

CITY OF DALY CITY

Regular Meeting - PLANNING COMMISSION

AGENDA

Tuesday, December 3, 2024 - 7:00 PM
City Hall Council Chambers – 2nd Floor
City Hall 333 – 90th Street
Daly City, CA 94015

To watch the live telecast:

<https://www.youtube.com/@DalyCityGov/streams>, <https://www.dalycity.org/agendas>, or Comcast Channel 27

PUBLIC PARTICIPATION

There are three ways to submit public comments: (1) email your comment directly to the Planning Division, (2) submit written comments via the City's website and (3) attend the meeting in person.

1. To email your comment, simply email a comment to the planner identified in the public hearing notice or send the email to mvanlonkhuysen@dalycity.org. Public Comments may also be emailed to mvanlonkhuysen@dalycity.org by including "Planning Commission Public Comment" in the subject line.
2. To submit a comment via the City's website, please visit www.dalycity.org/agendas to complete the Public Comment form. In the comment field box, include the item number and/or title of the item as well as your comments.
3. To speak at the meeting in person, please complete a "Speaker Card" located at the entrance to the Council Chambers and submit it to a staff member as early in the meeting as possible.

Please note: All written comments received by 4:00 pm on the meeting day will be provided to the Planning Commission prior to the meeting. Comments are not read aloud into the record. Any written comments received after 4:00 p.m. on the meeting date are not guaranteed to be received by the Planning Commission prior to the meeting.

Persons with disabilities who require auxiliary aids or services in attending or participating in this meeting should call the office of Michael Van Lonkhuysen at 991-8158 as soon as possible.

OPENING OF MEETING:

PLEDGE TO THE FLAG:

ROLL CALL:

AVAILABILITY OF PUBLIC RECORDS:

All public record to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the City Clerk's Office, City Hall located at 333 90th Street, Daly City, CA during normal business hours, at the same time that the public records are distributed or made available to the legislative body.

APPROVAL OF MINUTES:

1. Approval of Minutes of September 3, 2024 and of October 1, 2024 Planning Commission Meetings

PUBLIC HEARINGS:

2. **Coastal Development Permit CDP-10-24-016669** – The applicant, Erik Zang proposes to demolish an existing 246 square foot sunroom and construct a 216 square foot bedroom addition in approximately the same location 60 Roslyn Court. The project is in the -Resource Protection (-RP) overlay zone and therefore requires a Coastal Development Permit. The project has been determined to be Categorically Exempt under CEQA Section 15332 -In-Fill Development. APN 006-021-120.

STAFF: Michael Vanlonkhuysen

RECOMMENDATION:

3. **Parcel Map PM-05-23-016239, Use Permit UPR-05-23-016240, and Design Review DR-05-23-016241** The applicant, John Britton, proposes a lot split of a single parcel into two parcels for the construction of two residential, three-story buildings comprised of two, two-unit condominiums with one accessory dwelling unit each (six units total) on an 8,750 square foot vacant property, located on the east side of Edgeworth Avenue, between Bryant and Annie Streets. The project has been determined to be Categorically Exempt under CEQA Section 15332 -In-Fill Development. APNs 006-346-070 and 110.

STAFF: Sam Fielding

RECOMMENDATION:

4. **General Plan Amendment GP-11-015959, Zone Change ZC-1-22-015960, Use Permit UPR-11-22-015962, and Design Review DR-11-22-015961.** The applicant, Cormorant Energy Storage LLC, is requesting planning entitlements to develop an approximately 11-acre vacant lot for a 250-megawatt battery energy storage system (BESS) and transmission line located at 2150 Geneva Avenue. The battery energy storage system will be composed of lithium-ion batteries installed in racks, inverters, medium-voltage (MV) transformers, switchgear, a collector substation, transmission line and other associated equipment to interconnect into the Pacific Gas & Electric Company (PG&E) Martin Substation (point of interconnection). The PG&E Martin Substation, the project's point of interconnection, is located approximately 0.5 miles east of the project site. The 115-volt transmission line will travel primarily underground from the project site to the point of interconnection location. To allow a battery storage facility use, the site would be redesignated from the existing Commercial - Retail and Office (C-RO) to industrial (I) land use designation, and from Light Commercial (C-1) to Heavy Commercial (C-2) zoning. In addition, approval of a Use Permit and Design Review permit is required to allow the use and design of a battery energy storage system at the project site. A California Environmental Quality Act Mitigated Negative Declaration (CEQA-MND) has been prepared for the proposed project. APN 005-050-020.

STAFF: Sam Fielding

RECOMMENDATION:

PUBLIC APPEARANCES, STAFF COMMUNICATIONS:

ACQUISITIONS, VACATIONS, ETC. - SECTION 65402(A)

ADJOURNMENT:

**CITY OF DALY CITY
PLANNING COMMISSION
MEETING
Draft
MINUTES**

333 90th Street

<http://bit.ly/dalycitysep3>

OPENING OF MEETING:

PLEDGE TO THE FLAG:

ROLL CALL:

PRESENT: T. Faapuaa, T. Nuris, R. Paniza, R. Satorre

APPROVAL OF MINUTES: Approval of Minutes of May 7, 2024 and of June 4, 2024 PC Meeting

PUBLIC HEARING:

General Plan Amendment GPA-8-24-16606 and Zone Chang ZC-8-16607 – Revised Draft Housing Element Adoption and Initial Implementation Measures – Citywide with eight specific parcels proposed for General Implementation Measures – Citywide with eight specific parcels proposed for General Plan Designation Amendment and/or rezoning.

Staff report presented by Michael Van Lonkhuysen, Planning Division Manager

On September 3, 2024, the Planning Commission received a staff presentation on the Revised Draft Housing Element and voted unanimously (4-0, one absent) to recommend that the City Council adopt the Housing Element and approve an initial suite of implementation measures related to the element. Planning Commission discussion topics are shown in bold italics.

- ***Commissioner Satorre asked staff when the entire General Plan was updated and stated that the law requires it be updated regularly. Staff responded that the last update was in 2013. Commissioner Satorre stated that there were too many plan amendments and that the entire plan should be updated. Staff clarified that there is no State law that mandates***

how often the General Plan is updated and that the eight-year mandate applies to the Housing Element only.

- *Commissioner Nuris asked if the Planning Commission could have an impact on the Regional Housing Need Allocation by suggesting that the City's population has changes. Staff answered that at this point it could not.*
- *Commissioner Satorre asked if there were any studies that analyzed how many homes in Daly City were underutilized. Staff responded that the Housing Element analyzes the City's vacancy rate, which in Daly City has been perpetually low, indicative of imbalance between housing supply and demand, causing housing prices to rise.*
- *Eric DeMesa, a resident of Olcese Court to the west of Seton, asked if the residents had access to the data that is the basis for Daly City's Housing Element RHNA. Staff indicated that much of this information could be provided by the Association of Bay Area Governments. He was particularly curious how many Daly City residents were in the low-income category. He said that he has seen capacity reached with parking, infrastructure, and policing needs.*
- *Roni Miller asked what the consequences would be if the City did not adopt a Housing Element. Staff responded that if the Housing Element was not adopted, the City would be out of compliance with State housing law and could lose significant funding, including PHLA money, which would impact the 493 Eastmoor project to which the City has committed PHLA funding. Staff added that OBAG funding, which is used to complete street improvements, would also be impacted. The amount of OBAG money that could be lost is over one million dollars. Staff further added that being out of compliance with Housing Element law would subject the City to "Builders Remedy," wherein developers would get to build the project they want to build anyway with the City having limited control and a low chance of success litigating against it.*
- *Commissioner Faapuaa asked, given some of the letters the Planning Commission had received and the State's mandate to building, if people in the community mattered. Staff responded that from the State's perspective providing housing to current and future Californians is a primary goal and that the plethora of laws enacted by the State Legislature reflect this objective.*
- *Jeunesse Raymundo, a resident of the adjacent neighborhood to the west, stated that her house was directly adjacent to one of the Seton parcel proposed for rezoning. She stated that she was concerned about the height that the zoning would allow and the impact to her privacy.*
- *Alfred Herpe, a resident of Olcese Court, asked if the development contemplated by the Housing Element would occur with development occurring at the low point of the site and*

how the development would be accessed. He also asked who would be responsible for concrete cracks that might be caused on adjacent residential properties. Staff responded

- that that the current proposal is not actually to construct specific buildings and that at some point an architect would develop a building design that answered these questions.*
- Commissioner Satorre added that he has seen almost 25 years of development in Daly City and that many times residents have expressed concerns about view loss, parking, and other complaints. He mentioned specifically taller buildings like the Kaiser Permanente building on Hickey and the Landmark building on Mission Street, where the public raised significant concerns. He expressed his opinion however that this is smart growth and this is what we need, and that it adds revenue for the City. He added that we need housing in the City and that people shouldn't need to travel to Vacaville or Tracy to live.*

Moved by Commissioner Satorre, seconded by Commissioner Paniza to close the public hearing. Motion carried 4-0.

Moved by Commissioner Paniza, seconded by Commissioner Nuris to recommend to City Council approval of **General Plan Amendment GPA-8-24-6606 and Zone Change ZC-8-24-16607**. Motion carried 4-0.

PUBLIC APPEARANCES, STAFF COMMUNICATIONS:

ACQUISITIONS, VACATIONS, ETC. - SECTION 65402(A):

ADJOURNMENT: Moved by Commissioner Nuris, seconded by Commissioner Faapuaa to adjourn the meeting at 8:28 p.m.

For further information regarding the above projects or to obtain staff report for any of the above projects, please contact Michael VanLonkhuysen at mvanlonkhuysen@dalycity.org. Persons with disabilities who require auxiliary aids or services in attending or participating in this meeting should notify the Office of the City Clerk at 991-8078 as early as possible.

Availability of Public Records: All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the City Clerk's Office, City Hall located at 333 90th Street, Daly City, CA during normal business hours, at the same time that the public records are distributed or made available to the legislative body.

**CITY OF DALY CITY
PLANNING COMMISSION
MEETING
Draft
MINUTES**

Tuesday, October 1, 2024 – 7:00 PM

<http://bit.ly/dalycityoct1>

OPENING OF MEETING:

PLEDGE TO THE FLAG:

ROLL CALL:

PRESENT: C. Catuar, T. Faapuaa, T. Nuris, R. Satorre

APPROVAL OF MINUTES: September 3, 2024 not presently available

PUBLIC HEARING:

1. **Use Permit UPR-06-24-16537.** The applicant, MG2NG, Inc., is requesting to use a currently vacant building at 6835 Mission Street for an adult day care service for individuals with intellectual and developmental disabilities. The project is exempt from CEQA per CEQA Guidelines Section (Existing Facilities). APN 003-480-080.

Staff report presented by: Brian Paland, Assistant Planner

On October 1, 2024, the Planning Commission voted 4-0 to recommend that the City Council approve Use Permit UPR-6-24-16537. Marybeth Luciero spoke on behalf of the project. Commissioner Faapuaa inquired about the age range of the participants. Ms. Luciero said participants would be age 18 and up. Commissioner Nuris if required licensing had been obtained and how participants were admitted into the program. Ms. Luciero answered that the state regulatory agency refers eligible participants and that priority is given to those living within 30 minutes of the facility. Licenses would only be issued after the site is confirmed. Commissioner Catuar asked about the capacity and targeted opening date. The applicant responded that their proposed maximum number of participants is 35 and an estimated opening date in six to eight months. Commissioner Satorre expressed concerns over potential behavioral issues when the facility is integrated with a busy shopping center. The applicant responded that participants with

behavioral issues would be referred to a different facility better equipped to handle adults with behavioral issues. She added that the participants referred to this facility would likely have medical or mobility disabilities.

Moved by Commissioner Nuris, seconded by Commissioner Faapuaa to close the public hearing. Motion carried 4-0.

Moved by Commissioner Nuris, seconded by Commissioner Faapuaa to recommend to City Council approval of **Use Permit UPR-06-24-16537**, Motion carried 4-0.

2. **Use Permit UPR-04-24-16537.** The applicant, A & J Autobody, is requesting to use a currently vacant building at 5900 Mission Street for vehicle storage. The project is exempt from CEQA per CEQA Guidelines Section (Existing Facilities). APNs 004-251-030 and -040.

Staff report presented by: Brian Paland, Assistant Planner

On October 1, 2024, the Planning Commission voted 4-0 to recommend that the City Council approve Use Permit UPR-6-24-16495. Commissioner Nuris asked for clarification that the site be used only for storage and that no autobody or paint preparation or repair will be performed on site. Staff confirmed that vehicle storage would be the only use allowed on the site.

Move by Commissioner Nuris, seconded by Commissioner Faapuaa to close the public hearing. Motion carried 4-0.

Moved by Commissioner Nuris, seconded by Commissioner Satorre to recommend that the City Council affirm the Environmental Assessment. Motion Carried 4-0.

PUBLIC APPEARANCES, STAFF COMMUNICATIONS:

ACQUISITIONS, VACATIONS, ETC. - SECTION 65402(A):

ADJOURNMENT: Moved by Commissioner Nuris, seconded by Commissioner Faauaa to adjourn the meeting at 7:56 p.m.

For further information regarding the above projects or to obtain staff report for any of the above projects, please contact Michael VanLonkhuysen at mvanlonkhuysen@dalycity.org. Persons with disabilities who require auxiliary aids or services in attending or participating in this meeting should notify the Office of the City Clerk at 991-8078 as early as possible.

Availability of Public Records: All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the City Clerk's Office, City Hall located at 333 90th Street, Daly City, CA during normal business hours, at the same time that the public records are distributed or made available to the legislative body.

Draft



Daly City Planning Commission Agenda Report

333 - 90th Street ♦ Daly City ♦ California ♦ 94015 ♦ 650-991-8033

Meeting Date: December 3, 2024

Applications: Coastal Development Permit CDP-10-24-16669

Project Planner: Michael Van Lonkhuysen, Planning Manager

Project Location: 60 Roslyn Court (APN 006-021-120)

Project Description: Replace existing sunroom with bedroom at rear of home

Applicant/Owner: Erik Zang
60 Roslyn Court
Daly City, CA 94015

Environmental Assessment: Categorical Exemption under CEQA Guidelines 15303:
Small Construction

Applicable Daly Municipal Code Sections: Chapter 17.08 – Single Family Residential District
Chapter 17.44 – Use Permits
Chapter 17.27 – Resource Protection Combining District

Site Information

Property Sizes	Existing Use	Proposed Use	General Plan Designation	Current Zoning
3,400 sq. ft.	Single Family Home	Single Family Home	Commercial Mixed-Use (R-LD)	R-1 Single Family Residential – Resource Protection (RP) Overlay

Area Information

Land Use	Zoning
North: Single-Family Residential	R-1 Single Family Residential//Resource Protection
South: Single-Family Residential	R-1 Single Family Residential/Resource Protection
West: Open Space Preservation	OS-RP Open Space/Resource Protection
East: Single-Family Residential	R-1 Single Family Residential/Resource Protection

Background

The applicant, Erik Zang proposes to demolish an existing 246 square foot sunroom and construct a 216 square foot bedroom addition in approximately the same location 60 Roslyn Court. The project is in the -Resource Protection (-RP) overlay zone and therefore requires a Coastal Development Permit. The Resource Protection overlay zone was established as outgrowth of the City’s adoption of the Coastal Element in 1984, which essentially requires public hearings for most new construction and allows for appeals to the California Coastal Commission. The Commission staff has been notified of this pending application.

Project Description

The project site is in the Westlake Palisades Neighborhood on Roslyn Court (see Attachment A – Site Location). As indicated in the project plans, the applicant proposes to demolish an approximately 246 square foot single-story sunroom and construct a new 218 square foot one-story addition in approximately the same location (see Attachment B – Project Plans). The addition is situated at the rear of the existing home approximately 30 feet from the rear property line and five feet from the side yard property line (see Attachment C – Photos of Existing Sunroom). Although the addition is single-story, the applicant has proposed a roof deck on top of the bedroom, which is permissible under current zoning regulations.

Coastal Development Permit

The project site is zoned R-1 Single-Family Residential District with a General Plan Land Use Designation of Low-density Residential. The site is also located in the Resource Protection (-RP) Combining District and Coastal Zone. Per the zoning ordinance, any new structures or additions in the -RP Combining District and Daly City Coastal Zone are subject to review for compliance with the Daly City Local Coastal Plan (Coastal Element) and Zoning Ordinance as a Coastal Development Permit. Proper noticing procedures in accordance with the Local Coastal Plan must be followed in review of the Coastal Development Permit.

The Coastal Element incorporates verbatim applicable Coastal Act policies for new development and hazard areas. Because the proposed development is located within 300 feet of the seaward face of a coastal bluff, the project may be appealed to the Coastal Commission under Coastal Act Section 30603(a)(2).

The Coastal Element recognizes that “the entire 2+ mile stretch of sea cliffs in the coastal zone presents physical hazards” as a result of erosion and geologic stability. The Coastal Element incorporates verbatim Coastal Act Section 30253, which provides in relevant part:

New development shall:

- Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Site Design

Findings must be made to ensure the subject project is consistent with the General Plan, Local Coastal Plan and the R-1 Single-family Residential district standards and, together with the provisions for its design and improvements, would not be detrimental to the health, safety, morals, comfort and general welfare of the neighborhood.

Per the Zoning Ordinance, minimum standards including setbacks, height, and lot coverage must be in compliance. As proposed, the proposed addition is within Zoning Ordinance standards in relation to setbacks, lot coverage, and height. As discussed previously, the roof deck proposed on top of the addition is permission under current zoning regulations.

Geotechnical Report

The applicant submitted a geotechnical report to the City for review and is subject to review by staff in compliance with the Resource Protection Combining District and Local Coastal Plan (see Attachment D – Geotechnical Report). Staff has reviewed the report and concurs with its findings and recommendations. According to the report, the site is geotechnically suitable for the proposed improvements subject to recommendations contained in the report. Staff has incorporated the report's recommendations by reference as Conditions of Approval.

Environmental Review

Staff has reviewed the proposal under the requirements of the California Environmental Quality Act (CEQA) and has determined that the project, as conditioned, will not result in significant adverse environmental impacts and is exempt from environmental review pursuant to CEQA Guidelines Section 15303: Small Construction.

Findings

Staff finds that, as conditioned, the proposed Coastal Development Permit CDP-10-24-16669 complies with Title 17 (Zoning) of the Daly City Municipal Code. Approval of the proposed project would not be detrimental to the health, safety, morals, comfort and general welfare of persons residing in or working in the neighborhood, or be injurious or detrimental to the property and improvements in the neighborhood or the general welfare of the city. These findings are based on the following facts:

1. In accordance with Title 17 of the Daly City Municipal Code, as well as applicable State zoning enabling legislation, the Planning Commission conducted a public hearing on December 3, 2024; notice of said hearing was by newspaper publication on November 21, 2024 posting and first class mailing to property owners within 300 feet and occupants within 100 feet of the site.
2. Staff has reviewed the proposal under the requirements of the California Environmental Quality Act (CEQA) and has determined the project is Categorically Exempt per Section 15303: Small Construction.
3. The subject property is zoned R-1 (Single-family Residential Zoning District), which requires a Coastal Development Permit for the bedroom addition construction.
4. The subject project is consistent with the General Plan, Local Coastal Plan and the R-1 Single-Family Residential district standards and, together with the provisions for its design

- and improvements, would not be detrimental to the health, safety, morals, comfort and general welfare of the neighborhood.
5. The proposed development is located within 300 feet of the seaward face of a coastal bluff. Thus, the project may be appealed to the Coastal Commission under Coastal Act Section 30603(a)(2).
 6. The proposed development is located within the Daly City Coastal Zone. The Coastal Element incorporates verbatim applicable Coastal Act policies for new development and hazard areas.
 7. The City has received a report from a California Licensed Civil Engineer concluding that the placement of the addition is feasible from a geotechnical engineering perspective, subject to certain requirements which have been required as a Condition of Approval for the project (Frank Lee and Associates, 2024). There is no evidence in the public record contrary to this conclusion.

Conditions of Approval

Staff recommends approval of Coastal Development Permit CDP-10-24-16669 based on the following conditions as specified by each Department and Division.

A. DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT

General

1. Within thirty (30) days of Council approval, the applicant shall file with the City Clerk a Declaration of Acceptance of all conditions. Until said declaration is filed, the project shall not be granted for any permits sought from the City.
2. If building permits are not issued and construction diligently pursued within one year of approval of the use permit, the use permit shall become invalid.
3. Recommendations contained in the subject geotechnical report (dated June 13, 2019) performed by Sigma Prime Associates, Inc. and a licensed geologist shall certify the associated building plans for conformity.

Geotechnical Report

4. The applicant shall attach the Geotechnical Report prepared by Frank Lee and Associates dated August 28, 2024, to the building permit and comply with the recommendations contained therein.

Time Limit

5. The Coastal Development Permit shall be valid for a period of one year from the date of City Council approval. The approval shall terminate if a building permit has not been obtained and construction commenced within one-year of City Council approval of the project.

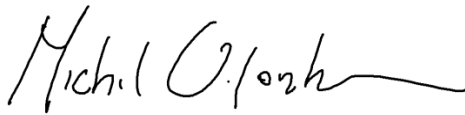
Recommendation

Staff recommends that the Planning Commission forward to the City Council the following:

1. Adopt the Findings as outlined herein;
2. Affirm the Environmental Assessment;
3. Approve Coastal Development Permit CDP-10-24-16669, subject to the Findings and Conditions outlined herein.

Staff is available to provide any additional information desired by the Planning Commissioners.

Respectfully submitted,



Michael Van Lonkhuysen
Planning Manager

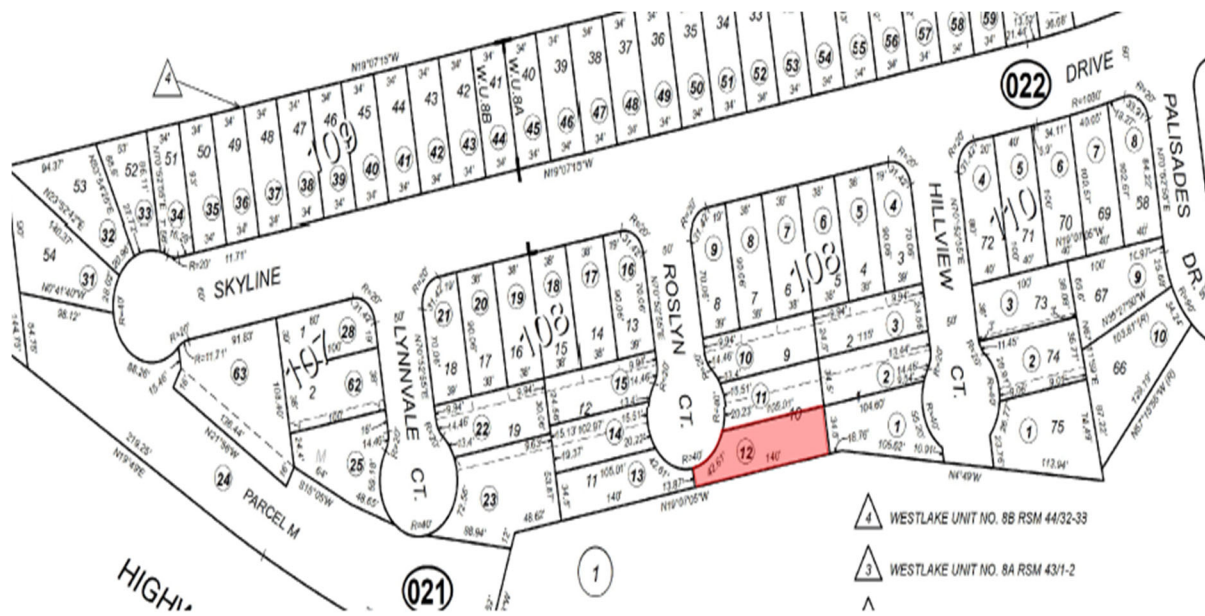


Tatum Mothershead
Director of Economic and Community
Development

Attachments

- Attachment A – Location Map
- Attachment B – Project Plans
- Attachment C – Photos of Existing Sunroom
- Attachment D – Geotechnical Report

SITE LOCATION



SINGLE FAMILY RESIDENCE
INTERIOR REMODEL AND ADDITIONS

60 ROSLYN CT, DALY CITY, CA 94015

PROJECT CONTACTS

OWNER
Rui Zhang & Yufang Wang,
925-791-0421 ,
38935G@GMAIL.COM

DESIGNER
Erik & Britna Design, LLC
Erik Zang
(628) 998-3498
erikbetinadesign@gmail.com

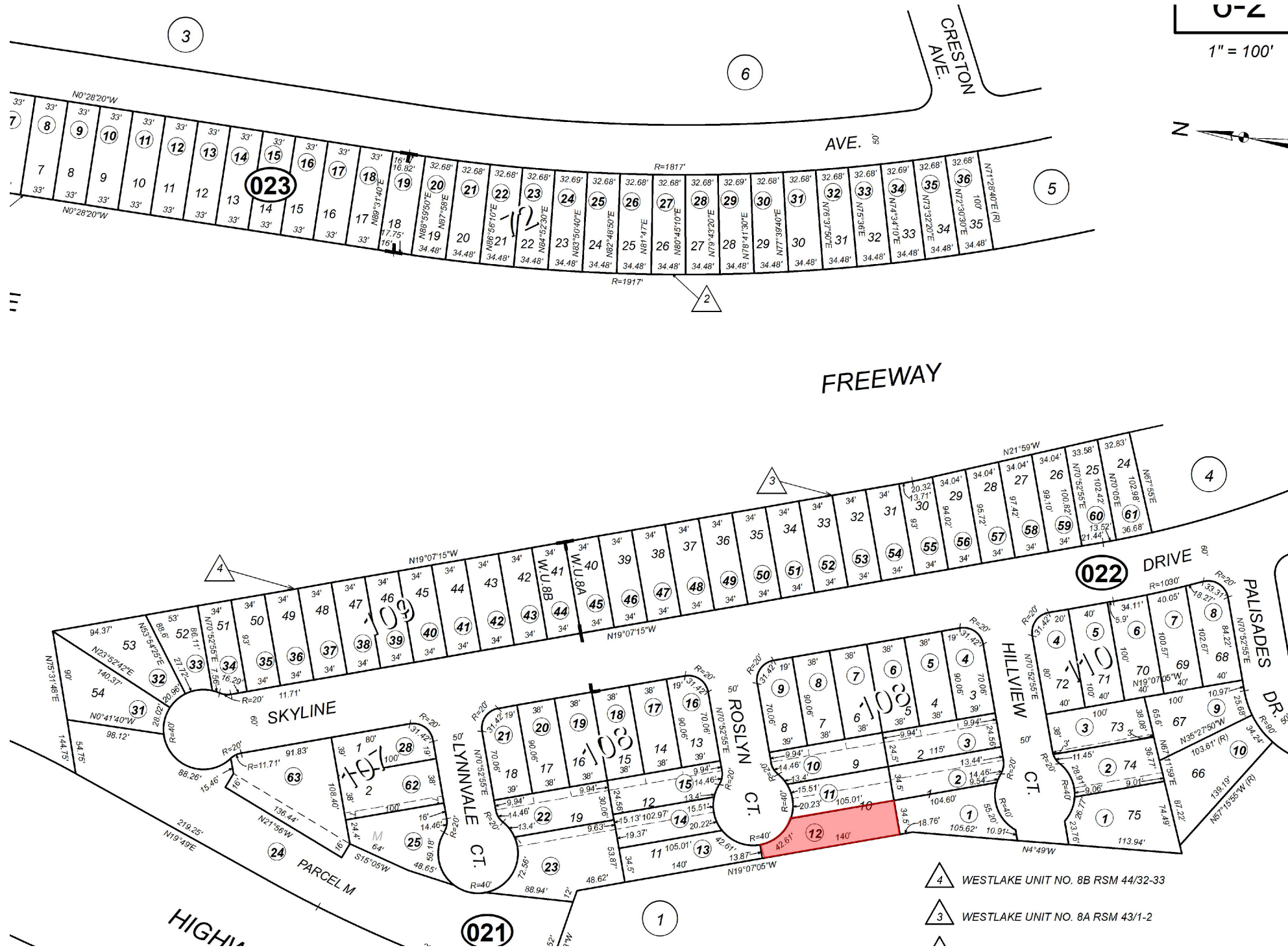
STRUCTURAL ENGINEER
Beamable Engineering INC.
Bo Zhang , P.E.
(408)-752-2777
bo@beam-able.com



60 Roslyn Ct, Daly
City, CA 94015

SHEET INDEX

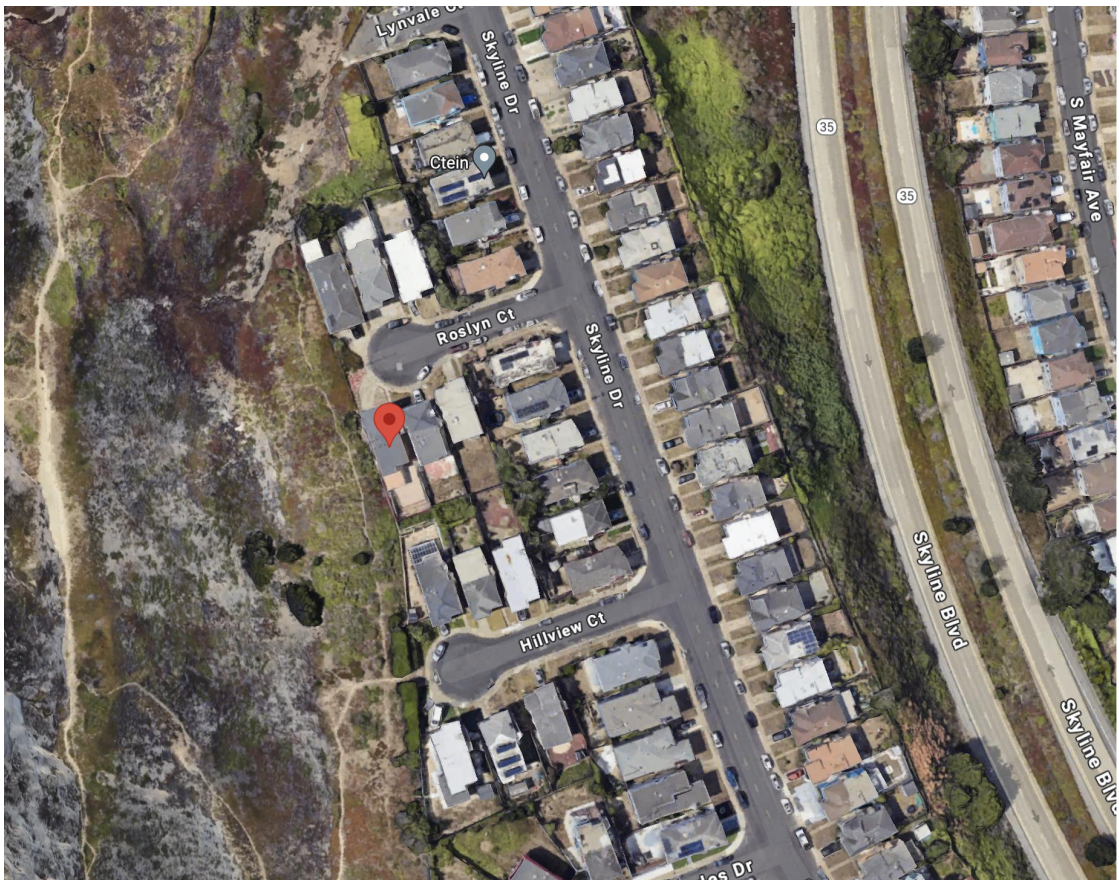
A-0.1	COVER SHEET
A-0.2	BUILDING NOTES
A-0.3	CLEAN BAY PLAN SHEET
A-0.4	SURVEY
A-1.1	EXISTING SITE PLAN
A-1.2	PROPOSED SITE PLAN
A-2.1	EXISTING/DEMO FLOOR PLAN
A-2.2	PROPOSED FLOOR PLAN
A-3.1	PROPOSED ELECTRICAL PLAN & RCP
A-4.1	EXISTING / PROPOSED ROOF PLAN
A-5.1	ELEVATIONS
A-5.2	ELEVATIONS
A-5.3	ELEVATIONS
C-1.0	GRADING & DRAINAGE PLAN
C-2.0	EROSION CONTROL PLAN
C-2.0	EROSION CONTROL PLAN



GENERAL NOTES

- THESE DRAWINGS ARE COPYRIGHT **ERIK & BETINA DESIGN LLC**. SHALL NOT BE USED ON ANY OTHER PROJECT WITHOUT WRITTEN CONSENT.
- PROJECT TO BE CONSTRUCTED BY A LICENSED GENERAL CONTRACTOR.
- CONTRACTOR SHALL NOT SCALE DIMENSIONS OFF DRAWINGS. FOLLOWING WRITTEN DIMENSIONS ONLY. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, SITE AND GRADE CONDITIONS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONAL IMMEDIATELY OF ANY DISCREPANCY ON THESE PLANS AND SPECIFICATIONS.
- SHOULD AN ERROR APPEAR IN THE DRAWINGS OR SPECIFICATIONS, OR IN WORK DONE BY OTHERS AFFECTING THIS WORK, NOTIFY THE DESIGN PROFESSIONAL AT ONCE. IF THE CONTRACTOR PROCEEDS WITH WORK AFFECTED WITHOUT INSTRUCTIONS FROM THE DESIGN PROFESSIONAL, THE CONTRACTOR SHALL MAKE GOOD ANY RESULTING DAMAGE OR DEFECT.
- THE GENERAL CONTRACTOR, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, SHALL ASSUME RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THE CONTRACTOR AND SUBCONTRACTORS SHALL MAINTAIN THE JOB SITE IN A CLEAN, ORDERLY CONDITION, FREE OF DEBRIS AND LITTER. OPERATIONS SHALL BE CONFINED TO THE SITE AREAS PERMITTED BY PERMIT & LAW.
- NO PORTION OF WORK REQUIRING A SHOP DRAWING OR SAMPLE SUBMISSION (PER REQUEST OF THE OWNER OR DESIGN PROFESSIONAL) MAY BE COMMENCED UNTIL THE SUBMISSION HAS BEEN REVIEWED AND APPROVED. ALL SUCH PORTIONS OF THE WORK SHALL BE IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS & SAMPLES.

VICINITY MAP



PROJECT DESCRIPTION

- DEMOLISH SUNROOM, AND ADD NEW BEDROOM -5 IN LOWER LEVEL. TOTAL 218.24 SQ FT
- ADD A NEW BATHROOM-3 IN THE LOWER LEVEL. TOTAL 60.33 SQ FT
- ADD A NEW WET BAR IN THE LOWER LEVEL. TOTAL 143.42 SQ FT
- ADD A NEW STORAGE IN THE LOWER LEVEL. TOTAL 212.76 SQ FT
- ADD A NEW ROOF DECK , TOTAL 218.24 SQ FT
- UPGRADE THE ELECTRICAL PANEL TO 200A

PROJECT INFORMATION

APN	006021120
OCCUPANCY	R1
CONSTRUCTION TYPE	V-B
ZONE	R10003
STORIES	TWO
FIRE SPRINKLER	NO
LOT AREA	4323 SQ.FT
(E)RESIDENCE AREA	2008.04 SQ.FT.
(E)GARAGE AREA	912.63 SQ.FT.
(E)FAR	67.56%
(E)LOT COVERAGE	36.99%
(E)BEDROOM	4
(E)BATHROOM	2
(N)RESIDENCE AREA	2879.94 SQ.FT
(N)GARAGE AREA	378.31 SQ.FT
(E)FAR	66.62%
(E)LOT COVERAGE	36.05%
(N)BEDROOM	5
(N)BATHROOM	3

APPLICABLE CODES

2022 California Building Code Volumes 1 & 2
2022 California Mechanical Code
2022 California Plumbing Code
2022 California Electrical Code
2022 California Existing Buildings Code
2022 California Fire Code
2022 California Energy Code
2022 California Residential Building Code
2022 California Green Building Standards Code
2022 California Historical Building Code
All other state and local laws, ordinances and regulations

THIS DRAWING AS INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF THE DESIGNER AND SHALL NOT BE REPRODUCED, PUBLISHED, OR USED IN ANYWAY WITHOUT THE PERMISSION OF THE DESIGNER.

DIMENSIONS SHOWN ARE MINIMUM AND ARE INTENDED TO BE APPROXIMATE TO ALLOW FOR REASONABLE TOLERANCES DUE TO FIELD CONDITIONS.

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

A-0.1

ABBREVIATIONS :

ADJ.	Adjustable	F.O.S.	Face Of Stud	RESIL.	Resilient
A.F.F.	Above Finished Floor (Grade)	F.O.F.	Face Of Finish	REQ'D.	Required
B.O.	Bottom Of	GA.	Gauge	RM.	Room
BD.	Board	GALV.	Galvanized	R.O.	Rough Opening
BLKG.	Blocking	GB	Grab Bar	RWL	Rain Water Leader (Overflow)
BM.	Beam	GLB	Glulam Beam	SAM	Self Adhesive Membrane
C.J.	Control Joint	GSM.	Galvanized Sheet Metal	S.S.D	See Structural Drawings
C (C.L.)	Center Line	GYP. BD.	Gypsum Board	S.L.D	See Landscape Drawings
CLG.	Ceiling	HB.	Hose Bibb	SCHED.	Schedule (Scheduled)
CLR.	Clear	HR.	Hour	SIM.	Similar
COL.	Column	HT.	Height	ST.STL//SS	Stainless Steel
CONC.	Concrete	INS.	Insulation	STL	Steel
CONST.	Construction	INT.	Interior	STD.	Standard
CONT.	Continuous	JB.	J-Box	STRUCT.	Structural
DBL.	Double	JT.	Joint	TB	Towel Bar
DIA.	Diameter	MAX.	Maximum	T.B.D.	To Be Determined
DIM.	Dimension	MECH.	Mechanical	T.B.R.	To Be Removed
DN.	Down	MFR.	Manufacturer	THRU.	Through
DS.	Downspout	MIN.	Minimum	T.O.	Top Of
DTL.	Detail	MTL	Metal	T.O.P.	Top of Parapet
DWG.	Drawing	N.I.C.	Not In Contract	T.O.S.	Top of Structure
EA.	Each	N.T.S.	Not To Scale	TPO	Thermoplastic Polyolefin
EL.	Elevation (Height)	(N)	New	T.S.	Tube Steel
ELEC.	Electrical	O.C.	On Center	TYP.	Typical
ELEV.	Elevation (Drawing)	OPP.	Opposite	VER.	Verify
EQ.	Equal	OPNG.	Opening	V.I.F.	Verify In Field
EXT.	Exterior	O/	Over	W/	With
(E)	Existing	PL.	Property Line	WD.	Wood
F.B.O.	Furnished By Owner	PLY.	Plywood	WF	Wood Finish
F.F.	Finished Floor	PT.	Point	W.O.	Where Occurs
FLR.	Floor	PTD.	Painted	WV	Wood Veneer
FL	Fluorescent	R	Radius	U.O.N	Unless Otherwise Noted
FIN.	Finish (Finished)	REF.	Refer To (Reference)		
F.O.	Face Of	RES.	Resistant		

27. Contractor shall waive "common practice" and "common usage" as construction criteria wherever details and Contract Documents or governing codes, ordinances, etc. require greater quantity or better quality than common practice or common usage would require.
28. Only new items of recent manufacture, of standard quality, free from defects, will be permitted on the new Work. Rejected items shall be removed immediately from the Work and replaced with items of the quality specified. Failure to remove rejected materials and equipment shall not relieve the Subcontractor from the responsibility for quality and character of items used nor from any other obligation imposed on him by the Contract.
29. Continuous inspection of welding in the shop and field shall be required during the time of welding. In addition, all complete penetration welds shall be ultrasonically tested by the laboratory, unless some other means of providing the compliance of the welds is designated by the Structural Engineer. Welds showing inclusions, porosity, lack of fusion, penetration or uneven contours (sagging or overlapping parent metal) beyond acceptable limits, as determined by the Welding Inspector, shall be ground out and rewelded at no additional cost to the owner. Procedures and criteria for acceptance of welds shall be per AWS D1.1.
30. No work defective in construction or quality or deficient in any requirements of the Drawings and Specifications will be acceptable in consequence of Owner's or Architect's failure to discover or to point out defects or deficiencies during construction; nor will presence of inspectors on work site relieve Contractor from responsibility for securing quality and progress of Work as required by the Contract. Defective work revealed within time required by guarantees shall be replaced by work conforming with the intent of the Contract. No payment, whether partial or final, shall be construed as an acceptance of defective work or improper materials.
31. WATER EFFICIENT PLUMBING FIXTURES
Toilets - Maximum 1.28 gallons/flush.
Shower heads - Maximum 1.8 gallons/minute
Bath sink faucets - Maximum 1.2 gallons/minute
Kitchen sink faucets - Maximum 1.8 gallons/minute
32. Bathrooms containing shower, tub or tub/shower combination shall be mechanically ventilated.
- a. Provide Energy Star exhaust fan ducted to the exterior with backdraft damper.
- b. Unless functioning as component of a whole house ventilation system, fans to be controlled by humidity control.
- c. Humidity controls shall be capable of adjustment between ≤ 50 % to maximum 80 %.
33. ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL BE A MINIMUM OF 4 INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 1/2 INCH. NUMBERS SHALL NOT BE SPELLED OUT. THESE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND.

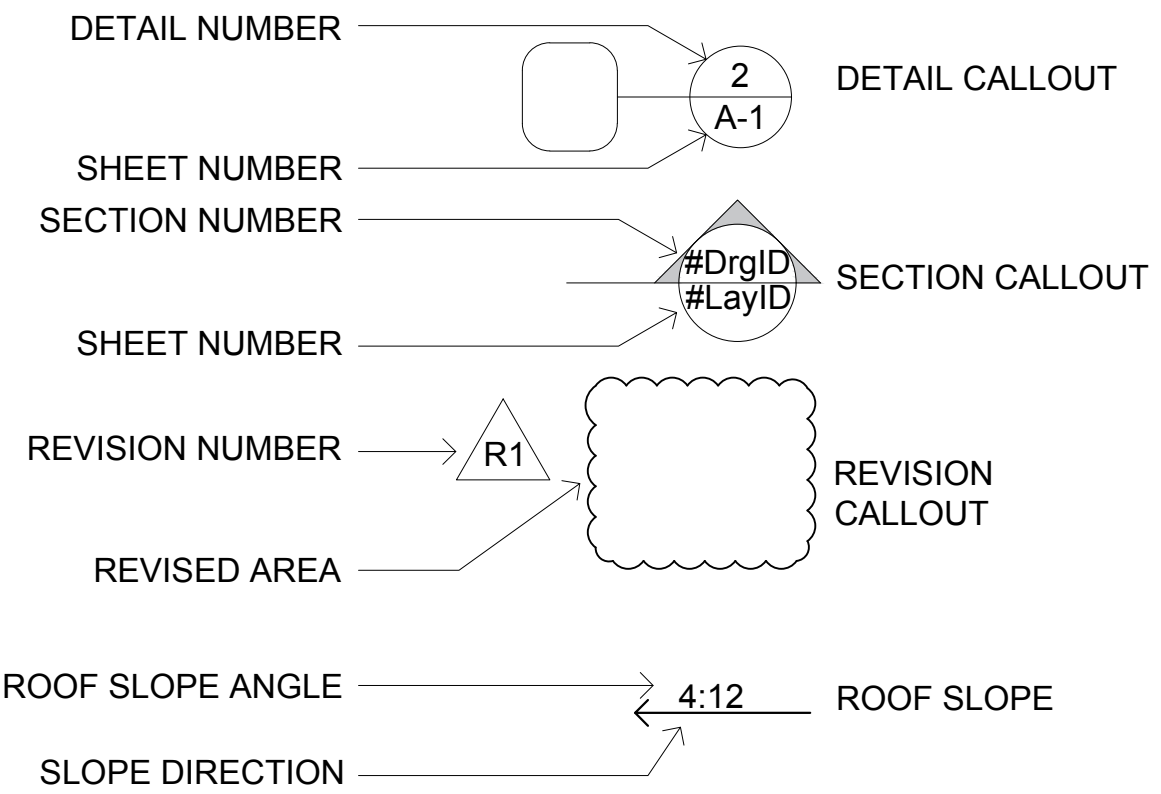
CALGREEN NOTES

1. COMPLIANCE WITH CALGREEN IS REQUIRED
2. SITE DEVELOPMENT TO FOLLOW WATER MANAGEMENT STANDARDS LISTED ON SHEETS CG3.0, CG4.0, AD.5, AD.6 OF STORM WATER MANAGEMENT THROUGH SWALES, FRENCH DRAINS, WATER COLLECTION, ETC. THROUGH AND AFTER FINAL CONSTRUCTION.
3. EVSE CIRCUIT CONDUIT/RACEWAY TO BE 1" DIAMETER AND 40A SERVICE FROM PANEL.
4. PROJECT TO MEET REQUIREMENTS SET FORTH BY TITLE 24 COMPLIANCE DOCUMENT, 2022 CALIFORNIA ENERGY CODE, 2022 CALIFORNIA TITLE 24 CODE, 2022 CALIFORNIA CALGREEN CODE.
5. ALL WATER FIXTURES TO MEET FLOW REQUIREMENTS LISTED ON TABLE.
- FIXTURE TYPE FLOW RATE
SHOWER HEADS
(RESIDENTIAL) 1.8 GMP @ 80 PSI
LAVATORY FAUCETS
(RESIDENTIAL)
MAX. 1.2 GPM @ 60 PSI
MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN
KITCHEN FAUCETS 1.8 GPM @ 60 PSI
WATER CLOSET 1.28 GAL/FLUSH
6. ALL INTERIOR MATERIALS, FLOORING, FINISHES, ADHESIVES/CAULKINGS, PAINTS TO MEET VOC LIMITS SPECIFIED ON CG1.0-CG4.0

FIRE PROTECTION NOTES

1. FIRESTOPPING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:
- a. IN CONCEALED SPACE OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 10' INTERVALS BOTH VERTICAL AND HORIZONTAL.
- b. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCURS AT SOFFITS, DROPPED CEILINGS, AND CAVED CEILINGS.
- c. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AN IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.
- d. IN OPENINGS AROUND TUBS AND SHOWERS, VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES, AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS.
- e. AT OPENING BETWEEN ATTIC SPACES AND CHIMNEY CHASES.
- f. AROUND TOP, BOTTOM, SIDES, AND ENDS OF SLIDING DOOR POCKETS.
- g. ALL INSULATION MATERIAL SHALL HAVE A FLAME-SPREAD RATINGS NOT TO EXCEED 25 AND SMOKE DENSITY NOT TO EXCEED 450.

SYMBOL LEGEND



GENERAL NOTES

1. The Contract Documents include the Working Drawings, Specifications, Addenda, Modifications and the Conditions of the Construction Contract.
2. The Contract Documents are instruments of service and shall remain the property of the Architect whether the project for which they are prepared is executed or not. The Contract Documents are not to be used for other projects or extensions of the project nor are they to be modified in any manner whatsoever except by agreement in writing and with appropriate compensation to the Architect.
3. The Contractor shall be responsible for checking Contract Documents, field conditions and dimensions for accuracy and confirming that the Work is as shown before proceeding with construction. Clarifications regarding any conflicts shall be achieved prior to related work being started.
4. In the event of conflict between data shown on the Drawings and data shown in the Specifications, the Specifications shall govern. Dimensions noted on the Drawings shall take precedence over scaled dimensions. Detail drawings take precedence over drawings of smaller scale. Should the Contractor at any time discover an error in a Drawing or Specification, or a discrepancy or variation between Dimensions on Drawings and measure-ments at site, or lack of dimensions or other information, he shall report at once to the Architect for clarification and shall not proceed with the work affected until clarification has been made. **Do NOT scale the plans.**
5. Discrepancies between General, Plan or Sheet Notes shall be brought to Architect's attention for clarification and resolution. Occasional reference to one or more specific notes within the General, Plan or Sheet Notes shall not in any way diminish or eliminate the full force and effect of all other notes, neither in relation to one another or not specifically referenced.
6. The Contractor is responsible for verifying the dimensions and elevations at the site. The Contractor and sub-contractors shall coordinate the layout and exact location of all partitioning, doors, electrical/telephone outlets, light switches and thermostats with the Architect in the field before proceeding with construction.
7. Horizontal dimensions are from face of stud to face of stud, except as noted otherwise. Vertical dimensions are from top of floor slab or plywood, except where noted to be above finished floor (AFF). All dimensions marked "clear" shall be maintained and shall allow for thickness of all finishes. Dimensions are not adjustable without approval of Architect unless noted with "+/-".
8. "Furnish" means supply only, for others to put in place. "Install" means supplied by others, to be installed by Contractor. "Provide" means furnish and install, complete and in place.
9. "Typical" means identical for conditions noted. "Similar" means comparable characteristics for conditions noted. Contractor to verify dimensions and orientation.
- Quality Assurance**
10. When authorized by the Owner, the Architect will be the designated agent for design of this project and will exercise sole authority for determining conformance of materials, equipment and systems with the intent of the design. Review and acceptance of all items proposed by the Contractor for incorporation into this work will be by the Architect. This function of the Architect will apply both to the Contract as initially signed, and to changes to the Contract by modification during progress of the Work.
11. The Contractor is to exercise extreme care and caution during construction of the Work to minimize disturbances to adjacent structures and their occupants, property, public thorough-fares, etc. Contractor shall take precautions and be responsible for the safety of all bldg. occupants from construction procedures.
12. The Contractor is responsible for and shall provide protection for any existing finishes to remain.
13. Cut and fit components for alteration of existing work and installation of new work. Patch disturbed areas to match adjacent materials and finishes.
14. All work shall be erected and installed plumb, level, square, and true and in proper alignment.
15. The finished work shall be firm, well anchored, in true alignment, plumb, level, with smooth, clean, uniform appearance without waves, distortions, holes, marks, cracks, stains or discoloration. Jointings shall be close-fitting, neat and well-scribed. The finish work shall not have exposed, unsightly anchors or fasteners and shall not present hazardous, unsafe corners. All work shall have the provision for expansion, contraction and shrinkage as necessary to prevent cracks, buckling and warping due to temperature and humidity conditions.
16. Coordinate and provide appropriate structural blocking/backing and reinforcing in partitions behind all wall mounted items.
17. Attachments, connections or fastenings of any nature are to be properly and permanently secured in conformance with best practice and the Contractor is responsible for improving them accordingly to these conditions. The Drawings show only special conditions to assist the Contractor; they do not illustrate every such conditions and detail.
18. References to makes, brands, models, etc. is to establish type and quality desired. Substitution of acceptable equals will not be permitted unless specifically noted otherwise or when made according to procedures for substitutions.
19. Make all necessary provisions for items to be furnished or installed by Owner. Provide protection for these provisions until completion of the project. Contractor to coordinate N.I.C. items with appropriate trades. Submittals
20. Within five (5) days from contract date, Subcontractor is to prepare and submit and estimated progress schedule for the Work, with sub-schedules of related activities which may affect the progress of the Work.
21. Subcontractor shall order and schedule delivery of materials in ample time to avoid delays in construction. If an item is found to be unavailable, Subcontractor shall notify Architect immediately to allow Architect a reasonable amount of time to select a suitable substitute.
22. Subcontractor shall provide manufacturer's specifications, installation instructions, shop drawings and samples for review and approval of all materials and methods to be used prior to ordering or proceeding with the Work. Submit Product Data, Shop Drawings and Samples for all trades as soon as possible to the Architect to guarantee progress of the Work.
23. Subcontractor to follow manufacturer's recommended specifications and installation procedures. If these differ from the Contract Documents, Subcontractor shall notify Architect in writing immediately to resolve discrepancies prior to proceeding.
24. If any time before commencement of Work, or during progress thereof, Subcontractor's methods, equipment or appliances are inefficient or inappropriate for securing quality of Work or rate of progress intended by the Contract Documents, Owner may order Subcontractor to improve their quality or increase their efficiency. This will not relieve Subcontractor or his sureties from their obligations to secure quality of work and rate of progress specified in Contract.
25. All work shall comply with applicable codes, amendments, rules, regulations, ordinances, laws, orders, approvals, etc. that are required by public authorities. In the event of conflict, the most stringent requirements shall comply. Requirements include, but are not limited to the current applicable editions or publications of the following (or as otherwise noted):
- A. 2022 CBC, CRC, CPC, CMC, CEC, and all local codes and ordinances
- B. 2022 CALGreen, 2022 California Fire Code
- C. National Fire Protection Association
- D. Title 24 Energy Compliance
- E. American National Standards Institute
- F. State of California Energy Regulations
26. Materials and workmanship specified by reference to number, symbol, title, or specification, such as commercial standards, federal specifications, trade association standard, or other similar standard, shall comply with require-ments in latest edition or revision thereof, and with any amendment or supplement thereto in effect on date of origin of this project's Contract Documents. Such standard, except as modified herein, shall have full force and effect as though printed in the Contract Documents. Abbreviations used in referring to standards that apply to the Work, include, but are not necessarily limited to, the following:
- A. American Society of Testing Materials (ASTM)
- B. American Institute of Steel Construction (AISC)
- C. American Welding Society (AWS)
- D. American Concrete Institute (ACI)
- E. American National Standards Institute (ANSI)
- F. Architectural Aluminum Manufacturer's Association (AAMA)
- G. Aluminum Association, Inc. (AA)
- H. Concrete Reinforcing Steel Institute (CRSI)
- I. National Association of Architectural Metal Manufacturers (NAAAMM)
- J. National Fire Protection Association (NFPA)
- K. National Woodwork Manufacturer's Association (NWWA)
- L. Woodwork Institute of California (WIC)



60 Roslyn Ct, Daly City, CA 94015

AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

PLAN PREPARED BY

Erik Zany

THIS DRAWING AS INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF THE DESIGNER AND SHALL NOT BE REPRODUCED, PUBLISHED, OR USED IN ANYWAY WITHOUT THE PERMISSION OF THE DESIGNER.

DIMENSIONS SHOWN ARE MINIMUM AND ARE INTENDED TO BE APPROXIMATE TO ALLOW FOR REASONABLE TOLERANCES DUE TO FIELD CONDITIONS.

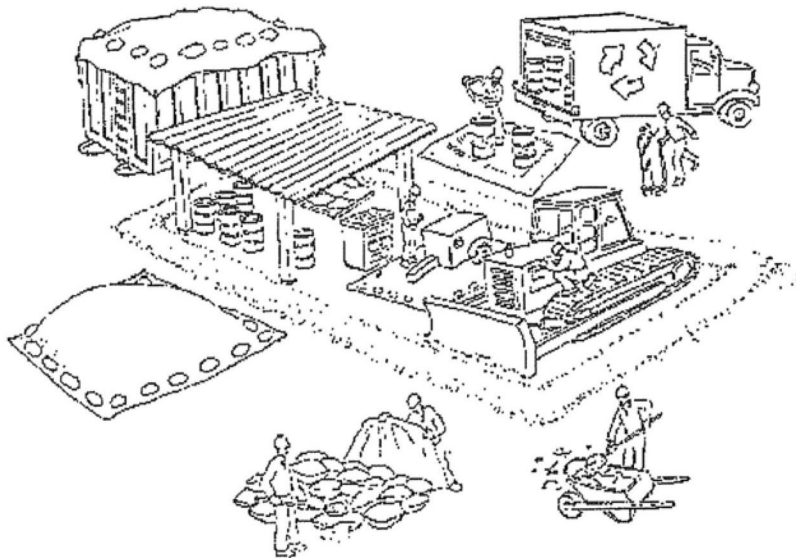
SHEET TITLE:

BUILDING NOTES

SHEET NUMBER:

A-0.2

Clean Bay Blue Print



Materials storage & spill cleanup

Non-hazardous materials management

- ✔ Sand, dirt, and similar materials must be stored at least 10 feet (3 meters) from catch basins. All construction material must be covered with a tarp and contained with a perimeter control during wet weather or when rain is forecasted or when not actively being used within 14 days.
- ✔ Use (but don't overuse) reclaimed water for dust control as needed.
- ✔ Sweep or vacuum streets and other paved areas daily. Do not wash down streets or work areas with water!
- ✔ Recycle all asphalt, concrete, and aggregate base material from demolition activities.

- ✔ Check dumpsters regularly for leaks and to make sure they are not overfilled. Repair or replace leaking dumpsters promptly.
- ✔ Cover all dumpsters with a tarp at the end of every work day or during wet weather.

Hazardous materials management

- ✔ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state, and federal regulations.
- ✔ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecasted.
- ✔ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecasted within 24 hours.
- ✔ Be sure to arrange for appropriate disposal of all hazardous wastes.

Spill prevention and control

- ✔ Keep a stockpile of spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
- ✔ When spills or leaks occur, contain them immediately and be particularly careful to prevent leaks and spills from reaching the gutter, street, or storm drain. Never wash spilled material into a gutter, street, storm drain, or creek!
- ✔ Dispose of all containment and cleanup materials properly.
- ✔ Report any hazardous materials spills immediately! Dial 911

Construction Entrances and Perimeter

- ✔ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ✔ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking.

Vehicle and equipment maintenance & cleaning

- ✔ Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- ✔ Fuel and maintain vehicles on site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- ✔ If you must clean vehicles or equipment on site, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or creeks.
- ✔ Do not clean vehicles or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.



Earthwork & contaminated soils

- ✔ Keep excavated soil on the site where it will not collect in the street.
- ✔ Transfer to dump trucks should take place on the site, not in the street.
- ✔ Use fiber rolls, silt fences, or other control measures to minimize the flow of silt off the site.



- ✔ Earth moving activities are only allowed during dry weather by permit and as approved by the City Inspector in the Field.
- ✔ Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- ✔ If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, or seed with fast-growing grasses as soon as possible. Place fiber rolls down-slope until soil is secure.

- ✔ If you suspect contamination (from site history, discoloration, odor, texture, abandoned underground tanks or pipes, or buried debris), call the Engineer for help in determining what should be done, and manage disposal of contaminated soil according to their instructions.

Dewatering operations

- ✔ Effectively manage all run-on, all runoff within the site, and all runoff that discharges from the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance.



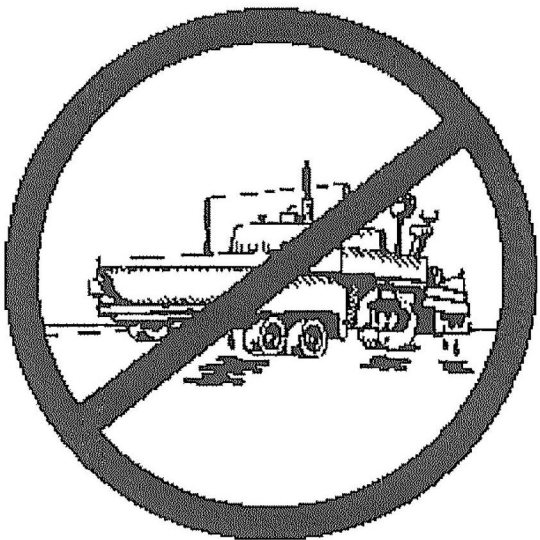
- ✔ Reuse water for dust control, irrigation, or another on-site purpose to the greatest extent possible.

- ✔ Be sure to notify and obtain approval from the Engineer before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ✔ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the Engineer to determine what testing is required and how to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

Saw cutting

- ✔ Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or sand/gravel bags to keep slurry out of the storm drain system.
- ✔ Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ✔ If saw cut slurry enters a catch basin, clean it up immediately.

Paving/asphalt work



- ✔ Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- ✔ Protect gutters, ditches, and drainage courses with sand/gravel bags, or earthen berms.
- ✔ Do not sweep or wash down excess sand from sand sealing into gutters, storm drains, or creeks. Collect sand and return it to the stockpile, or dispose of it as trash.
- ✔ Do not use water to wash down fresh asphalt concrete pavement.

Concrete, grout, and mortar storage & waste disposal

- ✔ Store concrete, grout, and mortar under cover, on pallets, and away from drainage areas. These materials must never reach a storm drain.
- ✔ Wash out concrete equipment/trucks off-site or into contained washout areas that will not allow discharge of wash water onto the underlying soil or onto the surrounding areas.



- ✔ Collect the wash water from washing exposed aggregate concrete and remove it for appropriate disposal off site.

Painting

- ✔ Never rinse paint brushes or materials in a gutter or street!
- ✔ Paint out excess water-based paint before rinsing brushes, rollers, or containers in a sink.



- ✔ Paint out excess oil-based paint before cleaning brushes in thinner.
- ✔ Filter paint thinners and solvents for reuse whenever possible. Dispose of oil-based paint sludge and unusable thinner as hazardous waste.

Landscape Materials

- ✔ Contain, cover, and store on pallets all stockpiled landscape materials (mulch, compost, fertilizers, etc.) during wet weather or when rain is forecasted or when not actively being used within 14 days.
- ✔ Discontinue the application of any erodible landscape material within 2 days of forecasted rain and during wet weather.

For references and more detailed information:
www.cleanwaterprogram.org
www.cabmphandbooks.com

Storm drain polluters may be liable for fines of \$10,000 or more per day!



60 Roslyn Ct, Daly
City, CA 94015

AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

PLAN PREPARED BY

Enk Zany

THIS DRAWING AS INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF THE DESIGNER AND SHALL NOT BE REPRODUCED, PUBLISHED, OR USED IN ANYWAY WITHOUT THE PERMISSION OF THE DESIGNER.

DIMENSIONS SHOWN ARE MINIMUM AND ARE INTENDED TO BE APPROXIMATE TO ALLOW FOR REASONABLE TOLERANCES DUE TO FIELD CONDITIONS.

SHEET TITLE:

**CLEAN BAY
BLUE PRINT**

SHEET NUMBER:

A-0.3

THE BEARING N70°52'55"E ON ROSLYN COURT AS SHOWN ON WESTLAKE UNIT NO. 8B
FILED IN BOOK 44 OF MAPS AT PAGES 32 & 33 IN SAN MATEO COUNTY RECORDS
IS TAKEN AS THE BASIS OF BEARINGS SHOWN ON THIS MAP.

THIS MAP CORRECTLY REPRESENTS A TOPOGRAPHIC AND BOUNDARY SURVEY MADE BY ME OR UNDER MY DIRECTION.

CARLOS R. DOMINGUEZ
R.C.E. NO C 26949
LICENSE EXPIRES MARCH 31, 2025



ALL DISTANCE ARE MEASURED IN FEET AND DECIMAL.
UNDERGROUND UTILITIY LOCATION IS BASED
ON SURFACE EVIDENCE.

A number line from 10 to 30 with major tick marks at 10, 20, and 30, and minor tick marks at 15 and 25. A 2x2 grid of regions is defined by vertical lines at 10, 15, 20, and 25. The top row has alternating shaded and unshaded regions: shaded from 10 to 15, unshaded from 15 to 20, shaded from 20 to 25, and unshaded from 25 to 30. The bottom row has alternating unshaded and shaded regions: unshaded from 10 to 15, shaded from 15 to 20, unshaded from 20 to 25, and shaded from 25 to 30.

LEGEND

- | | |
|---|------------------------|
|  | PROPERTY LINE |
|  | ADJOINER PROPERTY LINE |
|  | FENCE LINE |
|  | FOUND CITY MONUMENT |
|  | BENCHMARK |
|  | SPOT ELEVATION |
|  | WATER VALVE |
|  | WATER METER |
|  | JOINT POLE |
|  | ELEC. METER |
|  | GAS METER |
|  | SEWER CLEANOUT |
|  | TREE |

LOT 10, BLOCK 108
WESTLAKE UNIT NO. 8B
CITY OF DALY CITY

DOMINGUEZ ASSOCIATES LLC

4360 COOPER HOLLOW RD. DALLAS, OR 97338
(650) 359-0947 CARLOS@DOMINGUEZASSOCIATES.COM

SHEET 1 OF 1

STATE OF CALIFORNIA

ROSLYN COURT

(50.00' WIDE)

SKYLINE DRIVE
(60.00' WIDE)

(60.00' WIDE)

LOT 8

LOT 7

LOT 6

LOT 5

APN: 006-021-130

APN: 006-021-140

APN: 006-021-150

APN: 006-021-120
4,323 SQ. FT.

ROOF HEIGHT 15 FEET
60 ROSLYN COURT

NEIGHBOR'S HOUSE

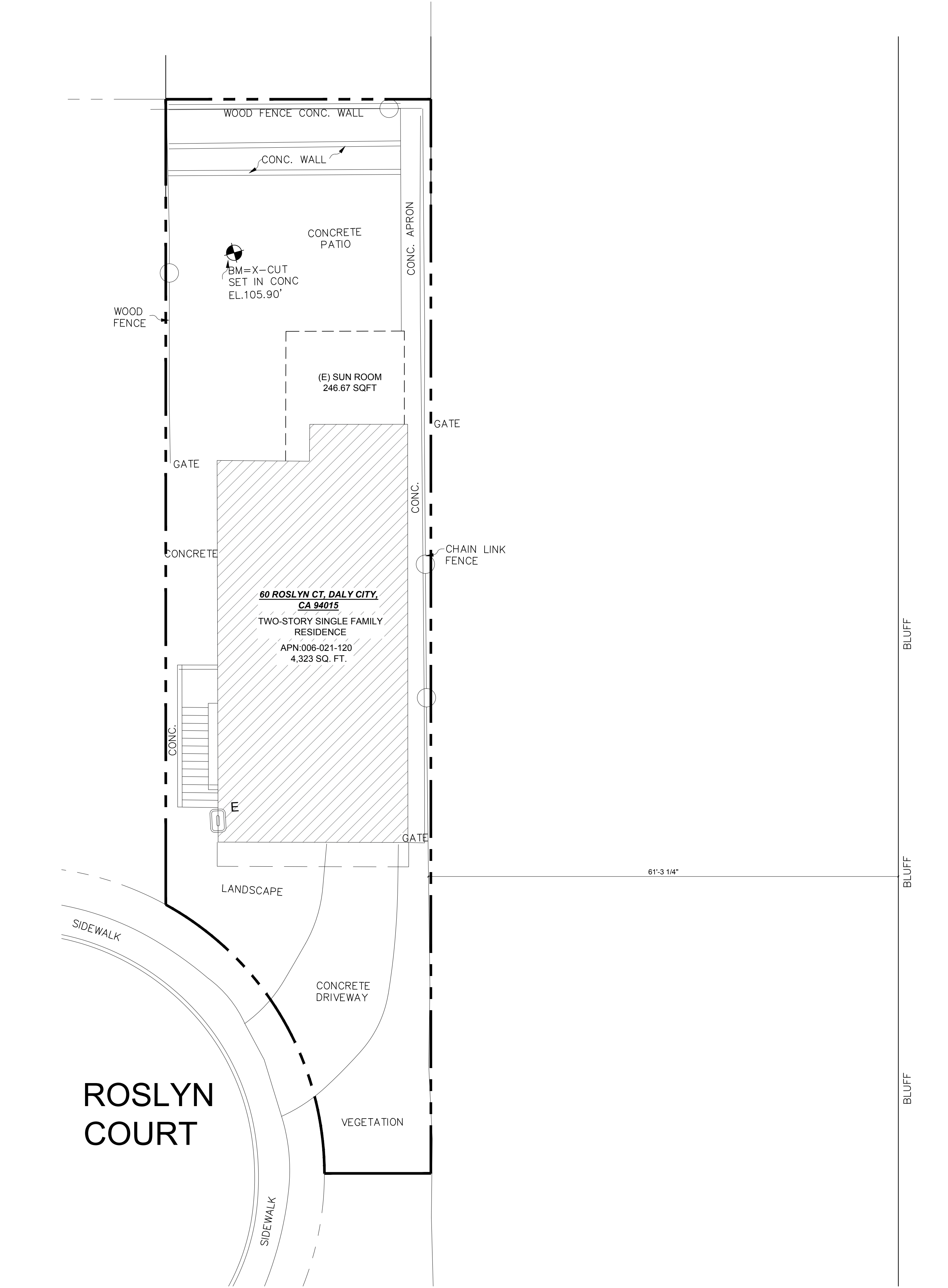
APN: 006-021-110

APN: 006-021-100

APN: 006-021-110

APN: 006-021-110

APN: 006-021-110



EXISTING SITE PLAN
SCALE 1/8" = 1'-0"

1

CONSTRUCTION LEGEND

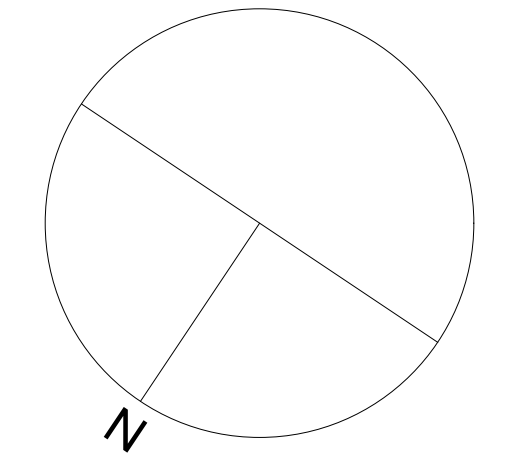
SYMBOL	DESCRIPTION
---	EAVE LINE
—OH—	POWER LINE OVER HEAD
(E)	EXISTING
(R)	REPLACE
(N)	NEW
EMP	ELECTRICAL MAIN PANEL
ESP	ELECTRICAL SUB PANEL
WM	WATER METER
GM	GAS METER
←E	SPLASH BLOCK(TYP)
~>	DIRECTION OF DRAINAGE

SITE PLAN NOTES:

- CONTRACTOR TO VERIFY AND REPLACE THE ADDRESS NUMERALS, IF NOT ALREADY EXISTING. INSTALL ADDRESS NUMBERS MEETING THE FOLLOWING STANDARDS:
1) ADDRESS NUMBERS SHALL BE INTERNALLY OR EXTERNALLY LIT DURING NONDAYLIGHT HOURS. LIGHTING MUST BE ON ALL THE TIME (TYPICAL OF LOW VOLTAGE UNITS) OR IF LIT ONLY DURING NONDAYLIGHT HOURS. SWITCHING SHALL BE CONTROLLED BY A TIME CLOCK OR A PHOTO SENSOR. BATTERY OR PHOTO CELL POWERED UNITS CANNOT BE USED FOR REQUIRED ADDRESSING.
2) ADDRESS NUMBERS SHALL BE AT LEAST FOUR INCHES HIGH AND INSTALLED ON A CONTRASTING BACKGROUND.
3) ADDRESS NUMBERS SHALL READ FROM LEFT TO RIGHT. VERTICALLY POSITIONED NUMBERS CANNOT BE USED.
4) ADDRESS NUMBERS SHALL BE PLACED IN SUCH A LOCATION THAT EMERGENCY CREWS CAN READ THE ADDRESS FROM THE STREET FRONTING THE DWELLING.
- ALL REQUIRED NEW SERVICES FOR THE PROPOSED PROJECT SHALL BE UNDER GROUNDED FROM THE POINT OF CONNECTION AT THE UTILITY PURVEYOR'S NETWORK TO THE SERVICE POINT.



60 Roslyn Ct, Daly
City, CA 94015



AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

10/23/2024

PLAN PREPARED BY

Erik Zang

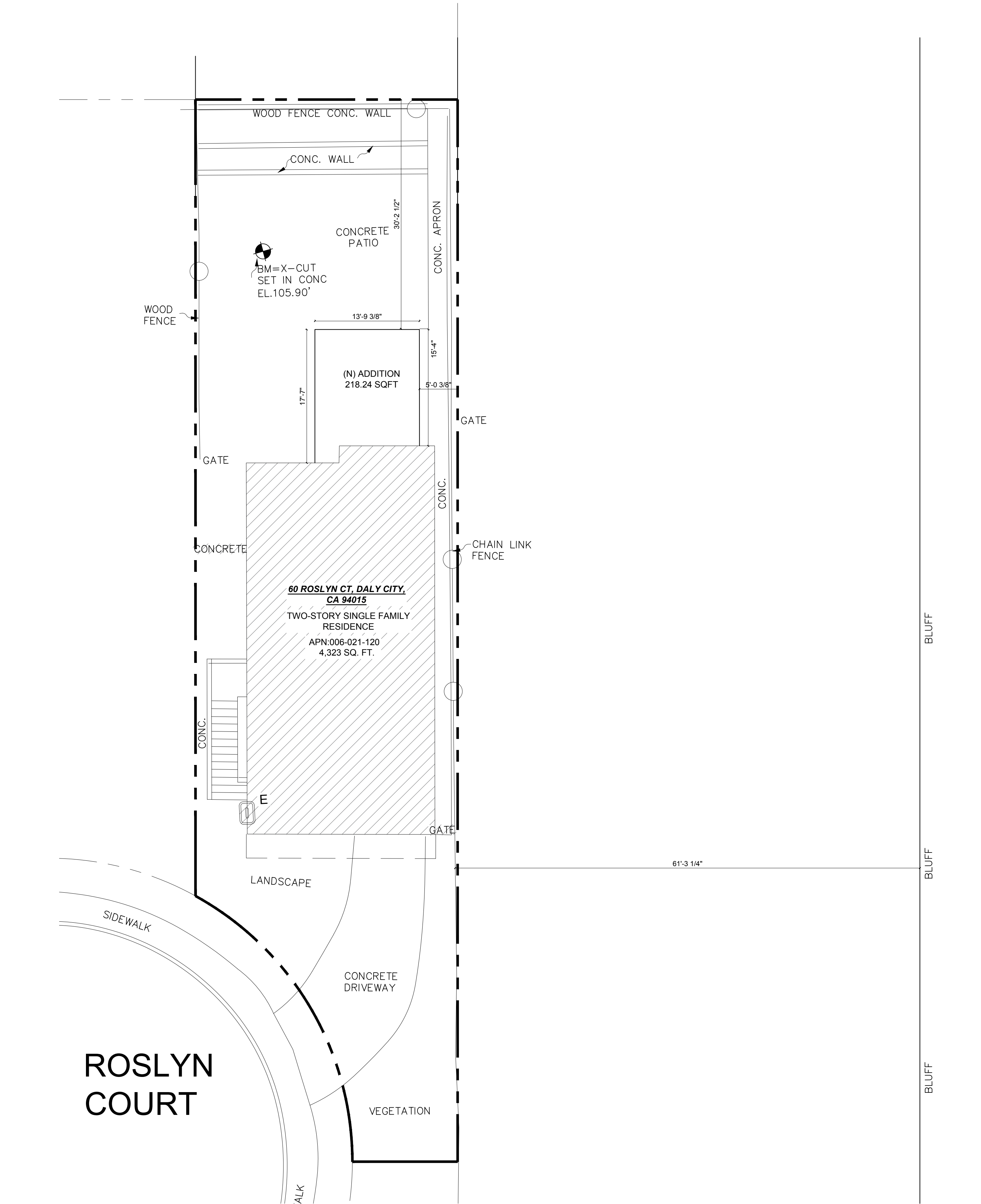
THIS DRAWING AS INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF THE DESIGNER AND SHALL NOT BE REPRODUCED, PUBLISHED, OR USED IN ANYWAY WITHOUT THE PERMISSION OF THE DESIGNER.

DIMENSIONS SHOWN ARE MINIMUM AND ARE INTENDED TO BE APPROXIMATE TO ALLOW FOR REASONABLE TOLERANCES DUE TO FIELD CONDITIONS.

SHEET TITLE:
EXISTING SITE
PLAN

SHEET NUMBER:

A-1.1



PROPOSED SITE PLAN
SCALE 1/8" = 1'-0"

1

CONSTRUCTION LEGEND

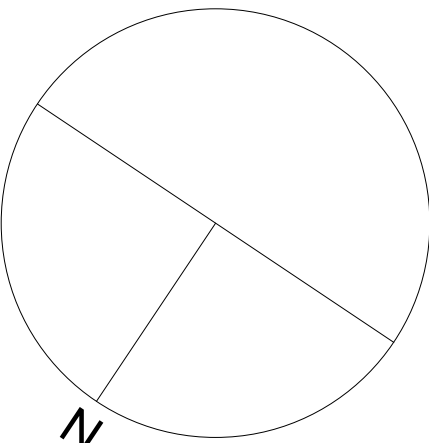
SYMBOL	DESCRIPTION
---	EAVE LINE
—OH—	POWER LINE OVER HEAD
(E)	EXISTING
(R)	REPLACE
(N)	NEW
EMP	ELECTRICAL MAIN PANEL
ESP	ELECTRICAL SUB PANEL
WM	WATER METER
GM	GAS METER
←[]	SPLASH BLOCK(TYP)
~>	DIRECTION OF DRAINAGE

SITE PLAN NOTES:

- CONTRACTOR TO VERIFY AND REPLACE THE ADDRESS NUMERALS, IF NOT ALREADY EXISTING. INSTALL ADDRESS NUMBERS MEETING THE FOLLOWING STANDARDS:
1) ADDRESS NUMBERS SHALL BE INTERNALLY OR EXTERNALLY LIT DURING NONDAYLIGHT HOURS. LIGHTING MUST BE ON ALL THE TIME (TYPICAL OF LOW VOLTAGE UNITS) OR IF LIT ONLY DURING NONDAYLIGHT HOURS. SWITCHING SHALL BE CONTROLLED BY A TIME CLOCK OR A PHOTO SENSOR. BATTERY OR PHOTO CELL POWERED UNITS CANNOT BE USED FOR REQUIRED ADDRESSING.
2) ADDRESS NUMBERS SHALL BE AT LEAST FOUR INCHES HIGH AND INSTALLED ON A CONTRASTING BACKGROUND.
3) ADDRESS NUMBERS SHALL READ FROM LEFT TO RIGHT. VERTICALLY POSITIONED NUMBERS CANNOT BE USED.
4) ADDRESS NUMBERS SHALL BE PLACED IN SUCH A LOCATION THAT EMERGENCY CREWS CAN READ THE ADDRESS FROM THE STREET FRONTING THE DWELLING.
- ALL REQUIRED NEW SERVICES FOR THE PROPOSED PROJECT SHALL BE UNDER GROUNDED FROM THE POINT OF CONNECTION AT THE UTILITY PURVEYOR'S NETWORK TO THE SERVICE POINT.



60 Roslyn Ct, Daly
City, CA 94015



AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

PLAN PREPARED BY

Erik Zang

THIS DRAWING AS INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF THE DESIGNER AND SHALL NOT BE REPRODUCED, PUBLISHED, OR USED IN ANYWAY WITHOUT THE PERMISSION OF THE DESIGNER.

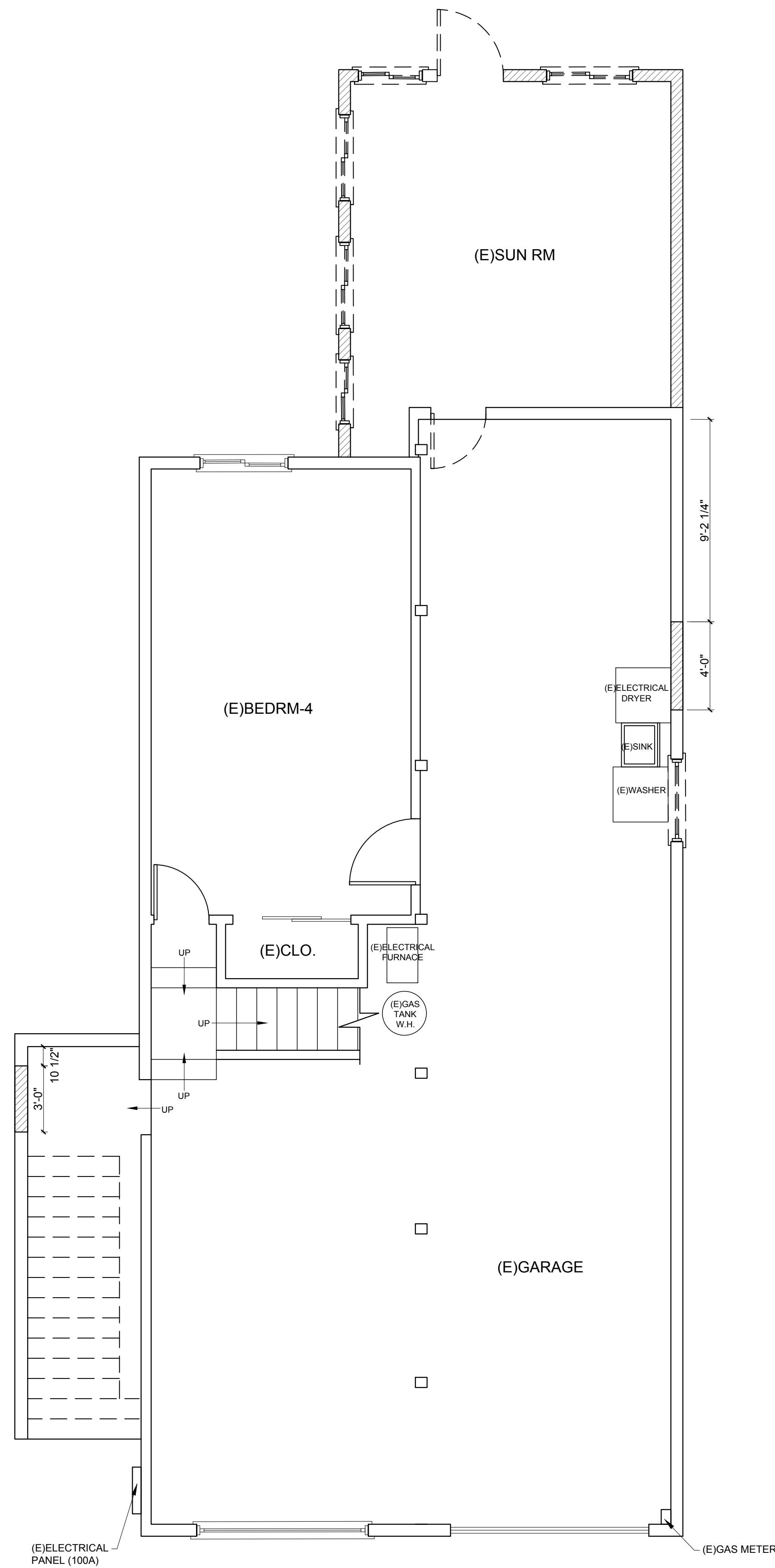
DIMENSIONS SHOWN ARE MINIMUM AND ARE INTENDED TO BE APPROXIMATE TO ALLOW FOR REASONABLE TOLERANCES DUE TO FIELD CONDITIONS.

SHEET TITLE:

PROPOSED SITE
PLAN

SHEET NUMBER:

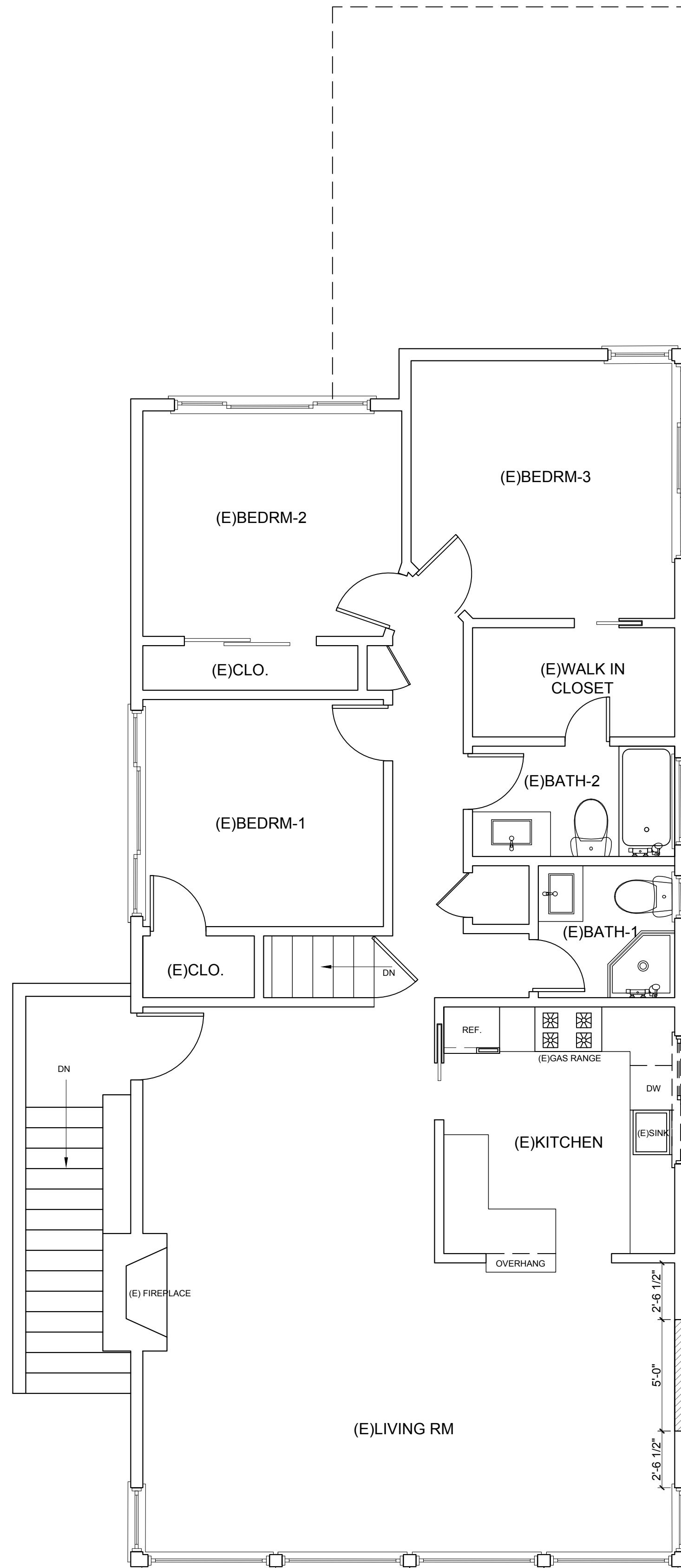
A-1.2



EXISTING/DEMO FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"

1



EXISTING/DEMO SECOND FLOOR PLAN

SCALE 1/4" = 1'-0"

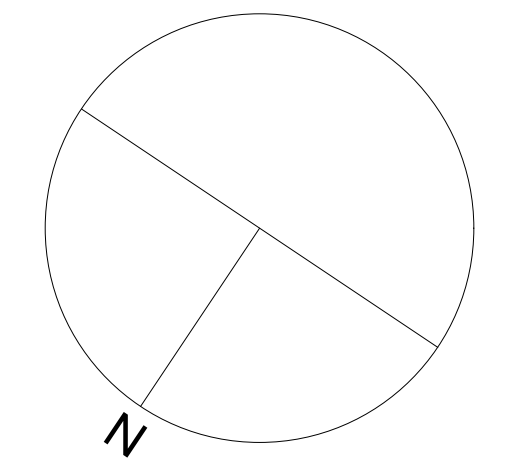
2

CONSTRUCTION LEGEND

SYMBOL	DESCRIPTION
	EXISTING WALL
	WALL TO BE DEMOLISHED
	NEW 2X4 WALL
	1HR FIRE RATED 2X4 WALL
	WINDOW/DOOR TO BE DEMOLISHED
(E)	EXISTING
(R)	REPLACE
(N)	NEW
CH	CEILING HEIGHT
EMP	ELECTRICAL MAIN PANEL
ESP	ELECTRICAL SUB PANEL
WM	WATER METER
GM	GAS METER



60 Roslyn Ct, Daly
City, CA 94015



AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

PLAN PREPARED BY

Erik Zang

THIS DRAWING AS INSTRUMENT
OF SERVICE, IS AND SHALL
REMAIN THE PROPERTY OF THE
DESIGNER AND SHALL NOT BE
REPRODUCED, PUBLISHED, OR
USED IN ANYWAY WITHOUT THE
PERMISSION OF THE DESIGNER.

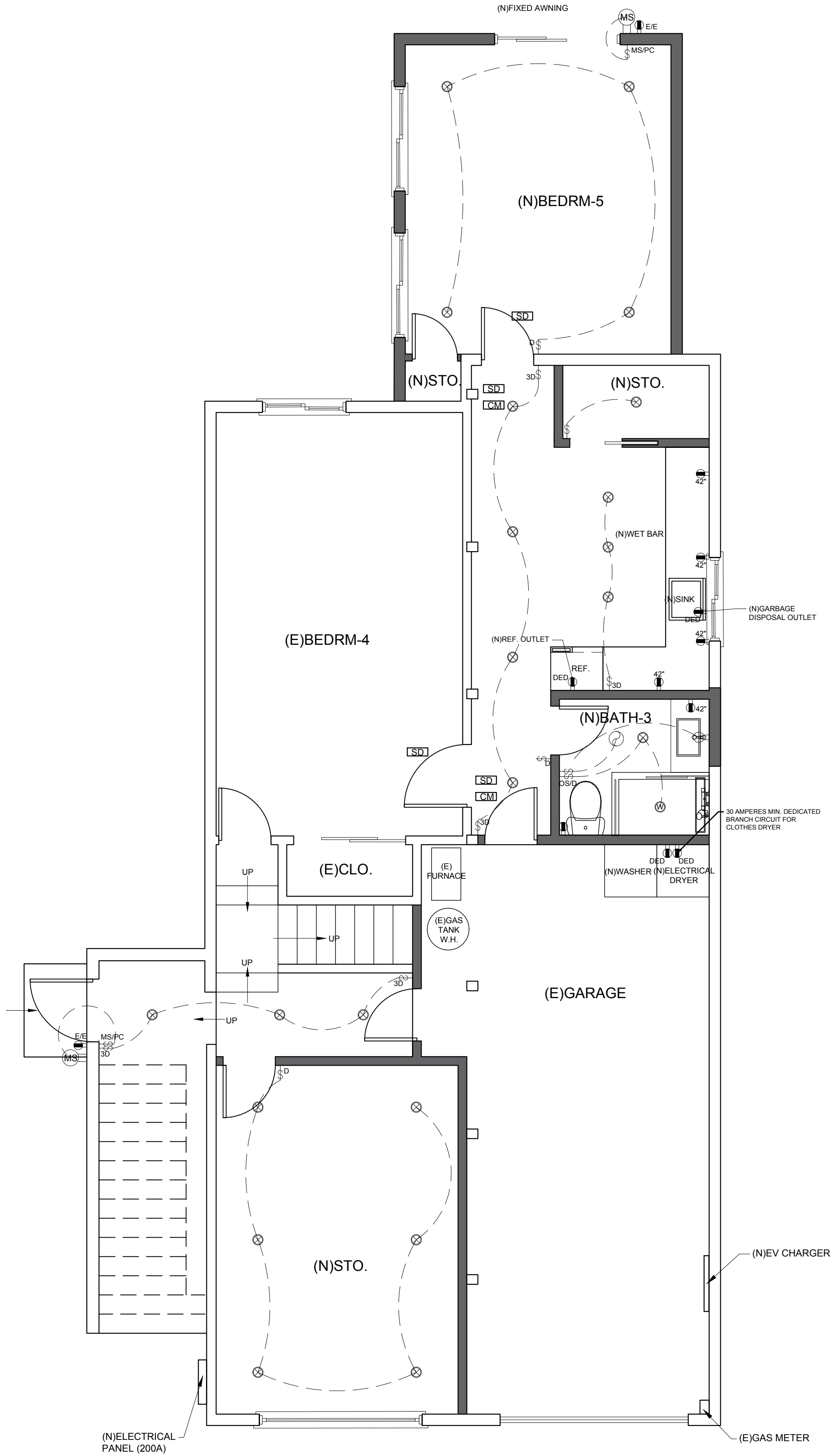
DIMENSIONS SHOWN ARE
MINIMUM AND ARE INTENDED TO
BE APPROXIMATE TO ALLOW FOR
REASONABLE TOLERANCES DUE
TO FIELD CONDITIONS.

SHEET TITLE:

EXISTING/DEMO
FLOOR PLAN

SHEET NUMBER:

A-2.1



PROPOSED FIRST LEVEL ELECTRICAL PLAN & RCP
SCALE 1/4" = 1'-0"

1

CONSTRUCTION LEGEND

SYMBOL	DESCRIPTION
	HIGH EFFICACY RECESSED LIGHT 06"
	HIGH EFFICACY RECESSED LIGHT WATER PROOF
	PENDANT LIGHT
	CEILING MOUNT LIGHT
	ENERGY EFFICIENT WALL MOUNTED LIGHT
	ENERGY EFFICIENT WALL MOUNTED LIGHT/MOTION SENSOR
	TRACK LIGHTING SYSTEM
	EXHAUST FAN
	SMOKE DETECTOR, HARD WIRED AND INTERCONNECTED
	COMBINATION CARBON MONOXIDE DETECTOR
	ELECTRICAL MAIN-PANEL
	ELECTRICAL SUB-PANEL
	TV
	DATA JACK
	SINGLE SWITCH
	DIMMER SWITCH
	SWITCH W/ OCCUPANCY SENSOR DIMMER
	SWITCH W/ MOTION SENSOR OR PHONECELL ONTROLS
	THREE WAY SWITCH
	FOUR WAY SWITCH
	DUPLEX OUTLET
	DUPLEX OUTLET 42"AFF
	GFCI(GROUND FAULT CIRCUIT INTERRUPTER) DUPLEX OUTLET
	GFCI(GROUND FAULT CIRCUIT INTERRUPTER) DUPLEX OUTLET 42"AFF
	DEDICATED LINE GFCI
	GFCI(GROUND FAULT CIRCUIT INTERRUPTER) DUPLEX WATERPROOF EXTERIOR OUTLET
	GFCI(GROUND FAULT CIRCUIT INTERRUPTER) QUAD OUTLET
	GFCI(GROUND FAULT CIRCUIT INTERRUPTER) COUNTERTOP POP-UP OUTLET
	AFCI(ARC FAULT CIRCUIT INTERRUPTER) DUPLEX OUTLET
	AFCI(ARC FAULT CIRCUIT INTERRUPTER) DUPLEX OUTLET 42"AFF
	AFCI(ARC FAULT CIRCUIT INTERRUPTER) QUAD OUTLET
	OUTLET 200V
	OUTLET 240V
	GAS LINE
	THERMO CONTROL
	DOOR BELL
	DOOR BELL CHIME

NOTES:

- CONTRACTOR SHALL VERIFY LOCATION OF ALL LIGHTS AND OUTLETS W/ OWNER ON SITE.
- ALL NEW INSTALLED LIGHTING MUST BE HIGH EFFICACY.
- CARBON MONOXIDE & SMOKE DETECTOR WILL BE INTERCONNECTED.
- PROVIDE MINIMUM TWO 20 AMP SMALL APPLIANCE CIRCUITS FOR THE KITCHEN COUNTERTOPS. SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS. LOADS SHALL BE BALANCED.
- SMOKE ALARMS SHALL BE INSTALLED OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS. CARBON MONOXIDE ALARMS IN DWELLING UNITS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
- EXHAUST FAN IN THE BATHROOM. THE MINIMUM LOCAL EXHAUST RATES SHALL BE 80 CUBIC FEET PER MINUTE FOR INTERMITTENT VENTILATION OR 20 CUBIC FEET PER MINUTE FOR CONTINUOUS VENTILATION. EXHAUST AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS.

ELECTRIC NOTES:

- THE 20-AMP BATHROOM CIRCUIT SHALL ONLY SERVE RECEPTACLES WITHIN THE BATHROOM. THE CIRCUIT MAY SERVE THE RECEPTACLES AND LIGHTS IN STAND-ALONE BATHROOMS. THE CIRCUIT MAY SERVE MULTIPLE BATHROOMS FOR RECEPTACLES ONLY.
- A GFCI PROTECTED RECEPTACLE SHALL BE LOCATED WITHIN 36" FROM THE EDGE OF THE SINK.
- ALL NEW BATHROOM LIGHTING SHALL BE HIGH-EFFICACY AND AT LEAST ONE NEW LUMINAIRE IN EACH NEW/REMODELED BATHROOM SHALL BE CONTROLLED BY A VACANCY SENSOR OR MANUAL-ON OCCUPANCY SENSOR. REGARDING ALL OTHER ROOMS (I.E. BEDROOMS, HALLWAYS, FOYER, DINING ROOMS, ETC.) ALL LIGHTS IN THESE ROOMS ARE HIGH EFFICACY LUMINARIES.
- LIGHT FIXTURES LOCATED IN WET LOCATION SHALL BE LISTED FOR WET LOCATION AND REQUIRE WATER RESISTANT TRIMS.
- ELECTRICAL PANELS SHALL NOT BE INSTALLED IN BATHROOMS.
- BATHROOM FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY HUMIDITY CONTROL. HUMIDITY CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF < 50 % TO A MAXIMUM OF 80 %. A HUMIDITY CONTROL MAU UTILIZE MANUAL OR AUTOMATIC MEANS OF ADJUSTMENT. A HUMIDITY CONTROL MAY BE A SEPARATE COMPONENT TO THE EXHAUST FAN AND IS NOT REQUIRED TO BE INTEGRAL. (I.E. BUILT IN).
- CARBON MONOXIDE ALARMS SHALL BE OPERATIONAL AND LOCATED OUTSIDE OF EACH SEPARATE DWELLING UNIT SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM(S) AND ON EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS.
- ALL 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN KITCHEN, BEDROOMS, LAUNDRY AREAS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARE-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. (2022NEC 210.128) ALL AFCIS ARE REQUIRED TO BE THE "COMBINATION" TYP. RATHER THAN A "BRANCHFEEDER". PROTECTION CAN BE IN THE FORM OF A CIRCUIT BREAKER OR AN OUTLET. HOWEVER, THE WIRING FROM THE CIRCUIT BREAKER TO THE AFCI OUTLET MUST BE METAL CLAD. THE OUTLET DOWNSTREAM MAY BE WIRED USING NON-METALLIC SHEATHED CABLE.
- TERMINATION OF ALL DRYER AIR DUCTS SHALL BE A MINIMUM OF 3 FEET FROM PROPERTY LINES AND 3 FT FROM ANY OPENINGS INTO THE BUILDING (I.E. DRYERS, BATH AND UTILITY FANS, ETC. MUST BE 3 FEET AWAY FROM DOORS, WINDOWS, OPENING SKYLIGHTS OR ATTIC VENTS). CMC 504.5
- ALL RECEPTACLES SHALL BE TAMPER- RESISTANT CEC 406.11, CEC 210.52, CEC 210.8
- EXTERIOR LIGHTING MUST BE HIGH EFFICACY, MANUAL CONTROL, AND HAVE PHOTOCELL MOTION SENSOR, PHOTOCELL WITH AUTOMATIC TIMER, ASTRONOMICAL TIME SWITCH, OR EMCS.
- ALL NEW LIGHTING IN HABITABLE SPACES SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED DIMMING CONTROLS OR SHOW THAT THE LIGHTING MEETS ONE OF THE EXCEPTIONS TO CENC SECTION 150.0(K)2F.
- THE BATHROOM HAS AT LEAST ONE LIGHT ON A VACANCY SENSOR.
- ALL NEW SMOKE DETECTORS AND CARBON MONOXIDE WILL BE INTERCONNECTED.
- ALL NECESSARY NEW OUTLETS WILL BE AFCI PROTECTED PER CODE.
- ALL LIGHTING WILL BE HIGH EFFICACY.
- HARDWIRED SMOKE DETECTION IS REQUIRED IN EACH BEDROOM, COMBINATION SMOKE AND CARBON MONOXIDE DETECTION IS REQUIRED OUTSIDE EACH BEDROOM AND ON EACH FLOOR.
- ALL NEW AND REPLACED DUPLEX RECEPTACLES SHALL BE LISTED "TAMPER-RESISTANT RECEPTACLES".
- A 120V RECEPTACLE SHALL BE PLACED WITHIN 3' OF A WATER HEATER AND WITHIN 25' OF AN A/C CONDENSER (IF THE HOME HAS A/C SHOW THE CONDENSER).
- RECEPTACLES SHALL NOT BE INSTALLED WITHIN A ZONE MEASURED 900 MM (3 FT) HORIZONTALLY AND 2.5 M (8 FT) VERTICALLY FROM THE TOP OF THE BATHTUB RIM OR SHOWER STALL THRESHOLD. THE IDENTIFIED ZONE IS ALL-ENCOMPASSING AND SHALL INCLUDE THE SPACE DIRECTLY OVER THE TUB OR SHOWER STALL.

EXCEPTION NO. 1: IN BATHROOMS WITH LESS THAN THE REQUIRED ZONE THE RECEPTACLE(S) SHALL BE PERMITTED TO BE INSTALLED OPPOSITE THE BATHTUB RIM OR SHOWER STALL THRESHOLD ON THE FARTHEST WALL WITHIN THE ROOM.
EXCEPTION NO. 2: IN A DWELLING UNIT, A SINGLE RECEPTACLE SHALL BE PERMITTED FOR AN ELECTRONIC TOILET OR PERSONAL HYGIENE DEVICE SUCH AS AN ELECTRONIC BIDET SEAT. THE RECEPTACLE SHALL BE READILY ACCESSIBLE AND LOCATED ON ONE OF THE FOLLOWING:
(1)THE WALL BEHIND THE TOILET BUT NOT BEHIND THE TANK
(2)THE OPPOSITE SIDE OF THE TOILET FROM THE BATHTUB OR SHOWER
- FIRE PROTECTION IS REQUIRED FOR RECEPTACLES IN THE COMMON WALLS BETWEEN THE GARAGE AND THE RESIDENCE. THIS CAN BE PROVIDED WITH FIRE RATED RECEPTACLE BOXES, OR BY STEEL ELECTRICAL BOXES THAT DO NOT EXCEED 16 SQUARE INCHES IN AREA THAT ARE PERMITTED IN 2-HOUR MAXIMUM FIRE-RESISTANCE-RATED WALLS PROVIDED THE AGGREGATE AREA OF OPENINGS THROUGH THE MEMBRANE DOES NOT EXCEED 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL AREA. SUCH BOXES ON OPPOSITE SIDES OF THE WALL SHALL BE SEPARATED BY ONE OF FIVE THE CONDITIONS LISTED IN EXCEPTION #1.
- OUTDOOR LIGHTING SHALL BE DESIGNED TO BE AN INTEGRAL PART OF THE BUILT ENVIRONMENT, REFLECTING A BALANCE FOR THE LIGHTING NEEDS WITH THE CONTEXTUAL AMBIENT LIGHT LEVEL AND SURROUNDING NIGHTTIME CHARACTERISTICS OF THE COMMUNITY.

1 MAXIMUM HEIGHT A WITHIN ONE HUNDRED FEET OF A RESIDENTIAL DISTRICT: SIXTEEN FEET.
2 DESIGN OF FIXTURES. FIXTURES SHALL BE APPROPRIATE TO THE STYLE AND SCALE OF THE ARCHITECTURE. FIXTURES ON BUILDINGS SHALL BE ATTACHED ONLY TO WALLS OR EAVES, AND THE TOP OF THE FIXTURE SHALL NOT EXCEED THE HEIGHT OF THE PARAPET OR ROOF OR EAVE OF ROOF.
3 TIMING CONTROLS. ALL OUTDOOR LIGHTING IN NON-RESIDENTIAL DEVELOPMENT SHALL BE ON A TIME CLOCK OR PHOTO-SENSOR SYSTEM AND TURNED OFF DURING DAYLIGHT HOURS AND DURING HOURS WHEN THE BUILDING OR, IN THE CASE OF SHOPPING CENTERS, ALL BUILDINGS, ARE NOT IN USE AND THE LIGHTING IS NOT REQUIRED FOR SECURITY.
4.TRESPASS. ALL LIGHTS SHALL BE DIRECTED, ORIENTED, AND SHIELDED TO PREVENT LIGHT TRESPASS OR GLARE ONTO ADJACENT PROPERTIES. THE LIGHT LEVEL AT PROPERTY LINES SHALL NOT EXCEED 0.3 FOOT-CANDLES.
- KITCHEN COUNTERTOPS AT EACH COUNTER SPACE LARGER THAN 12" AND SPACED NO MORE THAN TWO FEET ON CENTER. KITCHEN RECEPTACLE SHALL BE SUPPLIED BY AT LEAST TWO 20 AMP CIRCUITS.
- PROVIDE AN 8' DRIVEN GROUNDING ROD, 1/2" OF BURIED METAL PIPE OR UFER GROUND, BOND GROUNDING CONDUCTOR TO METAL PIPES (WATER AND GAS SERVICE) WITH APPROVED CLAMPS.
- LIGHT FIXTURES INSTALLED OVER SHOWERS ARE DAMP PROOF TYPE FIXTURES.
- THERMOSTATIC MIXING VALVE AT SHOWER TO LIMIT WATER TEMPERATURE TO 120 DEGREES F.
- WATER HEATERS SHALL BE ANCHORED OR STRAPPED TO RESIST HORIZONTAL DISPLACEMENT DUE TO EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE-THIRD (1/3) AND LOWER ONE-THIRD (1/3) OF ITS VERTICAL DIMENSIONS. AT THE LOWER POINT, A MINIMUM DISTANCE OF FOUR(4) INCHES (102 MM) SHALL BE MAINTAINED ABOVE THE CONTROLS WITH THE STRAPPING. (CPC 501.2)

PROVIDE A WATER TIGHT PAN UNDER THE WATER HEATER WITH A 3/4" PIPE DRAIN TO THE EXTERIOR OF THE RESIDENCE.
- 4" EXHAUST DUCT FOR DRYER GOES UP AND THROUGH ROOF TO EXTERIOR WITH VERTICAL DUCT LENGTH 12' MAXIMUM.
- EXHAUST FAN NEED TO MEET THE REQUIREMENTS FOR INDOOR AIR QUALITY AND MECHANICAL VENTILATION:

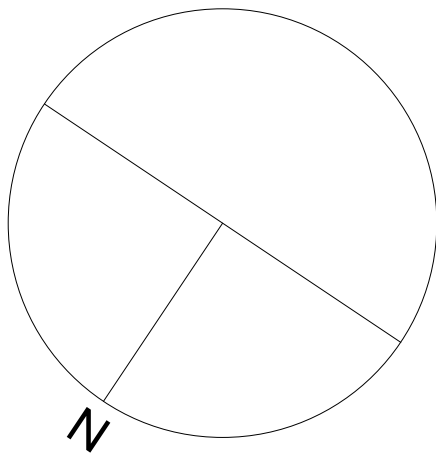
1) BATHROOMS: PROVIDE AN EXHAUST FAN DUCTED TO THE OUTSIDE (MIN. 4" DIA. FLEX DUCT WITH A MAX LENGTH OF 10') WITH A MIN VENTILATION RATE OF 50 CFM. EXHAUST FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL PER CALGREEN SECTION 4.506.1.
2) KITCHEN: PROVIDE AN EXHAUST FAN DUCTED TO THE OUTSIDE (MIN. 5" DIA. FLEX DUCT WITH A MAX LENGTH OF 35') WITH A MIN VENTILATION RATE OF 100CFM.
3) WHOLE-BUILDING VENTILATION: CONTINUOUS FAN WITH A MIN VENTILATION RATE OF 0.03X524+7.5X61+11=30.12 CFM.

TABLE 150.0-A CLASSIFICATION OF HIGH EFFICACY LIGHT SOURCES

HIGH EFFICACY LIGHT SOURCES		
Light sources shall comply with one of the columns below:		
Light sources in this column, other than those installed in ceiling recessed downlight luminaires, are classified as high efficacy and are NOT required to comply with reference Joint Appendix JA8.	Light sources in this column are only considered to be high efficacy if they are certified to the Commission as High Efficacy Light Sources in accordance with Reference Joint Appendix JA8 and marked as required by JA8.	Light sources in this column are only considered to be high efficacy if they are certified to the Commission as High Efficacy Light Sources in accordance with Reference Joint Appendix JA8 and marked as required by JA8.
(1)LED light sources installed outdoors. (2)Inseparable solid state lighting (SSL) luminaires containing colored light sources that are installed to provide decorative lighting. (3)Pin-based linear fluorescent or compact fluorescent light sources using electronic ballasts. (4)High intensity discharge (HID) light sources including pulse start metal halide and high pressure sodium light sources. (5)Luminaires with hardwired high frequency generator and induction lamp. (6)Ceiling fan light kits subject to federal appliance regulations.	(7)All light sources installed in ceiling recessed downlight luminaires. Note that ceiling recessed downlight luminaires shall not have screw bases regardless of lamp type as described in section 150.0(A)(1C). (8)Any light source not otherwise listed in this table.	



60 Roslyn Ct, Daly City, CA 94015



AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

PLAN PREPARED BY

Erik Zany

THIS DRAWING AS INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF THE DESIGNER AND SHALL NOT BE REPRODUCED, PUBLISHED, OR USED IN ANYWAY WITHOUT THE PERMISSION OF THE DESIGNER.

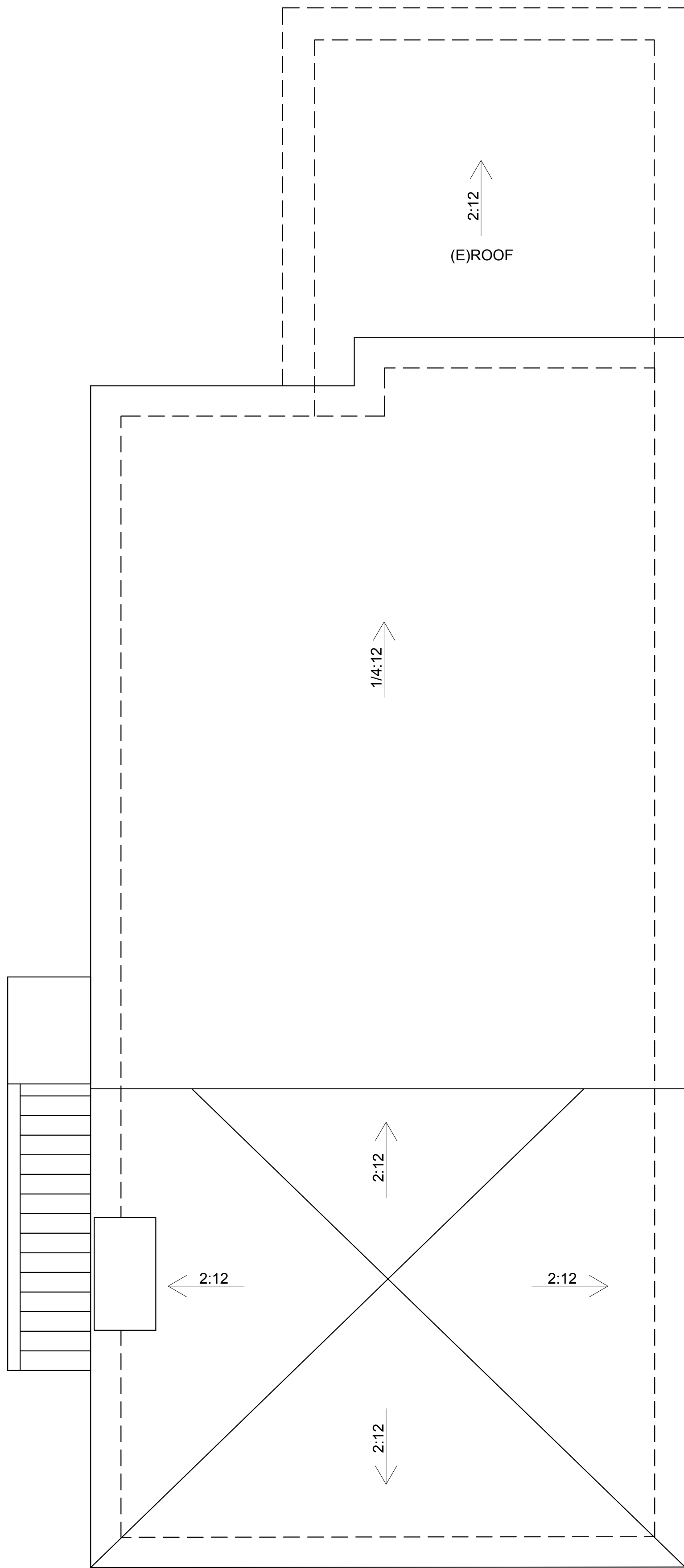
DIMENSIONS SHOWN ARE MINIMUM AND ARE INTENDED TO BE APPROXIMATE TO ALLOW FOR REASONABLE TOLERANCES DUE TO FIELD CONDITIONS.

SHEET TITLE:

PROPOSED ELECTRICAL PLAN & RCP

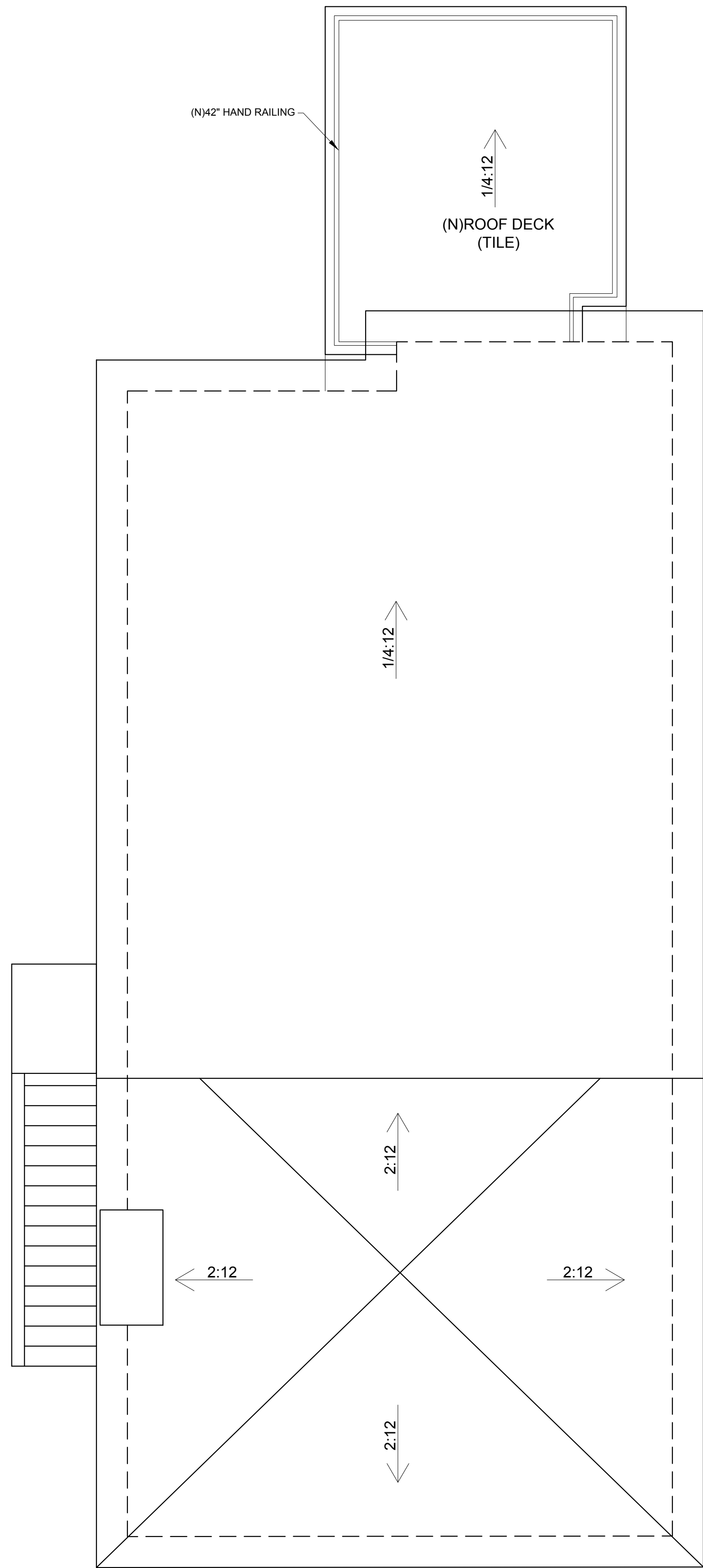
SHEET NUMBER:

A-3.1



EXISTING ROOF PLAN
SCALE 1/4" = 1'-0"

1

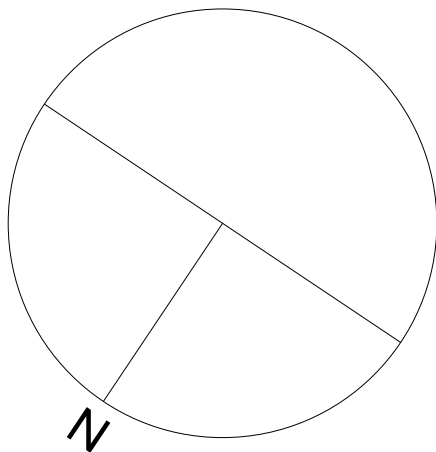


PROPOSED ROOF PLAN
SCALE 1/4" = 1'-0"

2



60 Roslyn Ct, Daly
City, CA 94015



AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

PLAN PREPARED BY

Erik Zang

THIS DRAWING AS INSTRUMENT
OF SERVICE, IS AND SHALL
REMAIN THE PROPERTY OF THE
DESIGNER AND SHALL NOT BE
REPRODUCED, PUBLISHED, OR
USED IN ANYWAY WITHOUT THE
PERMISSION OF THE DESIGNER.

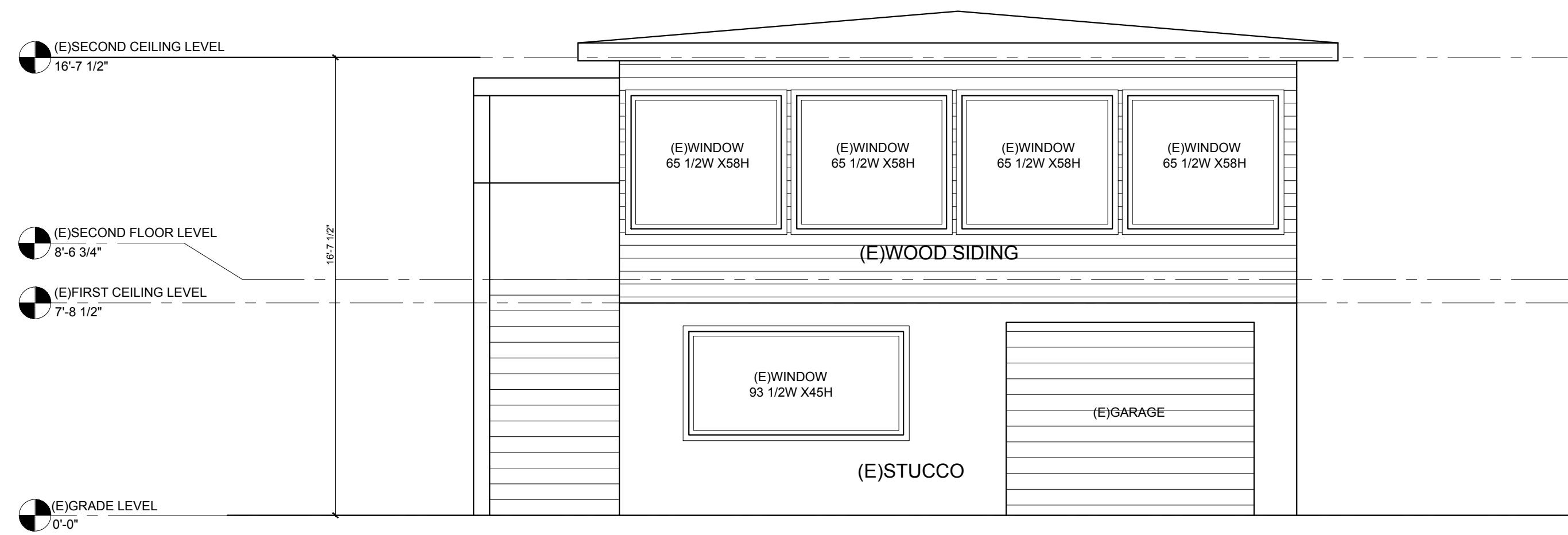
DIMENSIONS SHOWN ARE
MINIMUM AND ARE INTENDED TO
BE APPROXIMATE TO ALLOW FOR
REASONABLE TOLERANCES DUE
TO FIELD CONDITIONS.

SHEET TITLE:

EXISTING
ROOF PLAN

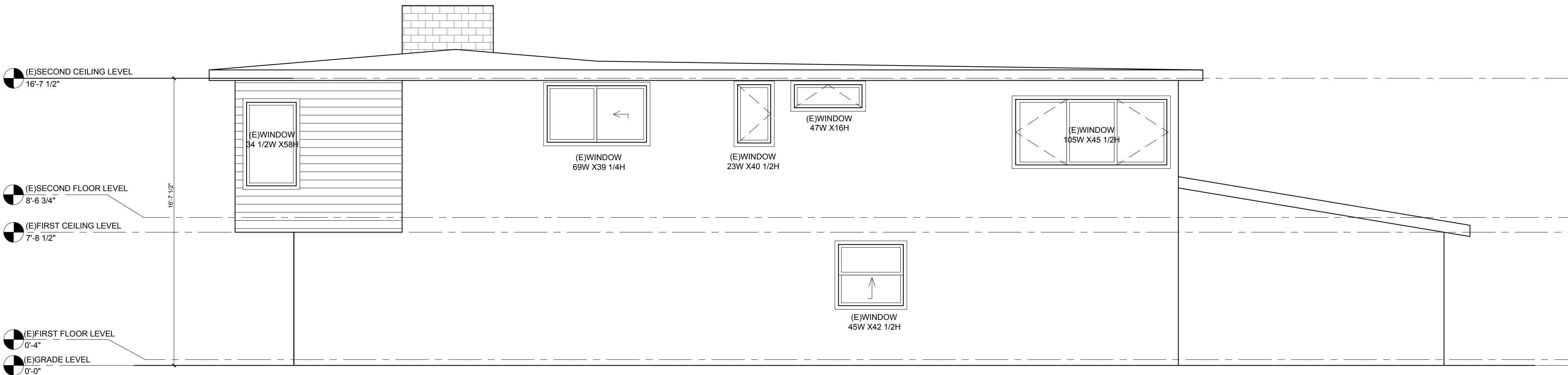
SHEET NUMBER:

A-4.1



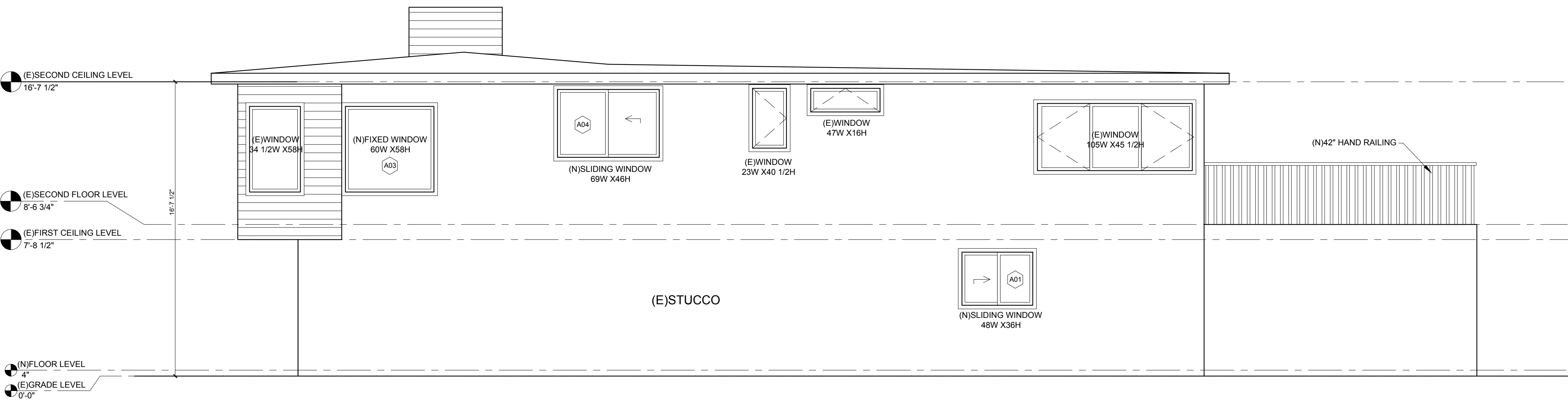
EXISTING FRONT ELEVATION
SCALE 1/4" = 1'-0"

1



EXISTING RIGHT ELEVATION
SCALE 1/4" = 1'-0"

2



PROPOSED RIGHT ELEVATION
SCALE 1/4" = 1'-0"

3



60 Roslyn Ct, Daly
City, CA 94015

AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

PLAN PREPARED BY

Enk Zang

THIS DRAWING AS INSTRUMENT
OF SERVICE, IS AND SHALL
REMAIN THE PROPERTY OF THE
DESIGNER AND SHALL NOT BE
REPRODUCED, PUBLISHED, OR
USED IN ANYWAY WITHOUT THE
PERMISSION OF THE DESIGNER.

DIMENSIONS SHOWN ARE
MINIMUM AND ARE INTENDED TO
BE APPROXIMATE TO ALLOW FOR
REASONABLE TOLERANCES DUE
TO FIELD CONDITIONS.

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

A-5.1



60 Roslyn Ct, Daly
City, CA 94015

AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

PLAN PREPARED BY

Erik Zang

THIS DRAWING AS INSTRUMENT
OF SERVICE, IS AND SHALL
REMAIN THE PROPERTY OF THE
DESIGNER AND SHALL NOT BE
REPRODUCED, PUBLISHED, OR
USED IN ANYWAY WITHOUT THE
PERMISSION OF THE DESIGNER.

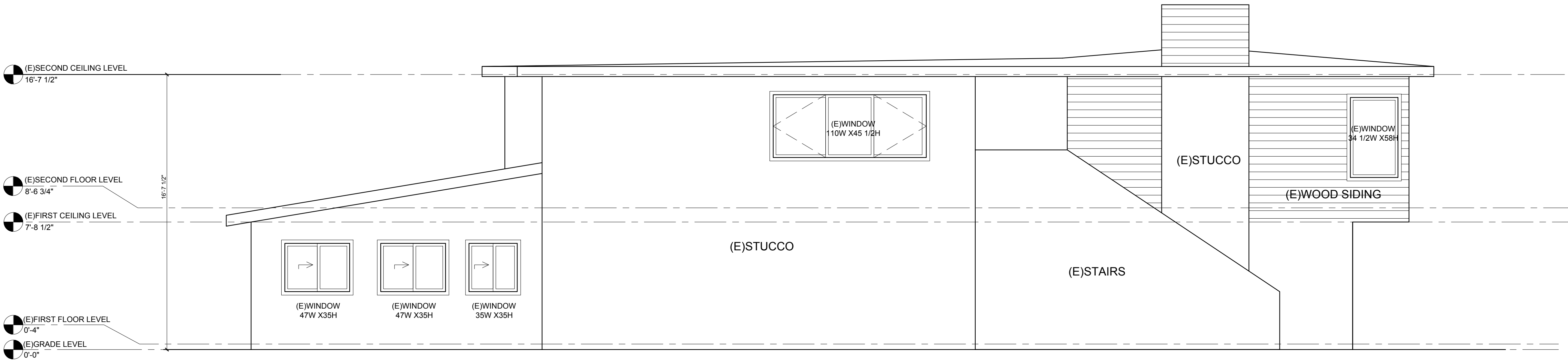
DIMENSIONS SHOWN ARE
MINIMUM AND ARE INTENDED TO
BE APPROXIMATE TO ALLOW FOR
REASONABLE TOLERANCES DUE
TO FIELD CONDITIONS.

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

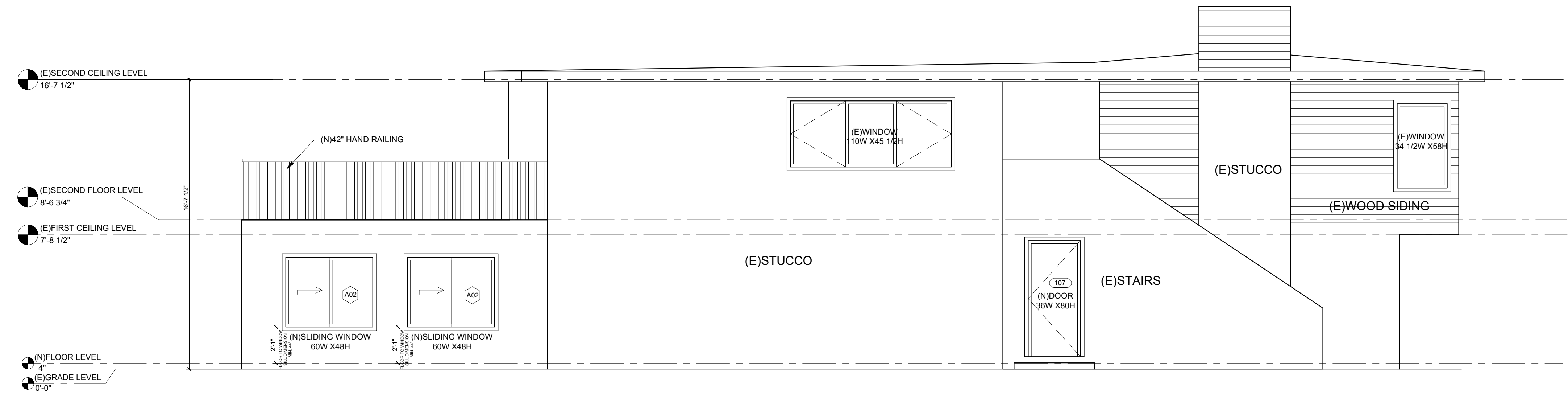
A-5.2



EXISTING LEFT ELEVATION

SCALE 1/4" = 1'-0"

1



PROPOSED LEFT ELEVATION

SCALE 1/4" = 1'-0"

2



60 Roslyn Ct, Daly
City, CA 94015

AP NUMBER 006021120

DATE 06/15/2024

PLAN CHECK

BID DATE

FINAL PERMIT

REVISIONS

PLAN PREPARED BY

Erik Zang

THIS DRAWING AS INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF THE DESIGNER AND SHALL NOT BE REPRODUCED, PUBLISHED, OR USED IN ANYWAY WITHOUT THE PERMISSION OF THE DESIGNER.

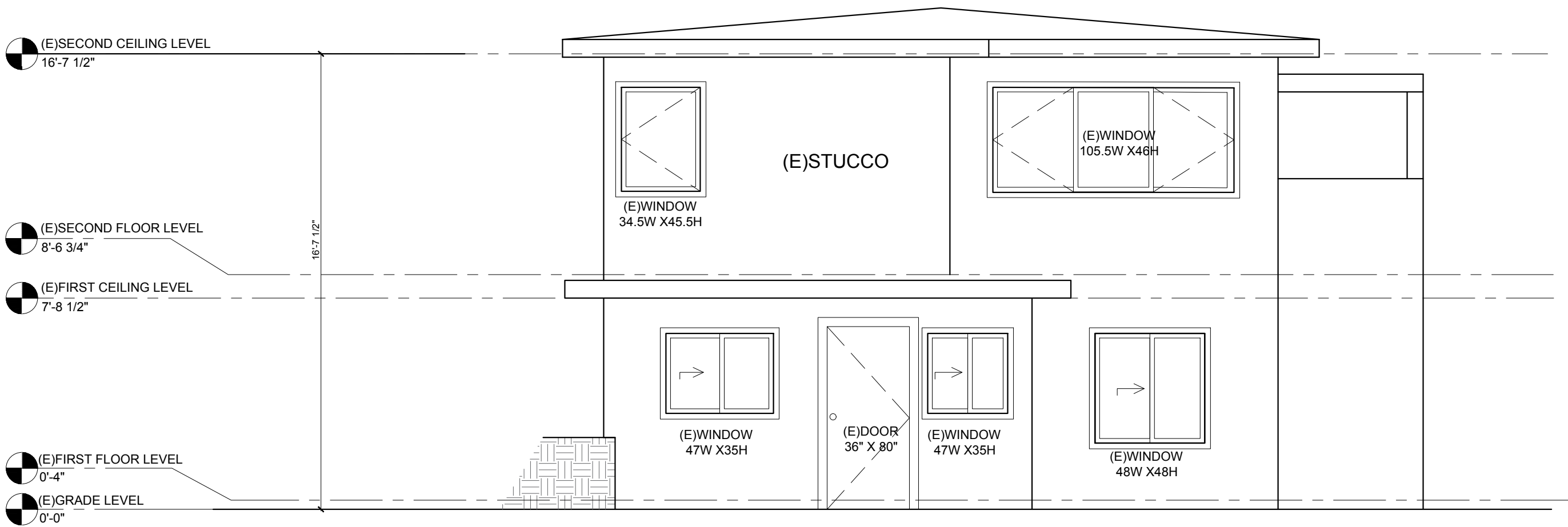
DIMENSIONS SHOWN ARE MINIMUM AND ARE INTENDED TO BE APPROXIMATE TO ALLOW FOR REASONABLE TOLERANCES DUE TO FIELD CONDITIONS.

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

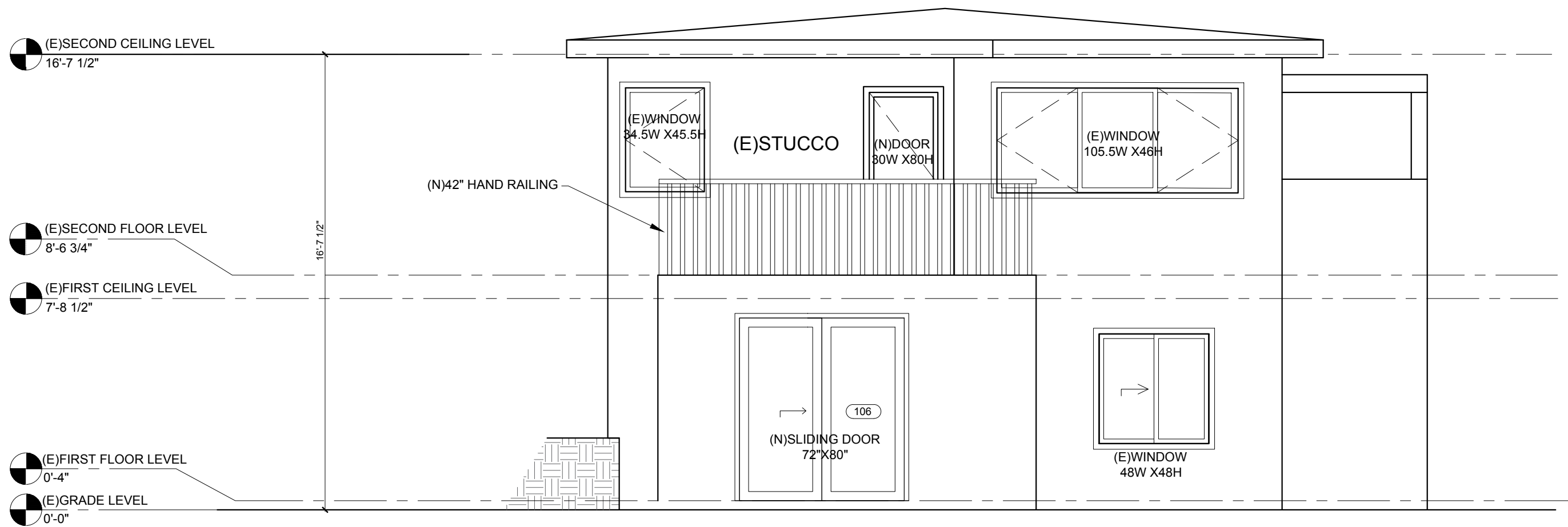
A-5.3



EXISTING REAR ELEVATION

SCALE 1/4" = 1'-0"

1



PROPOSED REAR ELEVATION

SCALE 1/4" = 1'-0"

2

PIPE SPECIFICATIONS	
TYPE	DRAINAGE PIPE
	JM EAGLE PVC
SIZE	4"
MATERIAL	PVC
TYPE	SOLID, SDR-35

- NOTES: 1. DOWN SPOUT SOLID LEADER PIPE AND SURFACE DRAIN SYSTEM
2. ALL ON-SITE PVC CONNECTED PIPES SHALL BE PVC SDR-35 UNLESS OTHERWISE SPECIFIED
3. ALL PVC PIPE CONNECTIONS TO CONCRETE STRUCTURES SHALL BE WATER STOP PER CSJ STD DETAIL D-19

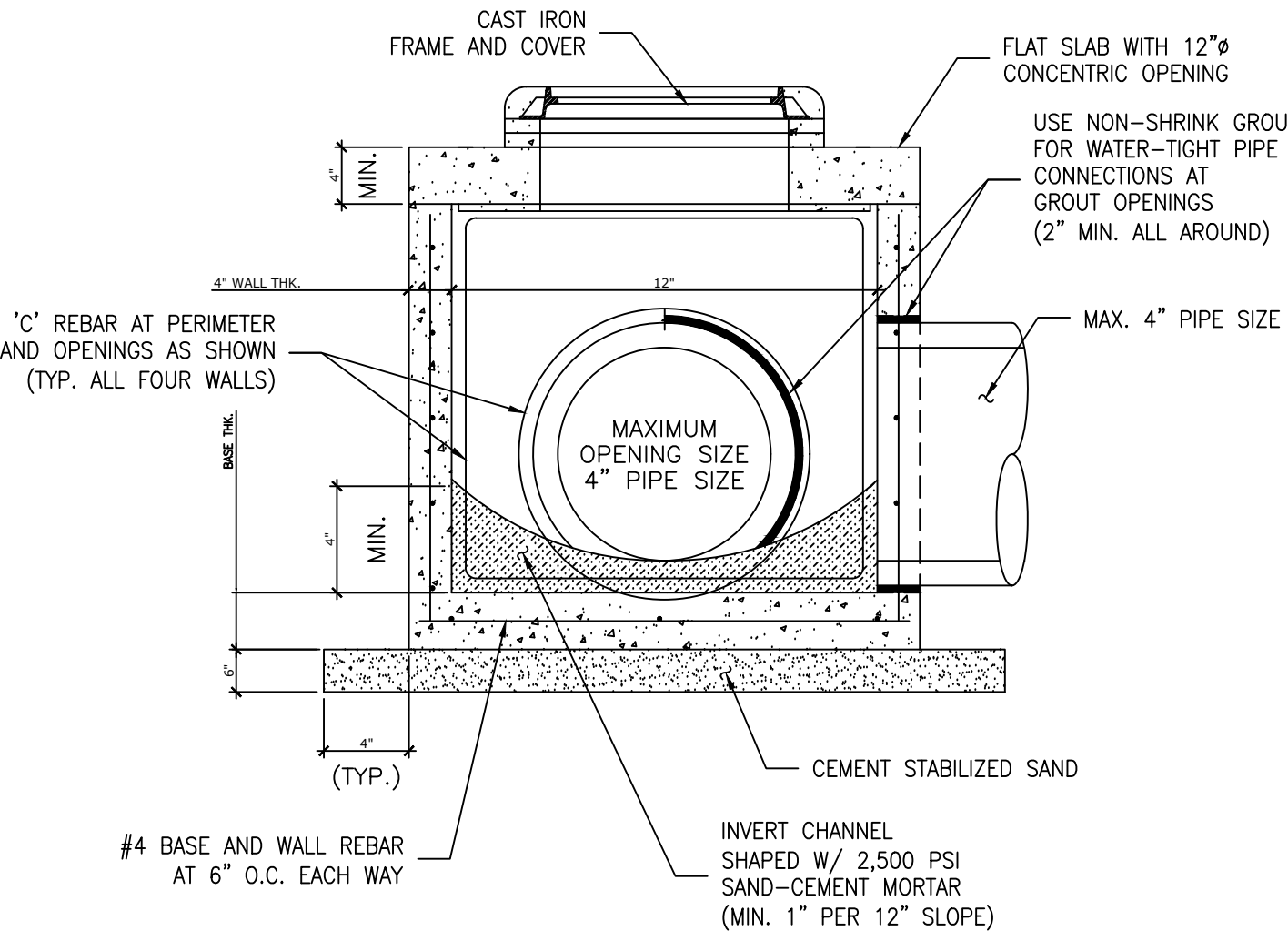
EXCAVATION NOTES

ALL EXCAVATIONS SHALL BE RETAINED BY A SOIL RETENTION SYSTEM AS REQ'D. THE DESIGN, INSTALLATION, MAINTENANCE, MONITORING AND REMOVAL SHALL BE THE COMPLETE AND SOLE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL COORDINATE ALL ELEMENTS OF THE SOIL RETENTION SYSTEM WITH ALL ELEMENTS OF THE PERMANENT BUILDING, EXISTING UTILITIES/CONDITIONS, ADJACENT STRUCTURES ETC.

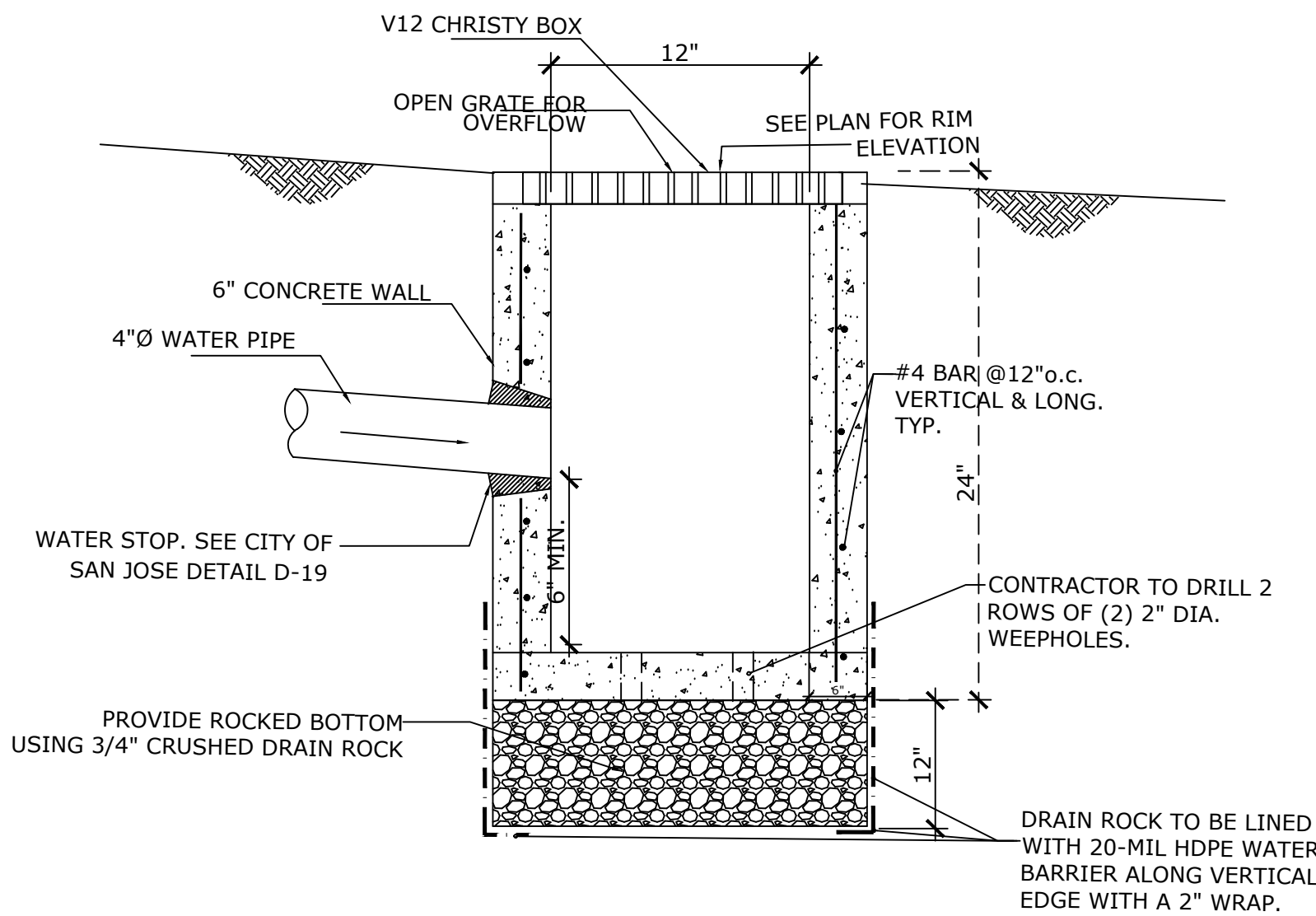
THE CONTRACTOR SHALL PROVIDE POSITIVE PROTECTION (MAT/SHEET COVERINGS) FOR ALL EXCAVATION SLOPES TO PROTECT SLOPES FROM INSTABILITY AND DETERIORATION DUE TO RAIN, WIND, ETC.

THE CONTRACTOR SHALL PROVIDE DEWATERING SYSTEMS INCLUDING SURFACE DRAINAGE CHANNELS, SUMPS, ETC., TO PROTECT ALL EXCAVATIONS FROM FLOODING.



1 INLET BOX DETAIL

SCALE: NOT TO SCALE



2 BUBBLER BOX DETAIL

SCALE: NOT TO SCALE

EARTH WORK QUANTITIES

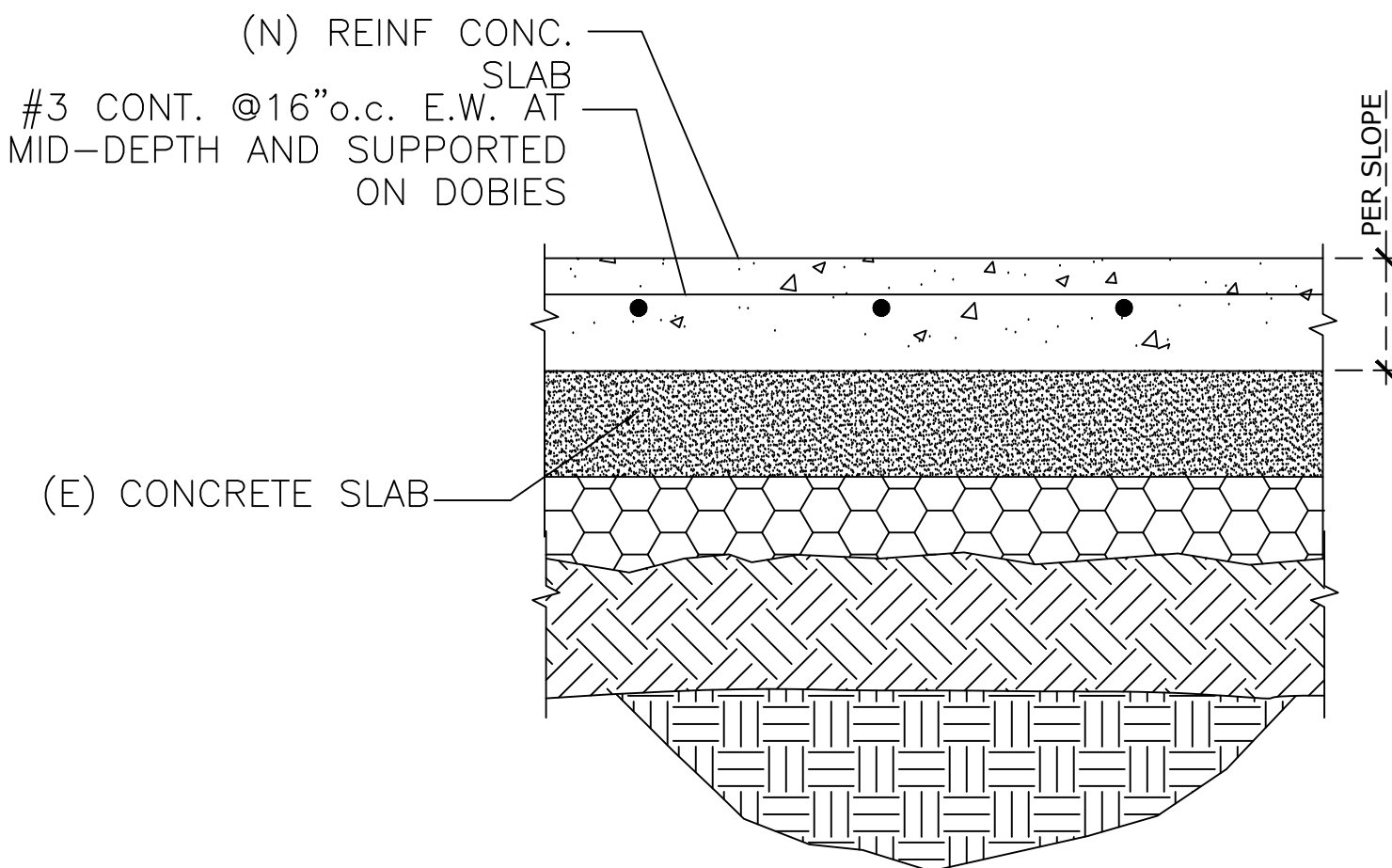
CUT: 7 CY
FILL: 5 CY
EXPORT: 2 CY
IMPORT: 0 CY

NOTE: EARTHWORK QUANTITIES SHOWN ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INDEPENDENTLY ESTIMATE QUANTITIES FOR HIS/HER OWN USE.

- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE GENERAL AND SPECIFIC PROVISIONS, STANDARD DRAWINGS, AND REQUIREMENTS OF CURBING.
- CONTRACTOR SHALL SECURE A STREET OPENING PERMIT FROM THE CITY ENGINEERING DEPARTMENT AND PAY APPROPRIATE FEE PRIOR TO COMMENCEMENT OF WORK. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DONE UNDER A SINGLE STREET OPENING PERMIT.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES WITH THE APPROPRIATE UTILITY AGENCIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY OWNERS 48 HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO THE UTILITY CONTRACT UNDERGROUND SERVICE.
- EXISTING UTILITIES SHOWN ARE BASED UPON RECORD INFORMATION AND ARE APPROXIMATE IN THE LOCATION AND DEPTH. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES THAT MAY BE AFFECTED BY NEW FACILITIES IN THIS CONTRACT. VERIFY ACTUAL LOCATION AND DEPTH, AND REPORT POTENTIAL CONFLICTS TO THE ENGINEER PRIOR TO EXCAVATION FOR NEW FACILITIES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE ALL STREET MONUMENTS, LOT CORNER PIPES, AND GRADE STAKES DISTURBED DURING THE PROCESS OF CONSTRUCTION AT THE REGULAR ENGINEER'S FEE.
- PROVIDE CONCRETE PROTECTION BETWEEN UNDERGROUND PIPES CROSSING WITH 12" OF LESS VERTICAL CLEARANCE.
- ALL SURPLUS AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM PROJECT SITE AND FROM PUBLIC RIGHT-OF-WAY.
- CONTRACTOR SHALL PROVIDE ADEQUATE EROSION CONTROL, AND KEEP MAINTENANCE OF THE PUBLIC RIGHT-OF-WAY AT ALL TIMES.
- ALL TRENCHES AND EXCAVATIONS SHALL BE CONSTRUCTED IN STRICT COMPLIANCE WITH THE APPLICABLE SECTIONS OF CALIFORNIA AND FEDERAL O.S.H.A. REQUIREMENTS AND OTHER APPLICABLE SAFETY ORDINANCES. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR TRENCH SHORING DESIGN AND INSTALLATION.
- GRADE BREAKS ON THE CURBS AND SIDEWALK ARE TO BE ROUNDED OFF ON FORM WORK AND FINISHED SURFACING.
- CONTRACTOR SHALL PERFORM HIS CONSTRUCTION AND OPERATION IN A MANNER WHICH WILL NOT ALLOW HARMFUL POLLUTANTS TO ENTER THE STORM DRAIN SYSTEM. TO ENSURE COMPLIANCE, THE CONTRACTOR SHALL IMPLEMENT THE APPROPRIATE BEST MANAGEMENT PRACTICE (BMP) AS OUTLINED IN THE MONITORING AND BEST MANAGEMENT PRACTICES FOR THE CONSTRUCTION INDUSTRY ISSUED BY THE COUNTY. COUNTYWIDE STORM WATER POLLUTION PREVENTION PROGRAM, TO SUIT THE CONSTRUCTION SITE AND JOB CONDITION. THE CONTRACTOR SHALL PRESENT HIS PROPOSED BMP AT THE PRE-CONSTRUCTION MEETING FOR DISCUSSION AND APPROVAL.
- OVERNIGHT PARKING OF THE CONSTRUCTION EQUIPMENT IN THE STREET RIGHT-OF-WAY SHALL NOT BE PERMITTED, EXCEPT AT LOCATIONS APPROVED BY THE COUNTY.
- THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE COUNTY'S ENGINEERING DIVISION FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- THE STORM RUNOFF GENERATED BY THE NEW PROJECT SHALL NOT DRAIN ONTO ADJACENT PROPERTIES. THE EXISTING STORM DRAINAGE FROM THE ADJACENT PROPERTIES SHALL NOT BE BLOCKED BY THE NEW DEVELOPMENT.

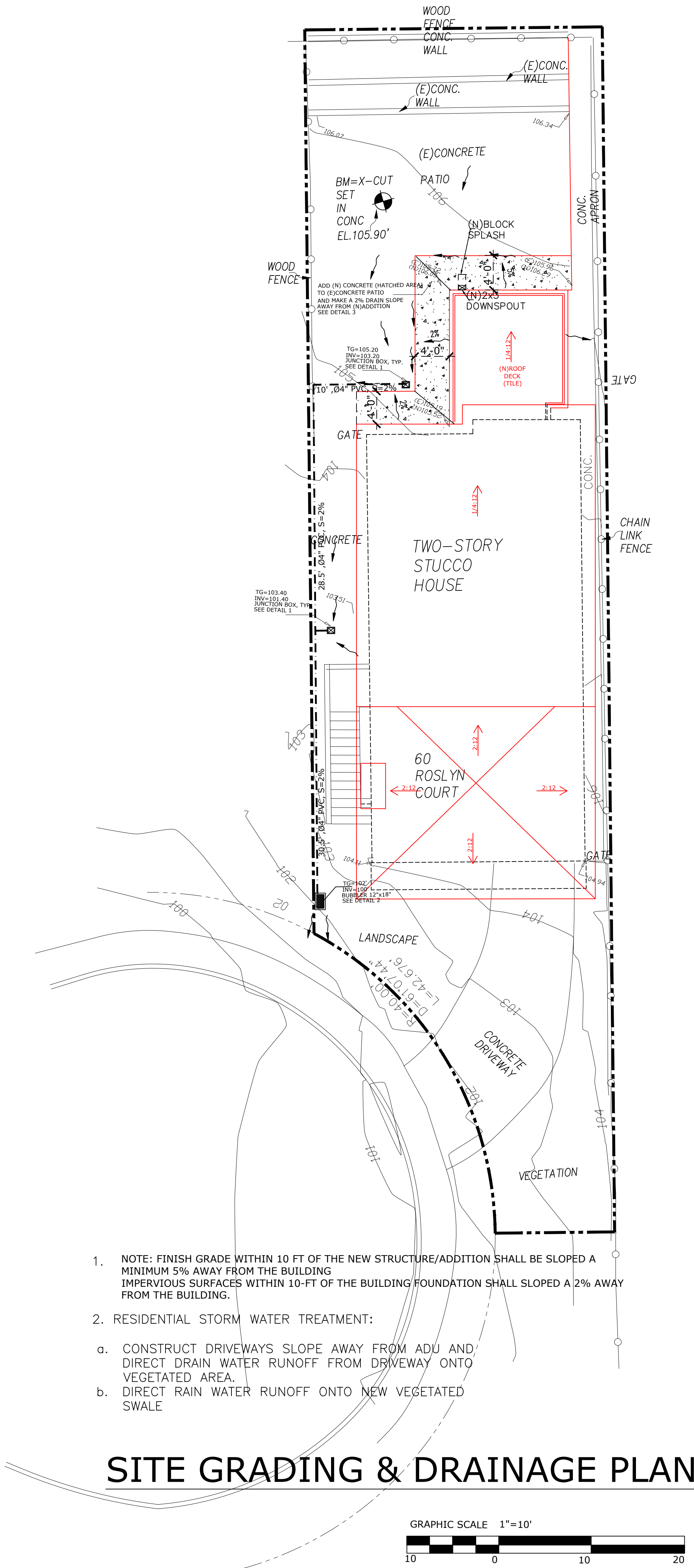
GRADING & DRAINAGE NOTES:

- All grading is subject to observation by the City, Permittee or representative shall notify the City Department of Public Works Project Inspector before start of any grading.
- Approval of this plan applies only to (A) the excavation, placement, and compaction of natural earth materials, (B) the installation of on-site (i.e. private property) storm water conveyance and treatment facilities that are outside of the 5-foot building envelope, and (C) the installation of retaining structures. This approval does not confer any rights of entry to either public property or the private property of others. Approval of this plan also does not constitute approval of any improvements with the exception of those listed above. Proposed improvements, with the exception of those listed above, are subject to review and approval by the responsible authorities and all other required permits shall be obtained.
- Unless otherwise noted on the plan, any depiction of a retaining structure on this plan shall not constitute approval for construction of the retaining structure unless a separate structural review, by the Department of Public Works is completed and approved.
- It shall be the responsibility of the Permittee or agent to identify, locate and protect all underground facilities.
- The permittee or agent shall maintain the streets, sidewalks and all other public rights-of-way in a clean, safe and usable condition. At spills of soil, rock or construction debris shall be removed from the publicly owned property during construction and upon completion of the project. All adjacent property, private or public shall be maintained in a clean, safe and usable condition.
- All grading shall be performed in such a manner as to comply with the standards established by the Air Quality Management District for airborne particulates.
- Civil Engineer Information and Statements:
 - The Civil Engineer for this project is: (Name and Address)
GUANGSHENG WANG, E.E. 2594 PEBBLE BEACH DR. SANTA CLARA, CA 95051
 - This Rough Grading Plan has been prepared under the direction of a licensed engineer and designed based on the recommendations of the referenced project Geotechnical Report.
 - The stormwater conveyance system has been designed in accordance with the appropriate Building and Plumbing Codes or has been proven to be designed with adequate capacity through signed and sealed hydraulic calculations.
- A post construction "Final" Report is required by the Director of Public Works from a Civil Engineer retained by the owner to observe the construction stating:
 - "That the construction conforms to the lines and grades on the approved plans;" or
 - "that all significant changes were reviewed and approved in advance by the Department of Public Works" and the Civil Engineer shall submit a "Record Drawing" plan
- A post construction "Final" Report is required by the Director of Public Works from a Soil Engineer, and also from an Engineering Geologist if the project is in a Geologic Hazard Zone, stating:
 - "that the anticipated conditions and materials and actual site conditions and materials were comparable," and supply supporting data; or
 - "that the design was modified to meet the new conditions and was reviewed and approved in advance by the Department of Public Works;" and provide supporting data for these statements.
- According to the City's Waste Water Ordinance, the use of potable (piped or hydrant) water for building or construction purposes including consolidation of baseload or dust control is prohibited.

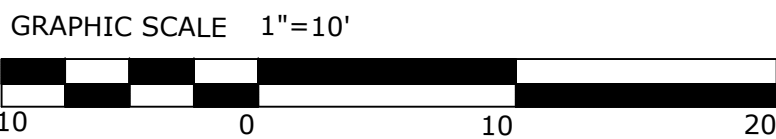


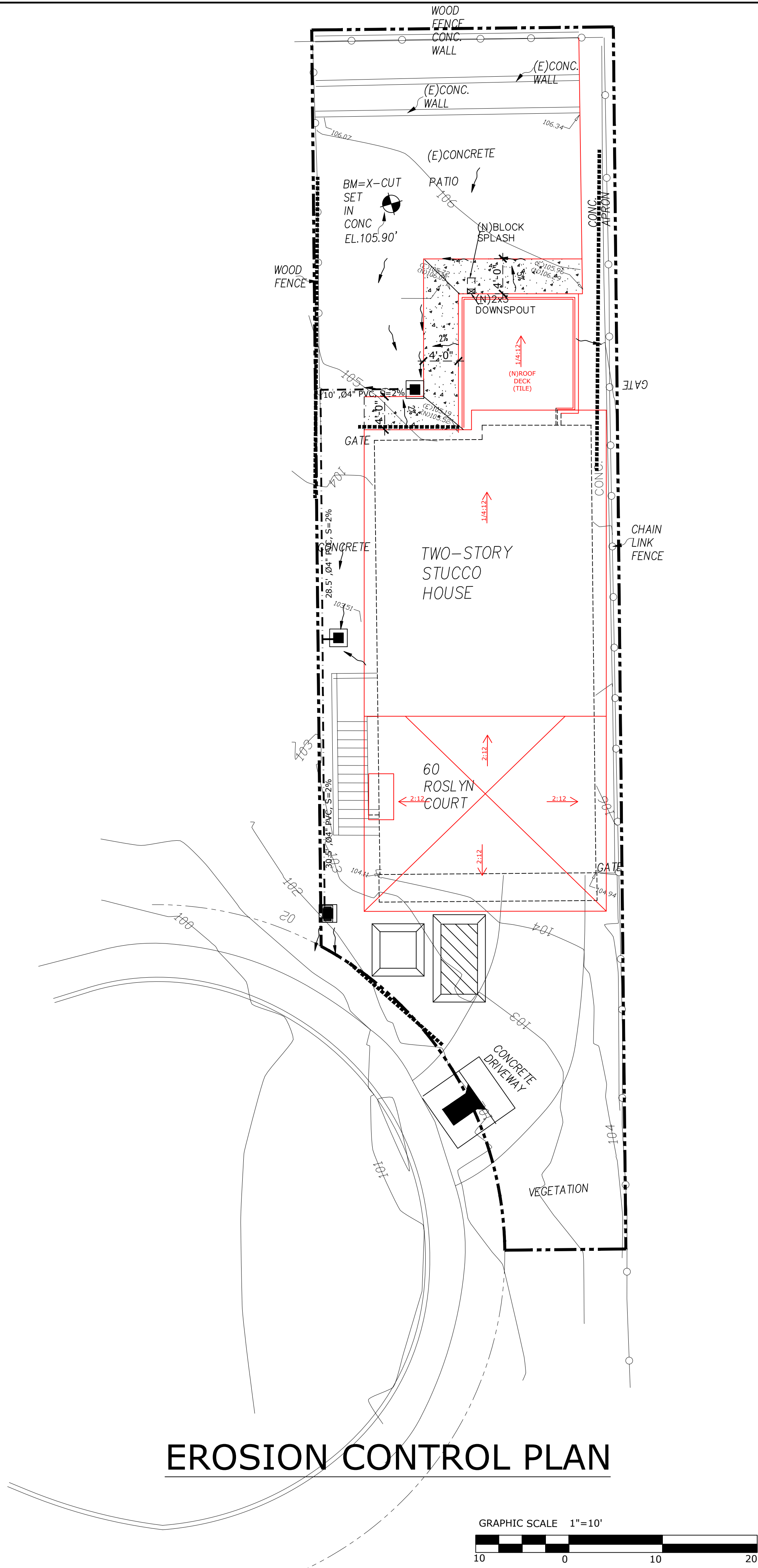
3 EXTERIOR SLAB-ON-GRADE

SCALE: N.T.S.



SITE GRADING & DRAINAGE PLAN





EROSION CONTROL PLAN

(Symbol Size May Vary)

Fiber Rolls, Detail SE-5, Sheet 3

Concrete Washout, Detail WM-8, Sheet 3

Direction of Surface Drainage

Inlet Protection, Detail SE-10, Sheet 3

Stock pile

Tree Protection

STABILIZED CONSTRUCTION ENTRANCE/EXIT

G.S. ENGINEERING

CIVIL ENGINEER

2594 PEBBLE BEACH DRIVE
SANTA CLARA, CA 95051

Tel: (510)304-9812
Email: gsengineering2000@gmail.com

HOUSE ADDITION

60 ROSLYN CT
DALY CITY, CA 94015

PROJECT NO

24-28

REGISTERED PROFESSIONAL ENGINEER

QIANGSHENG WANG

C 77916

EXP 6-30-2025

CIVIL

STATE OF CALIFORNIA

08/19/2024

PLANS SUBMITTAL

SHEET CONTENTS

EROSION CONTROL PLAN

SHEET NUMBER

C2.0

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. This plan is intended to be used for interim erosion and sediment control only and is not to be used for final elevations or permanent improvements.
2. Developer will submit to the City monthly certifications that all erosion/sediment measures identified on the approved erosion control plan are in place. If measures are not in place, Developer shall provide the City with a written explanation of why the measure is not in place and what will be done to remedy this situation.
3. Owner/contractor shall be responsible for monitoring erosion and sediment control measures prior, during, and after storm events.
4. Reasonable care shall be taken when hauling any earth, sand, gravel, stone, debris, paper or any other substance over any public street, alley or other public place. Should any blow, spill, or track over and upon said public or adjacent private property, immediate remedy shall occur.
5. Sanitary facilities shall be maintained on the site.
6. During the rainy season, all paved areas shall be kept clear of earth material and debris. The site shall be maintained so as to minimize sediment laden runoff to any storm drainage system, including existing drainage swales and water courses.
7. Construction operations shall be carried out in such a manner that erosion and water pollution will be minimized. State and local laws concerning pollution abatement shall be complied with.
8. Contractor shall provide dust control as required by the appropriate federal, state and local agency requirements.

EROSION AND SEDIMENT CONTROL MEASURES

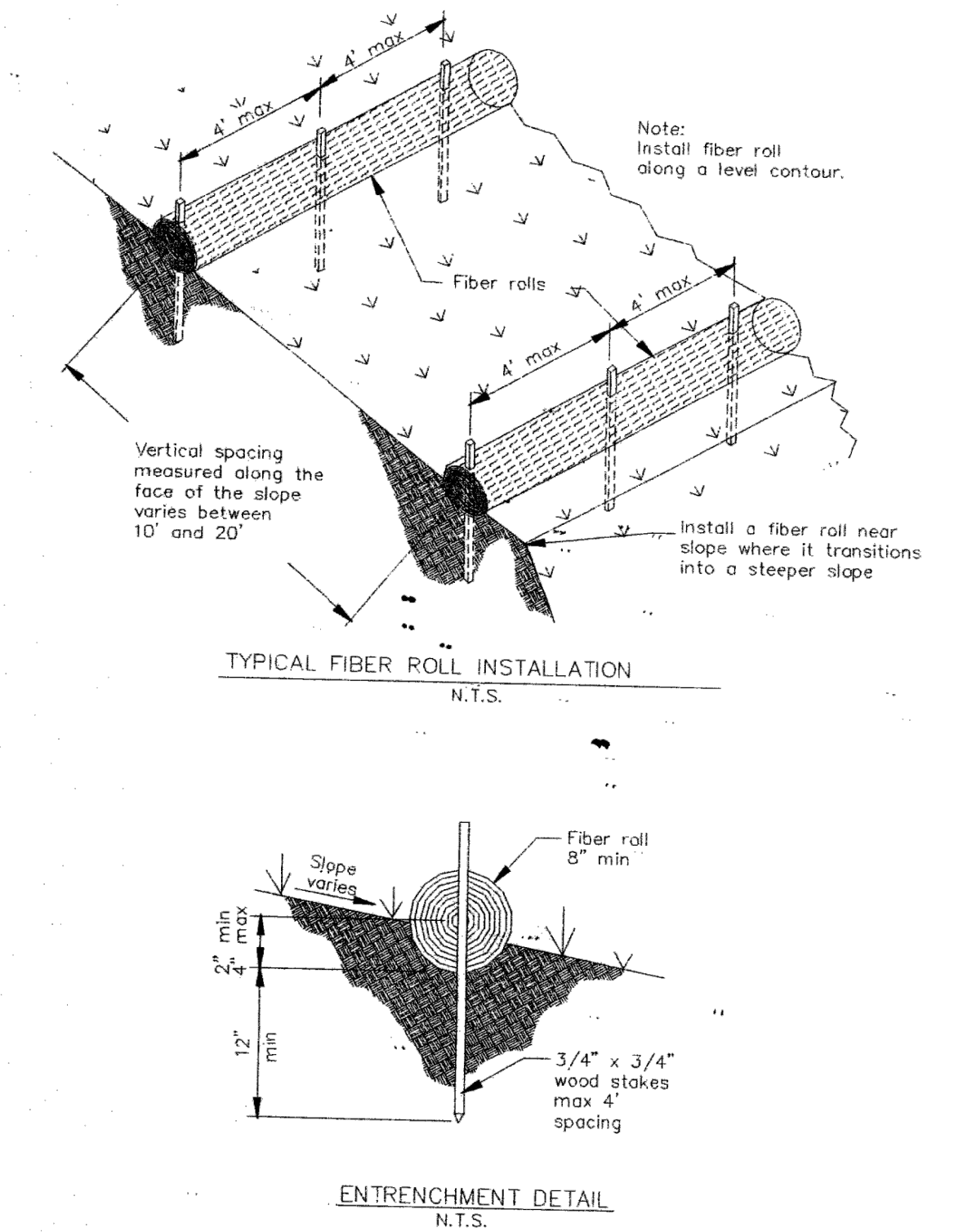
1. The facilities shown on this plan are designed to control erosion and sediment during the rainy season. Grading operations during the rainy season which leave denuded slopes shall be protected with erosion control measures immediately following grading on the slopes. During the non-rainy season Best Management Practices (BMPs) must be implemented during construction which includes, but is not limited to: stabilized construction entrance, tire wash area and inlet protection.
2. This plan covers only the first winter following grading with assumed site conditions as shown on the Erosion Control Plan. the completion of site improvement shall be evaluated and revisions made to this plan as necessary with the approval of the City Engineer. Plans are to be resubmitted for city approval prior to September 1 of each subsequent year until site improvements are accepted by the City.
3. Construction entrances shall be installed prior to commencement of grading. All construction traffic entering onto the paved roads must cross the stabilized construction entrance ways. (Also include this note on grading plans.)
4. Contractor shall maintain stabilized entrance at each vehicle access point to existing paved streets. Any mud or debris tracked onto public streets shall be removed daily and as required by the City.
5. If hydroseeding is not used or is not effective, then other immediate methods shall be implemented, such as Erosion control Blankets, or a three-step application of 1) seed, mulch, fertilizer 2) blown straw 3) tackifier and mulch.
6. Inlet protection shall be installed at open inlets to prevent sediment from entering the storm drain system. Inlets not used in conjunction with erosion control are to be blocked to prevent entry of sediment.
7. Lots with houses under construction will not be hydroseeded. Erosion protection for each lot with a house under construction shall conform to the Typical Lot Erosion Control Detail shown on this sheet.
8. This erosion and sediment control plan may not cover all the situations that may arise during construction due to unanticipated field conditions. Variations and additions may be made to this plan in the field. Notify the City Representative of any field changes.

Maintenance Notes

1. Maintenance is to be performed as follows:
 - A. Repair damages caused by soil erosion or construction at the end of each working day.
 - B. Swales shall be inspected periodically and maintained as needed.
 - C. Sediment traps, berms, and swales are to be inspected after each storm and repairs made as needed.
 - D. Sediment shall be removed and sediment trap restored to its original dimensions when sediment has accumulated to a depth of 1 foot.
 - E. Sediment removed from trap shall be deposited in a suitable area and in such a manner that it will not erode.
 - F. Rills and gullies must be repaired.
2. Sand bag inlet protection shall be cleaned out whenever sediment depth is one half the height of one sand bag.

Fiber Rolls

SE-5

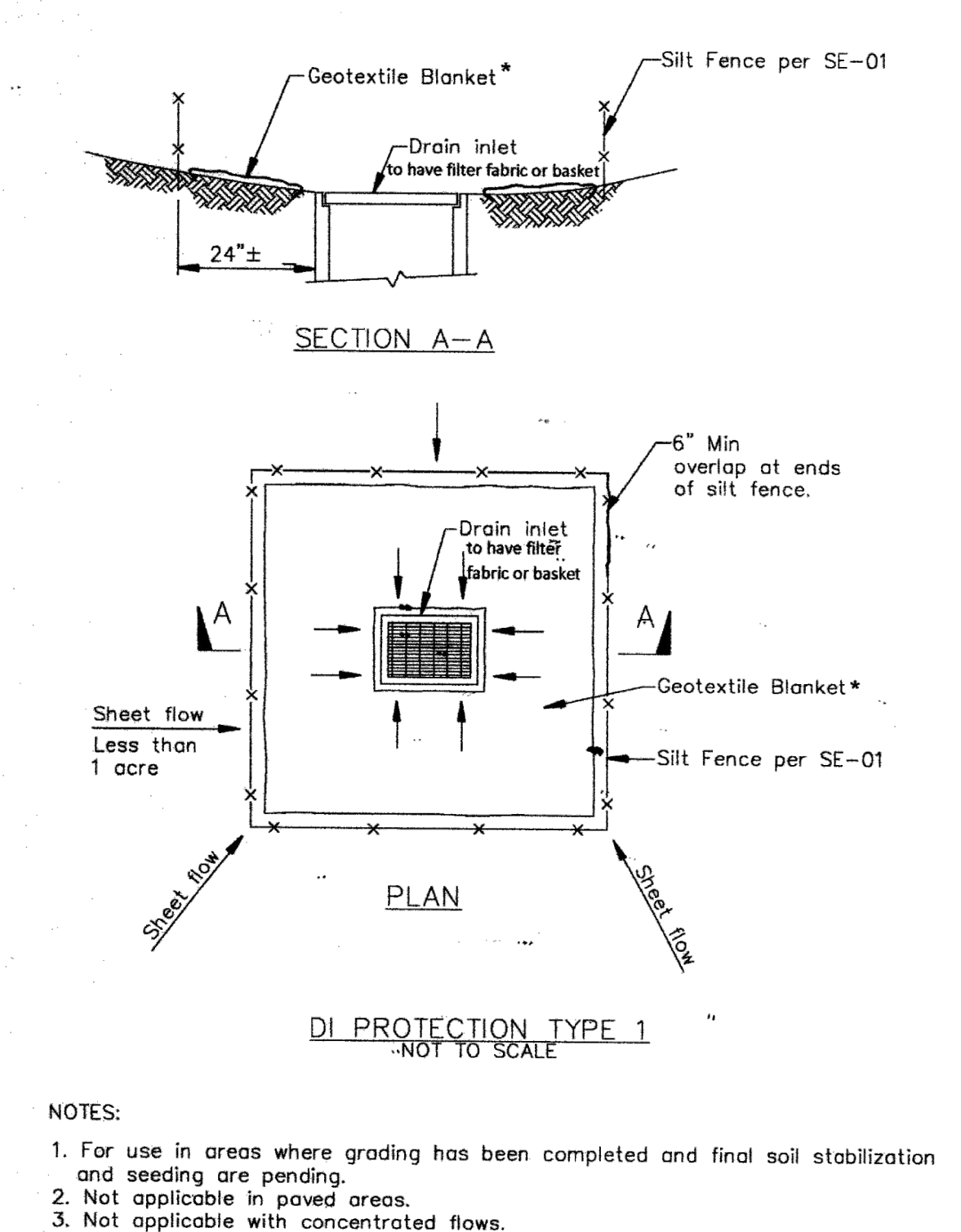


NOTES:
If more than one fiber roll is placed in a row, the rolls must be overlapped, not abutted.
Turn the ends of the fiber roll up-slope to prevent runoff from going around the roll.

July 2012 California Stormwater BMP Handbook Portal Construction www.casqa.org 5 of 5

Storm Drain Inlet Protection

SE-10

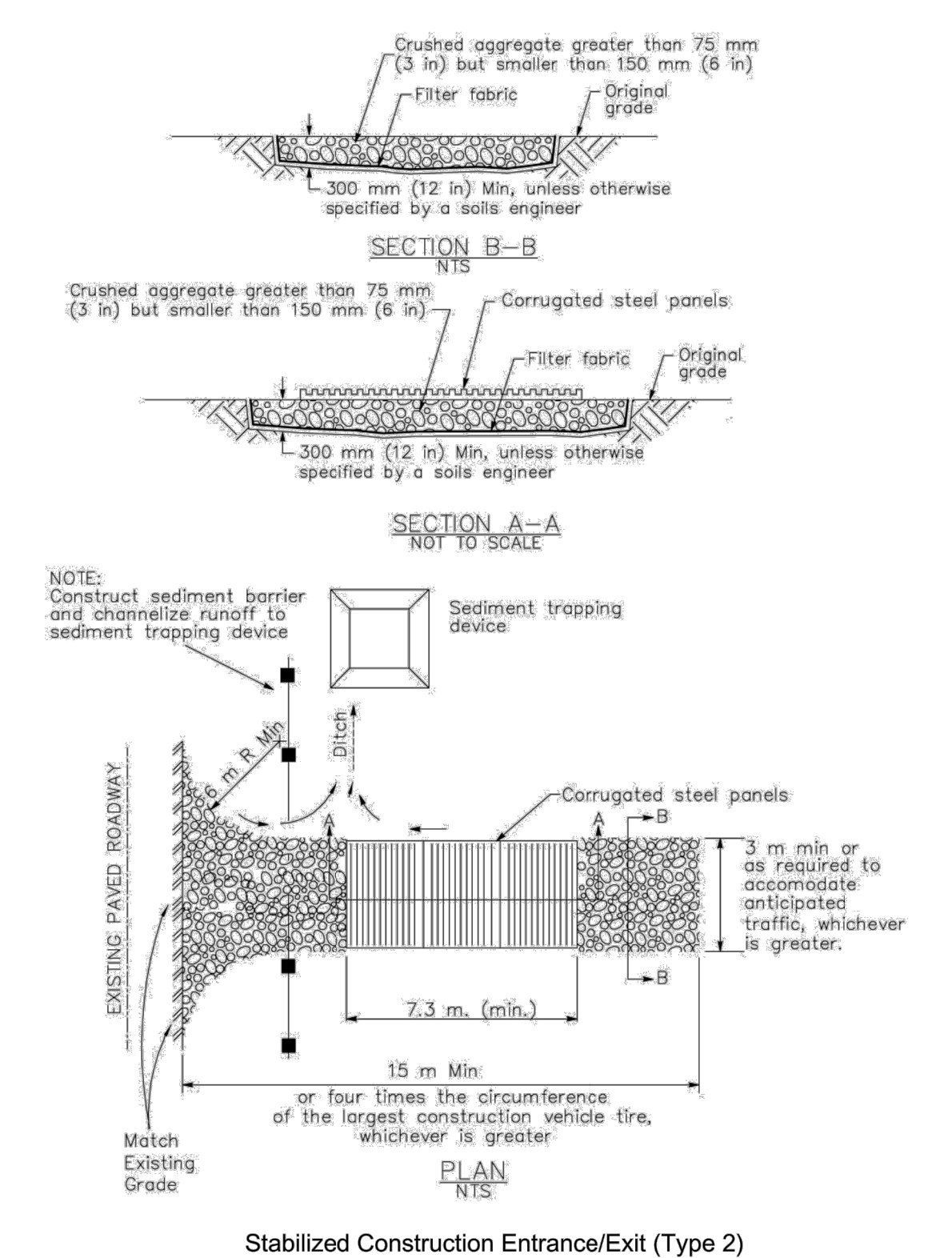


NOTES:
1. For use in areas where grading has been completed and final soil stabilization and seeding are pending.
2. Not applicable in paved areas.
3. Not applicable with concentrated flows.

July 2012 California Stormwater BMP Handbook Construction www.casqa.org 7 of 10

Stabilized Construction Entrance/Exit

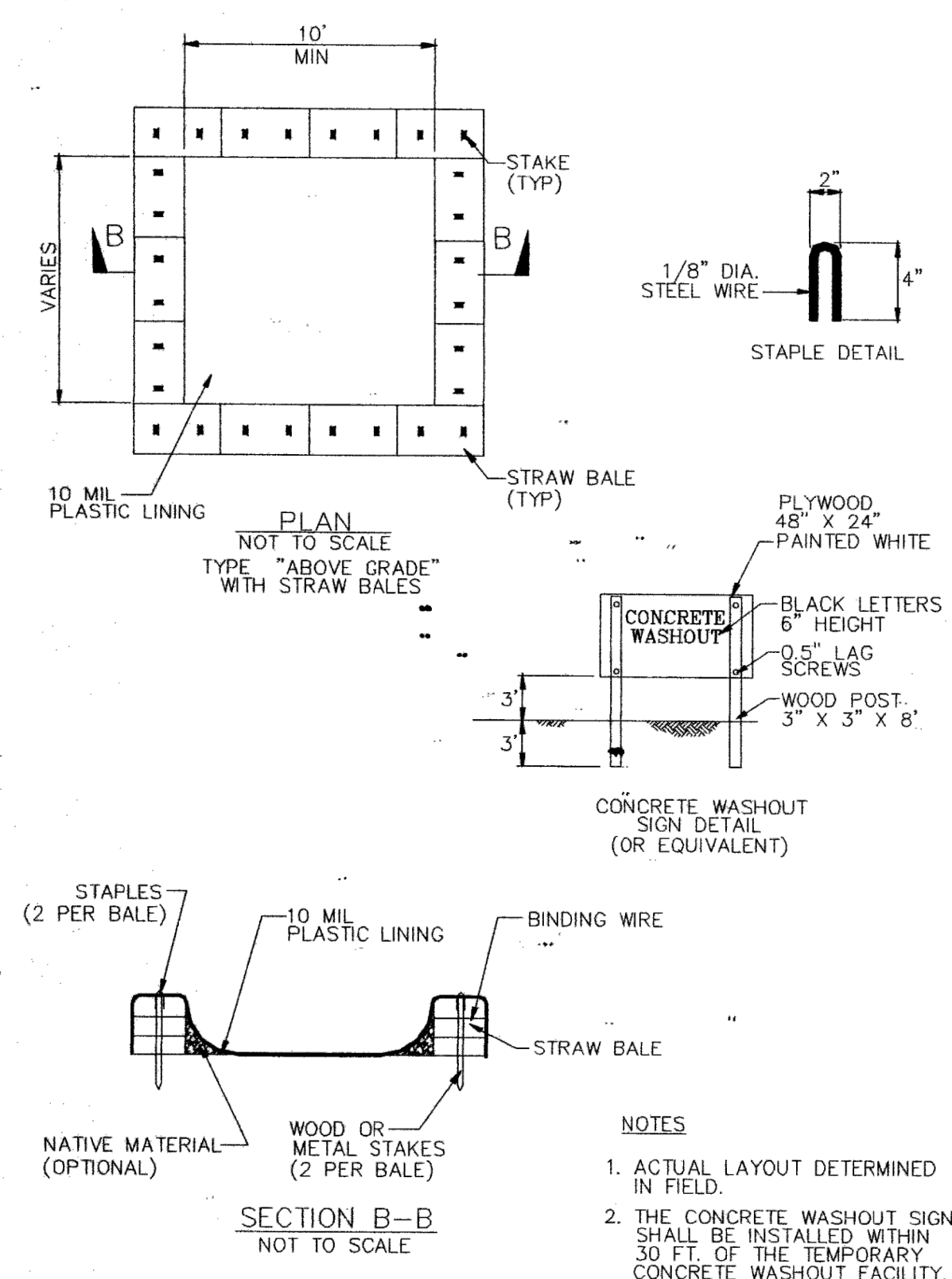
TC-1



Caltrans Storm Water Quality Handbooks Construction Site Best Management Practices Manual March 1, 2003 Section 6 Stabilized Construction Entrance/Exit TC-1 4 of 4

Concrete Waste Management

WM-8



July 2012 California Stormwater BMP Handbook Construction www.casqa.org 7 of 7

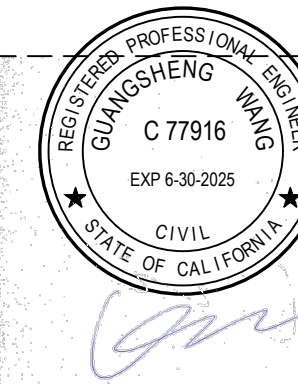
CIVIL ENGINEER

G.S. ENGINEERING
2594 PEBBLE BEACH DRIVE
SANTA CLARA, CA 95051
Tel: (510)304-9812
Email: gsengineering2000@gmail.com

PROJECT

HOUSE ADDITION
60 ROSLYN CT
DALY CITY, CA 94015

PROJECT NO
24-28



08/19/2024

PLANS SUBMITTAL

SHEET CONTENTS

EROSION CONTROL PLAN

SHEET NUMBER

C2.0





GEOTECHNICAL INVESTIGATION
PROPOSED REAR ATTACHED ADDITION AND REMODELS
60 ROSLYN COURT
DALY CITY, CA 94015

Report Prepared For

Yufang Wang

60 Roslyn Court

Daly City, CA 94015

Project No. 12942-S1-L1

FRANK LEE & ASSOCIATES
GEOTECHNICAL CONSULTANTS
10 KOOTENAI COURT, FREMONT, CALIFORNIA 94539
(510) 676-5859

28 August 2024

**FRANK LEE & ASSOCIATES
GEOTECHNICAL CONSULTANTS
10 KOOTENAI COURT, FREMONT, CALIFORNIA 94539
(510) 676-5859**

Project No. 12942-S1-L1
28 August 2024

Yufang Wang
60 Roslyn Court
Daly City, CA 94015

Subject: **GEOTECHNICAL INVESTIGATION**
Proposed Rear Attached Addition and Remodels
60 Roslyn Court
Daly City, CA 94015

Dear Yufang Wang:

In accordance with your authorization, **FRANK LEE & ASSOCIATES (FLA)** has completed a geotechnical investigation for the proposed improvements at the subject site. The purpose of this study was to investigate the subsurface conditions and to obtain geotechnical data for use in the design and construction of the proposed improvements. The scope of this investigation included the following:

- a. A site and area reconnaissance by the Project Engineer.
- b. Excavation, logging, and sampling of 1 exploratory boring to 18.0 feet.
- c. Laboratory testing of selected soil samples.
- d. An engineering analysis of the data and information obtained.
- e. Preparation and writing of this report which presents our findings, conclusions, and recommendations.

Our findings indicate that the proposed improvements are feasible from a geotechnical engineering standpoint provided the recommendations in this report are carefully followed.

SITE LOCATION AND DESCRIPTION

The relatively flat subject site is located at 60 Roslyn Court, Daly City, California, with the closest cross street is Skyline Drive. The lot is bounded to the north by Roslyn Court, west by a cliffside, and the other sides are bounded by residential structures. An existing residential structure was observed during the field investigation.

PROPOSED IMPROVEMENTS

The proposed construction consists of building attached rear additions and remodels. We anticipate the proposed improvements will utilize wood-framed construction and concrete foundation. Light building load is typically associated with this type of construction.

FIELD INVESTIGATION

FLA conducted the field investigation on July 31, 2024. The field investigation consisted of a site reconnaissance by the Project Engineer and excavation of one boring using a portable rig with 4.0-inch stem augers. The approximate location of the boring is shown on the Site Plan, Figure 1.

Soils encountered during the excavation operation were continuously logged in the field. Relatively undisturbed samples were obtained by dynamically driving 18 inches using a 3.0-inch outside diameter Modified California Sampler and/or SPT sampler with a 140-pound hammer free falling 30 inches. Blow counts were recorded for every 6-inch penetration interval and reported corresponding to the last 12 inches of penetration and converted to raw SPT-equivalent blow counts in the boring log. These samples were then sealed and returned to the laboratory for testing. The classifications, descriptions, natural moisture contents, dry densities, strength test, and depths of the obtained samples are shown in the Boring Log, Figure 2 of Appendix A.

LABORATORY TESTING

CLASSIFICATION

The field classification of the samples was visually verified in the laboratory in accordance with the Unified Soil Classification System. These classifications are presented in the Boring Log.

MOISTURE-DENSITY

The natural moisture contents and/or dry weights were determined for selected soil samples obtained during our field investigation. The data are presented in the Boring Log.

ATTERBERG LIMITS

The Atterberg Limits Test was determined for the selected soil sample to classify, as well as to obtain an indication of the expansion and shrinkage potential with respect to moisture content variations. The test results are summarized as follows:

Sample	Depth	Classification	Liquid Limit	Plasticity Index	Expansion Potential
B1-1	3.0 feet	Medium brown silty clay	59.0%	40	Critical High

DIRECT SHEAR

The fully softened Direct Shear Test was performed on a relatively undisturbed sample to evaluate the angle of internal friction and unit cohesion of the soil. The data is presented in the forementioned Boring Log and summarized as follow:

Sample	Depth	Classification	Angle of Internal Friction (degree)	Unit Cohesion(p.s.f.)
B1-1	2.5 feet	Medium brown silty clay	21	260

UNCONFINED COMPRESSIVE STRENGTH

The Unconfined Compression Test was performed on a relatively undisturbed sample to evaluate the ultimate compressive strength of the soil. The data is presented in the Boring Log and summarized as follow:

Sample	Depth	Classification	U.C. Strength (p.s.f.)
B1-2	8.0 feet	Medium brown silty clay	3,500

SUBSURFACE SOIL CONDITIONS

The following soil descriptions were derived from our site reconnaissance and information obtained from our exploratory boring's samples. Detailed descriptions of the materials encountered in the exploratory boring and results of the laboratory testing are presented in the Boring Log, Figure 2.

Based upon our review of the boring log, examination of the samples, and laboratory test data, the general subsurface conditions consist of clayey soil layer to 12.0 feet and was underlain by sandy soil layer to the maximum depth explored of 18.0 feet.

Groundwater was not encountered during the exploration at the time of our field study. However, fluctuations in the groundwater table are anticipated to vary with respect to seasonal rainfall.

SEISMIC CONSIDERATIONS

According to U.S.G.S U.S. Quaternary Fault maps, the approximate distances from active faults to the subject site are listed in the following table.

Fault Name	Distance (Kilometers)	Direction From Site	30 Year M>6.7 Probability
San Gregorio	7.48	Southwest	2.68 %
San Andreas	1.44	Southwest	6.19 %

Based on USGS Earthquake Outlook for the San Francisco Bay Region 2014-2043, Revised August 2016 (ver.1.1), the San Andreas Fault have a 22% probability and the San Gregorio Fault have a 6% probability for M>6.7.

Damage resulting from earthquakes is not necessarily related directly to the distance from the fault.

More important than distance, are the foundation materials upon which structures are to be built. If structures are not located across the trace of the fault, are located on structurally competent materials, and are designed with state-of-the-art seismic considerations, the probability of continued usefulness after an earthquake is relatively good.

SHEAR-WAVE VELOCITY IN THE UPPER 30M OF SURFICIAL GEOLOGY

Per California State Geoportal, <https://gis.data.ca.gov/datasets/cadoc::cgs-map-sheet-48-shear-wave-velocity-in-upper-30m-of-surficial-geology-vs30/explore>, the mean Vs in the upper 30 meter is 385.1. “D-Default” soil will be utilized.

CALIFORNIA BUILDING CODE SITE CHARACTERIZATION

The following design values are based on the geologic information, longitude and latitude of the site, and the U.S. Seismic Design Maps from <https://seismicmaps.org/>. Furthermore, in accordance with Chapter 16 of the 2022 California Building Code (CBC), the site seismic design values are provided below:

2022 CBC Category/Coefficient ASCE 7-16, Supp. 1,2,3	Design Values
Risk Category	II
Short-Period MCE at 0.2s, Ss	2.364
1.0s Period MCE, S1	0.99
SMS = $F_a \times S_s$ Spectral Response Accelerations	2.837
Soil Profile Type, Site Class	D-Default
SDS = $2/3 \times$ SMS Design Spectral Response Accelerations	1.891
Site amplification factor at 0.2 second, F_a	1.2
Latitude	37.6928475
Longitude	- 122.4961039

It is noted that final values should be determined by the project structural engineer according to risk categories of the proposed improvements.

SEISMIC HAZARD IDENTIFICATION

According to California Geological Survey for the Earthquake Zones of Required investigation from <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, the site is not within a liquefaction zone, is not within a landslide zone, and is not within an earthquake fault zone.

GEOLOGIC CONDITION

According to Geologic Map of California, the general site vicinity consists of generalized rock types P, consisting of Sandstone, siltstone, shale, and conglomerate; mostly moderately consolidated. Pliocene in age.

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

1. Based on the results of our reconnaissance, FLA concludes that the subject site is geotechnically suitable for the proposed improvements provided the recommendations presented in this report are incorporated into the project plans and specifications. The recommendations given in this report are applicable only for the design of the previously described improvements and only at the location mentioned. They should not be used for any other purpose.
2. FLA should review the foundation plans and specifications so that comments can be made regarding the interpretation and implementation of our geotechnical recommendations in the design and specifications.
3. It is recommended that FLA be retained for testing and observation during grading and foundation construction phases to help determine that the design requirements are fulfilled, and to verify soil condition. Our firm should be notified at least two working days prior to grading and/or foundation operations on the property.
4. The following conclusions and recommendations are based on information provided, the results of our site reconnaissance and laboratory tests, as well as our experience with similar soil conditions. Possibility always exists that the subsurface conditions at the site may vary somewhat from what is expected. If there are any unusual conditions differing significantly from those described herein during construction, this firm should be notified to review the effects on the performance of the designed foundations. Any work related to the grading and foundation operations performed without the direct observation of FLA will invalidate the recommendations of this report.

GENERAL SITE PREPARATION AND GRADING

5. Prior to grading, the proposed building pad and driveway, with a minimum 3.0 feet offset, if applicable, should be cleared of all obstructions and deleterious materials such as existing foundation, asphalt, utilities, pipes, surface or subsurface structures, and organic top soil. These objects shall be accurately located on the grading plans to assist the Field Engineer in establishing proper control over their removal or relocation.
6. It is estimated that stripping depths of organic top soil may be in the order of 6 to 12 inches and up to 6.0 feet for tree roots. The final depth of stripping should be verified by FLA in the field. The predominantly organic material from the stripping should be removed from the site or to use as future landscaping soil only. Any depressions left by the removal of obstructions and deleterious materials shall be cleaned of all debris to expose native subgrade.
7. Following the removal of obstructions and deleterious materials, any loose fill material or wet soil is encountered on-site in areas that will or may affect the proposed structure(s) should be over-excavated. The extent of the over-excavation should be determined by FLA on-site during grading.
8. The exposed native competent soil should then be; excavated to proposed grade, if applicable;

scarified in the upper 8 inches; and be watered or aerated as necessary to bring the soils to a moisture content 2.0 percent above the optimum moisture amount. The subgrade should then be uniformly compacted to a minimum degree of relative compaction of 90 percent of the maximum dry density as determined by ASTM D1557 Laboratory Test Procedure and tested by FLA in the field for quality control per ASTM D6983.

9. Following the initial compaction of the native soil, fills, either clean native soil or import soil, can be used to establish desired grade. This fill should be placed in lifts not exceeding 4 to 8 inches in fluff thickness, dependent on compaction equipment. Each fill lift should then be compacted to a minimum relative compaction of 90 percent, at 2% above optimum moisture content. Each layer shall be spread evenly and thoroughly and shall be blade mixed to provide uniformity of the soil in each layer. Compaction of each layer shall be continuous over the entire fill area and continued until the required density is obtained. FLA should be notified to test the compacted soil for quality control at every 12 inches in vertical fill.
10. Should select import material be used to establish the proper grading for the proposed development, the import material should (a) be free of organic material; (b) have a Plasticity Index between four (4) and twelve (12); (c) be no more than 15% passing the No. 200 Sieve; (d) not contain rocks or lumps over 4 inches in greatest dimension. The import fill should be approved by FLA before it is transported to the site.
11. After grading is completed and the Field Engineer has finished his observation of the grading work, no further excavation or fill shall be done except with the approval of and under the observation of the Field Engineer.
12. It shall be the responsibility of the grading contractor and/or the general contractor to prevent erosion of the freshly graded areas during construction and until such time as permanent drainage and erosion measures have been installed.
13. In the event that any unusual condition not covered by the special provisions is encountered during the grading operations, the Soil Engineer shall be immediately notified for further recommendation.

WATER WELLS

14. All water wells (if any) on the site, which are to be abandoned, shall be capped according to the requirements of the Water District, City, and/or County. The final elevation of the top of the well casing must be a minimum of 3 feet below any adjacent grade prior to any grading operations. In no case shall a building foundation be placed over or found within 10 feet of a capped well.

FOUNDATION

15. It is to FLA understanding that the existing house is supported on shallow foundation, which should be field verified by the contractor and FLA shall be notified for foundation verification. Therefore, provided that the previously General Site Preparation and Grading recommendation

have been properly followed and prepared for the building pad, if applicable, the proposed improvements can be satisfactorily supported on the following foundation system.

Continuous Footing

16. Due to critical high expansive clay soil, the proposed improvements can be satisfactorily found on a continuous footing foundation system. The footing foundations are to laid out in a grid-like pattern of no more than 16.0 feet square, which ties some of interior the foundation element in one or two directions to help resist deflection resulting from settlements and seismic effects, and to reinforce them in such a way that they are rigid enough to move as a single unit in the event of differential soil movement. If properly reinforced and constructed, differential movement should not impart damaging stress to the structure itself.
17. The footings should be designed for allowable bearing pressures of 1,500 p.s.f. due to dead loads plus design live loads, and 2,000 p.s.f. due to all loads which include wind or seismic forces. Due to expansive clay and to limit the effect of expansive soil per CBC 1803.5.3, the bottom of the footings should be found at least 36 inches below the crawlspace elevation or 48 inches from the outside finished grade. Footing width should have a minimum 16 inches wide. Cross tie-beams or foundation ties should be provided at about every 16.0 feet maximum intervals.
18. In addition, due to expansive soil condition, the top 6 inches of native soil at the bottom of footing should be removed and replaced with Class II aggregate base and compacted to 95 percent of relative compaction, and the top 6 inches of native soil under the Class II aggregate base should be scarified, moisture conditioned, and compacted to a minimum 85 to 90 percent of relative compaction. Loose soil should be removed before concrete pouring.
19. The final depth and width of footing will be determined by FLA in the field. Footing reinforcement will be determined by the Structural Engineer. Tie beams or grade-beams should be provided at every maximum 16.0 feet interval.
20. The available resistance to lateral loads when utilizing spread footing is limited to sliding resistance along the base of the footing. Sliding resistance between the base of the footing and the underlying soil may be taken as a friction value of 0.30.
21. We estimate that the total movement will be approximately 1.5-inches, and post-construction differential settlements across the building should not exceed approximately 1.0- inches over a span of 30 feet during the 20-year-life of the building following construction.
22. It is to FLA's understanding that the entire existing foundation may not be improved. Therefore, a floor or foundation level survey may be performed at the owner's discretion to determine if differential settlement is more than 1.0-inch over a span of 20 feet for the existing structure. If so, then it may be necessary to underpin the entire existing foundation with the new foundation design to limit differential movements. Interior slab on grade experience more than 1/8 of an inch separation may need to be replaced with new concrete and recommended subgrade preparation. However, as the cost of construction may be prohibitive, the percentage of the existing foundation

improvement is at the owner's discretion, and the client agrees to accept possible differential movements between the existing and new foundation.

CONCRETE SLAB-ON-GRADE

23. Interior and garage slab-on-grade should be underlain by at least 18 inches of approved non-expansive soil or class 2 aggregate base to mitigate expansive soil from swelling. The fills should be properly compacted and tested by FLA in the field.
24. A minimum of 8 inches of native subgrade soil should be scarified, moisture conditioned and compacted to a minimum 85 to 90 percent of relative compaction below the non-expansive fill and tested by FLA in the field.
25. Garage concrete slab entrances should be designed with a thickened edge extending a minimum of 6 inches below the slab.
26. Exterior concrete slab-on-grade should not be doveled into the foundation and should be reinforced by the Structural Engineer.
27. Small movements of the concrete slab resulting in cracks should be expected from expansive soils. Controlled predetermined failure planes should be scored in the concrete in both directions over the slab area.
28. In areas where moisture transmission through slabs is undesirable, a 15-mil membrane serving as a vapor retarder should be placed over a minimum 6 inches of clean crushed rock to minimize condensation caused by temperature differentials under the floor covering. It is noted that the 15-mil is not a waterproofing material. If waterproofing is desired, a waterproof specialist should be consulted.

DRIVEWAY

29. Prior to any paving construction, the upper 12 inches of the subgrade soil should be scarified and recompact to 95% of the maximum dry density at 2% above the optimum moisture content as defined by ASTM D1557 latest test procedure.
30. After the compaction of the subgrade, aggregate base should then be placed on top of the subgrade and compacted to a minimum relative compaction of 95% at optimum moisture content as defined by the ASTM Test Procedure. Class II aggregate base should conform to the requirement of Standard Specifications of Caltrans.
31. Pavement Sections: The recommended pavement sections are based on several Traffic Indexes (T.I.) and R-value of 5 are presented in the following Table.

Traffic Index	Asphaltic Concrete	Class II Aggregate	Total Depth
---------------	--------------------	--------------------	-------------

(TI)	Pavement (inches)	Base (inches)	(inches)
4.5	4.0	8.0	12.0
5	4.0	9.0	13.0
6	4.0	13.0	17.0

Paver sections: Pavers may be utilized with minimum 2 inches of sand over minimum 16 inches of Class II aggregate base.

TRENCH BACKFILL

32. Backfilling and compaction of utility trenches must meet the requirements published by the City and/or County. All trench backfill under pavement areas must be backfilled with suitable native or imported soil and compacted to at least 90% relative compaction as determined by ASTM D1557 latest Laboratory Test Procedure. The top minimum 12 inches of the subgrade should be compacted to at least 95%.
33. The backfill of utility trenches extending under the building and landscaping area should be properly compacted to ensure against water migration underneath the structure.
34. Specific excavation considerations are beyond the scope of this report. However, stable excavations over 5 feet deep for utility construction will require a temporary stable cut slope and/or proper shoring. Proper shoring and stable cut slope construction should be in accordance with the Occupational Safety and Health Administration (OSHA) requirements as well as other applicable building code requirements.

GENERAL DRAINAGE AND CONSTRUCTION REQUIREMENTS

35. All parallel trenches should stay at least 3.0 feet away from the foundation and the bottom of the trench should stay above the imaginary 45 degrees line as measured from the bottom of the foundation.
36. All grading must be adjusted to provide positive drainage within the first 10 feet away from the structure to prevent ponding of water toward the building. If the 10 feet requirement cannot be met due to property line, then drainage swell or subsurface drainage should be constructed to continue discharging storm water to 10 feet beyond the foundation perimeter. Drainage requirement should also be constructed according to CBC 1804.4, with 5% grade for pervious surfaces and 2% for impervious surfaces.
37. All surface drainage should be provided by the project Civil Engineer and should always maintained by the property owners. Yearly maintenance may be required before any rainy season.
38. The top minimum 8 inches of surface soil within 10 feet of the building, if applicable, should be generally compacted to act as a surface seal.

- 39. Roof drainage should be collected by a system of gutters and downspouts and discharged by adequate piping to carry storm water away from the structures. If splash block is utilized then downspouts discharge should have an unimpeded flow toward a swale or an area drain.
- 40. Flower beds and planting areas should not be constructed along building perimeters. If they are constructed, only drought resistant foliage requiring minimal irrigation should be installed.
- 41. Sprinkler systems should not be installed where they may cause saturation of the foundation soils. Landscape mounds or concrete flatwork should not block or obstruct the surface drainage measures.
- 42. Backfill of utility trenches under the building areas should be compacted to at least 90 percent compaction to ensure against water migration underneath the building structure.
- 43. Building area should be placed outside of existing and future tree drip-line to minimize root damage to the foundation.

CONSTRUCTION OBSERVATION AND TESTING

- 44. All grading and site drainage, including pier drilling, preparation of subgrade, placement of clean fill and clean non-expansive fill beneath slabs-on-grade, retaining wall backfill, utilities excavation and backfill, and installation of surface and subsurface drainage, should be performed in accordance with the geotechnical report prepared for this project by FLA, and under FLA observations as required under California Building Code, Section 1705.6 and Table 1705.6.
- 45. FLA should be provided at least 2 days in advance for notification of any earthwork operations and should be present to observe and test, as necessary, the earthwork, foundation, and drainage installation phases of the project for compliance and evaluation of site conditions with the geotechnical design concepts, specifications, and recommendations.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

- 46. Our client should recognize that every effort made to evaluate the subsurface conditions at this site is based on the samples recovered from the boring and the results of laboratory tests on these samples. The conclusions reached in this report were based on the conditions at the test boring location. The owner or his representative should be reminded that unanticipated subsurface conditions are commonly encountered and cannot be fully determined and frequently require that additional expenditures be made to attain a properly constructed project. Therefore, some contingency fund is recommended to accommodate these required extra costs.
- 47. Our client should also recognize that this report is prepared for the exclusive use of the proposed improvements. Our professional services, findings, and recommendations were prepared in accordance with generally accepted engineering principles and practices. No other warranty, expressed or implied, is made.

Project No. 12942-S1-L1
28 August 2024

48. The conclusions and recommendations contained in this report will not be considered valid after a period of two years unless the changes are reviewed, and the conclusions of this report are modified or verified in writing. In the event that a geotechnical consultant firm other than FLA is engaged in providing geotechnical services, FLA must receive a letter of indemnification releasing us of any responsibility on the subject project.
49. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure the information and recommendations contained in this report are brought to the attention of the Architect, Engineer, and Contractor. In all cases, the contractor shall retain responsibility for the quality of the work and for repairing defects regardless of when they are found. It is also the responsibility of the contractor for conforming to the project plans and specifications.

Should you have any questions relating to the contents of this report or for any other service, please contact our office at your convenience.

Very truly yours,

FRANK LEE & ASSOCIATES

Frank Lee

Frank Lee, C.E.
Professional Engineer CE 34975



APPENDIX A

Site Plan, Figure 1

Boring Log, Figure 2



Google Maps

FRANK LEE & ASSOCIATES

BORING LOCATION

Figure No. 1

GEOTECHNICAL CONSULTANTS

No Scale

Page No. 14

60 Roslyn Court, Daly City, California				Project No. 12942				28 August 2024	
Depth (Feet)	Description	Sample No.	Unified Soil Classification	Blows/Foot (SPT-eqv.)	Dry Density (P.C.F)	Moisture (% Dry)	Pocket Penet. (T.S.F)	Remarks	
1	Medium brown silty clay, stiff to very stiff and moist		CH					Elevation = 336 ft From Google Earth	
2								Modified CA Sampler Internal Friction = 21° Cohesion = 260 p.s.f. LL = 59 % , PI = 40	
3		1-1		33	104.4	17.7			
4									
5									
6									
7	grades to medium brown and brown silty clay		CL					Modified CA Sampler U.C. = 3,500 p.s.f.	
8		1-2		42	109.9	18.7			
9									
10									
11									
12	Brown clayey sand, medium dense to dense and moist to very moist		SC					SPT Sampler	
13		1-3		31	115.0	19.2			
14									
15									
16									
17	Brown silty dense sand, dense and moist		SM						
18		1-4		>50	103.8	14.0		SPT Sampler	
19	Boring terminated at 18.0 feet. Groundwater was not encountered.								
20									
21									
22									
23									
24									
25									
FRANK LEE & ASSOCIATES		BORING LOG NO. 1						Figure No. 2	
GEOTECHNICAL CONSULTANTS		Drill Date:		31 July 2024		By: W.L.		Page No. 15	



Daly City Planning Commission Agenda Report

333 - 90th Street ♦ Daly City ♦ California ♦ 94015 ♦ 650-991-8033

Meeting Date: December 3, 2024

Application: Parcel Map PM-05-23-016239, Use Permit UPR-05-23-016240, and Design Review DR-05-23-016241

Project Planner: Sam Fielding, Associate Planner

Project Location: 1645 Edgeworth Avenue (APN 006-346-110)

Project Description: Subdivision of a single parcel into two parcels and construction of two residential buildings comprised of two condominium units on each new lot and one accessory dwelling unit each.

Applicant/Owner: John Britton
1345 Mission Street
San Francisco, CA 94103

Environmental Assessment: Categorically Exempt per CEQA Guidelines Section 15332: In-Fill Development Projects

Applicable Daly City Municipal Code Sections: Title 16 Subdivisions
Chapter 17.21 – Sullivan Corridor Specific Plan District
Chapter 17.37 – Condominiums and Condominium Conversions
Chapter 17.44 – Use Permits
Chapter 17.45 – Design Review

Site Information

Property Sizes	Existing Use	Proposed Use	Specific Plan Designation	Current Zoning
.17 acres	Vacant	Residential condominiums	C-R/R Commercial Retail Residential	C-R/R Commercial Retail Residential

Area Information

Land Use	Zoning
North: Vacant	C-R/R Commercial Retail Residential
South: Allied Waste Corp Yard	C-R/O Commercial Retail Office
East: Residential Duplex	C-R/R Commercial Retail Residential
West: Single Family Residential	C-R/R Commercial Retail Residential

The project site is a single parcel, vacant lot located on the east side of Edgeworth Avenue at 1645 Edgeworth Avenue between Washington street to the north, Pierce Street to the south, Bryant Street to the east and Annie Street to the west (see attachment A – Location Map). As part of the Sullivan Corridor Specific Plan Area, the subject site is two blocks southwest of the Civic Center and has a zoning and land use designation of C-R/R (Commercial Residential Retail Commercial). Both designations would allow for the proposed residential development.

Background

The applicant, John Britton, is requesting to subdivide the single parcel into two parcels and construct two, three-story (approximately 31'-5" in height), residential buildings comprised of two condominium units and one accessory dwelling unit on each lot (six units total). The proposed subdivision map would result in each building being situated on individual parcels and a transfer to property encompassing 620 square feet to the property owner at 1668 Bryant Street. The proposed condominium buildings would consist of approximately 2,000 square feet of habitable area each, including the two-car garage (see Attachment B - Project Description).

This application is similar to applications that the Planning Commission and City Council approved in 2005 and 2008, although duplexes were proposed in those applications. At the applicant's request, the City Council amended the Zoning Ordinance to allow condominium buildings consisting of two or more units in August 2015. The applicant has therefore reapplied to have the units constructed as condominiums instead of duplexes.

On January 14, 2015, the Sullivan Corridor Council Committee conceptually approved the applicant's proposal.

On June 8, 2016, the Planning Commission recommended approval of the project and on June 27, 2016, the City Council approved the project entitlements. Pursuant to the conditions of approval for the project, the applicant had one year to submit building permit plans to the City. The City did not receive a building permit submittal within one year, therefor the applicant was required to submit a new application for the planning entitlement.

The originally approved plans were resubmitted in September of 2023. Subsequently, a new architect began working on the project in February of 2024 and changed the traditional, gabled roof with balconies design to a modern, contemporary building design plan submittal. The new design is more compatible with the existing residential buildings located on the west side of Edgeworth Avenue. As the building is a new architectural design not previously approved, the project requires a Design Review to ensure the new design is compliant with the Sullivan Corridor Specific Plan and Chapter 17.45 – Design Review of the Daly City Municipal Code. The recently adopted Objective Design Standards do not apply since the city deemed the application complete prior to their adoption on November 12, 2024.

Proposal

The proposal is for a subdivision of a single parcel into two parcels and construction of two residential buildings comprised of two condominium units on each new lot and one accessory dwelling unit (ADU) each. Under Assemble Bill 1033 (AB 1033), ADUs can be sold as condos. This law was passed in October 2023 to increase affordable housing options and give homeowners more flexibility.

The proposal would subdivide the existing 8,750 square foot lot into two lots fronting Edgeworth Avenue, while transferring the rear 20 feet of the southerly proposed lot to the adjacent parcel where a duplex was constructed in 2005 at 1662 and 1668 Bryant Street. The existing lot provides a 62'-6" street frontage at Edgeworth Avenue, with a depth of 140 feet. The proposed subdivision would result in the two lots directly fronting Edgeworth each measuring 31'-3" feet at their Edgeworth frontage with the southerly lot depths being 120 feet and the northerly lot depth being 140 feet. The southerly lot would be 3,750 square feet in area. The northerly lot would be 4,375 square feet in area. Also, the resulting lot on Bryant Street would continue to meet the 2,500 square foot minimum.

The Tentative map also includes the airspace subdivision for each of the four condominium units proposed (see Attachment C - Tentative Map). Once subdivided, the applicant would construct two, three-unit condominium buildings on each lot, for a total of six units. Each of the new lots will be developed into a three-unit building, three stories (31'-5" in height) with 2 interior garage parking spaces for each building and 2 driveway parking space for each building for a total of 8 on-site parking spaces. Each building will consist of a one bedroom, one bathroom first floor unit of 700sf, a three bedroom, three-bathroom second floor unit of 1,640 square feet, and a three bedroom, three-bathroom third floor unit of 1,510 square feet. Each unit will have a rear yard deck with access to a +1,400 square feet of rear yard. The third-floor units will also have two private decks of 100 square feet each along the front façade (see Attachment D - Project Plans).

Use Permit

The applicant is required obtain a use permit pursuant to Chapter 17.37 – Condominiums and Condominium Conversions, which requires the permit for any condominium project. Also, the proposed condominiums are located within the Sullivan Corridor Specific Plan area, which designates the subject property as Residential Retail Commercial (C-R/R). Medium-low density residential uses, such as those proposed, are allowed within the Residential Retail Commercial designation subject to use permit approval.

The Zoning Ordinance requires a use permit for the condominium approval, and requires the Planning Commission to make the following findings:

1. The condominium project will not have a detrimental effect on sound community planning, the economic, ecological, cultural and aesthetic qualities of the community, and on public health, safety and general welfare;
2. The overall impact on schools, parks, utilities, neighborhood streets, traffic, parking and other community facilities and resources will not be detrimental;

3. That tenants over the twelve months preceding the filing of any application required for a conversion shall not have been encouraged to vacate in order to bring about the conversion.

For reasons discussed in this staff report, staff is recommending that the Commission adopt the first two findings. The applicant has not applied to convert any existing apartment to a condominium and therefore the third finding does not apply.

As part of the Sullivan Corridor Specific Plan area, the Residential Retail Commercial designation is characterized by mixed-uses within the same building and has been utilized to date primarily for development with retail uses on the ground floor and single or multifamily residential uses above. This area is planned to contain existing residential units; existing residential structures converted to commercial uses; residential live-work units; new in-fill residential, office and commercial structures, and similar compatible uses.

The Sullivan Corridor Specific Plan includes objectives and policies that would support the proposed project. Sullivan Corridor Land Use Objective 2.5 encourages additional residential development that reinforces the existing neighborhood, and which is within walking distance of the Colma BART Station; Policy 8 supports residential and mixed-use projects between Pierce Street and Washington Street. The area should remain a viable residential neighborhood with appropriate scale and character, while allowing gradual commercial infill development.

As new in-fill residential development, the subject project would be compatible with the Sullivan Corridor Specific Plan. The Colma BART Station is less than a half-mile from the subject site and the SamTrans bus route runs along Washington Street. Single-family homes, commercial services uses, and plant nurseries front the subject block face. As a predominantly residential neighborhood with an assortment of agricultural and industrial uses (i.e. greenhouses, auto repair, Republic Services, etc.) in the immediate vicinity, a residential development would be most appropriate for the site.

Minor Subdivision/ Site Design

The subject site is presently vacant, with an insignificant slope decline running from southwest to northeast and is accessible from Edgeworth Avenue (an existing improved public right-of-way). Per the zoning code, the proposed lots meet the 25' minimum lot width and 2,500 square feet minimum lot area standards.

Each of the 37-foot-tall duplex buildings is built to a zero-lot line and meets all applicable setbacks requirements. The proposed front yard setback is 18 feet, while the rear yard setback is 20 feet minimum. As proposed, the project is consistent with the development regulations set forth by the Sullivan Corridor Specific Plan, which allow up to 8,125 square feet of building area based on the proposed site size (a maximum 1.0 Floor Area Ratio is required). The applicant has proposed 8,000 square feet of habitable area, not included the area adjacent to and behind the garage for each building, which are open to each backyard.

The project site plan identifies the provision of an improved yard at the rear of each duplex which would be accessible to duplex occupants. Yard sizes are 837 square feet and 1,672 square feet for the southerly and northerly duplex, respectively.

Building Design

The proposed building design underwent staff review for compliance with the Sullivan Corridor Specific Plan and Daly City's Municipal Code Chapter 17.45 – Design Review standards. The recently adopted Objective Design Standards do not apply since the city deemed the application complete prior to their adoption on November 12, 2024.

The Sullivan Corridor Specific Plan places strong emphasis on architectural quality, specifically requiring interesting building façades, well-defined entrances to buildings, and the maintenance of a residential character and scale for in-fill projects. Uninteresting building facades, with “overly defensive” design elements (e.g., obscured doorways, minimal windows, etc.), are not allowed.

Through the initial project applications, staff worked with the applicant's architect to develop an architectural concept for the buildings that would be consistent with the design requirements set forth by the Specific Plan. The architect proposed building design is a modern, contemporary design but incorporates key architectural elements found on residential buildings in the adjacent neighborhood. These elements include an accentuated front stairway and entry, porches, combination stucco, horizontal siding and vertical stained wood batten siding, and horizontal roofs. The second floor is recessed ten (10) feet from the first floor, as required by the Specific Plan and Residential Design Guidelines.

Staff worked with the applicant to refine the building architectural concept with the project architect, and conformance with Design Review standards incorporating decks to provide a setback from the second and third floors, introduce horizontal trim as a visual separation between floors, and adds a variety of exterior materials, and color variation, to reduce the bulk and mass appearance of the home. The side elevations incorporate siding and banding to add visual interest at these elevations.

Landscaping

The project includes a landscape plan for the front and back yards, which incorporates a variety of proposed box specimen trees (california buckeye, marina strawberry) and shrubs/perennials (california lilac, cape rush, carmel sur and majestic purple lily grass and leonotis leonurus). The plants and trees will be accessed by permeable walkways to the landscaped areas in the backyard. Staff is satisfied and supports the proposed landscape plan design, as it provides a variety of plants and trees in landscaped areas with accessible, permeable walkways for the condominium owners to access the open space backyard areas and well as planter boxes located in the front driveway areas (Attachment D – Project Plans).

Parking and Circulation

The Daly City zoning regulations require two parking spaces be provided for each condominium unit; however, the applicant is not required to provide parking because the project meets the criteria for a parking exemption under Assembly Bill (AB) 2097, due to the project site's location within a ½ mile of high-quality transit. The project site is located within .43 miles of the Colma Bart Station.

Despite the parking exemption, the applicant will provide one car garage parking space for each condominium unit on the ground floor, for a total of four garages spaces. Additionally, the applicant has designed driveways of sufficient length to accommodate one additional space per unit, for a total of eight on-site parking spaces. Permeable pavers will be used for all driveway surfaces.

Zoning Ordinance and General Plan Consistency

The site is zoned Commercial Retail Residential (C-R/R) by the Sullivan Corridor Specific Plan and designated Commercial Mixed-Use (C-MU) by the General Plan. This C-R/R zoning and C-MU land use designation allow residential condominium buildings, subject to tentative subdivision map, use permit, and design review approval. As discussed previously, the C-R/R zone requires a use permit for Residential Medium-Low density residential development.

Because the Sullivan Corridor Specific Plan requires a use permit for Residential Medium-Low density residential development, staff has used the density parameters of the Residential Medium-Low General Plan land use designation, which allows between 14.5 and 20 dwelling units per acre, to determine the number of units allowed on the subject site. Using the density parameters prescribed by the Residential Medium-Low General Plan designation, up to four dwelling units could be constructed on the property given the subject parcel size and maximum 20 dwelling units per acre net density allowed on the 8,125 square foot parcel. Pursuant to state law, the two Accessory Dwelling Units are not calculated in the allowable density.

Aside from the Housing Element, the General Plan infill housing in existing neighborhoods on underutilized sites, where residential development represents the highest and best use, and where public infrastructure exists to support the intensity of the proposed development. The subject site is situated adjacent to future single-family homes, duplexes, and other residential mixed uses. Residential development is the highest and best use for the subject property given its size and shape, and adjacent uses.

Subdivision Requirements

Pursuant to Section 66474 of the Subdivision Map Act, a legislative body of a city or county may approve a parcel map if it makes the following findings:

1. The proposed subdivision and/or design or improvement must be consistent with applicable general and specific plans.
 - Using the density parameters prescribed by the Residential Medium-Low General Plan designation, up to four dwelling units (not including Accessory Dwelling Units) could be constructed on the property given the subject parcel size and maximum 20 dwelling units per acre net density allowed on the 8,125 square foot parcel.
2. The site must be physically suitable for the type and density of the proposed subdivision.
 - Within the subject area, there are predominantly single-family residential dwellings. The parcels are in a fully urbanized area with all public services capable of being extended to the new lots.

3. The design of the proposed subdivision or improvements must not cause substantial environmental damage or injure fish or wildlife or their habitat.
 - Staff has the determined that the proposed subdivision will not cause significant environmental damage or injure fish, wildlife, or their habitat. The proposed project would be constructed in a fully urbanized area. A Categorical Exemption per CEQA will be prepared.
4. The design of the proposed subdivision must not cause serious public health problems.
 - The construction of duplexes on this site must meet Building Code requirements, which set minimum safety standards for new construction. Other City and State regulations will assure that public health is not at risk.
5. The design of the proposed subdivision or improvements must not conflict with any easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.
 - As mentioned earlier, access to the proposed new lots and utilities for the lots would be available directly from the Edgeworth Avenue right-of-way. No structures of any kind will be built over the easement. Where necessary, permits for utility connections for the newly created lots would be obtained in Daly City.

Utility Providers

The parcel is in a fully urbanized area with all public services capable of being extended to the new lots. Utilities to serve the project are in place within the Edgeworth Avenue public right-of-way and have the capacity to accommodate additional units. These include electrical, water, sewer, and the availability of telephone service and access to public streets.

<i>Utility</i>	<i>Provider</i>
Sanitary Sewers	North County Sanitation District
Gas & Electric	PG&E
Telephone	Pacific Bell
Cable Television	RCN Cablevision
Fire/Police Protection, Storm Drains, Water	Daly City/Cal Water

Fiscal Analysis and Impacts

The construction of four condominium units will add an incremental demand for City services. Prior to project completion, the project applicant will be required to pay park in-lieu fees as required by Parkland Dedications Ordinance, building permit, plan check, affordable housing, and AB 1600 fees to the City. Upon sale of the residential properties, the future owners will pay property tax to the County, a portion of which will be distributed to the City.

Environmental Assessment

The proposed project is Categorically Exempt per CEQA Guidelines Section 15332: In-Fill Development Projects.

Findings

Staff finds that, as conditioned, the approval of Minor Subdivision SUB-04-16-12018, Use Permit UPR-04-16-12019, and Design Review DR-04-16-12020 would be in compliance with all applicable provisions of Title 16 (Subdivisions) and Title 17 (Zoning) of the Daly City Municipal Code. Approval of the proposed project will not be detrimental to the health, safety, morals, comfort and general welfare of persons residing in or working in the neighborhood or be injurious or detrimental to the property and improvements in the neighborhood or the general welfare of the City. These findings are based on the following facts:

1. In accordance with Title 17 of the Daly City Municipal Code, as well as applicable State zoning enabling legislation, the Planning Commission will conduct a public hearing on December 3, 2024; notice of said hearing was published in a newspaper of general circulation on November 23, 2024, and by posting and first-class mailing to property owners within 300 feet.
2. Staff has reviewed the proposal under the requirements of the California Environmental Quality Act (CEQA) and has determined that it is Categorically Exempt per CEQA Guidelines Section 15332: In-Fill Development Project. Staff has determined, based on the findings specified herein, that the proposed project would have no significant detrimental effect on the environment.
3. The proposed subdivision, together with any provisions for its improvement, is consistent with the objectives, policies, and general land uses as outlined in the Daly City General Plan. More specifically, applying the density parameters prescribed by the Residential Medium-Low General Plan designation, up to four dwelling units could be constructed on the property given the subject parcel size and maximum 20 dwelling units per acre net density allowed on the 8,125 square foot parcel. The proposed land use conforms to Objective 6 in the General Plan Land Use Element, which states that, a pattern of variety in residential densities; types and tenure should be maintained in order to provide housing opportunities.
4. The site is physically suitable for the type and density of the proposed subdivision. Within the subject area, there are predominantly single-family residential dwellings. The parcels are in a fully urbanized area with all public services capable of being extended to the new lots.
5. Pursuant to standards set by the California Environmental Quality Act, staff has the determined that the proposed subdivision will not cause significant environmental damage or injure fish, wildlife, or their habitat. The proposed project would be constructed in a fully urbanized area.

6. The design of the proposed subdivision and related improvements will not conflict with any easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. Access to the proposed new lots and utilities for the lots would be available directly from the Edgeworth Avenue right-of-way.
7. The newly created lots are physically suitable for both the type and density of the proposed development.
8. The design of the condominium buildings would be required to meet all health and safety requirements of the Uniform Building Code and will not cause serious public health problems.
9. The design of the project will not conflict with any easements, acquired by the public at large, for access through or use of property within the proposed subdivision.
10. Utilities to serve the project are in place within the Edgeworth Avenue public right-of-way and have the capacity to accommodate additional units. These include electrical, water, sewer, and the availability of telephone service and access to public streets.
11. General site considerations, including site layout, open space and topography, orientation and location of buildings, vehicular access, circulation and parking, setbacks, heights, walls, fences, public safety and similar elements have been designed to provide a desirable environment.
12. General architectural considerations, including the character, scale and quality of the design, the architectural relationship with the site and other buildings, building materials, colors, screening of exterior appurtenances, exterior lighting and signing and similar elements have been incorporated in order to insure the compatibility of this development with its design concept and the character of other adjacent buildings.
13. The condominium project will not have a detrimental effect on sound community planning, the economic, ecological, cultural and aesthetic qualities of the community, and on public health, safety and general welfare.
14. The overall impact on schools, parks, utilities, neighborhood streets, traffic, parking and other community facilities and resources will not be detrimental.

Conditions of Approval

Staff recommends the Planning Commission forward a recommendation of approval to the City Council for Minor Subdivision SUB-04-16-12018, Use Permit UPR-04-16-12019, and Design Review DR-04-16-12020, subject to the following conditions and Daly City General Conditions of Approval. Minor deviations from the conditions of approval may be approved by the Planning Division. Significant deviations will require review and approval by the Planning Commission and City Council.

A. DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT

General

1. The minor subdivision shall be valid only in conjunction with detailed plans submitted and approved by the City Council. Any modifications required due to the Conditions of Approval and changes to the plans shall be treated as an amendment and shall be subject to review by a Council Committee appointed by the Mayor.
2. All technical corrections or modifications required by the City Engineer shall be incorporated into the Final maps, and all applicable fees paid prior to approval for recordation.
3. The minor subdivision shall conform to the City Standards Conditions for Minor Subdivisions.
4. The minor subdivision and use permit shall be valid for a period of two years from the date of City Council approval. The subdivision shall lapse if the parcel map is not recorded within two years.
5. The applicant shall pay park-in-lieu fees, in compliance with DCMC Chapter 16.30 Parkland Dedications. Per DCMC Section 16.30.040.A, the required dedication in this specific case is 0.238 acres. Per DCMC Section 16.30.060, the in-lieu fee shall be based upon said dedication requirement. Per DCMC Section 16.30.090, in-lieu fees are required to be paid to the City of Daly City, prior to approval of the Final Map. The project is subject to full compliance with DCMC Chapter 16.30 Parkland Dedications.
6. The proposed parcel map recordation shall not render any adjacent parcels or buildings on those parcels nonconforming to size, lot coverage, etc.

Building Design

7. Prior to the issuance of building permits the texture and color of the front elevation veneer will be approved by the Planning Division.
8. Prior to the issuance of building permits the specific garage doors to be used in the project will be approved by the Planning Division.

Landscaping

9. The applicant shall provide substantial, high-quality landscaping. The use of flowering plants and trees shall be used to reinforce the visual character of the area.

10. Landscaping shall be low-maintenance, drought-resistant and adaptive to Daly City climate. A full landscape plan should be submitted and subject to review by the Planning Division.
11. The applicant shall install permeable pavers for all the driveways and walkways and shall provide a manufacturer cut-sheet for the pavers prior to building permit issuance.

B. BUILDING DIVISION

16. Hours of operation for all construction work associated with the subject project shall be Monday through Friday between the hours of 8:00 am to 5:00 pm. For work in City public right-of-way, the construction hours would be limited to Monday through Friday between the hours of 9:00 am to 3:00 pm. If the project's general contractor wishes to work outside the allowable hours, on weekends, or on City holidays, on a regular basis, this must be approved in advance by the City Council and the City Manager. For special requests on a limited basis, the Building Official can approve alternate construction hours for the project not within or impacting the right-of-way (ROW). The applicant will be making only special requests, on a limited basis, to the Building Official to work on construction outside of allowable hours, not within or impacting the ROW. The Building Official must be notified, and approval given, in writing, in advance of said work.
17. At Building Permit Submittal, the applicant shall apply for a Building Permit for Site Improvement work to review and inspect all Building Code-related items. This includes structural, architectural, accessibility, and et. cetera. The Building Division review will not occur under the Site Improvement Permit.

C. PUBLIC WORKS - ENGINEERING DIVISION

GENERAL

1. All improvements shall be consistent with the plans approved by the City Engineer and the Conditions of Approval. All improvements shall meet the latest California Building Code, California Fire Code, Daly City Municipal Code, and the Daly City City Standards and Specifications.
2. The applicant shall minimize impact on street traffic during construction. Pedestrian and vehicular safety shall be maintained.
3. Prior to the request of any building permits, the applicant shall submit site improvement plans for the City's review and approval. The plans shall include utility connections and shall

indicate replacement of curb, gutter, and sidewalk across the entire frontage of each lot. The applicant shall pay any prescribed fees applicable for such a review.

4. Before filing the final map, the subdivider shall provide “will serve” letters from each of the utility agencies.
5. All improvements shall be installed, inspected and approved by the City Engineer prior to issuance of occupancy permits. In addition, as-built record plans of all improvements shall be submitted in a form acceptable to the City Engineer prior to issuance of occupancy permits.
6. Grading and improvement plan review and approval by the City Engineer are required before any City permit is issued. The improvement plans shall include details for on-site and off-site improvements for vehicular and pedestrian access, parking, traffic signs and markings, utility service connections, modifications and extensions of the City’s sewer, water, storm drain, safety lighting, landscaping, and other public service facilities.
7. Securities for all improvements (on-site and off-site), and applicable fees and charges, shall be submitted with any building permits. The applicant shall obtain all required permits before commencing work.
8. All plans shall be accompanied by all required calculations and studies including geotechnical and impact studies to justify design signed and sealed by a licensed professional engineer.
9. Provide erosion and storm water pollution plan incorporating best management practices, including operation and maintenance provisions per the requirements applicable at the time of construction permit application. During the wet/rainy season (October 1 to April 30) the developer shall submit a revised erosion control plan as necessary (every five working days) or as required by the City Engineer and/or his representative.
10. Concurrent with each demolition, grading and drainage permit submittal, or as a part of the Improvement Plan package, the Applicant shall prepare a dust control plan. The plan shall conform to the City Standards and comply with the requirements of the Bay Area Air Quality Management District (BAAQMD) Best Management Practices for dust control. The Applicant shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The person shall respond and take corrective action within 48 hours.

11. No permanent building encroachment including but not limited to: awnings, canopies, marquees, signs, windows, balconies, architectural features and mechanical equipment shall be allowed in the Right-of-Way without the written authorization of the City Engineer.
12. The project's electrical transformer shall not be installed within the public right-of-way.
13. The applicant shall enter into a Landscape Maintenance Agreement in a form acceptable to the City Attorney to ensure the Property Owner will provide long-term maintenance of all street trees, landscaping, irrigation, and pedestrian-scale lighting installed in the public right-of-way. Design of planting and irrigation system shall minimize the extent of irrigation lines, controllers, and valves in the public right-of-way and shall be reviewed and approved by the City Engineer.

SITE

14. The applicant shall install monolithic curb, gutter, and sidewalk over the entire frontage of the development to the nearest expansion joints or score lines. Sidewalks fronting the property on public streets and within the development shall be a minimum 5.5 feet in width including the top of curb. The improvements shall be ADA compliant and to current City Standards and Specifications.
15. The applicant shall repair and/or replace additional areas of street pavement, sidewalk, curb, and gutter, streetlights, manhole, catch basins, or any other public infrastructure within the right-of-way damaged by construction activities associated with the project (utility installation, etc.) as required by the City Inspector during construction. Such repair shall be per the City's Standards and Specifications.
16. The applicant shall replace in its entirety the existing sidewalk fronting the new lots per current ADA and Daly City Standards and Specifications. The applicant shall obtain all required permits before commencing work.
17. Driveways shall be designed and constructed per current Daly City Standards and Specifications.

GRADING

18. Grading exceeding 50 cubic yards shall require approval of plans and a grading permit. A licensed Civil Engineer shall prepare the grading plans and erosion control plan in conformance with a soil report prepared by a licensed soil engineer or qualified civil engineer in compliance with the NPDES requirements prior to any development on the property.

19. Grading plans shall be reviewed by an independent qualified Consulting Engineer or Geologist as well as the City Engineer; a letter of compliance from the independent qualified Consulting Engineer or Geologist shall be provided to Engineering prior to the issuance of any permit. The Engineer and/or Geologist, of record, shall be present on-site during the excavation and grading phases of the project and shall submit a written certification that the project civil plans has been implemented as approved.
20. The applicant shall provide fail-safe conditions for catastrophic events such as 100-year storms, seismic events, system overflows or failures. Drainage swales shall be provided at the top, intermediate and bottom of slopes and embankments to prevent erosion and degradation of slopes. The project geotechnical report shall include appropriate recommendations regarding the protection of existing and proposed slopes.
21. The soils report shall be finalized and resubmitted prior to any parcel or final map approval, and prior to building permit issuance. As required by the engineering division, the applicant shall be responsible for the costs associated with a third-party peer review of soils reports provided for buildings or subdivision, and the applicant's soils engineer shall address and incorporate the recommendations of the third-party peer review. Prior to subdivision improvement or building permit issuance, the applicant's soils engineer shall provide a letter stating that they have reviewed such plans and the plans incorporate the recommendations contained in their report.

STORM WATER/UTILITY

22. Provide a storm drain study of the project. A storm drain utility report containing hydraulic calculations for the proposed storm drain system, that includes both public and private on-site drainage, shall be submitted to the City for review and approval. Along with the report, a letter from the engineer of record indicating that the proposed storm drain system does not increase runoff above the pre-development condition shall be submitted to the City Engineer for review and approval.
23. Runoff calculations shall be provided verifying that post development stormwater runoff from the site does not exceed the pre-development stormwater runoff. Additional stormwater runoff generated from the design storm as a result of this development shall be retained on-site.
24. Drainage from the site to a public storm drain system or street shall not flow over any sidewalk. On site drainage retention shall be provided to limit the flow rate entering the City's storm drain system to the pre-development rate. The retention facility shall accommodate the excess runoff from a storm of 10-year frequency and two-hour duration.

The intensity of the storm shall be the 10-year, 2-hour storm. Please refer to Daly City's Design Standards for more information. The stormwater runoff from each lot shall be discharged to the street gutters through pipes under the sidewalk (see City Standard Detail SD-5) at a rate not exceeding the predevelopment rate.

25. All stormwater retention, stormwater treatment, or other stormwater BMP improvements shall be located outside of the public right-of-way and maintained by the property owner. All privately owned and maintained improvements shall be located outside of the public right-of-way. There shall be no private improvements within the public right-of-way.
26. The applicant shall be financially responsible for all project-related storm drainage improvements on- and off-site, as required and approved by the City Engineer in accordance with City Standards.
27. Full trash capture devices approved by the City Engineer shall be installed on the drainage system.
28. All utility services shall be underground. Said improvements shall conform to the City of Daly City and affected Agency's standards.
29. All electrical and telecommunications services shall be provided through underground connections. There shall be no overhead drops. All existing overhead services and supporting poles along the project frontage and/or on the private property shall be removed, at the applicant's expense.

MAPPING

30. Prior to Building Permit issuance, a parcel map will be prepared and recorded. Please contact the Planning Division and Engineering Division to apply for a minor subdivision to subdivide the parcel.
31. Current title reports and all referenced documents (within the last 6 months) for all affected parcels shall be provided when requested.

PERMIT

32. Permits shall be required to be issued by the Public Works Department for all work proposed within the public right-of-way.

D. DEPARTMENT OF WATER AND WASTEWATER RESOURCES

33. Separate sewer laterals are required for each building and shall connect to the district main in Edgeworth Avenue.
34. Sewer lateral construction shall follow Daly City Standard Conditions and Drawings.
35. Clean outs are required 18 to 24 inches outside of the building foundation for each lateral.
36. Applicant shall submit additional permits as required from the Daly City engineering department for sewer lateral installation and inspection.

E. FIRE DEPARTMENT

37. Applicant shall install a Fire sprinkler system compliant with NFPA 13R required. All common areas, hallways and corridors shall be protected. Applicant shall submit plans to NCFA under separate fire permit.
38. A monitored fire alarm system compliant with NFPA 72 shall be required. Applicant shall submit plans to NCFA under separate permit.
39. Provide fire flow information per CFC, Appendix B.
40. Illuminated address identification is required.
41. Utility identification is required.
42. Knox Box required. Visit Knox Box.com for acquisition. A 3200 series will suffice.

Recommendation

Staff recommends the Planning Commission forward to the City Council the following recommendations:

1. Adopt the Findings as outlined herein;
2. Affirm the Environmental Assessment;
3. Approve Minor Subdivision SUB-04-16-12018, Use Permit UPR-04-16-12019, and Design Review DR-04-16-12020, as conditioned herein.

Staff is available to provide any additional information desired by the Planning Commissioners.

Respectfully submitted,



Sam Fielding
Associate Planner



Tatum Mothershead
Director of Economic and Community
Development

Attachments

Attachment A – Location Map
Attachment B – Project Description
Attachment C – Tentative Map
Attachment D – Project Plans

[illegible]

Project description for 1645 Edgeworth Avenue:

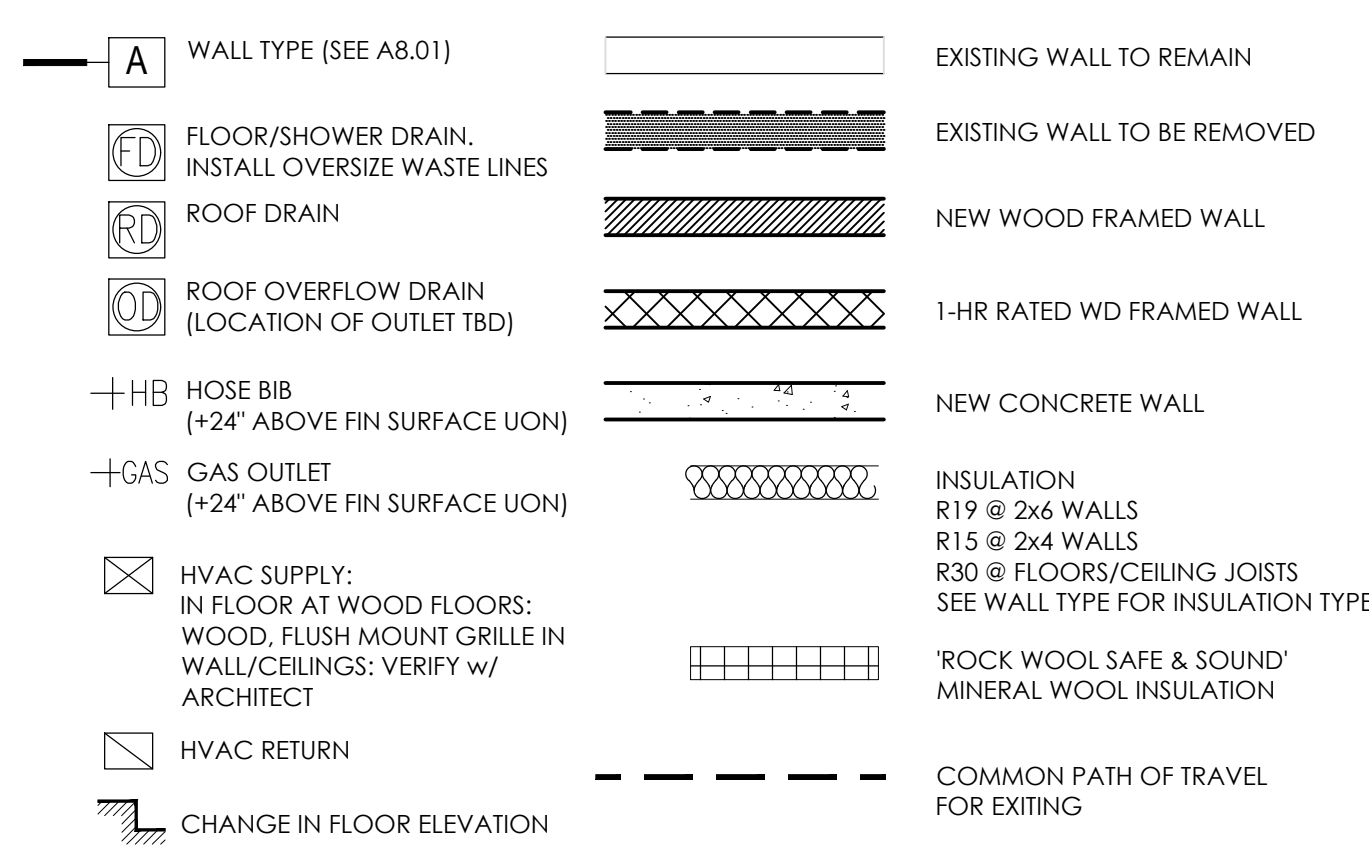
The proposed scope of work will be to divide the existing lot, with a width of 62'-6", into two lots each measuring 31'-3" along the Edgeworth frontage. Each of the new lots will be developed into a three-unit building, three stories in height with 2 interior garage parking spaces. Each building will consist of a one bedroom / one bathroom first floor unit of 700sf, a three bedroom / three-bathroom second floor unit of 1,640sf, and a three bedroom / three-bathroom third floor unit of 1,510sf. Each unit will have a rear yard deck with access to a +1,400sf rear yard. The third-floor units will also have two private decks of 100sf each along the front façade.

1. All construction to conform to all current building, electrical, mechanical, and plumbing codes:
 - 2022 California Building Code
 - 2022 California Electrical Code
 - 2022 California Energy Code
 - 2022 California Fire Code
 - 2022 California Green Building Standards Code
 - 2022 California Mechanical Code
 - 2022 California Plumbing Code
 - 2022 California Residential Code
 - Daly City Municipal Code
- Permits: Contractor shall obtain and pay for the Electrical, Plumbing, and all other permits etc. required by the governing authorities for the scope limited to only the work in the Architect's Drawings. All other work noted NIC (Not In Contract) is by others (Owner and Architect will obtain and pay for the General Building Permit).
2. The Contractor assumes sole and complete responsibility for the job site conditions at ALL times. The Contractor shall isolate the areas of the house that are not included in the scope of work for the project by using double zip walls between non-working and working areas, providing means and instructions to subcontractors preventing workers from traveling through non-working areas, and security locking these areas if applicable. Areas involved in the scope of work shall be kept in an orderly fashion, debris removed daily and broom swept daily. A portable bathroom and washing facility shall be provided on site and maintained by the Contractor. Smoking will not be permitted on site.
3. The Contractor shall protect all existing plant and landscape materials not intended to be removed. The rear yard shall not be used for staging of materials unless allowed by the Owner.
4. Contractor shall examine and verify existing conditions of the job site. Any discrepancy between drawings and existing conditions shall be recorded and reported with a submittal copy to the Architect for resolution prior to the commencement of work.
5. The contractor will notify the Architect about any condition requiring a modification or change and will not proceed with any change to the Work without the approval of Owner and Architect.
6. The Contractor shall provide submittals, shop drawings, and mock ups for approval to the owner and architect as indicated in the drawings.
7. The Contractor shall coordinate completion and clean up of work in preparation for final occupancy.
8. All penetrations of the building envelope shall be fully caulked and sealed unless otherwise noted. Contractor to insure waterproof conditions, including but not limited to all new roofing, doors and windows.
9. Grindlines at exterior walls are located as noted on plans. All interior dimensions are shown to the face of stud, unless otherwise noted.
10. Refer to Structural (Electrical, and Plumbing if applicable) drawings for additional general notes and requirements and coordinate with the Architectural Drawings.
11. DO NOT SCALE THE DRAWINGS. The contractor shall contact the Architect for clarification of dimensions.
12. Verify all dimensions in the field.
13. The Contractor and framing sub-contractor shall mark the crown of each framing member and frame the walls with the crown of the studs each facing the same way
14. All appliances shall be seismically anchored per UMC 304.4 specifications, and shall have adequate volume of combustion air per UMC 701.2.
15. Use manufacturer's standard detail for all flashing unless otherwise noted.
16. Contractor to install waterproofing and drainage under all new concrete slabs/retaining walls per structural requirements (see drawings), and architectural drawings.
17. Structural observation shall be required by the Architect or Engineer of Record for structural conformance to the approved plans per Sec. 1702 CBC.

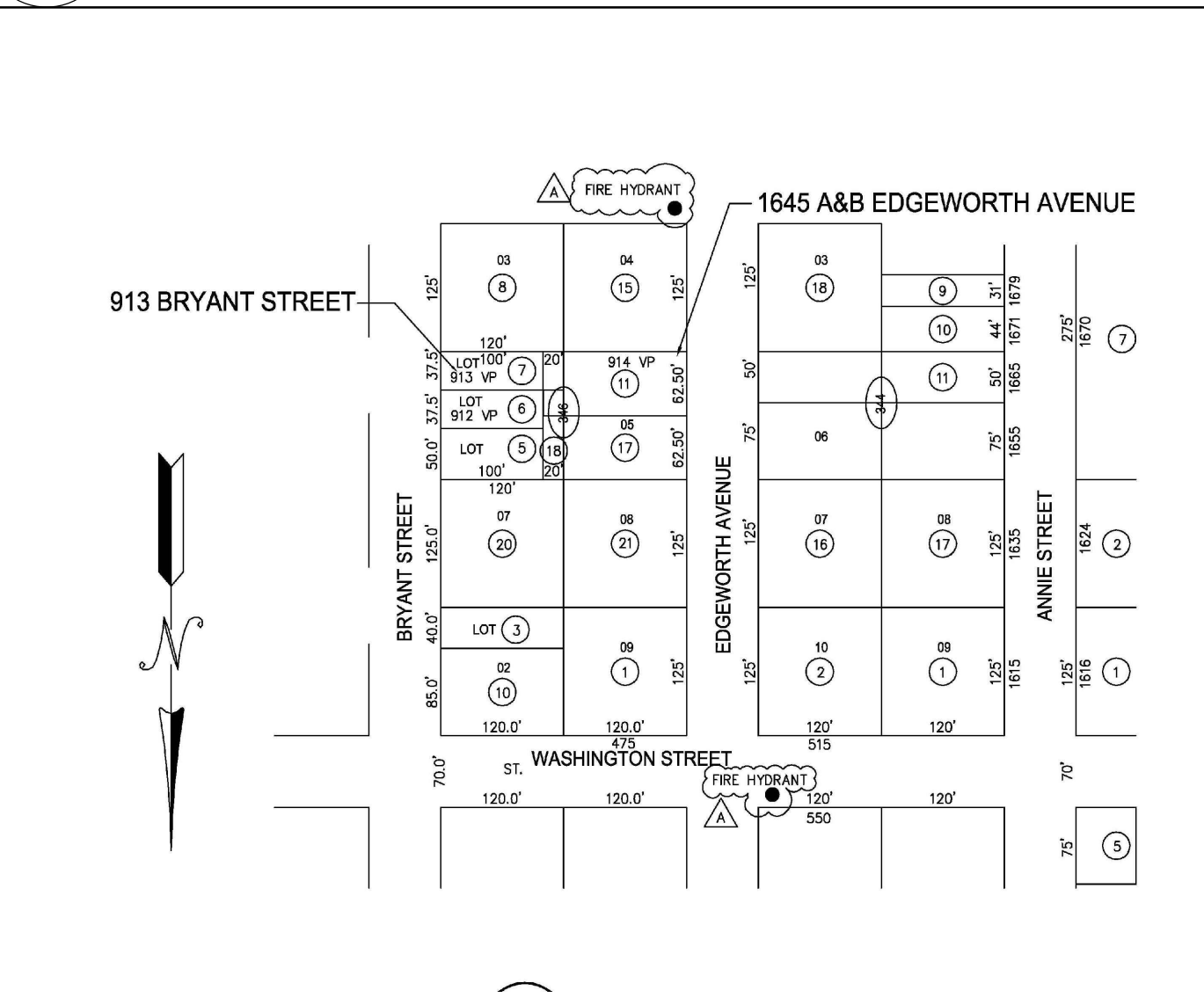
1. All utilities (but not limited to the following: gas, electric, water, sewer, etc.) shall be inspected for existing and new capacity and modified as required to meet codes per Architectural note #1 above.
2. Provide 2-min separate 20 amp circuits to kitchen appliances per CEC 220.4.
3. Provide 2-min separate 20 amp circuits to laundry appliances per CEC 220.4.
4. All clothes closet lamps shall be enclosed if incandescent and light fixture clearances shall conform to CEC 608.
5. Smoke and CO2 detectors shall be powered by building wiring current with battery backup CBC 310.9.1
6. Provide a smoke detector for each story and within each bedroom. Where non-bedroom ceiling heights exceed the hall ceiling height by more than 2 feet, additional detectors are required in each room per CBC 310.9.1
7. Electric floor mat heat in the bathroom shall meet the requirements of CEC 151(b)3 Exception. Supplemental heating shall be less than 2kW and controlled by a time-limiting device not exceeding 30 minutes

1. All plumbing vents shall be joined as often as possible into one main vent stack and roof penetration
2. Provide non-removable backflow prevention device on all exterior hose bibs, and lawn sprinkler/irrigation systems per CPC 608.
3. Base materials below all shower pans to be sloped toward indicated drains as per UPC Section 410.5.
4. If conventional water heater tank is used, provide seismic anchorage for new and/or existing water heater tanks per CPC 510.5. Strapping shall be at points within the upper one-third and lower one-third of its vertical dimensions. At the sub-point, a minimum distance of four inches shall be maintained above the controls with the strapping.
5. Contractor and sub-contractor are to evaluate the condition and location of the existing plumbing lines from the house to the street main and determine a location to tie into the main line. Also, the need for a lift pump will have to be determined.
6. Contractor is to note that it may be necessary to (depending on actual field elevations of pertinent items) to provide an approved backwater valve for drain piping serving fixtures having fluid level rims below the elevation of next upstream manhole cover.
7. Hammer arresting device shall be installed at quick-acting valves per CBC 609.10.
8. Coordinate space requirements and installation of mechanical, electrical and plumbing items that are indicated diagrammatically on Drawings.
- 8.1. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

1. Gas vent terminations shall meet the requirements of CMC 802.6.
2. Combustion air shall meet the requirements of CMC Chapter 7.
3. Environmental air ducts shall terminate 3 feet from the property line, 3 feet from openings into the building, and 10 feet above a public walkway per CMC 502.2.1 and provide with back-draft dampers per CMC 504.1.1.
4. Domestic range hood vents shall meet the requirements of CMC 504.3 and comply with CMC Table 403.7 and the California Energy Code.
5. All interior spaces intended for human occupancy shall be provided with space heating per CBC 1203.1.
6. Clothes dryer exhaust shall be a minimum 4 inches, terminate to the outside of the building, shall be equipped with a back-draft damper, and meet the requirements of CMC 504.4. Provide 100 sq. inch minimum make-up air opening for domestic dryers.
7. Steel ducts not less than 0.019 inch in thickness and have no openings in garage per CBC 406.3.2.2
8. Lighting shall be high-efficacy and comply with the lighting control requirements of CEC 150.0(k).
9. Maintain rated separation between dwelling units per CBC 420.3 (horizontal) and CBC 420.2 (separation walls).
10. Penetrations through horizontal assemblies shall comply with CBC 717.6.
11. Provide a minimum 200 square inch ventilation outlet in the garage walls or exterior doors.



T1



T1

SHEET NUMBER	SHEET DESCRIPTION
T1	PROJECT INFORMATION, SHEET INDEX, LEGENDS, GENERAL NOTES
T1.01	WATER POLLUTION PREVENTION CONSTRUCTION BMP
T2.01	EXISTING SITE PLAN
T2.02	PROPOSED SITE PLAN
T2.03	IMPERVIOUS VS PERVIOUS AREA SITE PLAN EXHIBIT
T2.04	PLANTING / LANDSCAPE PLAN
A2.01	PROPOSED 1st FLOOR PLANS
A2.02	PROPOSED 2nd FLOOR PLANS
A2.03	PROPOSED 3rd FLOOR PLANS
A2.04	PROPOSED ROOF PLANS
A3.01	PROPOSED EXTERIOR ELEVATIONS
A3.02	PROPOSED EXTERIOR ELEVATIONS
A3.03	PROPOSED EXTERIOR ELEVATIONS
A3.04	PROPOSED EXTERIOR ELEVATIONS
A3.05	PROPOSED BUILDING SECTIONS
A3.06	PROPOSED BUILDING SECTIONS
A3.07	PROPOSED WALL SECTIONS AND DETAILS
A6.01	WINDOW SCHEDULE
A6.02	DOOR SCHEDULE
A8.01	WALL TYPES, CEILING-ROOF TYPES, UTILITY PENETRATION DETAILS
A8.02	ROOF DETAILS
	CIVIL DRAWINGS
C-1	SITE DRAINAGE PLAN AND DETAILS
C-2	SITE DETAILS
C-3	EROSION CONTROL PLAN AND DETAILS

Owner:	WJ Britton and Co. John Britton 1345 Mission Street San Francisco, CA 94103	<u>Architect:</u> Jeffrey A. Eade, Architect 407 Crestmont Drive San Francisco, CA 94131 415.606.4414
Project Address:	1645 Edgeworth Avenue Daly City, CA 94015	<u>Structural Engineer:</u> Atrium Engineering Inc. 2451 Harrison Street San Francisco, CA 94110 415-642-7722 License: S2994
Proprietor's Number:	006346110	
Planning:	C-R/R Sullivan Corridor Specific Plan R2	
Occupancy:		
Construction Type:	VA (3 stories)	<u>General Contractor:</u>
Fire Sprinkler System:	NFPA 13D Fire Sprinkler System (to be submitted under a separate permit)	

Type of Work:
 shall be divided into two separate parcels.
 The parcel proposes the following scope of work:
 1. New three story building with three condominiums

ect is applying under AB 2097 which allows 0 parking spaces if transit qualifies as within 1/2 mile of high quality transit. reference letter attached to permit documents which demonstrates that project meets this criteria.

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jacarchitect.com
www.jacarchitect.com



DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

PROJECT INFORMATION, SITE PLAN
SHEET INDEX, LEGENDS,
GENERAL NOTES

DRAFTED BY JAF

CHECKED BY	IAE
------------	-----

CHECKED BY JAE

JOB NAME EDGEWORTH

JOB NAME EDGEWORTH

PLOT DATE: 10/02/24

SHEET NO. 14

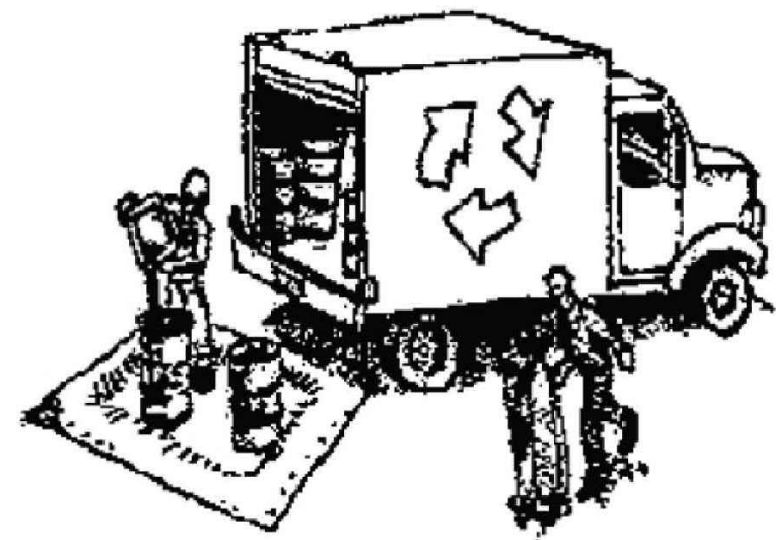
T1

SHEET SEQUENCE: ## of ##

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



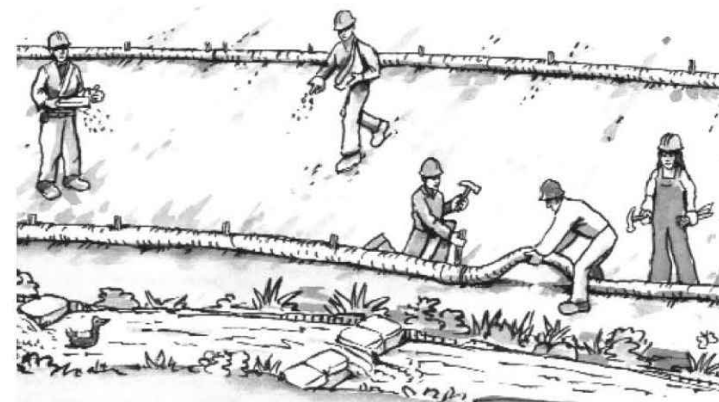
Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
 - Unusual soil conditions, discoloration, or odor.
 - Abandoned underground tanks.
 - Abandoned wells
 - Buried barrels, debris, or trash.

Paving/Asphalt Work



- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

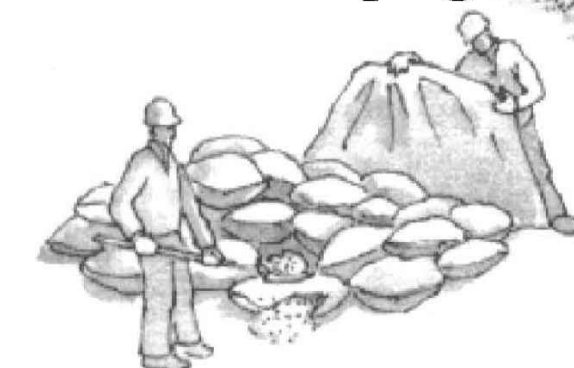
- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



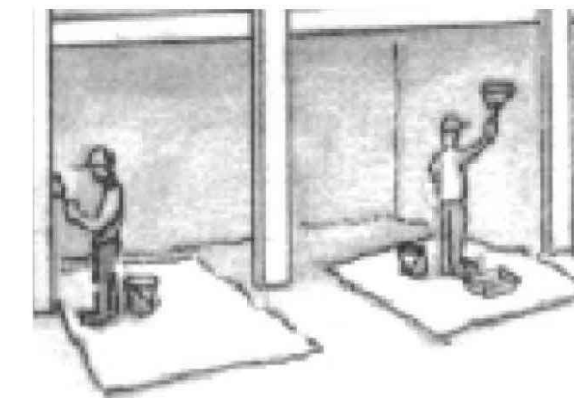
- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping



- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

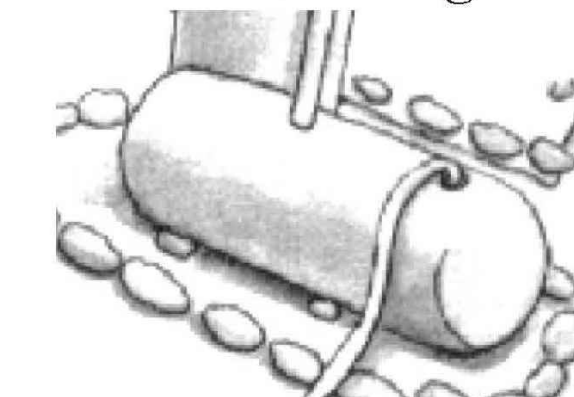
Painting & Paint Removal



Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering



- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to \$10,000 per day!

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect

407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

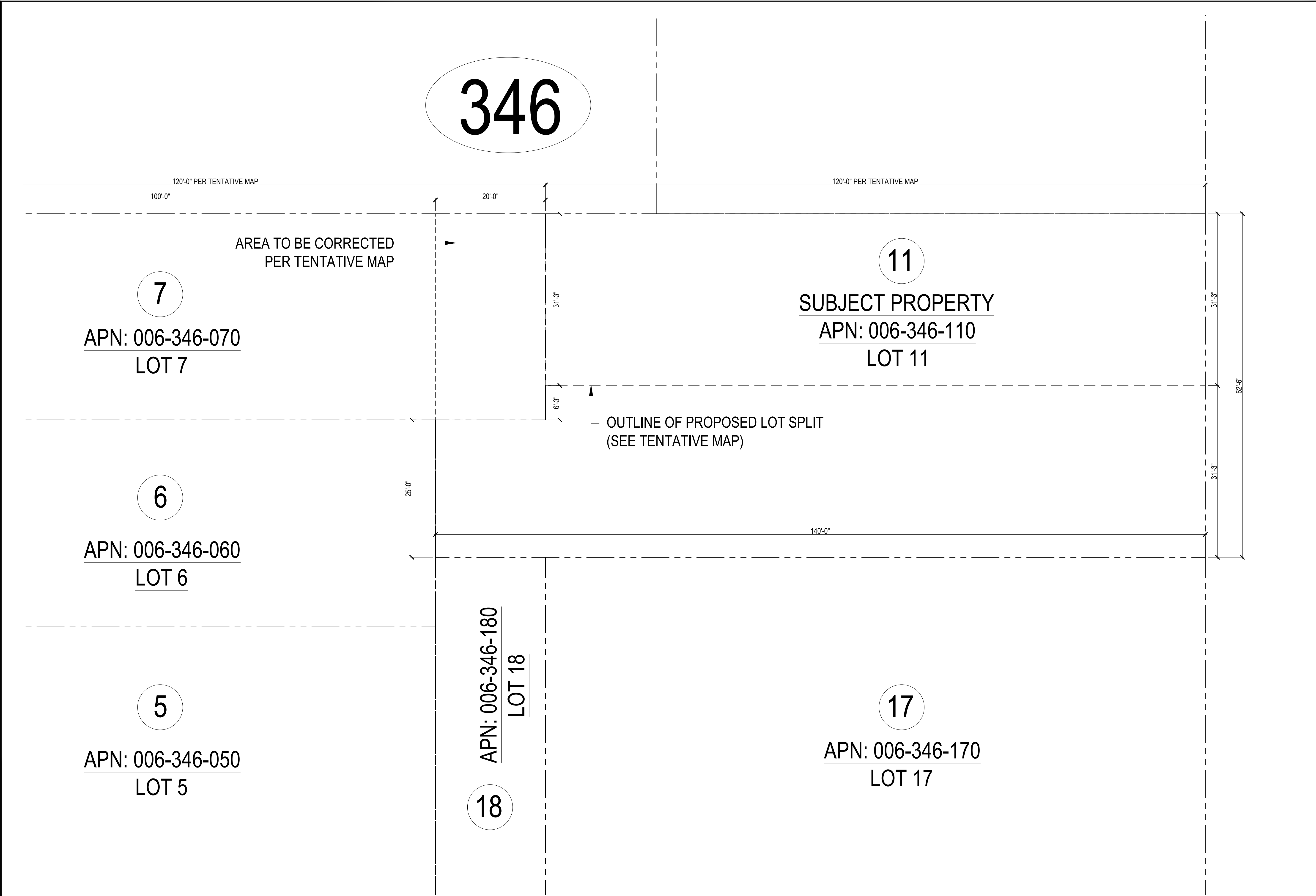
WATER POLLUTION PREVENTION
CONSTRUCTION BEST MANAGEMENT
PRACTICES

SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO.

T1.01

SHEET SEQUENCE: ## of ##



1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



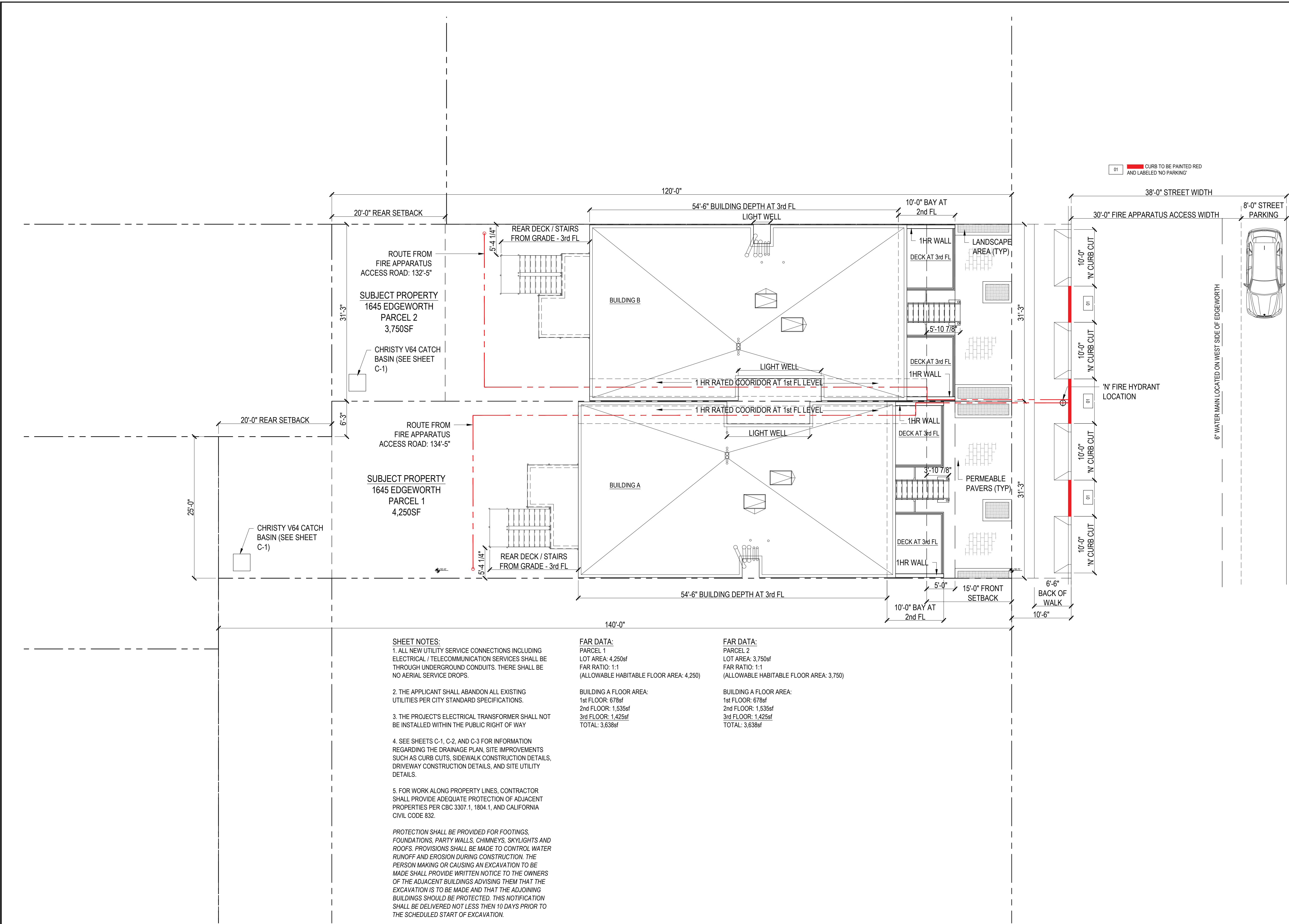
DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

EXISTING SITE PLAN

SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO. T2.01
SHEET SEQUENCE: ## of ##



- SHEET NOTES:**
1. ALL NEW UTILITY SERVICE CONNECTIONS INCLUDING ELECTRICAL / TELECOMMUNICATION SERVICES SHALL BE THROUGH UNDERGROUND CONDUITS. THERE SHALL BE NO AERIAL SERVICE DROPS.
 2. THE APPLICANT SHALL ABANDON ALL EXISTING UTILITIES PER CITY STANDARD SPECIFICATIONS.
 3. THE PROJECT'S ELECTRICAL TRANSFORMER SHALL NOT BE INSTALLED WITHIN THE PUBLIC RIGHT OF WAY
 4. SEE SHEETS C-1, C-2, AND C-3 FOR INFORMATION REGARDING THE DRAINAGE PLAN, SITE IMPROVEMENTS SUCH AS CURB CUTS, SIDEWALK CONSTRUCTION DETAILS, DRIVEWAY CONSTRUCTION DETAILS, AND SITE UTILITY DETAILS.
 5. FOR WORK ALONG PROPERTY LINES, CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OF ADJACENT PROPERTIES PER CBC 3307.1, 1804.1, AND CALIFORNIA CIVIL CODE 832.

PROTECTION SHALL BE PROVIDED FOR FOOTINGS, FOUNDATIONS, PARTY WALLS, CHIMNEYS, SKYLIGHTS AND ROOFS. PROVISIONS SHALL BE MADE TO CONTROL WATER RUNOFF AND EROSION DURING CONSTRUCTION. THE PERSON MAKING OR CAUSING AN EXCAVATION TO BE MADE SHALL PROVIDE WRITTEN NOTICE TO THE OWNERS OF THE ADJACENT BUILDINGS ADVISING THEM THAT THE EXCAVATION IS TO BE MADE AND THAT THE ADJOINING BUILDINGS SHOULD BE PROTECTED. THIS NOTIFICATION SHALL BE DELIVERED NOT LESS THEN 10 DAYS PRIOR TO THE SCHEDULED START OF EXCAVATION.

FAR DATA:
PARCEL 1
LOT AREA: 4,250sf
FAR RATIO: 1:1
(ALLOWABLE HABITABLE FLOOR AREA: 4,250)

BUILDING A FLOOR AREA:
1st FLOOR: 678sf
2nd FLOOR: 1,535sf
3rd FLOOR: 1,425sf
TOTAL: 3,638sf

FAR DATA:
PARCEL 2
LOT AREA: 3,750sf
FAR RATIO: 1:1
(ALLOWABLE HABITABLE FLOOR AREA: 3,750)

BUILDING A FLOOR AREA:
1st FLOOR: 678sf
2nd FLOOR: 1,535sf
3rd FLOOR: 1,425sf
TOTAL: 3,638sf

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

PROPOSED SITE PLAN

SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO. **T2_02**
SHEET SEQUENCE: ## of ##

01 **PROPOSED SITE PLAN**
T2 SCALE: 1/8"=1'-0"

 **Jeffrey A. Eade**
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



AREA FOR PERMIT STAMPS

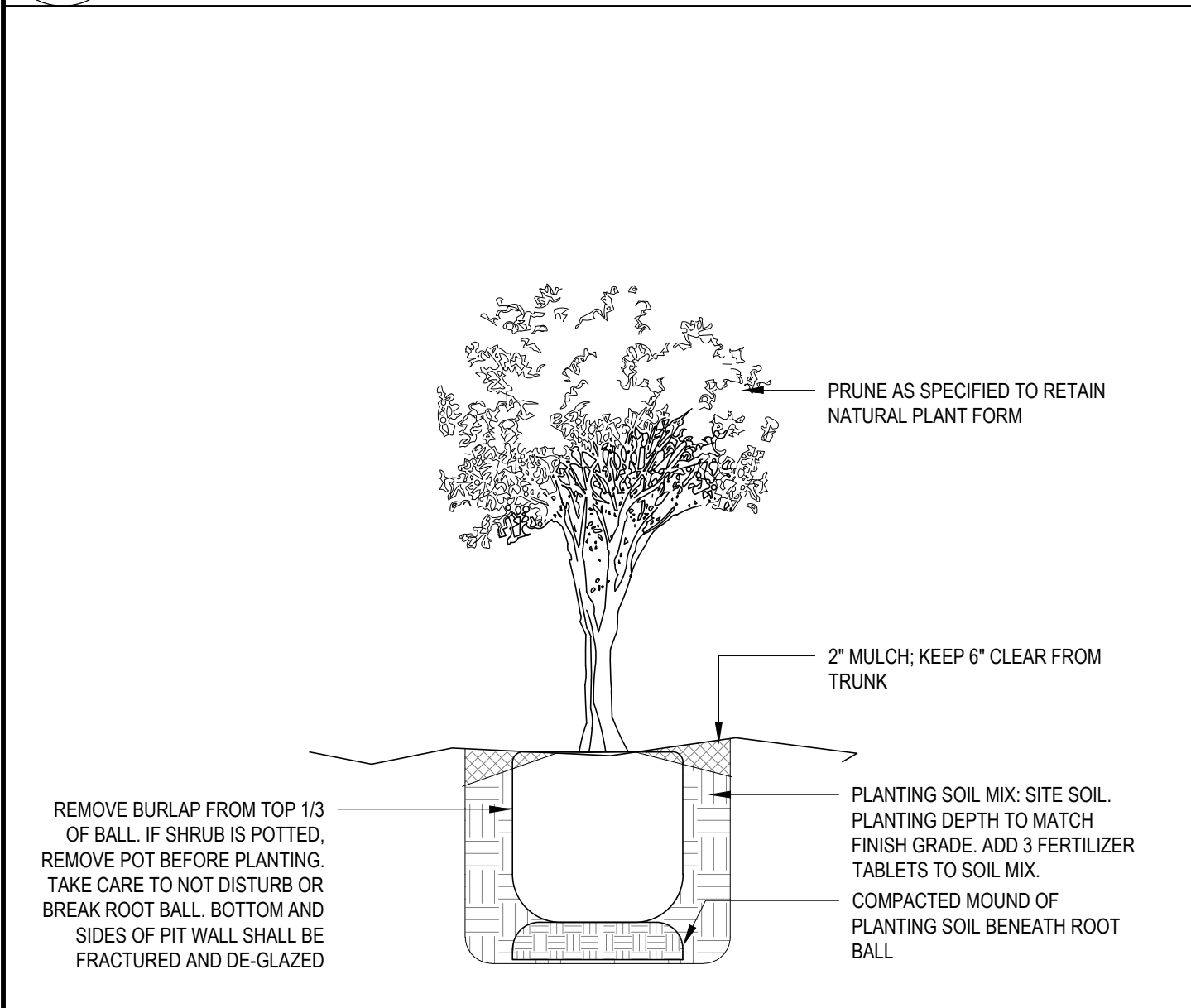
SCALE	AS NOTED
DRAFTED BY	JAE
CHECKED BY	JAE
JOB NAME	EDGEWORTH
PLOT DATE: 10/02/24	

SHEET NO. T2_03

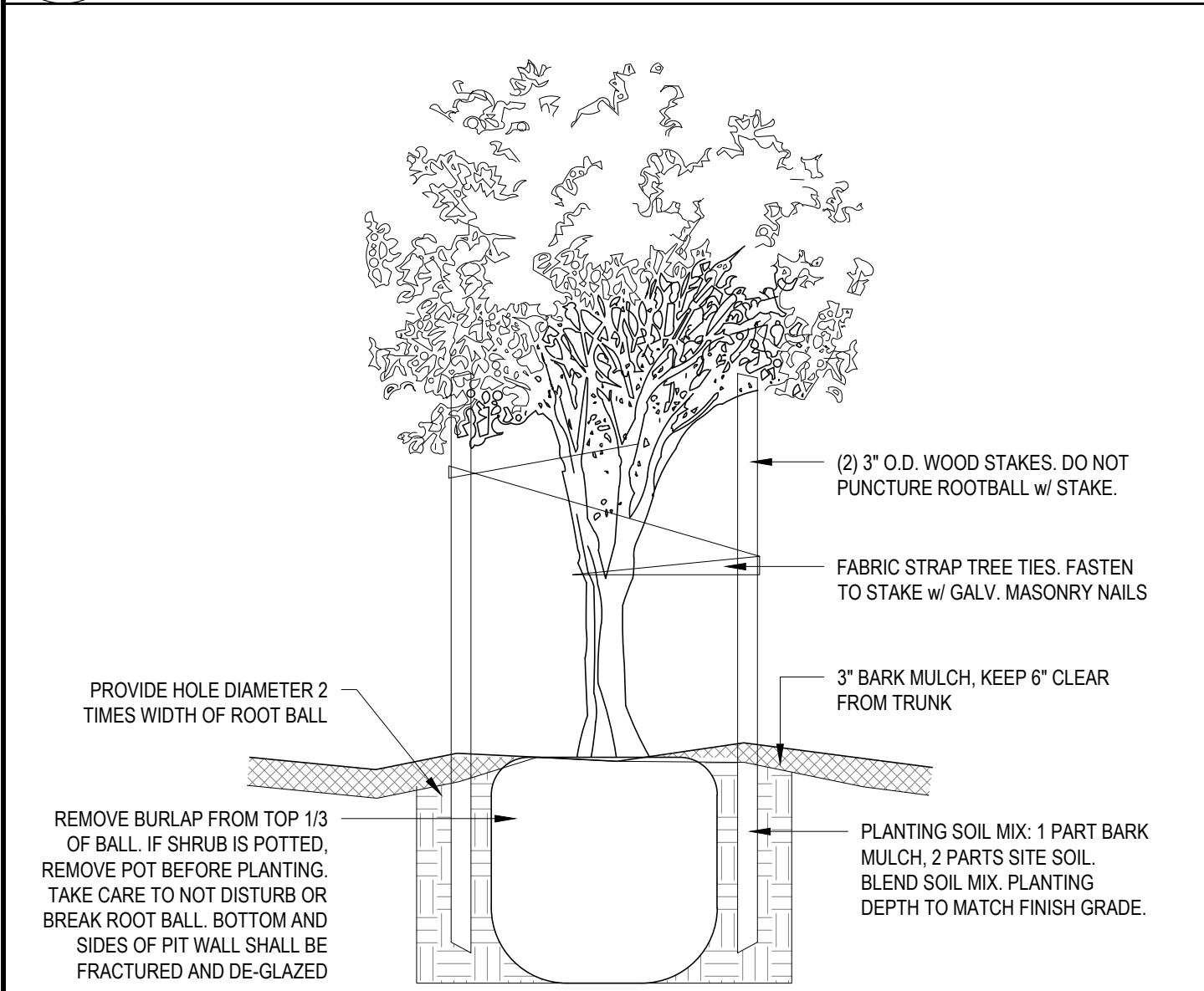
SHEET SEQUENCE: ## of ##



T2.04 1 OR 5 GALLON PLANTING



T2.04 SHRUB PLANTING

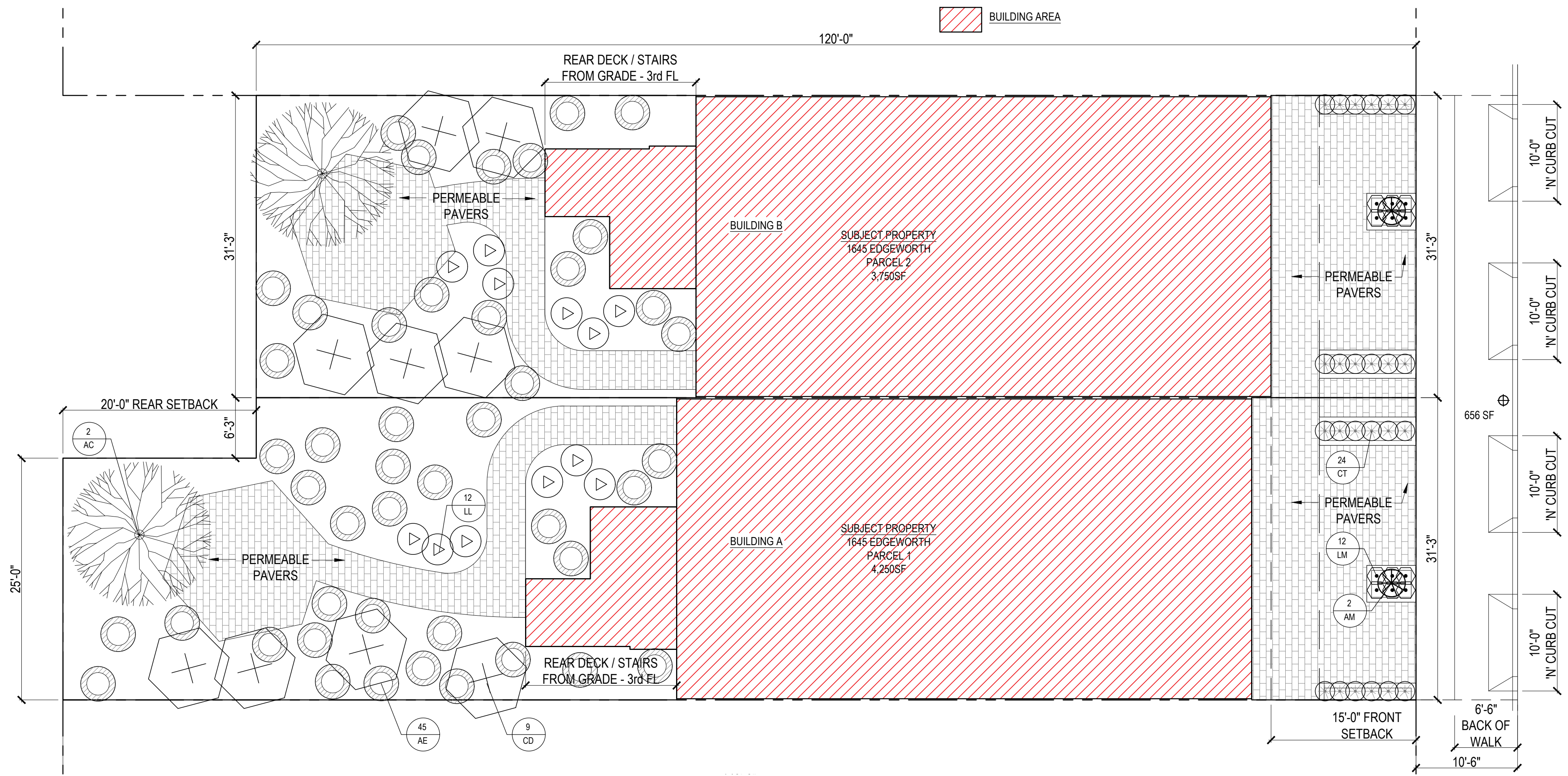


T2.04 TREE PLANTING

- PLANTING NOTES:
1. SEE PLANT SCHEDULES FOR SPECIES, QUANTITIES, AND MIN SPACING. SEE PLANTING DETAILS FOR INSTALLATION AND LAYOUT.
 2. CONTRACTOR SHALL ALLOW FOR THE ADDITION OF SOIL AMENDMENTS AND CONDITIONS IN SOIL PREPARATION AND FINISH GRADING.
 3. LAYOUT FOR ALL PLANTING AREAS TO BE VERIFIED IN FIELD DUE TO VARYING FIELD CONDITIONS.
 4. FINAL PLANT LIST WILL BE CONTINGENT ON PLANT AVAILABILITY. IF SELECTED SPECIES AREA UNAVAILABLE FROM LOCAL NURSERIES THEN UPON PRIOR APPROVAL OTHER GENUS OR SPECIES WITH SIMILAR HYDROLOGICAL REQUIREMENTS MAYBE SUBSTITUTED.
 5. ALL WOODY PLANTINGS WILL BE MULCHED WITH A MINIMUM OF 2" OF ORGANIC MATTER (BARK MULCH) TO DISCOURAGE WEED GROWTH, MINIMIZE SOIL EROSION, AND RETAIN MOISTURE. THE MULCH IS NOT TO MAKE CONTACT WITH THE PLANT STEM.
 6. IRRIGATION SYSTEM WILL BE PROVIDED. INSTALL DRIP IRRIGATION AND CONTROLLER. PLACEMENT OF CONTROLLER AND ANTI-SYPHON VALVES TO BE DETERMINED IN THE FIELD.

PLANT SCHEDULE

SYMBOL	QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
TREES					
	2	AC	AESCLUSUS CALIFORNICA	CALIFORNIA BUCKEYE	24" BOX
	2	AM	ARBUTUS 'MARINA'	MARINA STRAWBERRY TREE	24" BOX
SHRUBS/PERENNI ALS					
	45	AE	ARCTOSTAPHYLOS EDMUNDSII 'CARMEL SUR'		5 GAL
	9	CD	CEANOTHUS 'DARK STAR'	CALIFORNIA LILAC	5 GAL
	24	CT	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL
	12	LL	LEONOTIS LEONURUS		5 GAL
	12	LM	LIRIOPE MUSCARI 'MAJESTIC'	MAJESTIC PURPLE LILY GRASS	1 GAL



1645 Building A & Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

PLANTING / LANDSCAPE
PLAN

SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO. T2_04
SHEET SEQUENCE: ## of ##

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



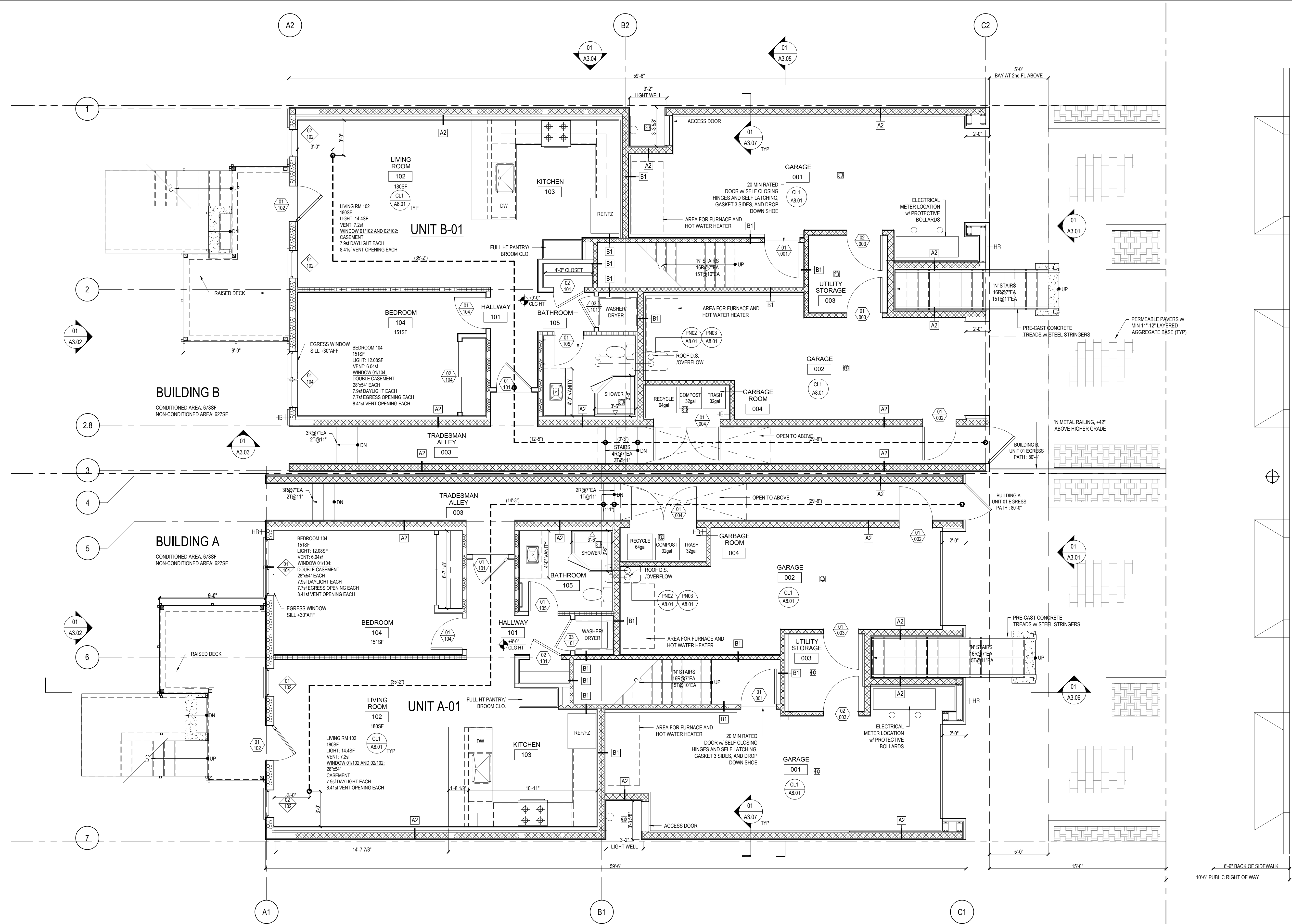
DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

PROPOSED
FLOOR PLANS

SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO.
A2.01
SHEET SEQUENCE: ## of ##



01
A2.01
PROPOSED FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect

407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



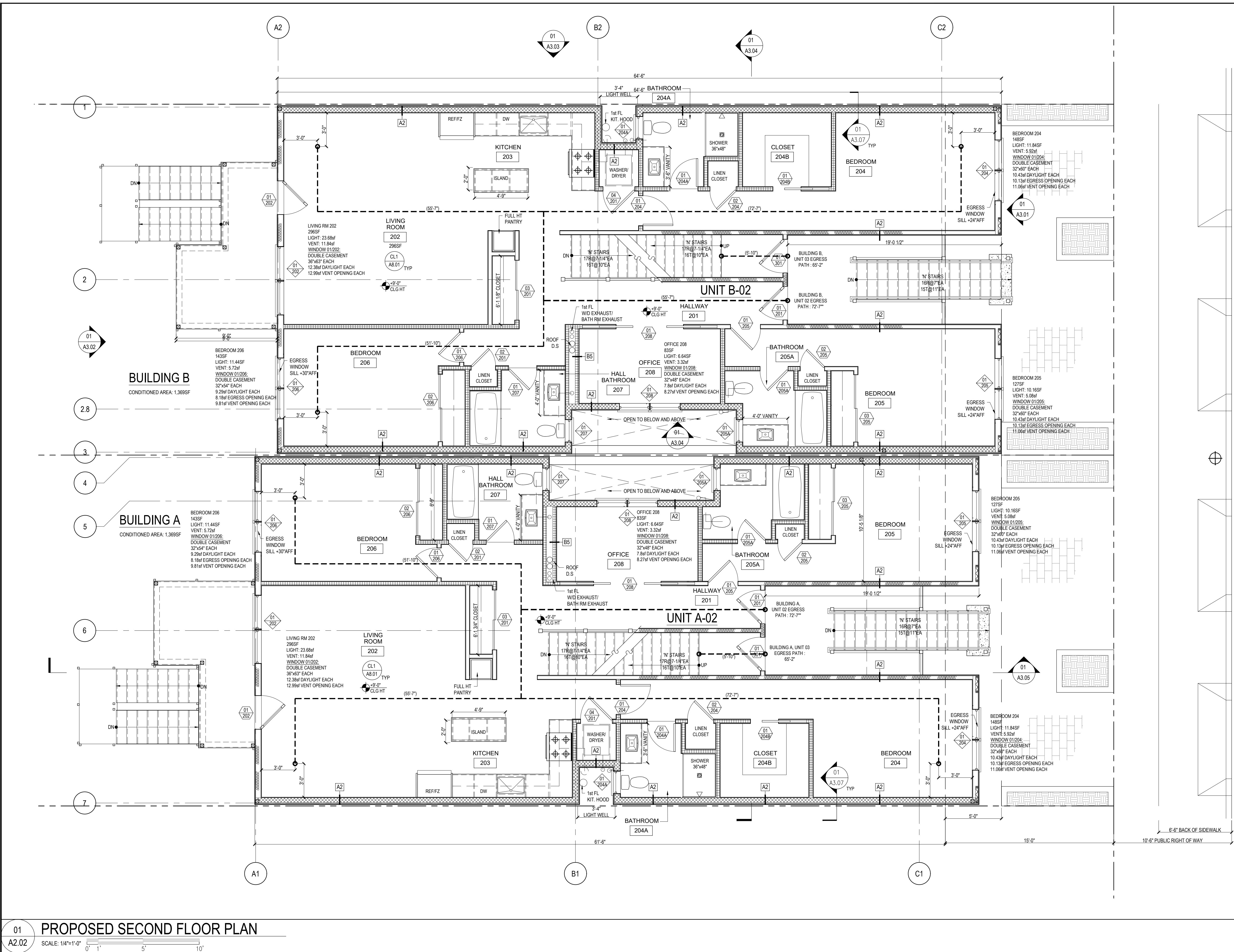
DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

PROPOSED
FLOOR PLANS

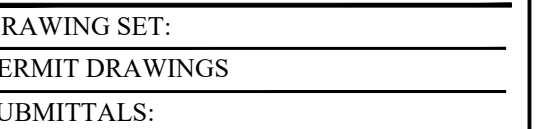
SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO. **A2.02**
SHEET SEQUENCE: ## of ##



01
A2.02
SCALE: 1/4"=1'-0"
0' 1' 5' 10'
PROPOSED SECOND FLOOR PLAN

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



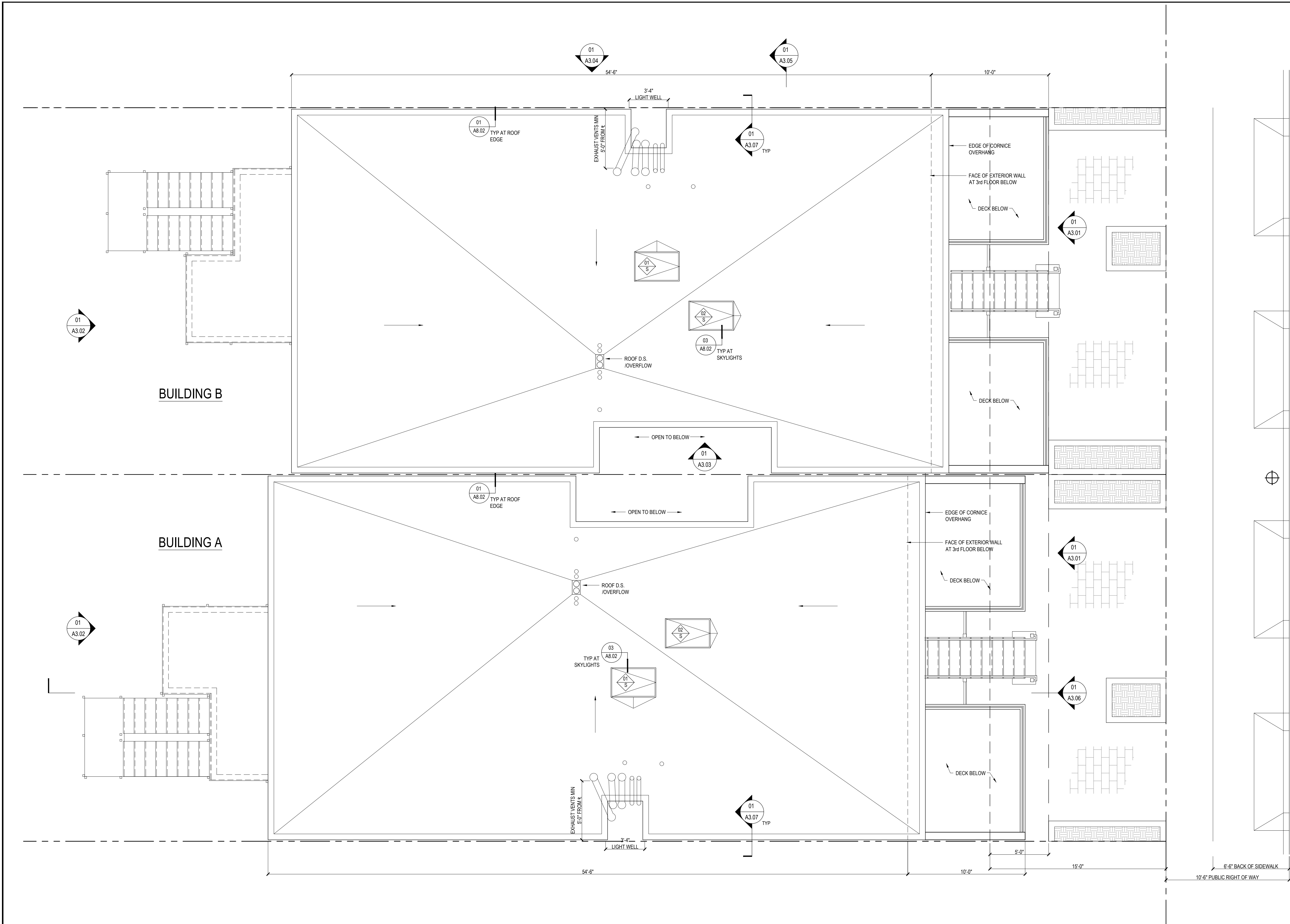
PROPOSED FLOOR PLANS

SCALE	AS NOTED
DRAFTED BY	JAE
CHECKED BY	JAE
DOB NAME	EDGEWORTH
PLOT DATE: 10/02/24	

SHEET NO. **A2.03**

SHEET SEQUENCE: ## of ##





1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

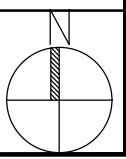
AREA FOR PERMIT STAMPS

PROPOSED
FLOOR PLANS

SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO. A2.04
SHEET SEQUENCE: ## of ##

01 PROPOSED ROOF PLAN
A2.04 SCALE: 1/4"=1'-0" 0' 1' 5' 10'



1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

PROPOSED
EXTERIOR ELEVATIONS
SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO. A3.01
SHEET SEQUENCE: ## of ##

01 PROPOSED WEST ELEVATION
A3.01 SCALE: 1/4"=1'-0"

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



AREA FOR PERMIT STAMPS

SCALE	AS NOTED
DRAFTED BY	JAE
CHECKED BY	JAE
DB NAME	EDGEWORTH
PLOT DATE: 10/02/24	

SHEET NO. **A3.02**

SHEET SEQUENCE: ## of ##



01 **PROPOSED EAST ELEVATION**
A3.02 SCALE: 1/4"=1'-0" 0' 1' 5' 10'

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jacarchitect.com
www.jacarchitect.com



AREA FOR PERMIT STAMPS

SCALE	AS NOTED
DRAFTED BY	JAE
CHECKED BY	JAE
DB NAME	EDGEWORTH
PLOT DATE: 10/02/24	

01 PROPOSED NORTH ELEVATION AT BUILDING B (BUILDING A SOUTH ELEV SIMILAR)
A3.03 SCALE: 1/4"=1'-0" 0' 1' 5' 10'

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect

407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

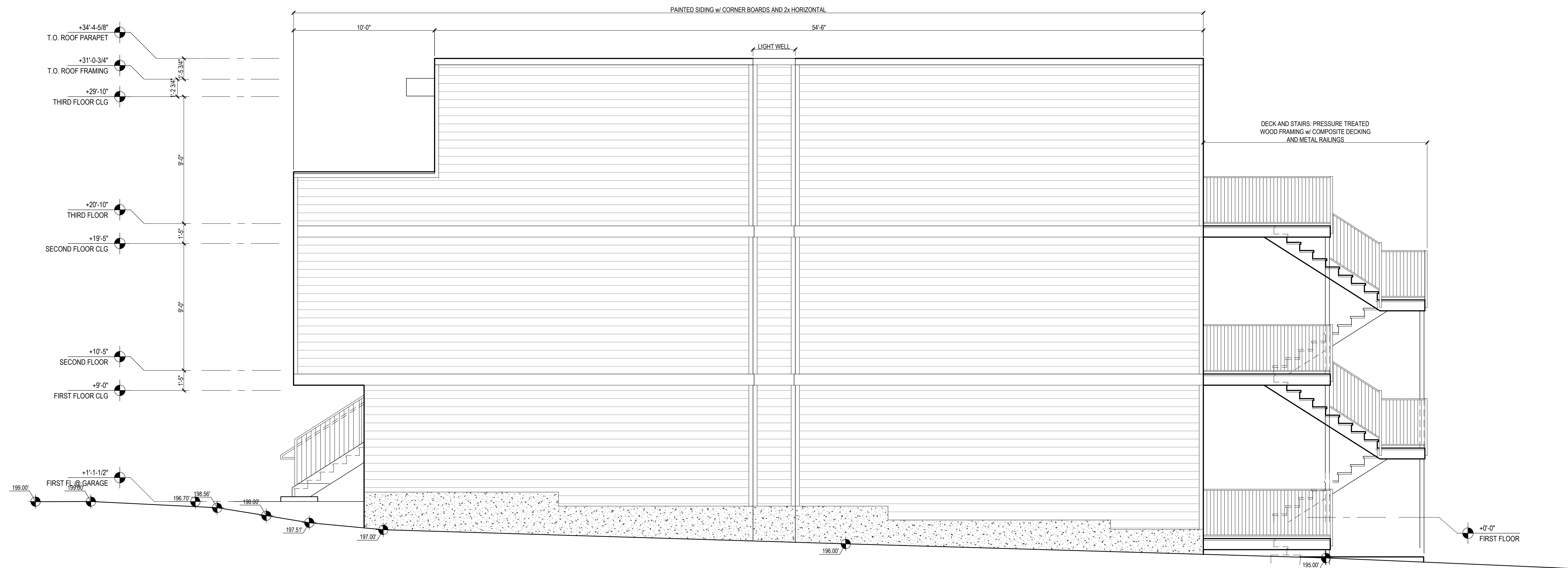
PROPOSED
EXTERIOR ELEVATIONS

SCALE	AS NOTED
DRAFTED BY	JAE
CHECKED BY	JAE
JOB NAME	EDGEWORTH
PLOT DATE: 10/02/24	

SHEET NO. _____

A3.04

SHEET SEQUENCE: ## of ##



01

A3.04

PROPOSED SOUTH ELEVATION AT BUILDING B (BUILDING A NORTH ELEVATION SIMILAR)

SCALE: $1/4"=1'-0"$

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



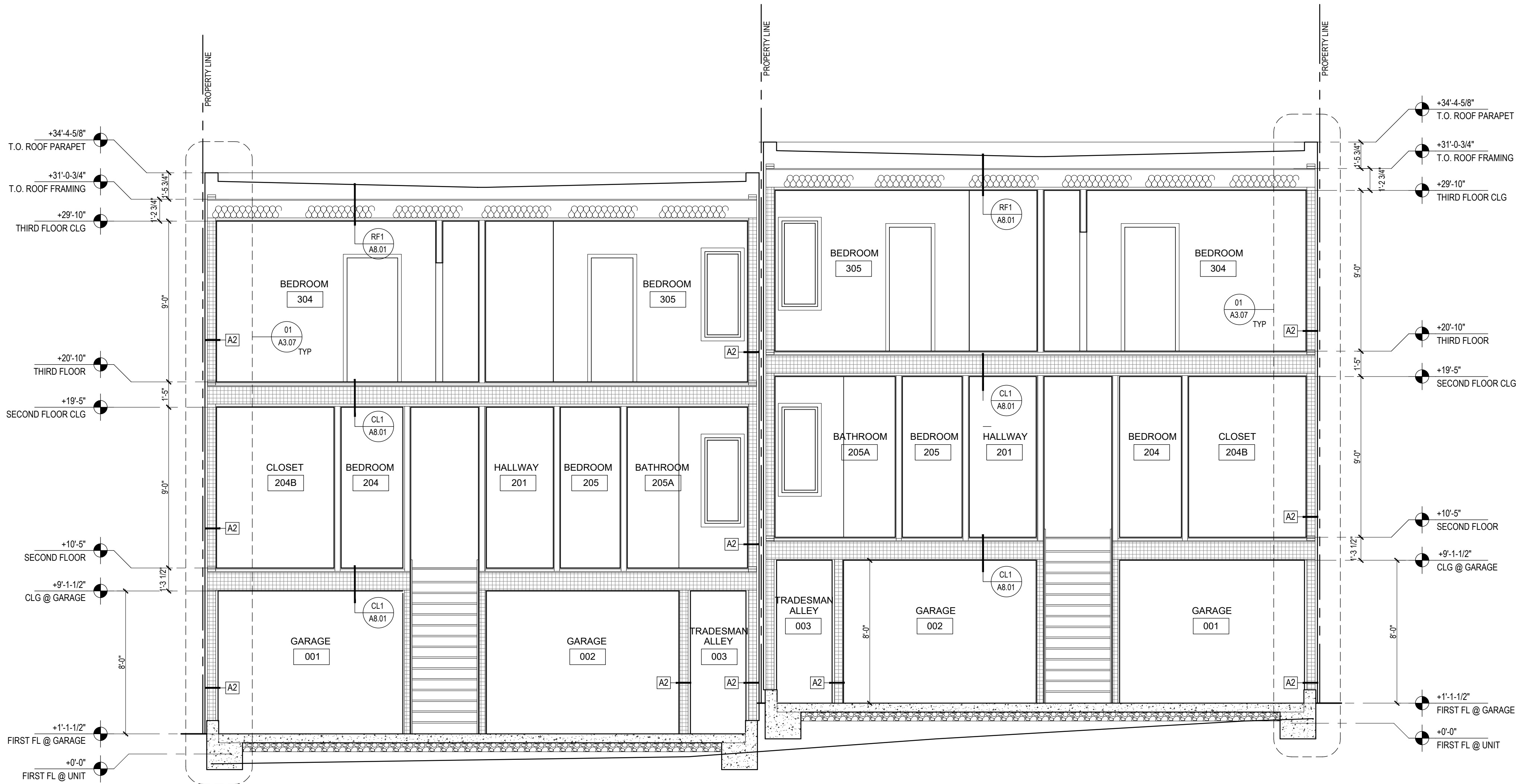
DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

PROPOSED
BUILDING SECTIONS

SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO.
A3.05
SHEET SEQUENCE: ## of ##

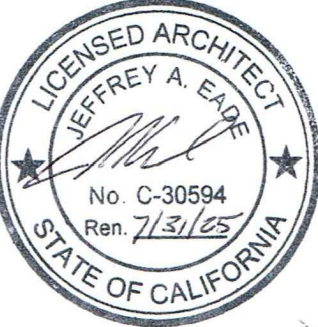


01 PROPOSED BUILDING SECTION

A3.05 SCALE: 1/4"=1'-0" 0' 1' 5' 10'

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



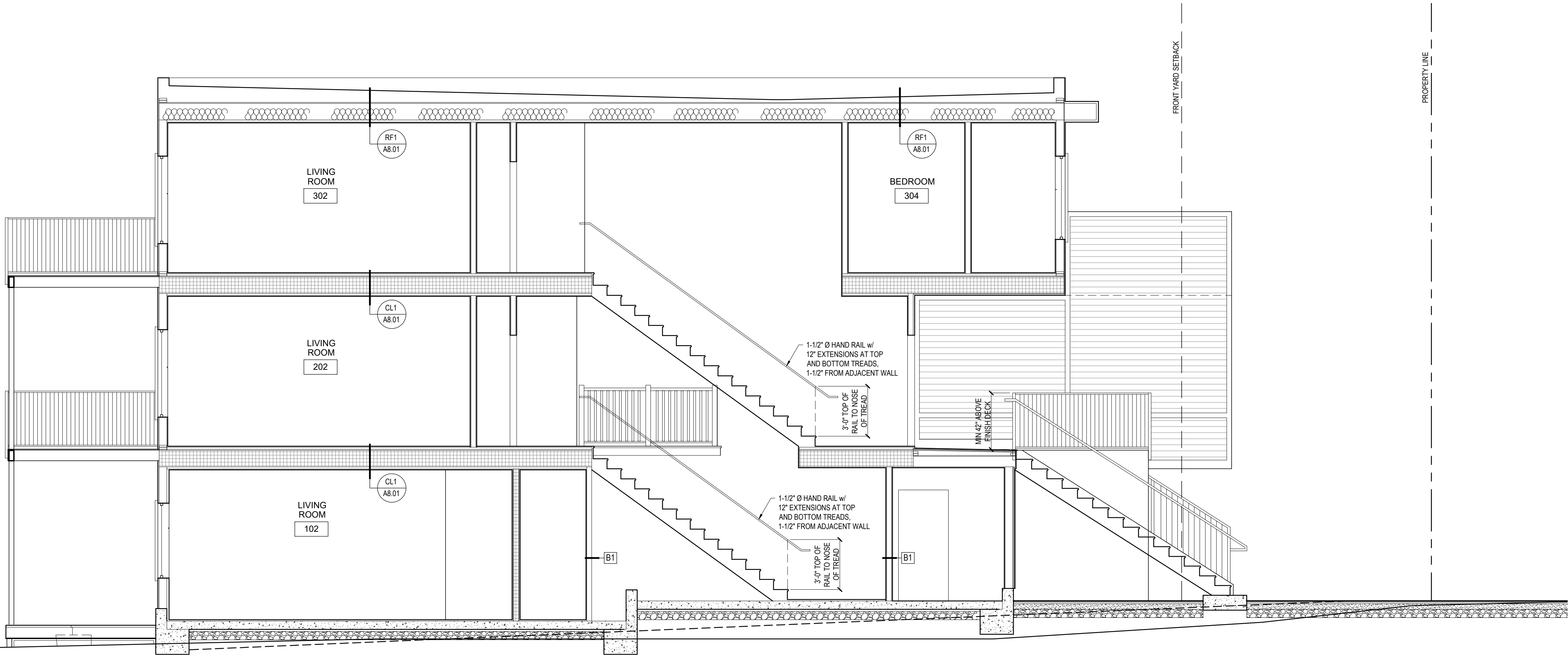
DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

PROPOSED
BUILDING SECTIONS
SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO. A3.06
SHEET SEQUENCE: ## of ##

+34'-4-5/8"
T.O. ROOF PARAPET
+31'-0-3/4"
T.O. ROOF FRAMING
+29'-10"
THIRD FLOOR CLG
+20'-10"
THIRD FLOOR
+19'-5"
SECOND FLOOR CLG
+10'-5"
SECOND FLOOR
+9'-0"
FIRST FLOOR CLG
+0'-0"
FIRST FLOOR



01 PROPOSED BUILDING SECTION
A3.06

SCALE: 1/4"=1'-0"

0' 1' 5' 10'



Professional Engineer Seal for Jeffrey A. Eade, State of California, License No. C-30594, Renewed 7/31/05.

AREA FOR PERMIT STAMPS

SHEET NO. **A3.07**

SHEET SEQUENCE: ## of ##

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



AREA FOR PERMIT STAMPS

DOOR AND WINDOW SCHEDULE

SCALE	AS NOTED
DRAFTED BY	JAE
CHECKED BY	JAE
JOB NAME	MORRIS
PLOT DATE: 10/02/24	

SHEET NO. **A6.01**

SHEET SEQUENCE: ## of ##

WINDOW NUMBER	TYPE	FINISH EXT/INT	FRAME SIZE (WxH)	GLAZING	MANUFACTURER	REMARKS
01/102*	A(C)	CLAD/PAINTED	28"x55-1/8" (R0:29"x55-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
02/102*	A(C)	CLAD/PAINTED	28"x55-1/8" (R0:29"x55-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/104#*	B	CLAD/PAINTED	(2)28"x55-1/8" (R0:29"x55-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/202	B	CLAD/PAINTED	(2)36"x63-1/8" (R0: 37"x63-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/204#*	B	CLAD/PAINTED	(2)32"x59-1/8" (R0:33"x59-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/204A	A(C)	CLAD/PAINTED	24"x39-1/8" (R0:25"x39-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/205#*	B	CLAD/PAINTED	(2)32"x59-1/8" (R0:33"x59-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/205A	A(C)	CLAD/PAINTED	24"x39-1/8" (R0:25"x39-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/206#*	B	CLAD/PAINTED	(2)32"x55-1/8" (R0:33"x55-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/207	A(C)	CLAD/PAINTED	24"x39-1/8" (R0:25"x39-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/208	B	CLAD/PAINTED	(2)32"x47-1/8" (R0:33"x47-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/302	B	CLAD/PAINTED	(2)36"x63-1/8" (R0:37"x63-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/304*	A(C)	CLAD/PAINTED	24"x59-1/8" (R0:25"x59-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/305*	A(C)	CLAD/PAINTED	24"x59-1/8" (R0:25"x59-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
02/305*	A(C)	CLAD/PAINTED	24"x59-1/8" (R0:25"x59-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/305A	A(C)	CLAD/PAINTED	24"x39-1/8" (R0:25"x39-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/306#*	B	CLAD/PAINTED	(2)32"x55-1/8" (R0:33"x55-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/306A	A(C)	CLAD/PAINTED	24"x39-1/8" (R0:25"x39-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN
01/307	A(C)	CLAD/PAINTED	24"x39-1/8" (R0:25"x39-5/8")	-	MARVIN ELEVATE ROTO CASEMENT	w/ SCREEN

REFER TO EXTERIOR ELEVATIONS FOR DIRECTION OF SWING

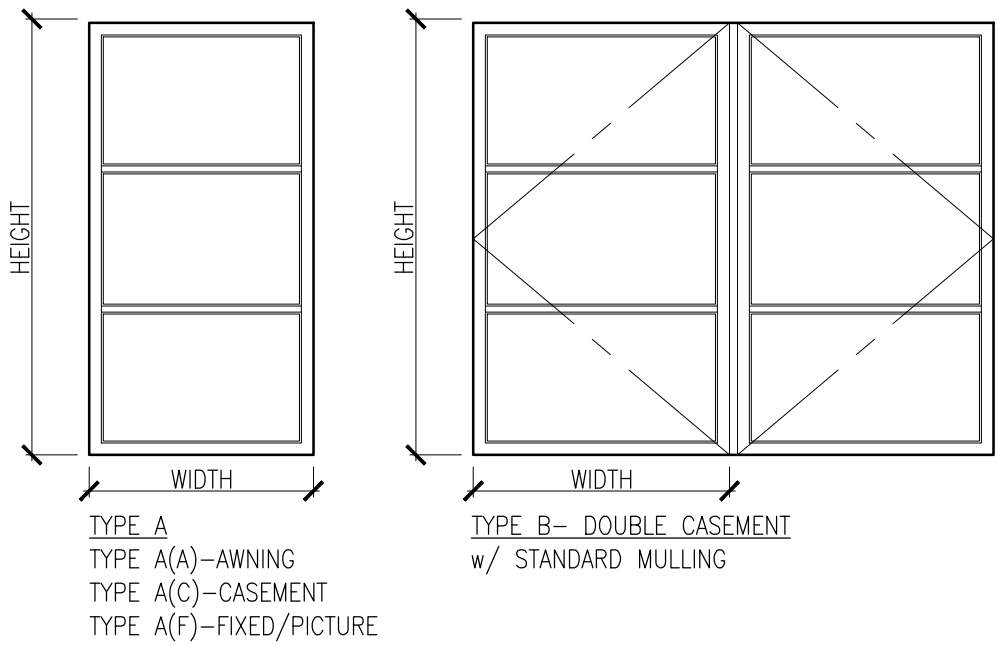
SIZE MEETS CBC 1030.2 REQUIREMENTS (MIN 5.7SF NET CLEAR OPENING, MIN NET CLEAR HEIGHT DIMENSION OF 24" AND MIN NET CLEAR WIDTH DIMENSION OF 20") AND MAX SILL HT OF +44" ABOVE FINISH FLOOR

* WINDOWS EQUIPPED W/ OPENING CONTROL DEVICES WHICH SHALL COMPLY WITH CBC 1015.8

EXTERIOR CLADDING COLOR: STONE WHITE
INTERIOR: PRIMED WOOD
HARDWARE FINISH: WHITE (UNLESS OTHERWISE NOTED)
DIVIDED LIGHTS: 5/8" SDLS w/ BLACK SPACER BAR, OGEE PROFILE

GLASS: LOW-E2 w/ARGON, BLACK SPACER BAR
SCREENS: (WHERE NOTED) BRIGHT VIEW

MARVIN ELEVATE THERMAL VALUES:
U-FACTOR: .31
SHGC: .29



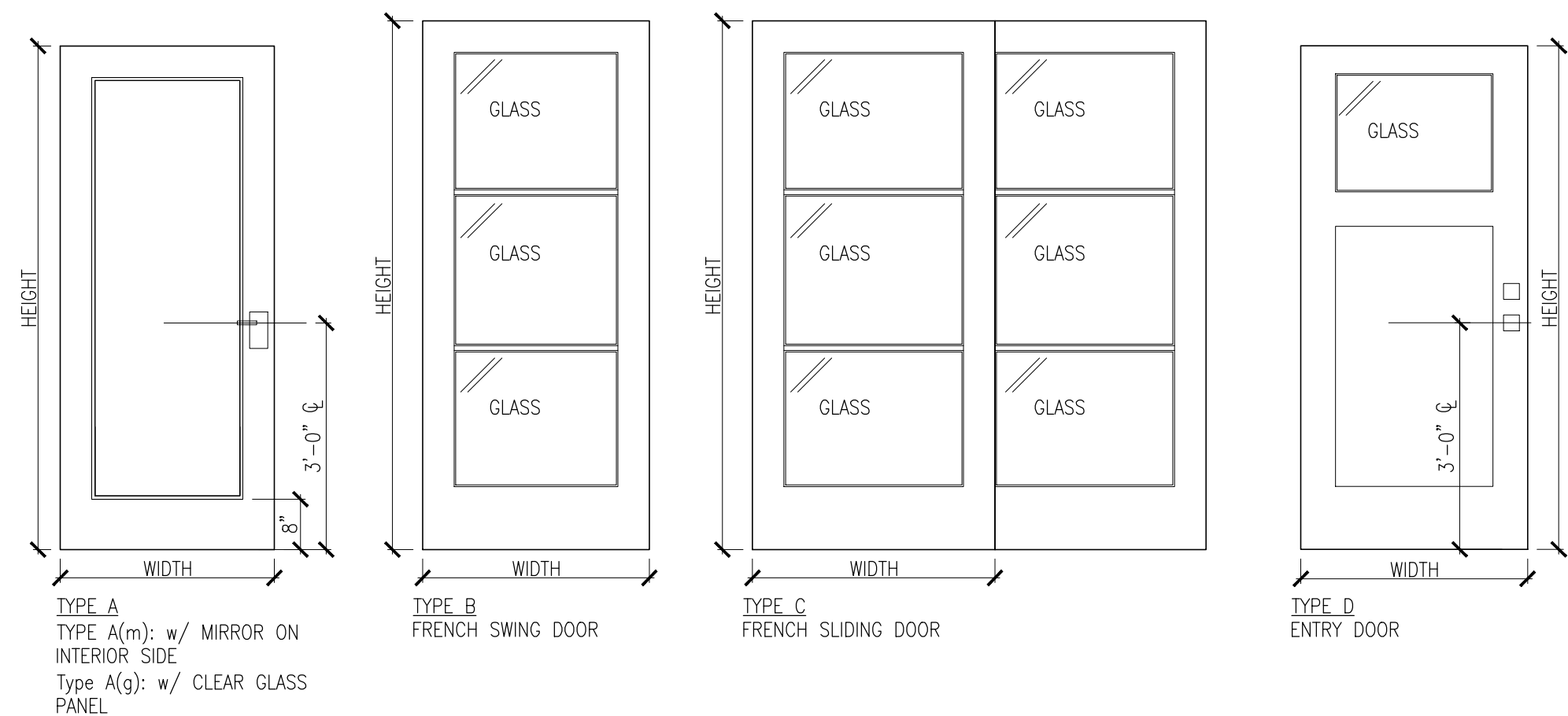
SKYLIGHT NUMBER	SIZE (WxH)	MANUFACTURER	REMARKS
01/S	MODEL VCS 3046	VELUX--OPERABLE, SOLAR SKYLIGHT	
02/S	MODEL VCS 3046	VELUX--OPERABLE, SOLAR SKYLIGHT	

02 SKYLIGHT SCHEDULE
A6.01 SCALE: NTS

01 WINDOW SCHEDULE

DOOR NUMBER	TYPE	GRADE	FRAME SIZE U.O.N. (WxHxTH)	GLAZING	FUNCTION	FINISH EXT/INT	MANUFACTURER	HARDWARE COMMENTS
01/001	A	INT	36"x80"x1-3/4"	—	KEYED HANDLE w/ DEADBOLT	PAINTED	MANUFACTURER TBD	20 MIN RATED DOOR w/ SELF CLOSING HINGES, SELF LATCHING, 3 SIDED GASKETS, AND DROP SHOE
01/002	A	INT	34"x80"x1-3/4"	—	KEYED HANDLE w/ DEADBOLT	PAINTED	MANUFACTURER TBD	20 MIN RATED DOOR w/ SELF CLOSING HINGES, SELF LATCHING, 3 SIDED GASKETS, AND DROP SHOE
01/003	A	INT	36"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	SELF CLOSING HINGES, SELF LATCHING, 3 SIDED GASKETS, AND DROP SHOE
02/003	A	INT	36"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	SELF CLOSING HINGES, SELF LATCHING, 3 SIDED GASKETS, AND DROP SHOE
01/004	A	EXT	34"x80"x1-3/4"	—	PASSAGE AT ACTIVE DR w/ SURFACE BOLTS AT IN-ACTIVE DOOR	PAINTED	MANUFACTURER TBD	FULL LOUVERED PANEL AT EACH DOOR; SELF CLOSING HINGES
01/101	A	EXT	36"x80"x1-3/4"	—	ENTRY	PAINTED	MANUFACTURER TBD	
02/101	A	INT	32"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	
03/101	A	INT	32"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	FULL LOUVERED PANEL
01/102	B	EXT	36-5/16"x 86" (RO: 37-5/16"x 86-1/2")	TEMPERED	PATIO	CLAD/PAINTED	MARVIN ELEVATE INSWING FRENCH	
01/104	A	INT	32"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
02/104	A	INT	(2)36"x80"x1-3/8"	—	BI-PASS	PAINTED	MANUFACTURER TBD	
01/105	A	INT	30"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
01/201	D	EXT	36"x80"x1-3/4"	—	ENTRY	PAINTED	SIMPSON EXTERIOR DOOR-CRAFTSMAN 36813 w/ WATER BARRIER TECHNOLOGY, ULTRA BLOCK AT BOTTOM STILE, BLACK SPACERS AT GLAZING	
02/201	A	INT	26"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	
03/201	A	INT	(2)32"x80"x1-3/8"	—	BI-PASS	PAINTED	MANUFACTURER TBD	
04/201	A	INT	34"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	FULL LOUVERED PANEL
01/202	B	EXT	36-5/16"x 86" (RO: 37-5/16"x 86-1/2")	TEMPERED	PATIO	CLAD/PAINTED	MARVIN ELEVATE INSWING FRENCH	
01/204	A	INT	32"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
02/204	A	INT	28"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	
01/204A	A	INT	30"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
01/204B	A	INT	30"x80"x1-3/8"	—	POCKET	PAINTED	MANUFACTURER TBD	
01/205	A	INT	32"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
02/205	A	INT	26"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	
03/205	A	INT	(2)36"x80"x1-3/8"	—	BI-PASS	PAINTED	MANUFACTURER TBD	
01/205A	A	INT	30"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
01/206	A	INT	32"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
02/206	A	INT	(2)36"x80"x1-3/8"	—	BI-PASS	PAINTED	MANUFACTURER TBD	
01/207	A	INT	30"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
01/208	A	INT	(2)36"x80"x1-3/8"	—	POCKET	PAINTED	MANUFACTURER TBD	

DOOR NUMBER	TYPE	GRADE	FRAME SIZE U.O.N. (WxHxTH)	GLAZING	FUNCTION	FINISH EXT/INT	MANUFACTURER	HARDWARE COMMENTS
01/301	D	EXT	36"x80"x1-3/4"	—	ENTRY	PAINTED	SIMPSON EXTERIOR DOOR-CRAFTSMAN 36813 w/ WATER BARRIER TECHNOLOGY, ULTRA BLOCK AT BOTTOM STILE, BLACK SPACERS AT GLAZING	
02/301	A	INT	(2)32"x80"x1-3/8"	—	BI-PASS	PAINTED	MANUFACTURER TBD	
03/301	A	INT	34"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	FULL LOUVERED PANEL
04/301	A	INT	26"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	
01/302	B	EXT	36-5/16"x 86" (RO: 37-5/16"x 86-1/2")	TEMPERED	PATIO	CLAD/PAINTED	MARVIN ELEVATE INSWING FRENCH	
01/304	A	INT	34"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
02/304	A	INT	(2)36"x80"x1-3/8"	—	BI-PASS	PAINTED	MANUFACTURER TBD	
03/304	C	EXT	71"x82" (RO:72"x82-1/2")	TEMPERED	PATIO	CLAD/PAINTED	MARVIN ELEVATE SLIDING FRENCH DOOR	
01/305	A	INT	34"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
02/305	A	INT	26"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	
03/305	C	EXT	71"x82" (RO:72"x82-1/2")	TEMPERED	PATIO	CLAD/PAINTED	MARVIN ELEVATE SLIDING FRENCH DOOR	
01/305A	A	INT	30"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
01/305B	A	INT	28"x80"x1-3/8"	—	POCKET	PAINTED	MANUFACTURER TBD	
01/306	A	INT	34"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	
02/306	A	INT	26"x80"x1-3/8"	—	PASSAGE	PAINTED	MANUFACTURER TBD	
03/306	A	INT	(2)36"x80"x1-3/8"	—	BI-PASS	PAINTED	MANUFACTURER TBD	
01/307	A	INT	30"x80"x1-3/8"	—	PRIVACY	PAINTED	MANUFACTURER TBD	



REFER TO FLOOR PLANS FOR DIRECTION OF SWING AND ACTIVE PANEL AT MULTI-PANEL DOORS

MARVIN ELEVATE SWINGING AND SLIDING FRENCH DOORS:
EXTERIOR CLADDING COLOR: STONE WHITE
INTERIOR: PRIMED WOOD
HARDWARE TYPE AND FINISH: NORTHFIELD STYLE; WHITE
DIVIDED LIGHTS: 5/8" SDLS w/ BLACK SPACER BAR, OGEE PROFILE
GLASS: LOW-E2 w/ARGON, BLACK SPACER BAR
SCREENS: (WHERE NOTED) BRIGHT VIEW

MARVIN INTEGRITY THERMAL VALUES:
U-FACTOR: .31
SHGC: .29

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

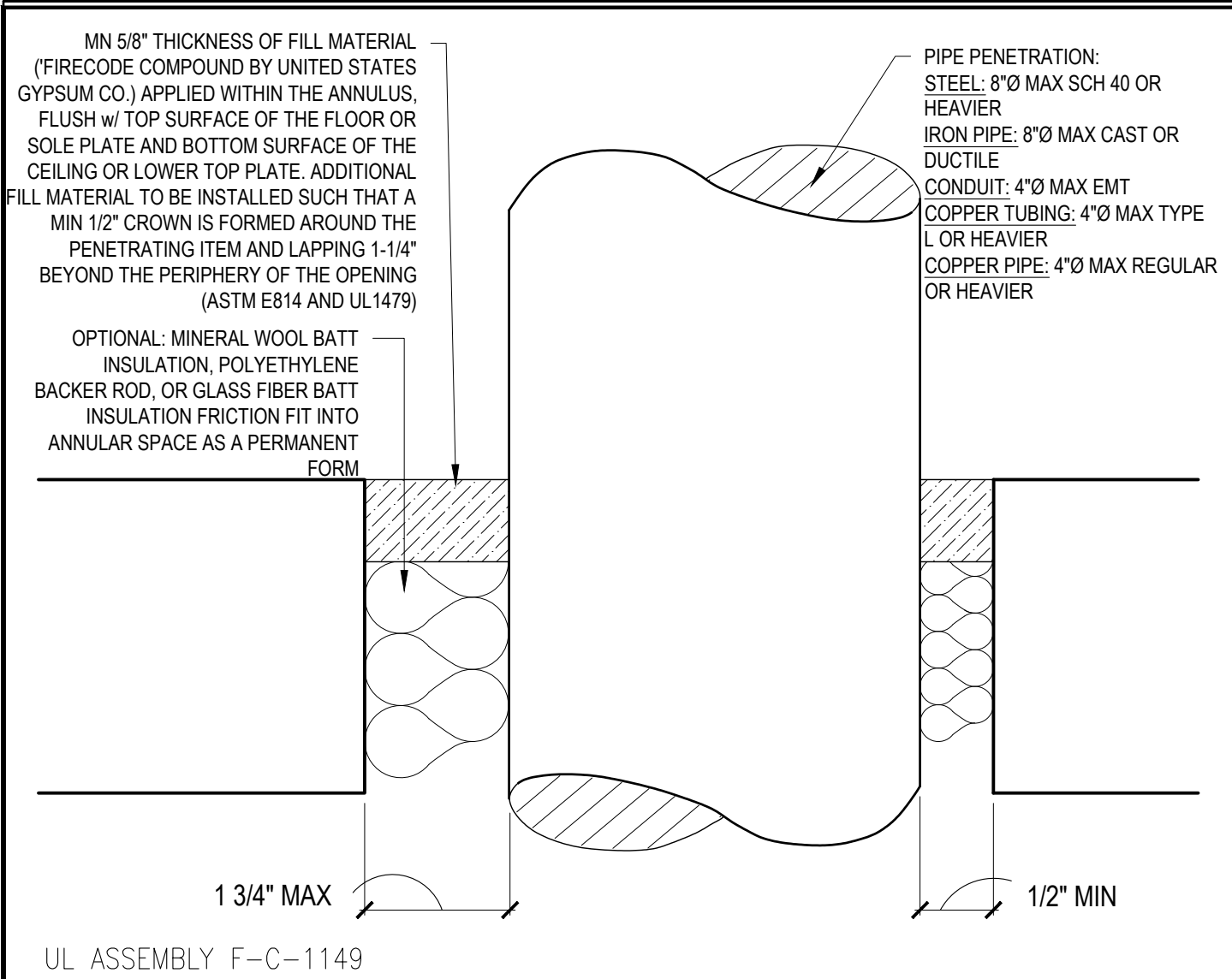
AREA FOR PERMIT STAMPS

DOOR AND WINDOW
SCHEDULE

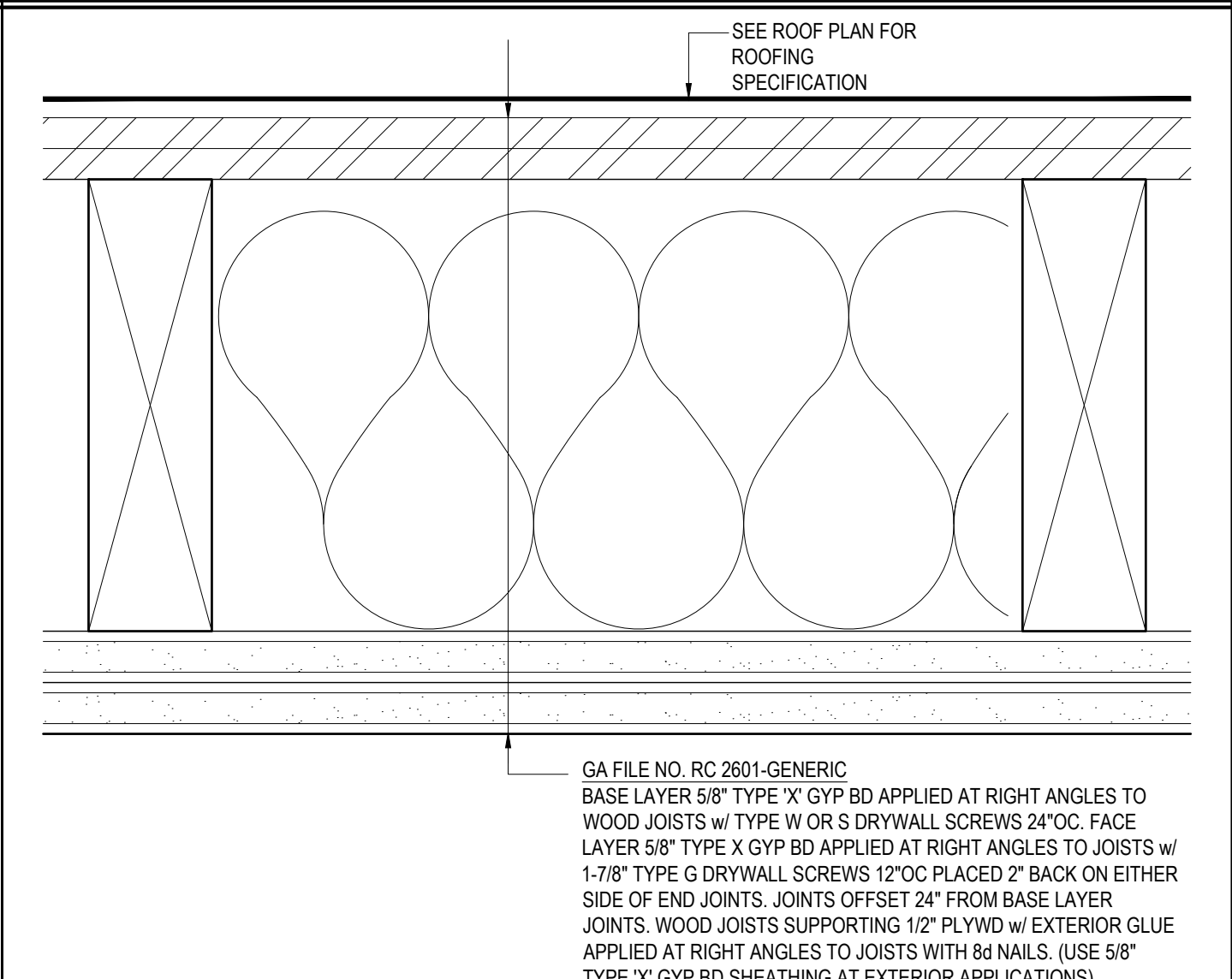
SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME EDGEWORTH
PLOT DATE: 10/02/24

SHEET NO.
A6.02
SHEET SEQUENCE: ## of ##

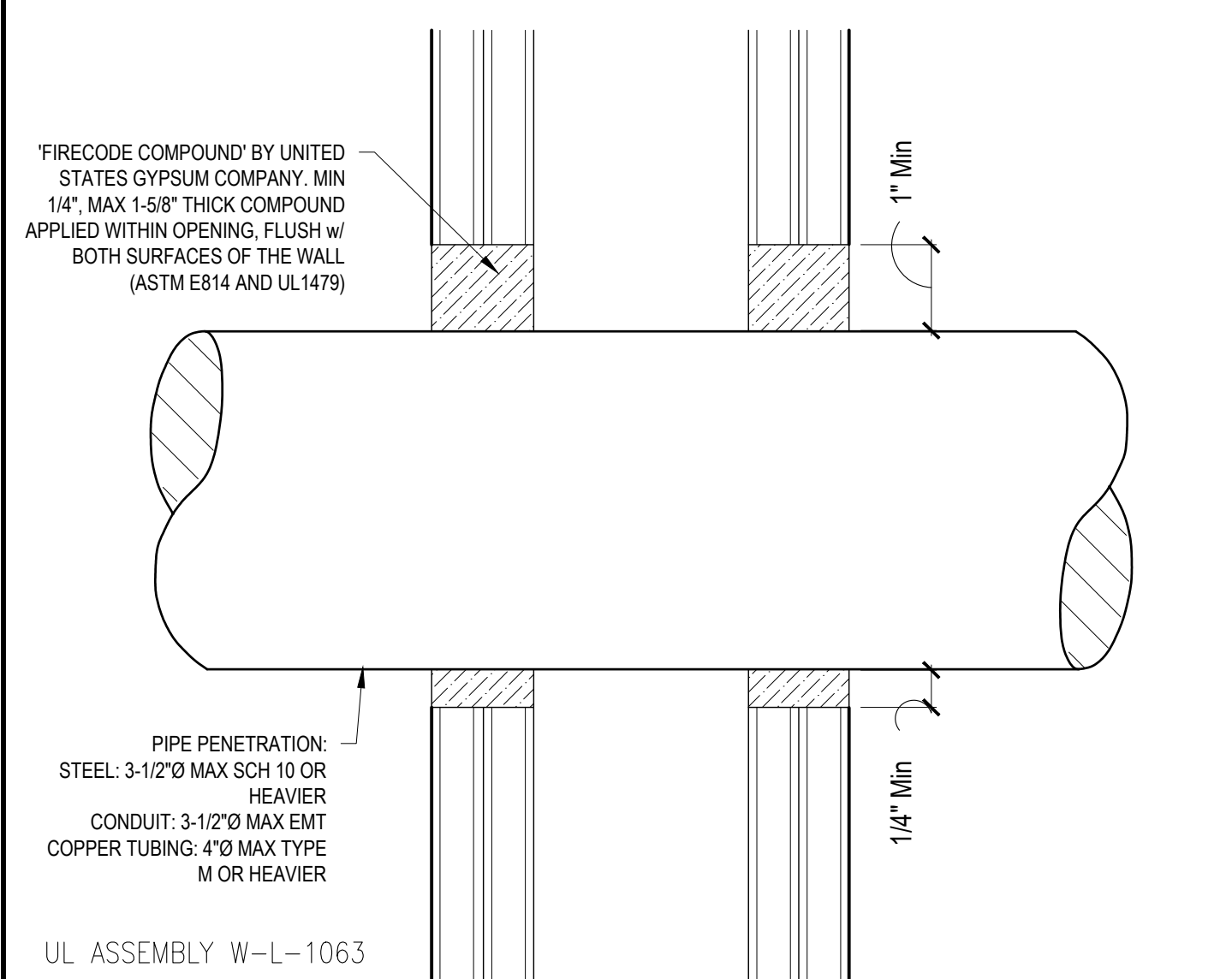
01 DOOR SCHEDULE
A6.02 SCALE: NTS



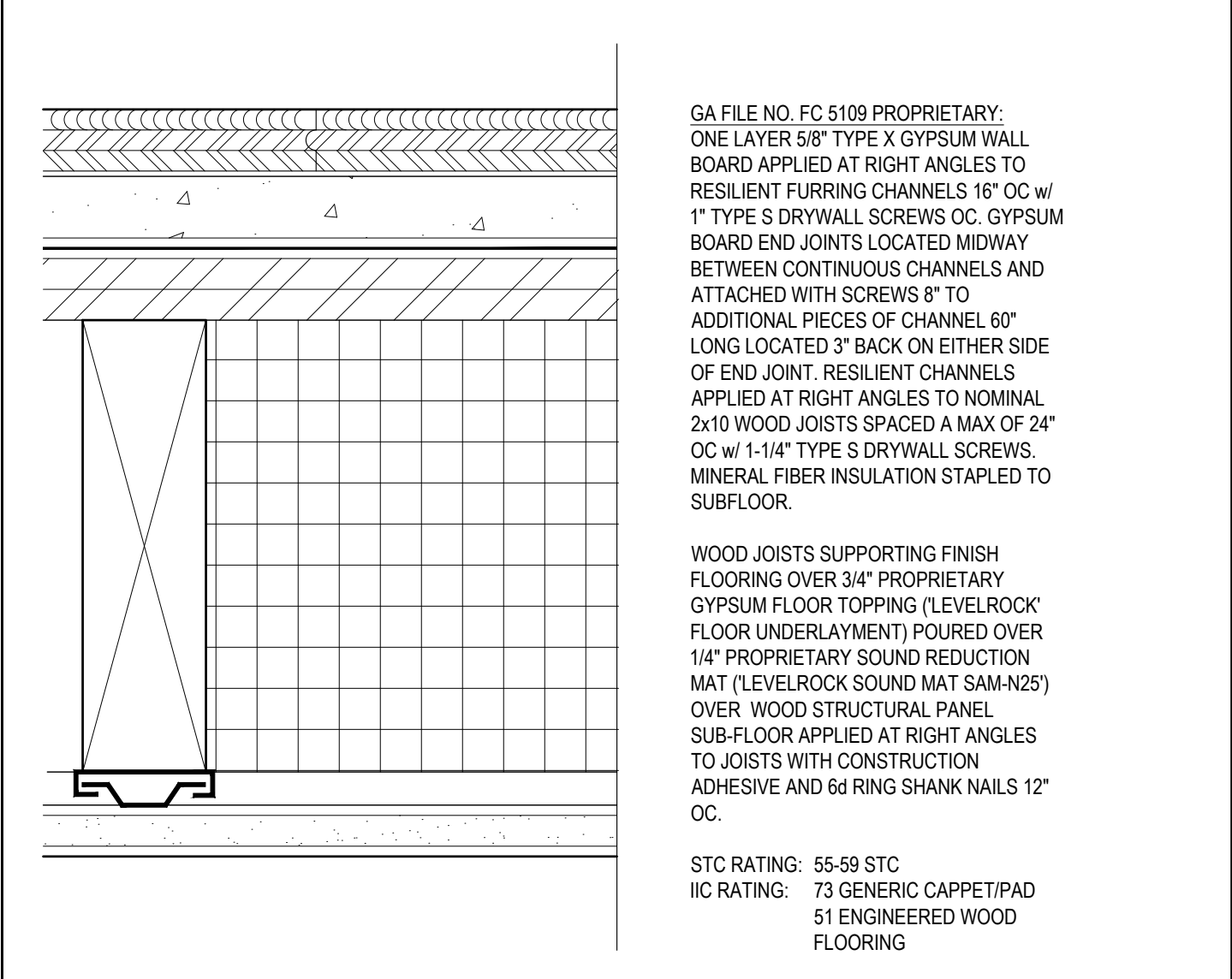
PN03 FIRE STOP-WOOD JOISTS FLOOR
A8.02 SCALE: FULL SCALE



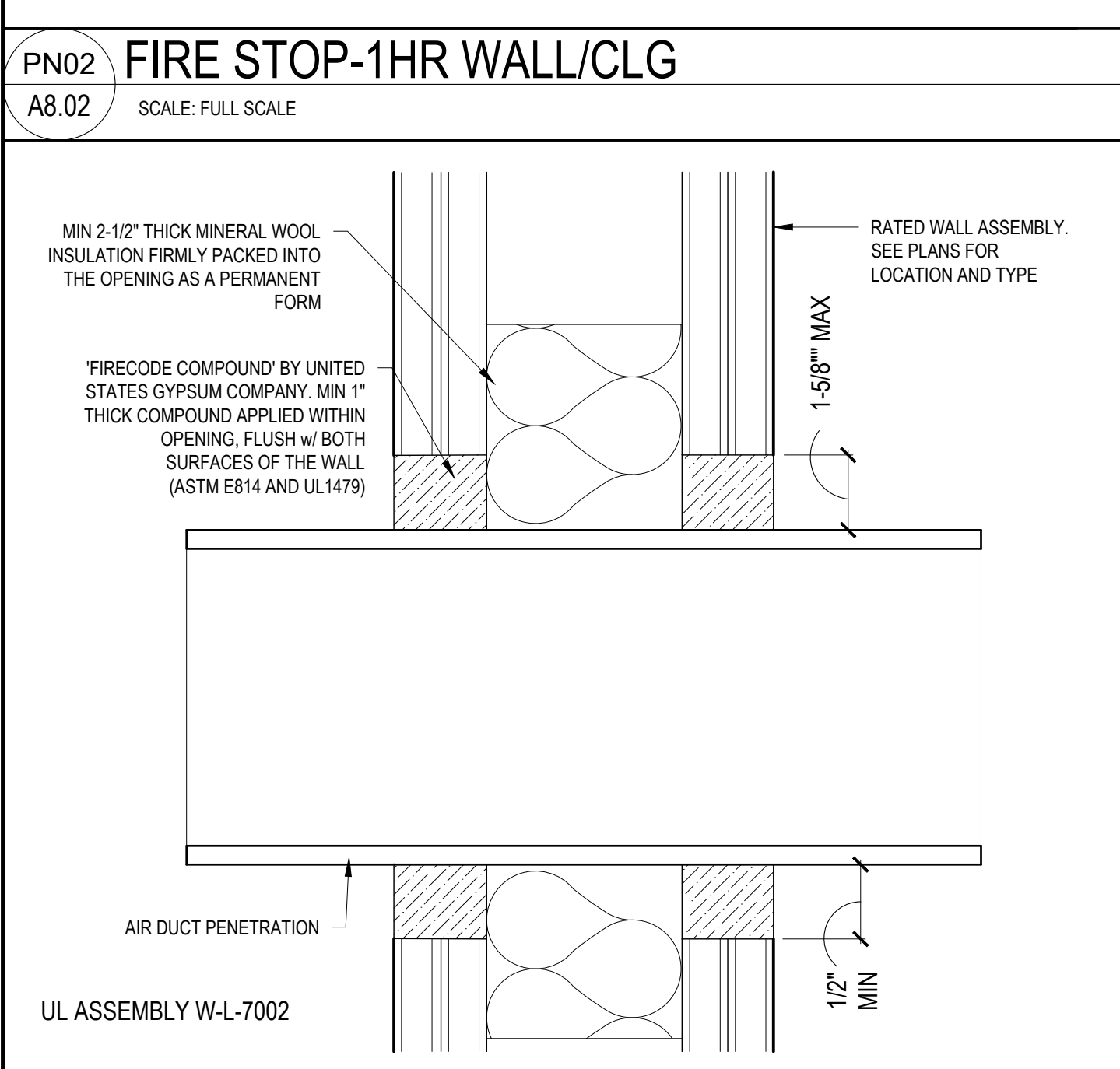
RF1 ROOF TYPE RF1-1 HR RATED
A8.01 SCALE: 6"-1'-0"



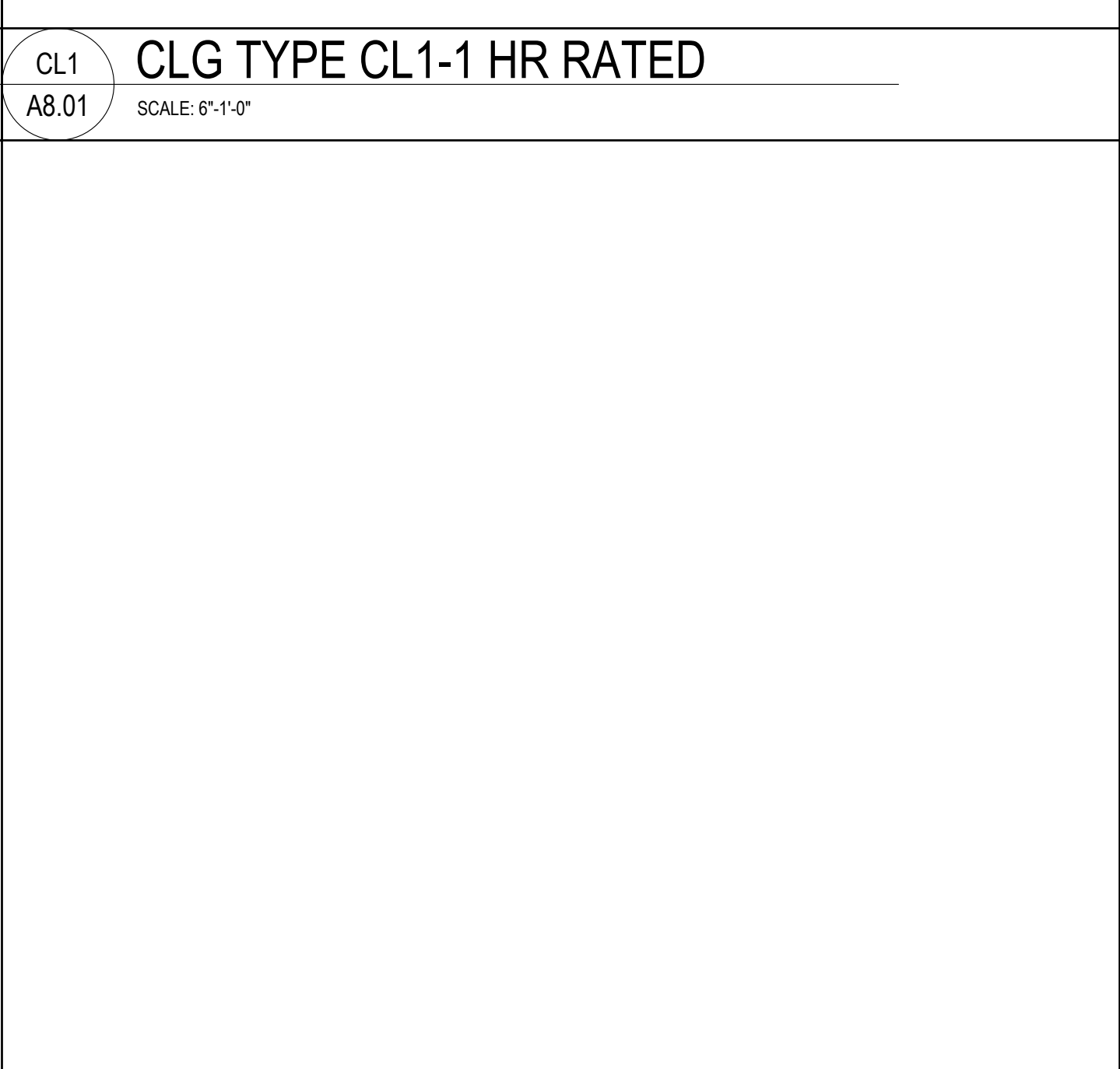
PN02 FIRE STOP-1HR WALL/CLG
A8.02 SCALE: FULL SCALE



CL1 CLG TYPE CL1-1 HR RATED
A8.01 SCALE: 6"-1'-0"



PN01 FIRE STOP-1HR WALL/CLG
A8.00 SCALE: FULL SCALE



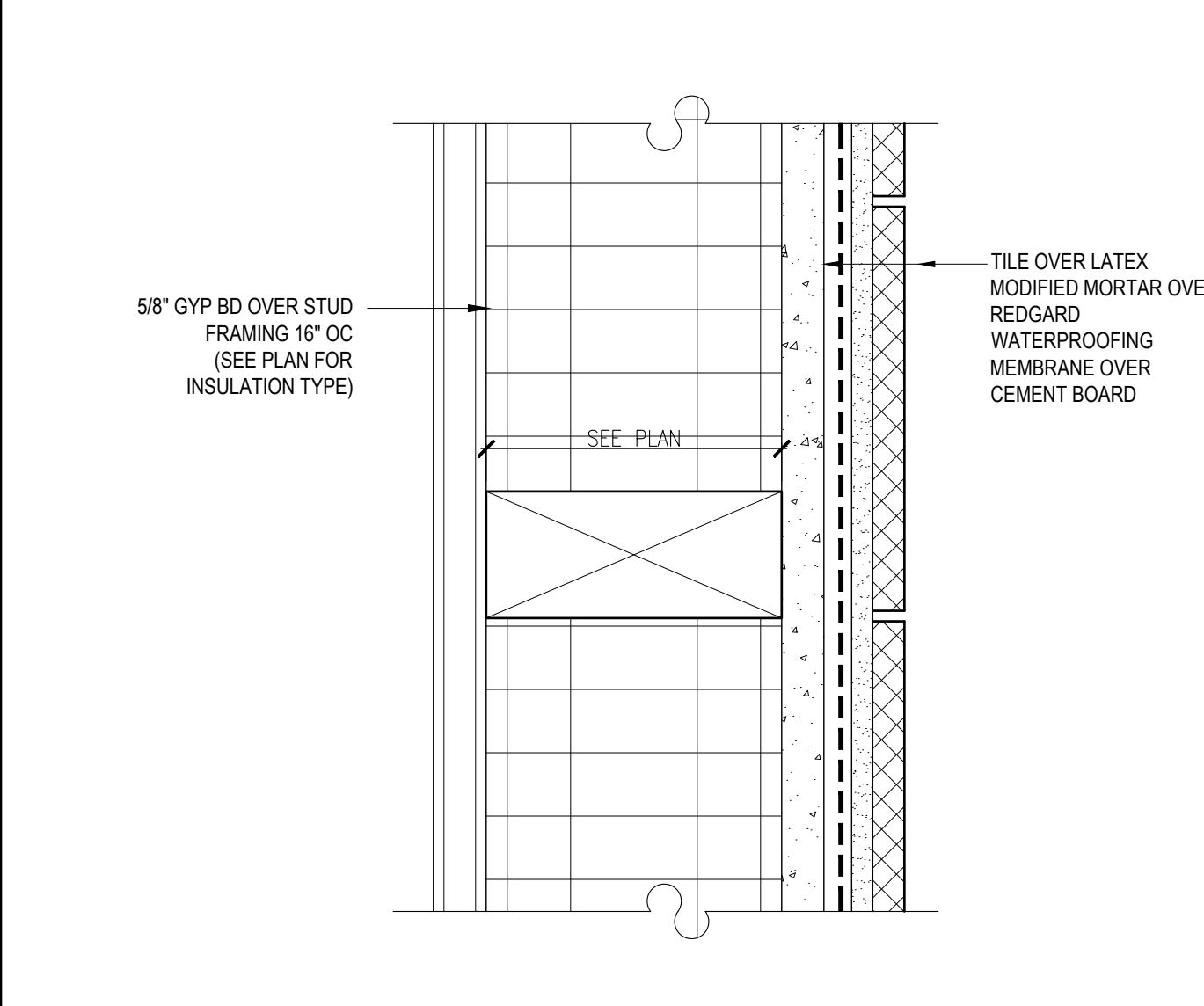
CL1 CLG TYPE CL1-1 HR RATED
A8.01 SCALE: 6"-1'-0"

PN01 FIRE STOP-1HR WALL/CLG
A8.00 SCALE: FULL SCALE

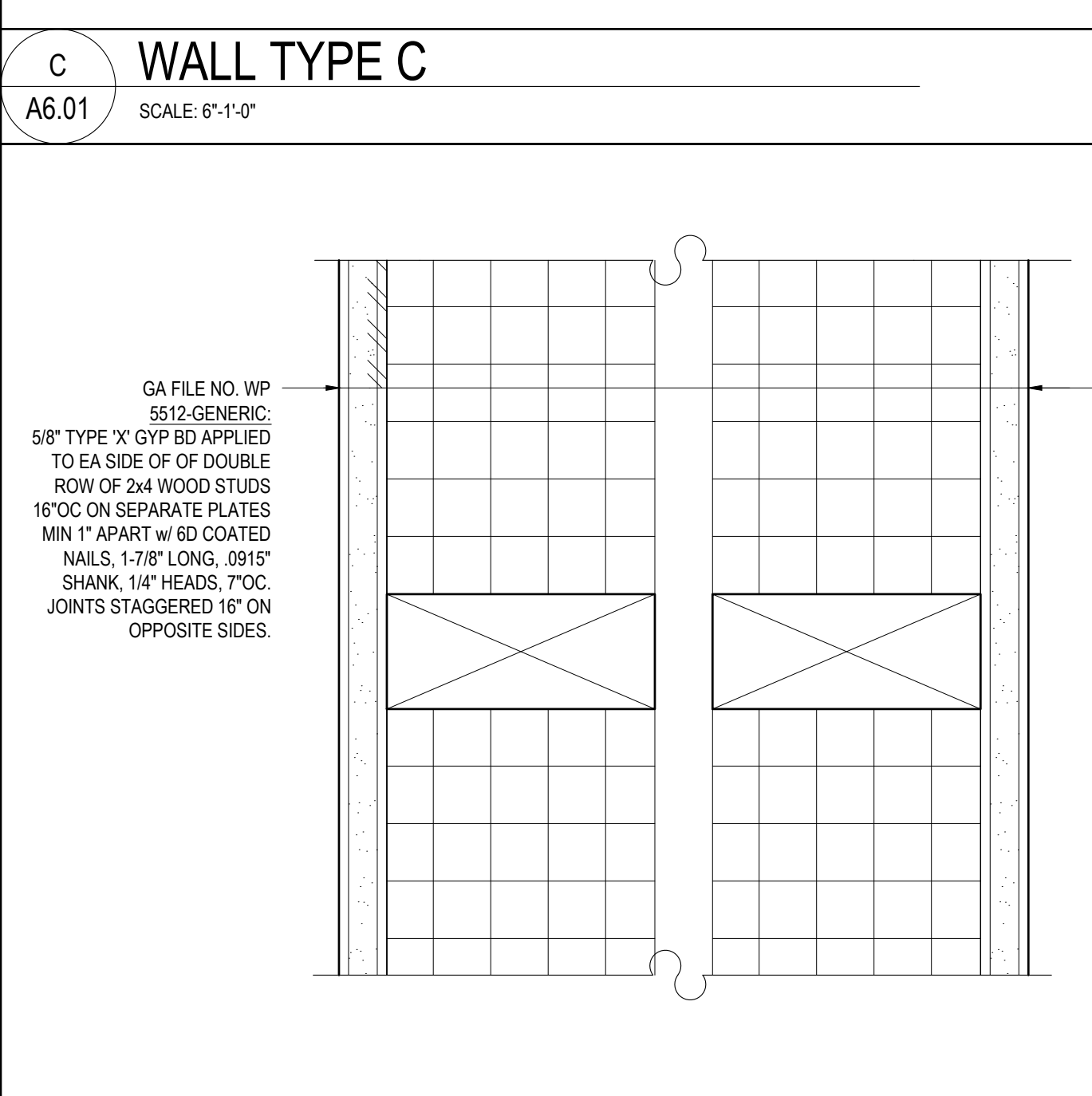
CL1 CLG TYPE CL1-1 HR RATED
A8.01 SCALE: 6"-1'-0"



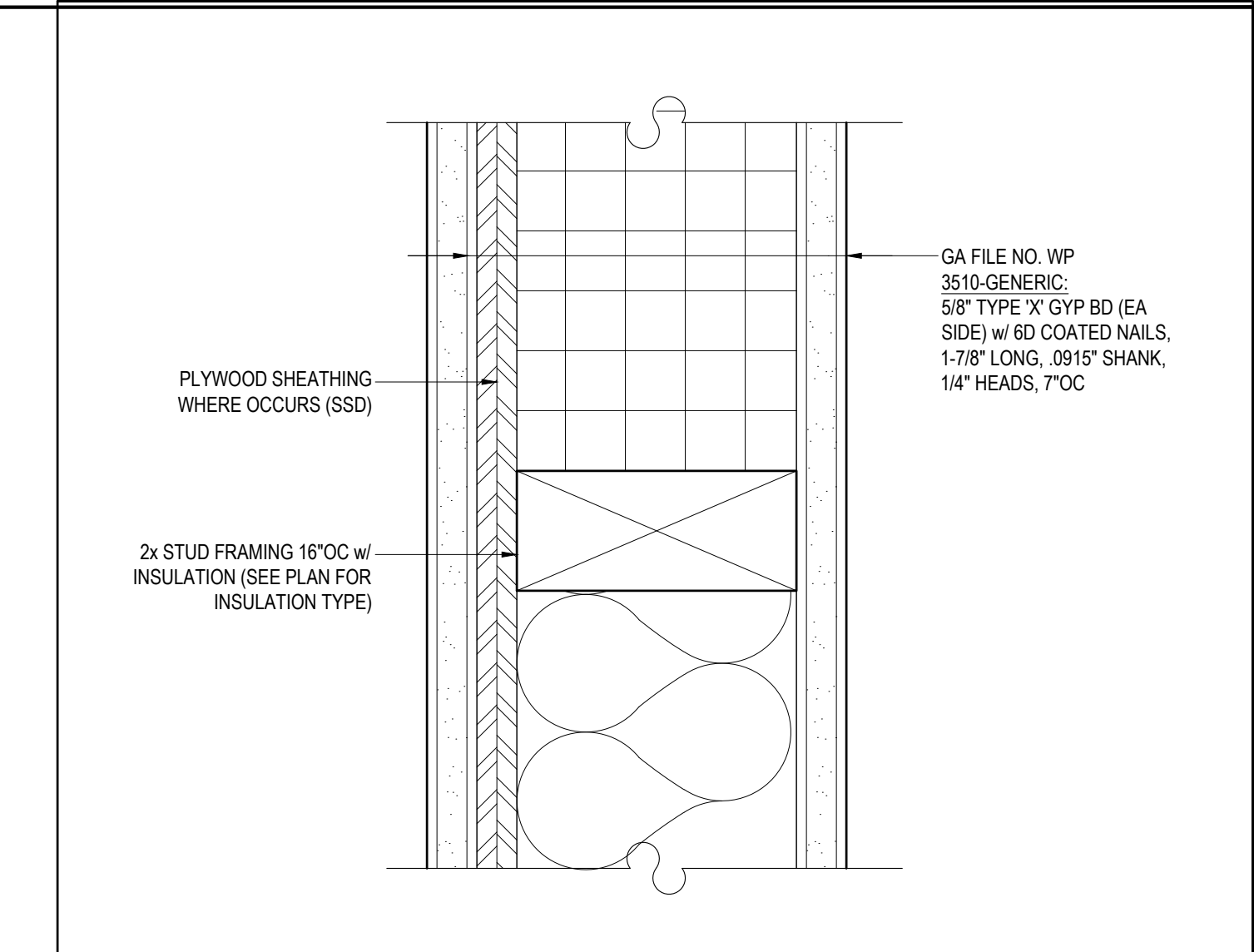
C WALL TYPE C
A6.01 SCALE: 6"-1'-0"



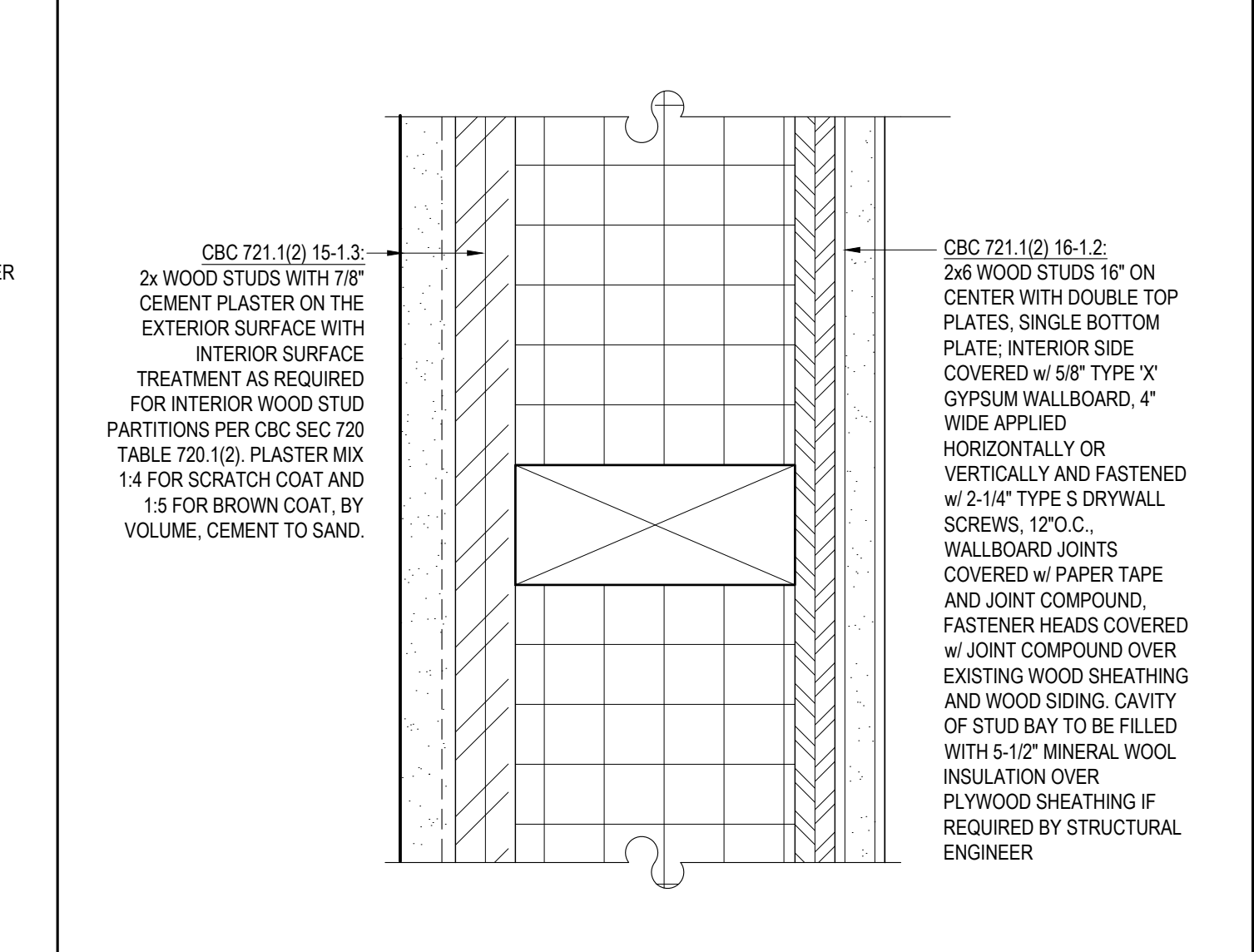
C WALL TYPE C
A6.01 SCALE: 6"-1'-0"



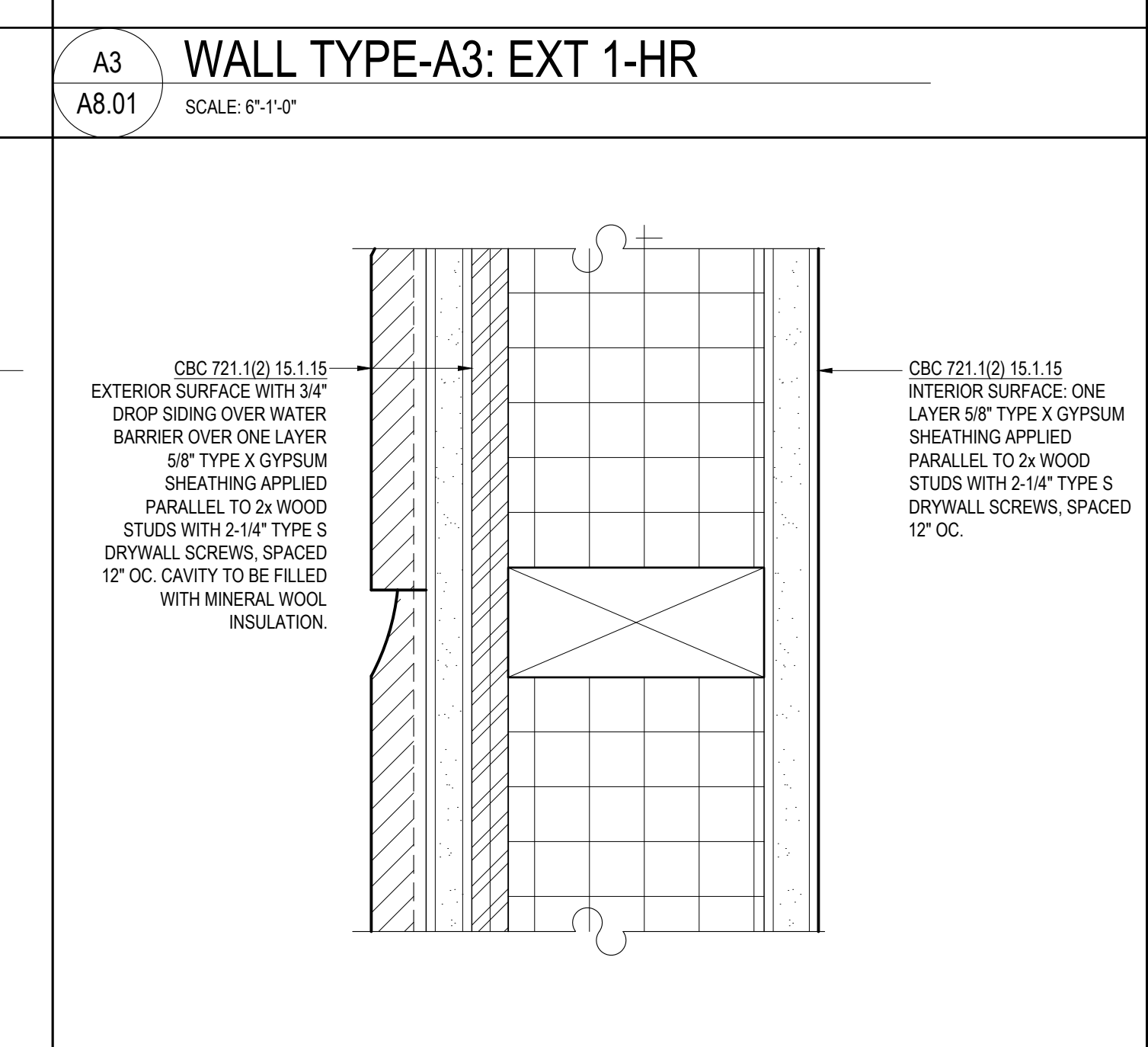
B5 WALL TYPE-B5: INT 1-HR SHAFT WALL
A8.01 SCALE: 6"-1'-0"



B1 WALL TYPE-B1: INT 1-HR
A8.01 SCALE: 6"-1'-0"



A3 WALL TYPE-A3: EXT 1-HR
A8.01 SCALE: 6"-1'-0"



A2 WALL TYPE A2-EXT 1-HR WALL ASSEMBLY
A8.01 SCALE: 6"-1'-0"

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com

LICENSED ARCHITECT
JEFFREY A. EADE
No. C-30594
Ren. 7/31/05
STATE OF CALIFORNIA

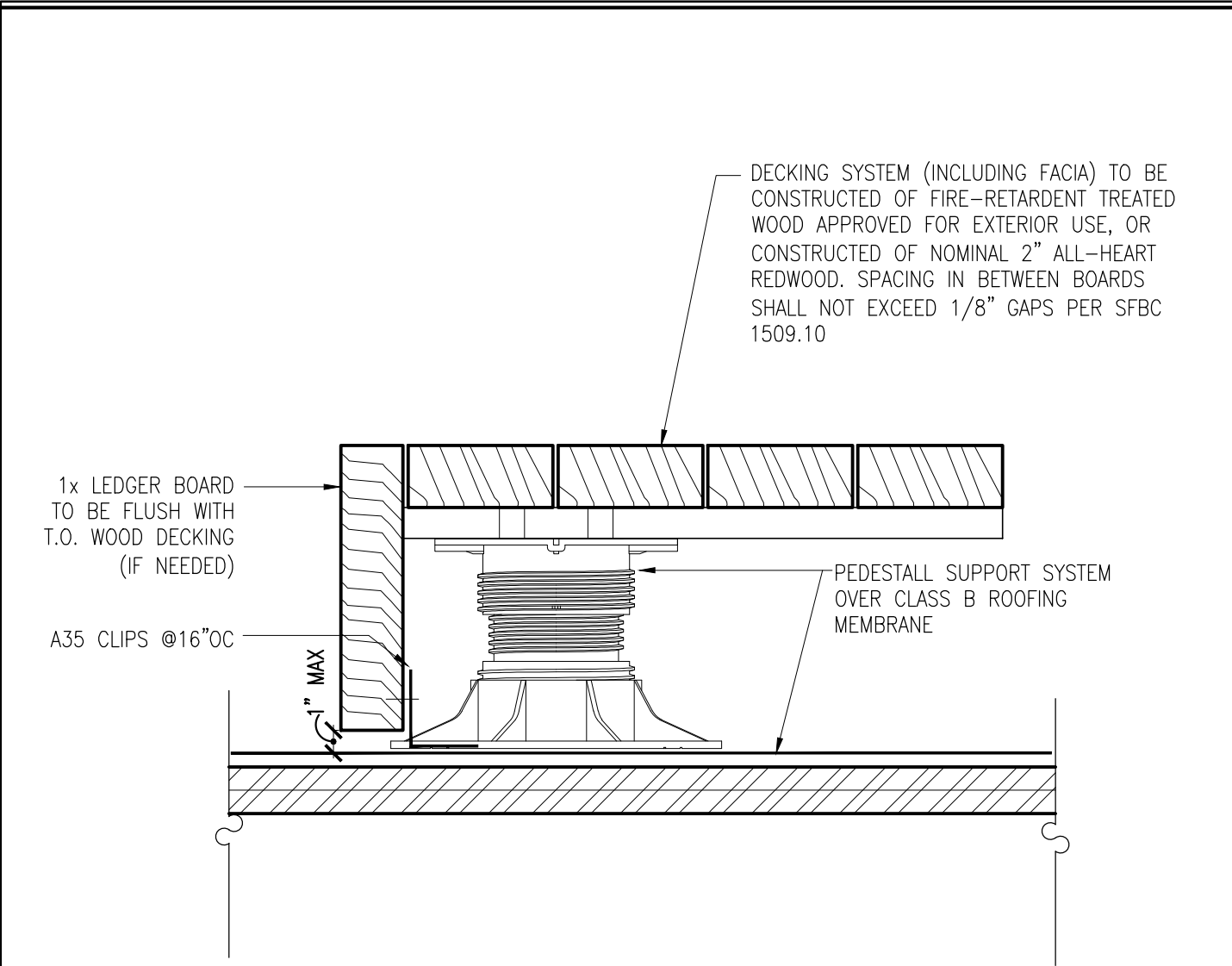
DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

AREA FOR PERMIT STAMPS

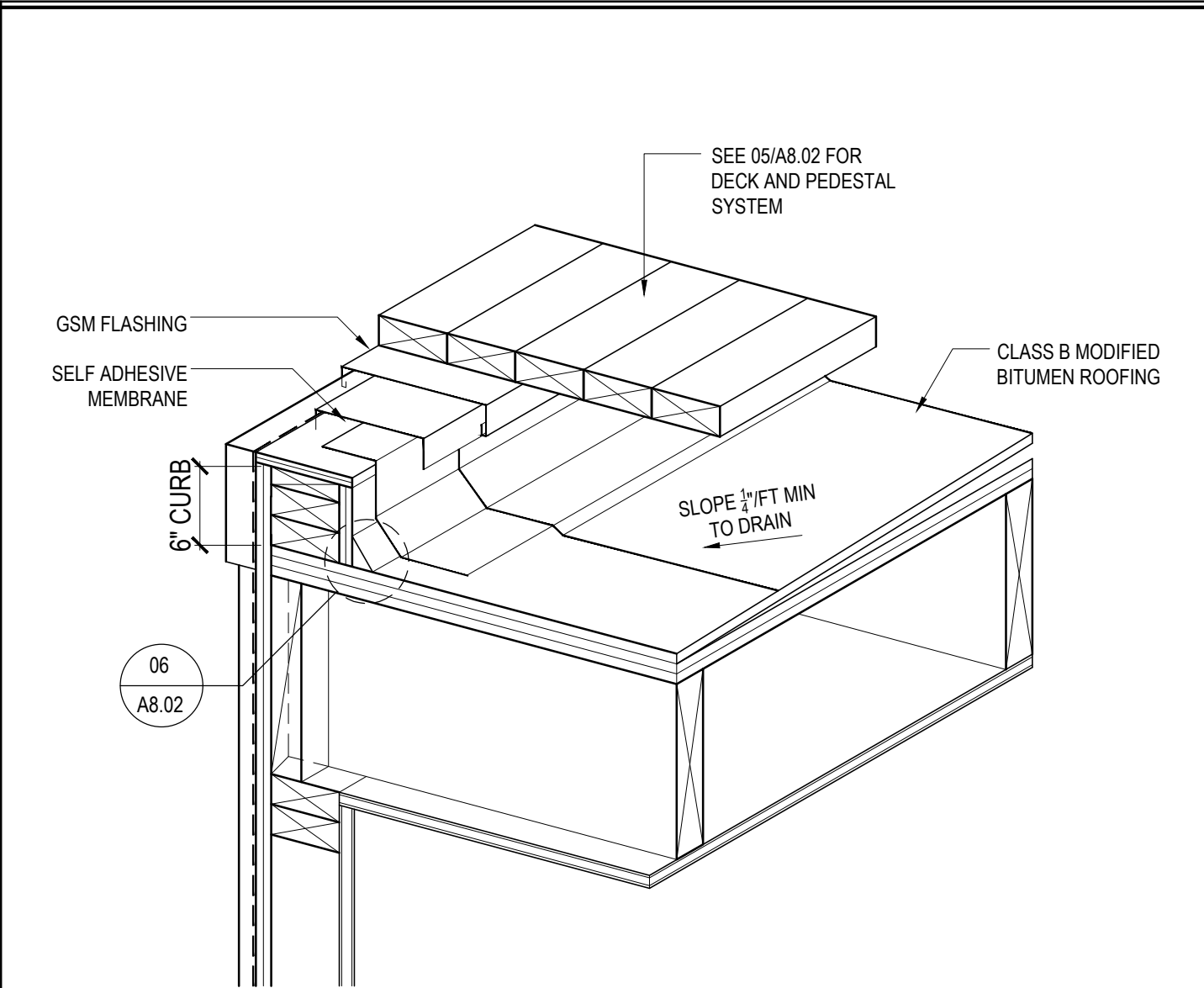
EXTERIOR DETAILS
AND WALL TYPES

SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME SPRINGER
PLOT DATE: 10/02/24

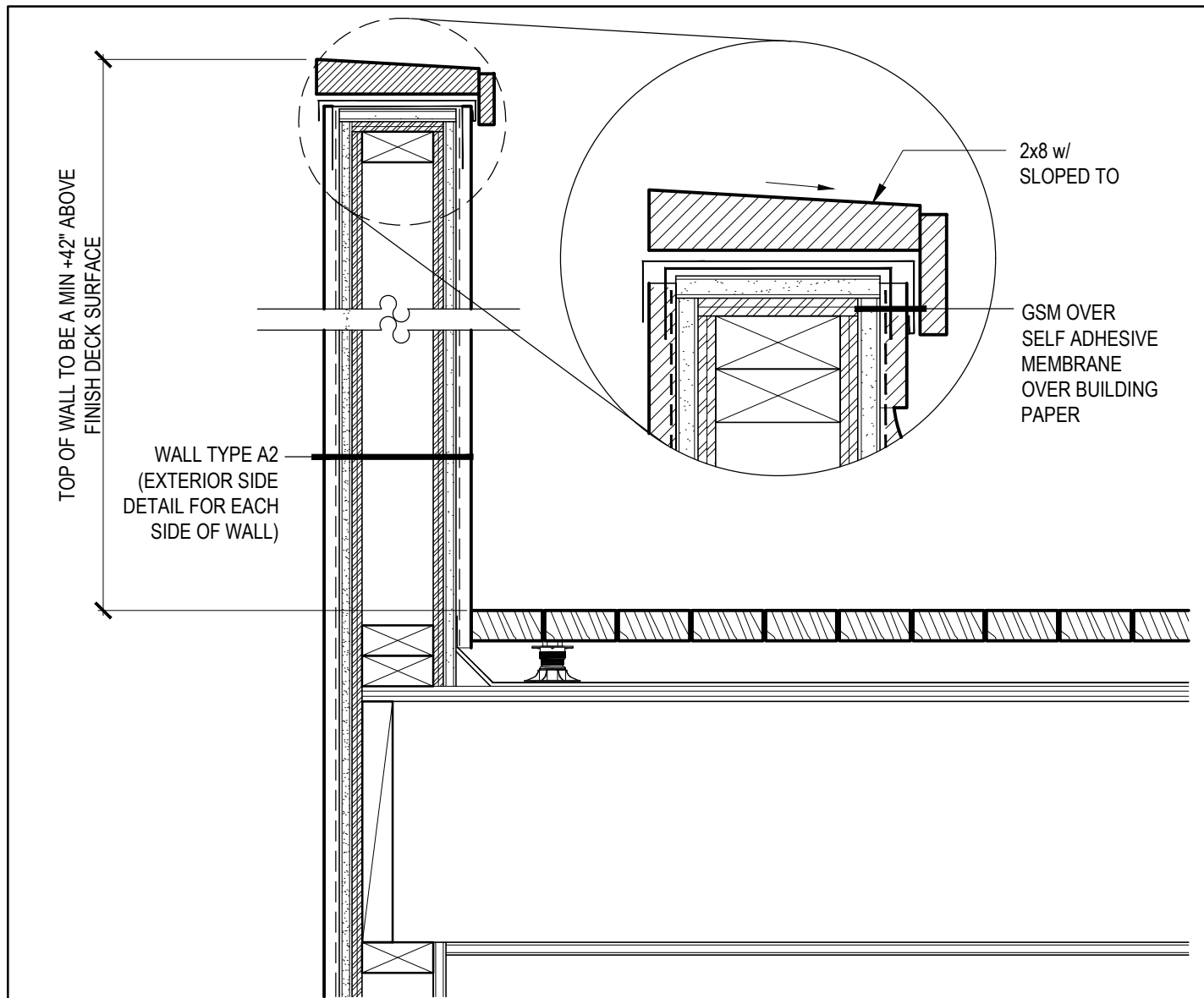
SHEET NO. A8.01
SHEET SEQUENCE: ## of ##



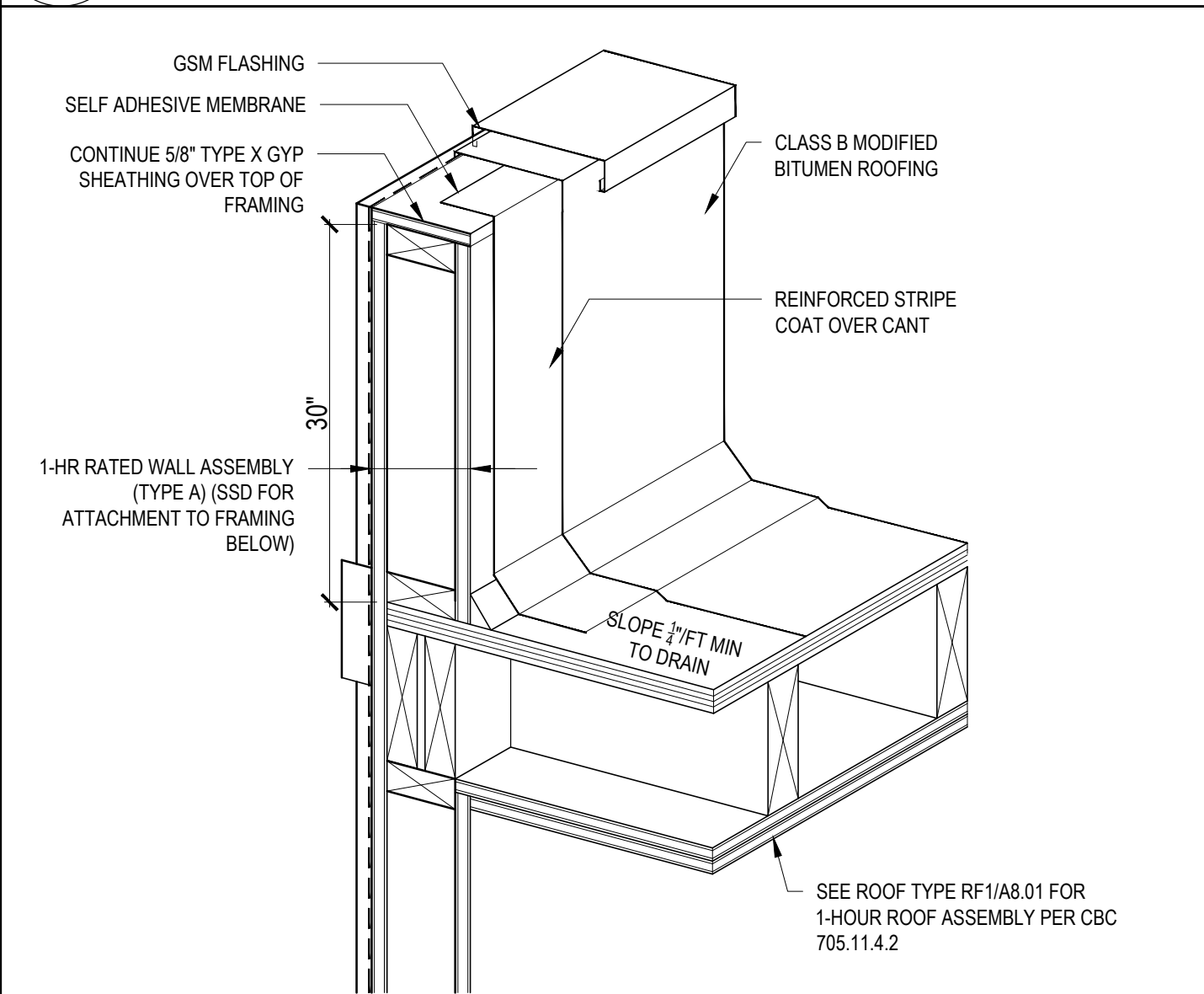
05
A8.03 ROOF DECKING SYSTEM
SCALE: 3'-1'-0"



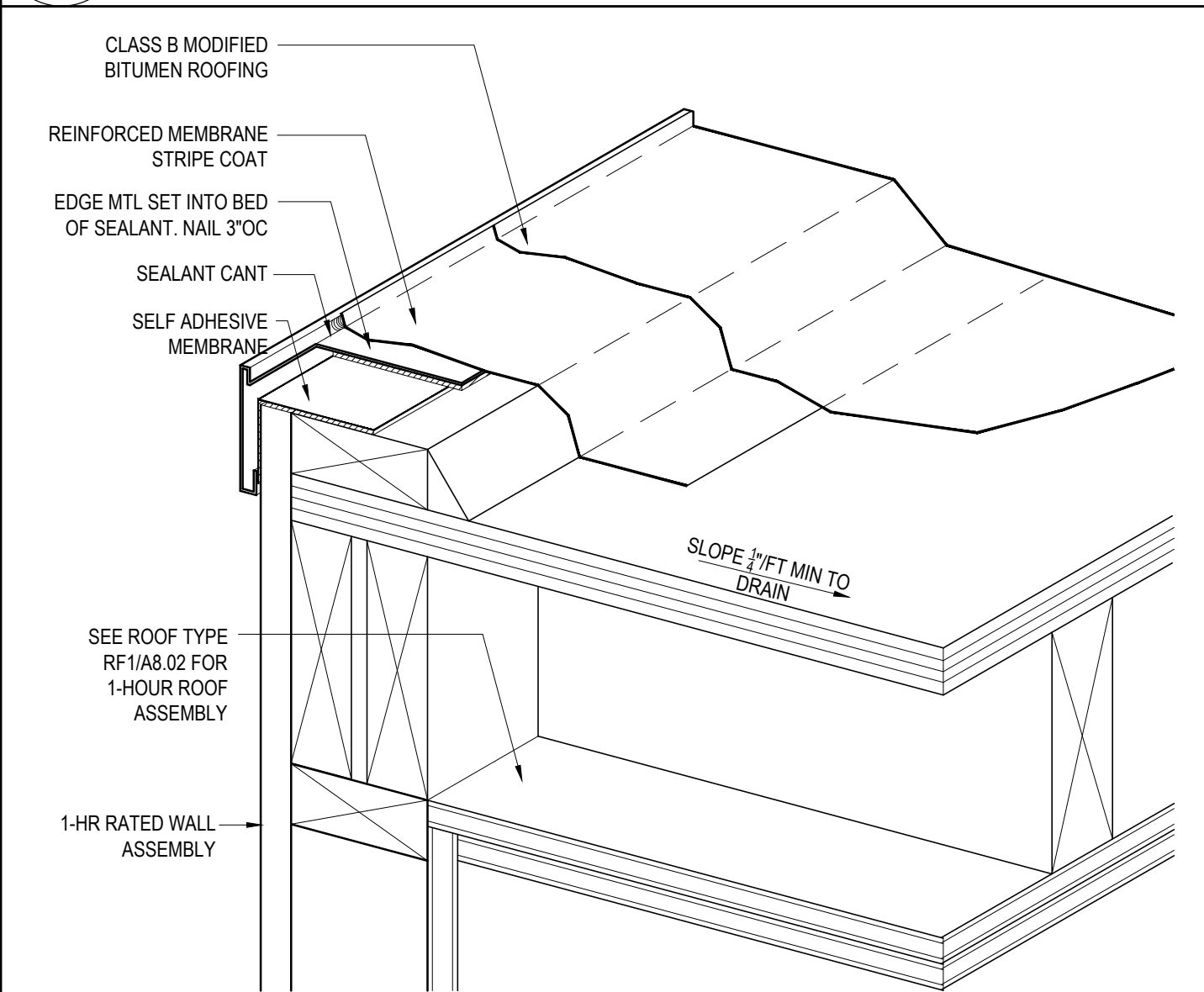
02
A8.02 ROOF AT DECK
SCALE: 1-1/2'-1'-0"



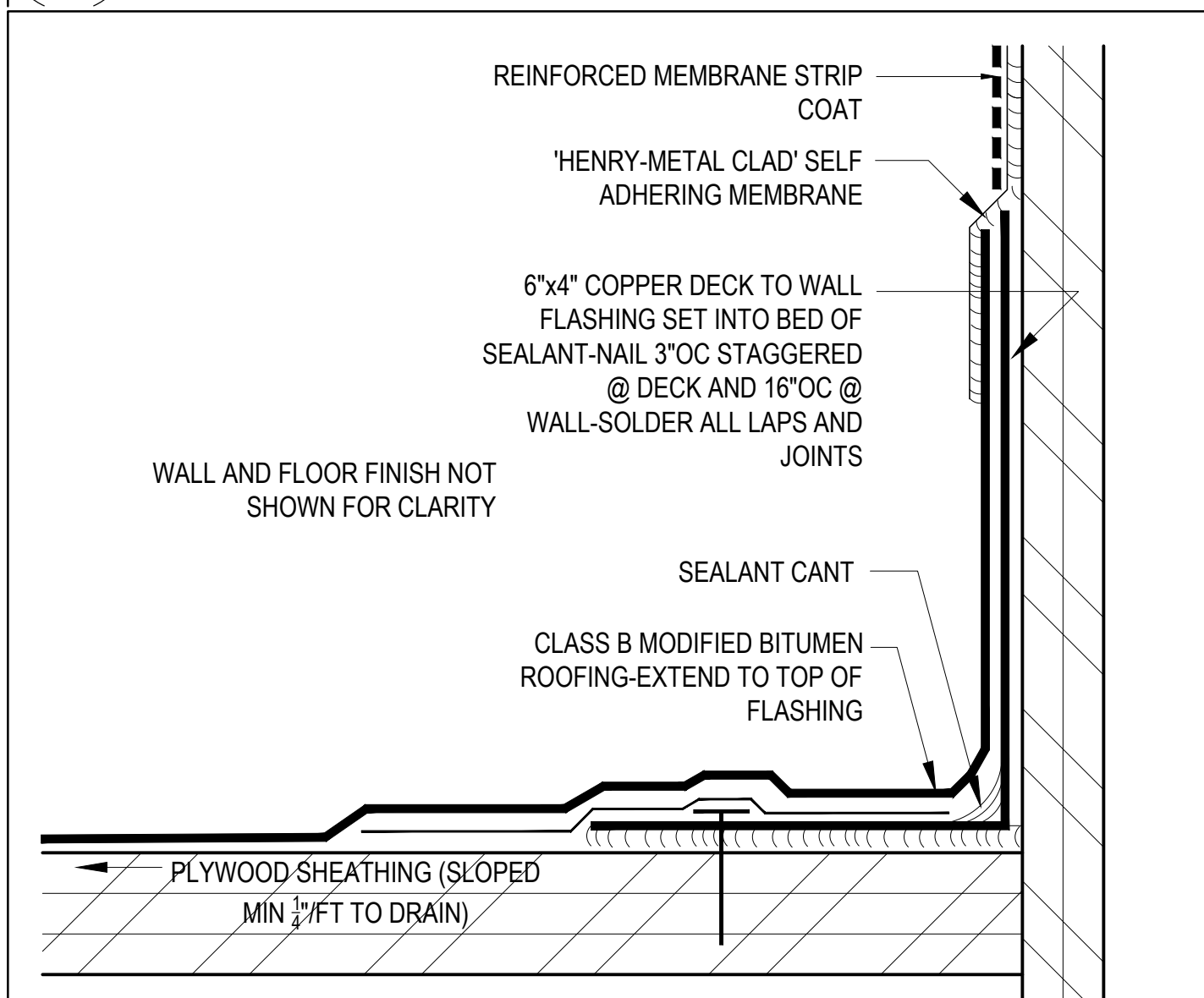
07
A8.02 PROPERTY LINE WALL
SCALE: 1-1/2'-1'-0"



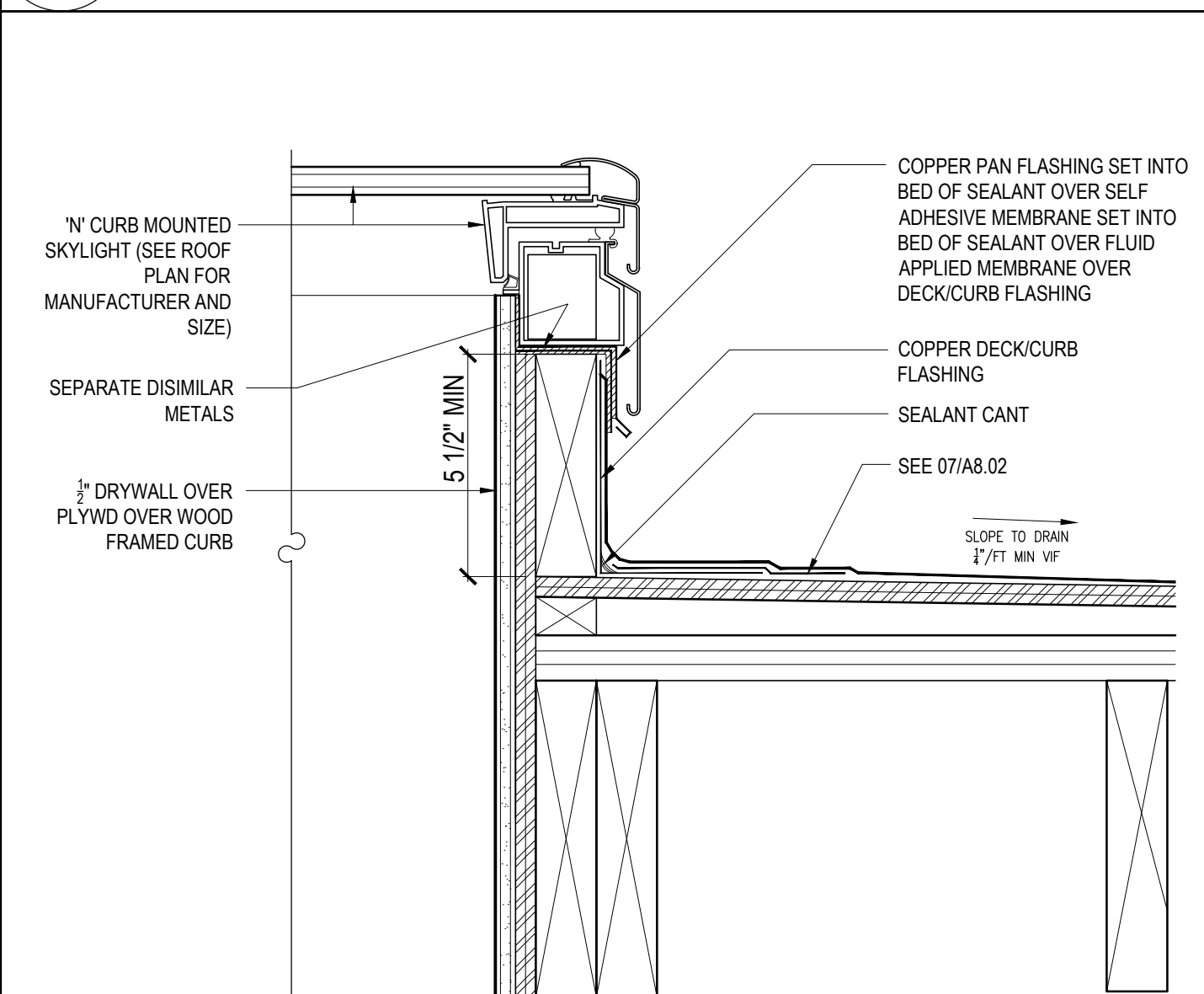
04
A8.02 ROOF PARAPET - 1HR RATED
SCALE: 1-1/2'-1'-0"



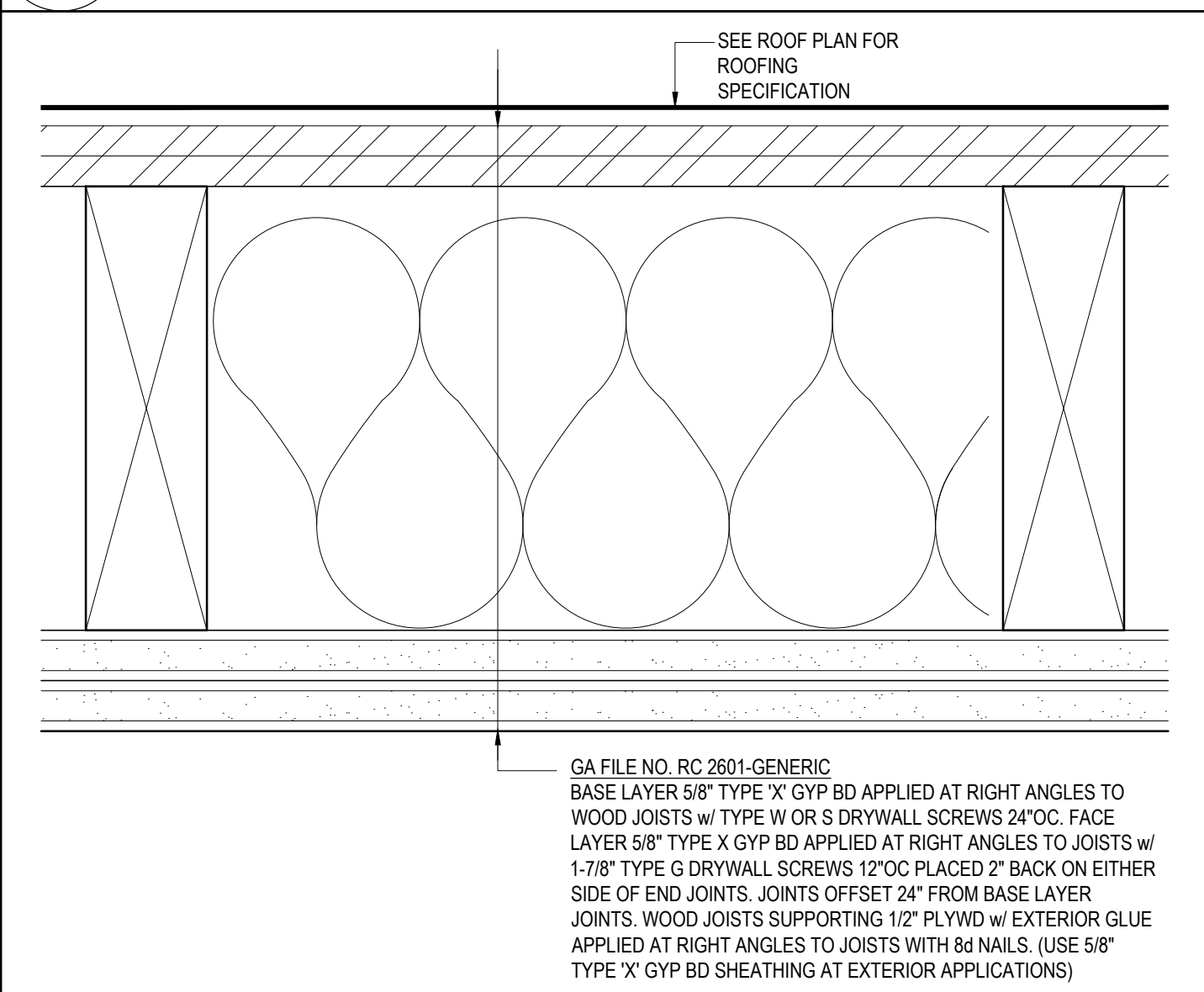
01
A8.02 ROOF CURB
SCALE: 3'-1'-0"



06
A8.02 ROOF TO WALL DETAIL
SCALE: FULL SCALE



03
A8.02 SKYLIGHT CURB & WELL
SCALE: 3'-1'-0"



RF1
A8.01 ROOF TYPE RF1-1 HR RATED
SCALE: 6'-1'-0"

1645 Building A &
Building B
Edgeworth Avenue
Daly City, CA 94015
APN: 006346110

Jeffrey A. Eade
Architect
407 Crestmont Drive
San Francisco, CA 94131
415.606.4414
jeff@jaearchitect.com
www.jaearchitect.com



DRAWING SET:
PERMIT DRAWINGS
SUBMITTALS:

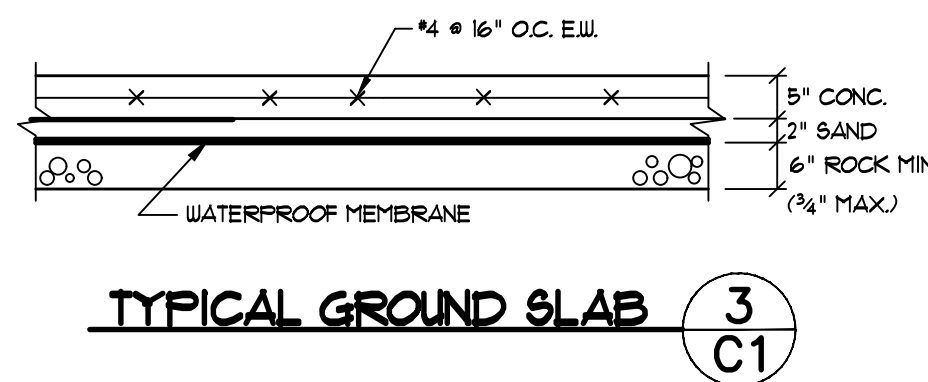
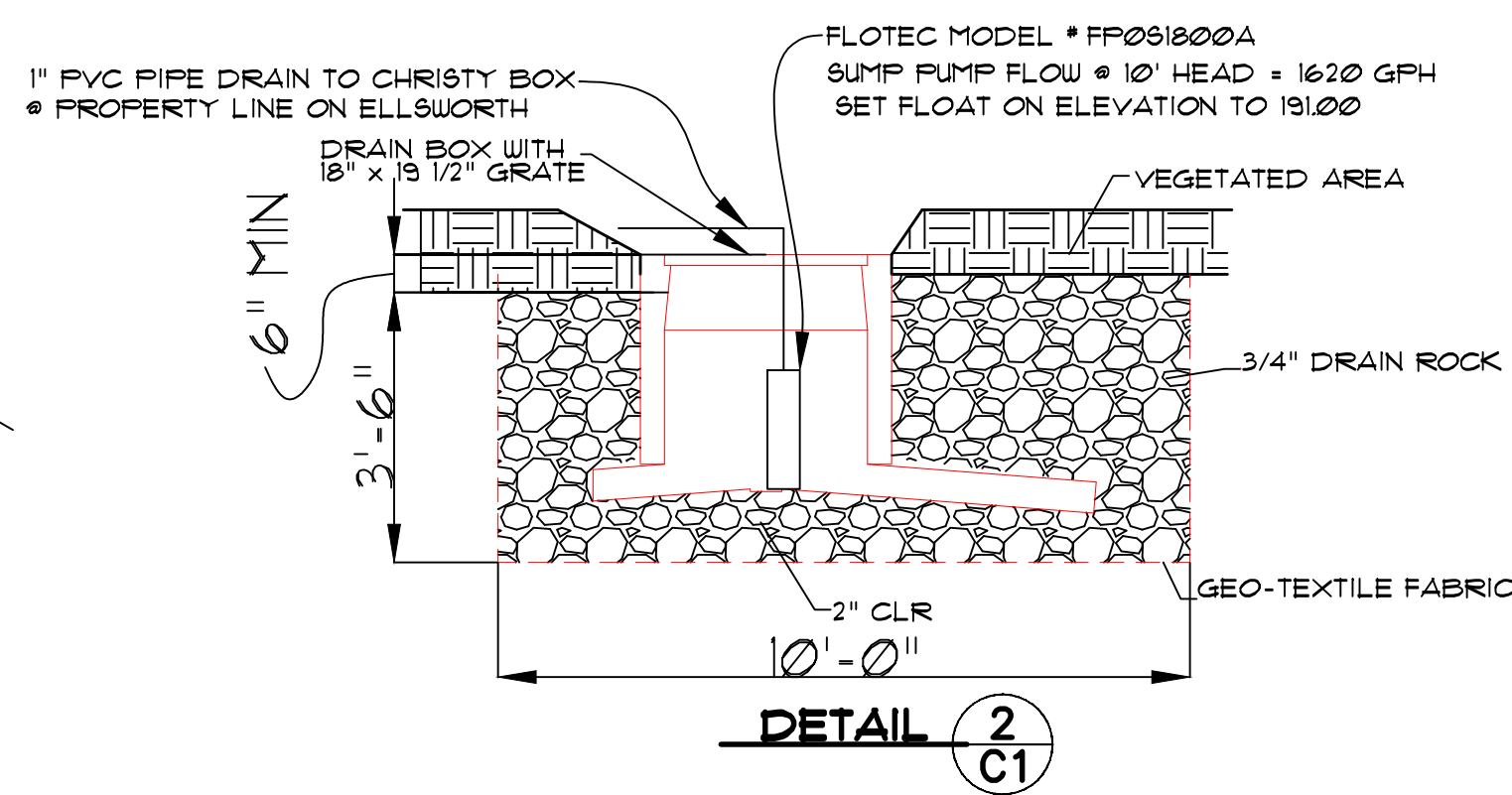
AREA FOR PERMIT STAMPS

ROOF DETAILS

SCALE AS NOTED
DRAFTED BY JAE
CHECKED BY JAE
JOB NAME SHEA
PLOT DATE: 10/02/24

SHEET NO. A8.02
SHEET SEQUENCE: ## of ##

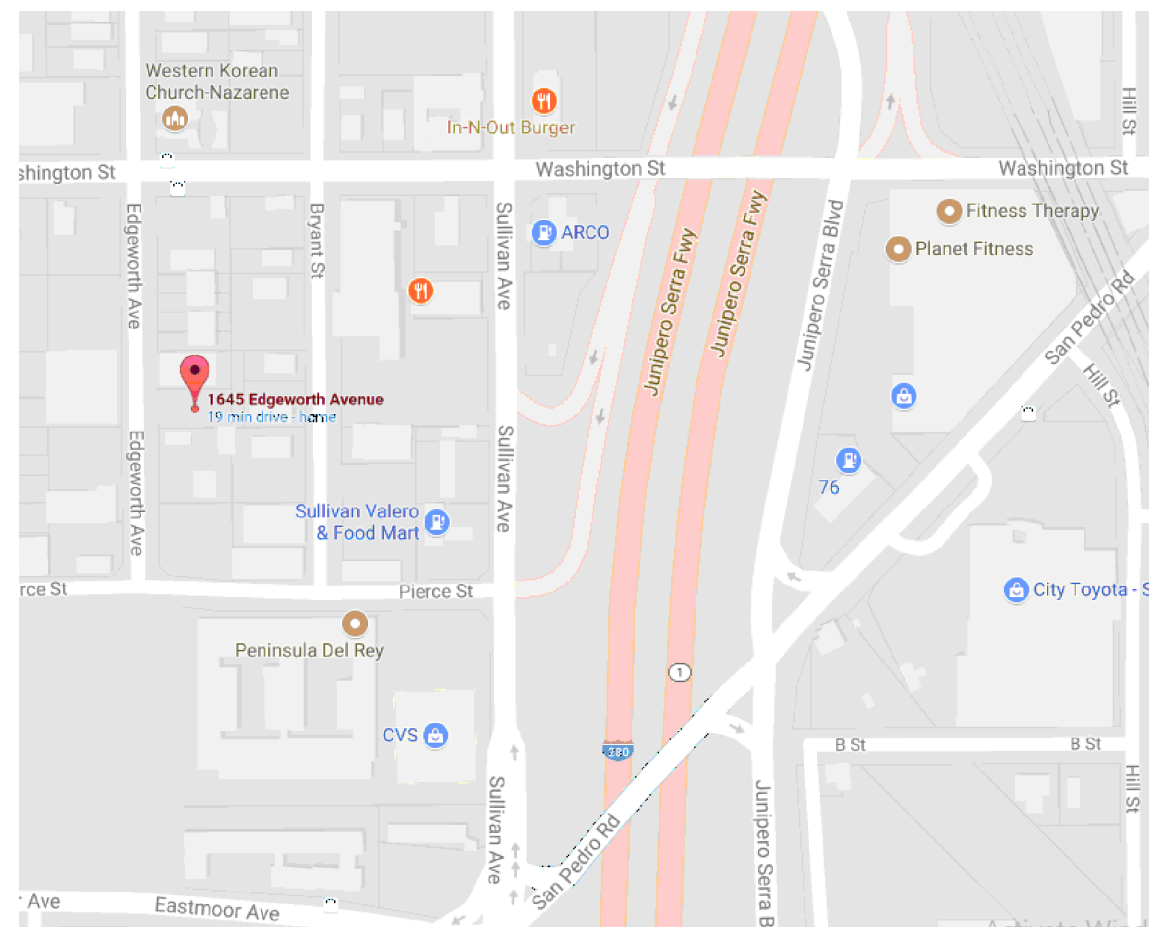
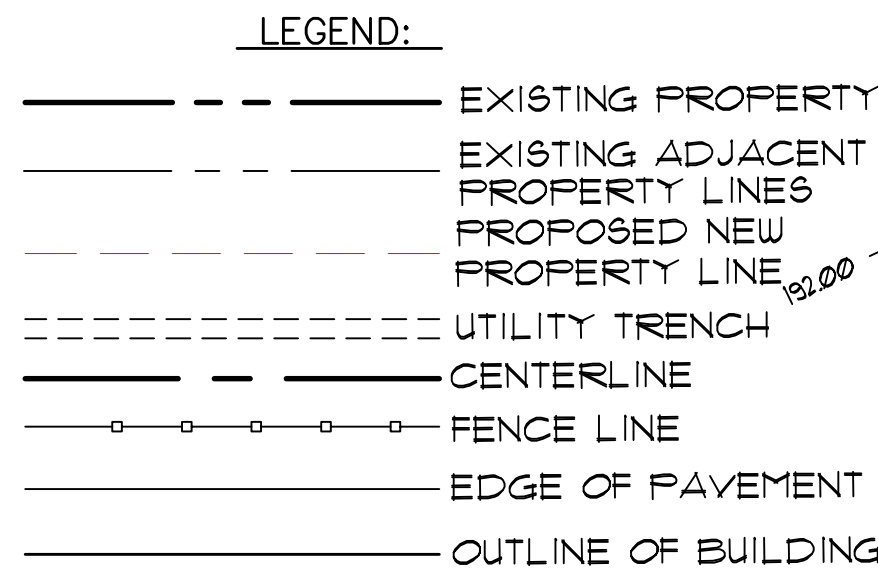
12" MIN 3/4" DRAIN ROCK AT THE BOTTOM OF ALL CHRISTY BOXES



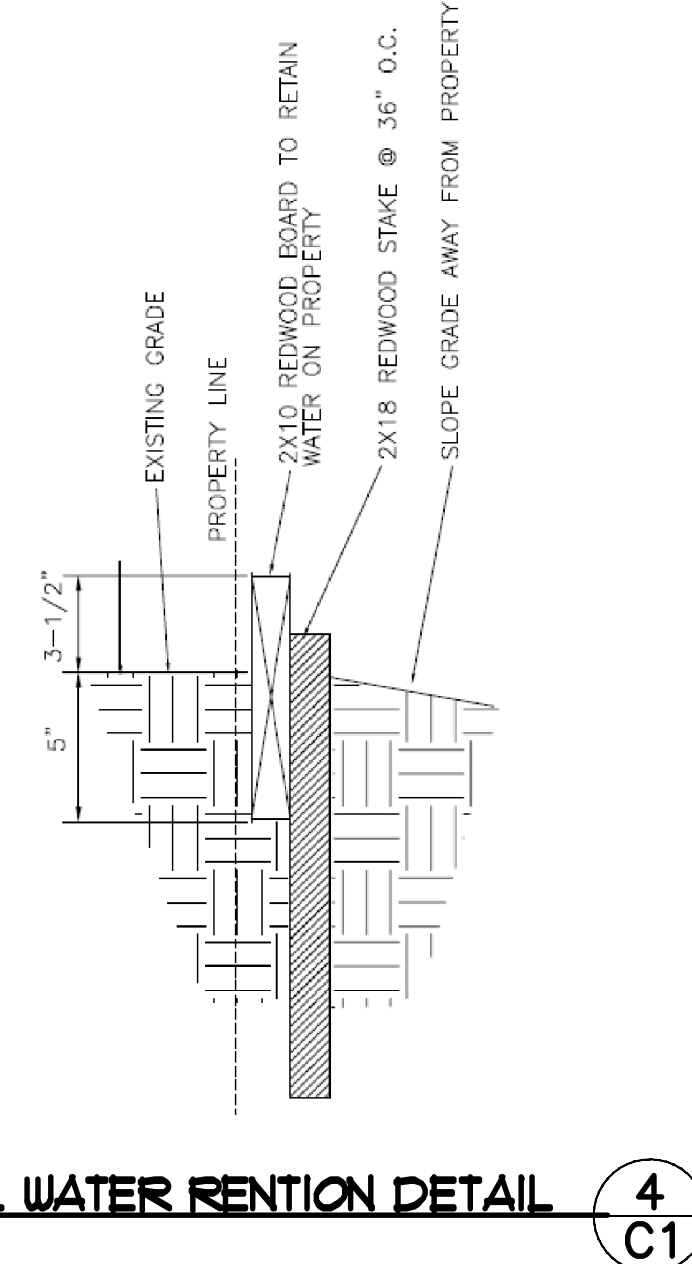
CHRISTY V64
CATCH BASIN
WITH STORMTEK
ST-3
Rim=191.51
Inv=189.50
FLOTEC MODEL
SUMP PUMP FL
SET ON FLOAT

* FP031800A
OW @ 10' HEAD = 1620
ELEVATION TO 191.00

CHRISTY V64
CATCH BASIN
WITH STORMTEK
ST-3
Rim = 193.18
Inv = 191.00
FLOTEC MODEL * FPOS1800A
PUMP FLOW @ 10' HEAD = 1620 GPH



VICINITY MAP
N.T.S.



PL WATER RETENTION DETAIL 4
C1

BASIS OF BEARING

THE BEARING $S00^{\circ}13'0''W$ OF THE CENTERLINE OF EDGEWORTH AVENUE, AS SHOWN ON THAT MAP ENTITLED "PARCEL MAP M8 02-1", RECORDED NOVEMBER 18, 2003, IN BOOK 75 OF PARCEL MAPS AT PAGES 32 AND 33, IN THE OFFICE OF THE RECORDER OF THE COUNTY OF SAN MATEO, CALIFORNIA, WAS TAKEN AS THE BASIS OF BEARINGS SHOWN HEREON.

SPECIAL NOTES

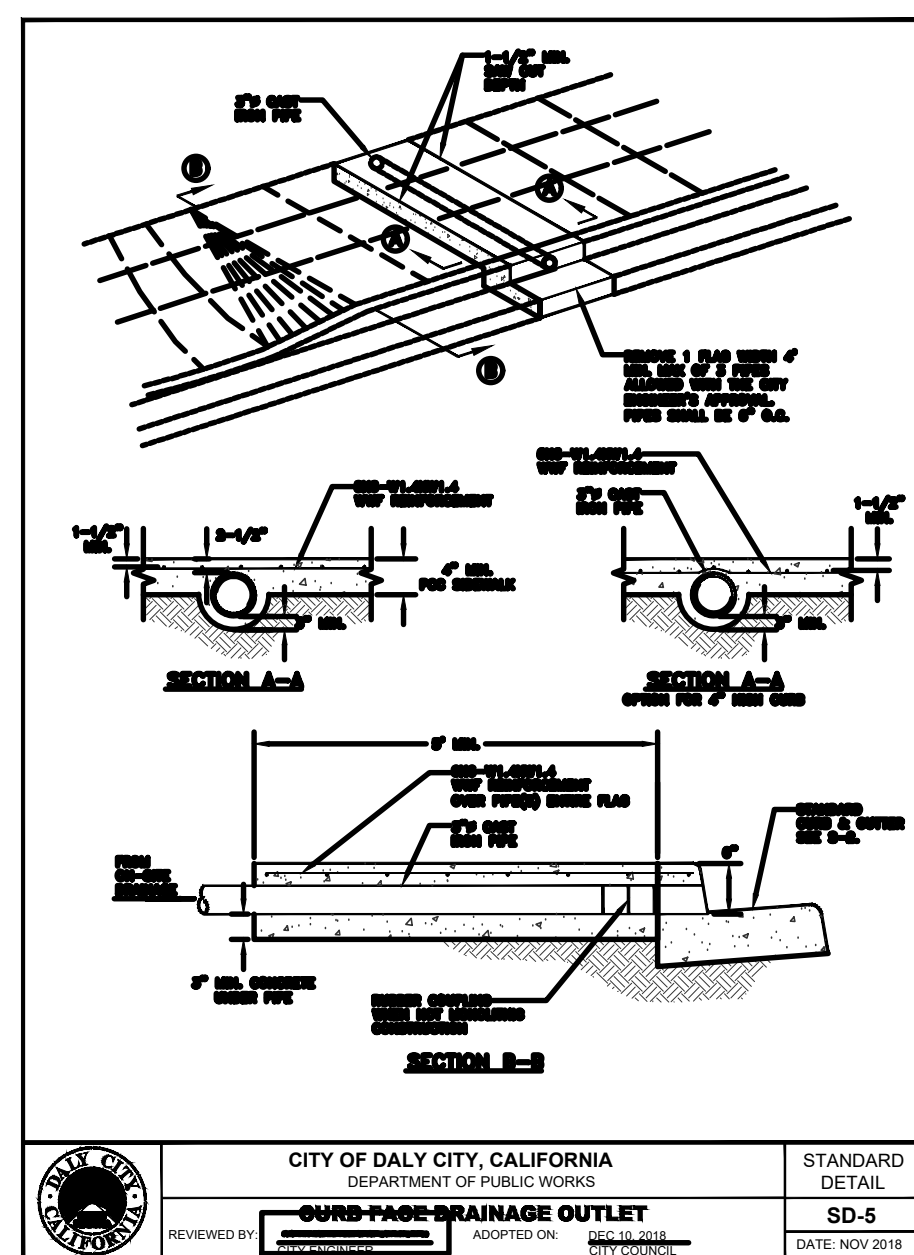
1. ALL DIMENSIONS FROM THE BOUNDARIES OF THE PROPERTY IN QUESTION TO MONUMENT LINES OF THE MONUMENT MAP REFERRED TO HEREON ARE GIVEN FOR THE SOLE PURPOSE OF ITS RETRACEMENT. SUCH INFORMATION SHALL NOT BE USED FOR ANY OTHER PURPOSE.
2. ALL DEFLECTION ANGLES HEREON ARE 30 OR 45 DEGREES UNLESS EXPRESSLY OTHERWISE INDICATED.
3. ALL DISTANCES ARE MEASURED IN FEET AND DECIMALS THEREOF.
4. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
5. ALL GRADES ARE BASED UPON ELEVATION OF 200.08' ON NAIL AND TAG ON EDGEWORTH AVENUE.
6. DISTANCES ARE MEASURED IN FEET AND DECIMALS THEREOF CONSTRUCTION.
7. A CERTIFIED DALY CITY DISTRIBUTION SYSTEM OPERATOR MUST BE PRESENT FOR ALL HYDROSTATIC TESTING, CHLORINATION, FLUSHING, BACTERIA TESTING AND CONNECTIONS TO THE EXISTING SYSTEM, PER CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, OPERATOR CERTIFICATION REGULATIONS, SECTION 63170. THE DWMR MUST RECEIVE THE REQUEST FOR THE CERTIFIED OPERATOR TO BE PRESENT FOR THESE OPERATIONS IN WRITING NO LESS THAN SIX (6) WORKING DAYS PRIOR TO THE ANTICIPATED DATE OF WORK.

ABBREVIATIONS

P/L	PROPERTY LINE
EX.	EXISTING
FND.	FOUND
MEAS.	MEASURED
N.T.S.	NOT TO SCALE

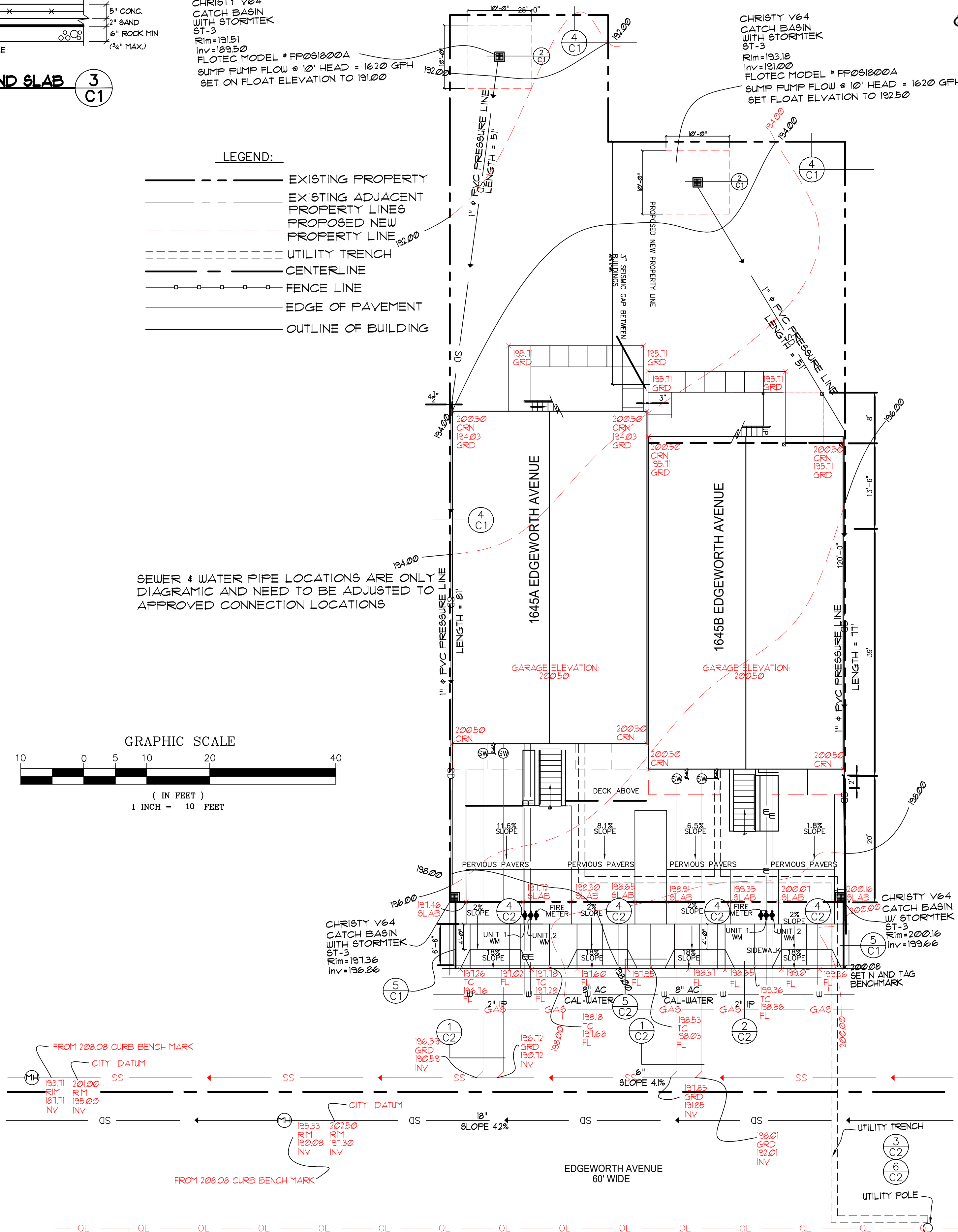
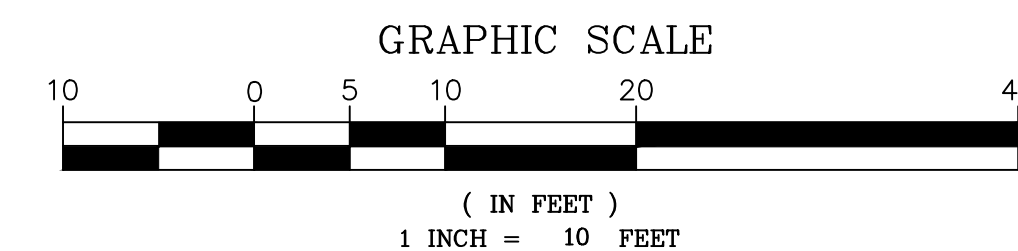
SYMBOLS

	FND MOUNMENT
	MAN HOLE
	WATER METER
	SEWER CLEAN OUT

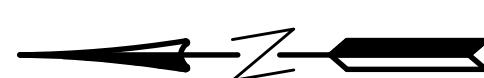


CURB FACE DRAINAGE OUTLET 5
C1

NOTE:
CONTRACTOR SHALL OBTAIN AN ENCROACHMENT
PERMIT FROM ENGINEERING DIVISION FOR THE ABOVE.

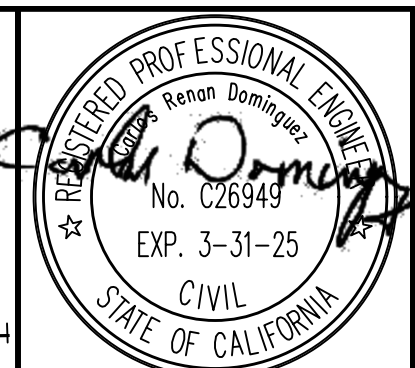


FILL: 50 CY/ LOT 100 CY TOTAL BELOW BUILDINGS.



GRADING AND DRAINAGE PLAN

SCALE: 1 IN. = 10 FT.



GRADING AND DRAINAGE PLAN FOR JOHN F. BRITTON
1645 EDGEWORTH AVENUE, DALY CITY

DALLAS, OR. 97338
(650) 359-0947 EMAIL carlos@dominguezassociates.com

DOMINGUEZ ASSOCIATES LLC

REVISION	
NO.	DATE

SCALE

SHEET NUMBER

C1

OF SHEETS

DATE 7-12-24

FILE BR 1536

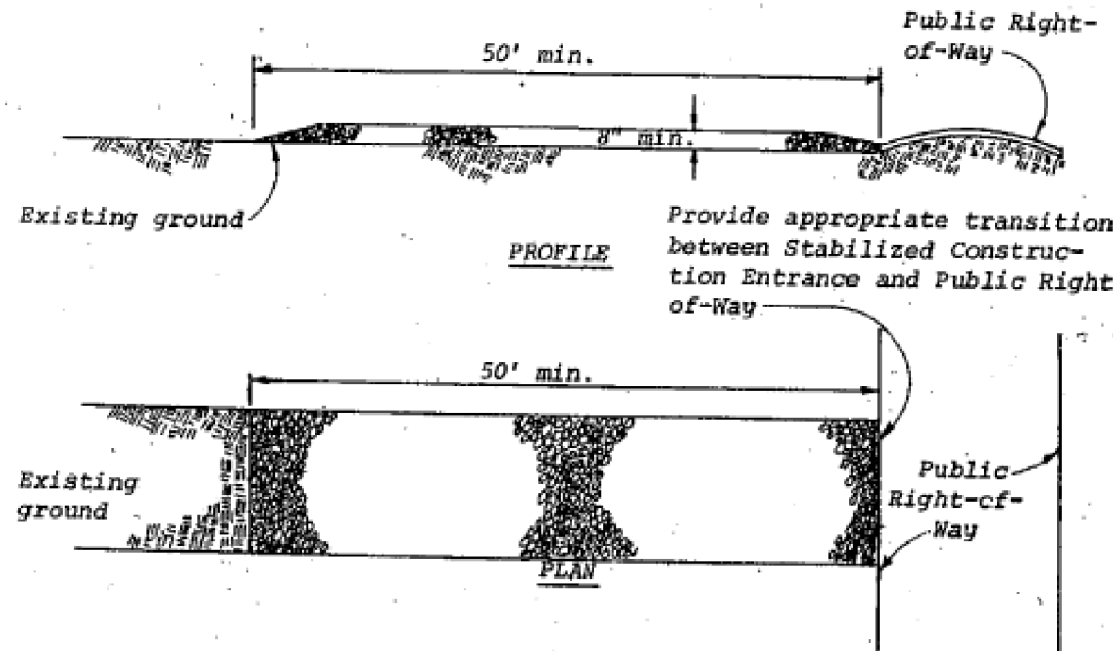
CHAPTER 7

STRUCTURAL STANDARDS AND SAMPLE SPECIFICATIONS

**MEASURE A:
TEMPORARY STABILIZED
CONSTRUCTION ENTRANCE**

FIGURE 7. Sample Drawing: Stabilized Construction Entrance

(not to scale)



Design and Construction Specifications

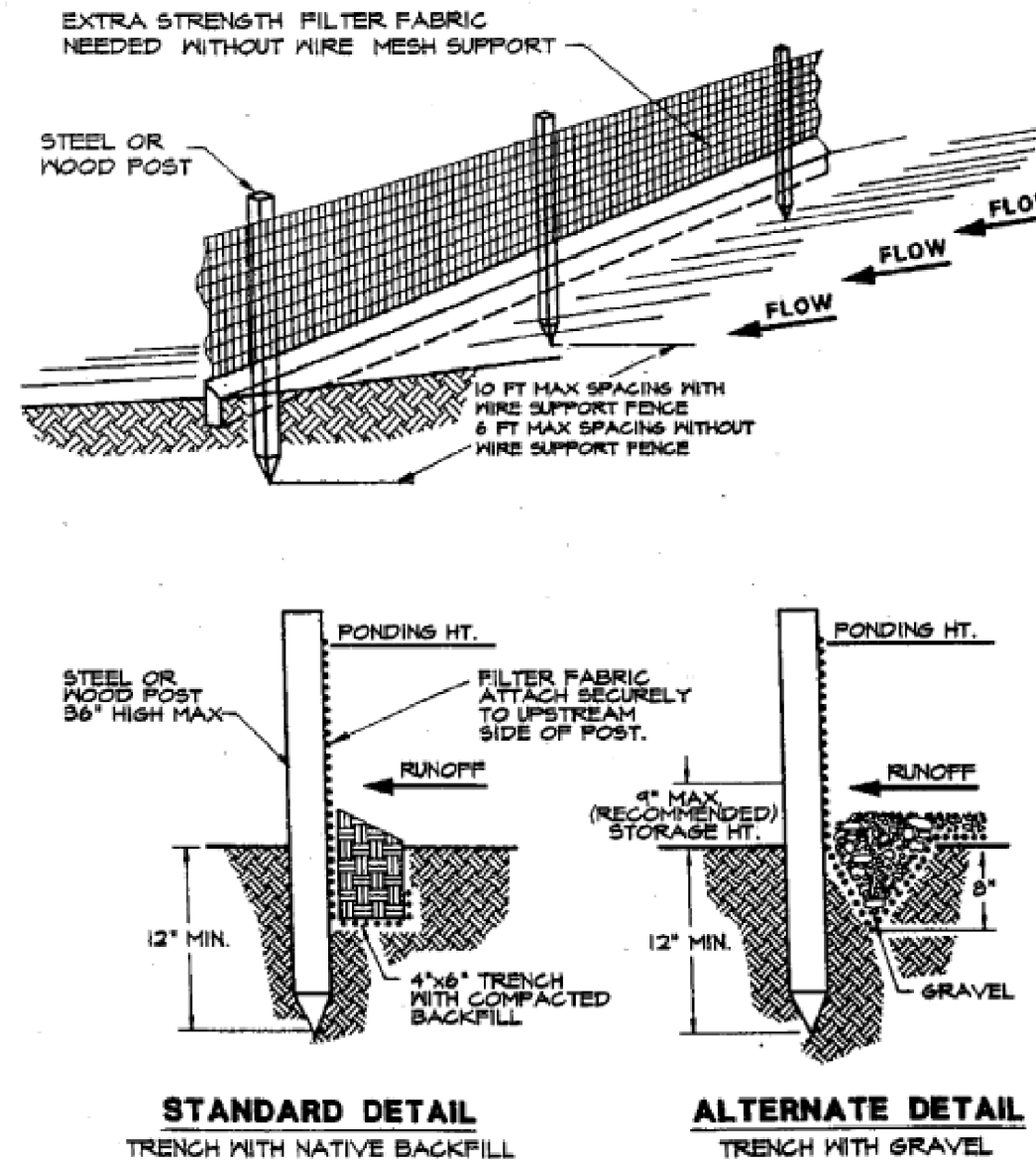
1. The material for construction of the pad shall be 2 to 3 inch (5-8 cm) stone.
2. The thickness of the pad shall not be less than 8 inches (20 cm).
3. The width of the pad shall not be less than the full width of all points of ingress or egress.
4. The length of the pad shall be as required, but not less than 50 feet (15 m).
5. The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand, and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed, or tracked onto public rights-of-way shall be removed immediately.
6. When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sand bags, gravel, boards, or other approved methods.

CHAPTER 7

STRUCTURAL STANDARDS AND SAMPLE SPECIFICATIONS

**MEASURE R:
TEMPORARY
SILT FENCE**

FIGURE 39. Sample Drawing: Silt Fence



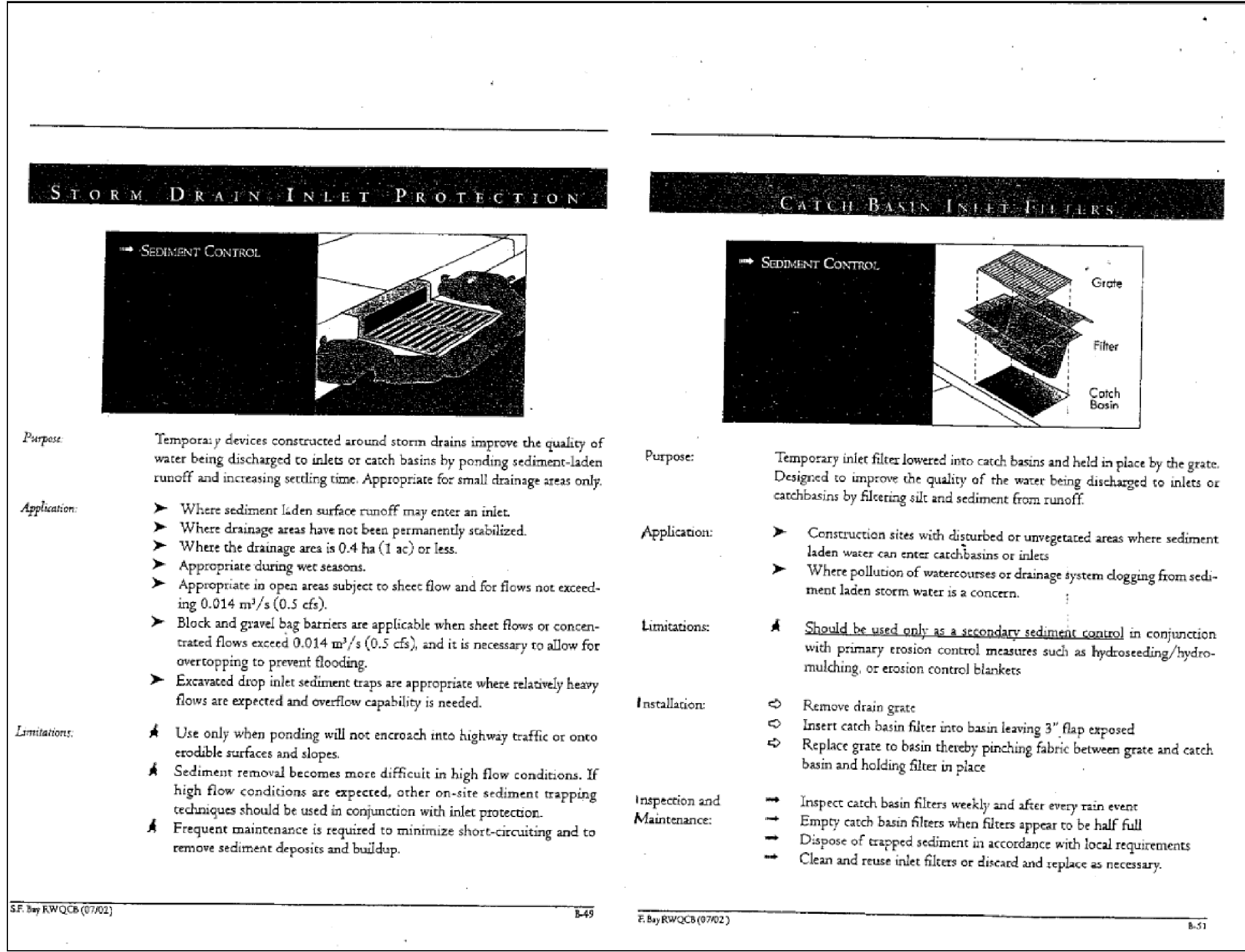
Source: Erosion Draw 1.3, Salix Applied Earthcare [Ref. No. 3]

Manual of Standards for Erosion and Sediment Control Measures

7.143

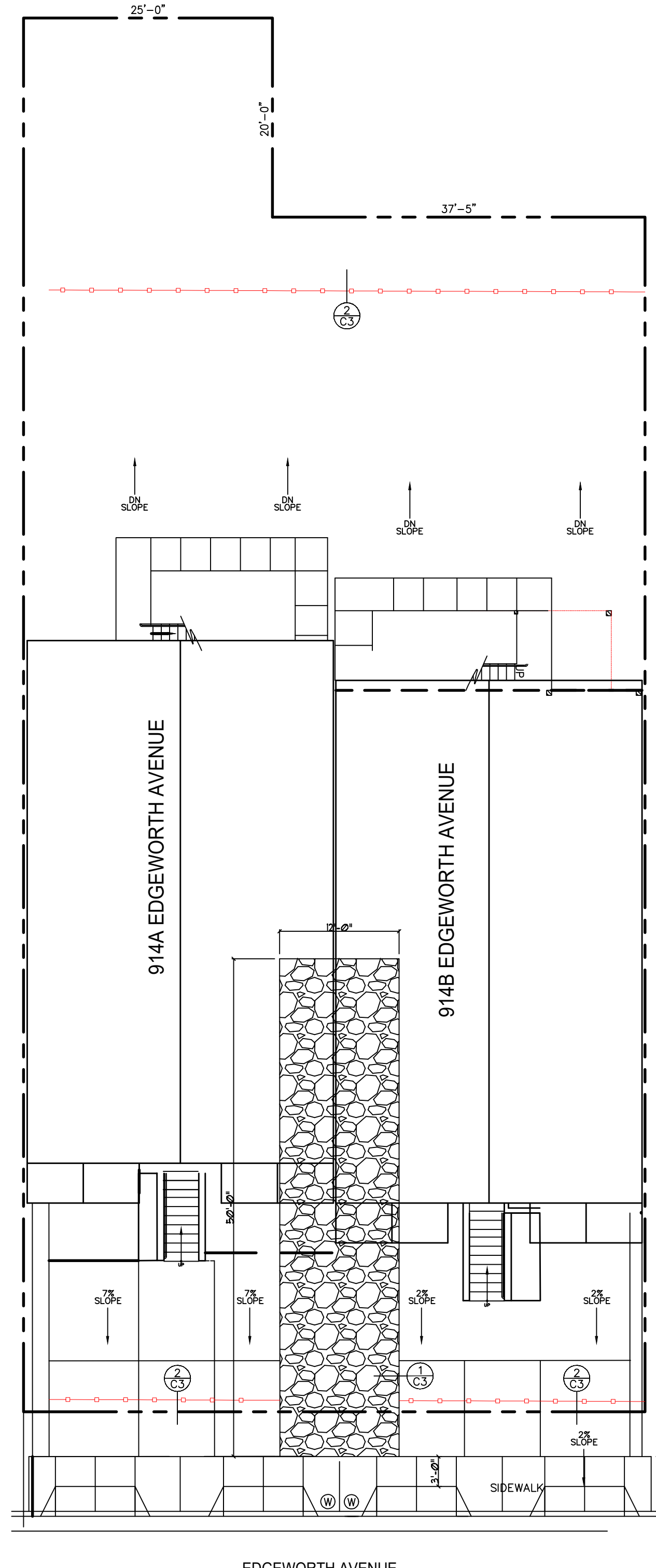
STABILIZED CONSTRUCTION ENTRANCE (1)
TO BE USED IF CONSTRUCTION EQUIPMENT LEAVES (C3)
THE PUBLIC STREET.

SILT FENCE DETAIL (2
C3)



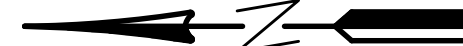
STORM DRAIN INLET PROTECTION (3
C3)

CATCH BASIN INLET FILTERS (4
C3)



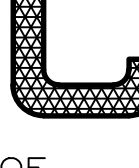
EROSION CONTROL PLAN

SCALE: 1 IN. = 10 FT.



EROSION CONTROL PLAN FOR JOHN F. BRITTON
1645 EDGEWORTH AVENUE, DALY CITY

DOMINGUEZ ASSOCIATES LLC • 4360 COOPER HOLLOW RD. • DALLAS, OR. 97338
(650) 359-0947 EMAIL carlos@dominguezassociates.com

REVISION	
NO.	DATE
SCALE	
SHEET	NUMBER
	
OF	SHEETS
DATE	7-12-24
FILE	BRI 1536



Daly City Planning Commission Agenda Report

333 - 90th Street ♦ Daly City ♦ California ♦ 94015 ♦ 650-991-8033

Meeting Date: December 3, 2024

Application: General Plan Amendment (GPA-11-22-015959), Zone Change (ZC-11-22-015960), Use Permit (UPR-11-22-015962) and Design Review (DR-11-22-015961)

Project Planner: Sam Fielding, Associate Planner

Project Location: 2150 Geneva Avenue (APN 005-050-020)

Project Description: Battery Energy Storage System and Transmission Line

Applicant/Property Owner: Cormorant LLC
Aron Branam
452 Fifth Avenue, 29th Floor
New York, NY 10018

Syufy Enterprises, LP
William Vierra

Environmental Assessment: CEQA-Mitigated Negative Declaration

Applicable Daly City Municipal Code Sections: Chapter 17.48 – Amendments
Chapter 17.44 – Use Permits
Chapter 17.45 – Design Review

Site Information

Property Sizes	Existing Use	Proposed Use	General Plan Designation	Current Zoning
11-acres	Vacant Lot	Battery Energy Storage	Commercial Retail and Office (C-RO)	Light Commercial (C1)

Area Information

Land Use	Zoning
North: Public Facility (Cow Palace)	C2 Heavy Commercial
South: Residential	R-1 Single-Family Residential
West: Residential	R-1 Single-Family Residential
East: Public Facility (Cow Palace)	PF Public Facility

Background

The applicant, Cormorant Energy Storage LLC, has applied to develop an approximately 11-acre vacant lot for a 250-megawatt battery energy storage system (BESS). The project site is located near the southeast corner of the intersection of Carter Street and Geneva Avenue (see Attachment A, Site Location). It is approximately 1.4 miles from the nearest highway interchange (U.S. Highway 101). The project site is currently undeveloped (used for vehicle and building material storage) and surrounded by a mix of land uses. State-owned land with an arena and event center (Cow Palace) is located to the north and east; open space is located directly to the south with residential subdivisions located farther south across Martin Street; and residential subdivisions are located across Carter Street to the west. The PG&E Martin Substation, the project's point of interconnection, is located approximately 0.5 miles east of the project site. Access to the project site will be from a driveway connecting to Carter Street at the northwest corner of the lot (see Attachment B - Project Description).

Proposed Project

The battery energy storage system will be composed of lithium-ion batteries installed in racks, inverters, medium-voltage (MV) transformers, switchgear, a collector substation, transmission line and other associated equipment to interconnect into the Pacific Gas & Electric Company (PG&E) Martin Substation (point of interconnection). The batteries will be installed in purpose-built enclosures which will include storage racks, with relay and communications systems for automated monitoring and managing of the batteries to ensure design performance (see Attachment C - Project Plans).

Construction Phasing

The applicant proposes to construct the project in two phases. The first phase will include proposed offsite improvements, including the entirety of the proposed generation transmission line and telecommunications lines. Regarding onsite improvements, the initial phase will include all perimeter fencing, site grading, access road construction, and stormwater facilities. This phase will also include placement of approximately 75 percent of the proposed BESS modules and related medium voltage collection lines, medium voltage transformers, and inverters; and one of the two proposed high voltage transformers. The second phase of construction is anticipated to be completed approximately one to six years after the initial phase of construction is completed and would include installation of the remaining 25 percent of the proposed BESS modules and related medium voltage collection lines, medium voltage transformers, and inverters; and the second of the two proposed high voltage transformers. The applicant has requested the construction phasing to be allowed as part of the Use Permit for the project.

The project as proposed requires the following entitlements:

1. Certification of a Mitigated Negative Declaration for the project.

2. General Plan Amendment: Approval of General Plan Amendment from Commercial Retail and Office (C-RO) to Industrial (I) land use.
3. Zone Change: Approval of a zone change from Light Commercial (C1) to Heavy Commercial (C2).
4. Use Permit: Approval of a use permit allowing a battery energy storage system in the C2 zone.
5. Design Review: Approval of design review of a proposed battery energy storage system.

According to the applicant, the electric battery energy storage is needed to provide a more stable, sustainable, electricity supply benefiting electricity consumers in the community and region. The energy stored in the batteries at the project site will provide readily available electricity, through the PG&E transmission lines the utility customers. Adjacent residential land uses surrounding the subject site to the west and south would not be negatively impacted by the battery energy storage facility, as indicated by the California Environmental Quality Act (CEQA) Mitigated Negative Declaration study prepared by the city consultant for the project.

General Plan Amendment and Zoning Change Consistency

The General Plan designation for the project site is Commercial Retail and Office (C-RO). This land use designation allows retail and office uses both regional and citywide in scope. Although historically residential uses have been permitted within this General Plan land use category, the inclusion of the Commercial Mixed-Use General Plan designation is not the most appropriate designation for existing and new development which contains residential land uses. The proposed battery energy storage facility use is not allowed in the current land use designation, therefore, the applicant is requesting an amendment to the General Plan for this site from C-RO to the Industrial (I) land use designation. This designation includes light manufacturing, storage of merchandise produce on the site, administrative offices, and research facilities that are subordinate to the primary business. The battery energy storage is considered a light manufacturing use.

The project site is currently zoned Light Commercial (C-1). An amendment to the zoning Heavy Commercial (C-2) is necessary to allow for the battery energy storage facility use at the site, as battery storage is not a permitted use within the C-1 Zone. The Heavy Commercial Zone permits the storage of materials and equipment in open areas, which would include battery energy storage.

Staff supports and is recommending that the Planning Commission approve the proposed amendments to the General Plan and Zoning for 2150 Geneva Avenue (APN #005-050-020). The proposed amendments would allow a battery energy storage project on a vacant lot, surrounded by public parking lot facility uses on the north and east adjacent properties and would not negatively impact the residential uses located to the west and south of the project. Staff recommends that the Planning Commission find that it is in the public interest to change the land use designation from C1 (Light Commercial) to M (Industrial), allow the construction of the battery energy storage system at the project site generates more electricity than it can use.

Use Permit

Pursuant to the Zoning Code, Chapter 17.44 – Use Permits, a use permit approval is required to allow a battery energy storage system and transmission interconnect line in the proposed Heavy Commercial (C2) zone. The Heavy Commercial Zone permits the storage of materials and equipment in open areas, which would include battery energy storage.

The proposed use would be located on a vacant lot, immediately surrounded by Cow Palace parking lots and open space and is screened by large, mature Eucalyptus trees. The adjacent uses are open space. Beyond the open space to the west and south are residential uses to the west of Carter Street, south of Carter Street and Martin Street. Parking lots for the Bay Club Tennis and Pickleball and Cow Palace Event Center are located to the north and east of the project site. The location of housing to the west, south and east of the site are quite a distance away from the project site and would not be impacted by the proposed project. The location of the battery storage area will be approximately 599 feet away from residential uses to the west, adjacent to Carter Street and 668-830 feet away from residents located to the south, adjacent to Martin Street and 1,302 feet from the residences on Rio Verde Street, to the east of the project site. The interconnect transmission line will connect with the battery storage transmission equipment and travel 0.5 miles to the east along a transmission line to the PG&E substation.

The use permit provides the Planning Commission with an opportunity to evaluate the proposal in the context of the existing on-site and adjacent uses and evaluate if the proposed project merits approval. In so determining, the Planning Commission should evaluate if the battery energy storage system would be compatible with existing uses and if infrastructure exists to serve the site.

Compatibility with Existing Uses. The subject site is presently occupied by a vacant lot owned by the Syufy Enterprises LP. The applicant will enter into a lease agreement with the property owners (Cow Palace) for the lease of the lot for the battery energy storage system. The proposed battery energy storage system on the 11-acre site would not be incompatible with the existing adjacent parking lot and commercial uses. The site is immediately surrounded by Cow Palace and Bay Club Tennis and Pickleball parking lots and adjacent open space. The nearest residential uses are located between approximately 599 to 1302 feet away from the proposed battery storage area and the site would be screened by large, mature trees and open space from the residential areas beyond. A CEQA-MND environmental study has been prepared for the project and has determined there are no significant impacts from the project. The proposed use would be compatible with existing uses and would benefit the Daly City by providing battery energy storage for supply of electricity to Daly City and other bay area cities as needed, during emergencies. Staff recommends the Planning Commission recommend for approval the use permit for the proposed project.

Design Review

The battery energy storage system will be composed of lithium-ion batteries installed in racks, inverters, medium-voltage (MV) transformers, switchgear, a collector substation, and other associated equipment to interconnect into the Pacific Gas & Electric Company (PG&E) Martin Substation (point of interconnection). The batteries will be installed in purpose-built enclosures which will include storage racks, with relay and communications systems for automated

monitoring and managing of the batteries to ensure design performance. The purpose-built enclosures will be 9'-2" height, built on a 6" concrete foundation pad and the entire storage facility will be enclosed by an 8'-6" tall precast concrete wall with 1'-6" climbing deterrent.

Based on staff review of the plans for the battery energy storage system, the project conforms to the required Findings in Chapter 17.45.080 Design Review of the Daly City Municipal Code. The project meets the provisions of the chapter and applicable guidelines and is in the best interest of the public health, safety and general welfare of the community. The general site layout, open space and orientation of the battery storage units have been designed to consider public safety and visual aesthetics and provide a desirable environment for outdoor storage use away from residential areas. Finally, the general landscape will provide visual relief, with trees along the perimeter of the lot and berms that will visually screen the battery storage structures, facilities and transmission line interconnect from the public. Access to the site will be controlled for the public's safety. Staff recommends the Planning Commission recommend for approval the design review permit for the proposed project.

Fiscal Impacts

As required for all General Plan Amendments, the applicant contracted an independent consultant (Development Planning and Financing Group), to prepare a fiscal revenue analysis to estimate the major annual fiscal tax revenues that the Project may generate, under multiple scenarios, when at full build-out, and under stabilized operating conditions for the City (see Attachment F - Fiscal Review Analysis). The development scenarios analyzed were, an energy storage facility, an office development, a multi-family residential development, and a retail garden center.

The assessed values for the other land uses were determined by using recent market data and recent sales within the area. The major annual fiscal tax revenues analyzed included property taxes, property taxes in-lieu of vehicle license fees and on-site sales tax. The major annual fiscal tax revenues for each scenario result in an annual fiscal revenue, for the City, of \$1,071,747 for Cormorant Energy Storage, \$179,685 for the Office, \$759,234 for the Multi-Family Residential, and \$80,831 for the Garden Center. The analysis determined that a retail uses for the site face significant access difficulties which makes these uses not feasible for the site. The second highest revenue for the site would be multifamily residential development, however the analysis does not include the estimate of the costs and expenditures that would need to be incurred by the City for each of the residential. Other uses analyzed and found to not be feasible (due to site geography and access issues), in addition to generating less revenue, were single-family residential and public storage.

In addition to the estimated annual fiscal tax revenues of the project, the consultant, estimated that the proposed battery energy storage system would generate approximately \$2,925,000 for Phase 1 in 2026 and \$1,050,000 for Phase 2 in 2030 in one-time sales tax revenues to the City from the purchase of materials and equipment related to the proposed Project for a total one-time sales tax of \$3,975,000 to the City (see attachment D - Fiscal Review Analysis).

The results of the Fiscal Impact Analysis indicate that the Battery Energy Storage Facility would have a positive fiscal impact for the City and would provide the most financial benefit for the Daly

City community by providing a stable source of funding for city, county and state services as well as supporting the local school district.

Development Agreement

The City Attorney determined that the proposed project requires a Development Agreement between the developer and the City. A development agreement is a contractual arrangement between a property developer and a municipality or other governing body. These agreements are essential for coordinating the various aspects of a development project, including land use, zoning, infrastructure, and public services. Key components of development agreements often include: the project description, detailed responsibilities of both parties including obligations for construction, funding, and adherence to zoning regulations, duration or terms of the agreement, financial provisions and confirmation of zoning and land use permissions.

The Development Agreement includes the project description, the project term of the agreement, community benefits obligated by the developer to the City and Public, and regulatory considerations for Cormorant. The regulatory considerations include the vested rights, use permit (in effect for both construction phases of the project) and project-specific Encroachment, Maintenance, and Removal Agreement (EMRA) and Right-of-Way (ROW) Encroachment Authorization to facilitate title insurance coverage and financing. The Development Agreement also includes detailed information on the tax benefits, labor and workforce agreements, and community benefits the project sponsor has committed to for the City of Daly City (see Attachment F - Development Agreement Draft).

City staff worked with the developer on the Development Agreement and determined that it conforms to and is consistent with the General Plan. The Development Agreement is before the Planning Commission for a determination as to consistency with the General Plan only.

Environmental Assessment

The City of Daly City, as the lead agency, has completed an Initial Study for the project and has determined that, pursuant to the requirements of the California Environmental Quality Act (CEQA), a Mitigated Negative Declaration is the appropriate level environmental review (see Attachment G – Initial Study Mitigated Negative Declaration). The 30-day public review period was completed from November 1, 2024, to December 2, 2024. All public comments received during the public review period will receive a response included in the final document. The Initial Study found minimal environment impacts associated with the project and includes a Mitigation Monitoring and Reporting Program that will reduce impacts to air quality, geology and soils, biological, hazards and hazardous materials, noise and vibration, and cultural resources to less-than-significant environmental impacts (see Attachment H – Mitigation Monitoring and Reporting Program).

Findings

Staff recommends that the Planning Commission find that the proposed General Plan Amendment (GP-11-22-015959), Zone Change (ZC-11-22-015960), Use Permit (UPR-11-22-015962) and Design Review (DR-11-22-015961) are in accordance with Chapter 17 (*Zoning*) of the Daly City Municipal Code. Staff has determined that approval of the proposed project will not be detrimental to the health, safety, morals, comfort, and general welfare of persons residing or working in the vicinity. Staff has furthermore determined that the proposed project would not be injurious or detrimental to property and improvements in the neighborhood or result in substantial environmental damage or disturbance, given the mitigation measures outlined in the Mitigation Monitoring and Reporting Program. Staff recommends that the Planning Commission adopt the following findings:

1. In accordance with Title 17 of the Daly City Municipal Code, as well as applicable State zoning enabling legislation, the Planning Commission conducted a public hearing on December 3, 2024. Legal public notice of said hearing was provided by newspaper publication on November 23, 2024, posting and via first class mailing to property owners within 300 feet of the site;
2. An amendment to the General Plan from Office Commercial to Industrial use and Zoning designation from Light Commercial to Heavy Commercial is required which permits the storage of materials and equipment in open areas and is hereby found to be appropriate, and in the best interest of the public health, safety and general welfare of the community.
3. The Development Agreement is consistent and in conformance with the Daly City General Plan.
4. The subject site is situated in an area characterized by parking lots for commercial uses such as the Cow Place Event Center and the Bay Club Tennis and Pickleball parking lots to the north and east, an open space area with tall trees to the west and south and the Cow Palace parking lot to the east. Given the size and shape of the subject property, together with adjacent parking lot land uses for the Cow Palace and the Bay Club Tennis and Pickleball. The proposed general plan amendment to Industrial from Commercial and zone change to Heavy Commercial use to allow a Battery Energy Storage Facility in the existing vacant lot, is a compatible with the existing adjacent parking lot uses.
5. The Planning Commission further finds that it is in the public interest to allow the construction of a battery energy storage system and that the construction of such battery energy storage provides a critical need in the community for storage of excess solar power generated electricity and for resupply by a transmission line to the nearby PG&E power substation and grid as needed. The proposed use is compatible with the directly adjacent land uses surrounding the subject site to the north consisting of mixed use (Cow Palace) Industrial land use (PG&E Substation) to the east, Open Space to the south and Single-Family Residential to the west. According to the applicant, the energy storage system will support grid reliability and help maximize the use of clean, renewable energy sources,

enhance the stability and resilience of the local power grid and reduce reliance on fossil fuels.

6. The proposed project has been reviewed by various City departments, including the Fire Department, the Building Division, the Engineering Division, and the Department of Water and Wastewater Resources. Each of these agencies, comprised of persons qualified to render professional opinions concerning the project, have confirmed that the proposed project poses no threat to the public health, safety, and welfare. There furthermore exists no evidence in the public record to demonstrate that the project would be detrimental to the public health, safety, and general welfare.
7. General architectural considerations have been incorporated in order to ensure the compatibility of this development with its design concept and the character of other adjacent buildings. These considerations include, but are not limited to, the character, scale and quality of the design, the architectural relationship with the site and other structures, building materials, and colors.
8. The Planning Commission has reviewed the proposal under the requirements of the California Environmental Quality Act (CEQA) and based on the Initial Study prepared by a qualified professional consultant, has determined that there is no substantial evidence, in light of the whole record, that the project may have a significant impact, given the mitigation measures outlined in the Mitigation Monitoring and Reporting Program prepared for the project. Therefore, a Mitigated Negative Declaration is appropriate for the project in accordance with the California Environmental Quality Act.
9. The project will minimize the risk to existing public improvements and adjacent private property by providing controlled stormwater runoff from the site to City facilities in full compliance with Order R-2 NPDES Permit No. CAS612008 and Order No. 2010-0014-DWQ, NPDES No. CAS000002, the statewide National Pollutant Discharge Elimination System (NPDES) General Construction Activity Storm Water Permit.

Conditions of Approval

Staff recommends the Planning Commission approve the General Plan Amendment (GP-11-22-015959), Zone Change (ZC-11-22-015960), Use Permit (UPR-11-22-015962) and Design Review (DR-11-22-015961) subject to the following conditions and Daly City General Conditions of Approval. Minor deviations from the conditions of approval may be approved by the Planning Division. Significant deviations will require review and approval by the Planning Commission and City Council.

A . DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT

General

1. The applicant shall adhere to the Development Agreement terms between cormorant and Daly City including the project term, benefits to City/Public, and Regulatory

Considerations for Cormorant, including vested rights, use permit approval and project specific Encroachment, Maintenance, and Removal Agreement (EMRA) and Right-of-Way (ROW) Encroachment Authorization to facilitate title insurance coverage and financing.

2. All buildings, any applicable retaining walls, fences, and trash enclosure materials and colors must match those as approved on the plans.

Building and Site Design

3. The climbing deterrent concrete wall and substation enclosure shall match the approved plans. Any modification shall be subject to review and approval by City staff during building permit submittal.
4. The applicant shall work with City staff at building permit plan submittal on streetscape improvements for the intersection of Carter Street with the driveway entrance to the project site.

Landscaping

5. A detailed landscape and irrigation plan shall be submitted at the time of Building Permit submittal.

Stormwater Treatment

6. The applicant shall develop and submit a stormwater management plan that illustrates full compliance with Section C.3 of Order R-2-2009-0074 NPDES Permit No. CAS612008. The project must comply with Order No. 2010-0014-DWQ, NPDES No. CAS000002, the statewide National Pollutant Discharge Elimination System (NPDES) General Construction Activity Storm Water Permit.
7. The applicant shall receive approval of the stormwater management plan from a third-party reviewer appointed by the City prior to building permit submittal. The applicant shall pay the entire cost of the third-party reviewer.
8. All stormwater treatment facilities shall be inspected during construction to ensure eventual compliance with the stormwater management plan. The applicant shall pay the entire cost of these inspections.
9. The applicant shall enter into an Operation and Maintenance Agreement with the City to ensure long-term maintenance and servicing by the Property Owner of stormwater site design and treatment control measures according to the approved Operation and Maintenance Plan.

10. The applicant shall arrange and pay for final inspection of installed treatment measure by the City's Special Inspector within 45 days of installation or project construction completion, whichever comes first.

B. BUILDING DIVISION

11. Hours of operation for all construction work associated with the subject project shall be Monday through Friday between the hours of 8:00 am to 5:00 pm. For work in City public right-of-way, the construction hours would be limited to Monday through Friday between the hours of 9:00 am to 3:00 pm. If the project's general contractor wishes to work outside the allowable hours, on weekends, or on City holidays, on a regular basis, this must be approved in advance by the City Council and the City Manager. For special requests on a limited basis, the Building Official can approve alternate construction hours for the project not within or impacting the ROW. The applicant will be making only special requests, on a limited basis, to the Building Official to work on construction outside of allowable hours, not within or impacting the ROW. The Building Official must be notified and approval given, in writing, in advance of said work.
12. At Building Permit Submittal, the applicant shall apply for a Building Permit for Site Improvement work to review and inspect all Building Code-related items. This includes structural, architectural, accessibility, and et. cetera. The Building Division review will not occur under the Site Improvement Permit.

C. PUBLIC WORKS - ENGINEERING DIVISION

13. Any on site access roads shall be impervious or shall be a pervious material that does not generate dust in accordance with the MRP. Areas in between batteries not accessible to vehicles shall be treated similarly and shall not generate dust.
14. A city standard driveway and frontage improvements shall be installed on Carter Street.
15. Any access roads shall be upgraded to meet private street standards, per Daly City Standard Detail S-1.
16. Grading exceeding 50 cubic yards shall require approval of plans and a grading permit. A licensed Civil Engineer shall prepare any grading plans and erosion control plans in conformance with a soil report prepared by a licensed soil engineer or geologist in compliance with NPDES requirements prior to any development on the property.
17. The applicant shall comply with the applicable requirements of the City of Daly City Standard Details and Specifications.
18. An encroachment permit shall be required to be issued by the Public Works Department for all work proposed within the public right-of-way.

19. Following new utility installation, the applicant shall replace areas of street pavement, sidewalk, curb, and gutter damaged by construction to current City standard details and specifications.
20. Provide erosion and storm water pollution plan incorporating the best management practices, including operation and maintenance provisions per the requirements applicable at the time of construction permit application. During the rainy season between October 1st to April 30th, the developer shall submit a revised erosion control plan as necessary/as requested.
21. Resubmit hydraulic calculations for storm water retention using the 2-hr duration, 10-year storm in accordance with City standards. The development shall provide on-site drainage detention to limit the rate of flow to the pre-development rate.
22. The project shall not install any utility pole, including the Point of Change of Ownership (POCO) pole, within the public right-of-way.
23. The applicant shall provide documentation the property owner of APN 005-050-270 approves the driveway improvements and utility installation proposed in the access easement prior to submittal of the encroachment permit application.

D. DEPARTMENT OF WATER AND WASTEWATER RESOURCES

24. Applicant shall conduct a Transmission Line Study, as approved by the Department of Water and Wastewater (DWR), to evaluate potential impacts on DWR utilities due to the installation of the Project's generator tie transmission line (Transmission Line) within the City's public Right-of-Way. Based on the results of the Transmission Line Study, Applicant shall implement any combination of the following mitigation measures prior to issuance of any Transmission Line Building Permits:
 - a. Applicant must implement a design that provides adequate cathodic protection of the DWR utilities, as determined by the results of the Transmission Line Study.
 - b. Applicant must enter into a Long-Term Maintenance Agreement with the DWR. This agreement shall be approved by the DWR and will define any extra-ordinary maintenance that are required as a direct result of impacts by the Project to DWR utilities.
 - c. Transmission Line design will meet a minimum 5-foot radial separation requirement from all DWR utilities and infrastructure, unless otherwise determined by the Transmission Line Study.
 - d. Applicant will confirm separation and crossing requirements with Daly City Public Works, Bayshore Sanitary District, and any other relevant Authority Having Jurisdiction (AHJ).
 - e. Any alternate construction methods or substantial deviations to the initial design determined to be required as a result of the Transmission Line Study must be approved by the DWR and any other relevant AHJ's.

25. All construction within the city right of way shall follow the City of Daly City Standard Details and Specifications.
26. An encroachment permit shall be required for all work proposed within the public right-of-way.
27. The stormwater retention system shall be designed to prevent any pollutants that can be generated from the failure of the battery system, from entering the groundwater, or the city storm drain system.

E. FIRE DEPARTMENT

28. The specific Fire and Building Code requirements for this project will be determined upon submittal and review of the completed and approved construction plans. Work shall not commence without approved plans. All inspections require a copy of the "APPROVED" plans and job card available at the job site.
29. The project applicant shall comply with all relevant CFC, CBC and NFPA regulations, as well as Daly City Municipal Code.
30. Fire Department access shall conform to NCFA requirements.
31. Fire flow is adequate for the fire protection requirements per CFC Appendix B.
32. Stationary Energy Storage System Permit required. Applicant shall submit plans to NCFA under separate fire permit.
33. Knox Key Switch Over Ride required. Applicant shall apply for approved hardware at NCFA Administration.
34. Portable fire extinguishers(s) are required. Mount fire extinguishers 3-5 feet above grade.
35. Illuminated address identification is required.
36. Utility disconnect location and identification is required.

F. POLICE DEPARTMENT

37. Security cameras shall be required to be installed around the perimeter of the site. Access to the site will be controlled by gates on the property only, opened by a code. Emergency access will be provided by an on-site Knox Box as well as the gate code.

38. As part of the Fire Safety Plan, the applicant shall provide First Responder Training to both the Police Department and Fire Department.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission take the following actions:

1. Adopt the Findings as outlined herein;
2. Recommend that the City Council adopt the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program prepared for the project; and
3. Find that the Development Agreement is consistent with the General Plan; and
4. Recommend that the City Council approve the General Plan Amendment (GPA-11-22-015959), Zone Change (ZC-11-22-015960), Use Permit (UPR-11-22-015962) and Design Review (DR-11-22-015961), subject to the Conditions of Approval identified herein.

Staff is available to provide any additional information desired by the Planning Commissioners.

Respectfully submitted,



Sam Fielding
Associate Planner



Tatum Mothershead
Director of Economic and Community
Development

Attachments

Attachment A – Site Location
Attachment B – Project Description
Attachment C – Project Plans
Attachment D – Fiscal Review Analysis
Attachment E – Community Benefits
Attachment F – Development Agreement Draft
Attachment G – Initial Study - Mitigated Negative Declaration
Attachment H – Mitigation Monitoring and Reporting Program



VICINITY MAP

FIGURE 2.8-2

CORMORANT ENERGY STORAGE PROJECT

Project Narrative/Written Description of Request

Prepared for:

Cormorant Energy Storage, LLC

Prepared by:

DUDEK

OCTOBER 2024

Table of Contents

<u>SECTION</u>	<u>PAGE NO.</u>
ACRONYMS AND ABBREVIATIONS	III
1 PROJECT DESCRIPTION	1
1.1 Introduction.....	1
1.2 Project Location.....	1
1.3 Project Objectives.....	1
1.4 Environmental Setting.....	2
1.5 Project Characteristics	3
1.6 Construction.....	8
1.7 Operations and Maintenance Activities	11
1.8 Decommissioning.....	13
2 REFERENCES CITED.....	15
APPENDIX	
A Energy Storage Equipment Photos	
FIGURES	
1-1 Project Vicinity	17
1-2 Project Site	19
2-1 Transmission Line Routes 1 and 1A	21
2-3 Transmission Line Route 3.....	23
2-4 Transmission Line POCO Option 1	25
2-5 Transmission Line POCO Option 2	27
2-6 Transmission Line POCO Option 3	29
TABLES	
1-1 Site Grading and Preparation Equipment.....	10

INTENTIONALLY LEFT BLANK

Acronyms and Abbreviations

Acronym	Definition
AC	alternating current
BESS	battery energy storage system
BMP	best management practice
CAISO	California Independent System Operator
CMA	capacity maintenance augmentation
DC	direct current
FE	federally endangered
FP	fully protected
FT	federally threatened
gen-tie line	generation transmission line
kV	kilovolt
MV	medium-voltage
NFPA	National Fire Protection Association
PG&E	Pacific Gas & Electric Company
POCO	Point of Change of Ownership
SCADA	supervisory control and data acquisition
SE	state endangered
TSP	tubular steel pole
USFWS	U.S. Fish and Wildlife Service

INTENTIONALLY LEFT BLANK

1 Project Description

1.1 Introduction

This project narrative and written description of request has been prepared by Cormorant Energy Storage, LLC (Applicant), for the City of Daly City (City), which is the lead agency, for the proposed approximately 250-megawatt battery energy storage system (BESS). The project would be located on Assessor's Parcel Number 005-050-020, which comprises approximately 11.5 acres of previously undeveloped land in the City of Daly City, California.

The proposed Cormorant Energy Storage Project (project) will be composed of lithium-ion batteries installed in racks, inverters, medium-voltage (MV) transformers, switchgear, a collector substation, and other associated equipment to interconnect into the Pacific Gas & Electric Company (PG&E) Martin Substation (point of interconnection). The batteries will be installed either in purpose-built enclosures. The enclosures will have battery storage racks, with relay and communications systems for automated monitoring and managing of the batteries to ensure design performance. A battery management system will be provided to control the charging/discharging of the batteries, along with temperature monitoring and control of the individual battery cell temperature with an integrated cooling system. Batteries operate with direct current (DC) electricity, which must be converted to alternating current (AC) for compatibility with the existing electric grid. Power inverters to convert between AC and DC, along with transformers to step up the voltage, will be included.

The proposed facility will provide a service to the regional electric grid by receiving energy (charging) from the PG&E electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the point of interconnection. Following construction, the proposed use will not create emissions to air, will not require sanitary facilities, and will not require water.

1.2 Project Location

The subject property consists of approximately 11.5 acres in the City of Daly City, California (see Figure 1-1, Project Vicinity). The project site is located near the southeast corner of the intersection of Carter Street and Geneva Avenue (see Figure 1-2, Project Site). It is approximately 1.4 miles from the nearest highway interchange (U.S. Highway 101).

The project site is currently undeveloped (used for vehicle and building material storage) and surrounded by a mix of land uses. State-owned land with an arena and event center (Cow Palace) is located to the north and east; open space is located directly to the south with residential subdivisions located farther south across Martin Street; and residential subdivisions are located across Carter Street to the west. The PG&E Martin Substation, the project's point of interconnection, is located approximately 0.5 miles east of the project site.

1.3 Project Objectives

The proposed project will provide the City of Daly City and the State of California with a reliable and economically attractive development to receive, store, and discharge electricity from the California Independent System Operator

(CAISO) controlled electric grid, including renewable energy produced by existing solar and wind resources in the region. Construction of the project will accomplish the following:

- Establish a new energy storage facility to reliably capture and manage renewable energy in an economically feasible and commercially financeable manner.
- Provide economic benefit to the City, the region, and the state, through construction jobs, property and sales taxes, construction and maintenance services, and increased energy efficiency and reliability.
- Use a proven and established energy storage technology that is efficient, has low maintenance requirements, and is recyclable.
- Assist California in meeting its greenhouse gas emissions reduction goals by 2020 and 2030 as required by the California Global Warming Solutions Act (Assembly Bill 32), as amended by Senate Bill 32 in 2016.
- Assist California in achieving its switch away from fossil-fueled generation by allowing renewables to be stored and discharged back to the market when necessary.

1.4 Environmental Setting

Existing Zoning

The project site is designated as Light Commercial (C1) under the City's zoning map (City of Daly City 2020). The Daly City 2030 General Plan (General Plan) Land Use chapter identifies the project site as Retail and Office (C-RO) (City of Daly City 2013a).

Biological Resources

Dudek reviewed California Department of Fish and Wildlife records (including the California Natural Diversity Database [CDFW 2020]) and federally designated critical habitat from the U.S. Fish and Wildlife Service (USFWS 2020a) within a 10-mile radius of the project site to determine the potential for special-status wildlife and plant species to occur in the vicinity of the project site. Dudek conducted a desktop-level review of the project site. A number of historical occurrences of federally and state-listed species have been recorded within the project vicinity (i.e., the San Francisco South quadrant): callipe silverspot butterfly (*Speyeria callippe callippe*; federally endangered [FE]), mission blue butterfly (*Plebejus icarioides missionensis*; FE), San Francisco gartersnake (*Thamnophis sirtalis tetrataenia*; FE, state endangered [SE], fully protected [FP]), California red-legged frog (*Rana draytonii*; federally threatened [FT], state species of special concern), California Ridgway's rail (*Rallus obsoletus obsoletus*; FE, SE, FP), tidewater goby (*Eucyclogobius newberryi*; FE), San Bruno elfin butterfly (*Callophrys mossii bayensis*; FE), and bay checkerspot butterfly (*Euphydryas editha bayensis*; FT), as well as eight federally and/or state-listed plant species. An occurrence of American peregrine falcon (*Falco peregrinus anatum*; FP) has also been recorded. Within 10 miles of the project site on the San Francisco peninsula, there are recorded historic occurrences of approximately 18 federally/state-listed wildlife species or other special-status wildlife species, and 11 federally/state-listed plant species or other special-status plant species. The project site is located just north of the San Bruno Mountain Habitat Conservation Plan limits (County of San Mateo Parks Department 2020).

No USFWS-designated critical habitat is designated within the project boundary. USFWS-designated critical habitat for Franciscan manzanita (*Arctostaphylos franciscana*; FE) is located approximately 0.25 miles north of the project site across Geneva Avenue near John McLaren Park. According to the USFWS Information for Planning and

Consultation database (USFWS 2020b), a number of federally listed species are identified as having potential to occur in the vicinity of the project site: salt marsh harvest mouse (*Reithrodontomys raviventris*; FE), San Francisco gartersnake (FE), California red-legged frog (FT), bay checkerspot butterfly (FT), callippe silverspot butterfly (FE), mission blue butterfly (FE), Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*; FE), and San Bruno elfin butterfly (FE), as well as 6 plant species and 24 migratory bird species.

Cultural Resources

As discussed in the General Plan Resource Management Element, archaeological resources in the City consist primarily of the remains of the Ohlone Indian Tribe that inhabited the area. However, the project site is not located near either of the Tribe's villages near Colma and San Bruno Creeks or the seasonal village at Mussel Rock.

There are no sites in the City listed on the National Register of Historic Places and no designated state or local historical resources, such as older structures or residential structures of significance, are located within the project site (City of Daly City 2013b). A records search conducted during preparation of the General Plan indicated that the adjacent Cow Palace is a listed resource in the California Register of Historical Resources and is eligible for the National Register of Historic Places. As detailed in the General Plan Environmental Impact Report, the Cow Palace property was constructed in 1941 as part of the federal government's Works Progress Administration, which employed millions of Americans during the Great Depression. Today, it is best known as a music and performance venue (City of Daly City 2013b).

Geology and Soils

An Alquist-Priolo Earthquake Fault Zone traverses the southwestern-most limit of the City and includes fault traces associated with the San Andrea Fault (CDOC 2020). The General Plan Safety Element also notes that the San Andreas Fault can be observed at the Mussel Rock area of the City, where the greatest potential for surface rupture in the City exists (City of Daly City 2013a). The fault zone is approximately 4.4 miles southwest of the project site.

Noise

The project site is located on a site used for vehicle and material storage and is bounded by residential areas to the west, state-owned land used for events and entertainment to the north and east, and open space to the south, and residential areas farther south. Carter Road is located directly to the east of the site and Geneva Avenue is located north of the site. Consequently, noise sources affecting noise levels on the project site and in the vicinity include event noise, traffic noise, and trucking noise. The City's noise standards are included in Chapter 9.22 of the Daly City Municipal Code (City of Daly City 2003).

1.5 Project Characteristics

The project will include the development of energy storage facilities and associated infrastructure. The proposed BESS will be housed in enclosures that will consist of modular battery units. Power released or captured by the proposed project will be transferred to and from the PG&E Martin Substation via a generation transmission (gen-tie) line (see Figures 2-1 ad -2-3, Transmission Line Routes). The project will consist of lithium-ion batteries, which will be installed in racks; inverters; MV transformers; switchgear; a collector substation; and other associated

equipment. The project will include the following components, which are described in more detail following the bulleted list:

- **Energy Storage Enclosures:** Energy storage enclosures and appurtenances will be constructed that will provide energy storage capacity and dispatch for the electric grid.
- **Power Inverters and Transformers:** Power inverters to convert between AC and DC will be included, along with transformers that will step up the voltage.
- **Collector Substation:** A collector substation would be installed that would include the open rack, air insulated switch gear, and the main power transformer to step up from 34.5 kilovolts (kV) to 115 kV.
- **Telecommunication Facilities:** Telecommunication equipment, including underground and/or overhead fiber optics or supervisory control and data acquisition (SCADA), will be installed.
- **Site Access and Security:** On-site access driveways, perimeter security fencing, and nighttime directional lighting will be provided for the project.
- **Gen-Tie Line:** A 115 kV gen-tie line will be constructed to transfer power between the PG&E Martin Substation and the proposed project. The gen-tie line route options being considered at this time are shown on Figures 2-1 and 2-3.

The facilities are intended to operate year-round and will be available to receive or deliver energy 24 hours a day and 365 days a year.

Pacific Gas & Electric Company Facility Upgrades

PG&E has identified a need for the project to contribute its fair-share payment toward utility grid system upgrades that are planned to be completed within PG&E's service territory. In addition, PG&E has identified the following improvements to be completed by PG&E within the existing disturbed footprint of PG&E's Martin Substation:

- Install line relay package, voltage transformers, dead-end, underground riser, line switch, and fiber terminations;
- Complete breaker and a half (BAAH) bay, install two circuit breakers;
- Construction of a 115kV transmission line from the POCO to the termination point as follows:
 - Installation of a Tubular Steel Pole (TSP) involves these steps: staking the pole location; flagging the work area; mark and locate existing underground infrastructure in the area; installing silt fencing (if required); preparing the crane pad (if required); excavating the hole; installing forms, rebar, and anchor bolts; pouring concrete; removing forms; placing gravel around and grooming the base area; installing the new pole; and spreading or removing the excess soil onsite and trucking other construction materials offsite for disposal. A TSP will have concrete pier foundations that are approximately 5 to 7 feet in diameter and from approximately 15 to 30 feet deep.
 - Drilling and excavation of a hole for a TSP will use a hole auger, backhoe, dump truck, and crew truck—all of which will access pole location via existing paved road. A hole auger consists of an auger mounted on a heavy truck chassis or piece of track equipment that will be used to drill holes.

- A boom truck consisting of a small crane mounted on a flatbed truck will be used to haul foundation forms, anchor bolts, rebar, and pole structure to the TSP location. The boom truck also will be used to place foundation forms, anchor bolts, and rebar in place prior to pouring of concrete for the foundation—and to remove the forms following completion of the foundation.
- A concrete truck consisting of a four-wheel drive mixer capable of delivering 8 yards of concrete will be used to deliver and pour concrete for the TSP foundation. A backhoe will be used to place gravel around the TSP foundation after formwork has been removed and to groom the area immediately surrounding all pole installations.
- A crane will be used to place TSPs on the foundations. Aerial lift trucks will be used to install conductors. Crew trucks will be used to transport the crew, their hand tools, and other minor materials to and from pole location.
- The Q1552 Cormorant Interconnection 115 kV Project will create the new Cormorant- Martin 115 kV line of approximately 0.25 mile of new aluminum overhead conductor and approximately 0.05 mile of underground insulated cable on PG&E property that will connect a new substation dead-end structure on the western side of PG&E's existing Martin Substation to a new battery energy storage station that is to be installed and owned by the Applicant, west of the existing Martin substation.
- The new PG&E owned and maintained underground segment of the new Cormorant - Martin 115 kV line will consist of approximately 0.05 mile of underground insulated cable from the west side of the existing PG&E Martin Substation and going to the fourth bay where it will be terminated to a riser pole. The cable will either be installed in a cable bus ducted or in a trench.
- The new PG&E owned and maintained overhead segment of the new Cormorant - Martin 115 kV line will be supported by up to approximately nine new TSP structures, including two underground-to-overhead riser poles with a maximum height approximately 100' tall. All new 115 kV structures will be self-supporting and have drilled shaft concrete foundations. One of the new TSP structures will act as a Point of Change of Ownership (POCO) structure and have a manual switch, designed, and installed by PG&E. The POCO structure will be spotted west of the PG&E Martin Service Center. The POCO structure's location has been coordinated with the customer, which will connect its conductor to the POCO pole.

Battery Energy Storage System Enclosures

The energy storage batteries will be housed in purpose-built enclosures (see Appendix A). The BESS will be designed and installed in conformance with the nationally recognized National Fire Protection Association (NFPA) 855 Standard for the Installation of Stationary Energy Storage Systems, along with all applicable state and City fire protection requirements. The BESS will be unstaffed, with remote operational control and periodic inspections and maintenance performed as necessary.

Batteries and Racks

The lithium-ion batteries will be housed in racks similar to common computer server racks (see Appendix A). The racks are typically made of aluminum, but sometimes may be composed of steel. The lithium-ion technology is

considered one of the safest, most easily understood, and most efficient methods of energy storage on the market. The proposed facility will use a lithium-ion technology that has a long lifespan and boasts superior safety and stability characteristics. The battery racks will be designed and installed in accordance with the local seismic design requirements.

Fire Protection System

The Applicant intends to use battery storage systems that are NFPA 855 Code compliant and UL certified and that include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system will be installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules.

North County Fire Authority (the authority having jurisdiction) will have review and approval rights for the facility fire protection and suppression plans. The review/approval by the authority having jurisdiction will cover all applicable design, construction, and testing requirements of the NFPA 855 Code.

Generation Transmission Line

A 115 kV gen-tie line will be constructed that will transfer power to and from the proposed project and the PG&E POCO at Martin Substation. The gen-tie line route options being considered at this time are shown on Figures 2-1 and 2-3 and are described as follows.

Route alternative 1 would consist of a 1.2-mile-long underground line running from the proposed on-site collector substation to the Point of Change of Ownership (POCO) at the edge of the existing PG&E Martin substation. The line would exit the Project site to the west, onto Carter Street, and would follow Carter Street southerly to the intersection with Martin Street. It would then turn easterly and follow Martin Street to the intersection with Schwerin Street. It would then turn northerly and follow Schwerin Street to the POCO.

Route alternative 1A would consist of a 1.2-mile-long underground line running from the proposed on-site collector substation to the POCO at the edge of the existing PG&E Martin substation. The line would exit the Project site to the west, onto Carter Street, and would follow Carter Street southerly to the intersection with Martin Street. It would then turn easterly and follow Martin Street to the intersection with Oriente Street. It would then turn northerly and follow Oriente Street to the intersection with Otilla Street. It would then turn easterly and follow Otilla Street to the intersection with Schwerin Street. It would then turn southerly and follow Schwerin Street to the POCO.

Route alternative 3 would consist of a 0.7-mile-long underground line running from the proposed on-site collector substation to the POCO at the edge of the existing PG&E Martin substation. The line would exit the Project site to the northeast, onto the Cow Palace property, and would then traverse along the Cow Palace parking lot, around the north end of the existing Cow Palace building, running parallel to Geneva Avenue, and then turning southerly and running along the eastern edge of the Cow Palace building. It would then turn easterly and follow Otilla Street to the intersection with Schwerin Street. It would then turn southerly and follow Schwerin Street to the POCO.

At the transition from City streets to PG&E property, the Point of Change of Ownership (POCO) will occur. This POCO will include an above ground riser pole where the underground transmission line will come above ground and then transfer to another riser pole immediately on PG&E property. Three options are being considered for the POCO location, and these options are shown in Figures 2-4, 2-5 and 2-6. Upon entering the PG&E property, the proposed gen-tie line will continue either underground or overhead toward the substation to the final point of physical interconnection.

Outdoor Electrical Equipment

MV transformers and additional electrical equipment will be installed outside the BESS enclosures. The onsite collector substation will be located on the east side of the project site on approximately 1.3 acres. Components will include a main power transformer, control enclosure, and switchgear. Underground wires and cabling will run from the battery cable collection box (inside the enclosure) to a concrete pad housing the inverter and transformer. From the MV transformer, cabling would be run to the collector substation. All outside electrical equipment will be housed in the appropriate National Electrical Manufacturers Association (NEMA) rated enclosures and screened from view, to the extent possible, on all sides. All outside electrical collector cabling will be run underground.

Inverters

The Applicant uses only industry-standard, nationally (and internationally) recognized equipment. These inverters are unattended, stand-alone units that operate in all conditions. They operate in both a charge mode and a discharge mode. They are UL listed for bi-directional use and are monitored and controlled remotely. There will be on-site disconnects in the case of an emergency or unscheduled maintenance. They are robust in their design and are designed to last more than 30 years with proper preventive maintenance, scheduled maintenance, and occasional major overhauls.

Telecommunication Facilities

The project will also require telecommunication facilities to meet the communication requirements for interconnecting and communicating with the PG&E/CAISO facilities and to support remote project operations monitoring. To provide for communication with PG&E facilities, a fiber-optic cable will be used to connect the project site switchyard with the PG&E point of interconnection. Utility interconnection regulations require the installation of a second, separate, redundant fiber-optic cable. The primary fiber-optic cable will be installed directly adjacent to and along with the generation transmission line. The redundant fiber-optic cable will be installed in a separate trench, parallel with and approximately 10' distant from the generation transmission line, within the public right of way.

The project will use local exchange carrier services for telecommunication to support remote monitoring requirements. The project will connect to telecommunication fiber-optic lines owned and managed by local telecommunication providers.

The SCADA system is critical to the CAISO and PG&E utility interconnection and for the proper operation and maintenance of the project. The SCADA system uses proprietary software; a fiber-optic transmission system; a telephone, radio, and/or microwave communication network; and other means of communication such as radio links and phase loop communication systems. The SCADA system functions as a remote start, stop, reset, and tag out for the facility, thus minimizing the labor and site diagnostic information generated from the panels. The SCADA

system will also control the substation, allowing for fully centralized operation of the project to meet all CAISO and utility interconnection requirements.

Site Access and Security

The project site can be accessed from various roadways. U.S. Highway 101 is the largest highway in the area and provides regional access to the project site from the north and south. Access to the project site will be provided via the existing Carter Street. No new roads will be required to provide access to the project site.

All fence installation requirements will be evaluated, and the best-fit scenario will be incorporated into the project site based on the City's final determination. Fences will be installed around the perimeter of the project site for safety and security purposes. The fencing will remain for the life of the project.

Permanent motion-sensitive, directional security lights will be installed to provide adequate illumination around the substation area and points of ingress/egress. All lighting will be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. Security cameras will be placed on site and monitored 7 days a week and 24 hours per day.

1.6 Construction

Schedule and Workforce

The physical construction/site activities of the proposed project will last up to 12 months. Construction activities for the proposed project generally fall into three main categories: (1) site preparation; (2) system installation; and (3) testing, commissioning, and cleanup.

The on-site construction workforce is expected to peak at between 75 and 100 individuals; however, the average daily workforce on site during construction is expected to be 60 individuals, comprising construction, supervisory, support, and construction management personnel. It is anticipated that the construction workforce will commute to the site each day from local communities and report to the designated construction staging yards prior to the beginning of each workday. Construction staff not drawn from the local labor pool will stay in local hotels in the City or other local communities. Deliveries of equipment and materials will generate an estimated five to seven round-trips per day during peak construction periods.

The proposed project will be constructed by several specialized construction contractors. Construction will primarily occur during daylight hours, Monday through Saturday between 7:00 a.m. and 6:00 p.m., as required to meet the construction schedule. Any construction work performed outside the normal work schedule will be coordinated with the appropriate agencies and will conform to City regulations.

Site Access

The primary Project construction access shall be via the existing 60' wide access easement connecting the Project to Carter Street. In addition, a secondary access along the northerly Project boundary with the Cow Palace property will provide alternate access during construction.

Site Grading and Earthwork

Construction activities will be expected to include excavation and grading of the project site. Site preparation and construction will occur in accordance with all federal, state, and City zoning codes and requirements. Noise-generating construction activities will be limited to Monday through Saturday between 7:00 a.m. and 6:00 p.m. All stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels will be located away from noise receptors to the extent feasible. The contractor will conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed established noise levels.

All applicable federal, state, and local requirements and best management practices (BMPs) will be incorporated into the construction activities for the project site. Beginning work on the project site will involve preparing the land for installation of the BESS-related infrastructure, access driveways, and temporary construction staging areas. The construction contractor will be required to incorporate BMPs consistent with the City zoning ordinance and with guidelines provided in the California Stormwater Quality Association's Construction BMP Handbook (CASQA 2019), as well as a soil erosion and sedimentation control plan to reduce potential impacts related to construction of the proposed project. Prior to initial construction mobilization, pre-construction surveys will be performed and sediment and erosion controls will be installed in accordance with state and City guidelines. Stabilized construction entrances and exits will be installed at driveways to reduce tracking of sediment onto adjacent public roadways.

Site preparation will be consistent with City BMPs and the Bay Area Air Quality Management District rules for dust control (BAAQMD 2018). Site preparation will involve the removal and proper disposal of existing debris that would unduly interfere with project construction or the health and safety of on-site personnel. Dust-minimizing techniques will be employed, such as placement of wind control fencing, application of water, and application of dust suppressants. Conventional grading will be performed throughout the project site but minimized to the maximum extent possible to reduce unnecessary soil movement that may result in dust. Earthworks scrapers, excavators, dozers, water trucks, paddlewheels, haul vehicles, and graders may all be used to perform grading. Land-leveling equipment, such as a smooth steel drum roller, will be used to even the surface of the ground and to compact the upper layer of soil to a value recommended by a geotechnical engineer for structural support. Soil movement from grading will be balanced on the site.

Trenching will be required for placement of underground electrical and communication lines, and may include the use of trenchers, backhoes, excavators, haul vehicles, compaction equipment, and water trucks. After preparation of the site, the pads for enclosures, equipment enclosures, and equipment vaults will be prepared per geotechnical engineer recommendations. The switchyard area will have a grounding grid installed and will be covered with aggregate surfacing for safe operation.

During this work, multiple crews will be working on the site with various equipment and vehicles, including vehicles for transporting the batteries and other equipment. As the BESS enclosures are constructed, the electrical collection and communication systems will be installed. The wiring will connect to the appropriate electrical and

communication terminations and the circuits will be checked and commissioned prior to operation. It is estimated that site grading and preparation will require the equipment listed in Table 1-1.

Table 1-1. Site Grading and Preparation Equipment

Equipment Type	Preliminary Quantity
Bulldozer (e.g., CAT D7)	1
Grader (e.g., CAT D7)	1
Scraper (15–30 cubic yard)	2
Water truck (3,000–5,000 gallon)	1
Self-propelled compactor	1
Dump truck	1
Tractor/loader/backhoe (e.g., Case 590)	1
Bobcat	1

Construction Water Use

During construction of the proposed project, water will be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and grading. Dust-control water may be used during ingress and egress of on-site construction vehicle equipment traffic and during the construction of the energy storage equipment. A sanitary water supply will not be required during construction, because restroom facilities will be provided by portable units to be serviced by licensed providers.

During the 12-month construction period, the water used is anticipated to be supplied by purchasing water from the local water purveyor.

Solid and Nonhazardous Waste

The project site will produce a small amount of solid waste from construction activities. This may include paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty nonhazardous containers, and vegetation waste. These wastes will be segregated, where practical, for recycling. Non-recyclable wastes will be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III (nonhazardous waste) landfill.

Hazardous Materials

The hazardous materials used for construction will be typical of most construction projects of this type. Materials will include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliatives, herbicides, and welding materials/supplies. A hazardous materials business plan will be provided to the City. The hazardous materials business plan will include a complete list of all materials used on site and information regarding how the materials will be transported and in what form they will be used. This information will be recorded to maintain safety and prevent possible environmental contamination or worker exposure. During project construction, material safety data sheets for all applicable materials present at the site will be made readily available to on-site personnel.

Hazardous Waste

Small quantities of hazardous wastes will most likely be generated over the course of construction. These wastes may include waste paint, spent construction solvents, waste cleaners, waste oil, oily rags, waste batteries, and spent welding materials. Workers will be trained to properly identify and handle all hazardous materials. Hazardous waste will be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped off site for recycling or disposal will be transported by a licensed and permitted hazardous waste hauler.

Generation Transmission Line

Construction of the 115 kV gen-tie line will take approximately 3 months to complete. Depending upon the final route chosen, the gen-tie line will be placed primarily within the City right-of-way in developed areas, or along state lands near the Cow Palace. The workspace will be generally limited to within the existing road right-of-way and/or franchise position, and lands along the edges of the Cow Palace property.

At the transition from City streets to PG&E property, the Point of Change of Ownership (POCO) will occur. This POCO will include an above ground riser pole where the underground transmission line will come above ground and then transfer to another riser pole immediately on PG&E property. Upon entering the PG&E property, the proposed gen-tie line may go underground or overhead toward the substation to the final point of physical interconnection. The placement of this line may require excavation and trenching through the PG&E property for line placement or pole foundations. This property is known to contain contaminated soils which may be classified as hazardous material. PG&E has significant experience working on contaminated sites and placing facilities in and on these sites. PG&E will implement their standard practices and procedures to manage the placement of this gen-tie line and the proper disposal of any contaminated excavated materials, if encountered.

Phasing

The proposed project will be constructed in two phases. The first phase will include proposed offsite improvements, including entirety of the proposed generation transmission line and telecommunications lines. Regarding onsite improvements, the initial phase will include all perimeter fencing, site grading, access road construction, and stormwater facilities. This first phase will also include placement of approximately 75% of the proposed BESS modules and related medium voltage collection lines, medium voltage transformers, and inverters; and one of the two proposed high voltage transformers.

The second phase of construction is anticipated to be completed approximately one to six years after the initial phase of construction is completed, and would include installation of the remaining 25% of the proposed BESS modules and related medium voltage collection lines, medium voltage transformers, and inverters; and the second one of the two proposed high voltage transformers.

1.7 Operations and Maintenance Activities

Typical operations and maintenance activities that will occur on the project site during operation include, but are not limited to, liaison and remote monitoring administration and reporting; semi-annual and annual services; remote operations of batteries, inverters, substation, and site security and management; additional communication

protocols; and repair and maintenance of the BESS, electrical transmission lines, and other project facilities. The electrical equipment; heating, ventilation, and air conditioning; fire protection systems; and security will be automated and monitored remotely. Periodic in-person inspections will be included as needed, as part of a security contract. The site will be unoccupied but will be visited periodically through the year for equipment inspections, monitoring and testing, and maintenance as needed. Periodically, batteries and various components will be replaced or renewed to ensure optimal performance.

Augmentation

Intermittently throughout the lifetime of the project, there may be a requirement to provide additional energy storage augmentation, which will result in several trips to the site to deliver and install additional battery augmentation units over a period of several weeks. All grading and foundations necessary to accommodate these augmentation units will be completed with the initial construction of the project, and so the installation of the augmentation units will require no additional site preparation or disturbance.

Stormwater

Stormwater will be treated in accordance with City requirements. Outdoor equipment will be sealed or enclosed and will not affect stormwater quality.

Solid and Nonhazardous Waste

The project will produce a small amount of waste associated with maintenance activities, which could include broken and rusted metal, defective or malfunctioning electrical materials, empty containers, and other miscellaneous solid waste, including the typical refuse generated by workers. Most of these materials will be collected and delivered back to the manufacturer or to recyclers. Non-recyclable waste will be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III landfill.

Hazardous Materials

Limited amounts of hazardous materials will be stored or used on the site during operations, including diesel fuel, gasoline, and motor oil for vehicles; mineral oil to be sealed within the transformers; and lead-acid-based batteries for emergency backup. Appropriate spill containment and cleanup kits will be maintained during operation of the project. A spill prevention control and countermeasures plan will be developed for site operations.

Hazardous Waste

Fuels and lubricants used in operations will be subject to the spill prevention control and countermeasures plan to be prepared for the proposed project. Solid waste, if generated during operations, will be subject to the material disposal and solid waste management plan to be prepared for the proposed project.

Security and Lighting

The proposed project will be fenced to help prevent access by the public. Gates will be installed at the roads entering the project site along Carter Street. Limiting access to the project site will be necessary both to ensure the safety of the public and to protect the equipment from potential theft and vandalism.

The project's lighting system will provide operations and maintenance personnel with illumination for both normal and emergency conditions. Lighting will be designed to provide the minimum illumination needed to achieve safety and security objectives. Additionally, lighting will be directed downward and shielded to focus illumination on the desired areas only and to minimize light trespass.

1.8 Decommissioning

At the end of the proposed project's operational term, the Applicant may determine that the project site should be decommissioned and deconstructed, or it may seek an extension of its use permit. The proposed project will include measures to ensure the collection and recycling of batteries and to avoid the potential for batteries to be disposed of as municipal waste.

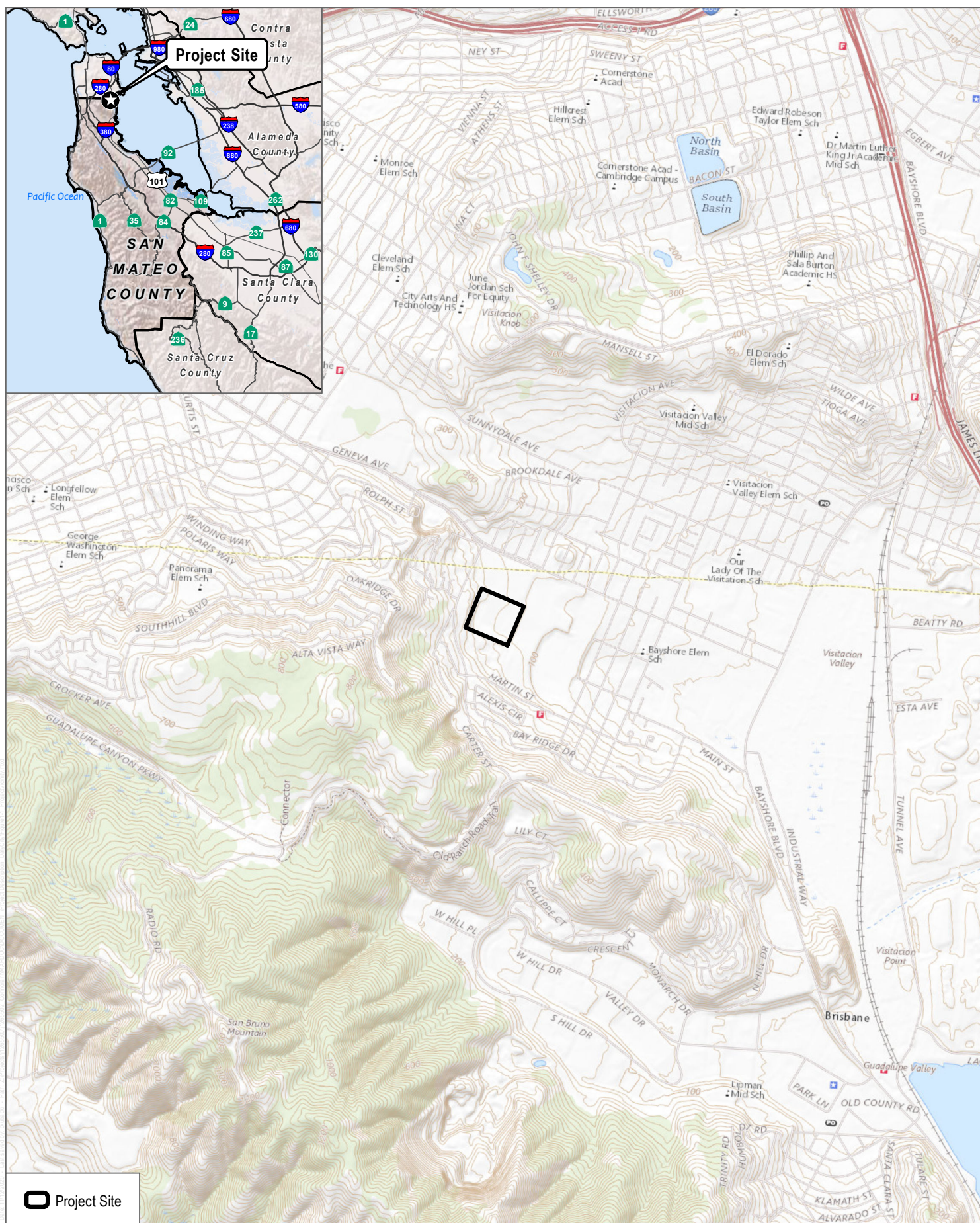
All decommissioning and restoration activities will adhere to the requirements of the appropriate governing authorities and be in accordance with all applicable federal, state, and City regulations. Following the expiration of the project's useful life, the facility will be decommissioned, which will include project enclosures being removed from the ground on the project site. Aboveground equipment that will be removed includes battery containers/enclosures, inverters, transformers, substation steel bus work and enclosures, electrical wiring, etc. Equipment will be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off site to be recycled or disposed of at an appropriately licensed disposal facility. Site infrastructure will be removed, including the fences and the concrete pads that may support the battery containers/enclosures, inverters, transformers, and related equipment. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried with the decommissioning equipment being used. The area will be thoroughly cleaned and all debris will be removed. A collection and recycling program will be implemented to promote recycling of project components and minimize disposal in landfills.

INTENTIONALLY LEFT BLANK

2 References Cited

- BAAQMD (Bay Area Air Quality Management District). 2018. Regulation 6: Particulate Matter – Common Definitions and Test Methods. Adopted August 1, 2018. <https://www.baaqmd.gov/rules-and-compliance/rules/regulation-6-particulate-matter--common-definitions-and-test-methods>.
- CASQA (California Stormwater Quality Association). 2019. *Construction BMP Handbook*. December 2019. <https://www.casqa.org/resources/bmp-handbooks>.
- CDFW (California Department of Fish and Wildlife). 2020. California Natural Diversity Database quadrant search: San Francisco South. Accessed November 2020. <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>.
- CDOC (California Department of Conservation). 2020. EQ Zapp: California Earthquake Hazards Zone Application online map. <https://maps.conservation.ca.gov/cgs/EQZApp/app>.
- City of Daly City. 2003. *Daly City Municipal Code Title 17 Zoning, Zoning Regulations (Consolidated)*. January 2003.
- City of Daly City. 2013a. *Daly City 2030 General Plan*. Adopted March 25, 2013. Accessed November 2020. http://www.dalycity.org/City_Hall/Departments/ECD/planning/General_Plan.htm.
- City of Daly City. 2013b. *City of Daly City General Plan Update Final Environmental Impact Report*. February. Accessed November 2020. http://www.dalycity.org/City_Hall/Departments/ECD/planning/Planning_Division_Library/General_Plan_Environmental_Impact_Report.htm.
- City of Daly City. 2020. Zoning Map. Updated September 25, 2020.
- County of San Mateo Parks Department. 2020. San Bruno Mountain Habitat Conservation Plan webpage. Accessed November 2020. <https://parks.smcgov.org/san-bruno-mountain-habitat-conservation-plan>.
- USFWS (U.S. Fish and Wildlife Service). 2020a. USFWS Threatened & Endangered Species Active Critical Habitat Report. Environmental Conservation Online System (ECOS). Accessed November 2020. <https://ecos.fws.gov/ecp/report/critical-habitat>.
- USFWS. 2020b. IPaC: Information for Planning and Consultation. Online project planning tool. Accessed November 2020. <https://ecos.fws.gov/ipac/>.

INTENTIONALLY LEFT BLANK



SOURCE: USGS Topo Series San Francisco South

FIGURE 1-1

Project Vicinity

Cormorant Energy Storage Project

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps 2020; Open Street Map 2019

FIGURE 1-2
Project Site

Cormorant Energy Storage Project

INTENTIONALLY LEFT BLANK



PLAN VIEW
HORIZONTAL SCALE: 1" = 150'

CORMORANT UNDERGROUND

115KV GEN-TIE

EXHIBIT: PRELIMINARY UG ROUTE ALTERNATIVES 1 & 1A

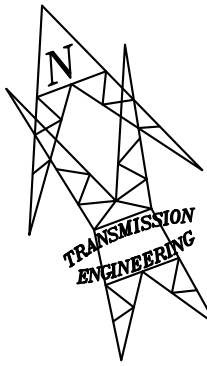
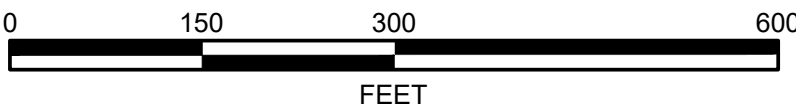
PRELIMINARY

LEGEND

- CORMORANT BESS
- POCO LOCATION / RISER POLE
- BESS UGT TERMINATION
- ROUTE ALTERNATIVE #1
- ROUTE ALTERNATIVE #1A
- 115KV OH TO MARTIN SUBSTATION

PRELIMINARY ROUTE ALTERNATIVES

	LENGTH	VAULTS	RISER POLE
ALTERNATIVE #1	5920'	4	1
ALTERNATIVE #1A	6140'	4	1



VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



Figure 2-1

INTENTIONALLY LEFT BLANK



PLAN VIEW
HORIZONTAL SCALE: 1" = 150'

CORMORANT UNDERGROUND

115KV GEN-TIE

EXHIBIT: PRELIMINARY UG ROUTE ALTERNATIVE 3

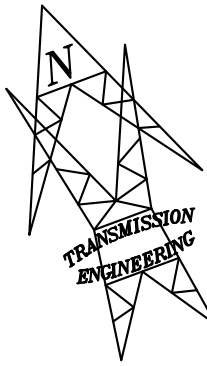
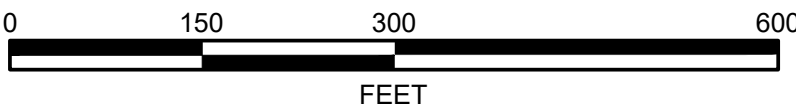
PRELIMINARY

LEGEND

- CORMORANT BESS
- POCO LOCATION / RISER POLE
- BESS UGT TERMINATION
- COW PALACE PROPERTY LINE
- ROUTE ALTERNATIVE #3
- 115KV OH TO MARTIN SUBSTATION

PRELIMINARY ROUTE ALTERNATIVE #3

LENGTH FROM BESS SUB TO CITY ROW	2610'
LENGTH WITHIN CITY ROW	1040'
VAULTS	3
RISER POLES	1

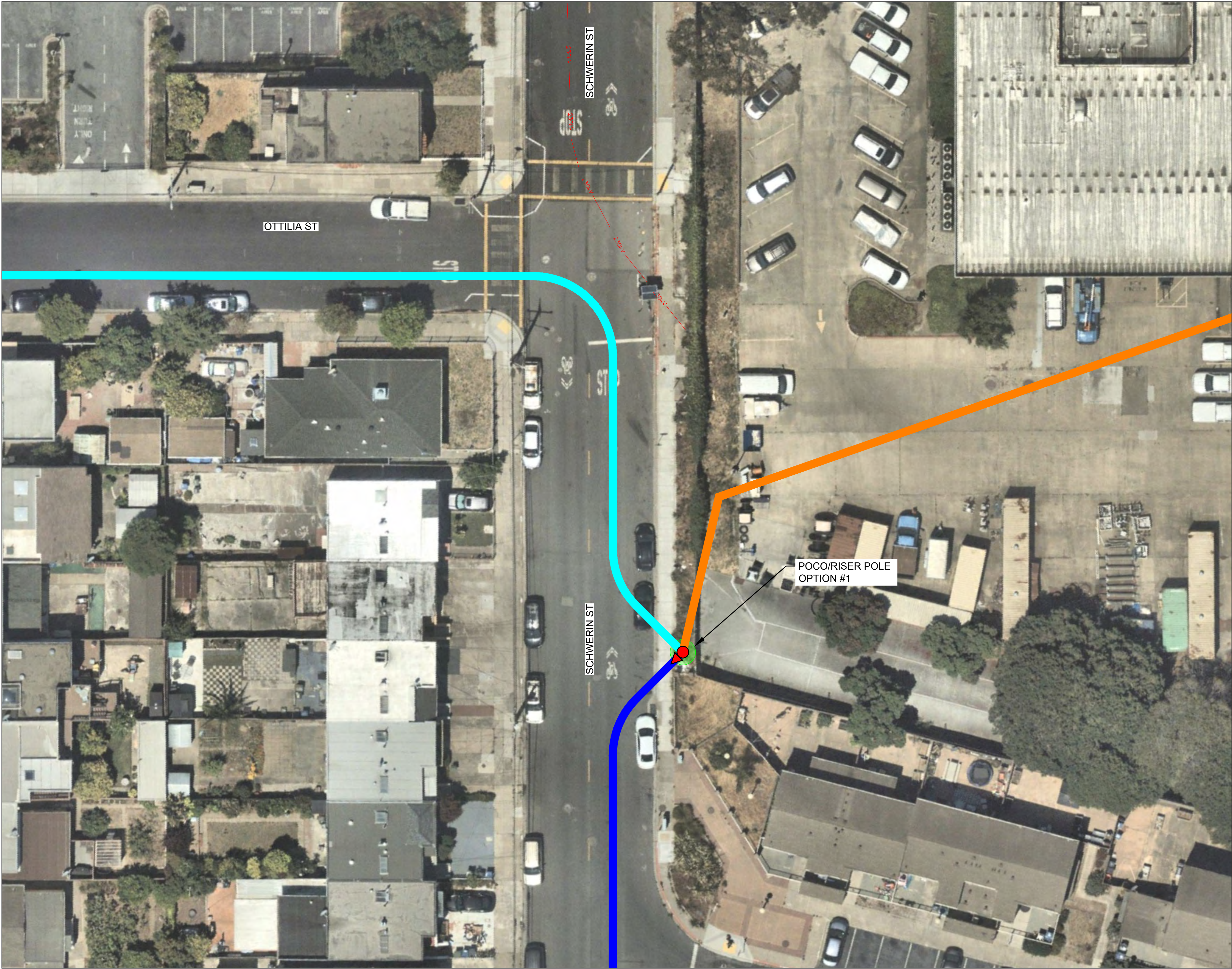


VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



Figure 2-3

INTENTIONALLY LEFT BLANK



PLAN VIEW
HORIZONTAL SCALE: 1" = 15'

CORMORANT UNDERGROUND

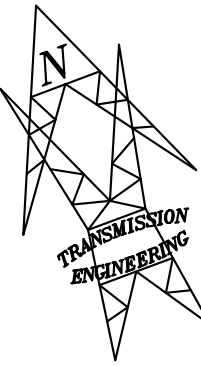
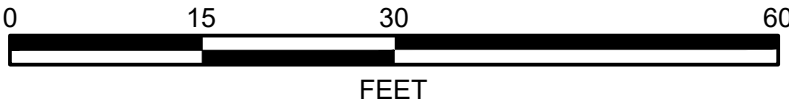
115KV GEN-TIE

EXHIBIT C: PRELIMINARY POCO LOCATION OPTION #1

PRELIMINARY

LEGEND

-  POCO LOCATION / RISER POLE
-  ROUTE ALTERNATIVE #1
-  ROUTE ALTERNATIVE #1A
-  115KV OH TO MARTIN SUBSTATION
-  POCO / RISER POLE OPTION #1

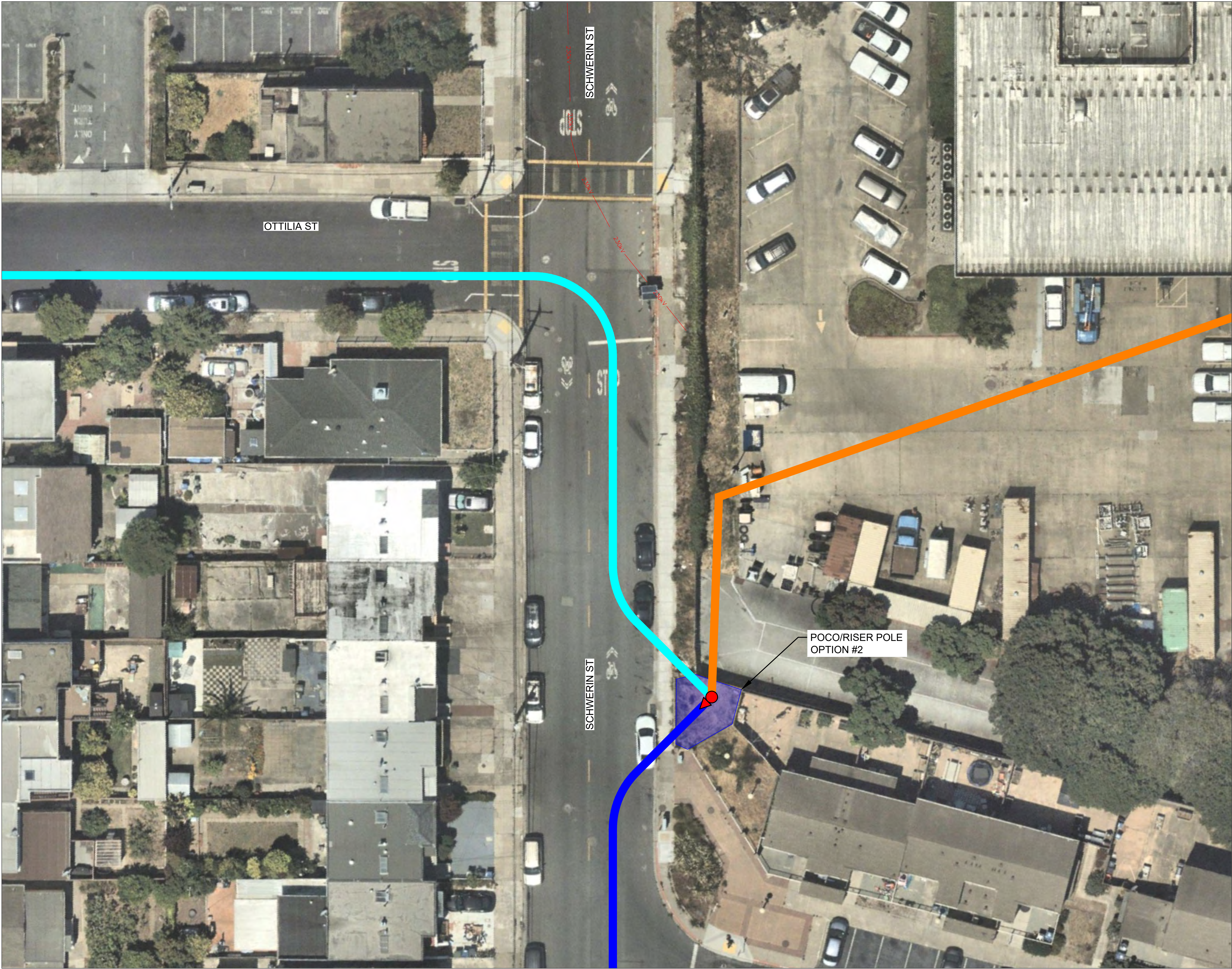


VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



Figure 2-4

INTENTIONALLY LEFT BLANK



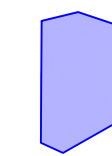
CORMORANT UNDERGROUND

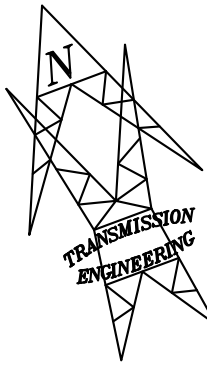
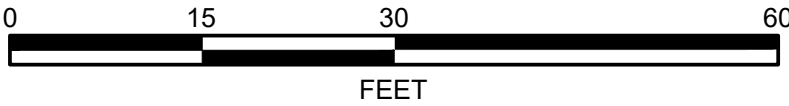
115KV GEN-TIE

EXHIBIT C: PRELIMINARY POCO LOCATION OPTION #2

PRELIMINARY

LEGEND

-  POCO LOCATION / RISER POLE
-  ROUTE ALTERNATIVE #1
-  ROUTE ALTERNATIVE #1A
-  115KV OH TO MARTIN SUBSTATION
-  POCO / RISER POLE OPTION #2



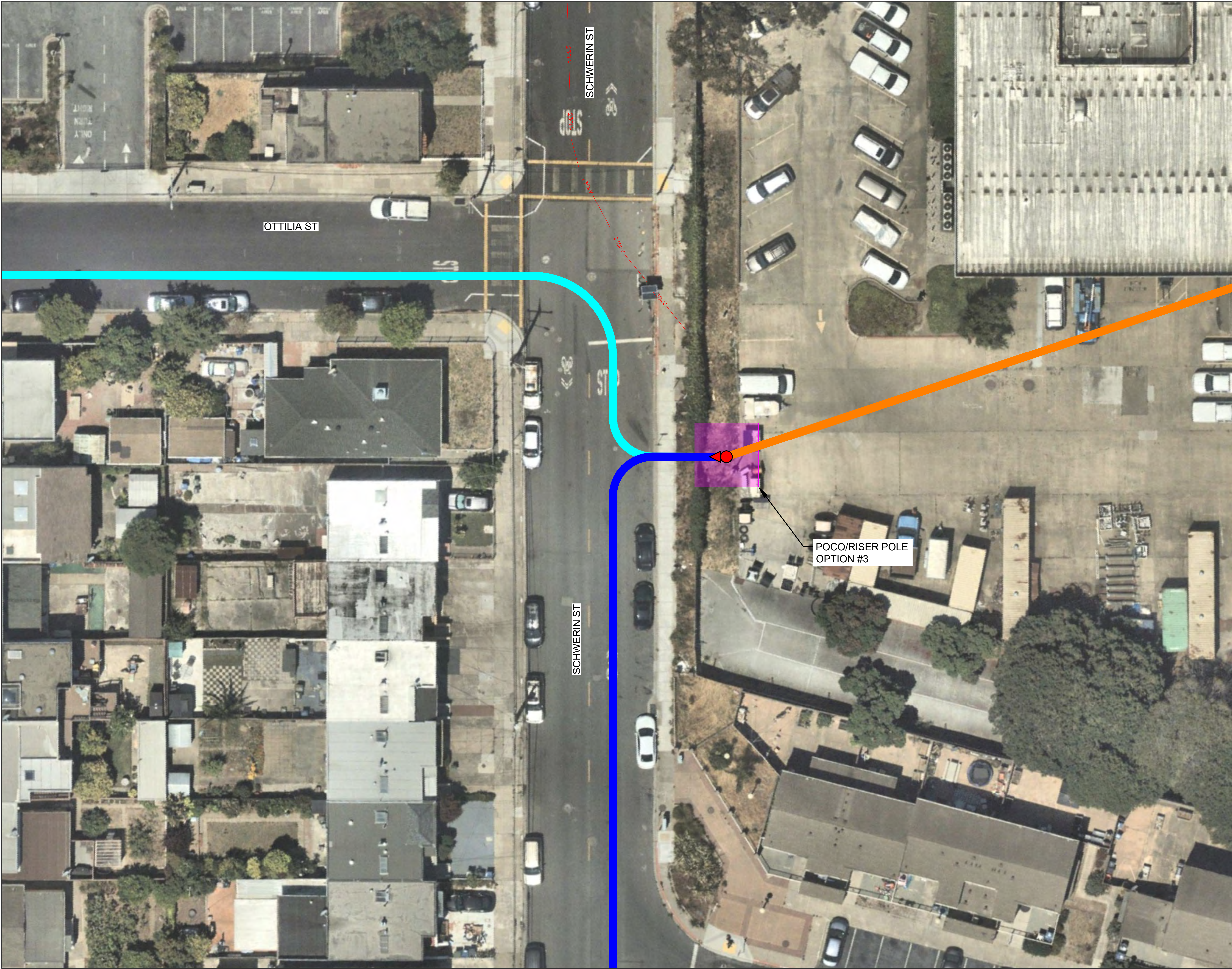
VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



SHEET: 5 OF 6

Figure 2-5

INTENTIONALLY LEFT BLANK



PLAN VIEW
HORIZONTAL SCALE: 1" = 15'

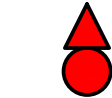
CORMORANT UNDERGROUND

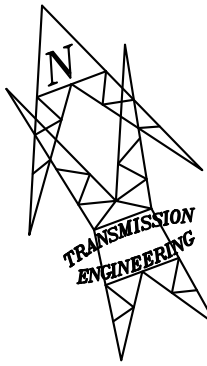
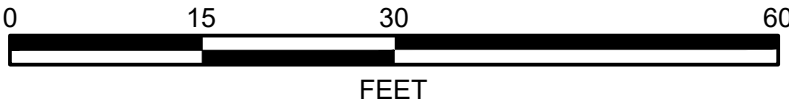
115KV GEN-TIE

EXHIBIT C: PRELIMINARY POCO LOCATION OPTION #3

PRELIMINARY

LEGEND

-  POCO LOCATION / RISER POLE
-  ROUTE ALTERNATIVE #1
-  ROUTE ALTERNATIVE #1A
-  115KV OH TO MARTIN SUBSTATION
-  POCO / RISER POLE OPTION #3



VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



SHEET: 6 OF 6

Figure 2-6

INTENTIONALLY LEFT BLANK

Appendix A

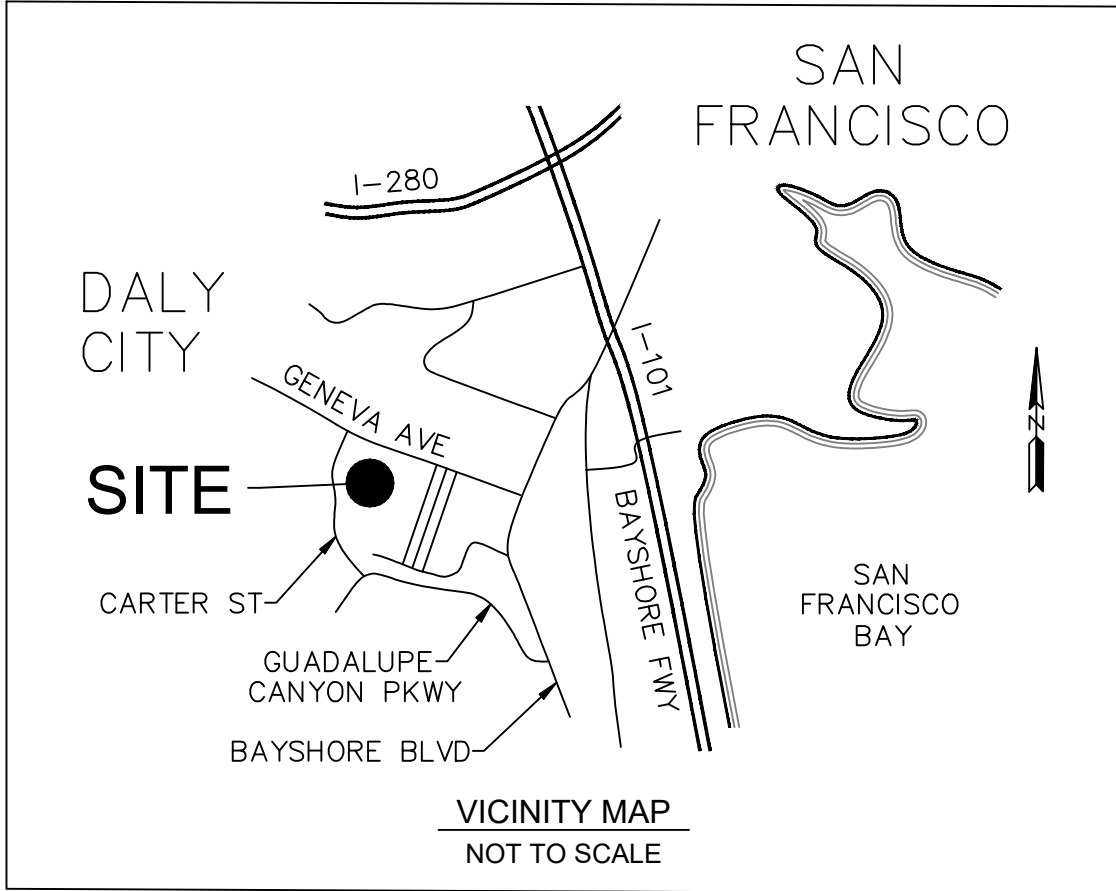
Energy Storage Equipment Photos



Photo A-1: Typical modular battery energy storage unit

INTENTIONALLY LEFT BLANK

CORMORANT ENERGY STORAGE PROJECT DEVELOPMENT PLAN SET



VICINITY MAP
SCALE = NTS



PROJECT DIRECTORY

CONTACT:	MR. JOHN MEINECKE AREVON ENERGY DIRECTOR OF DEVELOPMENT 8800 N GAINES CENTER DR, SUITE 100 SCOTTSDALE, AZ 85258
PERMITTING CONTACT:	MR. SAM WALCH AREVON ENERGY DEVELOPMENT ASSOCIATE 8800 N GAINES CENTER DR, SUITE 100 SCOTTSDALE, AZ 85258
PROJECT ADDRESS:	2150 GENEVA AVE DALY CITY, CA 94014 APN: 005-050-020
ENGINEER:	BURNS & McDONNELL ENGINEERING CO, INC 9400 WARD PARKWAY KANSAS CITY, MO 64114 816 -333 -9400
LANDSCAPE ARCHITECT:	BURNS & McDONNELL ENGINEERING CO, INC 9400 WARD PARKWAY KANSAS CITY, MO 64114 816 -333 -9400
ENVIRONMENTAL CONSULTANT:	DUDEK 605 THIRD STREET ENCINITAS, CA 92024

PROJECT DESCRIPTION

GENERAL	250 MW BATTERY ENERGY STORAGE SYSTEM (BESS) FACILITY
PRELIMINARY BUILDING AREA:	424,247.4 SQ. FT
ZONING:	LIGHT COMMERCIAL (C1)

DWG. NO.	TITLE
02A - SK101	SITE PLAN
03A - EXS101	ELEVATION LAYOUT SHEET 1
03B - EXS102	ELEVATION LAYOUT SHEET 2
03C - EXS103	ELEVATION LAYOUT SHEET 3
03D - EXS104	ELEVATION LAYOUT SHEET 4
04A - SKC001	GRADING AND DRAINAGE PLAN
04B - SKC002	EROSION AND SEDIMENT CONTROL DETAILS
04C - SKC003	MISCELLANEOUS CIVIL DETAILS
04D - SKC004	DRAINAGE MANAGEMENT AREA PLAN
04E - SKC005	EROSION AND SEDIMENT CONTROL PLAN
05A - LSC101	LANDSCAPE PLAN
05B - LSC102	SIGNAGE DETAILS
06A - LGT001	LIGHTING PLAN
06B - LGT002	LIGHTING AND SURVEILLANCE PLAN
06C - LGT CUT SHT	LIGHTING CUT SHEETS
07 - SK001	ON-SITE UTILITY PLAN
08 - FS PLAN	FIRE SAFETY PLAN
09 - SW PLAN	STORMWATER TREATMENT PLAN
10 - C3 & C6	C.3 & C.6 DEVELOPMENT REVIEW
11A - PHOTOSIM1	PHOTOSIMULATION 1
11B - PHOTOSIM2	PHOTOSIMULATION 2
11C - PHOTOSIM3	PHOTOSIMULATION 3
11D - PHOTOSIM4	PHOTOSIMULATION 4

PRELIMINARY - NOT
FOR CONSTRUCTION

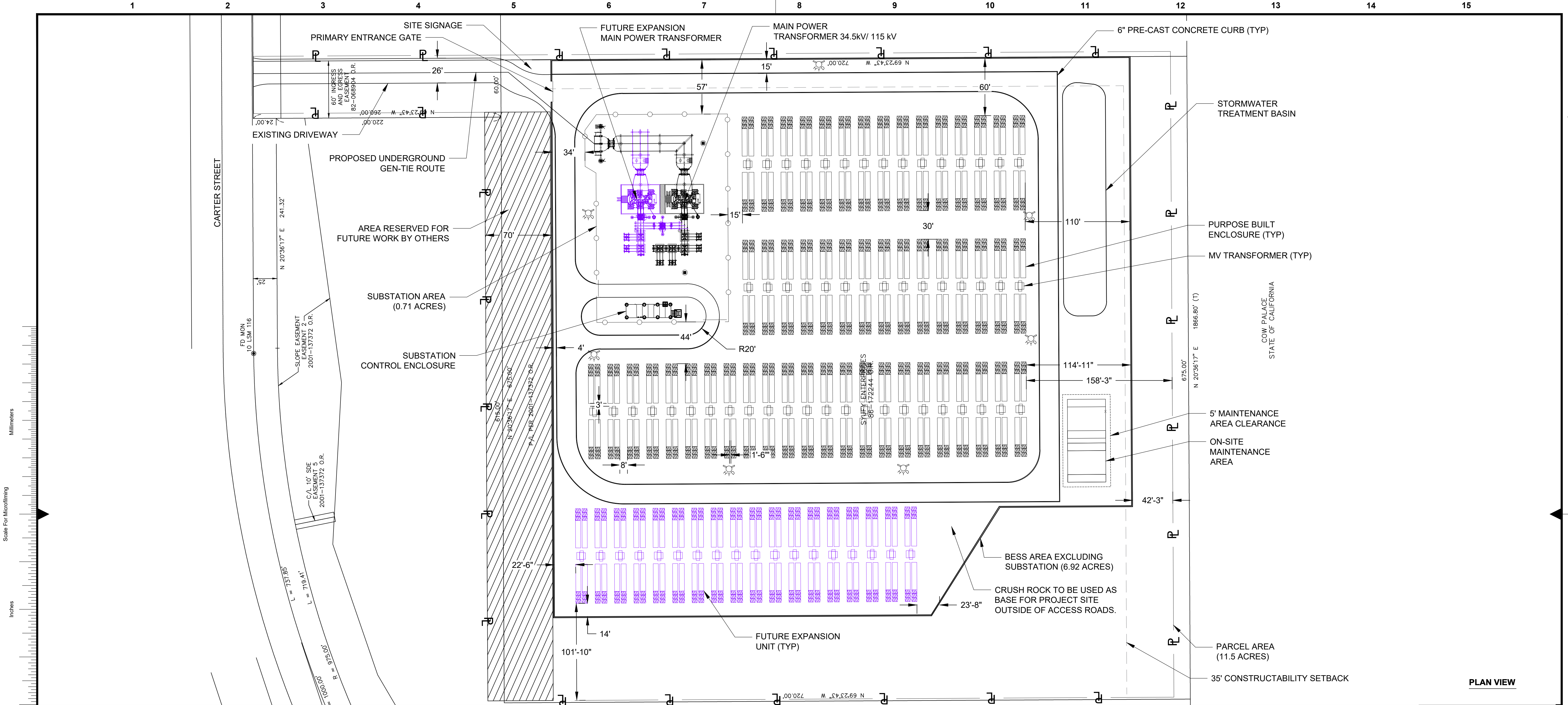
no.	date	by	ckd	description
A	02/20/24	EDV	-	ISSUED FOR CONDITIONAL USE PERMIT
B	05/10/24	EDV	-	ISSUED FOR CONDITIONAL USE PERMIT
C	06/07/24	EDV	-	ISSUED FOR CONDITIONAL USE PERMIT



9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
BURNS & MCDONNELL ENGINEERING COMPANY, INC.

CORMORANT
ENERGY STORAGE, LLC

COVER SHEET



ENERGY STORAGE SYSTEM DESCRIPTION	
NAMEPLATE PHASE 1	188 MW / 752 MWH
NAMEPLATE PHASE 2	62 MW / 248 MWH
NAMEPLATE TOTAL	250 MW / 1000 MWH

BESS MATERIAL LIST	
NUMBER OF BATTERY ENCLOSURES (BOL)	212
NUMBER OF BATTERY ENCLOSURES (EOL)	284
NUMBER OF MV TRANSFORMERS (BOL)	53
NUMBER OF MV TRANSFORMERS (EOL)	71

LEGEND:

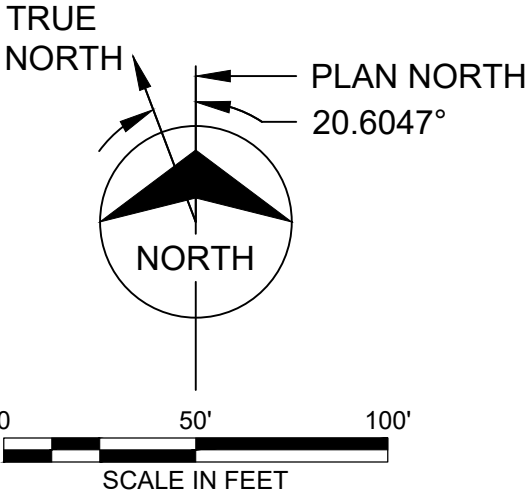
- PROPERTY LINE
- 8'-6" PRE-CAST CONCRETE WALL W/ 1'-6" CLIMBING DETERRENT
- 8' TUBULAR METAL FENCE
- SLIDING GATE
- FIRE HYDRANT
- PHASE 2 EXPANSION

ABBREVIATION LIST:

- BESS - BATTERY ENERGY STORAGE SYSTEM
- MV - MEDIUM VOLTAGE
- POI - POINT OF INTERCONNECTION
- TYP - TYPICAL
- BOL - BEGINNING OF LIFE
- EOL - END OF LIFE

NOTES:

- FINAL LAYOUT SUBJECT TO CHANGE BASED ON FINAL ENVIRONMENTAL AND CIVIL SETBACK DISTANCES.
- EQUIPMENT QUANTITIES, CONFIGURATION, AND FOOTPRINT SUBJECT TO CHANGE BASED ON FINAL BESS TECHNOLOGY SELECTION AND ADDITIONAL PROJECT DUE DILIGENCE.
- EXISTING DRIVEWAY TO BE ASPHALTED AT COMPLETION OF CONSTRUCTION IN COMPLIANCE WITH CALTRANS ROAD BASED DESIGN AND CITY STANDARD DWG S-3 DETAIL.
- PROPOSED SERVICE ROADS WITHIN BESS PROJECT FACILITY SHALL BE ASPHALT.
- ANY ACCESS ROADS SHALL BE UPGRADED TO MEET PRIVATE STREET STANDARDS IN ACCORDANCE WITH DALY CITY STANDARD DETAIL S-1.



PRELIMINARY - NOT FOR CONSTRUCTION

E	10/02/24	EDV	AR	ISSUED FOR CONDITIONAL USE PERMIT
D	08/09/24	EDV	AR	ISSUED FOR CONDITIONAL USE PERMIT
C	06/07/24	EDV	AR	ISSUED FOR CONDITIONAL USE PERMIT
B	05/10/24	EDV	AR	ISSUED FOR CONDITIONAL USE PERMIT
A	04/02/24	EDV	AR	ISSUED FOR CONDITIONAL USE PERMIT

no.	date	by	ckd	description
-----	------	----	-----	-------------

no.	date	by	ckd	description
-----	------	----	-----	-------------

BURNS
MCDONNELL

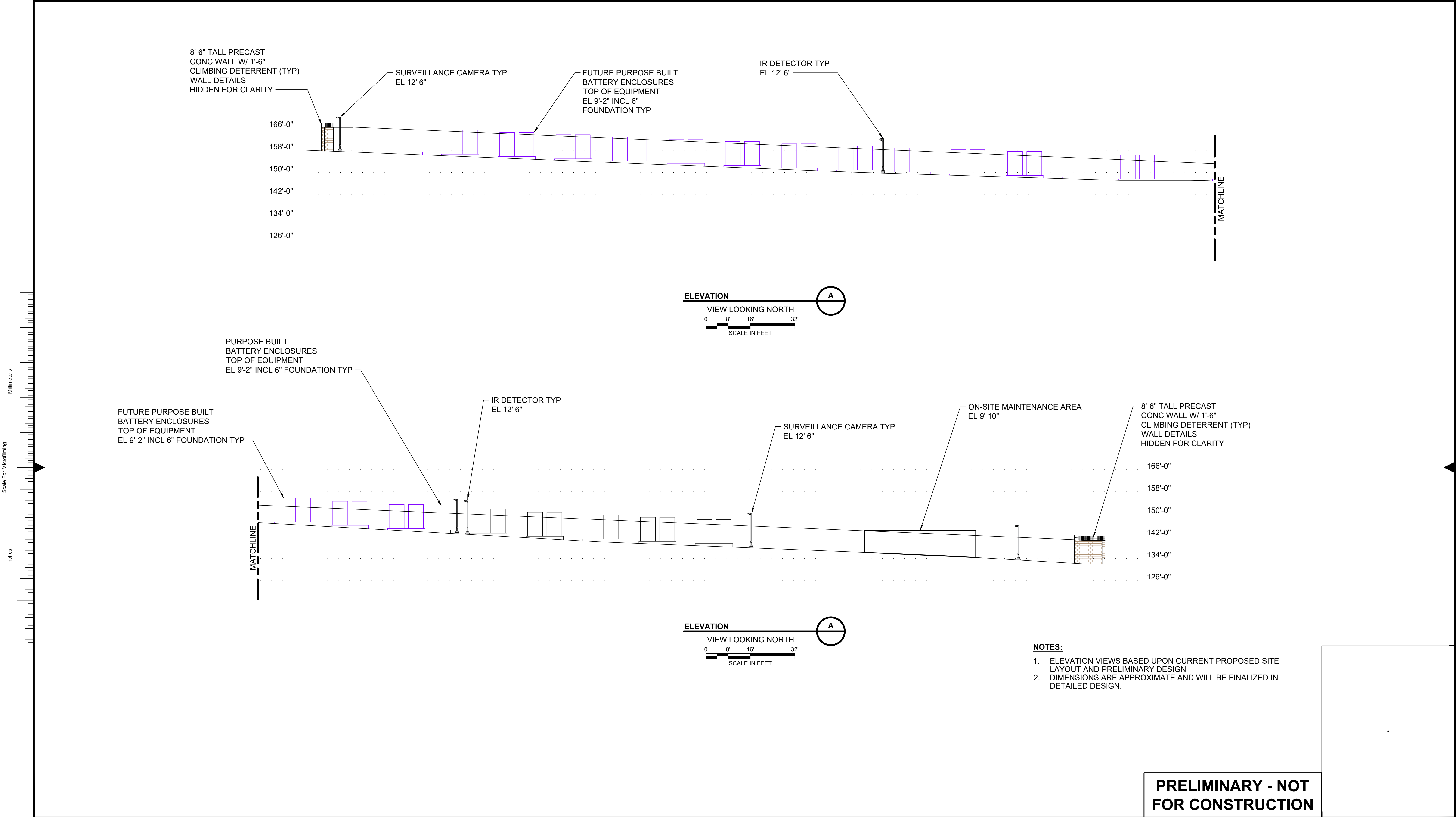
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.

designed
E. VILA

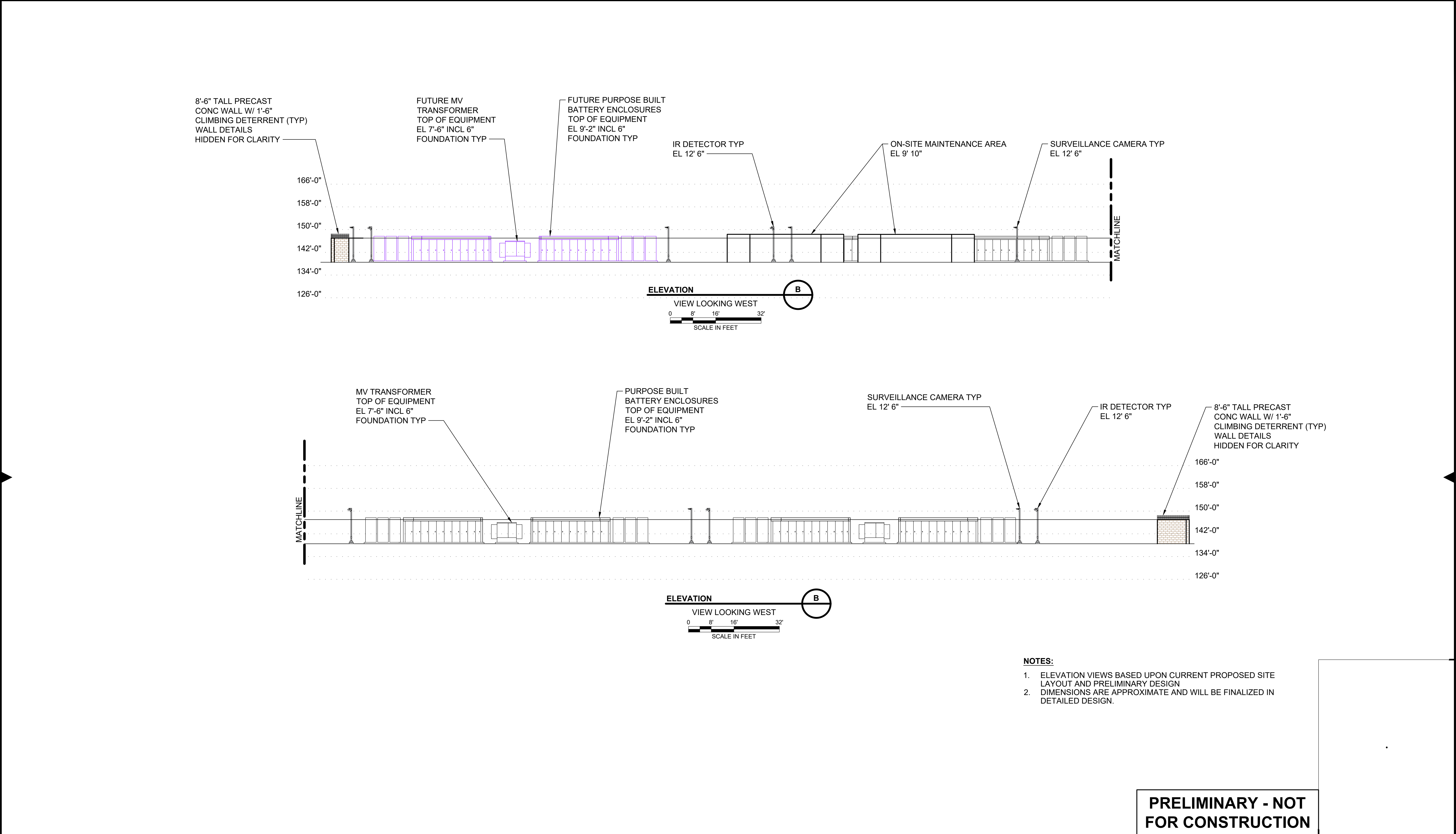
detailed
E. VILA

SAN MATEO COUNTY, CALIFORNIA

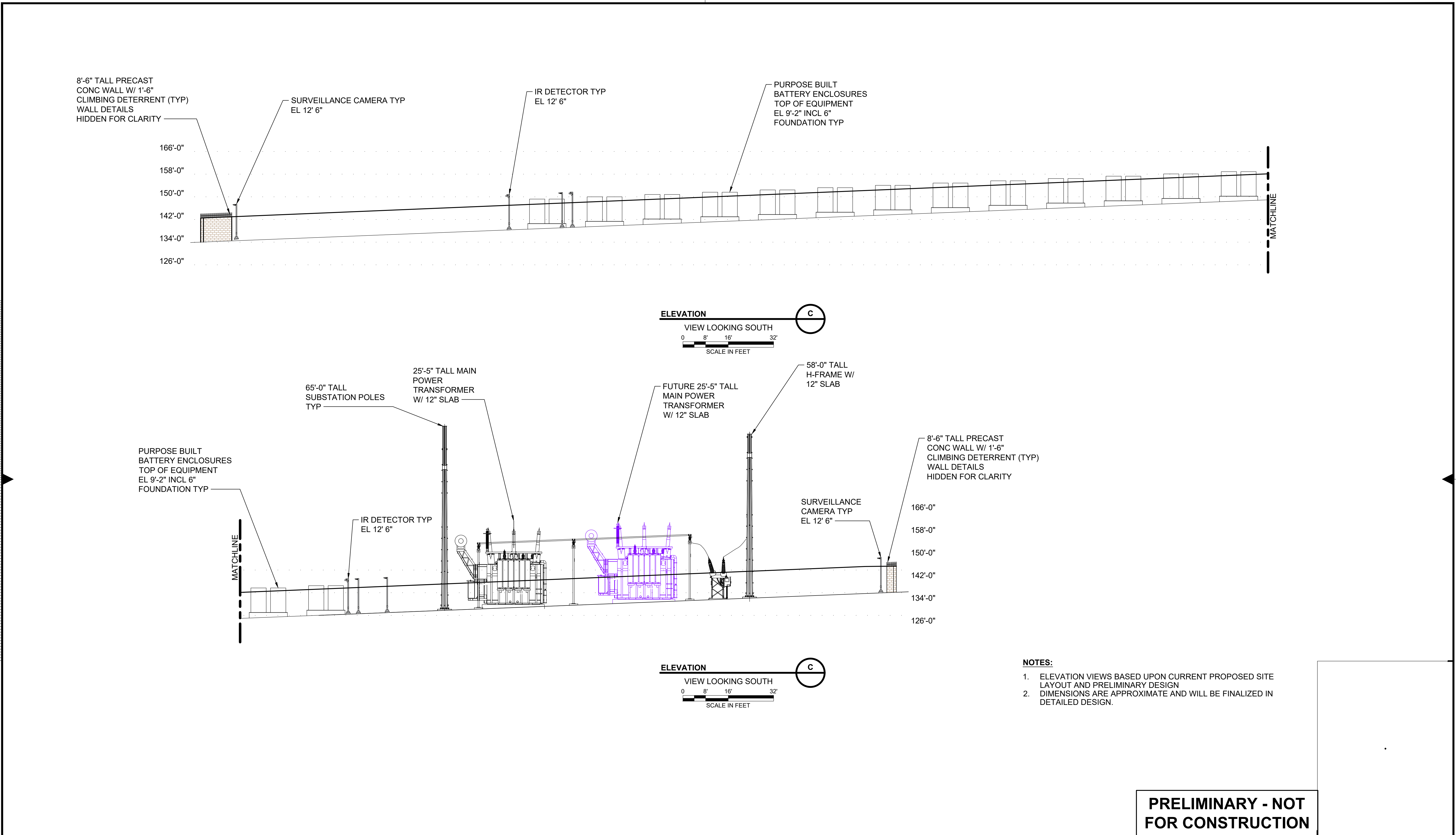
CORMORANT ENERGY STORAGE, LLC BATTERY ENERGY STORAGE SYSTEM SITE PLAN	
project	contract
drawing	rev.
LAYOUT — E	
sheet 1 of 1 sheets	file: CormorantLayout188MW.dwg



																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----



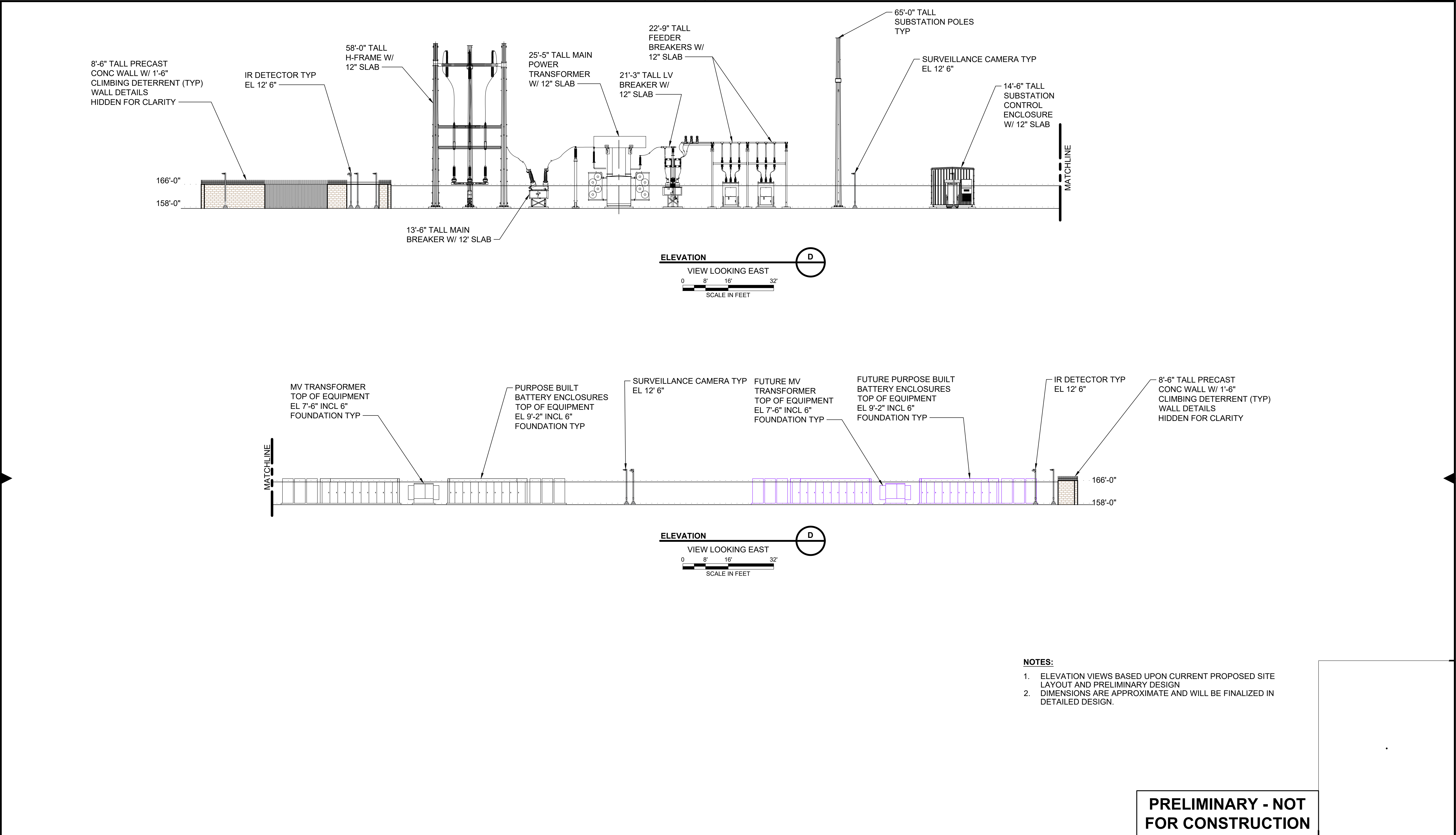
										BURNS MCDONNELL 9400 WARD PARKWAY KANSAS CITY, MO 64114 816-333-9400 Burns & McDonnell Engineering Co, Inc. designed C. BRYAN detailed C. BRYAN AREVON SAN MATEO COUNTY, CALIFORNIA CORMORANT ENERGY STORAGE, LLC BATTERY ENERGY STORAGE SYSTEM ELEVATION B - LOOKING WEST projectcontract drawingrev. EXS102 — D sheet 2 of 4 sheets file 148226-EXS102.dwg
D	10/2/24	CCB	AR	ISSUED FOR CONDITIONAL USE PERMIT						
C	6/7/24	CCB	AR	ISSUED FOR CONDITIONAL USE PERMIT						
B	5/3/24	CCB	AR	ISSUED FOR CONDITIONAL USE PERMIT						
A	2/20/24	CCB	AR	ISSUED FOR CONDITIONAL USE PERMIT						
no.	date	by	ckd	description	no.	date	by	ckd	description	



- NOTES:
- 1. ELEVATION VIEWS BASED UPON CURRENT PROPOSED SITE LAYOUT AND PRELIMINARY DESIGN
 - 2. DIMENSIONS ARE APPROXIMATE AND WILL BE FINALIZED IN DETAILED DESIGN.

PRELIMINARY - NOT FOR CONSTRUCTION

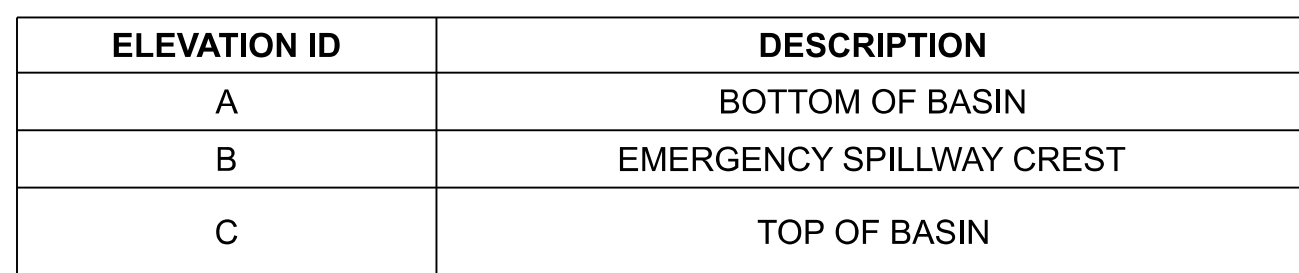
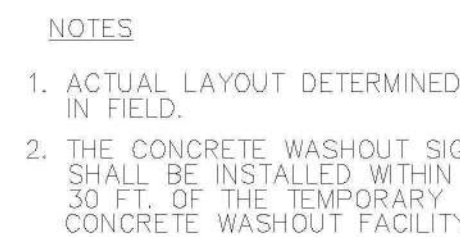
																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----



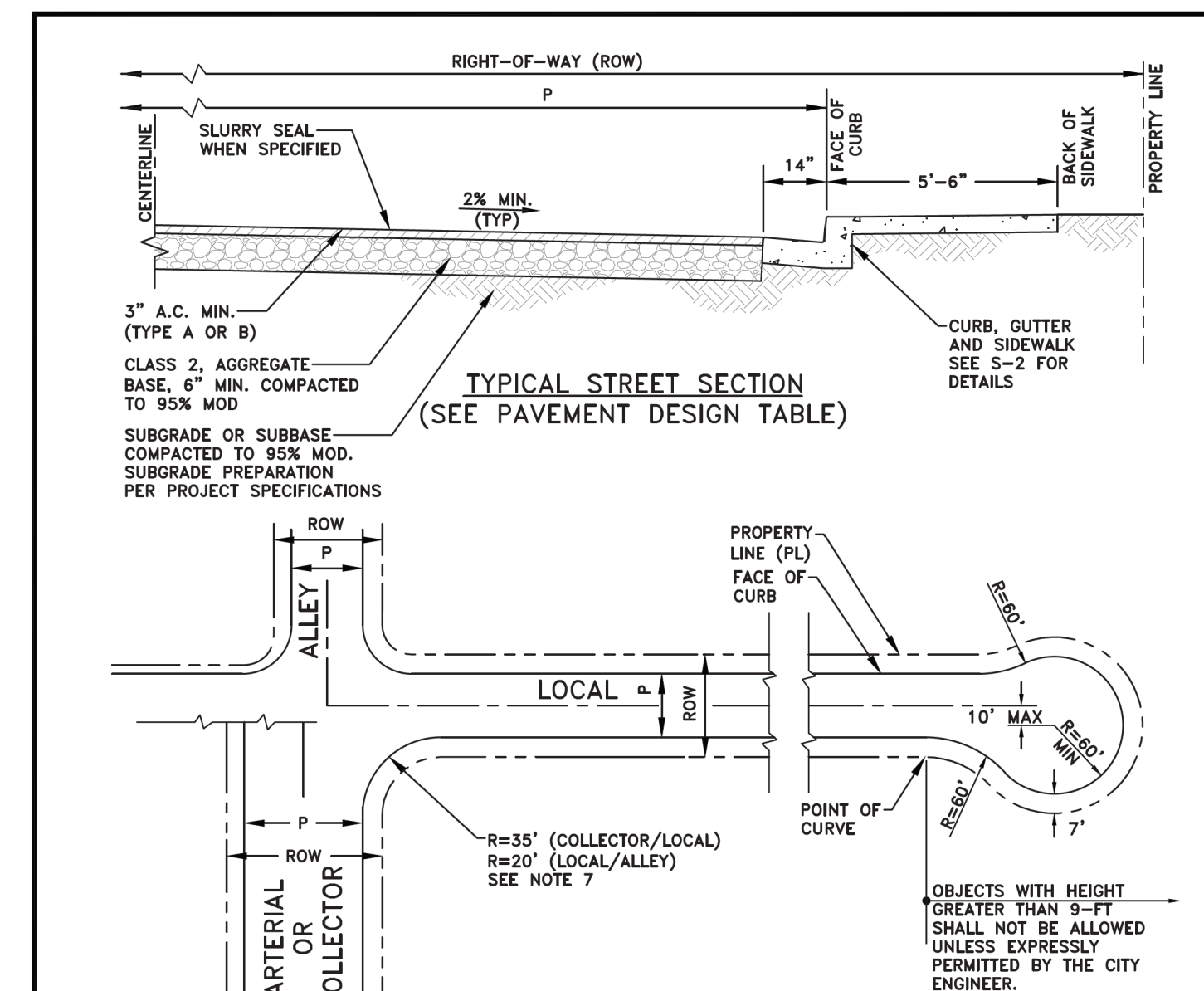
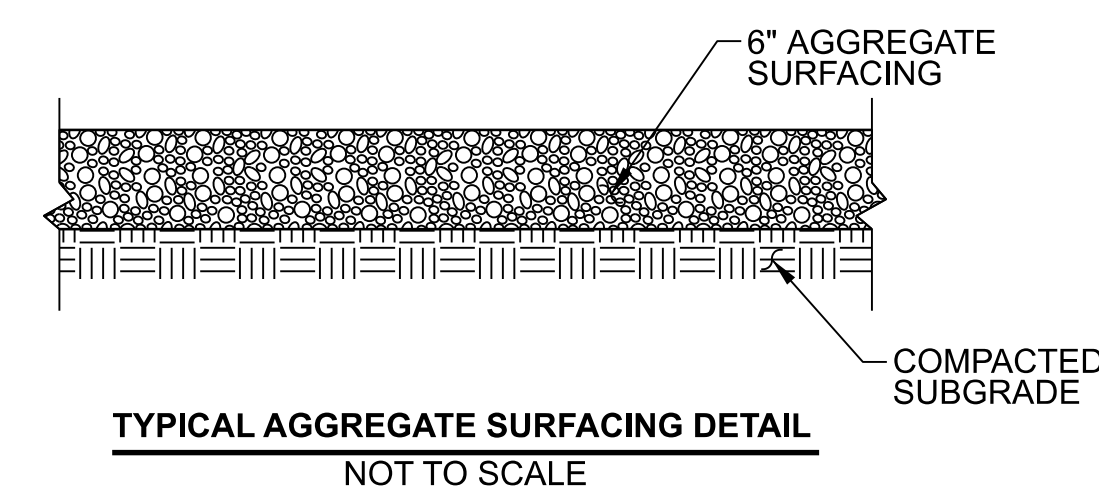
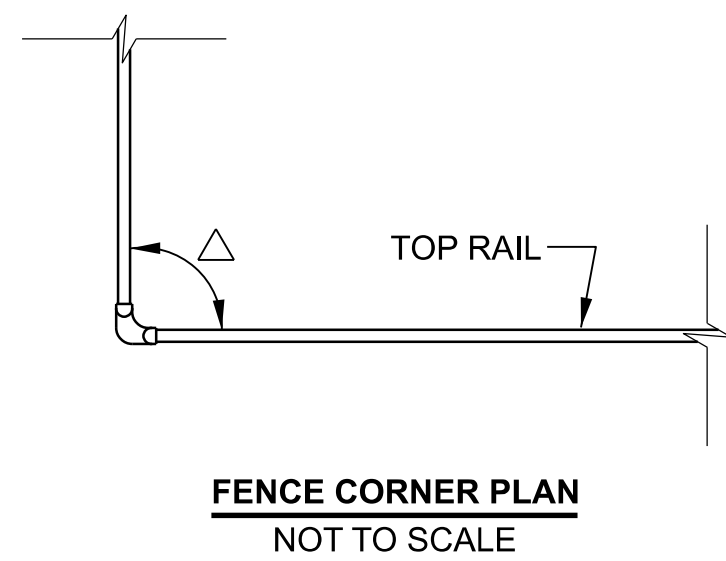
- NOTES:
- 1. ELEVATION VIEWS BASED UPON CURRENT PROPOSED SITE LAYOUT AND PRELIMINARY DESIGN
 - 2. DIMENSIONS ARE APPROXIMATE AND WILL BE FINALIZED IN DETAILED DESIGN.

PRELIMINARY - NOT
FOR CONSTRUCTION

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----



DETENTION BASIN DETAIL
NOT TO SCALE



	TYPE OF STREET	ROW	P	DESIGN TRAFFIC INDEX
1	ARTERIAL	NOTE 1	NOTE 1	9
2	COLLECTOR	60'	42'	8
3	LOCAL	50'	36'	6
4	LOCAL WITH ONE SIDE PARKING ONLY	46'	32'	6
5	ALLEY	30'	20'	5

NOTES:

1. TO MEET DESIGN CONSIDERATIONS, SEE PROJECT SPECIFICATION.
2. IN NO CASE SHALL A LONGITUDINAL STREET GRADE EXCEED 18% NOR BE LESS THAN 0.5%.
3. MINIMUM TRAVELWAY WIDTH SHALL BE 24'.
4. MINIMUM PARKING LANE WIDTH SHALL BE 8'.
5. THE VEHICULAR TRAVELWAY SHALL HAVE A MINIMUM 1.5 FEET CLEARANCE FROM ANY FIXED OBJECT.
6. IF OFFSET PROVIDED AT CUL-DE-SAC, IT MAY BE TO EITHER SIDE OF STREET CENTERLINE.
7. CURB RADIUS PROVIDED ARE FOR REFERENCE ONLY. CURB RADIUS "R" SHALL BE REDUCED WHERE PRACTICAL.



CITY OF DALY CITY, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

STREET DESIGN, SECTION & CUL-DE-SAC

DESIGNED BY: Richard Clark ADOPTED ON: DEC 10, 2018
CITY ENGINEER CITY COLICLI

STANDARD DETAIL
S-1
DATE: NOV 2018

**PRELIMINARY - NOT
FOR CONSTRUCTION**

C	10/02/24	CRR	-	ISSUED FOR CONDITIONAL USE PERMIT
B	05/03/24	CRR	-	ISSUED FOR CONDITIONAL USE PERMIT
A	02/20/24	KEW	-	ISSUED FOR CONDITIONAL USE PERMIT

no.	date	by	ckd	description	no.	date	by	ckd	description
-----	------	----	-----	-------------	-----	------	----	-----	-------------

C:\Users\jridder\Burns & McDonnell\ENR Storage - Links - 20231010 - Cormorant BESS Support\03 - Design Docs\01 - Civil\Drawings\Sketches\Daly SKC003.dwg



**BURNS
MCDONNELL**

9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.
FIRM LICENSE NO. ???

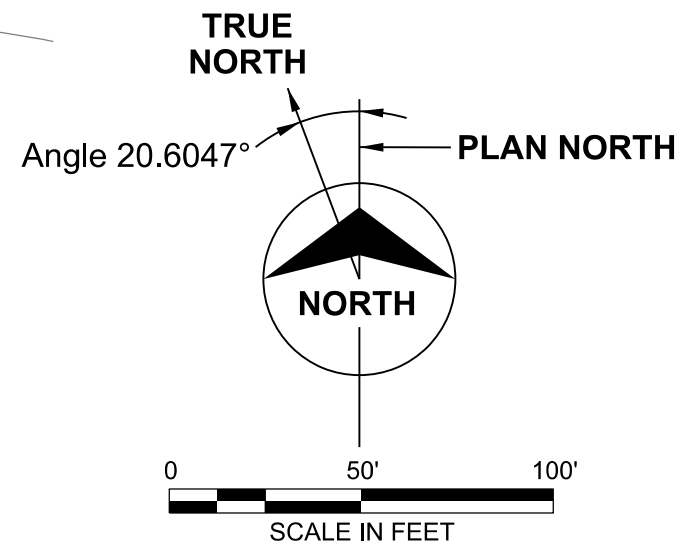
designed V. LARSON	detailed S. NICHOLS
-----------------------	------------------------



SAN MATEO COUNTY, CALIFORNIA

CORMORANT ENERGY STORAGE, LLC
BATTERY ENERGY STORAGE SYSTEM
 MISCELLANEOUS CIVIL DETAILS

project	-	contract	-
drawing	SKC003	—	rev. C
sheet 1	of 1	sheets	
file: SKC003.DGN			



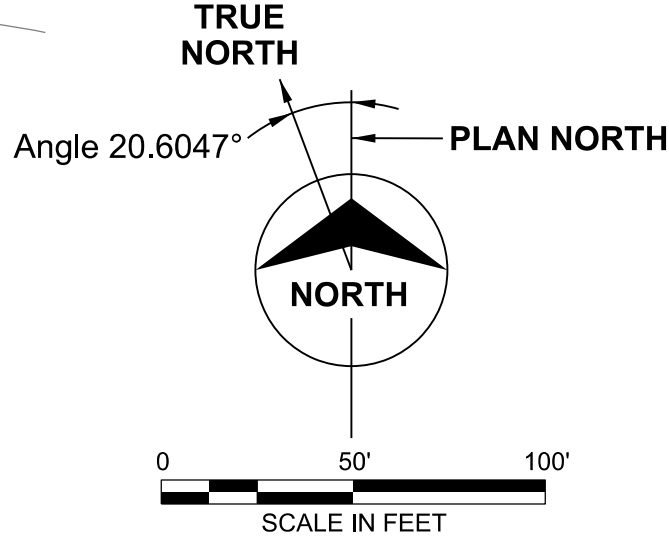
PRELIMINARY - NOT FOR CONSTRUCTION

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

1. IT SHALL BE THE OWNER'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN.
2. THIS PLAN IS INTENDED TO BE USED FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY AND IS NOT TO BE USED FOR FINAL ELEVATIONS OR PERMANENT IMPROVEMENTS.
3. DEVELOPER WILL SUBMIT TO THE CITY MONTHLY (AT THE FIRST OF EACH MONTH BETWEEN OCTOBER 1 AND APRIL 30) CERTIFICATIONS THAT ALL EROSION / SEDIMENT MEASURES IDENTIFIED ON THE APPROVED EROSION CONTROL PLAN ARE IN PLACE. IF MEASURES ARE NOT IN PLACE, DEVELOPER SHALL PROVIDE THE CITY WITH A WRITTEN EXPLANATION OF WHY THE MEASURE IS NOT IN PLACE AND WHAT WILL BE DONE TO REMEDY THIS SITUATION.
4. OWNER / CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS.
5. REASONABLE CARE SHALL BE TAKEN WHEN HAULING ANY EARTH, SAND, GRAVEL, STONE, DEBRIS, PAPER, OR ANY OTHER SUBSTANCE OVER ANY PUBLIC STREET, ALLEY, OR OTHER PUBLIC PLACE. SHOULD ANY BLOW, SPILL, OR TRACK OVER AND UPON SAID PUBLIC OR ADJACENT PRIVATE PROPERTY, IMMEDIATE REMEDY SHALL OCCUR.
6. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATER COURSES.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH.
8. CONTRACTOR SHALL PROVIDE DUST CONTROLS AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE, AND LOCAL AGENCY REQUIREMENTS.

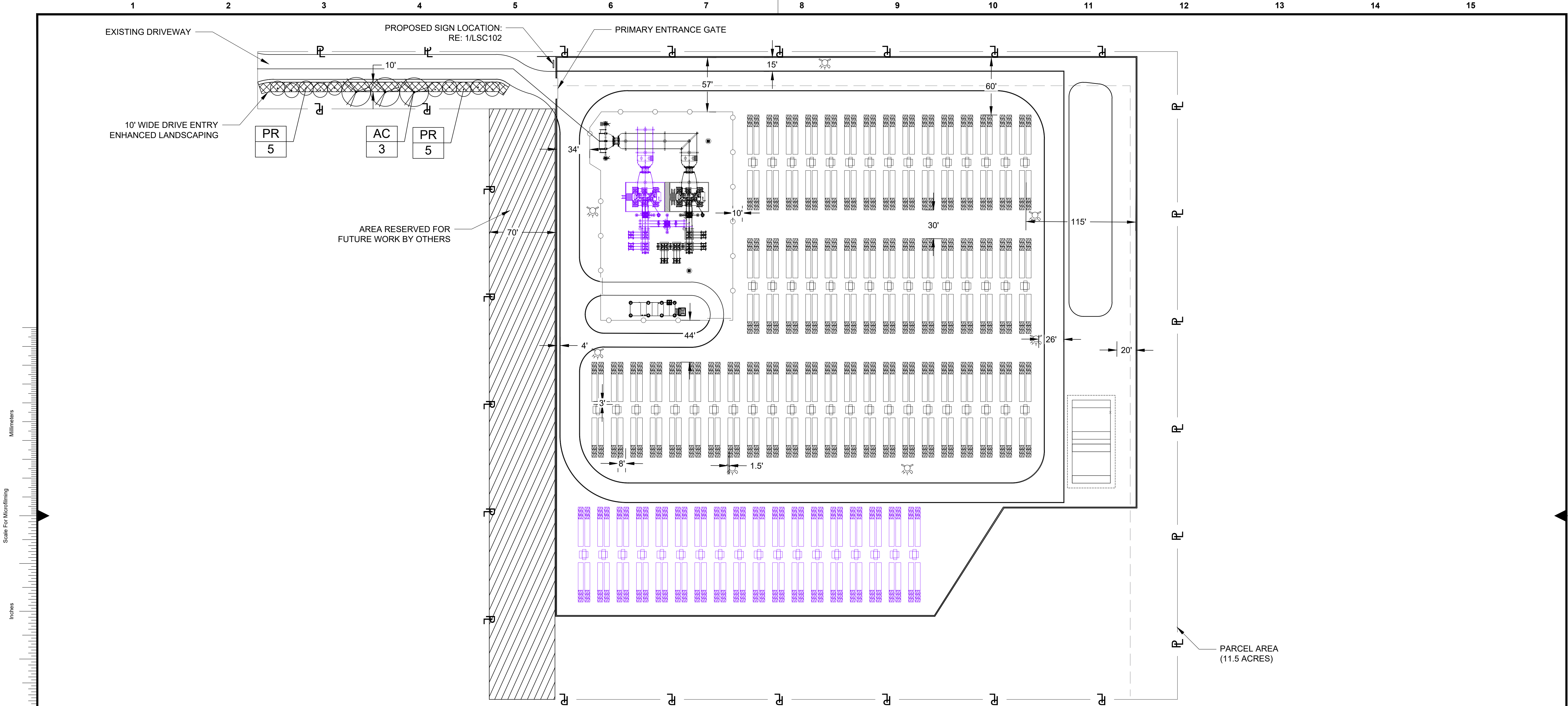
1. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 1 TO APRIL 30. FACILITIES ARE TO BE OPERABLE PRIOR TO SEPTEMBER 15 OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DETAILED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES. DURING THE NON-RAINY SEASON BEST MANAGEMENT PRACTICES (BMPs) MUST BE IMPLEMENTED DURING CONSTRUCTION WHICH INCLUDES, BUT IS NOT LIMITED TO: STABILIZED CONSTRUCTION ENTRANCE, TIRE WASH AREA, AND INLET PROTECTION.
2. THIS PLAN COVERS ONLY THE FIRST WINTER FOLLOWING GRADING WITH ASSUMED SITE CONDITIONS AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN. PRIOR TO SEPTEMBER 15, THE COMPLETION OF SITE IMPROVEMENT SHALL BE EVALUATED AND REVISIONS MADE TO THIS PLAN AS NECESSARY WITH THE APPROVAL OF THE CITY ENGINEER. PLANS ARE TO BE RESUBMITTED FOR CITY APPROVAL PRIOR TO SEPTEMBER 1 OF EACH SUBSEQUENT YEAR UNTIL SITE IMPROVEMENTS ARE ACCEPTED BY THE CITY.
3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCEWAYS.
4. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MOTOR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE CITY.
5. IF HYDROSEEDING IS NOT USED, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE-STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH.
6. THE STORMWATER DETENTION BASIN WILL BE USED AS A SEDIMENT COLLECTION BASIN TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT.
7. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. NOTIFY THE CITY REPRESENTATIVE OF ANY FIELD CHANGES.
8. FIBER ROLLS ARE AN ACCEPTABLE ALTERNATIVE TO SILT FENCE.

1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
 - A. REPAIR DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION AT THE END OF EACH WORKING DAY.
 - B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
 - C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
 - D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1-FOOT.
 - E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
 - F. RILLS AND GULLIES MUST BE REPAIRED.
2. SAND BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE SAND BAG.

[illegible]

SAN MATEO COUNTY, CALIFORNIA

C:\Users\jridder\Burns & McDonnell\ENR Storage - Links - 20231010 - Cormorant BESS Support\03 - Design Docs\01 - Civil\Dwgs\Sketches\Daly SKC005.dgn



PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND
AC	3	Aesculus californica	California Buckeye	8' HT. MIN	15-GAL.
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND
PR	10	Prunus ilicifolia	Hollyleaf Cherry	6' HT. MIN	15-GAL.

ABBREVIATION LIST:

BESS - BATTERY ENERGY STORAGE SYSTEM
MV - MEDIUM VOLTAGE
POI - POINT OF INTERCONNECTION
TYP - TYPICAL

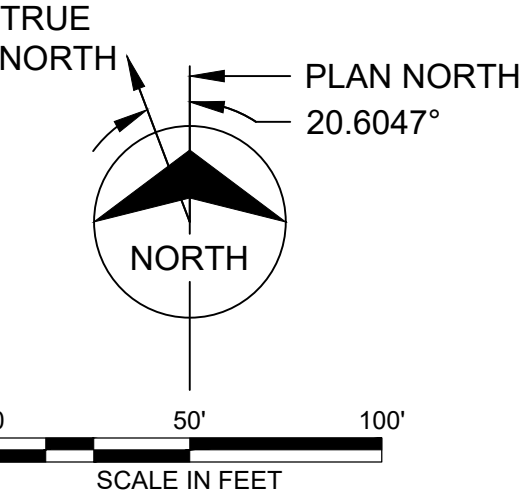
PLAN VIEW

LEGEND:

- PROPERTY LINE
- FENCE
- GATE
- DECIDUOUS TREE
- EVERGREEN TREE
- PHASE 2 EXPANSION

NOTES:

- FINAL LAYOUT SUBJECT TO CHANGE BASED ON FINAL ENVIRONMENTAL AND CIVIL SETBACK DISTANCES.
- EQUIPMENT QUANTITIES, CONFIGURATION, AND FOOTPRINT SUBJECT TO CHANGE BASED ON FINAL BESS TECHNOLOGY SELECTION AND ADDITIONAL PROJECT DUE DILIGENCE.
- EXISTING PERIMETER VEGETATION TO REMAIN FOR SCREENING FROM R.O.W. AND ADJACENT PROPERTIES.
- DRIVE ENTRY ENHANCED LANDSCAPING TO BE WATER EFFICIENT PLANTINGS WITH ADAPTABILITY TO LOCAL ENVIRONMENT. SHRUBS SHALL BE SIZE 3 GALLON.
- METHOD OF IRRIGATION TO BE A TEMPORARY SYSTEM FOR PLANT ESTABLISHMENT.



PRELIMINARY - NOT FOR CONSTRUCTION

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



Consistent with LEED® goals
& Green Globes™ criteria
for light pollution reduction

Autobahn Series ATBM Roadway

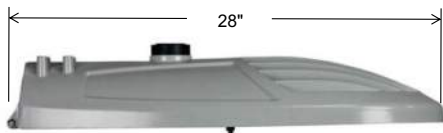
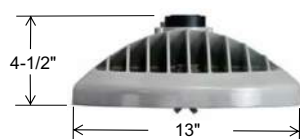
PRODUCT OVERVIEW



Applications:

Residential streets
Parking lots
High speed roadways

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the ATBM is 0.3 sq. ft.,
Approx. Wt. = 21 lbs. (9.5 kg)

STANDARDS

Color temperatures of $\leq 3000\text{K}$ must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Features:

**COBRA-HEAD TYPE 4:
ATBM-P05-480-R4-NR-HSS**

OPTICAL

Same Light: Performance is comparable to 150W – 250W HPS

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

IP66 rated borosilicate glass optics ensure longevity and minimize dirt depreciation. Unique IP66 rated LED light engines provide 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing.

Available distributions are Type II, III, IV, & V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated $>100,000$ hours at 25°C , L70.

Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected 40-60% over comparable HID luminaires.

Robust Surge Protection: Standard surge protection is 20kV/10kA "Extreme Level" per ANSI C136.2. An optional MOV pack provides 10kV/5kA "Enhanced Level."

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter.

The 2 – bolt and optional 4 bolt clamping mechanism provide 3G vibration rating per ANSI C136.

The Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 7 pin receptacle optionally available.

Premium solid state locking-style photocontrol – PCSS (10 year rated life) Extreme long life solid state locking-style photocontrol – PCL1 (20 year rated life).

Extreme long life solid state locking-style photocontrol with on demand remote on/off control – PCCC (15 year rated life).

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

Autobahn Series ATBM

Roadway

ORDERING INFORMATION

Series	Performance Packages	Voltage	Optics	Mounting
ATBM Autobahn LED Roadway	P05 9,700 lumens P10 11,000 lumens P20 12,800 lumens P30 15,500 lumens P40 17,400 lumens P50 18,700 lumens P60 20,000 lumens P70 21,500 lumens	MVOLT Multi-volt, 120-277V 347 347V 480 480V	R2 Roadway Type II R3 Roadway Type III R4 Roadway Type IV R5 Roadway Type V	(Blank) 2 Bolt Mounting 4B 4 Bolt Mounting

Options

Color Temperature (CCT)

(Blank)	4000K CCT, 70 CRI Min.
3K	3000K CCT, 70 CRI Min.
5K	5000K CCT, 70 CRI Min.

Paint

(Blank)	Gray
BK	Black
BZ	Bronze
DDB	Dark Bronze
GI	Graphite
WH	White

Surge Protection

(Blank)	Standard 20kV/10kA SPD
MP	MOV Pack

Miscellaneous Options

HSS	House Side Shield
NL	NEMA Label Indicating Wattage
XL	Not CSA Certified – No Terminal Block Cover
UMR-XX	8" Horizontal Arm for Round Pole, Painted to match Fixture
UMS-XX	8" Horizontal Arm for Square Pole, Painted to match Fixture
UMR-GALV	8" Horizontal Arm for Round Pole, Painted to match Fixture
UMS-GALV	8" Horizontal Arm for Square Pole, Painted to match Fixture

Control Options

(Blank)	3 Pin NEMA Photocontrol Receptacle
P7	7 Pin Photocontrol Receptacle (dimmable driver included) ¹
NR	No Photocontrol Receptacle
A0	Field Adjustable Output ³
DM	0-10V Dimmable Driver ²
PCSS	Solid-State Lighting Photocontrol ⁴
PCLL	Solid-State Long Life Photocontrol
PCCC	Solid-State Long Life Photocontrol with remote control on/off ⁴
SH	Shorting Cap

Packages

(Blank)	Standard Pack
JP	Job Pack (36/pallet)

Accessories

ATBMHSS	House Side Shield
ATBMLTS	Light Trespass Shield
RKATBMMVOLTSPD	ATBM Acuity SPD, MVOLT
RKATBMHVSPD	ATBM Acuity SPD, 347/480V
RKATBMMVOLTMP	ATBM MOV Pack, MVOLT
RKATBMHVMP	ATBM MOV Pack, 347/480V

Notes:

- 1 Dimmable Driver included. Not available with DM or NR.
- 2 Controls by others. Not available with P7 or A0.
- 3 Not available with DM.
- 4 MVOLT only.



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

© 2014-2019 Acuity Brands Lighting, Inc. All Rights Reserved. 05/22/19

Warranty Five-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
 Actual performance may differ as a result of end-user environment and application.
 Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

Autobahn Series ATBM

Roadway

P E R F O R M A N C E P A C K A G E															
Performance Package	Distribution	Input Watts	3K (3000K CCT, 70 CRI)					4K/5K (4000K/5000K CCT, 70 CRI)					LLD @ 25°C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	25k Hours	75k Hours	100k Hours
P05	R2	68	9,396	138	1	0	2	9,718	143	1	0	2	0.93	0.86	0.83
	R3		9,366	138	1	0	3	9,688	142	1	0	3			
	R4		9,030	133	1	0	3	9,340	137	1	0	3			
	R5		10,334	152	3	0	2	10,689	157	3	0	2			
P10	R2	81	10,635	131	2	0	3	11,299	139	2	0	3	0.93	0.86	0.83
	R3		10,675	132	2	0	3	11,302	140	2	0	3			
	R4		10,391	128	2	0	4	10,994	136	2	0	4			
	R5		11,504	142	3	0	2	12,086	149	3	0	2			
P20	R2	94	12,073	128	2	0	3	12,874	137	2	0	3	0.93	0.86	0.83
	R3		12,065	128	2	0	3	12,818	136	2	0	3			
	R4		11,946	127	2	0	4	12,525	133	2	0	4			
	R5		13,085	139	4	0	2	13,776	147	4	0	2			
P30	R2	118	14,637	124	2	0	3	15,514	131	2	0	3	0.93	0.86	0.83
	R3		14,631	124	2	0	3	15,452	131	2	0	3			
	R4		14,317	121	2	0	4	15,151	128	2	0	5			
	R5		15,775	134	4	0	2	16,685	141	4	0	2			
P40	R2	135	16,233	120	2	0	3	17,493	130	2	0	3	0.93	0.86	0.83
	R3		16,402	121	2	0	3	17,367	129	2	0	3			
	R4		15,911	118	2	0	5	17,008	126	2	0	5			
	R5		17,507	130	4	0	2	18,595	138	4	0	2			
P50	R2	152	17,541	115	2	0	3	18,748	123	2	0	3	0.93	0.86	0.83
	R3		17,677	116	2	0	4	18,712	123	2	0	4			
	R4		17,154	113	2	0	5	18,246	120	2	0	5			
	R5		19,008	125	4	0	2	20,088	132	4	0	2			
P60	R2	168	18,770	112	2	0	3	20,095	120	3	0	3	0.93	0.86	0.83
	R3		18,830	112	2	0	4	20,094	120	3	0	4			
	R4		18,369	109	2	0	5	19,648	117	2	0	5			
	R5		20,350	121	4	0	2	21,505	128	4	0	2			
P70	R2	190	20,190	106	3	0	3	21,565	114	3	0	3	0.93	0.86	0.83
	R3		20,142	106	3	0	4	21,504	113	3	0	4			
	R4		19,660	103	2	0	5	21,024	111	3	0	5			
	R5		21,988	116	4	0	2	23,076	121	4	0	2			

Note: Individual fixture performance may vary. Specifications subject to change without notice.



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

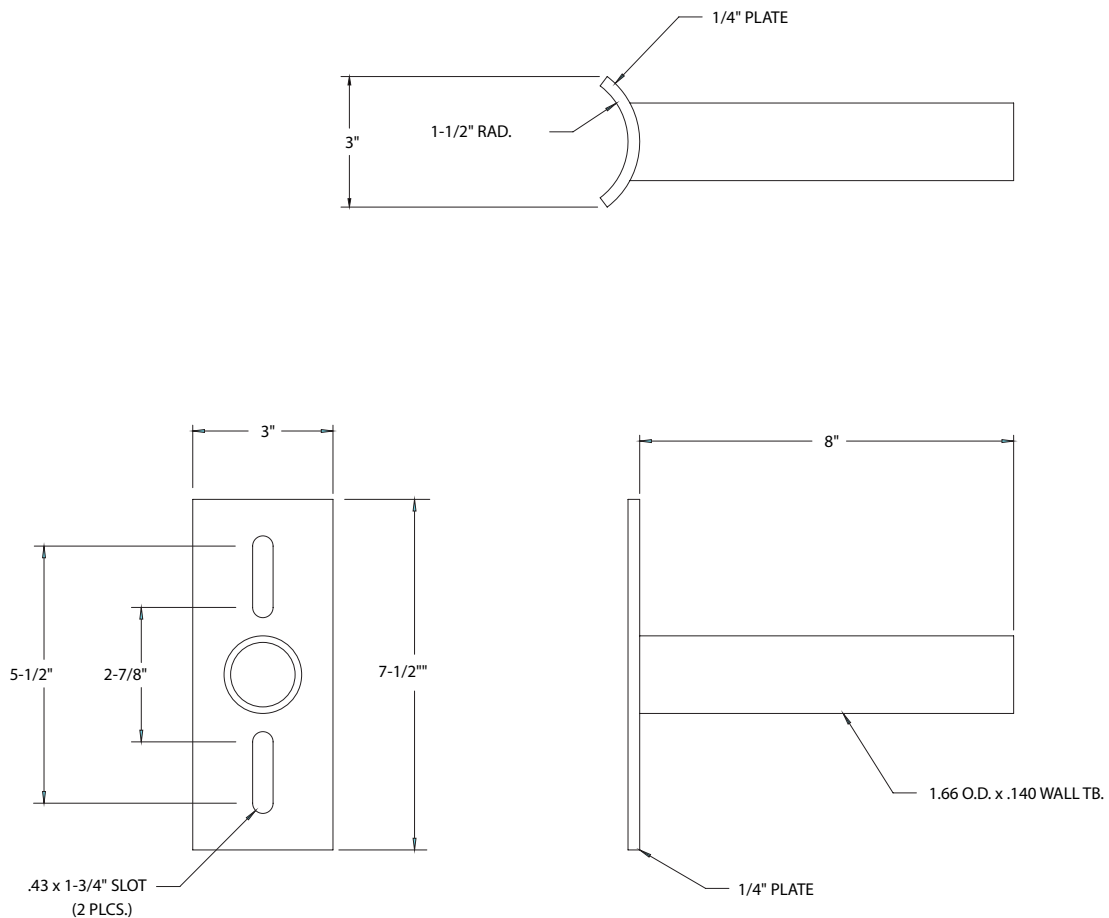
© 2014-2019 Acuity Brands Lighting, Inc. All Rights Reserved. 05/22/19

Warranty Five-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

UMR POLE ADAPTOR

RECOMMENDED FOR USE WITH POLES OF 4" DIAMETER OR SMALLER



UMS POLE ADAPTOR



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

© 2014-2019 Acuity Brands Lighting, Inc. All Rights Reserved. 05/22/19

Warranty Five-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
 Actual performance may differ as a result of end-user environment and application.
 Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

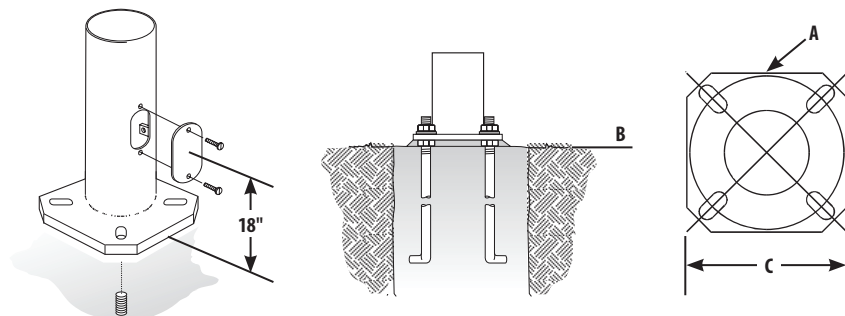
TECHNICAL INFORMATION

Holophane Pole Number	Fixture Mounting Height	Nominal Shaft Base, Wall Thickness	Quality of Arm and Length	EPA ft ² with 1.3 Gust per Arm 100 MPH	Maximum Weight (lbs.)	Bolt Circle (in.)	Bolt Size (in.)	Anchor Bolt Ship Level	Anchor Bolt Template Ship Level
FRTAU206EBMAUS4	20	6.0 X 4.0 X .156	Single Arm 4 feet	2	65	9.50	.75 X 30 X 3	AB-38-4	TMP-42
FRTAU257EBMAUS4	25	7.0 X 4.0 X .156	Single Arm 4 feet	2	65	10.50	1 X 36 X 4	AB-27-4	TMP-44
FRTAU308EBMAUS4	30	8.0 X 4.5 X .156	Single Arm 4 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU358GBMAUS4	35	8.0 X 4.5 X .188	Single Arm 4 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU408JBMAUS4	40	8.0 X 4.5 X .250	Single Arm 4 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU206GBMAUS6	20	6.0 X 4.0 X .188	Single Arm 6 feet	2	65	9.50	.75 X 30 X 3	AB-38-4	TMP-42
FRTAU257GBMAUS6	25	7.0 X 4.0 X .188	Single Arm 6 feet	2	65	10.50	1 X 36 X 4	AB-27-4	TMP-44
FRTAU308GBMAUS6	30	8.0 X 4.5 X .188	Single Arm 6 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU358JBMAUS6	35	8.0 X 4.5 X .250	Single Arm 6 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU408JBMAUS6	40	8.0 X 4.5 X .250	Single Arm 6 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU206GBMAUS8	20	6.0 X 4.0 X .188	Single Arm 8 feet	1.74	65	9.50	.75 X 30 X 3	AB-38-4	TMP-42
FRTAU258EBMAUS8	25	8.0 X 4.0 X .156	Single Arm 8 feet	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU308JBMAUS8	30	8.0 X 4.5 X .188	Single Arm 8 feet	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU358JBMAUS8	35	8.0 X 4.5 X .250	Single Arm 8 feet	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU4010GBMAUS8	40	10.0 X 4.5 X .188	Single Arm 8 feet	1.74	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU206GBMA2US4	20	6.0 X 4.0 X .188	Double Arm 4 feet (2@180)	2	65	9.50	.75 X 30 X 3	AB-38-4	TMP-42
FRTAU258EBMA2US4	25	8.0 X 4.5 X .156	Double Arm 4 feet (2@180)	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU308GBMA2US4	30	8.0 X 4.5 X .188	Double Arm 4 feet (2@180)	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU3510GBMA2US4	35	10 X 6.0 X .188	Double Arm 4 feet (2@180)	2	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU4010LBMA2US4	40	10 X 6.0 X .219	Double Arm 4 feet (2@180)	2	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU207EBMA2US6	20	7.0 X 4.0 X .156	Double Arm 6 feet (2@180)	2	65	10.50	1 X 36 X 4	AB-27-4	TMP-44
FRTAU258EBMA2US6	25	8.0 X 4.5 X .156	Double Arm 6 feet (2@180)	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU308JBMA2US6	30	8.0 X 4.5 X .250	Double Arm 6 feet (2@180)	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU3510GBMA2US6	35	10 X 6.0 X .188	Double Arm 6 feet (2@180)	2	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU4010LBMA2US6	40	10 X 6.0 X .219	Double Arm 6 feet (2@180)	2	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU207GBMA2US8	20	7.0 X 4.0 X .188	Double Arm 8 feet (2@180)	1.74	65	10.50	1 X 36 X 4	AB-27-4	TMP-44
FRTAU258GBMA2US8	25	8.0 X 4.5 X .188	Double Arm 8 feet (2@180)	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU308JBMA2US8	30	8.0 X 4.5 X .250	Double Arm 8 feet (2@180)	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU3510JBMA2US8	35	10 X 6.0 X .250	Double Arm 8 feet (2@180)	1.74	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU4010JBMA2US8	40	10 X 6.0 X .250	Double Arm 8 feet (2@180)	1.74	65	14.50	1 X 48 X 4	AB-39-4	TMP-51

Note: These specifications are intended for general purposes only. Acuity reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.

DIMENSIONAL DATA

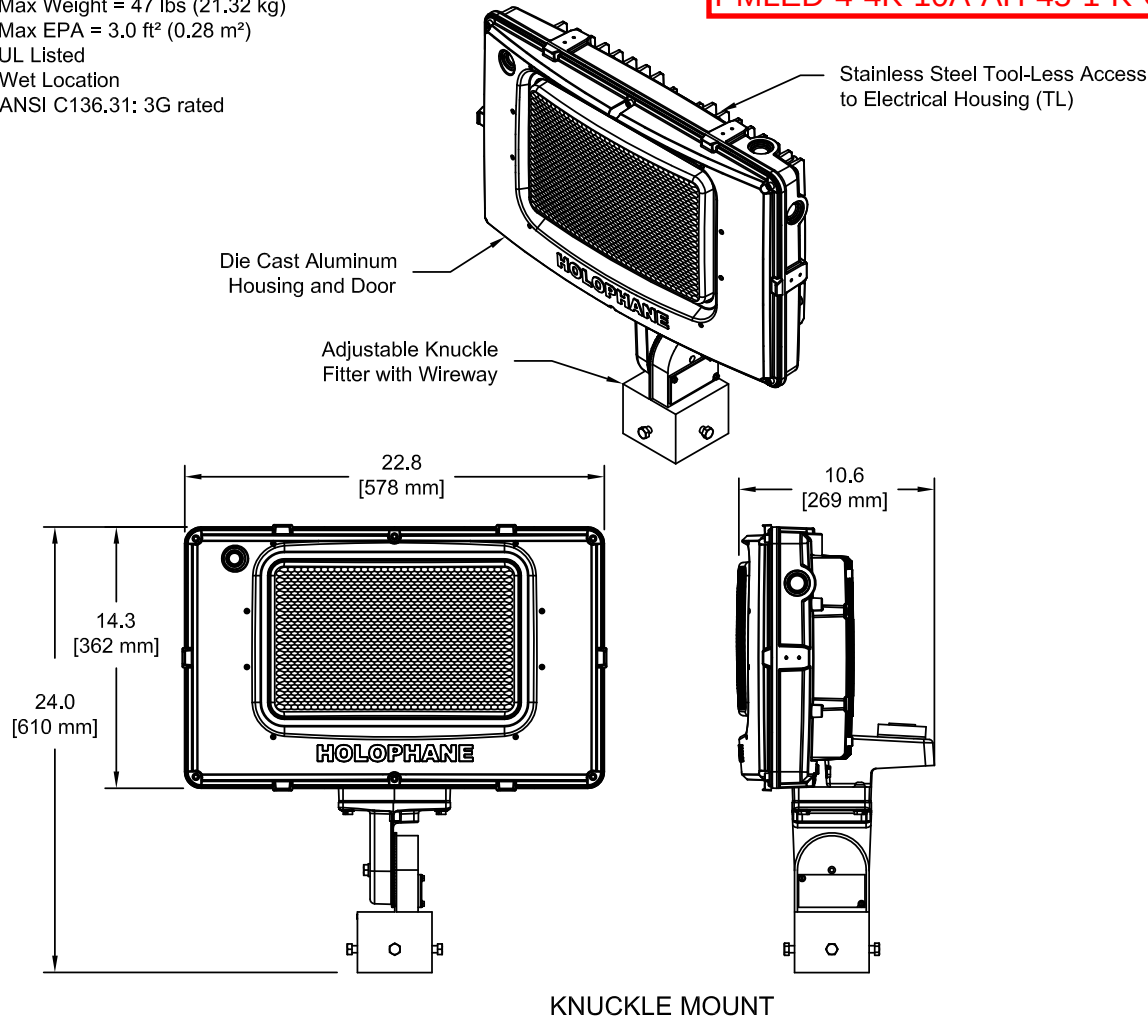
Shaft Base Size (in.)	A Bolt Circle (in.)	B Bolt Projection (in.)	C Base Square (in.)
5.9	9	3.5 - 4.25	10
6.6	9.5	3.5 - 4.25	10.5
7.3	10.5	3.5 - 4.25	11..25
9	12.5	3.75 - 4.5	12.375


Important:

- Do not erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Acuity will not accept claim for incorrect anchorage placement due to failure to use factory template.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.

Max Weight = 47 lbs (21.32 kg)
 Max EPA = 3.0 ft² (0.28 m²)
 UL Listed
 Wet Location
 ANSI C136.31; 3G rated

FLOOD:
PMLED-4-4K-10A-AH-45-1-K-GP-FVGP



Customer Preferred: (Most Frequently Ordered Catalog Numbers)
 PMLED 6 4K 10A AS 66 1 K HP

PMLED				
Series	Number of LED'S	Color Temperature	Drive Current	Voltage
Predator Medium LED	4 = 4 Module 5 = 5 Modules 6 = 6 Modules	3K = 3,000K CCT 4K = 4,000K CCT 5K = 5,000K CCT	10A = 1050 mA Driver	AS = Auto-sensing Voltage (120 thru 277) AH = Auto-sensing Voltage (347thru 480)
Beam pattern	Mounting	UL Category	Color	
44 = 4x4 (prismatic glass) 45 = 4x5 (prismatic glass) 55 = 5x5 (prismatic glass) 65 = 6x5 (prismatic glass) 66 = 6x6 (prismatic glass)	1 = Tenon Slipfitter Knuckle 3 = Yoke Stainless Steel 4 = Yoke Galvanized	K = Wet Locations 1L = Marine Outside	BP = Black Superdurable with Epoxy Primer GP = Grey Superdurable with Epoxy Primer HP = Graphite Superdurable with Epoxy Primer WP = White Superdurable with Epoxy Primer ZP = Bonze Superdurable with Epoxy Primer	
3 Cord Length Option		3 Cord Type	Options	Accessories
04 = 4 ft Cord Length 05 = 5 ft Cord Length 06 = 6 ft Cord Length 08 = 8 ft Cord Length 10 = 10 ft Cord Length	12 = 12 ft Cord Length 15 = 15 ft Cord Length 20 = 20 ft Cord Length 25 = 25 ft Cord Length 30 = 30 ft Cord Length	63 = 16 Gage, 3 Conductor 43 = 14 Gage, 3 Conductor 23 = 12 Gage, 3 Conductor	See Sheet 2	See Sheet 2

ORDERING INFORMATION:

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE ORDERED WITHOUT THE NECESSARY APPROVAL OF HOLOPHANE. HOLOPHANE WILL BE RESPONSIBLE FOR THE PROPER BOLT TIGHTENING TORQUE. HOLOPHANE WILL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS WRITTEN REQUEST. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY WAY DETRIMENTAL TO OUR INTERESTS AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

ORDER #:
 TYPE:
 DRAWN: BGW
 DATE: 4/3/17
 DWG #: LUM_PMLED

1 of 4

Predator[®]
 Medium LED

Infrastructure
 Specialty

HOLOPHANE[®]
 LEADER IN LIGHTING SOLUTIONS
 An Acuity Brands Company
 © 2010 Acuity Brands Lighting, Inc., All Rights Reserved

Options

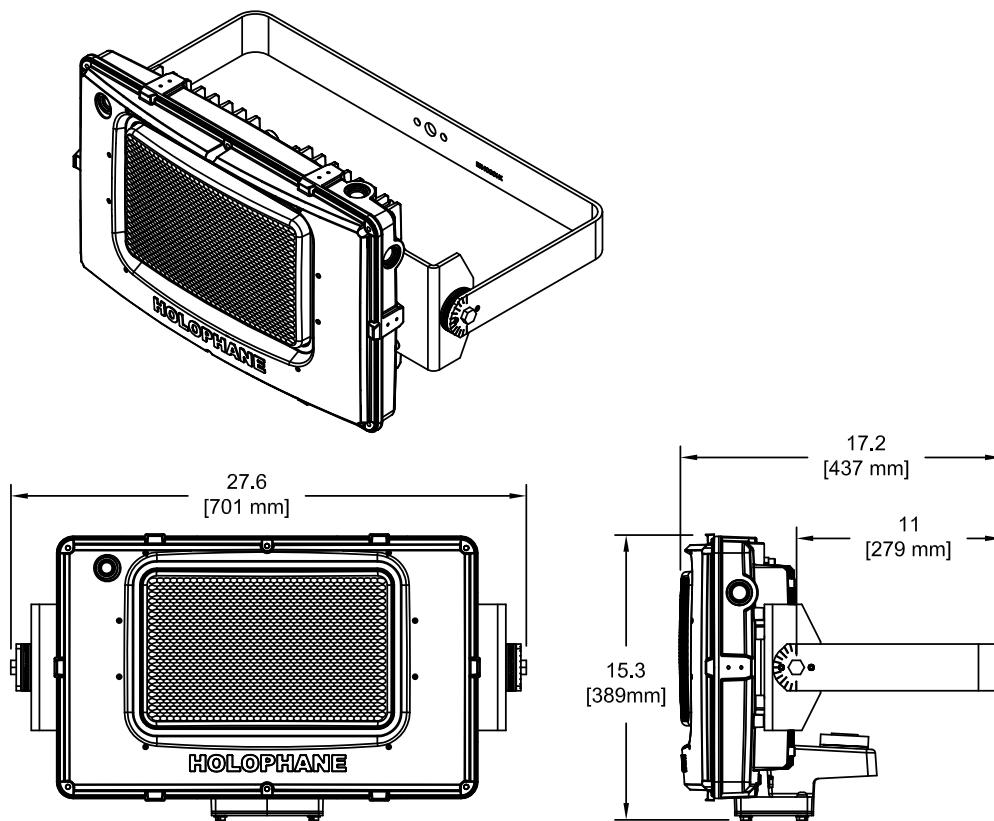
2P3 = Photocontrol Receptacle
 2P5 = 5-Pin Receptacle
 2P7 = 7-Pin Receptacle
 PCL1 = Photocontrol 120V
 PCL3 = Photocontrol 347V
 PCL4 = Photocontrol 480V
 PCSS = DSS 120-277V PC
 DM = 0-10V Dimmable Driver
 NL = NEMA Label
 TL = Tool-less Entry with latches
 F1 = Single Fusing
 F2 = Double Fusing
 SH = Shorting Cap

Accessories

PMLED FV-BP = Full Visor, Black
 PMLED FV-GP = Full Visor, Gray
 PMLED FV-HP = Full Visor, Graphite
 PMLED FV-WP = Full Visor, White
 PMLED FV-ZP = Full Visor, Bronze
 SH = Shorting Cap
 PMLED UBV-BP = Upper/Bottom Visor, Black
 PMLED UBV-GP = Upper/Bottom Visor, Gray
 PMLED UBV-HP = Upper/Bottom Visor, Graphite
 PMLED UBV-WP = Upper/Bottom Visor, White
 PMLED UBV-ZP = Upper/Bottom Visor, Bronze
 PMLED VG = Vandal Guard
 PMLED WG = Wire Guard
 08657-BP = Yoke to 2.375" OD Tenon Adaptor, Black
 08657-GP = Yoke to 2.375" OD Tenon Adaptor, Gray
 08657-HP = Yoke to 2.375" OD Tenon Adaptor, Graphite
 08657-WP = Yoke to 2.375" OD Tenon Adaptor, White
 08657-ZP = Yoke to 2.375" OD Tenon Adaptor, Bronze
 08775-BP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, Black
 08775-GP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, Gray
 08775-HP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, Graphite
 08775-WP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, White
 08775-ZP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, Bronze

Notes:

1. Only available with SS Yoke (3).
2. Not available with Marine (L).
3. Not available with tenon slipfitter mounting option



YOKE MOUNT

Predator®
Medium LED

**Infrastructure
Specialty**

HOLOPHANE®
LEADER IN LIGHTING SOLUTIONS
An Acuity Brands Company
© 2010 Acuity Brands Lighting, Inc., All Rights Reserved

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE SUBSTITUTED FOR THE UNIT ORDERED WITHOUT NOTICE. HOLOPHANE WILL BE RESPONSIBLE FOR ORDERING AND PROVIDING THE MATERIAL. HOLOPHANE WILL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS WRITTEN NOTICE TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

ORDER #:
 TYPE:
 DRAWN: BGW
 DATE: 4/3/17
 DWG #: LUM_PMLED

2 of 4

Performance specification

Optical

Performance of the PMLED is to replace 400-1000 watt HID luminaires. The optical system utilizes state of the art chip on board technology with 3000K, 4000K and 5000K color temperature choices with a 70 CRI minimum. The luminaire uses a highly specular internal reflector designed for superior field to beam ratios, uniformity and spacing. NEMA beam pattern choices of 4X4, 4X5, 5X5, 6X5, and 6X6 are available. Optional shielding is available to control uplight and light trespass. The optical enclosure is a borosilicate prismatic glass lens.

Electrical

Long Life: LED light engines are rated > 100,000 hours at 25C, L70. Electronic driver has a rated life of 100,000 hour at a 25C ambient.

Surge protection device provides IEEE/ANSI C62.4 Category C (10kV/5kA) level of protection.

Mechanical

Rugged low copper A360 alloy die cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convection cooling. The die cast aluminum housings are painted with a super durable polyester paint finish over an epoxy primer pretreat yields a finish that achieves a scribe creepage of 8 after 5,000 hours exposure to salt spray providing durability and corrosion resistance.

The luminaire is available in either knuckle mount or yoke mount. The knuckle mount is adjustable and is designed to fit 2.375 inch to 2.875 inch tenons. The yoke mount is available in either galvanized steel or stainless steel. The luminaire comes standard prewired eliminating the lineman from opening the unit during installation. The knuckle version is pre-wired to the wiring chamber at the fitter. The yoke mount has provision for a pre-wired cord drop to specified length in the ordering information.

The luminaire comes standard with the door frame bolted to the housing. Optional tool less stainless steel latches are available to allow easy access to LED drivers, surge protection, and optional terminal block.

The optical enclosure is sealed and gasketed to an IP66 rating. All luminaire mountings are 3G vibration rated per ANSI C136.

Controls

The NEMA three pin, five pin & seven pin locking-style photocontrol receptacles are available.

Dimming version uses proprietary Acuity Brands components to enable continuous 0-10V dimming down to 10% output via the ROAM smart controls system. (sold separately)

Photocontrol for solid-state lighting meets ANSI C136.10 criteria

Warranty & Standards

Suitable for ambient temperatures -40C to 40C.

UL 1598 A wet location, UL 1598A Marine Outside Type(Salt Water)

Predator[®]
Medium LED

**Infrastructure
Specialty**

HOLOPHANE[®]
LEADER IN LIGHTING SOLUTIONS
An Acuity Brands Company
© 2010 Acuity Brands Lighting, Inc., All Rights Reserved

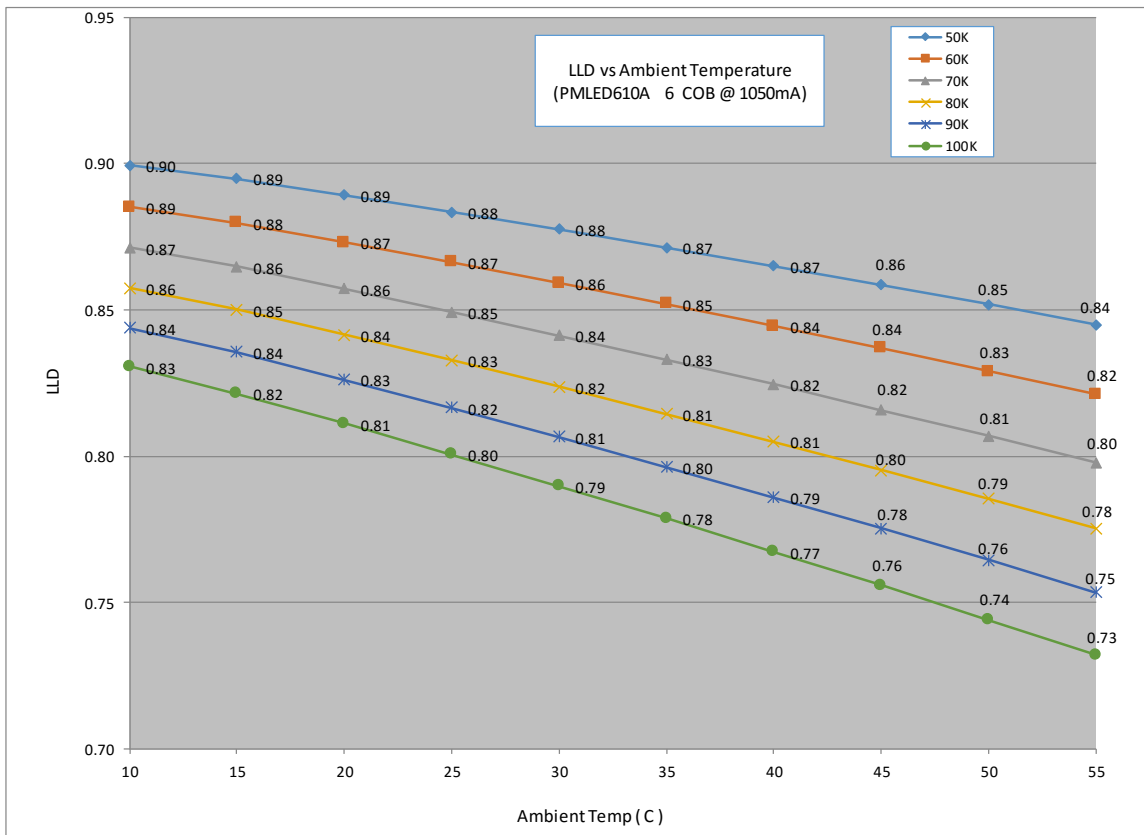
THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE SUBMITTED FOR REVIEW AND APPROVAL BY HOLOPHANE. ANY CHANGES TO THE ORDER, INCLUDING BUT NOT LIMITED TO, MATERIAL, DIMENSIONS, OR FINISH, SHALL BE NOTED ON THE ORDER. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS WRITTEN NOTICE. IT IS NOT TO BE REPRODUCED OR USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

ORDER #:	
TYPE:	
DRAWN:	BGW
DATE:	4/3/17
DWG #:	LUM_PMLED

3 of 4

Operating Characteristics

PMLED	Distribution	Lumens	Input operating Amps						Input Watts	LPW
		4K	120V	208V	240V	277V	347V	480V		
04 10A			1.48	0.86	0.76	0.67	0.67	1.40		
	44	20,083							177	113
	45	20,424							177	115
	55	21,789							177	123
	65	21,962							177	124
	66	21,524							177	122
PMLED	Distribution	Lumens	Input operating Amps						Input Watts	LPW
		4K	120V	208V	240V	277V	347V	480V		
05 10A			1.48	0.67	0.93	0.86	0.67	0.86		
	44	24,794							219	113
	45	25,215							219	115
	55	26,893							219	123
	66	27,114							219	124
	66	26,573							219	124
PMLED	Distribution	Lumens	Input operating Amps						Input Watts	LPW
		4K	120V	208V	240V	277V	347V	480V		
06 10A			2.18	0.67	1.11	0.67	0.76	0.86		
	44	29,257							261	112
	45	29,754							261	113
	55	31,740							261	122
	66	31,994							261	123
	66	31,357							261	124



WARRANTY

Limited warranty located at
[www.acuitybrands.com/CustomerResources/Terms and conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms%20and%20conditions.aspx)

NOTE

Specifications subject to change without notice.
 Actual performance may differ as a result of end-user environment and application.
 Actual wattage may differ by +/- 8% when operating at nominal input voltage +/- 10%.

Predator[®]
Medium LED

**Infrastructure
 Specialty**

HOLOPHANE[®]
 LEADER IN LIGHTING SOLUTIONS
 An Acuity Brands Company
 © 2010 Acuity Brands Lighting, Inc. All Rights Reserved

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE SUBSTITUTED FOR THE UNIT ORDERED WITHOUT NOTICE. HOLOPHANE WILL BE RESPONSIBLE FOR PROVIDING THE BOLT TIGHTENING TORQUE WILL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS WRITTEN NOTICE TO OUR INTERESTS AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

ORDER #:
 TYPE:
 DRAWN: BGV
 DATE: 4/3/17
 DWG #: LUM_PMLED

4 of 4

Petrolux® LED Low Bay

Wet Location for Demanding Environments

PXLW



Catalog Number	SUBSTATION
Notes	One lighting unit consists of: (2) PXLW-3000LM-WD-480-40K-70CRI-PM-DGXD AND (1) 072332DGXD TANDEM MOUNT ARM

Description

- For demanding environments with lower mounting heights where dust, dirt and moisture are a concern.
- Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. [Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.](#)

Optics

- Prismatic borosilicate glass directs light where needed and reduces harsh glare.
- Silicone rubber lens available that will not brown, chip, shatter or break.
- Four distributions (Type 5 low angle, Type 5 high angle, type 4 forward throw and Type 1 long and narrow) available to maximize versatility.
- Highly engineered LED system ensures superior uniformity and maximizes spacing.
- Lens assembly secured by stainless steel tamper-resistant Torx® T-20 screws.

Electrical

- Luminaire Surge Protection Level: Designed to withstand up to 10kV/5kA per ANSI C82.77-5-2015.
- 0-10V dimming driver is standard.
- Optional robust driver solution designed to assist with power quality and drop neutral conditions. XVOLT option supports 277-480V; 6kV surge rated.
- 3000K, 4000K or 5000K CCT available.
- Fault-tolerant LED light engine continues to provide light even in the failure of one LED.
- Field Adjustable Output (AO) module - Onboard device that adjusts the light output and input wattage to meet site specific requirements. The AO module is preset at the factory to position number 8 (see chart).

Mechanical

- Super durable TGIC thermoset powder coat finish provides 1500 hours salt fog rating. CR (corrosion resistant) optional finish is a five-stage pre-treating and painting process that yields over 5,000 hours salt rating per ASTM B117.
- Robust cast aluminum housing with low copper content (0.6% CU content) withstands harsh or hostile environments.
- Universal mount high profile top cover (ceiling/pendant). Optional universal arm available for wall/stanchion. Other mountings include, low profile hook/pendant mount and high profile yoke mount.
- Precise number of fins dissipate maximum amount of heat and achieve up to 149°F (65°C) ambient rating.
- Universal mount can be wall, stanchion, and angle mounted to accommodate a variety of arms.

Listings

- UL 1598 Listed for use in wet locations
- IP65 and IP66 rated. IP67 rated except when used with wall, stanchion, sensor, sub-station or hooks.
- Luminaire is 1G vibration rated.
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- Marine rated — see Marine/NEMA 4X chart for option compatibility
- NEMA 4X rated — see Marine/NEMA 4X chart for option compatibility
- Certified to meet NSF Splash Zone 2 (specify FPA option)
- IK rated (see chart on page 6)

Warranty

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.



Typical Applications

- Petroleum refineries
- Ethanol facilities
- Chemical plants
- Power plants
- Textile mills
- Water and wastewater treatment facilities
- Parking Garages

Dimensions: Inches (millimeters) unless otherwise noted.

Universal Mount
Diameter: 13.11 (332.99)
Height: 11.43 (290.32)
Weight: Approx. 19 lbs (8.62 kg)
Pallet quantity: 12 fixtures
EPA: 0.787 sq. ft. wind loading

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® or XPoint™ Wireless control networks marked by a **shaded background***

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details



A+ Capable options indicated
by this color background.

ORDERING INFORMATION

Example: PXLW 3000LM MDUS MVOLT 30K 80CRI UNM DNxD

Series	Lumens	Optics	Voltage	Color Temperature	Color Rendering Index	Mounting Options			
PXLW	3000LM	3,000 lumens ¹	FWD	Forward throw, glass lens	MVOLT (120V-277V)	30K 3000K CCT	70CRI 70CRI	UNM	Universal Mount, high profile top cap
	5000LM	5,000 lumens ¹	MDO	Medium glass lens with minimal uplight	120 120V	40K 4000K CCT	80CRI 80CRI	PM	Pendant Mount, low profile top cap
			MDU5	Medium glass lens with uplight	208 208V	50K 5000K CCT	90CRI 90CRI		
	8000LM	8,000 lumens	MDU5GLF	Medium frosted glass lens with uplight	240 240V			YK90	Yoke Mount 0-90 Degree, high profile top cap
			ND	Long and narrow, glass lens	277 277V				
	10000LM	10,000 lumens	SO	Medium, silicone optic, with minimal uplight	HVOLT (347V/480V)				
			SOND	Long and narrow, silicone optic	347 347V				
			WD	Wide, glass lens	480 480V				
					XVOLT (277-480V)				
				277X	277V ²				
			347X	347V ²					
			480X	480V ²					

Options	Finish
<u>Damp Cordsets:</u>³ CDP-L5-15-X X-ft. 120V cord and twist lock plug, 3 conductor, white (120 only) CDP-L6-15-X X-ft. 208V/240V cord and twist lock plug, 3 conductor, white (208 or 240 only) CDP-L7-15-X X-ft. 277V cord and twist lock plug, 3 conductor, white (277 or 277X only) CDP-L24-20-X X-ft. 347V cord and twist lock plug, 3 conductor, white (347 or 347X only) CDP-L8-20-X X-ft. 480V cord and twist lock plug, 3 conductor, white (480 or 480X only) CDP-5-15-X X-ft., 120V cord and straight blade plug, 3 conductor, white (120 only) <u>Wet Cordsets:</u>⁴ CDPW-L5-15-X X-ft. 120V cord and twist lock plug, 3 conductor, wet location, white (120 only) CDPW-L6-15-X X-ft. 208V/240V cord and twist lock plug, 3 conductor, wet location, white (208 or 240 only) CDPW-L7-15-X X-ft. 277V cord and twist lock plug, 3 conductor, wet location, white (277 or 277X only) CDPW-L24-20-X X-ft. 347V cord and twist lock plug, 3 conductor, wet location, white (347 or 347X only) <u>Wet Cords:</u>⁵ CDW-X X-ft. cord, 3 conductor, wet location, white CDW-4C-X X-ft. cord, 4 conductor, wet location, black⁶ CDW-5-W-X X-ft. cord, 5 conductor, wet location, white⁷ CDW-5-K-X X-ft. cord, 5 conductor, wet location, black⁷ <u>Hooks:</u>⁸ HKMW 3/4" wet listed hook male, PF-291 <u>Other Options:</u> WGX Wire guard, factory installed EMD Ingress/Egress Marker Decal NSG Non silicone gasket (complete fixture)⁹ DL Damp location UPS Uplight Shield¹⁰ CR Corrosion resistant paint FPA Food processing area¹¹ AO Field Adjustable Output, Standard setting is 8¹² E10WMCP EM Self-diagnostics battery pack, 10W, Certified in the Ca Title 20 MAEDBS¹³	<u>Controls:</u> <u>Non-Dimming Sensors:</u>¹⁴ MSI10NWL 360° motion sensor integral, low bay 15-25 ft., on/off, IP66 rated MSI10NWL DSCNWL 360° motion sensor integral with photocell & occupancy sensor, low bay 15-25 ft., on/off, IP66 rated <u>Dimming Sensors:</u>¹⁴ MSI102L3VWL 360° motion sensor integral, low bay 15-25 ft., on/off with second time-out period, goes to a dimmed state before turning off max./min. Dim setting, IP66 rated <u>Xpoint Wireless:</u>¹⁵ MSI10XAWL DSCXAWL XPoint wireless enabled with photocell & occupancy sensor, low bay 15-25 ft, IP66 rated XAD XPoint™ Wireless 0-10V relay, internal, lower max ambient XAD924 XPoint™ Wireless 0-10V relay, internal, lower max ambient, meets UL924 <u>Photocontrols:</u> BP Button style photo control, 120V-277V/347V¹⁶ PER NEMA twist lock receptacle¹⁷ PCS DTS, solid state photo control¹⁸ P34 DTL, solid state photo control¹⁹ P48 DTL, solid state photo control²⁰ PSC Shorting cap²¹ <u>nLight Air:</u>²² NLTAIR2 RSBG6 nLight AIR Generation 2 enabled 360° high mount(15-30ft) motion sensor NLTAIR2 RSBG10 nLight AIR Generation 2 enabled 360° low mount(8-15ft) motion sensor NLTAIR2 RIO nLight AIR (wireless) gen 2 control device (dimming & switching) <u>Bluetooth Dimming Sensors:</u>²³ SBGR10BTP 360° Low Mount Occ Sensor, pre-wired; Bluetooth® SBGR10BTP HL 360° Low Mount Occ Sensor w/HL Default, pre-wired; Bluetooth® SBGR10BTP ADC 360° Low Mount Occ Sensor w/ADC Default, pre-wired; Bluetooth® SBGR10BTP ANL 360° Low Mount Occ Sensor w/ANL Default, pre-wired; Bluetooth®

For Accessories and Footnotes, see next page.

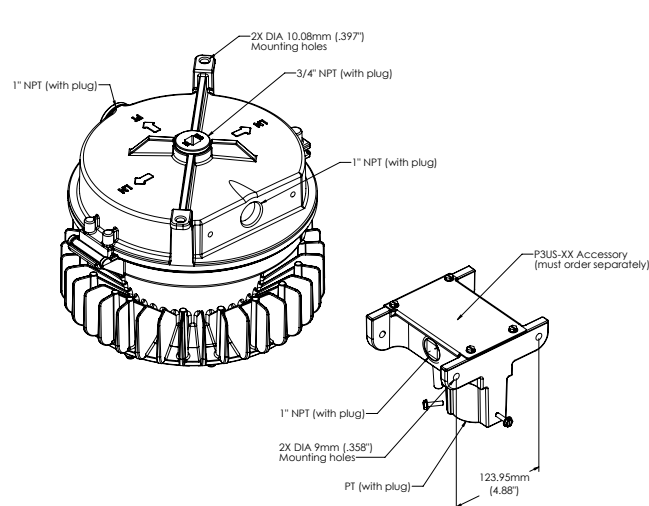
Accessories: Order as separate catalog number.

072331 XX	Substation Arm for Single Luminaire, XX denotes color ²⁴
072331CTL XX	Substation Arm for Single Luminaire with controls, XX denotes color ²⁴
072332 XX	Substation Arm for Tandem Mount Luminaire, XX denotes color (fixtures controlled separately in the field) ²⁴
072332CTL XX	Substation Arm for Tandem Mount Luminaire with controls, XX denotes color ²⁴
WGPXLW	Wire guard, zinc coated
SCK36	36" safety chain kit
SCK72	72" safety chain kit
SCK120	120" safety chain kit
UPSPXLWXX	Uplight shield, XX denotes color
P3US-35-XX	35 degree universal mount arm, XX denotes color ²⁵
P3US-XX	Universal Mount Arm, XX denotes color ²⁵
MI-3502	Thread Sealant
PCPXLWXX	Pendant Cone, XX denotes color ²⁶

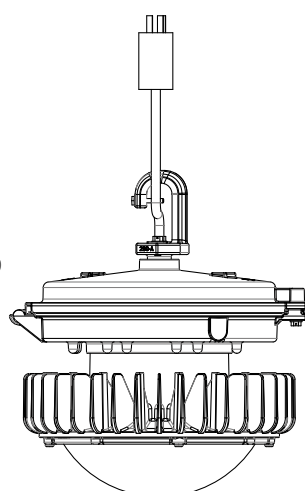
Notes

- 1 Not available with XVOLT, 277X, 347X or 480X.
- 2 Utilizes XVOLT driver.
- 3 Voltage must be specified. Requires DL and HKMW options. X denotes length, 3, 6 and 10ft available.
- 4 Voltage must be specified. Requires HKMW option. X denotes length, 3, 6 and 10ft available.
- 5 X denotes length, 3, 6 and 10ft available.
- 6 Requires E10WMCP battery option.
- 7 Not available with dimming sensors or battery pack.
- 8 Requires Cord or Cordset. Not available with YK90 option.
- 9 Not available with SO or SOND options.
- 10 When ordered with MS10NWL, MS10NWL DSCNWL, MS10XAWL DSCXAWL, SBGR10BTP, SBGR10BTP HL, SBGR10BTP ADC, or SBGR10BTP ANL, may cause sensor viewing angle cutoff.
- 11 Available with SO, SOND, UNM, PM options only. Not available with AO, SBGR10BTP, SBGR10BTPHL, SBGR10BTPADC, SBGR10BTPANL, MS10NWL, MS102L3VWL, MS10NWL DSCNWL, MS10XAWL DSCXAWL or E10WMCP options.
- 12 Not available with SBGR10BTP, SBGR10BTPHL, SBGR10BTPADC, SBGR10BTPANL, MS102L3VWL, MS10NWL DSCNWL, MS10XAWL DSCXAWL, XAD, XAD924, CDW-5-K-X or CDW-5-K-X options.
- 13 Utilizes PS1055MCP battery. Not available with PM, XVOLT, 347X, 480X, Xpoint wireless or Bluetooth dimming sensors. Available with CD-4C-X, but not required.
- 14 Not available with XVOLT. When ordered with YK90 and mounted between 35-90 degrees DL option is required.
- 15 Not available with HVOLT, XVOLT, 347X or 480X.
- 16 Not available with MVOLT, HVOLT, 480V, XVOLT, 480X, or YK90.
- 17 Not available with YK90.
- 18 Requires PER option. Available with 120, 208, 240, 277 or 277X options only.
- 19 Requires PER option. Available with 347, 347X options only.
- 20 Requires PER option. Available with 480, 480X options only.
- 21 Requires PER option.
- 22 Not available with HVOLT at 3000LM or 5000LM. Not available with XVOLT, 277X, 347X, 480X, AO, DIM, XAD or SBGR sensor in any lumen package.
- 23 Not available with XVOLT, 277X, 347X or 480X options. Only available in HVOLT with 8000LM or 10000LM lumen packages.
- 24 Not available with YK90, cord or cordset.
- 25 Not available with PM, YK90, cord or cordset.
- 26 Available with PM option only. Requires minimum 8" customer provided stem.

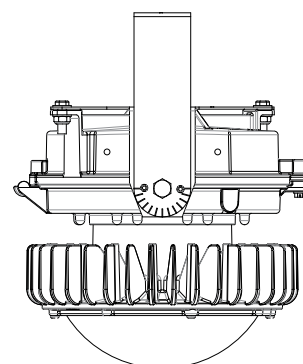
DIMENSIONAL DATA



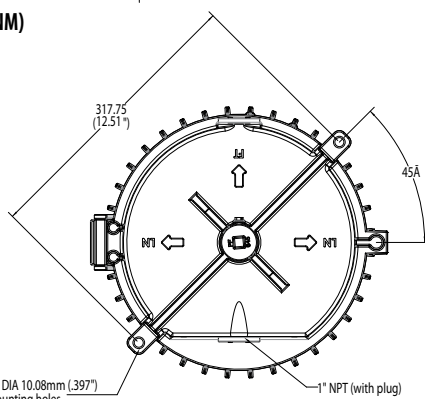
UNIVERSAL MOUNTING (UNM)



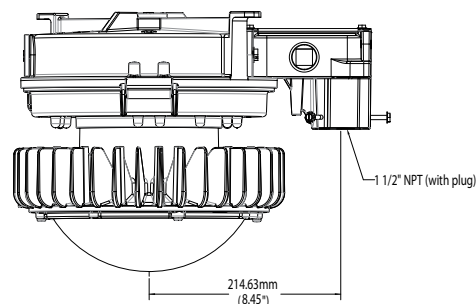
HOOK MOUNTING



YOKE MOUNT 0-90 DEGREE (YK90)

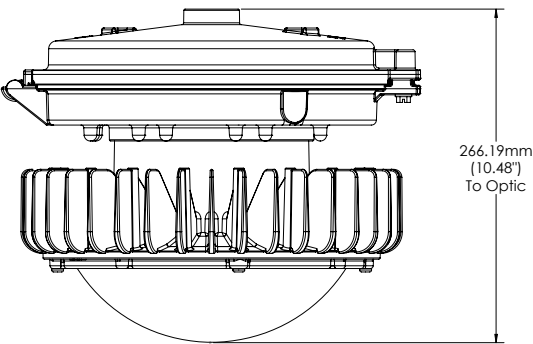


MOUNTING HOLES

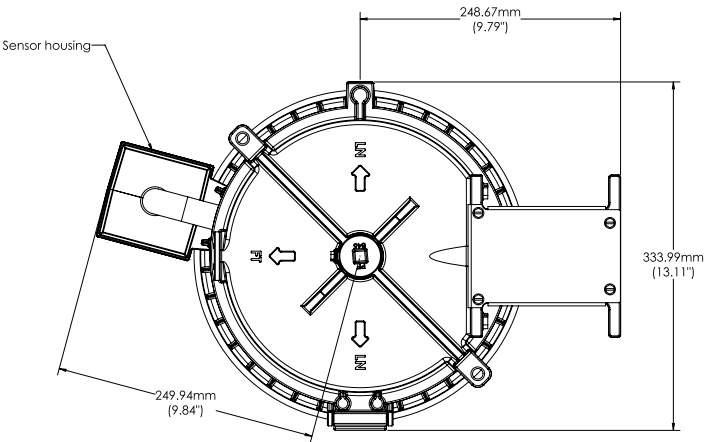


**UNIVERSAL MOUNTING (UNM)
with P3US-XX Accessory
(must order P3US-XX separately)**

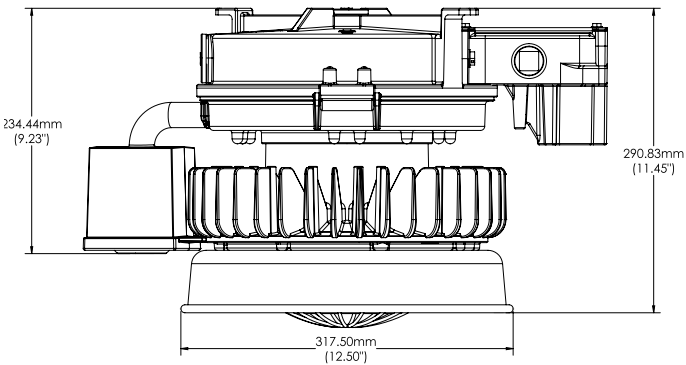
DIMENSIONAL DATA (continued)



PENDANT MOUNTING (PM)

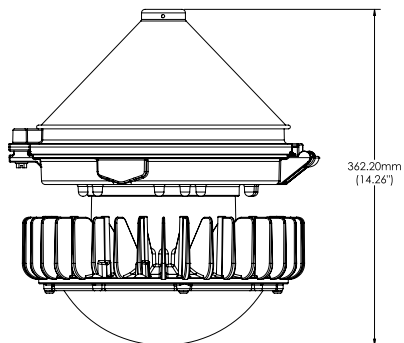


SENSOR OPTION

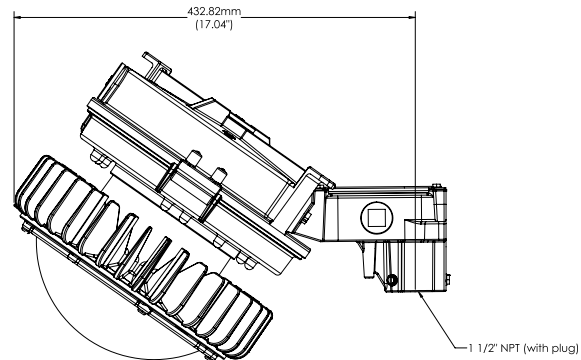


UPLIGHT SHIELD OPTION (UPS)

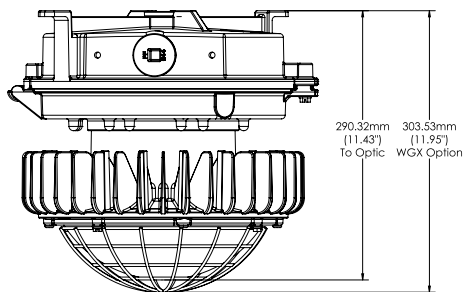
DIMENSIONAL DATA (continued)



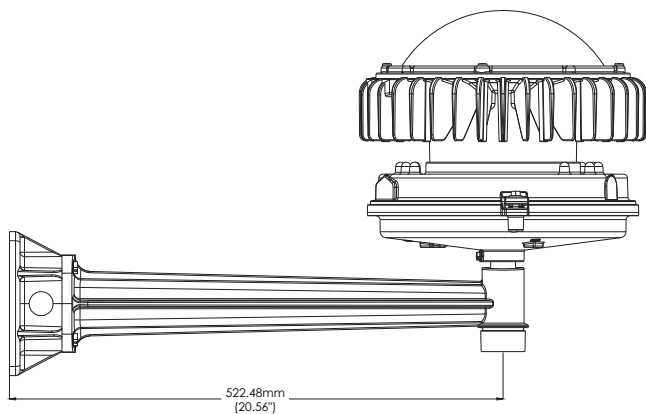
PENDANT CONE ACCESSORY



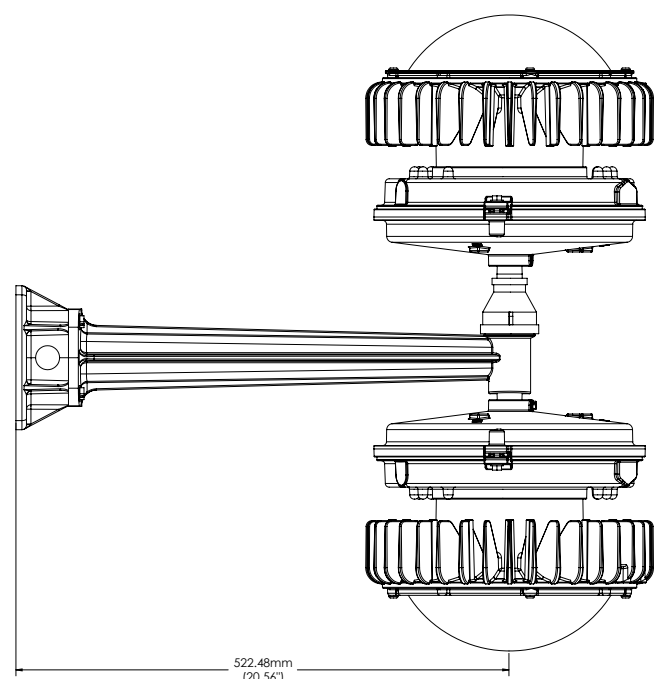
UNIVERSAL MOUNTING (UNM)
with P3US-35-XX Accessory
(must order P3US-35-XX separately)



WIRE GUARD OPTION (WGX)



07233-1-XX (Single Substation Arm)
07233-1-CTL-XX (Single Substation arm with controls)



07233-2-XX (Tandem Substation Arm)
07233-2-CTL-XX (Tandem Substation arm with controls)

OPERATIONAL DATA

Performance with AO Field Adjustable Output

FAO Setting	Base Max Lumen Output %
1	35%
2	48%
3	61%
4	74%
5	87%
6	100%
7	100%
8	100%

Impact Resistance (IK Ratings)

Lens Material	Rating
Glass	IK07
Silicone	IK10

Projected Lumen Maintenance (TM-21)

25C ambient						
Lumen Package	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
3,000LM	1	0.97	0.95	0.92	0.9	0.84
5,000LM	1	0.97	0.95	0.92	0.9	0.84
8,000LM	1	0.97	0.94	0.92	0.89	0.83
10,000LM	1	0.97	0.95	0.92	0.9	0.84

55C ambient						
Lumen Package	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
3,000LM	1	0.97	0.94	0.91	0.88	0.81
5,000LM	1	0.97	0.94	0.91	0.89	0.82
8,000LM	1	0.96	0.93	0.89	0.86	0.78
10,000LM	1	0.96	0.93	0.9	0.87	0.79

Default Bluetooth Sensor Programming

Model	Default Operation	Occupancy Time Delay	Photocell Mode	Photocell Set-point	Low Trim	High Trim	Dim to Off Time Delay
SBGR10BTP	On/Off Occupancy Only Disabled	10 minutes	Disabled	n/a	n/a	100%	Disabled
SBGR10BTP HL	Occupancy w/ 0-10V Dimming (High/Low/Off)	10 minutes	Disabled	n/a	10%	100%	2.5 minutes
SBGR10BTP ADC	Occupancy w/ Dim & Switch Photocell	10 minutes	On/Off & Auto Dim	50 fc	10%	100%	0 seconds
SBGR10BTP ANL	Dim & Switch Photocell with High/Low Occupancy Operation	10 minutes	On/Off & Auto Dim	50 fc	10%	100%	Stay Dim/Never Off

Operating Characteristics

Package	Distribution	Delivered lumens at 3000K CCT 70CRI @ 25C	Delivered lumens at 3000K CCT 80CRI @ 25C	Delivered lumens at 3000K CCT 90CRI @ 25C	Delivered lumens at 4000K CCT 70CRI @ 25C	Delivered lumens at 4000K CCT 80CRI @ 25C	Delivered lumens at 4000K CCT 90CRI @ 25C	Delivered lumens at 5000K CCT 70CRI @ 25C	Delivered lumens at 5000K CCT 80CRI @ 25C	Delivered lumens at 5000K CCT 90CRI @ 25C	Wattage	LPW @ 4000K 80CRI
3000LM	FWD	2848	2621	2167	2988	2712	2184	3110	2746	2202	21	127
	MD0	3035	2793	2308	3183	2785	2327	3314	2821	2346	21	130
	MDU5	2700	2485	2054	2833	2803	2071	2949	2839	2087	21	131
	MDU5GLF	3021	2780	2298	3169	2883	2316	3299	2920	2335	21	135
	ND	2698	2483	2053	2831	2596	2069	2947	2630	2086	21	121
	SO	3182	2928	2421	3338	2934	2440	3475	2971	2460	21	137
	WD	3098	2851	2357	3250	2850	2376	3383	2887	2395	21	133
5000LM	FWD	4852	4465	3691	5090	4619	3721	5298	4679	3750	35	130
	MD0	5169	4757	3933	5423	4745	3964	5645	4805	3996	35	134
	MDU5	4600	4233	3499	4826	4776	3528	5023	4837	3556	35	135
	MDU5GLF	5146	4735	3915	5398	4911	3946	5619	4974	3978	35	139
	ND	4597	4230	3497	4822	4423	3525	5020	4480	3553	35	125
	SO	5421	4989	4124	5687	4998	4157	5920	5062	4191	35	141
	WD	5278	4857	4015	5537	4856	4048	5764	4918	4080	35	137
8000LM	FWD	7751	7133	5896	8131	7380	5944	8464	7474	5991	58	128
	MD0	8258	7600	6282	8664	7580	6333	9018	7677	6384	58	132
	MDU5	7349	6763	5590	7709	7629	5636	8025	7727	5681	58	132
	MDU5GLF	8221	7565	6254	8624	7846	6304	8977	7947	6355	58	136
	ND	7344	6758	5586	7704	7066	5632	8019	7156	5677	58	123
	SO	8660	7970	6588	9085	7984	6641	9457	8086	6694	58	139
	WD	8432	7759	6414	8846	7757	6466	9208	7857	6518	58	135
10000LM	FWD	9796	9015	7452	10277	9327	7512	10698	9447	7573	74	126
	MD0	10438	9605	7940	10950	9580	8004	11398	9703	8068	74	129
	MDU5	9288	8547	7066	9744	9643	7123	10143	9766	7180	74	130
	MDU5GLF	10390	9561	7904	10900	9916	7968	11346	10044	8032	74	134
	ND	9281	8541	7061	9737	8930	7118	10136	9045	7175	74	121
	SO	10946	10073	8327	11483	10091	8394	11953	10220	8461	74	136
	WD	10657	9807	8107	11180	9804	8173	11638	9930	8238	74	132

Petrolux® LED

Wet Location for Demanding Environments



Ambient Temperature Ratings

Mounting	Occ Sensor	Xpoint	SBGR BTP or NLIGHT AIR	Battery	Voltage	Ambient			
				PS1055MCP		3000LM	5000LM	8000LM	10000LM
PM UNM YK90	N	N	N	N	Any	65	60	55	
				Y	120-277	40	35		
			Y	N	Any	60	60	55	
				Y	120-277	-			
		Y	N	N	Any	65	60	55	
				Y	120-277	-			
			Y	N	Any	-			
				Y	120-277	-			
				N	Any	-			
				Y	120-277	-			
	Y	N	N	N	Any	65	60	55	
				Y	120-277	40	35		
			Y	N	Any	-			
				Y	120-277	-			
				N	Any	-			
				Y	120-277	-			
		Y	N	N	Any	-			
				Y	120-277	-			
			Y	N	Any	-			
				Y	120-277	-			
				N	Any	-			
				Y	120-277	-			

Marine/NEMA 4X Compatibility

Catalog Nomenclature		Marine	NEMA 4X
Lumen Packages	3000LM	X	X
	5000LM	X	X
	8000LM	X	X
	10000LM	X	X
Optics	MD0	X	X
	MDU5	X	X
	MDU5GLF	X	X
	WD	X	X
	ND	X	X
	FWD	X	X
	S0		
	SOND		
Voltage	MVOLT	X	X
	120	X	X
	208	X	X
	240	X	X
	277	X	X
	HVOLT	X	X
	347	X	X
	480	X	X
Color Temperature	30K	X	X
	40K	X	X
	50K	X	X
CRI	70CRI	X	X
	80CRI	X	X
	90CRI	X	X
Mounting Optics	UNM	X	X
	PM	X	X
	YK90		X
Options	Any Cordset		
	HKMD		
	LPMD		
	HKMAR		
	HKMW		
	E10WMCP		
	AO	X	X
	WGX	X	X
	EMD	X	X
	UPS	X	X
	FPA	X	X
	CR	X	X
	USPOM	X	X

Catalog Nomenclature		Marine	NEMA 4X
Controls	SBGR10BTP		
	SBGR10BTPHL		
	SBGR10BTPADC		
	SBGR10BTPANL		
	MSI10NWL		
	MSI102L3VWL		
	MSI10NWL DSCNWL		
	MSI10XAWL DSCXAWL		
	XAD	X	X
	XAD924	X	X
	BP		
	PER		
	PCS		
	P34		
Fixture finish	P48		
	PSC		
	DGXD	X	X
	DWHXD	X	
Accessories	DNXD		
	DBXD		
	072331 (BR-2 Arm, Single)	X	
	072331-CTL (BR-2 Arm, Single w/Controls)	X	
	072332 (BR-2 Arm, Double)	X	
	072332-CTL (BR-2 Arm, Double w/Controls)	X	
	SCK36		
	WGPXLW	X	
	UPSPXLW	X	X
	PCPXLW		
	P3US (Universal Mount Arm)		
	P3US35 (Universal Mount Arm, Angled)		



Consistent with LEED® goals
& Green Globes™ criteria
for light pollution reduction

Autobahn Series ATBM Roadway

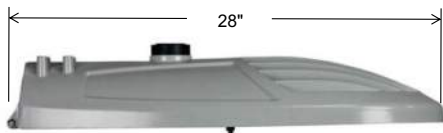
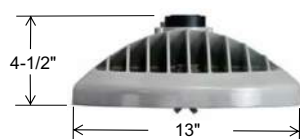
PRODUCT OVERVIEW



Applications:

Residential streets
Parking lots
High speed roadways

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the ATBM is 0.3 sq. ft.,
Approx. Wt. = 21 lbs. (9.5 kg)

STANDARDS

Color temperatures of $\leq 3000\text{K}$ must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Features:

**COBRA-HEAD TYPE 4:
ATBM-P05-480-R4-NR-HSS**

OPTICAL

Same Light: Performance is comparable to 150W – 250W HPS

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

IP66 rated borosilicate glass optics ensure longevity and minimize dirt depreciation. Unique IP66 rated LED light engines provide 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing.

Available distributions are Type II, III, IV, & V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated $>100,000$ hours at 25°C , L70.

Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected 40-60% over comparable HID luminaires.

Robust Surge Protection: Standard surge protection is 20kV/10kA "Extreme Level" per ANSI C136.2. An optional MOV pack provides 10kV/5kA "Enhanced Level."

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter.

The 2 – bolt and optional 4 bolt clamping mechanism provide 3G vibration rating per ANSI C136.

The Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 7 pin receptacle optionally available.

Premium solid state locking-style photocontrol – PCSS (10 year rated life) Extreme long life solid state locking-style photocontrol – PCL1 (20 year rated life).

Extreme long life solid state locking-style photocontrol with on demand remote on/off control – PCCC (15 year rated life).

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

Autobahn Series ATBM

Roadway

ORDERING INFORMATION

Series	Performance Packages	Voltage	Optics	Mounting
ATBM Autobahn LED Roadway	P05 9,700 lumens P10 11,000 lumens P20 12,800 lumens P30 15,500 lumens P40 17,400 lumens P50 18,700 lumens P60 20,000 lumens P70 21,500 lumens	MVOLT Multi-volt, 120-277V 347 347V 480 480V	R2 Roadway Type II R3 Roadway Type III R4 Roadway Type IV R5 Roadway Type V	(Blank) 2 Bolt Mounting 4B 4 Bolt Mounting

Options

Color Temperature (CCT)

(Blank)	4000K CCT, 70 CRI Min.
3K	3000K CCT, 70 CRI Min.
5K	5000K CCT, 70 CRI Min.

Paint

(Blank)	Gray
BK	Black
BZ	Bronze
DDB	Dark Bronze
GI	Graphite
WH	White

Surge Protection

(Blank)	Standard 20kV/10kA SPD
MP	MOV Pack

Miscellaneous Options

HSS	House Side Shield
NL	NEMA Label Indicating Wattage
XL	Not CSA Certified – No Terminal Block Cover
UMR-XX	8" Horizontal Arm for Round Pole, Painted to match Fixture
UMS-XX	8" Horizontal Arm for Square Pole, Painted to match Fixture
UMR-GALV	8" Horizontal Arm for Round Pole, Painted to match Fixture
UMS-GALV	8" Horizontal Arm for Square Pole, Painted to match Fixture

Control Options

(Blank)	3 Pin NEMA Photocontrol Receptacle
P7	7 Pin Photocontrol Receptacle (dimmable driver included) ¹
NR	No Photocontrol Receptacle
A0	Field Adjustable Output ³
DM	0-10V Dimmable Driver ²
PCSS	Solid-State Lighting Photocontrol ⁴
PCLL	Solid-State Long Life Photocontrol
PCCC	Solid-State Long Life Photocontrol with remote control on/off ⁴
SH	Shorting Cap

Packages

(Blank)	Standard Pack
JP	Job Pack (36/pallet)

Accessories

ATBMHSS	House Side Shield
ATBMLTS	Light Trespass Shield
RKATBMMVOLTSPD	ATBM Acuity SPD, MVOLT
RKATBMHVSPD	ATBM Acuity SPD, 347/480V
RKATBMMVOLTMP	ATBM MOV Pack, MVOLT
RKATBMHVMP	ATBM MOV Pack, 347/480V

Notes:

- 1 Dimmable Driver included. Not available with DM or NR.
- 2 Controls by others. Not available with P7 or A0.
- 3 Not available with DM.
- 4 MVOLT only.



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

© 2014-2019 Acuity Brands Lighting, Inc. All Rights Reserved. 05/22/19

Warranty Five-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

ATBM

Autobahn Series ATBM

Roadway

PERFORMANCE PACKAGE

Performance Package	Distribution	Input Watts	3K (3000K CCT, 70 CRI)					4K/5K (4000K/5000K CCT, 70 CRI)					LLD @ 25°C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	25k Hours	75k Hours	100k Hours
P05	R2	68	9,396	138	1	0	2	9,718	143	1	0	2	0.93	0.86	0.83
	R3		9,366	138	1	0	3	9,688	142	1	0	3			
	R4		9,030	133	1	0	3	9,340	137	1	0	3			
	R5		10,334	152	3	0	2	10,689	157	3	0	2			
P10	R2	81	10,635	131	2	0	3	11,299	139	2	0	3	0.93	0.86	0.83
	R3		10,675	132	2	0	3	11,302	140	2	0	3			
	R4		10,391	128	2	0	4	10,994	136	2	0	4			
	R5		11,504	142	3	0	2	12,086	149	3	0	2			
P20	R2	94	12,073	128	2	0	3	12,874	137	2	0	3	0.93	0.86	0.83
	R3		12,065	128	2	0	3	12,818	136	2	0	3			
	R4		11,946	127	2	0	4	12,525	133	2	0	4			
	R5		13,085	139	4	0	2	13,776	147	4	0	2			
P30	R2	118	14,637	124	2	0	3	15,514	131	2	0	3	0.93	0.86	0.83
	R3		14,631	124	2	0	3	15,452	131	2	0	3			
	R4		14,317	121	2	0	4	15,151	128	2	0	5			
	R5		15,775	134	4	0	2	16,685	141	4	0	2			
P40	R2	135	16,233	120	2	0	3	17,493	130	2	0	3	0.93	0.86	0.83
	R3		16,402	121	2	0	3	17,367	129	2	0	3			
	R4		15,911	118	2	0	5	17,008	126	2	0	5			
	R5		17,507	130	4	0	2	18,595	138	4	0	2			
P50	R2	152	17,541	115	2	0	3	18,748	123	2	0	3	0.93	0.86	0.83
	R3		17,677	116	2	0	4	18,712	123	2	0	4			
	R4		17,154	113	2	0	5	18,246	120	2	0	5			
	R5		19,008	125	4	0	2	20,088	132	4	0	2			
P60	R2	168	18,770	112	2	0	3	20,095	120	3	0	3	0.93	0.86	0.83
	R3		18,830	112	2	0	4	20,094	120	3	0	4			
	R4		18,369	109	2	0	5	19,648	117	2	0	5			
	R5		20,350	121	4	0	2	21,505	128	4	0	2			
P70	R2	190	20,190	106	3	0	3	21,565	114	3	0	3	0.93	0.86	0.83
	R3		20,142	106	3	0	4	21,504	113	3	0	4			
	R4		19,660	103	2	0	5	21,024	111	3	0	5			
	R5		21,988	116	4	0	2	23,076	121	4	0	2			

Note: Individual fixture performance may vary. Specifications subject to change without notice.



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

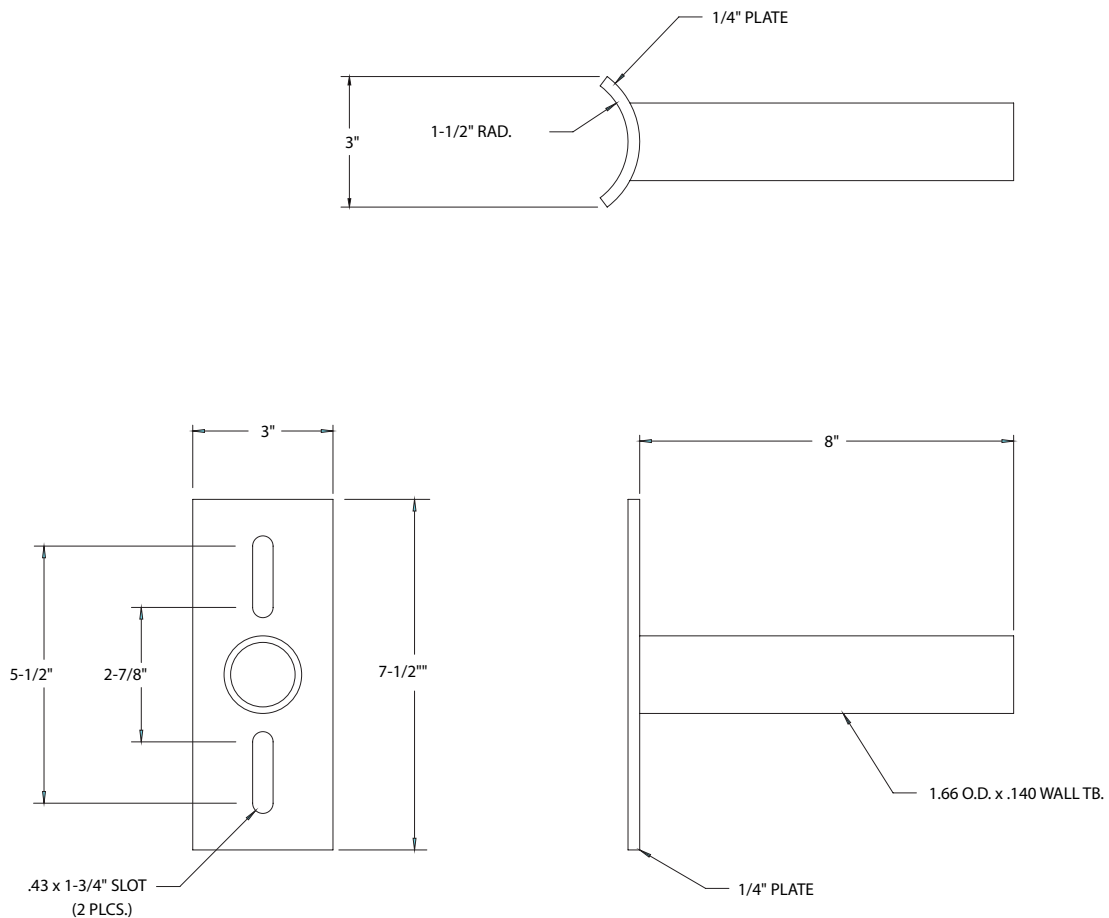
© 2014-2019 Acuity Brands Lighting, Inc. All Rights Reserved. 05/22/19

Warranty Five-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

UMR POLE ADAPTOR

RECOMMENDED FOR USE WITH POLES OF 4" DIAMETER OR SMALLER



UMS POLE ADAPTOR



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023

www.americanelectriclighting.com

© 2014-2019 Acuity Brands Lighting, Inc. All Rights Reserved. 05/22/19

Warranty Five-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

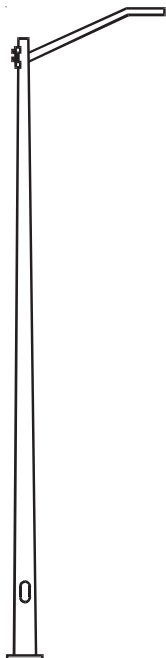
FRTAU

Anchor Base Poles/Mounting Arm(s) Combo

Round Tapered Aluminum Pole

Single and Double Mounting

Arms at 20' to 40' Fixture Mounting Heights



Intended Use

Round tapered aluminum roadway pole with upsweep mast arm(s) for up to 40 foot mounting heights including rise of arm.

Construction

Shaft: Shaft is spun tapered from seamless 6063 alloy aluminum tubing and heat-treated to a T6 temper. Circumferential satin-brushed finish. Round in cross-section down length of shaft and cone tapered to the base diameter.

Arm: Body of mounting arm is tapered aluminum alloy 6063-T6 tube with 2-3/8" OD (2" NPS) pipe size at luminaire end. The pole end of the arm is welded to an aluminum alloy 6063-T6 mounting plate.

Mounting: Arm mounting plate bolts to the shaft using stainless steel bolts, nuts and washers. A grommet is provided for the 1-1/4" diameter wiring hole between the pole shaft and the bracket arm.

Anchor base: Cast from A356 aluminum alloy and heat treated to T6 temper. Base plate and shaft are circumferentially welded top and bottom.

Anchor bolts: Fabricated from carbon steel bar with minimum yield strength of 55,000 psi. Upper portion of anchor bolt is galvanized per ASTM A-153. Each anchor bolt is furnished with two hex nuts and two washers.

Grounding: Provision located inside hand hole rim. Grounding hardware is not included (provided by others).

Hand hole: A nominal 3" x 5" or 4" or 6" reinforced flush covered hand hole is centered 18" above the base.

Top Cap: Removable top cap provided.

Bolt Covers: A356 bolt covers included with anchor base unless otherwise specified.

Finish

Must specify finish.

Warranty

1-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/CustomerResources/Terms_and_Conditions.aspx

NOTE: Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

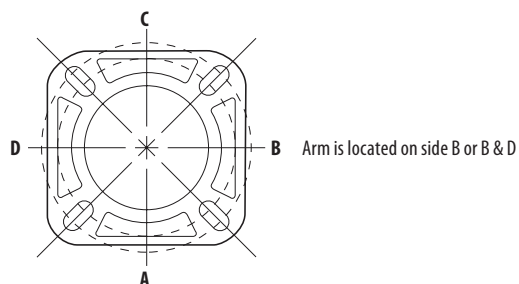
SINGLE ARM POLE:
FRTAU206EBMAUS4GRAB

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative.

Example: FRTAU 20 6G BMA US6 SB

FRTAU					BMA							
Series	Nominal Fixture Mounting Height		Nominal Shaft Base Size/ Wall Thickness		Mounting		Arm Length		Finish		Options	
FRTAU	20	20 feet	6E	6.0" x 4.0" x .156"	BMA	Bolt on mast arm	US4	Single 4' arm	Standard colors		AB	Anchor bolts
	25	25 feet	7E	7.0" x 4.0" x .156"			US6	Single 6' arm	BK	Black	1	Festoon box
	30	30 feet	8E	8.0" x 4.5" x .156"			US8	Single 8' arm	BZ	Bronze	2	Full base cover
	35	35 feet	8G	8.0" x 4.5" x .188"			2US4	Double 4' arm	GH	Graphite	3	Vibration damper
	40	40 feet	8J	8.0" x 4.5" x .250"			2US6	Double 6' arm	GN	Green	4	Tamper proof
			6G	6.0" x 4.0" x .188"			2US8	Double 8' arm	GR	Gray		
			7G	7.0" x 4.0" x .188"					SB	Satin Brush		
			8G	8.0" x 4.5" x .188"					WH	White		
			8J	8.0" x 4.5" x .250"								
			10G	10.0" x 6.0" x .188"								
			10L	10.0" x 6.0" x .219"								
			10J	10.0" x 6.0" x .250"								

HAND HOLE ORIENTATION



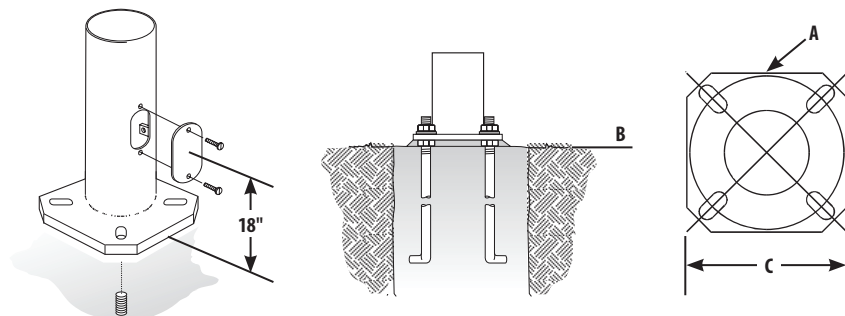
TECHNICAL INFORMATION

Holophane Pole Number	Fixture Mounting Height	Nominal Shaft Base, Wall Thickness	Quality of Arm and Length	EPA ft ² with 1.3 Gust per Arm 100 MPH	Maximum Weight (lbs.)	Bolt Circle (in.)	Bolt Size (in.)	Anchor Bolt Ship Level	Anchor Bolt Template Ship Level
FRTAU206EBMAUS4	20	6.0 X 4.0 X .156	Single Arm 4 feet	2	65	9.50	.75 X 30 X 3	AB-38-4	TMP-42
FRTAU257EBMAUS4	25	7.0 X 4.0 X .156	Single Arm 4 feet	2	65	10.50	1 X 36 X 4	AB-27-4	TMP-44
FRTAU308EBMAUS4	30	8.0 X 4.5 X .156	Single Arm 4 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU358GBMAUS4	35	8.0 X 4.5 X .188	Single Arm 4 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU408JBMAUS4	40	8.0 X 4.5 X .250	Single Arm 4 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU206GBMAUS6	20	6.0 X 4.0 X .188	Single Arm 6 feet	2	65	9.50	.75 X 30 X 3	AB-38-4	TMP-42
FRTAU257GBMAUS6	25	7.0 X 4.0 X .188	Single Arm 6 feet	2	65	10.50	1 X 36 X 4	AB-27-4	TMP-44
FRTAU308GBMAUS6	30	8.0 X 4.5 X .188	Single Arm 6 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU358JBMAUS6	35	8.0 X 4.5 X .250	Single Arm 6 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU408JBMAUS6	40	8.0 X 4.5 X .250	Single Arm 6 feet	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU206GBMAUS8	20	6.0 X 4.0 X .188	Single Arm 8 feet	1.74	65	9.50	.75 X 30 X 3	AB-38-4	TMP-42
FRTAU258EBMAUS8	25	8.0 X 4.0 X .156	Single Arm 8 feet	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU308JBMAUS8	30	8.0 X 4.5 X .188	Single Arm 8 feet	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU358JBMAUS8	35	8.0 X 4.5 X .250	Single Arm 8 feet	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU4010GBMAUS8	40	10.0 X 4.5 X .188	Single Arm 8 feet	1.74	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU206GBMA2US4	20	6.0 X 4.0 X .188	Double Arm 4 feet (2@180)	2	65	9.50	.75 X 30 X 3	AB-38-4	TMP-42
FRTAU258EBMA2US4	25	8.0 X 4.5 X .156	Double Arm 4 feet (2@180)	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU308GBMA2US4	30	8.0 X 4.5 X .188	Double Arm 4 feet (2@180)	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU3510GBMA2US4	35	10 X 6.0 X .188	Double Arm 4 feet (2@180)	2	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU4010LBMA2US4	40	10 X 6.0 X .219	Double Arm 4 feet (2@180)	2	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU207EBMA2US6	20	7.0 X 4.0 X .156	Double Arm 6 feet (2@180)	2	65	10.50	1 X 36 X 4	AB-27-4	TMP-44
FRTAU258EBMA2US6	25	8.0 X 4.5 X .156	Double Arm 6 feet (2@180)	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU308JBMA2US6	30	8.0 X 4.5 X .250	Double Arm 6 feet (2@180)	2	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU3510GBMA2US6	35	10 X 6.0 X .188	Double Arm 6 feet (2@180)	2	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU4010LBMA2US6	40	10 X 6.0 X .219	Double Arm 6 feet (2@180)	2	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU207GBMA2US8	20	7.0 X 4.0 X .188	Double Arm 8 feet (2@180)	1.74	65	10.50	1 X 36 X 4	AB-27-4	TMP-44
FRTAU258GBMA2US8	25	8.0 X 4.5 X .188	Double Arm 8 feet (2@180)	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU308JBMA2US8	30	8.0 X 4.5 X .250	Double Arm 8 feet (2@180)	1.74	65	11.50	1 X 36 X 4	AB-27-4	TMP-46
FRTAU3510JBMA2US8	35	10 X 6.0 X .250	Double Arm 8 feet (2@180)	1.74	65	14.50	1 X 48 X 4	AB-39-4	TMP-51
FRTAU4010JBMA2US8	40	10 X 6.0 X .250	Double Arm 8 feet (2@180)	1.74	65	14.50	1 X 48 X 4	AB-39-4	TMP-51

Note: These specifications are intended for general purposes only. Acuity reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.

DIMENSIONAL DATA

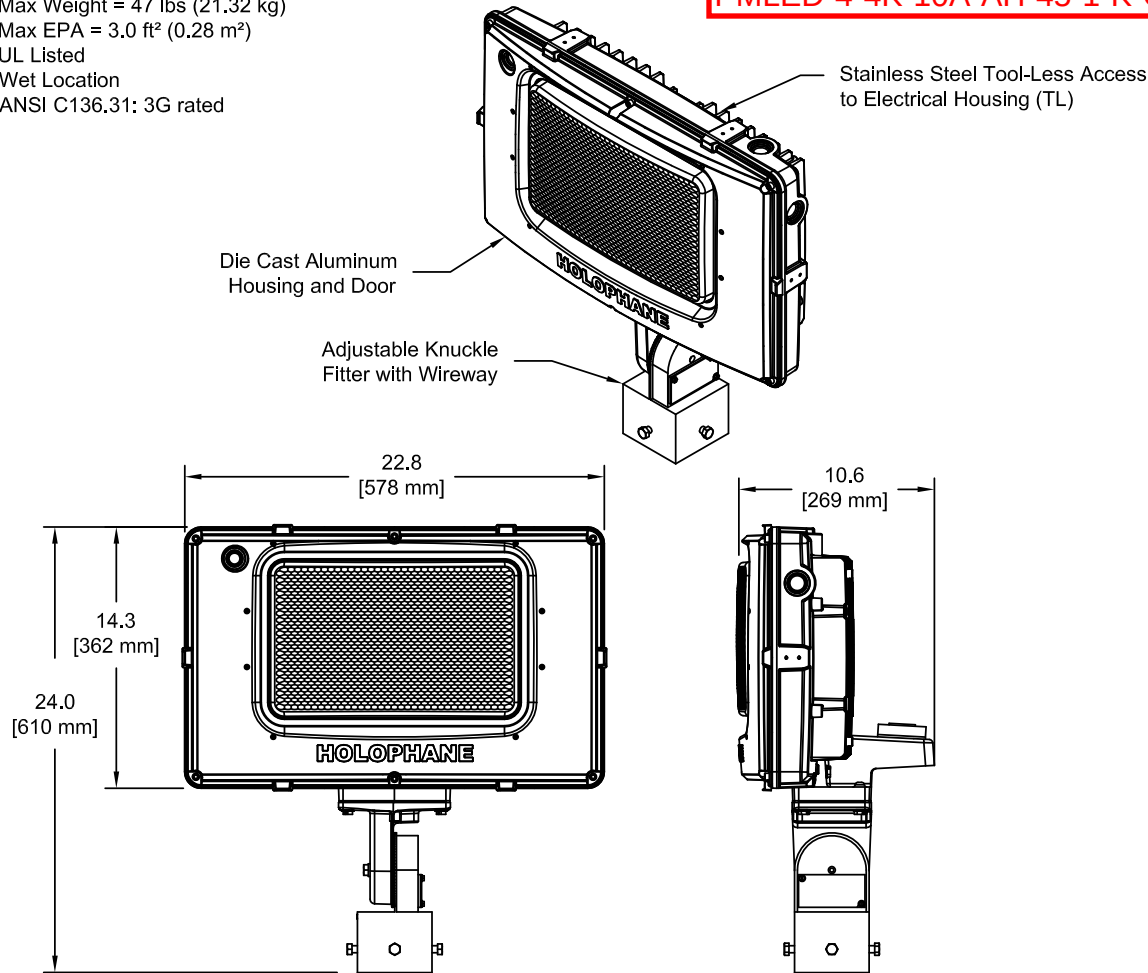
Shaft Base Size (in.)	A Bolt Circle (in.)	B Bolt Projection (in.)	C Base Square (in.)
5.9	9	3.5 - 4.25	10
6.6	9.5	3.5 - 4.25	10.5
7.3	10.5	3.5 - 4.25	11..25
9	12.5	3.75 - 4.5	12.375


Important:

- Do not erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Acuity will not accept claim for incorrect anchorage placement due to failure to use factory template.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.

Max Weight = 47 lbs (21.32 kg)
 Max EPA = 3.0 ft² (0.28 m²)
 UL Listed
 Wet Location
 ANSI C136.31; 3G rated

FLOOD:
PMLED-4-4K-10A-AH-45-1-K-GP-FVGP



KNUCKLE MOUNT

Customer Preferred: (Most Frequently Ordered Catalog Numbers)
 PMLED 6 4K 10A AS 66 1 K HP

PMLED				
Series	Number of LED'S	Color Temperature	Drive Current	Voltage
Predator Medium LED	4 = 4 Module 5 = 5 Modules 6 = 6 Modules	3K = 3,000K CCT 4K = 4,000K CCT 5K = 5,000K CCT	10A = 1050 mA Driver	AS = Auto-sensing Voltage (120 thru 277) AH = Auto-sensing Voltage (347thru 480)
Beam pattern	Mounting	UL Category	Color	
44 = 4x4 (prismatic glass) 45 = 4x5 (prismatic glass) 55 = 5x5 (prismatic glass) 65 = 6x5 (prismatic glass) 66 = 6x6 (prismatic glass)	1 = Tenon Slipfitter Knuckle 3 = Yoke Stainless Steel 4 = Yoke Galvanized	K = Wet Locations 1L = Marine Outside	BP = Black Superdurable with Epoxy Primer GP = Grey Superdurable with Epoxy Primer HP = Graphite Superdurable with Epoxy Primer WP = White Superdurable with Epoxy Primer ZP = Bonze Superdurable with Epoxy Primer	
3 Cord Length Option		3 Cord Type	Options	Accessories
04 = 4 ft Cord Length 05 = 5 ft Cord Length 06 = 6 ft Cord Length 08 = 8 ft Cord Length 10 = 10 ft Cord Length		12 = 12 ft Cord Length 15 = 15 ft Cord Length 20 = 20 ft Cord Length 25 = 25 ft Cord Length 30 = 30 ft Cord Length	63 = 16 Gage, 3 Conductor 43 = 14 Gage, 3 Conductor 23 = 12 Gage, 3 Conductor	See Sheet 2 See Sheet 2

ORDERING INFORMATION:

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE ORDERED WITHOUT THE HOLOPHANE LOGO OR OTHER IDENTIFYING MARKS. HOLOPHANE SHALL BE RESPONSIBLE FOR THE PROPER BOLT TIGHTENING TORQUE WILL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS WRITTEN NOTICE TO RETURN TO HOLOPHANE. IT IS NOT TO BE REPRODUCED IN ANY WAY DETRIMENTAL TO OUR INTERESTS AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

ORDER #:
 TYPE:
 DRAWN: BGW
 DATE: 4/3/17
 DWG #: LUM_PMLED

1 of 4

Predator®
Medium LED

**Infrastructure
 Specialty**

HOLOPHANE®
 LEADER IN LIGHTING SOLUTIONS
 An Acuity Brands Company
 © 2010 Acuity Brands Lighting, Inc., All Rights Reserved

Infrastructure
Specialty

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL, TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE ORDERED BY THE CONTRACTOR, BUT THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE ORDERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS WRITTEN NOTICE THAT IT WILL NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH THE PROJECT FOR WHICH IT WAS ORDERED.

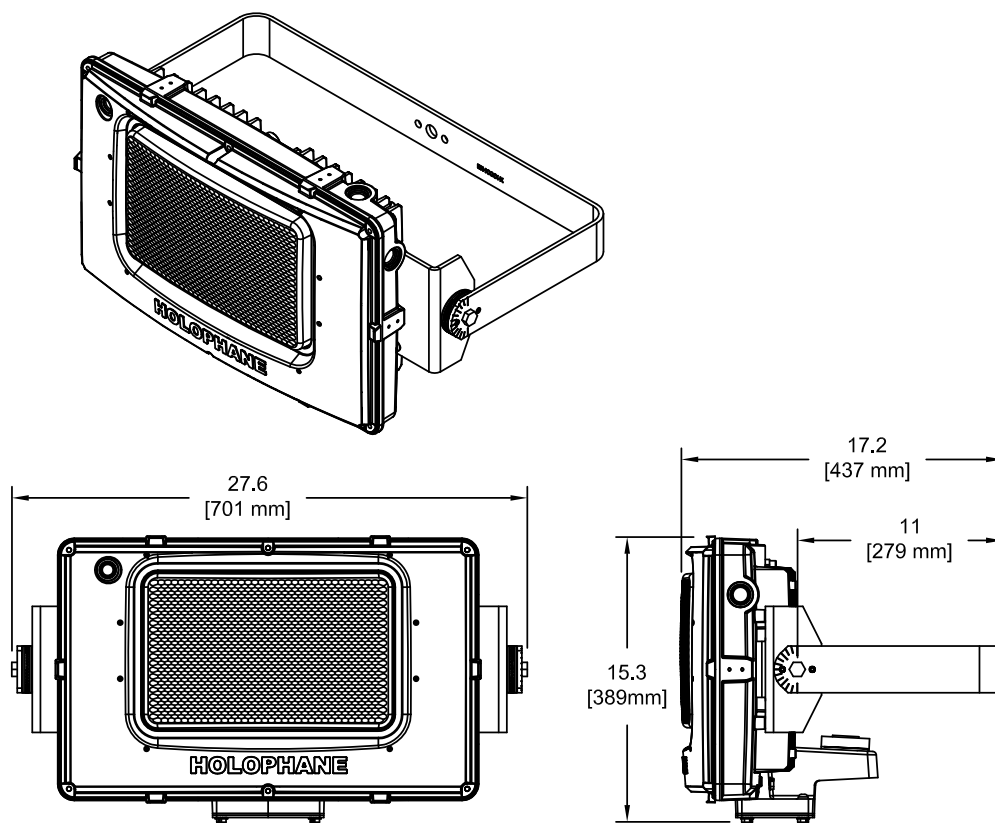
ORDER #:	
TYPE:	
DRAWN: BGW	
DATE: 4/3/17	
DWG #:	111M BMLER

Accessories

- ²P3 = Photocontrol Receptacle
²P5 = 5-Pin Receptacle
²P7 = 7-Pin Receptacle
PCL1 = Photocontrol 120V
PCL3 = Photocontrol 347V
PCL4 = Photocontrol 480V
PCSS = DSS 120-277V PC
DM = 0-10V Dimmable Driver
NL = NEMA Label
TL = Tool-less Entry with latches
F1 = Single Fusing
F2 = Double Fusing
SH = Shorting Cap

- PMLED FV-BP = Full Visor, Black
PMLED FV-GP = Full Visor, Gray
PMLED FV-HP = Full Visor, Graphite
PMLED FV-WP = Full Visor, White
PMLED FV-ZP = Full Visor, Bronze
SH = Shorting Cap
PMLED UBV-BP = Upper/Bottom Visor, Black
PMLED UBV-GP = Upper/Bottom Visor, Gray
PMLED UBV-HP = Upper/Bottom Visor, Graphite
PMLED UBV-WP = Upper/Bottom Visor, White
PMLED UBV-ZP = Upper/Bottom Visor, Bronze
PMLED VG = Vandal Guard
PMLED WG = Wire Guard
08657-BP = Yoke to 2.375" OD Tenon Adaptor, Black
08657-GP = Yoke to 2.375" OD Tenon Adaptor, Gray
08657-HP = Yoke to 2.375" OD Tenon Adaptor, Graphite
08657-WP = Yoke to 2.375" OD Tenon Adaptor, White
08657-ZP = Yoke to 2.375" OD Tenon Adaptor, Bronze
08775-BP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, Black
08775-GP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, Gray
08775-HP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, Graphite
08775-WP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, White
08775-ZP = Yoke to 2.375" OD Tenon Adaptor with Photocontrol Receptacle, Bronze

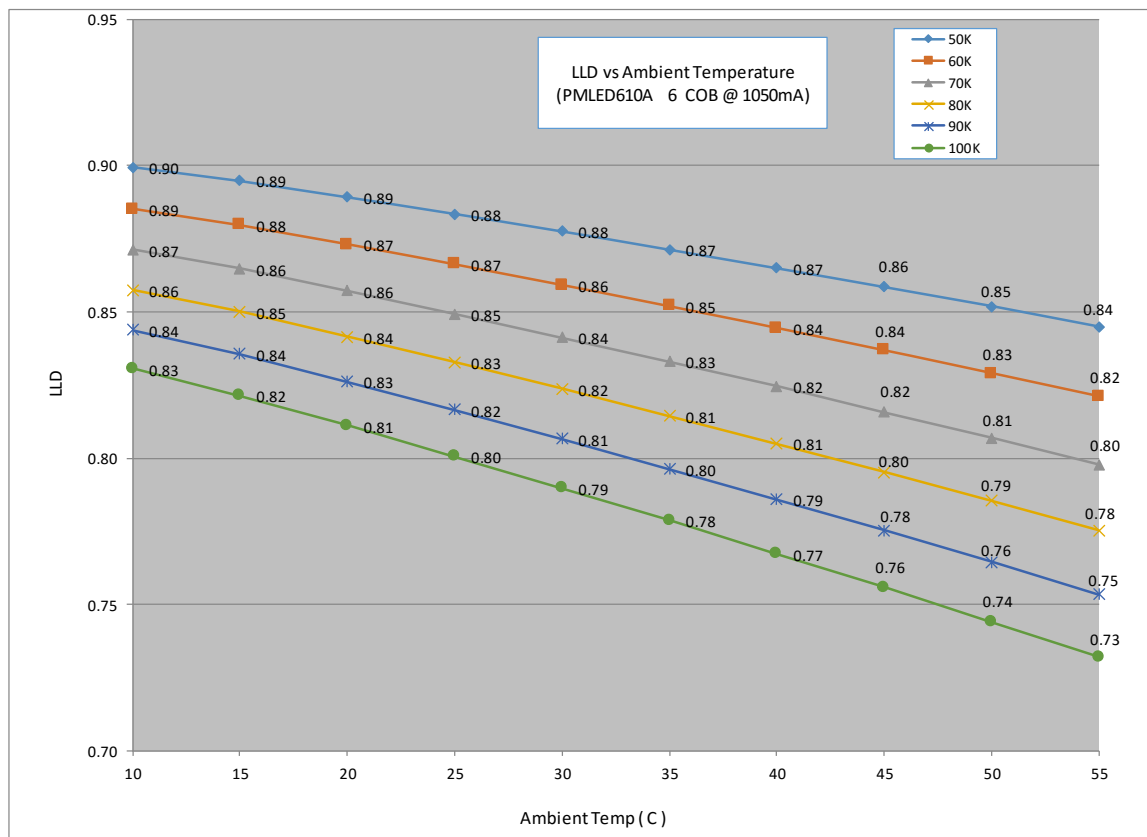
1. Only available with SS Yoke (3).
2. Not available with Marine (L).
3. Not available with tenon slipfitter mounting option



YOKE MOUNT

Operating Characteristics

PMLED	Distribution	Lumens	Input operating Amps						Input Watts	LPW
		4K	120V	208V	240V	277V	347V	480V		
04 10A			1.48	0.86	0.76	0.67	0.67	1.40		
	44	20,083							177	113
	45	20,424							177	115
	55	21,789							177	123
	65	21,962							177	124
	66	21,524							177	122
PMLED	Distribution	Lumens	Input operating Amps						Input Watts	LPW
		4K	120V	208V	240V	277V	347V	480V		
05 10A			1.48	0.67	0.93	0.86	0.67	0.86		
	44	24,794							219	113
	45	25,215							219	115
	55	26,893							219	123
	66	27,114							219	124
	66	26,573							219	124
PMLED	Distribution	Lumens	Input operating Amps						Input Watts	LPW
		4K	120V	208V	240V	277V	347V	480V		
06 10A			2.18	0.67	1.11	0.67	0.76	0.86		
	44	29,257							261	112
	45	29,754							261	113
	55	31,740							261	122
	66	31,994							261	123
	66	31,357							261	124



WARRANTY

Limited warranty located at
[www.acuitybrands.com/CustomerResources/Terms and conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms%20and%20conditions.aspx)

NOTE

Specifications subject to change without notice.
 Actual performance may differ as a result of end-user environment and application.
 Actual wattage may differ by +/- 8% when operating at nominal input voltage +/- 10%.

Predator[®]
Medium LED

**Infrastructure
 Specialty**

HOLOPHANE[®]
 LEADER IN LIGHTING SOLUTIONS
 An Acuity Brands Company
 © 2010 Acuity Brands Lighting, Inc. All Rights Reserved

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE SUBSTITUTED FOR THE UNIT ORDERED WITHOUT NOTICE. HOLOPHANE WILL BE RESPONSIBLE FOR PROVIDING THE BOLT TIGHTENING TORQUE WILL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS WRITTEN NOTICE TO OUR INTERESTS AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

ORDER #:	
TYPE:	
DRAWN:	BGW
DATE:	4/3/17
DWG #:	LUM_PMLED

4 of 4

Petrolux® LED Low Bay

Wet Location for Demanding Environments

PXLW



Catalog Number	SUBSTATION
Notes	One lighting unit consists of: (2) PXLW-3000LM-WD-480-40K-70CRI-PM-DGXD AND (1) 072332DGXD TANDEM MOUNT ARM

Description

- For demanding environments with lower mounting heights where dust, dirt and moisture are a concern.
- Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. [Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.](#)

Optics

- Prismatic borosilicate glass directs light where needed and reduces harsh glare.
- Silicone rubber lens available that will not brown, chip, shatter or break.
- Four distributions (Type 5 low angle, Type 5 high angle, type 4 forward throw and Type 1 long and narrow) available to maximize versatility.
- Highly engineered LED system ensures superior uniformity and maximizes spacing.
- Lens assembly secured by stainless steel tamper-resistant Torx® T-20 screws.

Electrical

- Luminaire Surge Protection Level: Designed to withstand up to 10kV/5kA per ANSI C82.77-5-2015.
- 0-10V dimming driver is standard.
- Optional robust driver solution designed to assist with power quality and drop neutral conditions. XVOLT option supports 277-480V; 6kV surge rated.
- 3000K, 4000K or 5000K CCT available.
- Fault-tolerant LED light engine continues to provide light even in the failure of one LED.
- Field Adjustable Output (AO) module - Onboard device that adjusts the light output and input wattage to meet site specific requirements. The AO module is preset at the factory to position number 8 (see chart).

Mechanical

- Super durable TGIC thermoset powder coat finish provides 1500 hours salt fog rating. CR (corrosion resistant) optional finish is a five-stage pre-treating and painting process that yields over 5,000 hours salt rating per ASTM B117.
- Robust cast aluminum housing with low copper content (0.6% CU content) withstands harsh or hostile environments.
- Universal mount high profile top cover (ceiling/pendant). Optional universal arm available for wall/stanchion. Other mountings include, low profile hook/pendant mount and high profile yoke mount.
- Precise number of fins dissipate maximum amount of heat and achieve up to 149°F (65°C) ambient rating.
- Universal mount can be wall, stanchion, and angle mounted to accommodate a variety of arms.

Listings

- UL 1598 Listed for use in wet locations
- IP65 and IP66 rated. IP67 rated except when used with wall, stanchion, sensor, sub-station or hooks.
- Luminaire is 1G vibration rated.
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- Marine rated — see Marine/NEMA 4X chart for option compatibility
- NEMA 4X rated — see Marine/NEMA 4X chart for option compatibility
- Certified to meet NSF Splash Zone 2 (specify FPA option)
- IK rated (see chart on page 6)

Warranty

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.



Typical Applications

- Petroleum refineries
- Ethanol facilities
- Chemical plants
- Power plants
- Textile mills
- Water and wastewater treatment facilities
- Parking Garages

Dimensions: Inches (millimeters) unless otherwise noted.

Universal Mount
Diameter: 13.11 (332.99)
Height: 11.43 (290.32)
Weight: Approx. 19 lbs (8.62 kg)
Pallet quantity: 12 fixtures
EPA: 0.787 sq. ft. wind loading

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® or XPoint™ Wireless control networks marked by a **shaded background***

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details



A+ Capable options indicated
by this color background.

ORDERING INFORMATION

Example: PXLW 3000LM MDUS MVOLT 30K 80CRI UNM DNxD

Series	Lumens	Optics	Voltage	Color Temperature	Color Rendering Index	Mounting Options			
PXLW	3000LM	3,000 lumens ¹	FWD	Forward throw, glass lens	MVOLT (120V-277V)	30K 3000K CCT	70CRI 70CRI	UNM	Universal Mount, high profile top cap
	5000LM	5,000 lumens ¹	MDO	Medium glass lens with minimal uplight	120 120V	40K 4000K CCT	80CRI 80CRI	PM	Pendant Mount, low profile top cap
			MDU5	Medium glass lens with uplight	208 208V	50K 5000K CCT	90CRI 90CRI		
	8000LM	8,000 lumens	MDU5GLF	Medium frosted glass lens with uplight	240 240V			YK90	Yoke Mount 0-90 Degree, high profile top cap
			ND	Long and narrow, glass lens	277 277V				
	10000LM	10,000 lumens	SO	Medium, silicone optic, with minimal uplight	HVOLT (347V/480V)				
			SOND	Long and narrow, silicone optic	347 347V				
			WD	Wide, glass lens	480 480V				
					XVOLT (277-480V)				
					277X 277V ²				
		347X 347V ²							
		480X 480V ²							

Options			Finish	
<u>Damp Cordsets:</u> ³			DGXD	Gray super durable
CDP-L5-15-X	X-ft. 120V cord and twist lock plug, 3 conductor, white (120 only)			
CDP-L6-15-X	X-ft. 208V/240V cord and twist lock plug, 3 conductor, white (208 or 240 only)			
CDP-L7-15-X	X-ft. 277V cord and twist lock plug, 3 conductor, white (277 or 277X only)			
CDP-L24-20-X	X-ft. 347V cord and twist lock plug, 3 conductor, white (347 or 347X only)		DWHXD	White super durable
CDP-L8-20-X	X-ft. 480V cord and twist lock plug, 3 conductor, white (480 or 480X only)		DNXD	Satin Nickle super durable
CDP-5-15-X	X-ft.,120V cord and straight blade plug,3 conductor, white (120 only)		DBXD	Black super durable
<u>Wet Cordsets:</u> ⁴				
CDPW-L5-15-X	X-ft. 120V cord and twist lock plug, 3 conductor, wet location, white (120 only)			
CDPW-L6-15-X	X-ft. 208V/240V cord and twist lock plug, 3 conductor, wet location, white (208 or 240 only)			
CDPW-L7-15-X	X-ft. 277V cord and twist lock plug, 3 conductor, wet location, white (277 or 277X only)			
CDPW-L24-20-X	X-ft. 347V cord and twist lock plug, 3 conductor, wet location, white (347 or 347X only)			
<u>Wet Cords:</u> ⁵				
CDW-X	X-ft. cord, 3 conductor, wet location, white			
CDW-4C-X	X-ft. cord, 4 Conductor, wet location, black ⁶			
CDW-5-W-X	X-ft. cord, 5 conductor, wet location, white ⁷			
CDW-5-K-X	X-ft. cord, 5 conductor, wet location, black ⁷			
<u>Hooks:</u> ⁸				
HKMW	3/4" wet listed hook male, PF-291			
<u>Other Options:</u>				
WGX	Wire guard, factory installed			
EMD	Ingress/Egress Marker Decal			
NSG	Non silicone gasket (complete fixture) ⁹			
DL	Damp location			
UPS	Uplight Shield ¹⁰			
CR	Corrosion resistant paint			
FPA	Food processing area ¹¹			
AO	Field Adjustable Output, Standard setting is 8 ¹²			
E10WMCP	EM Self-diagnostics battery pack, 10W, Certified in the Ca Title 20 MAEDBS ¹³			
<u>Controls:</u>				
<u>Non-Dimming Sensors:</u> ¹⁴				
MSI10NWL	360° motion sensor integral, low bay 15–25 ft., on/off, IP66 rated			
MSI10NWL DSCNWL	360° motion sensor integral with photocell & occupancy sensor, low bay 15–25 ft., on/off, IP66 rated			
<u>Dimming Sensors:</u> ¹⁴				
MSI102L3VWL	360° motion sensor integral, low bay 15-25 ft., on/off with second time-out period, goes to a dimmed state before turning off max./min. Dim setting, IP66 rated			
<u>Xpoint Wireless:</u> ¹⁵				
MSI10XAWL DSCXAWL	XPoint wireless enabled with photocell & occupancy sensor, low bay 15-25 ft, IP66 rated			
XAD	XPoint™ Wireless 0-10V relay, internal, lower max ambient			
XAD924	XPoint™ Wireless 0-10V relay, internal, lower max ambient, meets UL924			
<u>Photocontrols:</u>				
BP	Button style photo control, 120V-277V/347V ¹⁶			
PER	NEMA twist lock receptacle ¹⁷			
PCS	DTS, solid state photo control ¹⁸			
P34	DTL, solid state photo control ¹⁹			
P48	DTL, solid state photo control ²⁰			
PSC	Shorting cap ²¹			
<u>nLight Air:</u> ²²				
NLTAIR2 RSBG6	nLight AIR Generation 2 enabled 360° high mount(15-30ft) motion sensor			
NLTAIR2 RSBG10	nLight AIR Generation 2 enabled 360° low mount(8-15ft) motion sensor			
NLTAIR2 RIO	nLight AIR (wireless) gen 2 control device (dimming & switching			
<u>Bluetooth Dimming Sensors:</u> ²³				
SBGR10BTP	360° Low Mount Occ Sensor, pre-wired; Bluetooth®			
SBGR10BTP HL	360° Low Mount Occ Sensor w/HL Default, pre-wired; Bluetooth®			
SBGR10BTP ADC	360° Low Mount Occ Sensor w/ADC Default, pre-wired; Bluetooth®			
SBGR10BTP ANL	360° Low Mount Occ Sensor w/ANL Default, pre-wired; Bluetooth®			

For Accessories and Footnotes, see next page.

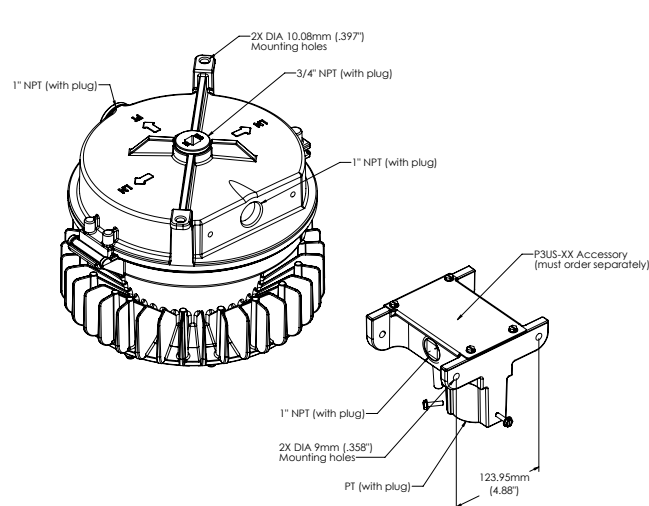
Accessories: Order as separate catalog number.

072331 XX	Substation Arm for Single Luminaire, XX denotes color ²⁴
072331CTL XX	Substation Arm for Single Luminaire with controls, XX denotes color ²⁴
072332 XX	Substation Arm for Tandem Mount Luminaire, XX denotes color (fixtures controlled separately in the field) ²⁴
072332CTL XX	Substation Arm for Tandem Mount Luminaire with controls, XX denotes color ²⁴
WGPXLW	Wire guard, zinc coated
SCK36	36" safety chain kit
SCK72	72" safety chain kit
SCK120	120" safety chain kit
UPSPXLWXX	Uplight shield, XX denotes color
P3US-35-XX	35 degree universal mount arm, XX denotes color ²⁵
P3US-XX	Universal Mount Arm, XX denotes color ²⁵
MI-3502	Thread Sealant
PCPXLWXX	Pendant Cone, XX denotes color ²⁶

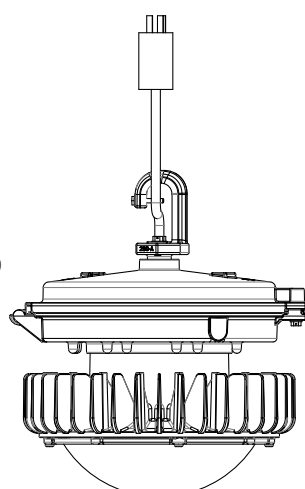
Notes

- 1 Not available with XVOLT, 277X, 347X or 480X.
- 2 Utilizes XVOLT driver.
- 3 Voltage must be specified. Requires DL and HKMW options. X denotes length, 3, 6 and 10ft available.
- 4 Voltage must be specified. Requires HKMW option. X denotes length, 3, 6 and 10ft available.
- 5 X denotes length, 3, 6 and 10ft available.
- 6 Requires E10WMCP battery option.
- 7 Not available with dimming sensors or battery pack.
- 8 Requires Cord or Cordset. Not available with YK90 option.
- 9 Not available with SO or SOND options.
- 10 When ordered with MS10NWL, MS10NWL DSCNWL, MS10XAWL DSCXAWL, SBGR10BTP, SBGR10BTP HL, SBGR10BTP ADC, or SBGR10BTP ANL, may cause sensor viewing angle cutoff.
- 11 Available with SO, SOND, UNM, PM options only. Not available with AO, SBGR10BTP, SBGR10BTPHL, SBGR10BTPADC, SBGR10BTPANL, MS10NWL, MS102L3VWL, MS10NWL DSCNWL, MS10XAWL DSCXAWL or E10WMCP options.
- 12 Not available with SBGR10BTP, SBGR10BTPHL, SBGR10BTPADC, SBGR10BTPANL, MS102L3VWL, MS10NWL DSCNWL, MS10XAWL DSCXAWL, XAD, XAD924, CDW-5-K-X or CDW-5-K-X options.
- 13 Utilizes PS1055MCP battery. Not available with PM, XVOLT, 347X, 480X, Xpoint wireless or Bluetooth dimming sensors. Available with CD-4C-X, but not required.
- 14 Not available with XVOLT. When ordered with YK90 and mounted between 35-90 degrees DL option is required.
- 15 Not available with HVOLT, XVOLT, 347X or 480X.
- 16 Not available with MVOLT, HVOLT, 480V, XVOLT, 480X, or YK90.
- 17 Not available with YK90.
- 18 Requires PER option. Available with 120, 208, 240, 277 or 277X options only.
- 19 Requires PER option. Available with 347, 347X options only.
- 20 Requires PER option. Available with 480, 480X options only.
- 21 Requires PER option.
- 22 Not available with HVOLT at 3000LM or 5000LM. Not available with XVOLT, 277X, 347X, 480X, AO, DIM, XAD or SBGR sensor in any lumen package.
- 23 Not available with XVOLT, 277X, 347X or 480X options. Only available in HVOLT with 8000LM or 10000LM lumen packages.
- 24 Not available with YK90, cord or cordset.
- 25 Not available with PM, YK90, cord or cordset.
- 26 Available with PM option only. Requires minimum 8" customer provided stem.

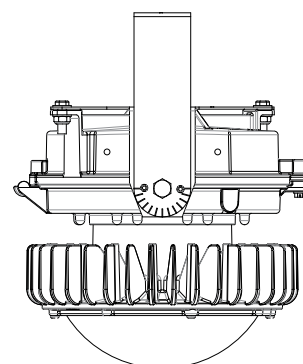
DIMENSIONAL DATA



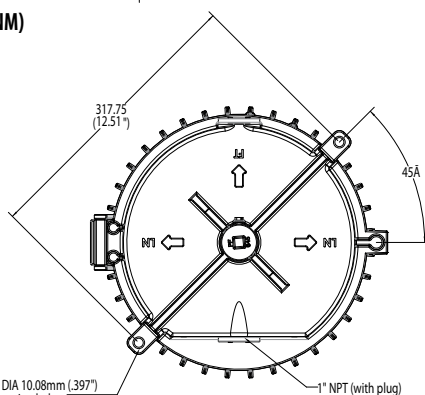
UNIVERSAL MOUNTING (UNM)



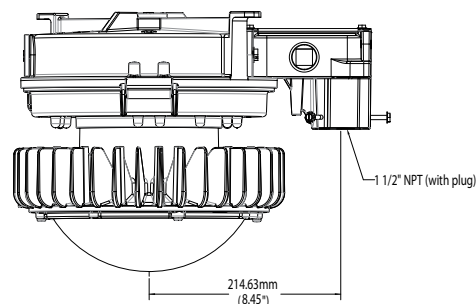
HOOK MOUNTING



YOKE MOUNT 0-90 DEGREE (YK90)

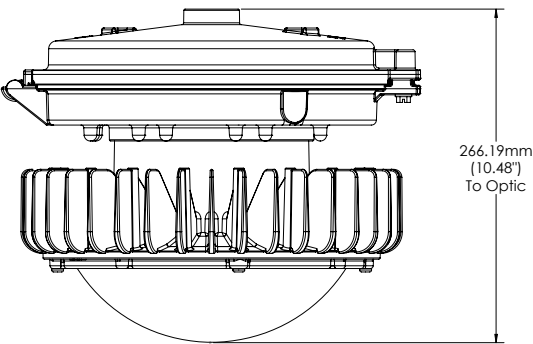


MOUNTING HOLES

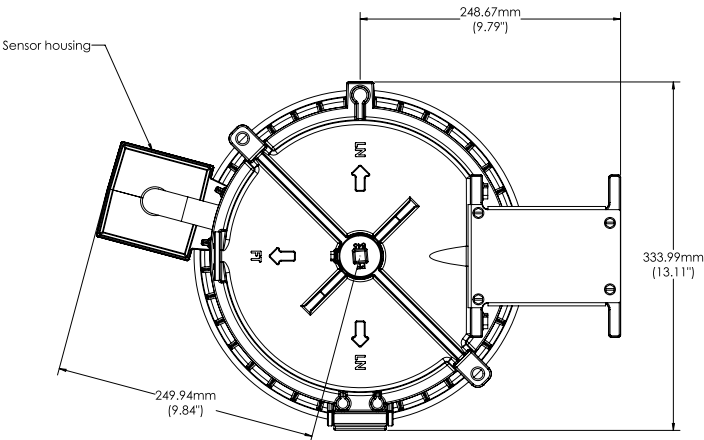


**UNIVERSAL MOUNTING (UNM)
with P3US-XX Accessory
(must order P3US-XX separately)**

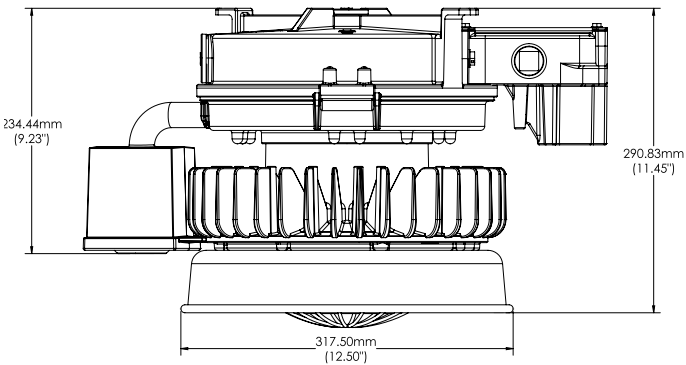
DIMENSIONAL DATA (continued)



PENDANT MOUNTING (PM)

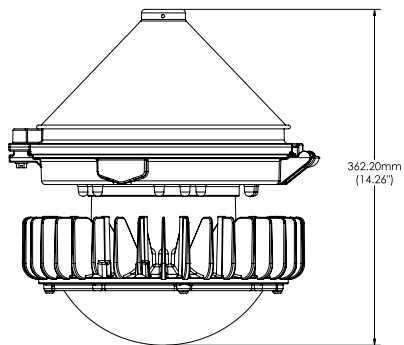


SENSOR OPTION

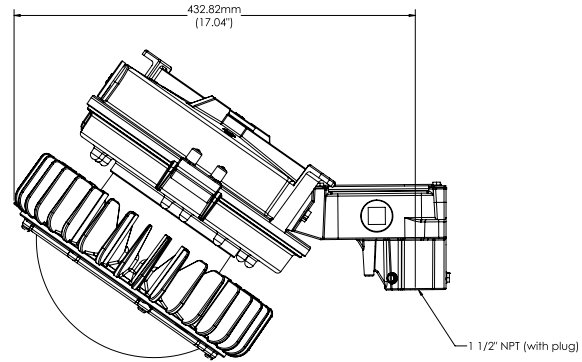


UPLIGHT SHIELD OPTION (UPS)

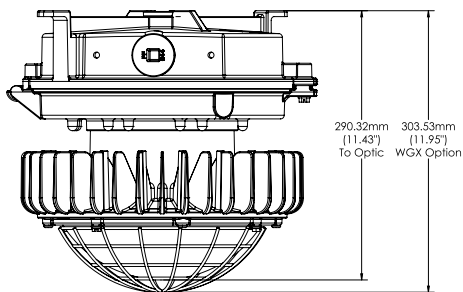
DIMENSIONAL DATA (continued)



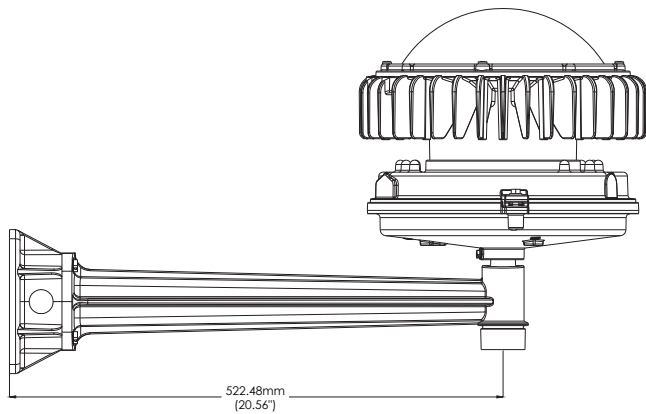
PENDANT CONE ACCESSORY



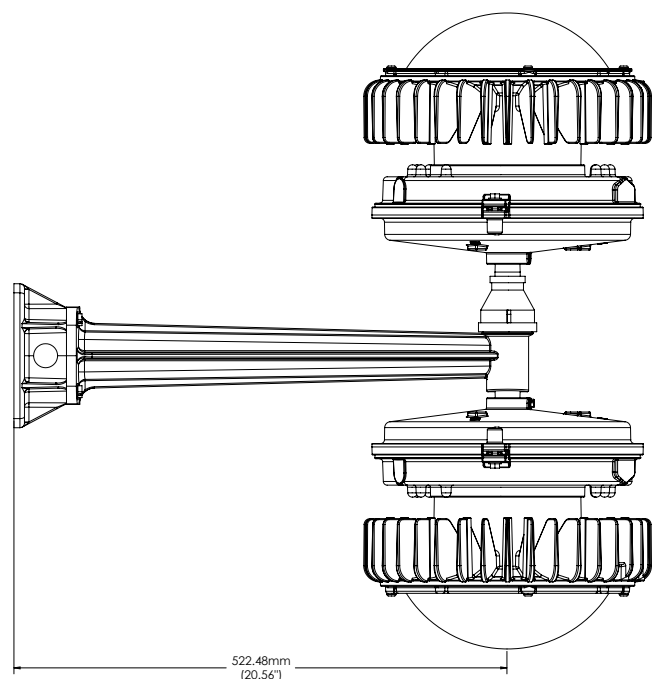
UNIVERSAL MOUNTING (UNM)
with P3US-35-XX Accessory
(must order P3US-35-XX separately)



WIRE GUARD OPTION (WGX)



07233-1-XX (Single Substation Arm)
07233-1-CTL-XX (Single Substation arm with controls)



07233-2-XX (Tandem Substation Arm)
07233-2-CTL-XX (Tandem Substation arm with controls)

OPERATIONAL DATA

Performance with AO Field Adjustable Output

FAO Setting	Base Max Lumen Output %
1	35%
2	48%
3	61%
4	74%
5	87%
6	100%
7	100%
8	100%

Impact Resistance (IK Ratings)

Lens Material	Rating
Glass	IK07
Silicone	IK10

Projected Lumen Maintenance (TM-21)

25C ambient						
Lumen Package	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
3,000LM	1	0.97	0.95	0.92	0.9	0.84
5,000LM	1	0.97	0.95	0.92	0.9	0.84
8,000LM	1	0.97	0.94	0.92	0.89	0.83
10,000LM	1	0.97	0.95	0.92	0.9	0.84

55C ambient						
Lumen Package	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
3,000LM	1	0.97	0.94	0.91	0.88	0.81
5,000LM	1	0.97	0.94	0.91	0.89	0.82
8,000LM	1	0.96	0.93	0.89	0.86	0.78
10,000LM	1	0.96	0.93	0.9	0.87	0.79

Default Bluetooth Sensor Programming

Model	Default Operation	Occupancy Time Delay	Photocell Mode	Photocell Set-point	Low Trim	High Trim	Dim to Off Time Delay
SBGR10BTP	On/Off Occupancy Only Disabled	10 minutes	Disabled	n/a	n/a	100%	Disabled
SBGR10BTP HL	Occupancy w/ 0-10V Dimming (High/Low/Off)	10 minutes	Disabled	n/a	10%	100%	2.5 minutes
SBGR10BTP ADC	Occupancy w/ Dim & Switch Photocell	10 minutes	On/Off & Auto Dim	50 fc	10%	100%	0 seconds
SBGR10BTP ANL	Dim & Switch Photocell with High/Low Occupancy Operation	10 minutes	On/Off & Auto Dim	50 fc	10%	100%	Stay Dim/Never Off

Operating Characteristics

Package	Distribution	Delivered lumens at 3000K CCT 70CRI @ 25C	Delivered lumens at 3000K CCT 80CRI @ 25C	Delivered lumens at 3000K CCT 90CRI @ 25C	Delivered lumens at 4000K CCT 70CRI @ 25C	Delivered lumens at 4000K CCT 80CRI @ 25C	Delivered lumens at 4000K CCT 90CRI @ 25C	Delivered lumens at 5000K CCT 70CRI @ 25C	Delivered lumens at 5000K CCT 80CRI @ 25C	Delivered lumens at 5000K CCT 90CRI @ 25C	Wattage	LPW @ 4000K 80CRI
3000LM	FWD	2848	2621	2167	2988	2712	2184	3110	2746	2202	21	127
	MD0	3035	2793	2308	3183	2785	2327	3314	2821	2346	21	130
	MDU5	2700	2485	2054	2833	2803	2071	2949	2839	2087	21	131
	MDU5GLF	3021	2780	2298	3169	2883	2316	3299	2920	2335	21	135
	ND	2698	2483	2053	2831	2596	2069	2947	2630	2086	21	121
	SO	3182	2928	2421	3338	2934	2440	3475	2971	2460	21	137
	WD	3098	2851	2357	3250	2850	2376	3383	2887	2395	21	133
5000LM	FWD	4852	4465	3691	5090	4619	3721	5298	4679	3750	35	130
	MD0	5169	4757	3933	5423	4745	3964	5645	4805	3996	35	134
	MDU5	4600	4233	3499	4826	4776	3528	5023	4837	3556	35	135
	MDU5GLF	5146	4735	3915	5398	4911	3946	5619	4974	3978	35	139
	ND	4597	4230	3497	4822	4423	3525	5020	4480	3553	35	125
	SO	5421	4989	4124	5687	4998	4157	5920	5062	4191	35	141
	WD	5278	4857	4015	5537	4856	4048	5764	4918	4080	35	137
8000LM	FWD	7751	7133	5896	8131	7380	5944	8464	7474	5991	58	128
	MD0	8258	7600	6282	8664	7580	6333	9018	7677	6384	58	132
	MDU5	7349	6763	5590	7709	7629	5636	8025	7727	5681	58	132
	MDU5GLF	8221	7565	6254	8624	7846	6304	8977	7947	6355	58	136
	ND	7344	6758	5586	7704	7066	5632	8019	7156	5677	58	123
	SO	8660	7970	6588	9085	7984	6641	9457	8086	6694	58	139
	WD	8432	7759	6414	8846	7757	6466	9208	7857	6518	58	135
10000LM	FWD	9796	9015	7452	10277	9327	7512	10698	9447	7573	74	126
	MD0	10438	9605	7940	10950	9580	8004	11398	9703	8068	74	129
	MDU5	9288	8547	7066	9744	9643	7123	10143	9766	7180	74	130
	MDU5GLF	10390	9561	7904	10900	9916	7968	11346	10044	8032	74	134
	ND	9281	8541	7061	9737	8930	7118	10136	9045	7175	74	121
	SO	10946	10073	8327	11483	10091	8394	11953	10220	8461	74	136
	WD	10657	9807	8107	11180	9804	8173	11638	9930	8238	74	132

Petrolux® LED

Wet Location for Demanding Environments



Ambient Temperature Ratings

Mounting	Occ Sensor	Xpoint	SBGR BTP or NLIGHT AIR	Battery	Voltage	Ambient			
				PS1055MCP		3000LM	5000LM	8000LM	10000LM
PM UNM YK90	N	N	N	N	Any	65	60	55	
				Y	120-277	40	35		
			Y	N	Any	60	60	55	
				Y	120-277	-			
		Y	N	N	Any	65	60	55	
				Y	120-277	-			
			Y	N	Any	-			
				Y	120-277	-			
				N	Any	-			
				Y	120-277	-			
	Y	N	N	N	Any	65	60	55	
				Y	120-277	40	35		
			Y	N	Any	-			
				Y	120-277	-			
		Y	N	N	Any	-			
				Y	120-277	-			
			Y	N	Any	-			
				Y	120-277	-			
				N	Any	-			
				Y	120-277	-			

Marine/NEMA 4X Compatibility

Catalog Nomenclature		Marine	NEMA 4X
Lumen Packages	3000LM	X	X
	5000LM	X	X
	8000LM	X	X
	10000LM	X	X
Optics	MD0	X	X
	MDU5	X	X
	MDU5GLF	X	X
	WD	X	X
	ND	X	X
	FWD	X	X
	S0		
	SOND		
Voltage	MVOLT	X	X
	120	X	X
	208	X	X
	240	X	X
	277	X	X
	HVOLT	X	X
	347	X	X
	480	X	X
Color Temperature	30K	X	X
	40K	X	X
	50K	X	X
CRI	70CRI	X	X
	80CRI	X	X
	90CRI	X	X
Mounting Optics	UNM	X	X
	PM	X	X
	YK90		X
Options	Any Cordset		
	HKMD		
	LPMD		
	HKMAR		
	HKMW		
	E10WMCP		
	AO	X	X
	WGX	X	X
	EMD	X	X
	UPS	X	X
	FPA	X	X
	CR	X	X
	USPOM	X	X

Catalog Nomenclature		Marine	NEMA 4X
Controls	SBGR10BTP		
	SBGR10BTPHL		
	SBGR10BTPADC		
	SBGR10BTPANL		
	MSI10NWL		
	MSI102L3VWL		
	MSI10NWL DSCNWL		
	MSI10XAWL DSCXAWL		
	XAD	X	X
	XAD924	X	X
	BP		
	PER		
	PCS		
	P34		
Fixture finish	P48		
	PSC		
	DGXD	X	X
	DWHXD	X	
Accessories	DNXD		
	DBXD		
	072331 (BR-2 Arm, Single)	X	
	072331-CTL (BR-2 Arm, Single w/Controls)	X	
	072332 (BR-2 Arm, Double)	X	
	072332-CTL (BR-2 Arm, Double w/Controls)	X	
	SCK36		
	WGPXLW	X	
	UPSPXLW	X	X
	PCPXLW		
	P3US (Universal Mount Arm)		
	P3US35 (Universal Mount Arm, Angled)		

Fire Safety Plan

Cormorant Energy Storage, LLC Project

**Issued for Review (Rev B)
May 2024**

FIRE SAFETY PLAN

prepared for

Arevon

**Cormorant Energy Storage Project
Daly City, California**

**Issued for Review
May 2024**

Prepared by

**Burns & McDonnell Engineering Company, Inc.
Kansas City, Missouri**

COPYRIGHT © 2024 BURNS & McDONNELL ENGINEERING CO, INC

TABLE OF CONTENTS

1. PROJECT SUMMARY

2. CODE BASIS

- 2.1. State Requirements
- 2.2. County Requirements
- 2.3. Applicable Codes and Standards

3. GENERAL DESCRIPTION OF EQUIPMENT

- 3.1. Batteries
- 3.2. Inverters

4. GENERAL CRITERIA

- 4.1. Large Scale Fire Testing
- 4.2. Battery OEM-provided Fire Protection Features
- 4.3. Hazard Mitigation Analysis Approach
- 4.4. Permits
- 4.5. First Responder Training
- 4.6. Approvals from Fire Official

EXHIBIT A – SK001 – ON-SITE UTILITY PLAN

The energy storage industry, related technology, and best practices are rapidly evolving and changing regularly. The project described herein is in the conceptual project development stage and information in this document is subject to change due to changes in equipment selection or other factors affecting the design of the system. Additionally, laws, ordinances, regulatory standards, and best practices related to the contents of this document are subject to change or modification.

1. PROJECT SUMMARY

Cormorant Energy Storage, LLC project is a battery energy storage system facility using safe, reliable, and commercially proven lithium-ion batteries to store electrical energy. The Cormorant Energy Storage, LLC project will be a 188 MW / 752 MWh system located in Daly City, California. This plan is based on an outdoor, pre-engineered lithium-ion battery energy storage cabinet solution.

This Fire Safety Plan describes the approach to hazard mitigation analysis, large scale fire testing, battery provider's fire protection features, and lists the applicable codes and standards that will be followed for the design of the facilities fire protection system.

2. CODE BASIS

2.1. State Requirements

At the time of permit application, the State of California will have adopted the 2022 edition of the California Building Code (CBC).

Buildings	California Building Code (CBC) – 2022 Edition
Structural	California Building Code (CBC) – 2022 Edition
Mechanical	California Mechanical Code (CMC) – 2022 Edition
Plumbing	California Plumbing Code (CPC) – 2022 Edition
Electrical	California Electrical Code (CEC) – 2022 Edition
Fire	California Fire Code (CFC) – 2022 Edition

2.2. County Requirements

The current effective municipal code is the Daly City Municipal Code, as of November 22, 2021.

Buildings	Daly City Municipal Code Title 15, Chapter 15.08
Mechanical	Daly City Municipal Code Title 15, Chapter 15.16
Plumbing	Daly City Municipal Code Title 15, Chapter 15.20
Electrical	Daly City Municipal Code Title 15, Chapter 15.24
Fire	Daly City Municipal Code Title 15, Chapter 15.32

2.3. Applicable Codes and Standards

The Code Basis for this project is recommended to be the above reference codes, and additional standards listed below:

1. National Fire Protection Association (NFPA)
 - a. NFPA 10, Standard for Portable Fire Extinguishers (2021)
 - b. NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances (2019)
 - c. NFPA 68, Standard on Explosion Protection by Deflagration Venting (2013)
 - d. NFPA 69, Standard on Explosion Prevention Systems (2019)
 - e. NFPA 70, National Electrical Code (2020)
 - f. NFPA 72, Fire Alarm and Signaling Code (2022)
 - g. NFPA 170, Standard for Fire Safety and Emergency Symbols (2018)
2. Underwriters Laboratories (UL)
 - a. UL 1741, Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources (2016)

- b. UL 1973, Standard for Batteries for Use in Light Electric Rail (LER) Applications and Stationary Applications (2018)
- c. UL 9540, Standard for Safety of Energy Storage Systems and Equipment, Edition 2 (2020)
- d. UL 9540A, Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems Standard, Edition 4 (2019)

3. GENERAL DESCRIPTION OF EQUIPMENT

3.1. Batteries

Battery enclosures designed for outdoor installation will be used at this facility. Batteries will be installed at grade more than 50 feet from property lines, in a planned development district. See drawings Exhibit A for additional layout details.

Battery enclosures are pre-engineered equipment cabinets, constructed of noncombustible construction, and are not to be entered for operations or maintenance purposes. The ESS cabinets will be listed and labeled in accordance with UL 9540 and will be monitored by an approved energy storage management system.

3.2. Inverters

Inverters will be listed and labeled in accordance with UL 1741 for utility interactive system use.

4. GENERAL CRITERIA

4.1. Large-Scale Fire Testing

Large-scale fire testing will be conducted by a Nationally Recognized Testing Laboratory (NRTL) in accordance with UL 9540A. Data collected during large-scale fire testing will be used to determine maximum unit energy capacity, spacing requirements, explosion control design criteria, and thermal runaway mitigation requirements. The results of the Large-scale fire testing will also inform the development of the Hazard Mitigation Analysis (HMA).

4.2. Battery OEM-provided Fire Protection Features

Battery OEM conducts extensive analysis and testing to assess hazardous conditions related to battery storage products. Battery technology includes multiple layers of protection to mitigate hazardous electrical and fire conditions. The following safety features are included in the battery technology and have been tested and validated through large-scale fire testing:

- **Explosion Control:** Explosion control will be achieved by use of deflagration vents, deflagration panels, and integral “sparker” technology. The battery cabinets have been designed to ensure no hazardous pressure waves, debris, shrapnel, or enclosure pieces are ejected, as validated by installation level large-scale testing and engineering evaluations.
- **Thermal Runaway Propagation Prevention:** Batteries will be constructed with materials proven to prevent thermal runaway propagation between adjacent cabinets via large scale fire testing.

4.3. Hazard Mitigation Analysis Approach

Fire Suppression Systems: An automatic fire suppression system will not be installed at this facility, as it is not required for cabinet type installations that cannot be entered for operations or maintenance. Also, per large

scale fire testing results, automatic fire suppression is not required to prevent thermal runaway propagation to adjacent battery cabinets.

Fire Detection and Alarm System: The battery cabinets do not contain built-in smoke, gas, or fire detection features as they are not required for outdoor cabinet type installations of this technology.

Water Supply: See Exhibit A for a layout of proposed fire hydrants around the site. The battery cabinets are designed to fully consume themselves by fire with minimal water application based on Large-scale fire tests showing limited fire spread to adjacent cabinets. A private fire main will be extended from the city water supply tie-in to hydrants spaced approximately 400-ft apart along the fire apparatus access road. Hydrants can be used to provide a reliable water supply source for defensive firefighting measures. The private fire main will be designed and installed in accordance with NFPA 24 and the Applicable Codes and Standards.

Fire Truck Access: Fire truck access will be provided within the site. See Exhibit A for additional layout details. All new emergency access roads will have 15 feet of vertical clearance, unobstructed minimum width of 20 feet and be 26 feet wide for a length of 20 feet on each side of the hydrant. The access road will have a minimum centerline turning radius of 35 feet and no dead-ends.

Battery OEM-provider Hazard Mitigation: The battery technology will have pre-installed Hazard Mitigation protection. See 4.2 for additional details.

Hazard Mitigation Analysis: Hazard mitigation analysis will be performed in accordance with CFC §104.8.2 to evaluate the consequences of the failure modes defined in CFC §1207.1.4.

4.4. Permits

Per CFC §1206.1.2, the following permits shall be obtained:

- Construction Permit in accordance with CFC §105.6.5.
- Operational Permit in accordance with CFC §105.5.14.

4.5. First Responder Training

First Responder Training will be developed in collaboration with the battery OEM and System Integrator.

4.6. Approvals from Fire Official

The following approvals will be requested by the Owner to the Fire Official:

- CFC §1207.5.1 – Size and separation
 - Approval for ESS groups exceeding 50 kWh having separations less than 3 feet from other groups and from walls.
 - Justification will be presented in the form of large-scale fire testing that evaluates larger capacities or smaller separations.
- CFC §1207.1.4 – Hazard Mitigation Analysis
 - Approval of the failure modes and effects analysis submitted to the fire code official for review and approval in accordance with CFC §104.8.2.
- CFC §1207.1.5 – Large Scale Fire Test
 - Approval of the large-scale fire test (UL 9540A) will be submitted to the fire code official for review and approval in accordance with CFC §104.8.2.
- CFC §1206.2.1 – Commissioning
 - The commissioning plan will be submitted for approval prior to initiating commissioning.
 - A report describing the results of the system commissioning will be provided to the fire code official prior to final inspection and approval.

EXHIBIT A – SK001 – ON-SITE UTILITY PLAN



CREATE AMAZING.

Stormwater Management Plan



Cormorant Energy Storage, LLC

**Daly City Energy Storage
Project No. 164465**

**Revision 3
10/1/2024**

Stormwater Management Plan

prepared for

Cormorant Energy Storage, LLC
Daly City Energy Storage
Daly City, California

Project No. 164465

Revision 3
10/1/2024

prepared by

Burns & McDonnell Consultants, Inc.

INDEX

Cormorant Energy Storage, LLC Stormwater Management Plan Project No. 164465

Report Index

<u>Chapter Number</u>	<u>Chapter Title</u>	<u>Number of Pages</u>
1.0	Site Conditions	4
2.0	Hydrology and Hydraulics	1
3.0	Soil Erosion and Sediment Control Measures	3
4.0	Conclusions	1
APPENDIX A	FEMA FIRM Panel	
APPENDIX B	Pre- and Post- Development Hydrology Analysis	
APPENDIX C	NOAA Rainfall Data	

TABLE OF CONTENTS

	<u>Page No.</u>
1.0 SITE CONDITIONS	1-1
1.1 Project Description.....	1-1
1.2 Existing Conditions.....	1-2
1.2.1 Soil Types	1-3
1.2.2 Rainfall Data	1-3
1.3 Proposed Conditions and Stormwater Management System	1-4
2.0 HYDROLOGY AND HYDRAULICS	2-1
2.1 Runoff Data.....	2-1
3.0 SOIL EROSION AND SEDIMENT CONTROL MEASURES	3-1
3.1 Checklist: San Mateo Countywide Water Pollution Prevention Program C.3 and C.6 Development Review Checklist	3-1
3.2 National Pollutant Discharge Elimination System (NPDES) Best Management Practices	3-2
4.0 CONCLUSIONS	4-1
 APPENDIX A – FEMA FIRM PANEL	
APPENDIX B – PRE- AND POST-DEVELOPMENT HYDROLOGY ANALYSIS	
APPENDIX C – NOAA RAINFALL DATA	

1.0 SITE CONDITIONS

1.1 Project Description

Cormorant Energy Storage, LLC proposes to install a new battery storage system (BESS) in Daly City, California, along Carter Street and Geneva Avenue. The 11.5-acre site comprises two existing parcels adjacent to a large event center on the North side. The Project Site sits in an area zoned for commercial development, most of which is currently in use as a spillover parking lot. Approximately 9.45 acres of the area will be disturbed during the construction of the proposed site. See Figure 1-1 for the Project's general vicinity map.

In the permeable surfaces, the post-development stormwater can infiltrate; however, runoff will flow from the various surfaces on-site to a dry detention basin during substantial stormwater events. The clean water from the basin will be discharged and conveyed to the existing city drainage system along the property's perimeter. The permeable crushed rock surface and dry detention basin will provide a treatment train that improves the quality of stormwater runoff and reduces the quantity of stormwater runoff.

As detailed herein, the stormwater management design will meet or exceed all applicable California Environmental Protection Agency (CEPA) Stormwater Standards. In addition to the California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, the Project's stormwater management system has been sited and designed in consideration of the San Mateo Countywide Water Pollution Prevention Program Checklist, as well as the Daly City Design Standards.

Figure 1-1 General Vicinity Map

1.2 Existing Conditions

The Project Site is in the Vista Grande Watershed in California. Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel No. 06081C0035F (Effective April 5, 2019), shown in Appendix A, the parcels are not located in the 100-year floodplain. No wetland, Riverfront area, or other protected resource area buffers are near the site.

The project site contains about 11.5 acres of existing dirt roads, crushed rock surfacing, and pavement. The general grade of the project site slopes from west to east. It is bound by tree lots on the higher ground in the west and developed parking lots on the lower ground in the east. The ground on either the north or south sides of the project site slopes away, and no drainage contribution from these areas will be expected.

The existing site contains one drainage area, DMA A, that spans the 9.45-acre disturbance area. This drainage area sheet flows across the site and eventually reaches a city stormwater system along the east border of the project site proper.

1.2.1 Soil Types

A desktop search failed to yield soil survey data for the area; for the calculations and to be conservative, hydrological soil group (HSG) D is used for curve number determination. For each drainage area, curve number (CN) values specific to their land use and respective areas are used to determine a weighted CN value for the entire drainage area. A summary of the land use and runoff CN values used in the stormwater model are provided in Table 1-1.

Table 1-1 Curve Number Summary

HSG	Curve Numbers				
	Pre-Development	Impervious Area	Roads	Grass	Water Surface
D	95	98	98	80	98

1.2.2 Rainfall Data

The Project's stormwater management system was designed per San Francisco Bay Region NPDES Permit requirements and the Daly City Design Standards. The design was refined using the San Mateo C.3 Regulated Projects Guide and its Countywide Water Pollution Prevention Program C.3 and C.6 Development Review checklist.

The detention basin volume was designed using the volumetric design storm method to capture the runoff volume generated by a 2-hour storm with a 10-year frequency. The design basis comes from the Volumetric Design Storm Method, described in the Caltrans Storm Water Quality Handbook. The storm curve and rainfall depth for the 10-year, 2-hour design storm was retrieved from the National Oceanic and Atmospheric Administration (NOAA) Atlas 14, Volume 6, Version 2. The data for the 10-year, 2-hour storm for this site's region is shown in Appendix C and the design storm depth used for stormwater modelling is shown in Table 1-2.

Table 1-2 Design Storm Frequency-Depth

Design Storm	Daly City
10-year	1.18

1.3 Proposed Conditions and Stormwater Management System

Cormorant Energy Storage, LLC proposes installing a battery energy storage system to develop the property. The Project site will total 9.45 acres of land disturbance, consisting of 6.56 acres of impervious surfaces, mainly equipment and foundations, including 1.34 acres of asphalt roads. Grading of the substation and battery storage areas will have no slope greater than 4.0% to minimize change to the natural drainage pattern while providing a relatively flat surface for operation and maintenance. To accomplish this, two retaining walls are proposed along the east and west sides of the project site.

The proposed site contains three drainage areas, DMA A, B, and C, that span the entire 9.45-acre disturbance area. DMA A contains all proposed impervious area and sheet flows Plan East to a stormwater collection swale and a culvert that flows Plan North to the proposed stormwater detention basin. DMA B and C contain seeded slopes that flow from the North and East sides of the BESS yard to offsite.

Stormwater Best Management Practices (BMPs) will be implemented on-site to control the quality and quantity of the stormwater discharge from the site. The new drainage system will include a dry detention pond with a discharge system designed for the necessary stormwater runoff mitigation. Several sets of orifices will be used to meter runoff discharge at reduced peak flow rates while detaining runoff over a period of at least 48 hours for settling sedimentation after a rainfall event.

The Project will have an Operations and Maintenance Plan, and the stormwater system will be maintained accordingly. Surrounding disturbed areas will have low-growing native vegetation buffers and will not negatively impact the stormwater management system.

2.0 HYDROLOGY AND HYDRAULICS

The stormwater management design for the project has been developed to minimize the downstream effects of the proposed project.

2.1 Runoff Data

Stormwater modeling was performed for pre-development and post-development conditions of the project. Modeling was performed using HydroCAD© 10.20-5a (©2023) software. The time of concentration (Tc), used to model all drainage areas, varies depending on area, surface type, and slope. The Tc for each drainage area is provided in Table 2-1.

Table 2-1 Time of Concentration Summary

	Pre-Development	Post-Development		
	DMA A	DMA A	DMA B	DMA C
Tc (minutes)	4.2	5.1	0.9	1.8

A summary of all the drainage areas and their properties are shown in Table 2-2. The full HydroCAD© reports for the pre- and post-development models are provided in Appendix B.

Table 2-2 Drainage Area Summary

Drainage Area	Area (ac)	Weighted CN	Peak Discharge (cfs)	Runoff Volume (ac-ft)
DMA A Pre-Development	9.45	95	17.62	0.568
DMA A Post-Development	8.93	94	14.39	0.487
DMA B Post-Development	0.22	80	0.07	0.003
DMA C Post-Development	0.30	80	0.08	0.004

3.0 SOIL EROSION AND SEDIMENT CONTROL MEASURES

The stormwater management design will meet or exceed the CEPA recommendations, and the Project will comply with all applicable San Mateo Countywide Water Pollution Prevention Program Checklist described in detail in this section.

3.1 Checklist: San Mateo Countywide Water Pollution Prevention Program C.3 and C.6 Development Review Checklist

Worksheet A: C.6 – Construction Stormwater BMPs

Since the project involves earthwork, Construction Stormwater Best Management Practices (BMP) will be observed. Construction materials and wastes will be stored, handled, and disposed of properly to prevent contact with stormwater. A designated area will be on-site for cleaning, fueling, and maintaining vehicles where wash water is contained and treated. BMP training will be provided to all employees and subcontractors, and construction access routes will be limited to stabilized designated access points. Sediment controls will protect all storm drain inlets in the vicinity. To ensure compliance with BMP, the San Mateo Countywide Water Pollution Prevention Program's construction BMP plan sheet will be attached to project plans, and the contractor will be required to implement all applicable BMPs. Temporary erosion controls will stabilize all denuded areas until permanent controls are established. Protective measures will be used for adjacent properties to limit the impact of construction impacts; on-site runoff will be diverted around the site and exposed areas, and sediment will be trapped on site. The site will also be delineated with field markers for clearing limits, easements, etc. Finally, the project will provide specifications describing the construction and operation of erosion and sediment controls, methods and schedule for grading and excavating, vegetative cover and mulch, and irrigation provisions.

Worksheet B: C.3 – Source Controls

The total impervious surface replaced and created exceeds 2,500 square feet, so the project will use stormwater source controls to reduce potential pollutants. Equipment and materials will be stored in only contained areas and covered to avoid possible contact with runoff.

Worksheet C: Low Impact Development – Site Design Measures

Per the designation of the storage facility as a C.3 Regulated Project, appropriate Site Design Measures are required. Any runoff from equipment and crushed rock surfaces not collected in the proposed dry detention basin will be directed onto vegetated areas to reduce water quality impacts. Impervious surfaces

will be minimized, and slopes and channels will be protected. The project will limit the disturbance and effects of runoff on natural water bodies and drainage systems and reduce the compaction of highly permeable soils.

Worksheet D: Stormwater Measures and Site Design Measures by Drainage Management Area (DMA)

The large new impervious surface area requires additional stormwater measures for individual Drainage Management Areas (DMAs). The project site consists of only one DMA, a self-retaining area that will store stormwater before treatment. The area will be sized using a volumetric hydraulic design base to achieve the capture of runoff from the 10-year, 2-hour design storm.

Worksheet E: Hydromodification Management & Worksheet F: Special Projects

The project is not designated as a Hydromodification Management (HM) Project and, therefore, is exempt from HM requirements. The project also does not qualify in special project categories “A,” “B,” or “C” and is not eligible for Low Impact Development treatment reduction credit.

3.2 National Pollutant Discharge Elimination System (NPDES) Best Management Practices

Various soil erosion and sediment control measures will be implemented to minimize impacts during construction, including, but not limited to, the following. All measures will be routinely inspected and adequately maintained during the entire construction phase and until the site has reached permanent stabilization.

- Erosion control barriers will be installed around the perimeter to be disturbed before beginning construction. These barriers are generally installed between construction and resource areas such as wetlands/waterbodies. They are designed to minimize sediment transport by stormwater into down-gradient resource areas. Erosion control barriers appropriate for use on the Project Site include silt fence, straw bales, compost filter tubes, silt socks, and/or straw wattles.
- Construction entrance track pads consisting of 1.5” to 3” stone will be installed at all access points to the Project to prevent construction machinery from tracking soil onto paved roadways, thus minimizing sediment transport away from the site.
- If any stockpiling of soil becomes necessary, it will be limited in size and duration, and an erosion control barrier will be placed around the perimeter of any stockpiles. If necessary, stockpiles will be covered with plastic sheeting for dust control purposes.

- If dewatering is required, all discharges will be located outside any jurisdictional wetland resource areas. Any water pumped from an excavation will be routed through a dewatering basin or filter bag surrounded by a haybale corral to remove sediment before discharge.
- Vegetation (using native species) will be re-established with native species in disturbed areas promptly after construction activities have temporarily or permanently ceased.

PRELIMINARY

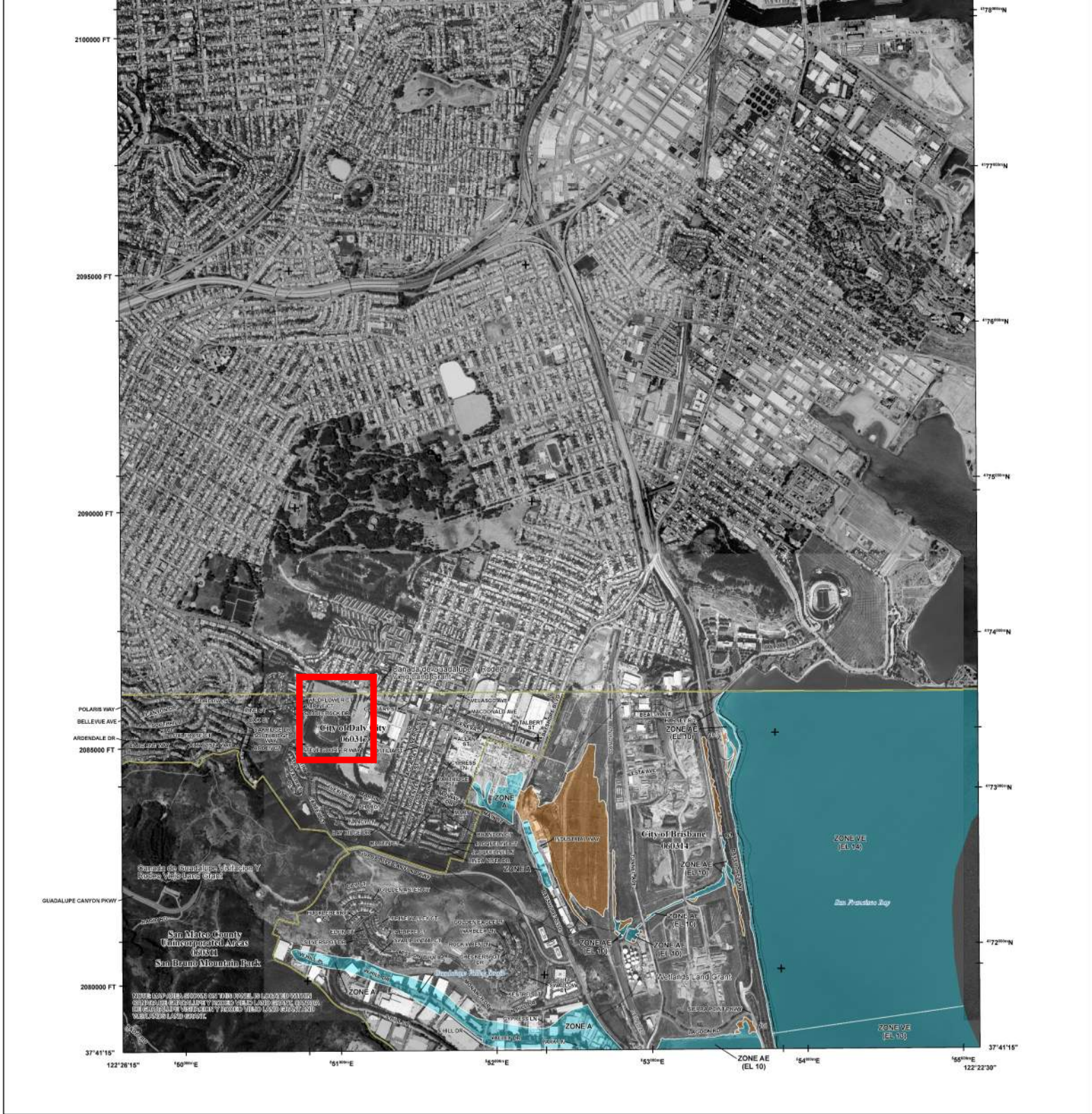
4.0 CONCLUSIONS

To accommodate the change in stormwater runoff due to Project development, the San Francisco Bay Region NPDES Permit, C3 Regulated Projects Guide, Daly City Design Standards, and the San Mateo Countywide Water Pollution Prevention Program Checklist were followed. This checklist accounts for site design, source control, and treatment measures that reduce impacts on water quality and remove pollutants from stormwater. The proposed detention pond will allow for the settlement of solids and can contain the runoff generated by the 10-year, 2-hour design storm.

The stormwater management design and proposed BMPs will meet or exceed all applicable CEPA Stormwater Standards.

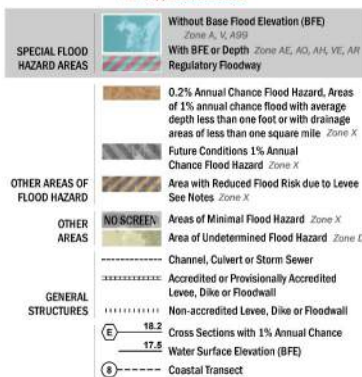
PRELIMINARY

APPENDIX A – FEMA FIRM PANEL



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)



NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information Exchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by calling the FEMA Map Service Center website or by calling the FEMA Map Information Exchange.

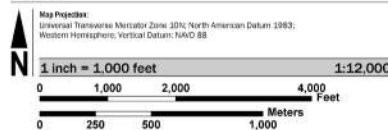
Communities appearing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

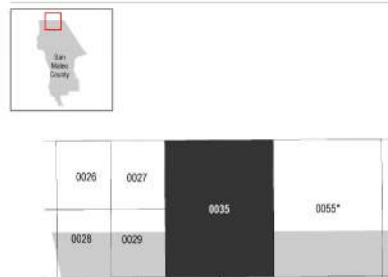
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-658-6629.

Base map information shown on this FIRM was derived from USGS LIDAR dated 2010 and Coastal California digital imagery dated 2011. USDA NAIP imagery dated 2012 is used in areas not covered by the Coastal California digital imagery.

SCALE



PANEL LOCATOR



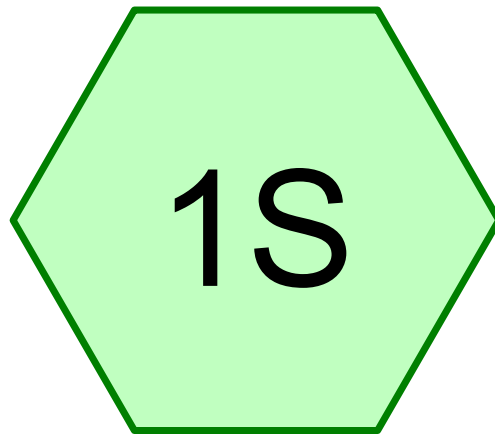
FEMA

National Flood Insurance Program

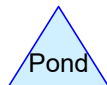
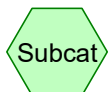
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
SAN MATEO COUNTY, CALIFORNIA
and Incorporated Areas
PANEL 35 of 510

Panel Contains:
COMMUNITY
SAN MATEO COUNTY
NUMBER
060314
060317
060311
PANEL
0035
0036
0035
SUFFIX
F
F
F

APPENDIX B – PRE- AND POST-DEVELOPMENT HYDROLOGY ANALYSIS



DMA A Pre-Dev



Routing Diagram for Daly City Pre-Dev (9.27.2024)
Prepared by Burns & McDonnell, Printed 10/1/2024
HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Project Notes

Copied 1 events from Arevon 24-hr S1 storm

Copied 1 events from Arevon 24-hr S1 storm

Daly City Pre-Dev (9.27.2024)

Prepared by Burns & McDonnell

Printed 10/1/2024

HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Page 3

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	10 yr, 2 hr	Arevon 24-hr S1	10-yr	Trim	2.00	1	1.18	2

Daly City Pre-Dev (9.27.2024)

Prepared by Burns & McDonnell

HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Printed 10/1/2024

Page 4

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
9.450	95	Dirt Roads, Rock, Existing Pavement, HSG D (1S)
9.450	95	TOTAL AREA

Daly City Pre-Dev (9.27.2024)

Prepared by Burns & McDonnell

HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Printed 10/1/2024

Page 5

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
9.450	HSG D	1S
0.000	Other	
9.450		TOTAL AREA

Daly City Pre-Dev (9.27.2024)

Prepared by Burns & McDonnell

Printed 10/1/2024

HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Page 6

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	9.450	0.000	9.450	Dirt Roads, Rock, Existing Pavement	
0.000	0.000	0.000	9.450	0.000	9.450	TOTAL AREA	

Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: DMA A Pre-Dev Runoff Area=9.450 ac 0.00% Impervious Runoff Depth=0.72"
Flow Length=724' Slope=0.0400 '/' Tc=4.2 min CN=95 Runoff=17.62 cfs 0.568 af

Total Runoff Area = 9.450 ac Runoff Volume = 0.568 af Average Runoff Depth = 0.72"
100.00% Pervious = 9.450 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: DMA A Pre-Dev

Runoff = 17.62 cfs @ 1.02 hrs, Volume= 0.568 af, Depth= 0.72"

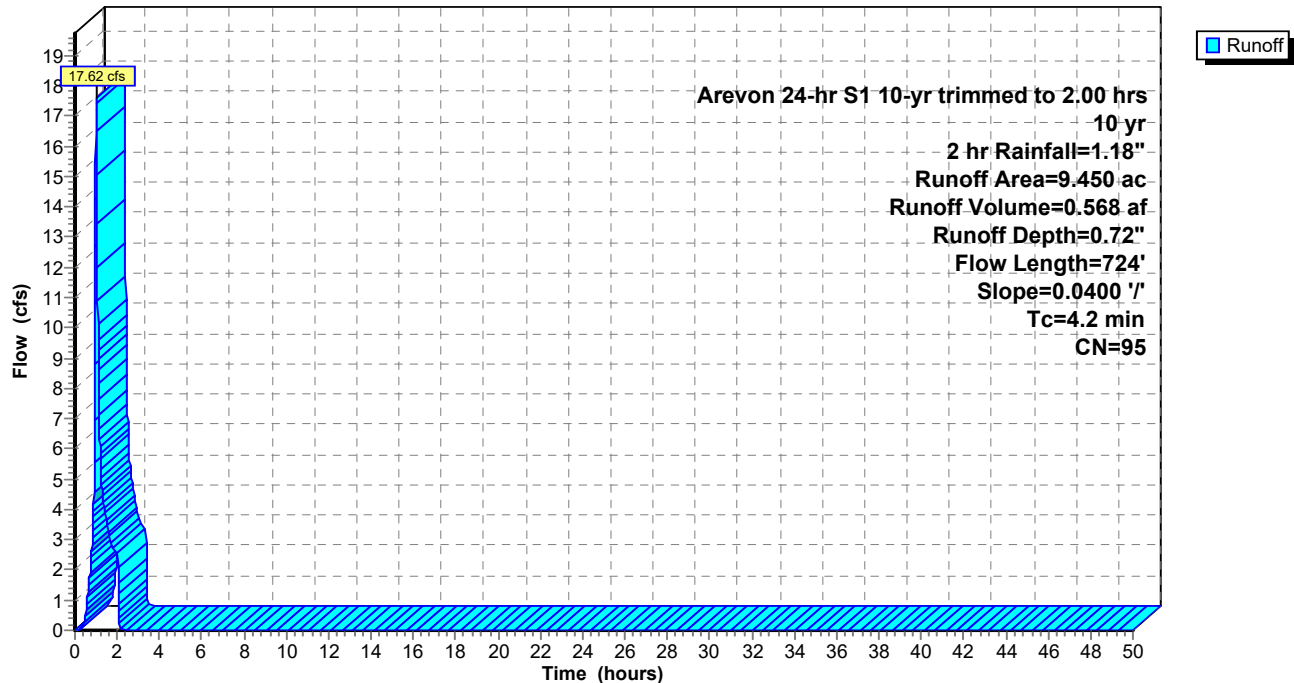
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Arevon 24-hr S1 10-yr trimmed to 2.00 hrs 10 yr, 2 hr Rainfall=1.18"

Area (ac)	CN	Description
* 9.450	95	Dirt Roads, Rock, Existing Pavement, HSG D
9.450		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	624	0.0400	3.22		Shallow Concentrated Flow,
					Unpaved Kv= 16.1 fps
1.0	100	0.0400	1.61		Sheet Flow,
					Smooth surfaces n= 0.011 P2= 2.53"
4.2	724	Total			

Subcatchment 1S: DMA A Pre-Dev

Hydrograph

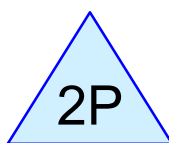




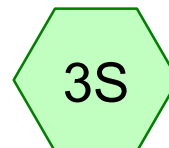
DMA B Post-Dev



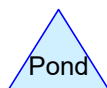
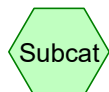
DMA A Post-Dev



Detention Basin



DMA C Post-Dev



Routing Diagram for Daly City Post-Dev (9.27.2024)
Prepared by Burns & McDonnell, Printed 10/1/2024
HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Project Notes

Copied 1 events from Arevon 24-hr S1 storm

Copied 1 events from Arevon 24-hr S1 storm

Copied 1 events from Arevon 24-hr S1 storm

Copied 1 events from Arevon 24-hr S1 storm

Daly City Post-Dev (9.27.2024)

Prepared by Burns & McDonnell

Printed 10/1/2024

HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Page 3

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	10 yr, 2 hr	Arevon 24-hr S1	10-yr	Trim	2.00	1	1.18	2

Daly City Post-Dev (9.27.2024)

Prepared by Burns & McDonnell

HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Printed 10/1/2024

Page 4

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.640	80	>75% Grass cover, Good, HSG D (3S, 4S, 5S)
5.220	98	Impervious Area (5S)
1.340	98	Paved roads w/curbs & sewers, HSG D (5S)
0.250	98	Water Surface, HSG D (5S)
9.450	93	TOTAL AREA

Daly City Post-Dev (9.27.2024)

Prepared by Burns & McDonnell

Printed 10/1/2024

HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Page 5

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
4.230	HSG D	3S, 4S, 5S
5.220	Other	5S
9.450		TOTAL AREA

Daly City Post-Dev (9.27.2024)

Prepared by Burns & McDonnell

Printed 10/1/2024

HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Page 6

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	2.640	0.000	2.640	>75% Grass cover, Good	3S,
							4S,
							5S
0.000	0.000	0.000	0.000	5.220	5.220	Impervious Area	5S
0.000	0.000	0.000	1.340	0.000	1.340	Paved roads w/curbs & sewers	5S
0.000	0.000	0.000	0.250	0.000	0.250	Water Surface	5S
0.000	0.000	0.000	4.230	5.220	9.450	TOTAL AREA	

Daly City Post-Dev (9.27.2024)

Prepared by Burns & McDonnell

Printed 10/1/2024

HydroCAD® 10.20-5a s/n 08510 © 2023 HydroCAD Software Solutions LLC

Page 7

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	5S	0.00	0.00	43.0	0.0230	0.010	0.0	12.0	8.7	

Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment3S: DMA C Post-Dev Runoff Area=0.300 ac 0.00% Impervious Runoff Depth=0.15"
Flow Length=42' Slope=0.3333 '/' Tc=1.8 min CN=80 Runoff=0.08 cfs 0.004 af

Subcatchment4S: DMA B Post-Dev Runoff Area=0.220 ac 0.00% Impervious Runoff Depth=0.15"
Flow Length=18' Slope=0.3333 '/' Tc=0.9 min CN=80 Runoff=0.07 cfs 0.003 af

Subcatchment5S: DMA A Post-Dev Runoff Area=8.930 ac 76.26% Impervious Runoff Depth=0.66"
Flow Length=897' Tc=5.1 min CN=94 Runoff=14.39 cfs 0.487 af

Pond 2P: Detention Basin Peak Elev=134.34' Storage=0.249 af Inflow=14.39 cfs 0.487 af
Outflow=4.55 cfs 0.434 af

Total Runoff Area = 9.450 ac Runoff Volume = 0.494 af Average Runoff Depth = 0.63"
27.94% Pervious = 2.640 ac 72.06% Impervious = 6.810 ac

Summary for Subcatchment 3S: DMA C Post-Dev

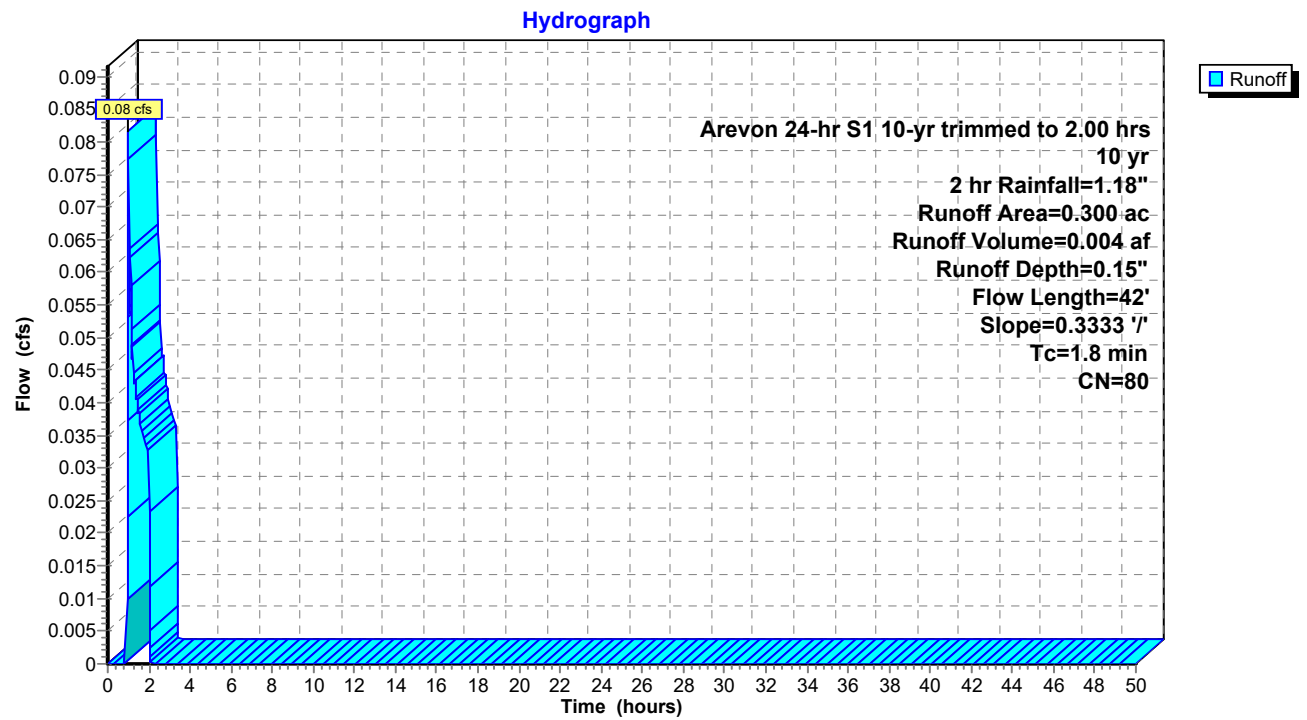
Runoff = 0.08 cfs @ 1.01 hrs, Volume= 0.004 af, Depth= 0.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Arevon 24-hr S1 10-yr trimmed to 2.00 hrs 10 yr, 2 hr Rainfall=1.18"

Area (ac)	CN	Description
0.300	80	>75% Grass cover, Good, HSG D
0.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	42	0.3333	0.39		Sheet Flow, Grass: Short n= 0.150 P2= 2.53"

Subcatchment 3S: DMA C Post-Dev



Summary for Subcatchment 4S: DMA B Post-Dev

[49] Hint: $T_c < 2dt$ may require smaller dt

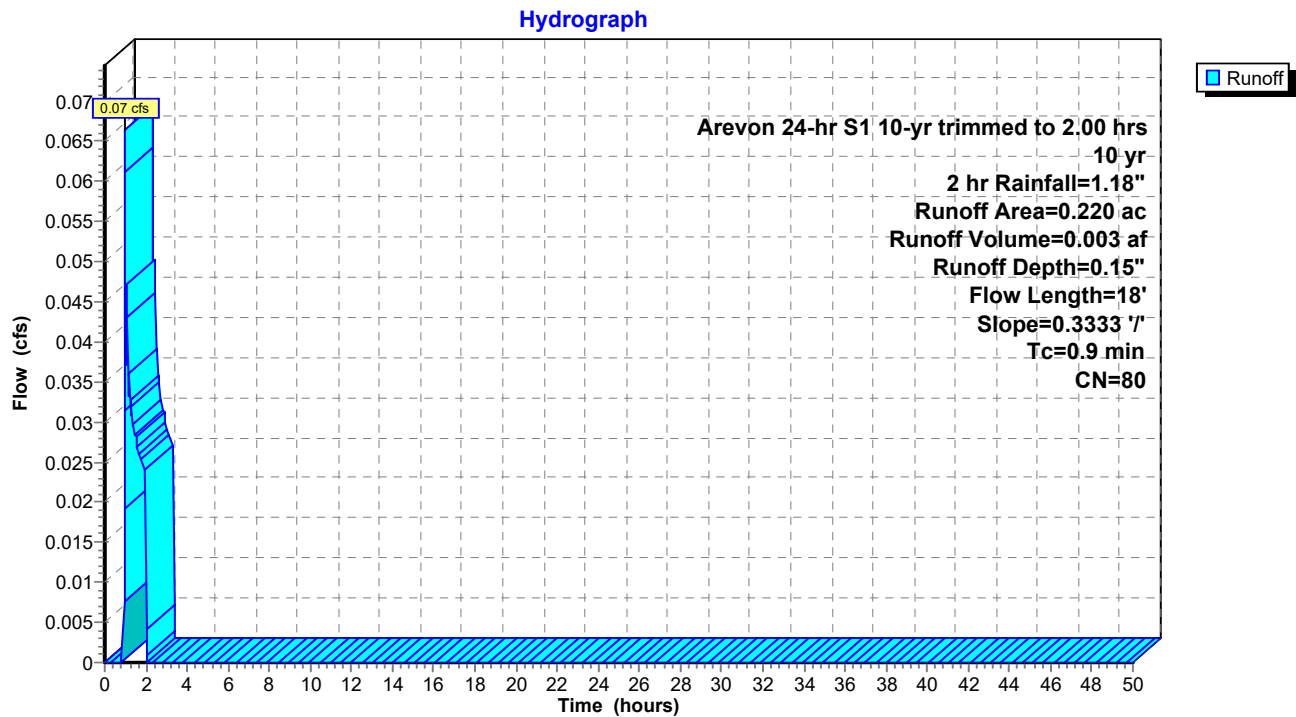
Runoff = 0.07 cfs @ 1.00 hrs, Volume= 0.003 af, Depth= 0.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, $dt=0.01$ hrs
 Arevon 24-hr S1 10-yr trimmed to 2.00 hrs 10 yr, 2 hr Rainfall=1.18"

Area (ac)	CN	Description
0.220	80	>75% Grass cover, Good, HSG D
0.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	18	0.3333	0.33		Sheet Flow, Grass: Short n= 0.150 P2= 2.53"

Subcatchment 4S: DMA B Post-Dev



Summary for Subcatchment 5S: DMA A Post-Dev

[47] Hint: Peak is 226% of capacity of segment #3
 [47] Hint: Peak is 1840% of capacity of segment #4

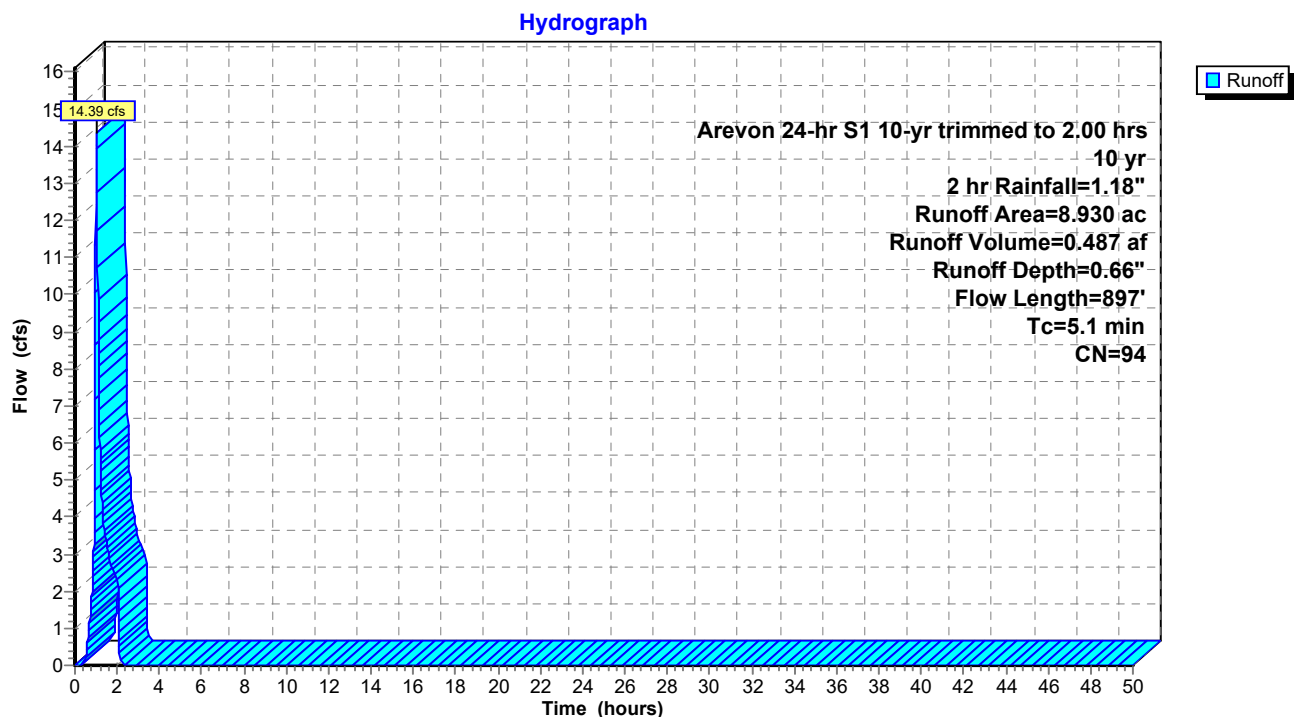
Runoff = 14.39 cfs @ 1.03 hrs, Volume= 0.487 af, Depth= 0.66"
 Routed to Pond 2P : Detention Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Arevon 24-hr S1 10-yr trimmed to 2.00 hrs 10 yr, 2 hr Rainfall=1.18"

Area (ac)	CN	Description
* 5.220	98	Impervious Area
1.340	98	Paved roads w/curbs & sewers, HSG D
0.250	98	Water Surface, HSG D
2.120	80	>75% Grass cover, Good, HSG D
8.930	94	Weighted Average
2.120		23.74% Pervious Area
6.810		76.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	100	0.0400	1.61		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.53"
2.7	527	0.0400	3.22		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
1.2	227	0.0077	3.16	6.37	Trap/Vee/Rect Channel Flow, Bot.W=0.00' D=0.82' Z= 3.0 '/' Top.W=4.92' n= 0.022 Earth, clean & straight
0.2	43	0.0230	4.46	0.78	Pipe Channel, 12.0" Round w/ 8.7" inside fill Area= 0.2 sf Perim= 2.0' r= 0.09' n= 0.010 PVC, smooth interior
5.1	897	Total			

Subcatchment 5S: DMA A Post-Dev



Summary for Pond 2P: Detention Basin

Inflow Area = 8.930 ac, 76.26% Impervious, Inflow Depth = 0.66" for 10 yr, 2 hr event
 Inflow = 14.39 cfs @ 1.03 hrs, Volume= 0.487 af
 Outflow = 4.55 cfs @ 1.27 hrs, Volume= 0.434 af, Atten= 68%, Lag= 14.4 min
 Primary = 4.55 cfs @ 1.27 hrs, Volume= 0.434 af

Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Peak Elev= 134.34' @ 1.27 hrs Surf.Area= 0.106 ac Storage= 0.249 af

Plug-Flow detention time= 136.9 min calculated for 0.434 af (89% of inflow)
 Center-of-Mass det. time= 131.9 min (208.1 - 76.2)

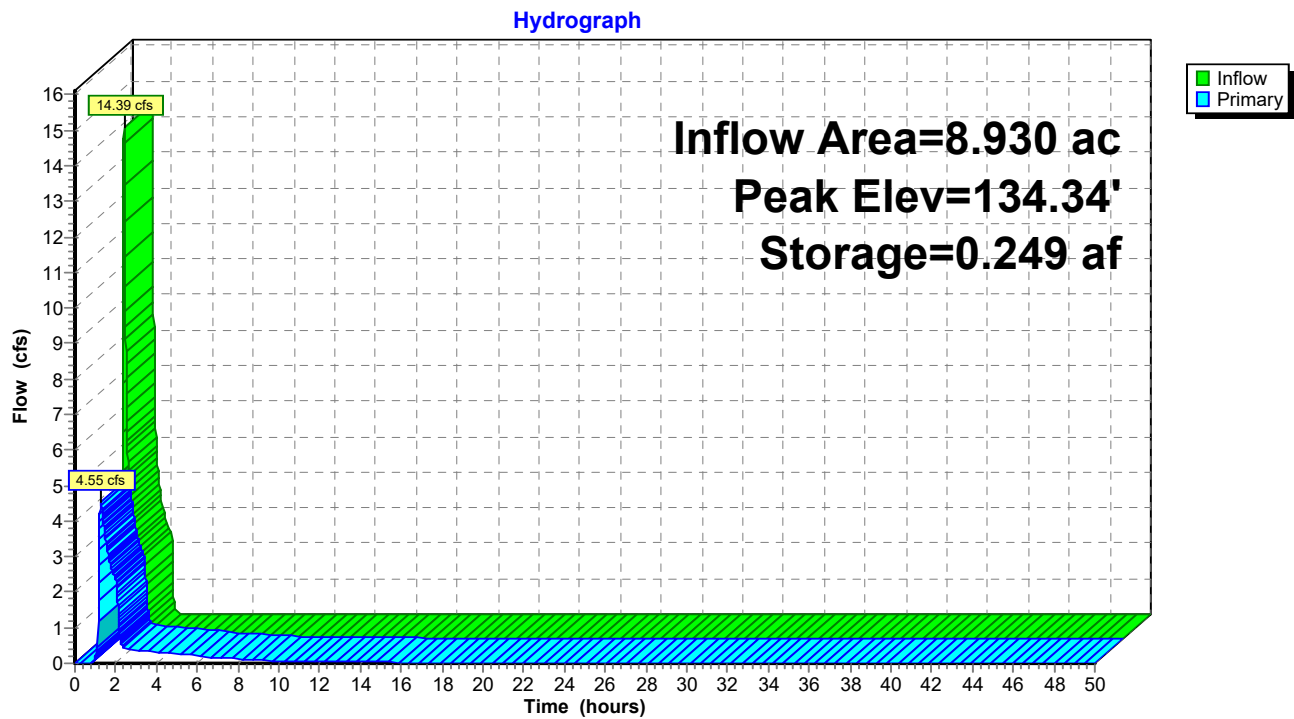
Volume	Invert	Avail.Storage	Storage Description
#1	131.00'	0.454 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
131.00	0.045	0.000	0.000
132.00	0.062	0.053	0.053
133.00	0.080	0.071	0.125
134.00	0.099	0.089	0.214
135.00	0.120	0.109	0.323
136.00	0.141	0.130	0.454

Device	Routing	Invert	Outlet Devices
#1	Primary	132.00'	12.0" Vert. Culvert C= 0.600 Limited to weir flow at low heads
#2	Device 1	132.00'	1.0" Vert. Orifice/Grate X 4.00 columns X 3 rows with 5.0" cc spacing C= 0.600 Limited to weir flow at low heads
#3	Device 1	134.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=4.54 cfs @ 1.27 hrs HW=134.34' (Free Discharge)

- 1=Culvert (Passes 4.54 cfs of 5.13 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.43 cfs @ 6.58 fps)
- 3=Orifice/Grate (Weir Controls 4.11 cfs @ 1.91 fps)

Pond 2P: Detention Basin



PRELIMINARY

APPENDIX C – NOAA RAINFALL DATA



NOAA Atlas 14, Volume 6, Version 2
Location name: Daly City, California, USA*
Latitude: 37.6911°, Longitude: -122.4724°
Elevation: 141 ft**

* source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

PF tabular

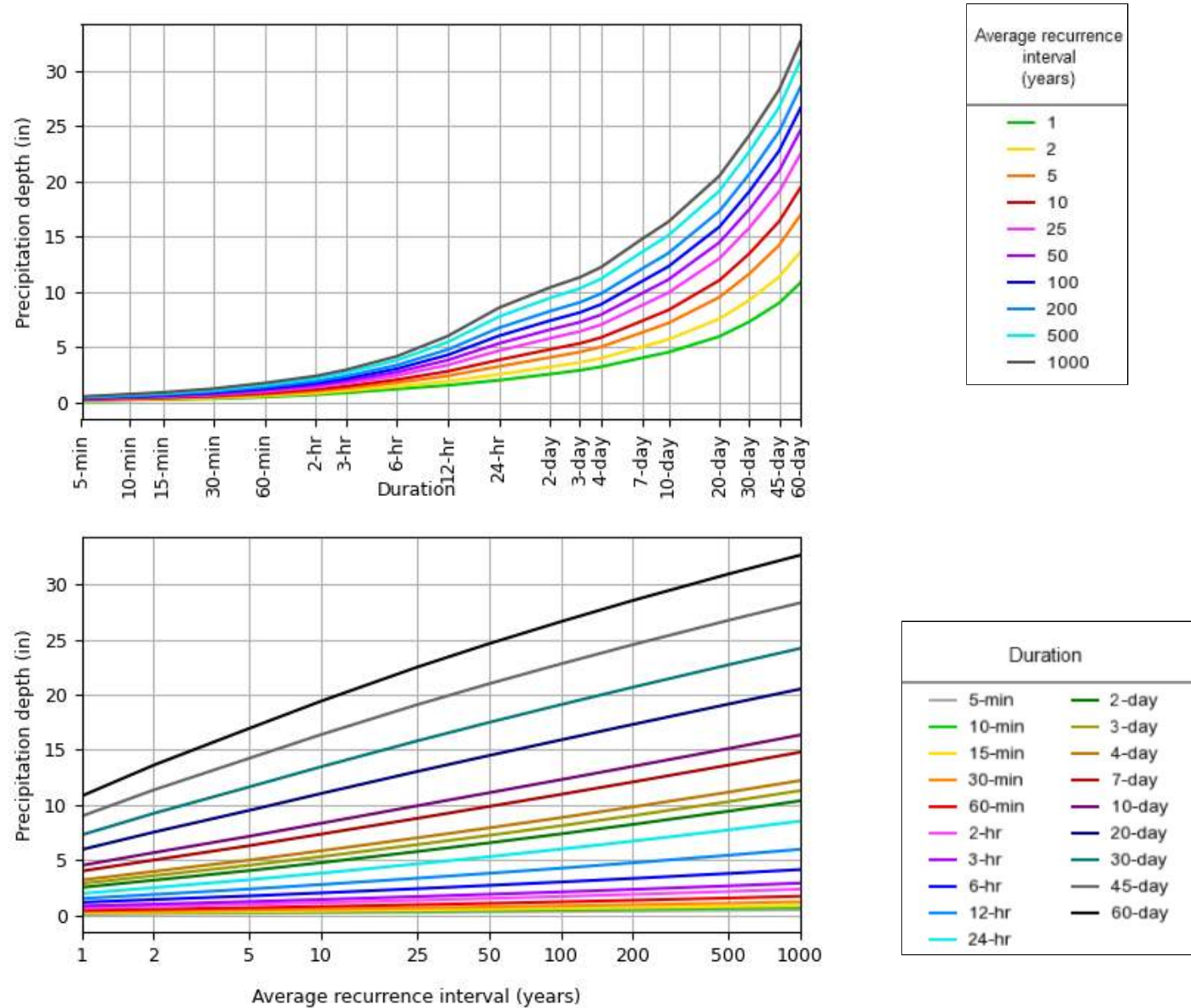
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.143 (0.127-0.162)	0.172 (0.153-0.195)	0.212 (0.188-0.241)	0.245 (0.215-0.282)	0.292 (0.246-0.350)	0.330 (0.271-0.406)	0.370 (0.295-0.469)	0.413 (0.318-0.542)	0.473 (0.346-0.653)	0.522 (0.367-0.751)
10-min	0.205 (0.183-0.232)	0.246 (0.219-0.280)	0.303 (0.269-0.345)	0.351 (0.308-0.404)	0.419 (0.353-0.502)	0.473 (0.389-0.582)	0.531 (0.423-0.673)	0.592 (0.456-0.776)	0.678 (0.497-0.936)	0.748 (0.526-1.08)
15-min	0.248 (0.221-0.280)	0.298 (0.265-0.338)	0.367 (0.325-0.417)	0.425 (0.373-0.488)	0.507 (0.427-0.607)	0.573 (0.470-0.704)	0.642 (0.511-0.813)	0.716 (0.551-0.939)	0.820 (0.600-1.13)	0.905 (0.636-1.30)
30-min	0.341 (0.304-0.386)	0.410 (0.365-0.465)	0.504 (0.448-0.574)	0.584 (0.513-0.672)	0.697 (0.587-0.836)	0.788 (0.647-0.969)	0.883 (0.703-1.12)	0.984 (0.758-1.29)	1.13 (0.826-1.56)	1.24 (0.874-1.79)
60-min	0.480 (0.428-0.544)	0.578 (0.515-0.656)	0.711 (0.631-0.810)	0.824 (0.724-0.948)	0.983 (0.828-1.18)	1.11 (0.912-1.37)	1.24 (0.992-1.58)	1.39 (1.07-1.82)	1.59 (1.16-2.20)	1.76 (1.23-2.52)
2-hr	0.698 (0.623-0.791)	0.835 (0.743-0.947)	1.02 (0.904-1.16)	1.17 (1.03-1.35)	1.39 (1.17-1.66)	1.56 (1.28-1.92)	1.73 (1.38-2.20)	1.92 (1.48-2.52)	2.18 (1.60-3.01)	2.39 (1.68-3.44)
3-hr	0.867 (0.773-0.982)	1.04 (0.923-1.18)	1.26 (1.12-1.44)	1.46 (1.28-1.67)	1.72 (1.45-2.06)	1.93 (1.58-2.37)	2.14 (1.71-2.72)	2.37 (1.83-3.11)	2.69 (1.97-3.71)	2.94 (2.07-4.23)
6-hr	1.20 (1.07-1.36)	1.45 (1.29-1.64)	1.78 (1.58-2.03)	2.06 (1.80-2.36)	2.43 (2.05-2.92)	2.73 (2.24-3.36)	3.04 (2.42-3.85)	3.36 (2.59-4.41)	3.81 (2.79-5.26)	4.17 (2.93-5.99)
12-hr	1.54 (1.38-1.75)	1.91 (1.70-2.17)	2.40 (2.13-2.73)	2.81 (2.47-3.23)	3.38 (2.85-4.05)	3.83 (3.14-4.71)	4.29 (3.42-5.44)	4.78 (3.68-6.27)	5.46 (4.00-7.53)	6.00 (4.22-8.63)
24-hr	2.00 (1.80-2.26)	2.53 (2.28-2.87)	3.24 (2.91-3.68)	3.84 (3.42-4.40)	4.67 (4.04-5.52)	5.33 (4.52-6.42)	6.02 (4.98-7.42)	6.74 (5.43-8.53)	7.75 (6.01-10.2)	8.56 (6.42-11.6)
2-day	2.56 (2.30-2.89)	3.20 (2.88-3.63)	4.07 (3.66-4.62)	4.79 (4.27-5.48)	5.79 (5.00-6.84)	6.58 (5.57-7.92)	7.40 (6.12-9.12)	8.25 (6.65-10.4)	9.44 (7.32-12.4)	10.4 (7.80-14.1)
3-day	2.90 (2.62-3.29)	3.61 (3.25-4.09)	4.55 (4.09-5.17)	5.33 (4.75-6.11)	6.41 (5.54-7.58)	7.26 (6.15-8.74)	8.13 (6.73-10.0)	9.05 (7.29-11.5)	10.3 (7.99-13.6)	11.3 (8.49-15.4)
4-day	3.22 (2.90-3.64)	4.00 (3.60-4.53)	5.02 (4.51-5.70)	5.86 (5.23-6.71)	7.03 (6.07-8.30)	7.94 (6.72-9.56)	8.87 (7.34-10.9)	9.84 (7.93-12.5)	11.2 (8.66-14.7)	12.2 (9.17-16.6)
7-day	4.03 (3.63-4.56)	5.03 (4.53-5.70)	6.32 (5.68-7.18)	7.37 (6.57-8.44)	8.79 (7.60-10.4)	9.87 (8.36-11.9)	11.0 (9.08-13.5)	12.1 (9.75-15.3)	13.6 (10.6-17.9)	14.8 (11.1-20.1)
10-day	4.54 (4.09-5.14)	5.70 (5.13-6.46)	7.18 (6.45-8.15)	8.36 (7.45-9.57)	9.93 (8.58-11.7)	11.1 (9.42-13.4)	12.3 (10.2-15.2)	13.5 (10.9-17.1)	15.1 (11.7-19.9)	16.4 (12.3-22.2)
20-day	5.97 (5.38-6.76)	7.55 (6.80-8.56)	9.52 (8.55-10.8)	11.1 (9.85-12.7)	13.0 (11.3-15.4)	14.5 (12.3-17.4)	15.9 (13.2-19.6)	17.3 (14.0-21.9)	19.1 (14.8-25.2)	20.5 (15.4-27.9)
30-day	7.30 (6.58-8.26)	9.25 (8.33-10.5)	11.6 (10.5-13.2)	13.5 (12.0-15.4)	15.8 (13.6-18.7)	17.5 (14.8-21.1)	19.1 (15.8-23.5)	20.7 (16.7-26.2)	22.7 (17.6-29.9)	24.2 (18.1-32.9)
45-day	9.00 (8.11-10.2)	11.4 (10.2-12.9)	14.2 (12.8-16.2)	16.4 (14.6-18.8)	19.1 (16.5-22.5)	21.0 (17.8-25.3)	22.8 (18.9-28.1)	24.5 (19.8-31.0)	26.7 (20.7-35.2)	28.3 (21.2-38.5)
60-day	10.8 (9.76-12.2)	13.6 (12.3-15.4)	16.9 (15.2-19.2)	19.4 (17.3-22.2)	22.5 (19.4-26.5)	24.6 (20.8-29.6)	26.6 (22.0-32.8)	28.5 (23.0-36.1)	30.9 (24.0-40.7)	32.6 (24.5-44.4)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).
 Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.
 Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

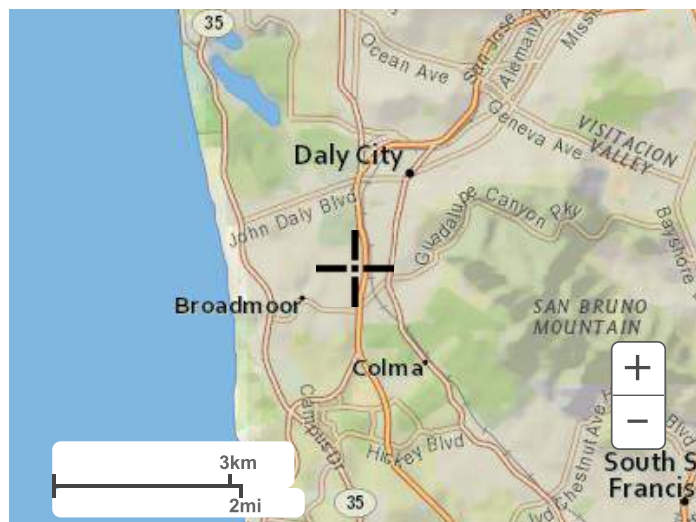
PDS-based depth-duration-frequency (DDF) curves
Latitude: 37.6911°, Longitude: -122.4724°



[Back to Top](#)

Maps & aerals

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



[Back to Top](#)

[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov
[Disclaimer](#)

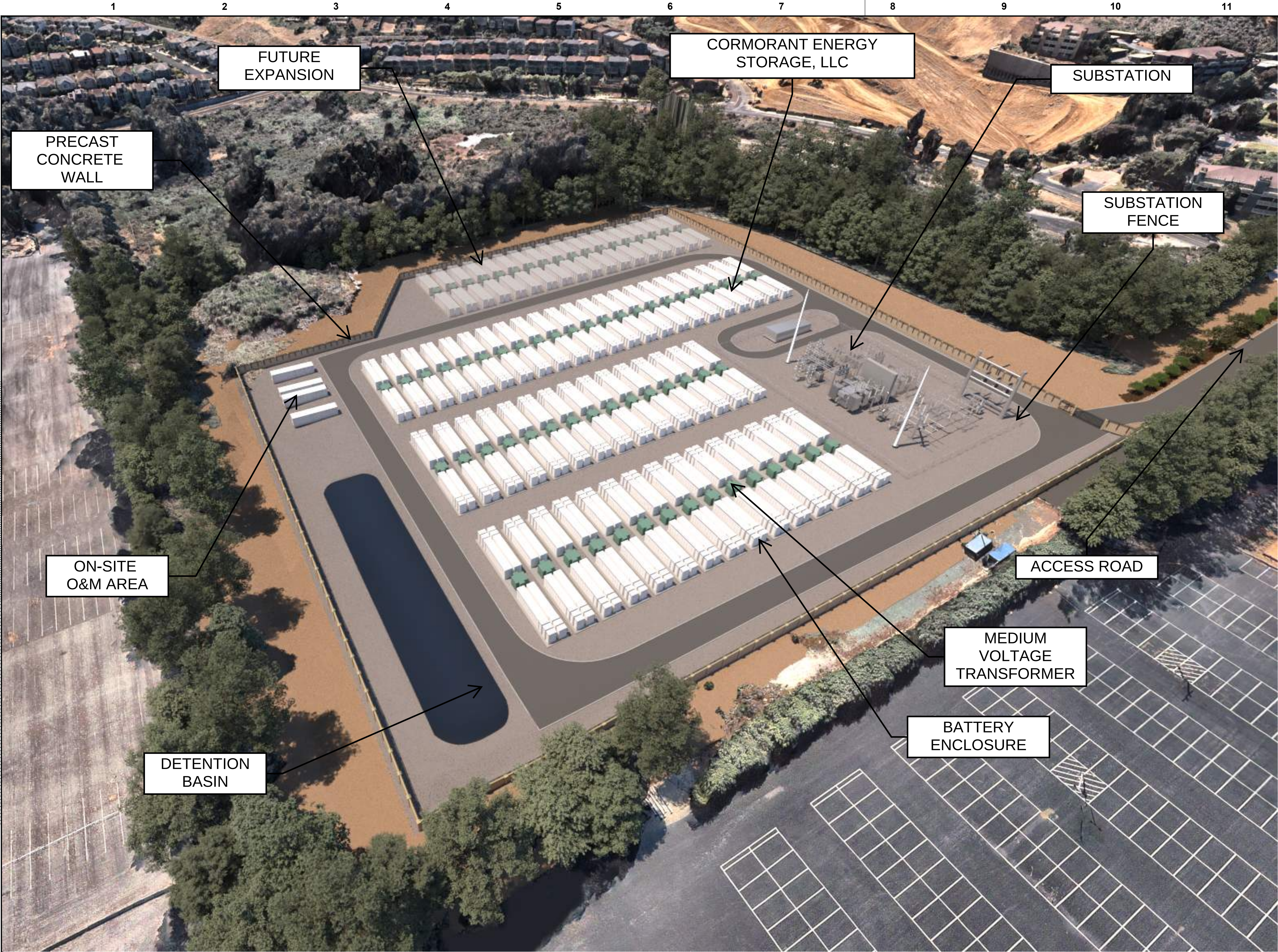
PRELIMINARY

Burns & McDonnell World Headquarters
9400 Ward Parkway
Kansas City, MO 64114
☎ 816-333-9400
www.burnsmcd.com



sheet 1 of 1 sheets
file ArevonCormorant.dwg

Page 253 of 562



POST-DEVELOPMENT
AERIAL RENDERING LOOKING SOUTHWEST
FROM ABOVE COW PALACE PARKING

**PRELIMINARY - NOT
FOR CONSTRUCTION**

C	06/07/24	EDV	ACR	ISSUED FOR CONDITIONAL USE PERMIT
B	05/03/24	EDV	ACR	ISSUED FOR CONDITIONAL USE PERMIT
A	02/20/24	EDV	ACR	ISSUED FOR CONDITIONAL USE PERMIT
no.	date	by	ckd	description

no.	date	by	ckd	description



9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co., Inc.

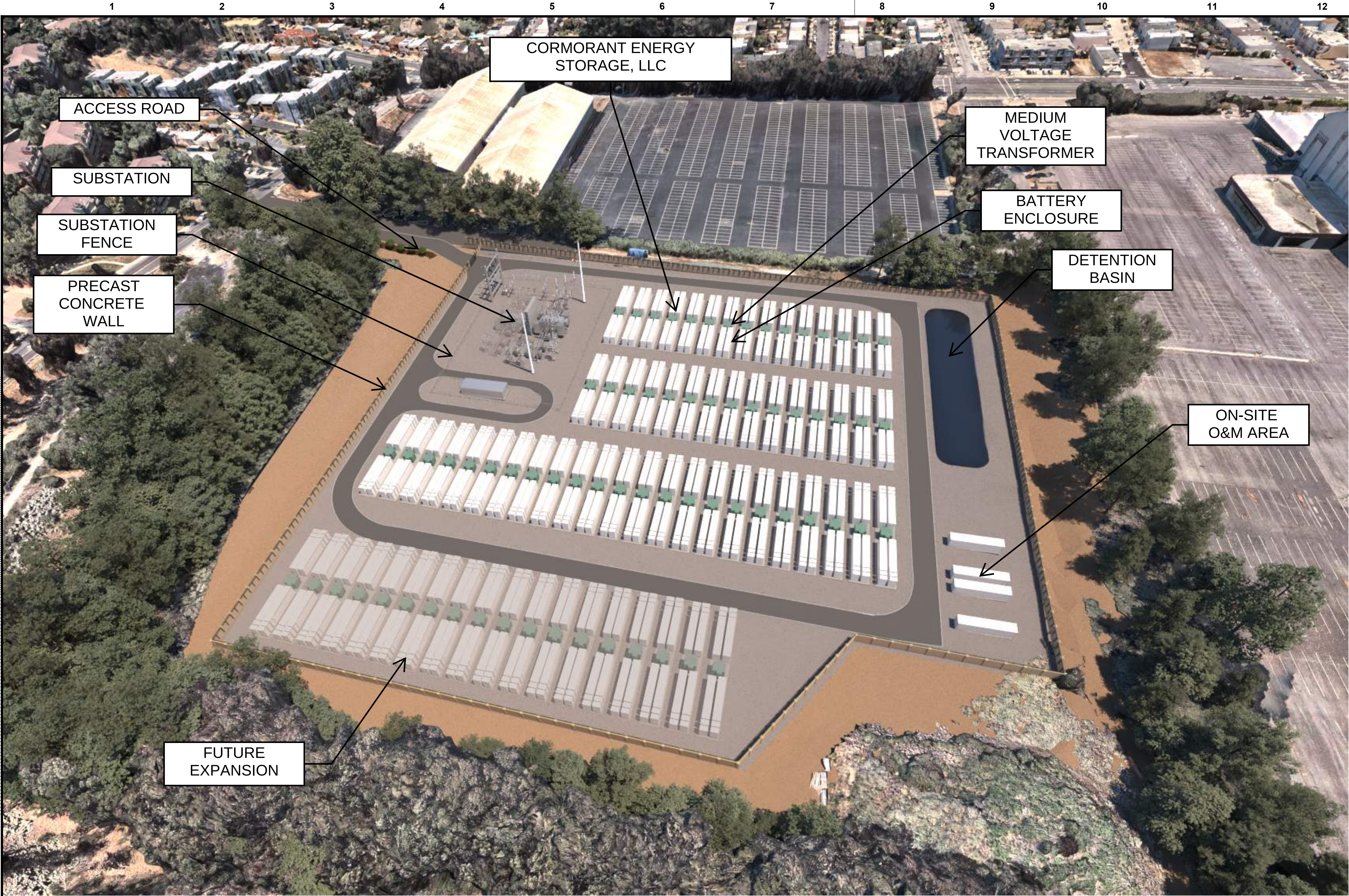
designed
E. VILA

detailed
E. VILA



SAN MATEO COUNTY, CALIFORNIA

CORMORANT ENERGY STORAGE, LLC 3D RENDERINGS AND PHOTOSIMULATIONS	
project	contract
drawing	rev.
PHOTOSIM— C	
sheet 1 of 1 sheets	file ArevonCormorant.dwg



POST-DEVELOPMENT
AERIAL RENDERING LOOKING NORTH FROM
ABOVE MARTIN STREET

**PRELIMINARY - NOT
FOR CONSTRUCTION**

C	06/07/24	EDV	ACR	ISSUED FOR CONDITIONAL USE PERMIT
B	05/03/24	EDV	ACR	ISSUED FOR CONDITIONAL USE PERMIT
A	02/20/24	EDV	ACR	ISSUED FOR CONDITIONAL USE PERMIT
no.	date	by	ckd	description

no.	date	by	ckd	description



9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.

designed
E. VILA

detailed
E. VILA



SAN MATEO COUNTY, CALIFORNIA

CORMORANT ENERGY STORAGE, LLC 3D RENDERINGS AND PHOTOSIMULATIONS	
project	contract
drawing	rev.
PHOTOSIM— C	
sheet 1 of 1 sheets	file ArevonCormorant.dwg



POST-DEVELOPMENT
AERIAL RENDERING LOOKING
NORTHEAST FROM ABOVE
CARTER STREET

PRELIMINARY - NOT
FOR CONSTRUCTION

C	06/07/24	EDV	ACR	ISSUED FOR CONDITIONAL USE PERMIT
B	05/10/24	EDV	ACR	ISSUED FOR CONDITIONAL USE PERMIT
A	02/20/24	EDV	ACR	ISSUED FOR CONDITIONAL USE PERMIT
no.	date	by	ckd	description

no.	date	by	ckd	description



9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co., Inc.

designed
E. VILA

detailed
E. VILA



SAN MATEO COUNTY, CALIFORNIA

CORMORANT ENERGY STORAGE, LLC
3D RENDERINGS AND
PHOTOSIMULATIONS

project | contract

drawing | rev. **C**

sheet 1 of 1 sheets
file ArevonCormorant.dwg

CORMORANT ENERGY STORAGE PROJECT

Project Narrative/Written Description of Request

Prepared for:

Cormorant Energy Storage, LLC

Prepared by:

DUDEK

OCTOBER 2024

Table of Contents

<u>SECTION</u>	<u>PAGE NO.</u>
ACRONYMS AND ABBREVIATIONS	III
1 PROJECT DESCRIPTION	1
1.1 Introduction.....	1
1.2 Project Location.....	1
1.3 Project Objectives.....	1
1.4 Environmental Setting.....	2
1.5 Project Characteristics	3
1.6 Construction.....	8
1.7 Operations and Maintenance Activities	11
1.8 Decommissioning.....	13
2 REFERENCES CITED.....	15
APPENDIX	
A Energy Storage Equipment Photos	
FIGURES	
1-1 Project Vicinity	17
1-2 Project Site	19
2-1 Transmission Line Routes 1 and 1A	21
2-3 Transmission Line Route 3.....	23
2-4 Transmission Line POCO Option 1	25
2-5 Transmission Line POCO Option 2	27
2-6 Transmission Line POCO Option 3	29
TABLES	
1-1 Site Grading and Preparation Equipment.....	10

INTENTIONALLY LEFT BLANK

Acronyms and Abbreviations

Acronym	Definition
AC	alternating current
BESS	battery energy storage system
BMP	best management practice
CAISO	California Independent System Operator
CMA	capacity maintenance augmentation
DC	direct current
FE	federally endangered
FP	fully protected
FT	federally threatened
gen-tie line	generation transmission line
kV	kilovolt
MV	medium-voltage
NFPA	National Fire Protection Association
PG&E	Pacific Gas & Electric Company
POCO	Point of Change of Ownership
SCADA	supervisory control and data acquisition
SE	state endangered
TSP	tubular steel pole
USFWS	U.S. Fish and Wildlife Service

INTENTIONALLY LEFT BLANK

1 Project Description

1.1 Introduction

This project narrative and written description of request has been prepared by Cormorant Energy Storage, LLC (Applicant), for the City of Daly City (City), which is the lead agency, for the proposed approximately 250-megawatt battery energy storage system (BESS). The project would be located on Assessor's Parcel Number 005-050-020, which comprises approximately 11.5 acres of previously undeveloped land in the City of Daly City, California.

The proposed Cormorant Energy Storage Project (project) will be composed of lithium-ion batteries installed in racks, inverters, medium-voltage (MV) transformers, switchgear, a collector substation, and other associated equipment to interconnect into the Pacific Gas & Electric Company (PG&E) Martin Substation (point of interconnection). The batteries will be installed either in purpose-built enclosures. The enclosures will have battery storage racks, with relay and communications systems for automated monitoring and managing of the batteries to ensure design performance. A battery management system will be provided to control the charging/discharging of the batteries, along with temperature monitoring and control of the individual battery cell temperature with an integrated cooling system. Batteries operate with direct current (DC) electricity, which must be converted to alternating current (AC) for compatibility with the existing electric grid. Power inverters to convert between AC and DC, along with transformers to step up the voltage, will be included.

The proposed facility will provide a service to the regional electric grid by receiving energy (charging) from the PG&E electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the point of interconnection. Following construction, the proposed use will not create emissions to air, will not require sanitary facilities, and will not require water.

1.2 Project Location

The subject property consists of approximately 11.5 acres in the City of Daly City, California (see Figure 1-1, Project Vicinity). The project site is located near the southeast corner of the intersection of Carter Street and Geneva Avenue (see Figure 1-2, Project Site). It is approximately 1.4 miles from the nearest highway interchange (U.S. Highway 101).

The project site is currently undeveloped (used for vehicle and building material storage) and surrounded by a mix of land uses. State-owned land with an arena and event center (Cow Palace) is located to the north and east; open space is located directly to the south with residential subdivisions located farther south across Martin Street; and residential subdivisions are located across Carter Street to the west. The PG&E Martin Substation, the project's point of interconnection, is located approximately 0.5 miles east of the project site.

1.3 Project Objectives

The proposed project will provide the City of Daly City and the State of California with a reliable and economically attractive development to receive, store, and discharge electricity from the California Independent System Operator

(CAISO) controlled electric grid, including renewable energy produced by existing solar and wind resources in the region. Construction of the project will accomplish the following:

- Establish a new energy storage facility to reliably capture and manage renewable energy in an economically feasible and commercially financeable manner.
- Provide economic benefit to the City, the region, and the state, through construction jobs, property and sales taxes, construction and maintenance services, and increased energy efficiency and reliability.
- Use a proven and established energy storage technology that is efficient, has low maintenance requirements, and is recyclable.
- Assist California in meeting its greenhouse gas emissions reduction goals by 2020 and 2030 as required by the California Global Warming Solutions Act (Assembly Bill 32), as amended by Senate Bill 32 in 2016.
- Assist California in achieving its switch away from fossil-fueled generation by allowing renewables to be stored and discharged back to the market when necessary.

1.4 Environmental Setting

Existing Zoning

The project site is designated as Light Commercial (C1) under the City's zoning map (City of Daly City 2020). The Daly City 2030 General Plan (General Plan) Land Use chapter identifies the project site as Retail and Office (C-RO) (City of Daly City 2013a).

Biological Resources

Dudek reviewed California Department of Fish and Wildlife records (including the California Natural Diversity Database [CDFW 2020]) and federally designated critical habitat from the U.S. Fish and Wildlife Service (USFWS 2020a) within a 10-mile radius of the project site to determine the potential for special-status wildlife and plant species to occur in the vicinity of the project site. Dudek conducted a desktop-level review of the project site. A number of historical occurrences of federally and state-listed species have been recorded within the project vicinity (i.e., the San Francisco South quadrant): callipe silverspot butterfly (*Speyeria callippe callippe*; federally endangered [FE]), mission blue butterfly (*Plebejus icarioides missionensis*; FE), San Francisco gartersnake (*Thamnophis sirtalis tetrataenia*; FE, state endangered [SE], fully protected [FP]), California red-legged frog (*Rana draytonii*; federally threatened [FT], state species of special concern), California Ridgway's rail (*Rallus obsoletus obsoletus*; FE, SE, FP), tidewater goby (*Eucyclogobius newberryi*; FE), San Bruno elfin butterfly (*Callophrys mossii bayensis*; FE), and bay checkerspot butterfly (*Euphydryas editha bayensis*; FT), as well as eight federally and/or state-listed plant species. An occurrence of American peregrine falcon (*Falco peregrinus anatum*; FP) has also been recorded. Within 10 miles of the project site on the San Francisco peninsula, there are recorded historic occurrences of approximately 18 federally/state-listed wildlife species or other special-status wildlife species, and 11 federally/state-listed plant species or other special-status plant species. The project site is located just north of the San Bruno Mountain Habitat Conservation Plan limits (County of San Mateo Parks Department 2020).

No USFWS-designated critical habitat is designated within the project boundary. USFWS-designated critical habitat for Franciscan manzanita (*Arctostaphylos franciscana*; FE) is located approximately 0.25 miles north of the project site across Geneva Avenue near John McLaren Park. According to the USFWS Information for Planning and

Consultation database (USFWS 2020b), a number of federally listed species are identified as having potential to occur in the vicinity of the project site: salt marsh harvest mouse (*Reithrodontomys raviventris*; FE), San Francisco gartersnake (FE), California red-legged frog (FT), bay checkerspot butterfly (FT), callippe silverspot butterfly (FE), mission blue butterfly (FE), Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*; FE), and San Bruno elfin butterfly (FE), as well as 6 plant species and 24 migratory bird species.

Cultural Resources

As discussed in the General Plan Resource Management Element, archaeological resources in the City consist primarily of the remains of the Ohlone Indian Tribe that inhabited the area. However, the project site is not located near either of the Tribe's villages near Colma and San Bruno Creeks or the seasonal village at Mussel Rock.

There are no sites in the City listed on the National Register of Historic Places and no designated state or local historical resources, such as older structures or residential structures of significance, are located within the project site (City of Daly City 2013b). A records search conducted during preparation of the General Plan indicated that the adjacent Cow Palace is a listed resource in the California Register of Historical Resources and is eligible for the National Register of Historic Places. As detailed in the General Plan Environmental Impact Report, the Cow Palace property was constructed in 1941 as part of the federal government's Works Progress Administration, which employed millions of Americans during the Great Depression. Today, it is best known as a music and performance venue (City of Daly City 2013b).

Geology and Soils

An Alquist-Priolo Earthquake Fault Zone traverses the southwestern-most limit of the City and includes fault traces associated with the San Andrea Fault (CDOC 2020). The General Plan Safety Element also notes that the San Andreas Fault can be observed at the Mussel Rock area of the City, where the greatest potential for surface rupture in the City exists (City of Daly City 2013a). The fault zone is approximately 4.4 miles southwest of the project site.

Noise

The project site is located on a site used for vehicle and material storage and is bounded by residential areas to the west, state-owned land used for events and entertainment to the north and east, and open space to the south, and residential areas farther south. Carter Road is located directly to the east of the site and Geneva Avenue is located north of the site. Consequently, noise sources affecting noise levels on the project site and in the vicinity include event noise, traffic noise, and trucking noise. The City's noise standards are included in Chapter 9.22 of the Daly City Municipal Code (City of Daly City 2003).

1.5 Project Characteristics

The project will include the development of energy storage facilities and associated infrastructure. The proposed BESS will be housed in enclosures that will consist of modular battery units. Power released or captured by the proposed project will be transferred to and from the PG&E Martin Substation via a generation transmission (gen-tie) line (see Figures 2-1 and 2-3, Transmission Line Routes). The project will consist of lithium-ion batteries, which will be installed in racks; inverters; MV transformers; switchgear; a collector substation; and other associated

equipment. The project will include the following components, which are described in more detail following the bulleted list:

- **Energy Storage Enclosures:** Energy storage enclosures and appurtenances will be constructed that will provide energy storage capacity and dispatch for the electric grid.
- **Power Inverters and Transformers:** Power inverters to convert between AC and DC will be included, along with transformers that will step up the voltage.
- **Collector Substation:** A collector substation would be installed that would include the open rack, air insulated switch gear, and the main power transformer to step up from 34.5 kilovolts (kV) to 115 kV.
- **Telecommunication Facilities:** Telecommunication equipment, including underground and/or overhead fiber optics or supervisory control and data acquisition (SCADA), will be installed.
- **Site Access and Security:** On-site access driveways, perimeter security fencing, and nighttime directional lighting will be provided for the project.
- **Gen-Tie Line:** A 115 kV gen-tie line will be constructed to transfer power between the PG&E Martin Substation and the proposed project. The gen-tie line route options being considered at this time are shown on Figures 2-1 and 2-3.

The facilities are intended to operate year-round and will be available to receive or deliver energy 24 hours a day and 365 days a year.

Pacific Gas & Electric Company Facility Upgrades

PG&E has identified a need for the project to contribute its fair-share payment toward utility grid system upgrades that are planned to be completed within PG&E's service territory. In addition, PG&E has identified the following improvements to be completed by PG&E within the existing disturbed footprint of PG&E's Martin Substation:

- Install line relay package, voltage transformers, dead-end, underground riser, line switch, and fiber terminations;
- Complete breaker and a half (BAAH) bay, install two circuit breakers;
- Construction of a 115kV transmission line from the POCO to the termination point as follows:
 - Installation of a Tubular Steel Pole (TSP) involves these steps: staking the pole location; flagging the work area; mark and locate existing underground infrastructure in the area; installing silt fencing (if required); preparing the crane pad (if required); excavating the hole; installing forms, rebar, and anchor bolts; pouring concrete; removing forms; placing gravel around and grooming the base area; installing the new pole; and spreading or removing the excess soil onsite and trucking other construction materials offsite for disposal. A TSP will have concrete pier foundations that are approximately 5 to 7 feet in diameter and from approximately 15 to 30 feet deep.
 - Drilling and excavation of a hole for a TSP will use a hole auger, backhoe, dump truck, and crew truck—all of which will access pole location via existing paved road. A hole auger consists of an auger mounted on a heavy truck chassis or piece of track equipment that will be used to drill holes.

- A boom truck consisting of a small crane mounted on a flatbed truck will be used to haul foundation forms, anchor bolts, rebar, and pole structure to the TSP location. The boom truck also will be used to place foundation forms, anchor bolts, and rebar in place prior to pouring of concrete for the foundation—and to remove the forms following completion of the foundation.
- A concrete truck consisting of a four-wheel drive mixer capable of delivering 8 yards of concrete will be used to deliver and pour concrete for the TSP foundation. A backhoe will be used to place gravel around the TSP foundation after formwork has been removed and to groom the area immediately surrounding all pole installations.
- A crane will be used to place TSPs on the foundations. Aerial lift trucks will be used to install conductors. Crew trucks will be used to transport the crew, their hand tools, and other minor materials to and from pole location.
- The Q1552 Cormorant Interconnection 115 kV Project will create the new Cormorant- Martin 115 kV line of approximately 0.25 mile of new aluminum overhead conductor and approximately 0.05 mile of underground insulated cable on PG&E property that will connect a new substation dead-end structure on the western side of PG&E's existing Martin Substation to a new battery energy storage station that is to be installed and owned by the Applicant, west of the existing Martin substation.
- The new PG&E owned and maintained underground segment of the new Cormorant - Martin 115 kV line will consist of approximately 0.05 mile of underground insulated cable from the west side of the existing PG&E Martin Substation and going to the fourth bay where it will be terminated to a riser pole. The cable will either be installed in a cable bus ducted or in a trench.
- The new PG&E owned and maintained overhead segment of the new Cormorant - Martin 115 kV line will be supported by up to approximately nine new TSP structures, including two underground-to-overhead riser poles with a maximum height approximately 100' tall. All new 115 kV structures will be self-supporting and have drilled shaft concrete foundations. One of the new TSP structures will act as a Point of Change of Ownership (POCO) structure and have a manual switch, designed, and installed by PG&E. The POCO structure will be spotted west of the PG&E Martin Service Center. The POCO structure's location has been coordinated with the customer, which will connect its conductor to the POCO pole.

Battery Energy Storage System Enclosures

The energy storage batteries will be housed in purpose-built enclosures (see Appendix A). The BESS will be designed and installed in conformance with the nationally recognized National Fire Protection Association (NFPA) 855 Standard for the Installation of Stationary Energy Storage Systems, along with all applicable state and City fire protection requirements. The BESS will be unstaffed, with remote operational control and periodic inspections and maintenance performed as necessary.

Batteries and Racks

The lithium-ion batteries will be housed in racks similar to common computer server racks (see Appendix A). The racks are typically made of aluminum, but sometimes may be composed of steel. The lithium-ion technology is

considered one of the safest, most easily understood, and most efficient methods of energy storage on the market. The proposed facility will use a lithium-ion technology that has a long lifespan and boasts superior safety and stability characteristics. The battery racks will be designed and installed in accordance with the local seismic design requirements.

Fire Protection System

The Applicant intends to use battery storage systems that are NFPA 855 Code compliant and UL certified and that include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system will be installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules.

North County Fire Authority (the authority having jurisdiction) will have review and approval rights for the facility fire protection and suppression plans. The review/approval by the authority having jurisdiction will cover all applicable design, construction, and testing requirements of the NFPA 855 Code.

Generation Transmission Line

A 115 kV gen-tie line will be constructed that will transfer power to and from the proposed project and the PG&E POCO at Martin Substation. The gen-tie line route options being considered at this time are shown on Figures 2-1 and 2-3 and are described as follows.

Route alternative 1 would consist of a 1.2-mile-long underground line running from the proposed on-site collector substation to the Point of Change of Ownership (POCO) at the edge of the existing PG&E Martin substation. The line would exit the Project site to the west, onto Carter Street, and would follow Carter Street southerly to the intersection with Martin Street. It would then turn easterly and follow Martin Street to the intersection with Schwerin Street. It would then turn northerly and follow Schwerin Street to the POCO.

Route alternative 1A would consist of a 1.2-mile-long underground line running from the proposed on-site collector substation to the POCO at the edge of the existing PG&E Martin substation. The line would exit the Project site to the west, onto Carter Street, and would follow Carter Street southerly to the intersection with Martin Street. It would then turn easterly and follow Martin Street to the intersection with Oriente Street. It would then turn northerly and follow Oriente Street to the intersection with Otilla Street. It would then turn easterly and follow Otilla Street to the intersection with Schwerin Street. It would then turn southerly and follow Schwerin Street to the POCO.

Route alternative 3 would consist of a 0.7-mile-long underground line running from the proposed on-site collector substation to the POCO at the edge of the existing PG&E Martin substation. The line would exit the Project site to the northeast, onto the Cow Palace property, and would then traverse along the Cow Palace parking lot, around the north end of the existing Cow Palace building, running parallel to Geneva Avenue, and then turning southerly and running along the eastern edge of the Cow Palace building. It would then turn easterly and follow Otilla Street to the intersection with Schwerin Street. It would then turn southerly and follow Schwerin Street to the POCO.

At the transition from City streets to PG&E property, the Point of Change of Ownership (POCO) will occur. This POCO will include an above ground riser pole where the underground transmission line will come above ground and then transfer to another riser pole immediately on PG&E property. Three options are being considered for the POCO location, and these options are shown in Figures 2-4, 2-5 and 2-6. Upon entering the PG&E property, the proposed gen-tie line will continue either underground or overhead toward the substation to the final point of physical interconnection.

Outdoor Electrical Equipment

MV transformers and additional electrical equipment will be installed outside the BESS enclosures. The onsite collector substation will be located on the east side of the project site on approximately 1.3 acres. Components will include a main power transformer, control enclosure, and switchgear. Underground wires and cabling will run from the battery cable collection box (inside the enclosure) to a concrete pad housing the inverter and transformer. From the MV transformer, cabling would be run to the collector substation. All outside electrical equipment will be housed in the appropriate National Electrical Manufacturers Association (NEMA) rated enclosures and screened from view, to the extent possible, on all sides. All outside electrical collector cabling will be run underground.

Inverters

The Applicant uses only industry-standard, nationally (and internationally) recognized equipment. These inverters are unattended, stand-alone units that operate in all conditions. They operate in both a charge mode and a discharge mode. They are UL listed for bi-directional use and are monitored and controlled remotely. There will be on-site disconnects in the case of an emergency or unscheduled maintenance. They are robust in their design and are designed to last more than 30 years with proper preventive maintenance, scheduled maintenance, and occasional major overhauls.

Telecommunication Facilities

The project will also require telecommunication facilities to meet the communication requirements for interconnecting and communicating with the PG&E/CAISO facilities and to support remote project operations monitoring. To provide for communication with PG&E facilities, a fiber-optic cable will be used to connect the project site switchyard with the PG&E point of interconnection. Utility interconnection regulations require the installation of a second, separate, redundant fiber-optic cable. The primary fiber-optic cable will be installed directly adjacent to and along with the generation transmission line. The redundant fiber-optic cable will be installed in a separate trench, parallel with and approximately 10' distant from the generation transmission line, within the public right of way.

The project will use local exchange carrier services for telecommunication to support remote monitoring requirements. The project will connect to telecommunication fiber-optic lines owned and managed by local telecommunication providers.

The SCADA system is critical to the CAISO and PG&E utility interconnection and for the proper operation and maintenance of the project. The SCADA system uses proprietary software; a fiber-optic transmission system; a telephone, radio, and/or microwave communication network; and other means of communication such as radio links and phase loop communication systems. The SCADA system functions as a remote start, stop, reset, and tag out for the facility, thus minimizing the labor and site diagnostic information generated from the panels. The SCADA

system will also control the substation, allowing for fully centralized operation of the project to meet all CAISO and utility interconnection requirements.

Site Access and Security

The project site can be accessed from various roadways. U.S. Highway 101 is the largest highway in the area and provides regional access to the project site from the north and south. Access to the project site will be provided via the existing Carter Street. No new roads will be required to provide access to the project site.

All fence installation requirements will be evaluated, and the best-fit scenario will be incorporated into the project site based on the City's final determination. Fences will be installed around the perimeter of the project site for safety and security purposes. The fencing will remain for the life of the project.

Permanent motion-sensitive, directional security lights will be installed to provide adequate illumination around the substation area and points of ingress/egress. All lighting will be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. Security cameras will be placed on site and monitored 7 days a week and 24 hours per day.

1.6 Construction

Schedule and Workforce

The physical construction/site activities of the proposed project will last up to 12 months. Construction activities for the proposed project generally fall into three main categories: (1) site preparation; (2) system installation; and (3) testing, commissioning, and cleanup.

The on-site construction workforce is expected to peak at between 75 and 100 individuals; however, the average daily workforce on site during construction is expected to be 60 individuals, comprising construction, supervisory, support, and construction management personnel. It is anticipated that the construction workforce will commute to the site each day from local communities and report to the designated construction staging yards prior to the beginning of each workday. Construction staff not drawn from the local labor pool will stay in local hotels in the City or other local communities. Deliveries of equipment and materials will generate an estimated five to seven round-trips per day during peak construction periods.

The proposed project will be constructed by several specialized construction contractors. Construction will primarily occur during daylight hours, Monday through Saturday between 7:00 a.m. and 6:00 p.m., as required to meet the construction schedule. Any construction work performed outside the normal work schedule will be coordinated with the appropriate agencies and will conform to City regulations.

Site Access

The primary Project construction access shall be via the existing 60' wide access easement connecting the Project to Carter Street. In addition, a secondary access along the northerly Project boundary with the Cow Palace property will provide alternate access during construction.

Site Grading and Earthwork

Construction activities will be expected to include excavation and grading of the project site. Site preparation and construction will occur in accordance with all federal, state, and City zoning codes and requirements. Noise-generating construction activities will be limited to Monday through Saturday between 7:00 a.m. and 6:00 p.m. All stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels will be located away from noise receptors to the extent feasible. The contractor will conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed established noise levels.

All applicable federal, state, and local requirements and best management practices (BMPs) will be incorporated into the construction activities for the project site. Beginning work on the project site will involve preparing the land for installation of the BESS-related infrastructure, access driveways, and temporary construction staging areas. The construction contractor will be required to incorporate BMPs consistent with the City zoning ordinance and with guidelines provided in the California Stormwater Quality Association's Construction BMP Handbook (CASQA 2019), as well as a soil erosion and sedimentation control plan to reduce potential impacts related to construction of the proposed project. Prior to initial construction mobilization, pre-construction surveys will be performed and sediment and erosion controls will be installed in accordance with state and City guidelines. Stabilized construction entrances and exits will be installed at driveways to reduce tracking of sediment onto adjacent public roadways.

Site preparation will be consistent with City BMPs and the Bay Area Air Quality Management District rules for dust control (BAAQMD 2018). Site preparation will involve the removal and proper disposal of existing debris that would unduly interfere with project construction or the health and safety of on-site personnel. Dust-minimizing techniques will be employed, such as placement of wind control fencing, application of water, and application of dust suppressants. Conventional grading will be performed throughout the project site but minimized to the maximum extent possible to reduce unnecessary soil movement that may result in dust. Earthworks scrapers, excavators, dozers, water trucks, paddlewheels, haul vehicles, and graders may all be used to perform grading. Land-leveling equipment, such as a smooth steel drum roller, will be used to even the surface of the ground and to compact the upper layer of soil to a value recommended by a geotechnical engineer for structural support. Soil movement from grading will be balanced on the site.

Trenching will be required for placement of underground electrical and communication lines, and may include the use of trenchers, backhoes, excavators, haul vehicles, compaction equipment, and water trucks. After preparation of the site, the pads for enclosures, equipment enclosures, and equipment vaults will be prepared per geotechnical engineer recommendations. The switchyard area will have a grounding grid installed and will be covered with aggregate surfacing for safe operation.

During this work, multiple crews will be working on the site with various equipment and vehicles, including vehicles for transporting the batteries and other equipment. As the BESS enclosures are constructed, the electrical collection and communication systems will be installed. The wiring will connect to the appropriate electrical and

communication terminations and the circuits will be checked and commissioned prior to operation. It is estimated that site grading and preparation will require the equipment listed in Table 1-1.

Table 1-1. Site Grading and Preparation Equipment

Equipment Type	Preliminary Quantity
Bulldozer (e.g., CAT D7)	1
Grader (e.g., CAT D7)	1
Scraper (15–30 cubic yard)	2
Water truck (3,000–5,000 gallon)	1
Self-propelled compactor	1
Dump truck	1
Tractor/loader/backhoe (e.g., Case 590)	1
Bobcat	1

Construction Water Use

During construction of the proposed project, water will be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and grading. Dust-control water may be used during ingress and egress of on-site construction vehicle equipment traffic and during the construction of the energy storage equipment. A sanitary water supply will not be required during construction, because restroom facilities will be provided by portable units to be serviced by licensed providers.

During the 12-month construction period, the water used is anticipated to be supplied by purchasing water from the local water purveyor.

Solid and Nonhazardous Waste

The project site will produce a small amount of solid waste from construction activities. This may include paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty nonhazardous containers, and vegetation waste. These wastes will be segregated, where practical, for recycling. Non-recyclable wastes will be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III (nonhazardous waste) landfill.

Hazardous Materials

The hazardous materials used for construction will be typical of most construction projects of this type. Materials will include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliatives, herbicides, and welding materials/supplies. A hazardous materials business plan will be provided to the City. The hazardous materials business plan will include a complete list of all materials used on site and information regarding how the materials will be transported and in what form they will be used. This information will be recorded to maintain safety and prevent possible environmental contamination or worker exposure. During project construction, material safety data sheets for all applicable materials present at the site will be made readily available to on-site personnel.

Hazardous Waste

Small quantities of hazardous wastes will most likely be generated over the course of construction. These wastes may include waste paint, spent construction solvents, waste cleaners, waste oil, oily rags, waste batteries, and spent welding materials. Workers will be trained to properly identify and handle all hazardous materials. Hazardous waste will be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped off site for recycling or disposal will be transported by a licensed and permitted hazardous waste hauler.

Generation Transmission Line

Construction of the 115 kV gen-tie line will take approximately 3 months to complete. Depending upon the final route chosen, the gen-tie line will be placed primarily within the City right-of-way in developed areas, or along state lands near the Cow Palace. The workspace will be generally limited to within the existing road right-of-way and/or franchise position, and lands along the edges of the Cow Palace property.

At the transition from City streets to PG&E property, the Point of Change of Ownership (POCO) will occur. This POCO will include an above ground riser pole where the underground transmission line will come above ground and then transfer to another riser pole immediately on PG&E property. Upon entering the PG&E property, the proposed gen-tie line may go underground or overhead toward the substation to the final point of physical interconnection. The placement of this line may require excavation and trenching through the PG&E property for line placement or pole foundations. This property is known to contain contaminated soils which may be classified as hazardous material. PG&E has significant experience working on contaminated sites and placing facilities in and on these sites. PG&E will implement their standard practices and procedures to manage the placement of this gen-tie line and the proper disposal of any contaminated excavated materials, if encountered.

Phasing

The proposed project will be constructed in two phases. The first phase will include proposed offsite improvements, including entirety of the proposed generation transmission line and telecommunications lines. Regarding onsite improvements, the initial phase will include all perimeter fencing, site grading, access road construction, and stormwater facilities. This first phase will also include placement of approximately 75% of the proposed BESS modules and related medium voltage collection lines, medium voltage transformers, and inverters; and one of the two proposed high voltage transformers.

The second phase of construction is anticipated to be completed approximately one to six years after the initial phase of construction is completed, and would include installation of the remaining 25% of the proposed BESS modules and related medium voltage collection lines, medium voltage transformers, and inverters; and the second one of the two proposed high voltage transformers.

1.7 Operations and Maintenance Activities

Typical operations and maintenance activities that will occur on the project site during operation include, but are not limited to, liaison and remote monitoring administration and reporting; semi-annual and annual services; remote operations of batteries, inverters, substation, and site security and management; additional communication

protocols; and repair and maintenance of the BESS, electrical transmission lines, and other project facilities. The electrical equipment; heating, ventilation, and air conditioning; fire protection systems; and security will be automated and monitored remotely. Periodic in-person inspections will be included as needed, as part of a security contract. The site will be unoccupied but will be visited periodically through the year for equipment inspections, monitoring and testing, and maintenance as needed. Periodically, batteries and various components will be replaced or renewed to ensure optimal performance.

Augmentation

Intermittently throughout the lifetime of the project, there may be a requirement to provide additional energy storage augmentation, which will result in several trips to the site to deliver and install additional battery augmentation units over a period of several weeks. All grading and foundations necessary to accommodate these augmentation units will be completed with the initial construction of the project, and so the installation of the augmentation units will require no additional site preparation or disturbance.

Stormwater

Stormwater will be treated in accordance with City requirements. Outdoor equipment will be sealed or enclosed and will not affect stormwater quality.

Solid and Nonhazardous Waste

The project will produce a small amount of waste associated with maintenance activities, which could include broken and rusted metal, defective or malfunctioning electrical materials, empty containers, and other miscellaneous solid waste, including the typical refuse generated by workers. Most of these materials will be collected and delivered back to the manufacturer or to recyclers. Non-recyclable waste will be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III landfill.

Hazardous Materials

Limited amounts of hazardous materials will be stored or used on the site during operations, including diesel fuel, gasoline, and motor oil for vehicles; mineral oil to be sealed within the transformers; and lead-acid-based batteries for emergency backup. Appropriate spill containment and cleanup kits will be maintained during operation of the project. A spill prevention control and countermeasures plan will be developed for site operations.

Hazardous Waste

Fuels and lubricants used in operations will be subject to the spill prevention control and countermeasures plan to be prepared for the proposed project. Solid waste, if generated during operations, will be subject to the material disposal and solid waste management plan to be prepared for the proposed project.

Security and Lighting

The proposed project will be fenced to help prevent access by the public. Gates will be installed at the roads entering the project site along Carter Street. Limiting access to the project site will be necessary both to ensure the safety of the public and to protect the equipment from potential theft and vandalism.

The project's lighting system will provide operations and maintenance personnel with illumination for both normal and emergency conditions. Lighting will be designed to provide the minimum illumination needed to achieve safety and security objectives. Additionally, lighting will be directed downward and shielded to focus illumination on the desired areas only and to minimize light trespass.

1.8 Decommissioning

At the end of the proposed project's operational term, the Applicant may determine that the project site should be decommissioned and deconstructed, or it may seek an extension of its use permit. The proposed project will include measures to ensure the collection and recycling of batteries and to avoid the potential for batteries to be disposed of as municipal waste.

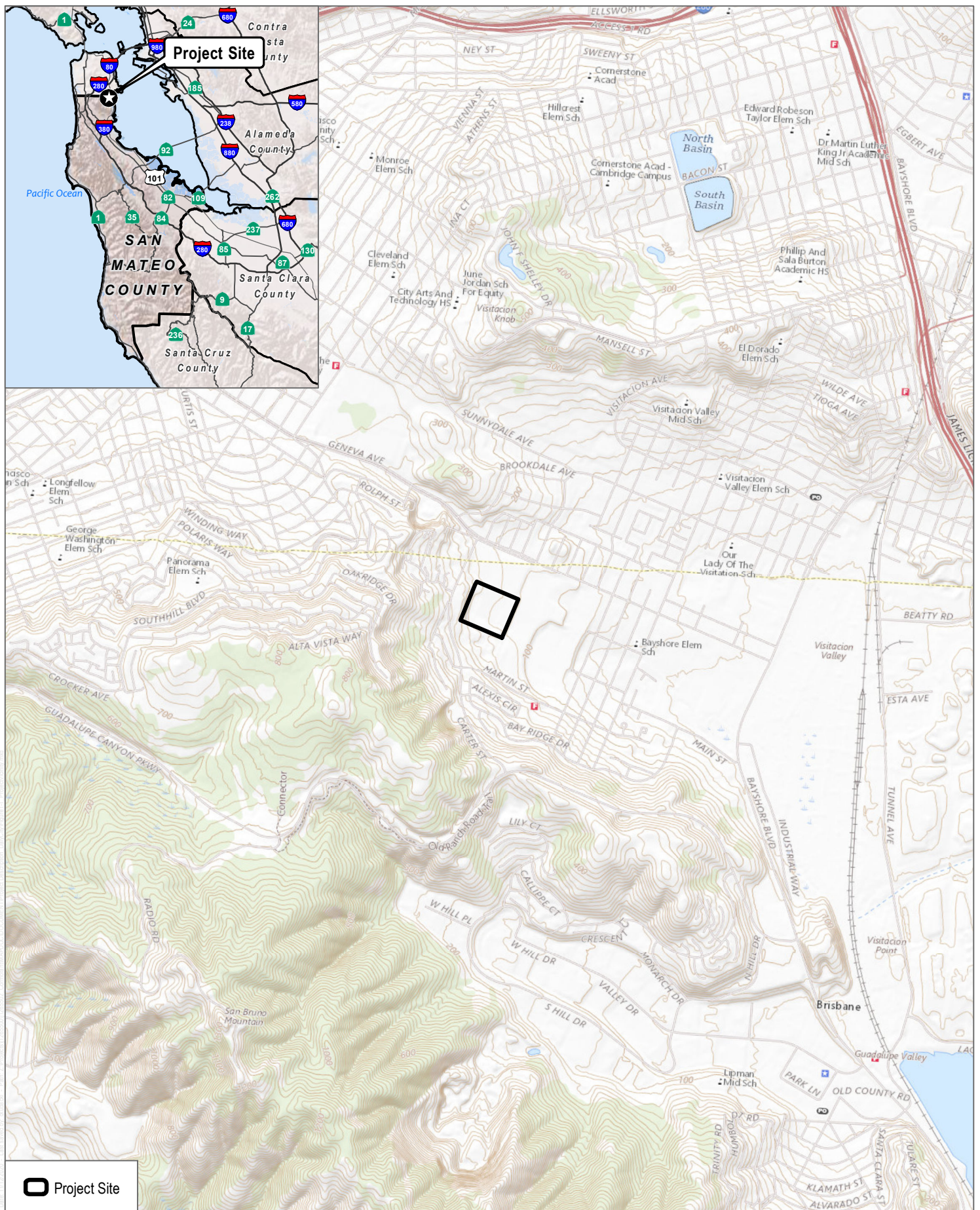
All decommissioning and restoration activities will adhere to the requirements of the appropriate governing authorities and be in accordance with all applicable federal, state, and City regulations. Following the expiration of the project's useful life, the facility will be decommissioned, which will include project enclosures being removed from the ground on the project site. Aboveground equipment that will be removed includes battery containers/enclosures, inverters, transformers, substation steel bus work and enclosures, electrical wiring, etc. Equipment will be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off site to be recycled or disposed of at an appropriately licensed disposal facility. Site infrastructure will be removed, including the fences and the concrete pads that may support the battery containers/enclosures, inverters, transformers, and related equipment. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried with the decommissioning equipment being used. The area will be thoroughly cleaned and all debris will be removed. A collection and recycling program will be implemented to promote recycling of project components and minimize disposal in landfills.

INTENTIONALLY LEFT BLANK

2 References Cited

- BAAQMD (Bay Area Air Quality Management District). 2018. Regulation 6: Particulate Matter – Common Definitions and Test Methods. Adopted August 1, 2018. <https://www.baaqmd.gov/rules-and-compliance/rules/regulation-6-particulate-matter--common-definitions-and-test-methods>.
- CASQA (California Stormwater Quality Association). 2019. *Construction BMP Handbook*. December 2019. <https://www.casqa.org/resources/bmp-handbooks>.
- CDFW (California Department of Fish and Wildlife). 2020. California Natural Diversity Database quadrant search: San Francisco South. Accessed November 2020. <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>.
- CDOC (California Department of Conservation). 2020. EQ Zapp: California Earthquake Hazards Zone Application online map. <https://maps.conservation.ca.gov/cgs/EQZApp/app>.
- City of Daly City. 2003. *Daly City Municipal Code Title 17 Zoning, Zoning Regulations (Consolidated)*. January 2003.
- City of Daly City. 2013a. *Daly City 2030 General Plan*. Adopted March 25, 2013. Accessed November 2020. http://www.dalycity.org/City_Hall/Departments/ECD/planning/General_Plan.htm.
- City of Daly City. 2013b. *City of Daly City General Plan Update Final Environmental Impact Report*. February. Accessed November 2020. http://www.dalycity.org/City_Hall/Departments/ECD/planning/Planning_Division_Library/General_Plan_Environmental_Impact_Report.htm.
- City of Daly City. 2020. Zoning Map. Updated September 25, 2020.
- County of San Mateo Parks Department. 2020. San Bruno Mountain Habitat Conservation Plan webpage. Accessed November 2020. <https://parks.smcgov.org/san-bruno-mountain-habitat-conservation-plan>.
- USFWS (U.S. Fish and Wildlife Service). 2020a. USFWS Threatened & Endangered Species Active Critical Habitat Report. Environmental Conservation Online System (ECOS). Accessed November 2020. <https://ecos.fws.gov/ecp/report/critical-habitat>.
- USFWS. 2020b. IPaC: Information for Planning and Consultation. Online project planning tool. Accessed November 2020. <https://ecos.fws.gov/ipac/>.

INTENTIONALLY LEFT BLANK



SOURCE: USGS Topo Series San Francisco South

FIGURE 1-1

Project Vicinity

Cormorant Energy Storage Project

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps 2020; Open Street Map 2019



FIGURE 1-2
Project Site

Cormorant Energy Storage Project

INTENTIONALLY LEFT BLANK



PLAN VIEW
HORIZONTAL SCALE: 1" = 150'

CORMORANT UNDERGROUND

115KV GEN-TIE

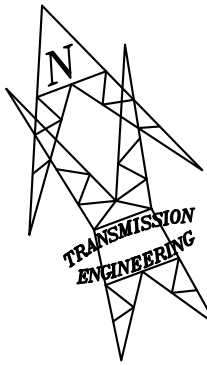
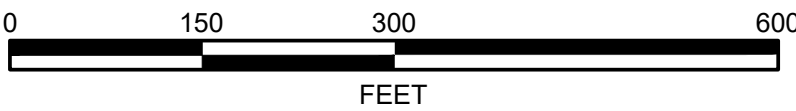
EXHIBIT: PRELIMINARY UG ROUTE ALTERNATIVES 1 & 1A

PRELIMINARY

LEGEND

- CORMORANT BESS
- POCO LOCATION / RISER POLE
- BESS UGT TERMINATION
- ROUTE ALTERNATIVE #1
- ROUTE ALTERNATIVE #1A
- 115KV OH TO MARTIN SUBSTATION

PRELIMINARY ROUTE ALTERNATIVES			
	LENGTH	VAULTS	RISER POLE
ALTERNATIVE #1	5920'	4	1
ALTERNATIVE #1A	6140'	4	1



VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



Figure 2-1

INTENTIONALLY LEFT BLANK



PLAN VIEW
HORIZONTAL SCALE: 1" = 150'

CORMORANT UNDERGROUND

115KV GEN-TIE

EXHIBIT: PRELIMINARY UG ROUTE ALTERNATIVE 3

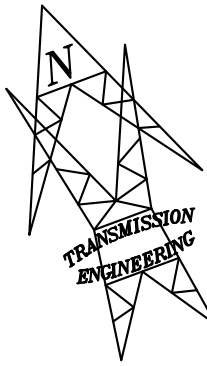
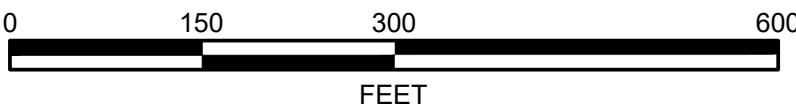
PRELIMINARY

LEGEND

- CORMORANT BESS
- POCO LOCATION / RISER POLE
- BESS UGT TERMINATION
- COW PALACE PROPERTY LINE
- ROUTE ALTERNATIVE #3
- 115KV OH TO MARTIN SUBSTATION

PRELIMINARY ROUTE ALTERNATIVE #3

LENGTH FROM BESS SUB TO CITY ROW	2610'
LENGTH WITHIN CITY ROW	1040'
VAULTS	3
RISER POLES	1

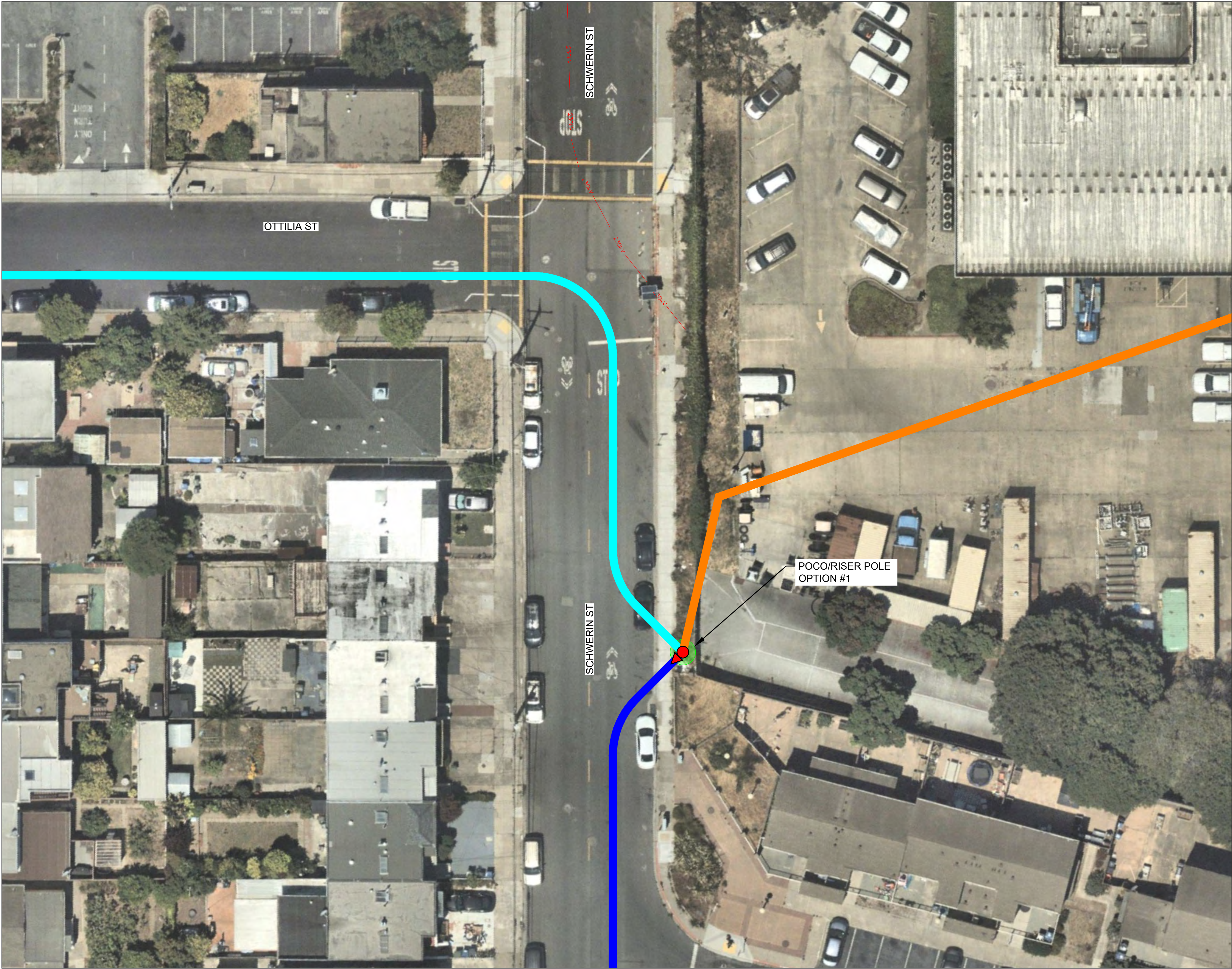


VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



Figure 2-3

INTENTIONALLY LEFT BLANK



PLAN VIEW
HORIZONTAL SCALE: 1" = 15'

CORMORANT UNDERGROUND

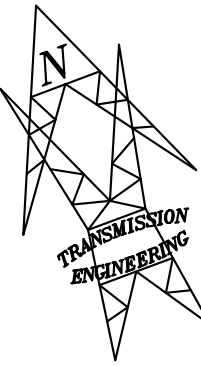
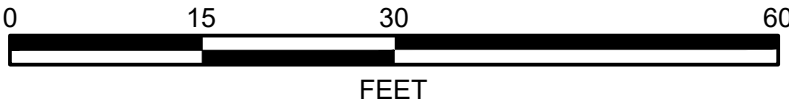
115KV GEN-TIE

EXHIBIT C: PRELIMINARY POCO LOCATION OPTION #1

PRELIMINARY

LEGEND

-  POCO LOCATION / RISER POLE
-  ROUTE ALTERNATIVE #1
-  ROUTE ALTERNATIVE #1A
-  115KV OH TO MARTIN SUBSTATION
-  POCO / RISER POLE OPTION #1

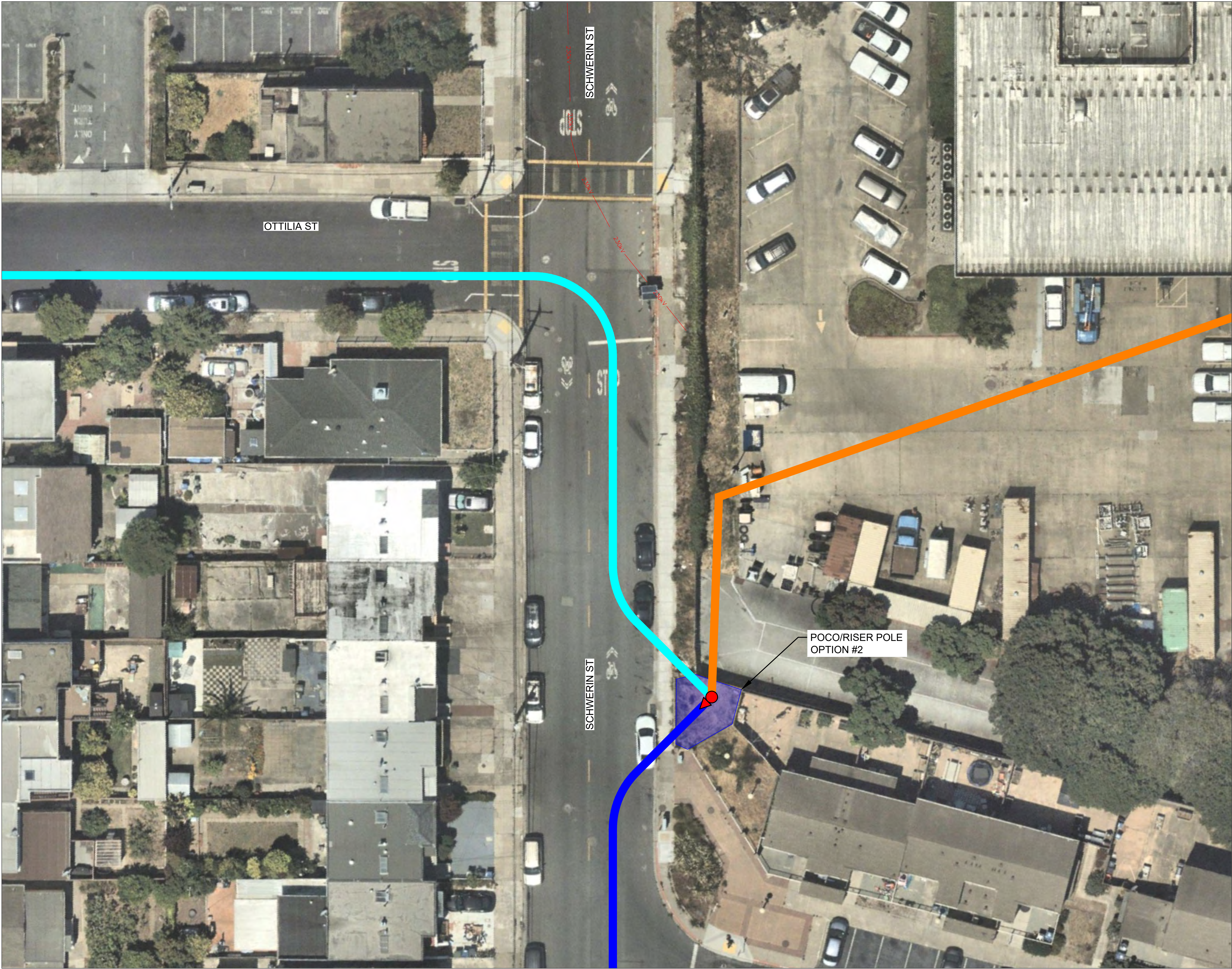


VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



Figure 2-4

INTENTIONALLY LEFT BLANK



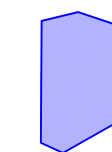
CORMORANT UNDERGROUND

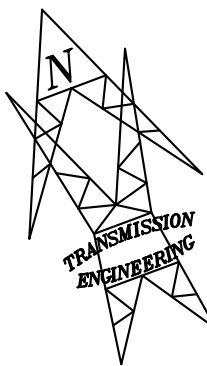
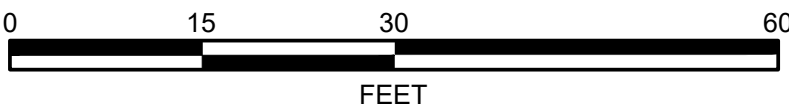
115KV GEN-TIE

EXHIBIT C: PRELIMINARY POCO LOCATION OPTION #2

PRELIMINARY

LEGEND

-  POCO LOCATION / RISER POLE
-  ROUTE ALTERNATIVE #1
-  ROUTE ALTERNATIVE #1A
-  115KV OH TO MARTIN SUBSTATION
-  POCO / RISER POLE OPTION #2



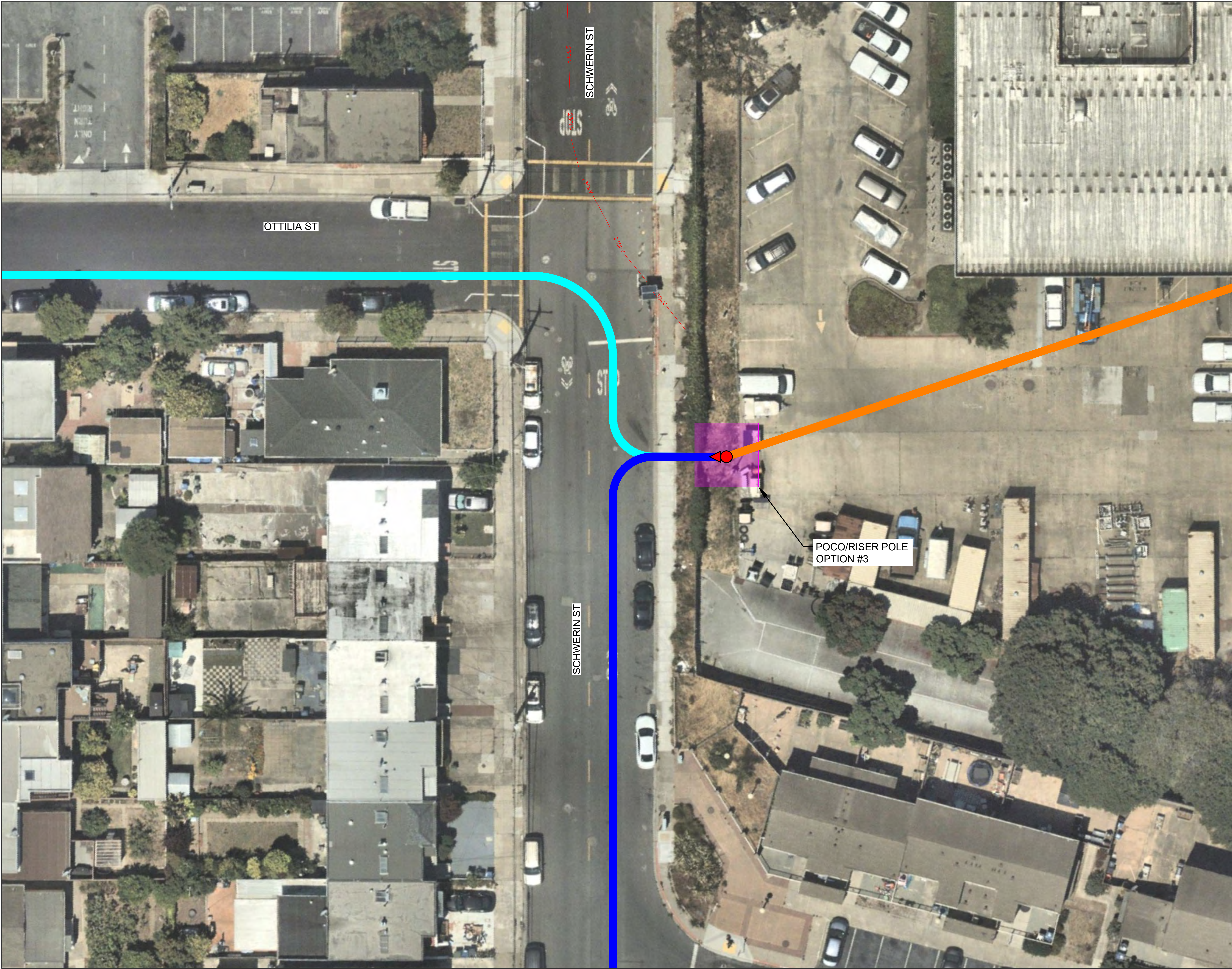
VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



SHEET: 5 OF 6

Figure 2-5

INTENTIONALLY LEFT BLANK



PLAN VIEW
HORIZONTAL SCALE: 1" = 15'

CORMORANT UNDERGROUND

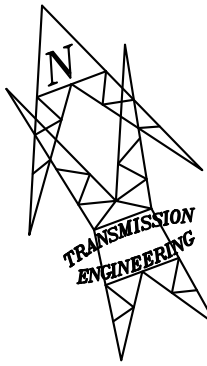
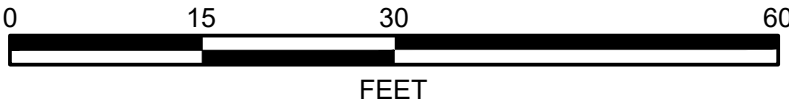
115KV GEN-TIE

EXHIBIT C: PRELIMINARY POCO LOCATION OPTION #3

PRELIMINARY

LEGEND

-  POCO LOCATION / RISER POLE
-  ROUTE ALTERNATIVE #1
-  ROUTE ALTERNATIVE #1A
-  115KV OH TO MARTIN SUBSTATION
-  POCO / RISER POLE OPTION #3



VERSION DATE : 04/26/2024
CREATED BY: LONDON GASTELUM



SHEET: 6 OF 6

Figure 2-6

INTENTIONALLY LEFT BLANK

Appendix A

Energy Storage Equipment Photos



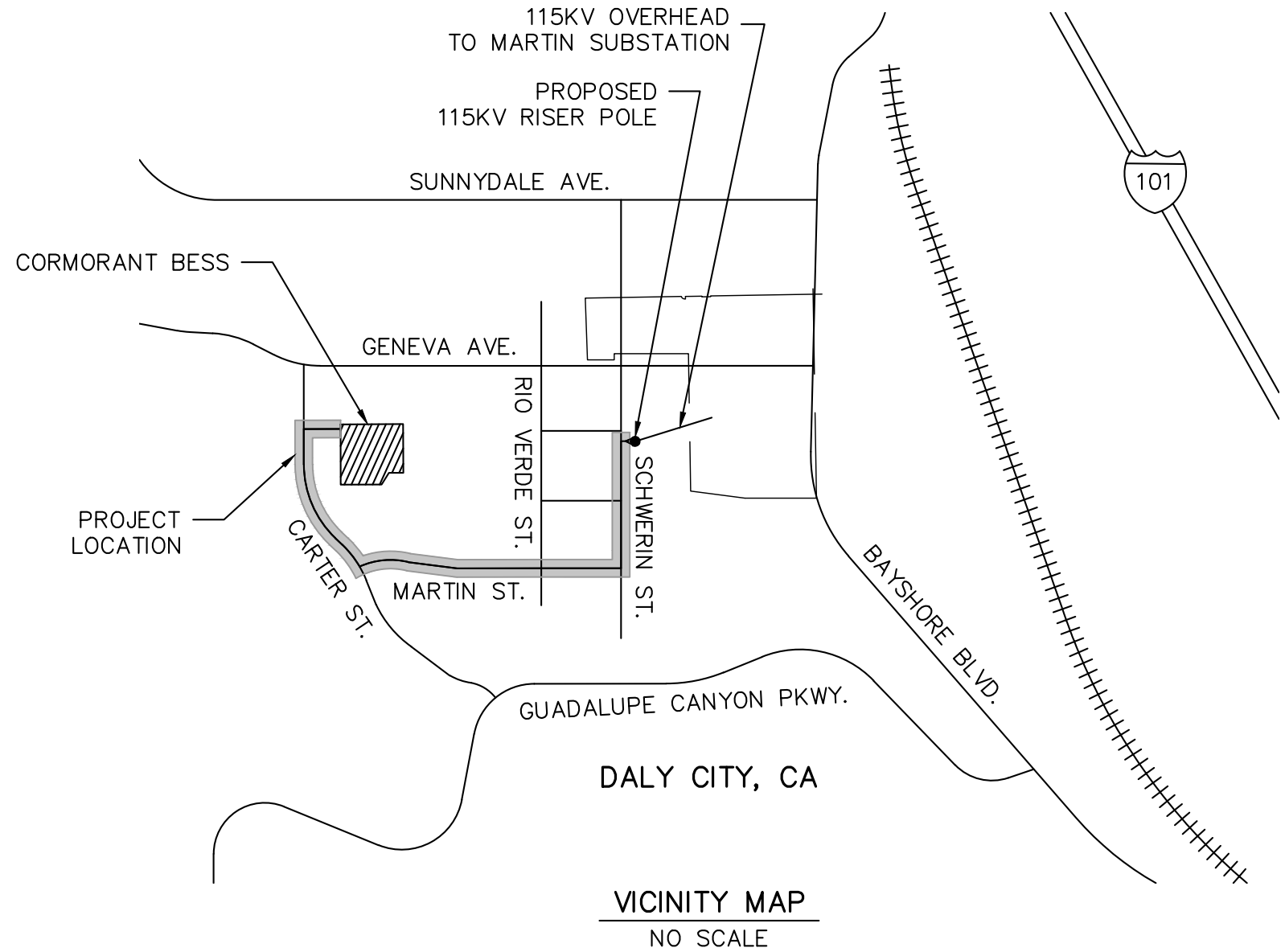
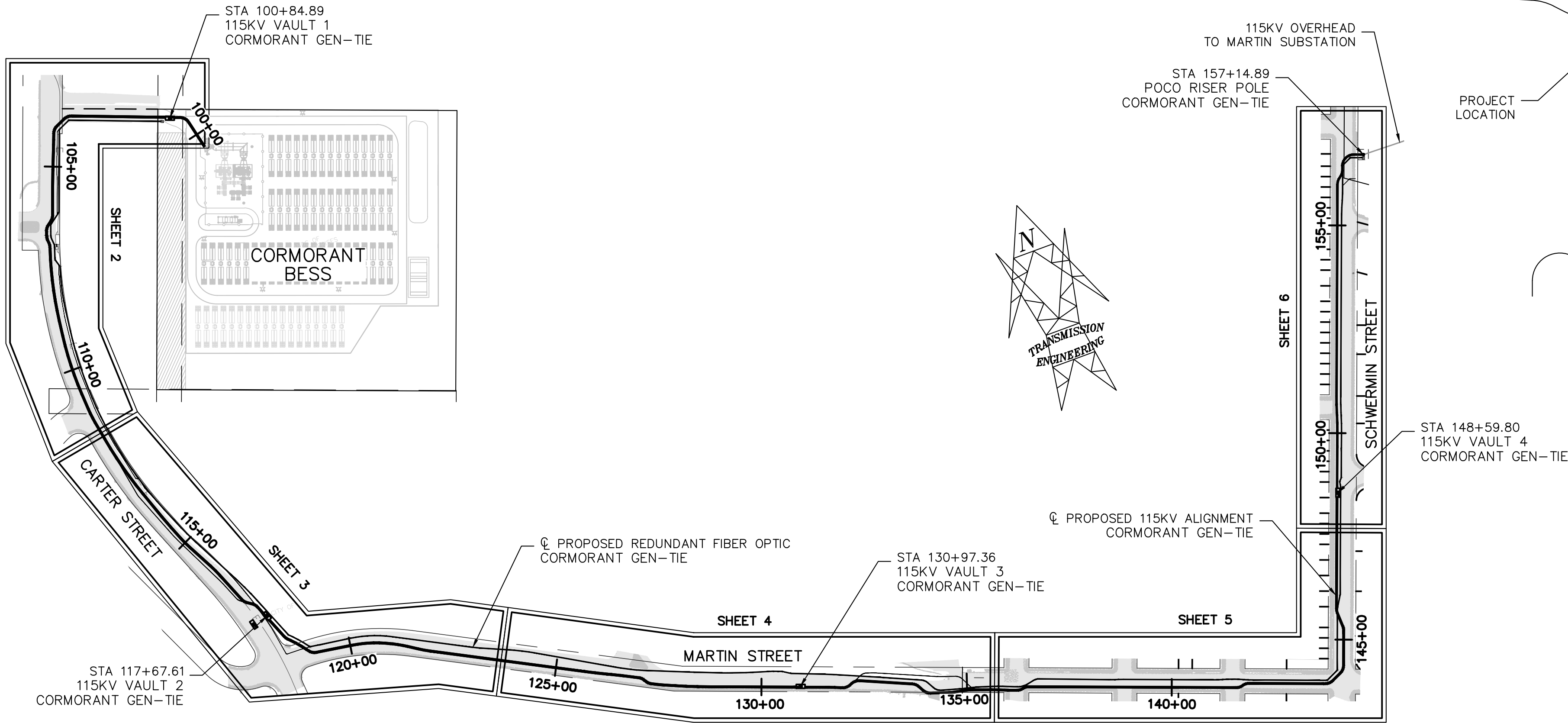
Photo A-1: Typical modular battery energy storage unit

INTENTIONALLY LEFT BLANK

GENERAL NOTES:

- LOCATIONS OF ALL UNDERGROUND FACILITIES ARE TAKEN FROM AVAILABLE MAPS AND RECORDS. ACTUAL FIELD LOCATIONS OF ALL UTILITIES MUST BE VERIFIED BY CONTRACTOR PRIOR TO TRENCHING. CONTACT USA DIG ALERT, 1-800-422-4133, PRIOR TO DIGGING. UNDERGROUND FACILITY ELEVATIONS. LOCATIONS SHOWN ON THE DRAWINGS ARE BASED ON THE AVAILABLE INFORMATION LOCATED DURING DESIGN. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO SURFACE OR UNDERGROUND FACILITIES WHETHER SHOWN OR NOT SHOWN ON THE DRAWINGS.
- ALL WORK SHALL COMPLY WITH ENGINEERING DRAWINGS, SPECIFICATIONS INCLUDED IN SUBMITTAL, CONTRACT DOCUMENTS AND ALL APPLICABLE PROVISIONS OF THE PG&E UNDERGROUND STANDARDS, LATEST REVISION.
- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF G.O. 128.
- ALL WORK SHALL COMPLY WITH ALL STATE AND LOCAL TRAFFIC CONTROL REGULATIONS. CONTRACTOR SHALL FOLLOW ALL PROVISIONS OF PERMITS, WHETHER FROM CITY, COUNTY, STATE, OR OTHER DISTRICTS OR AGENCIES.
- ANY DEVIATION FROM ENGINEERING DRAWINGS MUST BE APPROVED BY NV5 PRIOR TO CONSTRUCTION. MAINTAIN AND UPDATE THE AS-BUILT RECORDS TO DOCUMENT ALL FIELD CHANGES.
- PROFILE SECTIONS ON THE PLAN AND PROFILE DRAWINGS ARE ALONG CENTER LINE OF TRENCH.
- PROVIDE NECESSARY ANCHORING TO PREVENT CONDUITS FROM FLOATING WHILE THEY ARE BEING ENCASED IN CONCRETE.
- A CABLE MARKING TAPE SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF EACH 115KV DUCT BANK. CABLE MARKING TAPE SHALL BE 12 INCHES WIDE, RED PLASTIC STRIP, WITH WORDS "CAUTION ELECTRIC LINE BURIED BELOW" PRINTED IN BLACK. TAPE SHALL BE INSTALLED FLAT AND DIRECTLY ABOVE THE DUCT BANK WITH THE PRINTED SIDE UP.
- WHEN REQUIRED, USE ONLY PLASTIC STRAPS TO SECURE CONDUITS UNLESS OTHERWISE APPROVED. NO FERROUS METAL SHALL ENCIRCLE ANY INDIVIDUAL DUCT OR GROUP OF DUCTS.
- CLEARANCE BETWEEN EXISTING UTILITIES AND ENCASEMENT OF DUCT BANKS SHALL BE A MINIMUM OF 1' UNLESS OTHERWISE NOTED..
- CONDUITS TO BE SWABBED UNTIL THEY ARE CLEAR OF ALL DEBRIS BY USING MECHANICAL METHODS AND VERIFIED BY CONTRACT ADMINISTRATOR; CONTRACTOR TO BLOW AIR AND INSTALL PULL ROPE, DOCUMENT AND MARK PHASING ON MH WALLS TO IDENTIFY PHASING ALONG ENTIRE ROUTE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF ALL GROUND SURFACES DISTURBED DURING CONSTRUCTION. REPLACEMENT OF LANDSCAPING & IRRIGATION SHALL BE COMPARABLE TO THAT REMOVED. REPLANTING SHALL BE FINISHED WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION.
- THE MINIMUM BENDING RADIUS OF CONDUITS SHALL BE 25 FEET FOR HORIZONTAL BENDS EXCEPT SWEEPS, EXCEPT AS OTHERWISE NOTED ON DRAWINGS. INFORM NV5 OF ANY PROPOSED CHANGES IN BENDS OR ALIGNMENT BEFORE PROCEEDING.
- THE MINIMUM BENDING RADIUS OF CONDUITS SHALL BE 25 FEET FOR VERTICAL BENDS WITH A MAXIMUM ANGLE 5 DEGREES. INFORM NV5 OF ANY PROPOSED CHANGES IN VERTICAL BENDS BEFORE PROCEEDING.
- CONTRACTOR TO FIELD FIT ALL HANDHOLES.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A PERMIT FOR TEMPORARY CONSTRUCTION DEWATERING AS NEEDED. A PERMIT IS REQUIRED FROM THE REGIONAL WATER QUALITY CONTROL BOARD FOR ANY DISCHARGE OF GROUNDWATER TO THE ENVIRONMENT. THE CONTRACTOR SHALL COMPLY WITH REGIONAL WATER QUALITY CONTROL BOARD WASTE DISCHARGE PERMIT REQUIREMENTS, AS APPLICABLE. BEFORE STARTING DEWATERING OPERATIONS THE CONTRACTOR SHALL OBTAIN AUTHORIZATION FOR THE DISPOSAL OF GROUNDWATER. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAMPLING, TESTING, MONITORING, AND REPORTING REQUIREMENTS.
- SEE PROJECT SPECIFICATIONS FOR GENERAL CONCRETE REQUIREMENTS.
- BELL ENDS OF CONDUITS SHALL BE NO LESS THAN 12" AWAY FROM VAULT WALL OPENINGS

CORMORANT UNDERGROUND 115KV GEN-TIE



SHEET INDEX

1	TITLE SHEET & NOTES
2-6	PLAN & PROFILES
7	DETAILS
8	GAS CLEARANCE DETAILS

KEY MAP
NO SCALE

LEGEND (EXISTING)

— E —	ELECTRICAL
— T —	TELECOM
— FO —	FIBER OPTIC
— TV —	CABLE TV
— LT —	STREET LIGHT
— TS —	TRAFFIC SIGNAL
— G —	GAS
— S —	SEWER
— W —	WATER
— RW —	RECLAIMED WATER
— SD —	STORM DRAIN
— OE —	OVERHEAD
— — —	RETAINING WALL
— — —	RIGHT OF WAY
— — —	EASEMENT
— — —	CURB & GUTTER
— — —	GUARD RAIL
— — —	FENCE
— — —	30" GAS LINE

⊗	ELECTRIC RISER
⊗	ELECTRIC STUB POLE
⊗	ELECTRIC PULLBOX
⊗	ELECTRIC METER
⊗	ELECTRIC PEDESTAL
⊗	ELECTRIC CABINET
⊗	ELECTRIC BOX
⊗	ELECTRIC GUY WIRE
⊗	ELECTRIC POLE
⊗	ELECTRIC CABLE POLE
⊗	TELECOM MANHOLE
⊗	TELECOM PULLBOX
⊗	TELECOM BOX
⊗	TELECOM RISER
⊗	STREET LIGHT
⊗	STREET LIGHT PULLBOX
⊗	TRAFFIC SIGNAL LIGHT
⊗	TRAFFIC SIGNAL POLE
⊗	TRAFFIC SIGNAL BOX
⊗	CABLE TELEVISION BOX
⊗	BOLLARD
⊗	GAS RISER
⊗	GAS VALVE
⊗	GAS METER
⊗	SEWER MANHOLE

LEGEND (PROPOSED)

— — —	CORMORANT CL 115KV TRENCH
— — —	CORMORANT CL REDUNDANT FIBER OPTIC TRENCH
⊗	PROPOSED 115KV VAULT
⊗	PROPOSED FIBER OPTIC HH

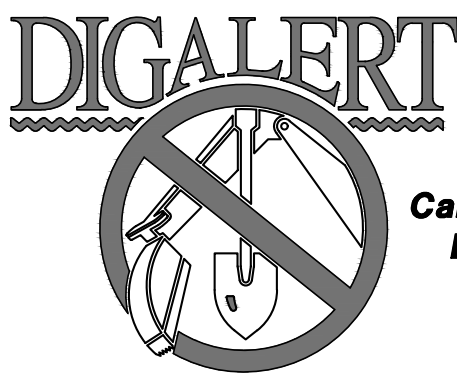
ABBREVIATIONS

GRND	GROUND	REF	REFERENCE
HH	HANDHOLE	RT	RIGHT
HP	HIGH PRESSURE	RW	RECLAIMED WATER
IRR	IRRIGATION	SD	STORM DRAIN
JT	JOINT TRENCH	SFT	SURVEY FEET
LT	LEFT	SL	STREET LIGHT
MH	MANHOLE	SS	SANITARY SEWER
MIN	MINIMUM	STA	STATION
OE	OVERHEAD ELECTRIC	STD	STANDARD
PCC	PORTLAND CEMENT CONCRETE	STL	STEEL
PE	POLYETHYLENE	TEL	TELEPHONE
PLA	PLATED	TS	TRAFFIC SIGNAL
PLCS	PLACES	TV	TELEVISION
POCO	POINT OF CHANGE OF OWNERSHIP	TYP	TYPICAL
PVC	POLYVINYL CHLORIDE	U/G	UNDERGROUND
PVT	PRIVATE	VCP	VITRIFIED CLAY PIPE
PX	CROSSLINKED POLYETHYLENE	WV	WATER VALVE
R/W	RIGHT OF WAY		
RCP	REINFORCED CONCRETE PIPE		
REC	RECLAIMED		

TRENCH DISTANCES CORMORANT 115KV		
FROM	TO	LENGTH (FT)
STA 99+65.50 BESS RACK	STA 100+84.89 VAULT 1	119.39
STA 100+84.89 VAULT 1	STA 117+24.83 VAULT 2	1639.94
STA 117+24.83 VAULT 2	STA 131+01.52 VAULT 3	1376.69
STA 131+01.52 VAULT 3	STA 148+76.58 VAULT 4	1775.06
STA 148+76.58 VAULT 4	STA 157+31.67 RISER POLE	855.09
TOTAL TRENCH LENGTH:		5766.17
TOTAL TRENCH LENGTH:		1.09 MILES

NV5

15002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
658.385.0500 TEL 658.385.0400 FAX
WWW.NV5.COM



Call 2 Working Days
Before You Dig!
811

DRAWN BY:	NV5
DATE:	7/25/2024
NV5 JOB:	----
PROJ. NO.:	----
CONST. NO.:	----

PLAN & PROFILE	
HORIZONTAL:	N/A
VERTICAL:	N/A

E
D
C
B
A

REV

BUDGET

CONST ORDER

CHANGE

DATE

SK

IP

NV5

DK

DWN

CHKD

APPV

DATE



TITLE SHEET
CORMORANT 115KV

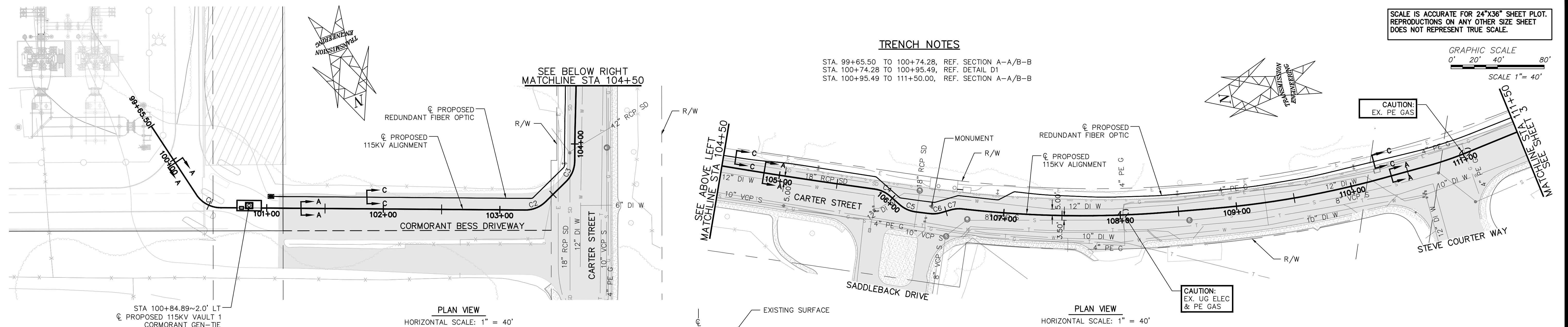
SCALE: AS SHOWN

SHEET 1 OF 8

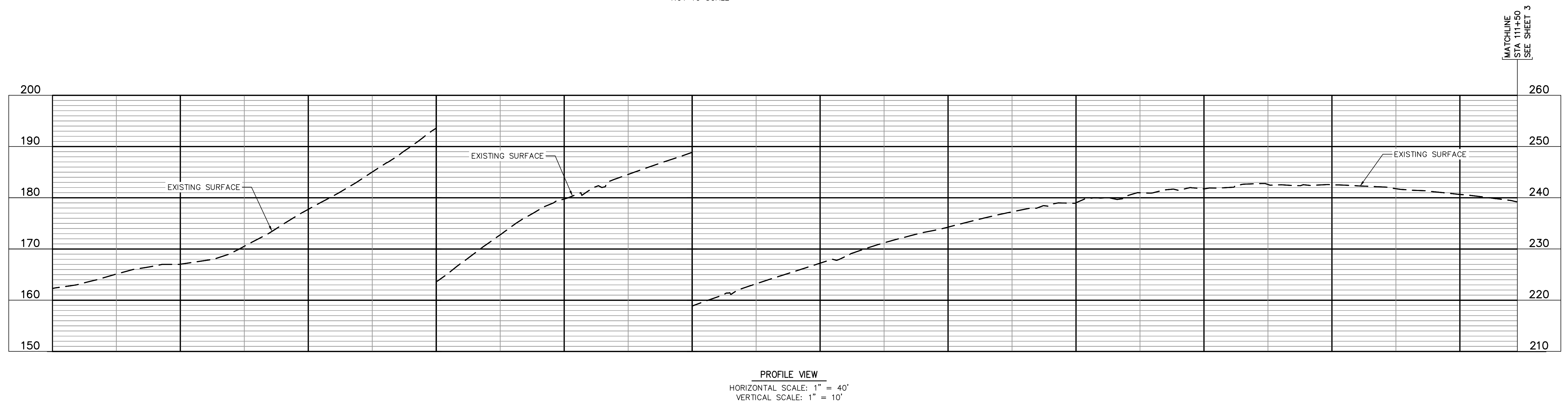
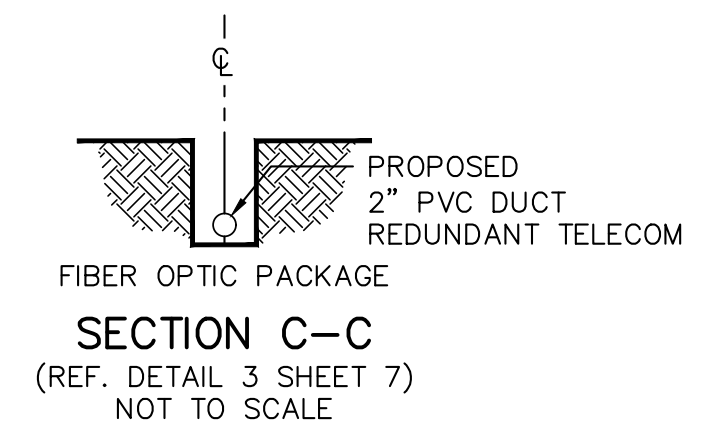
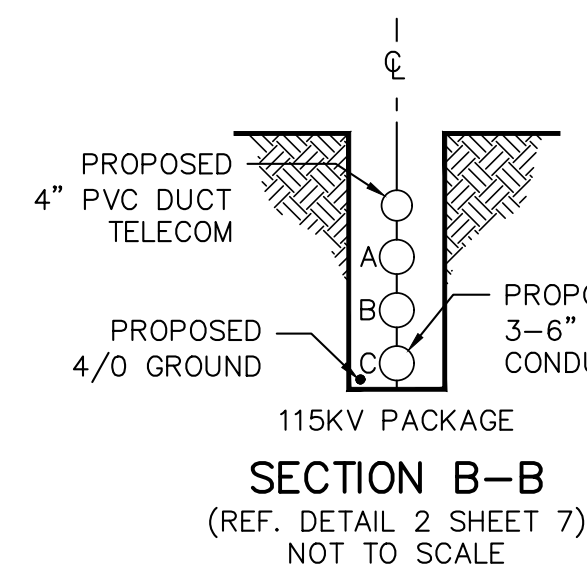
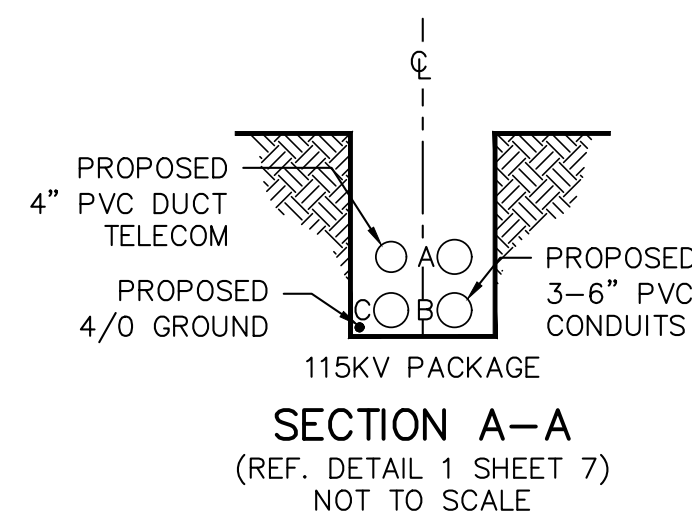
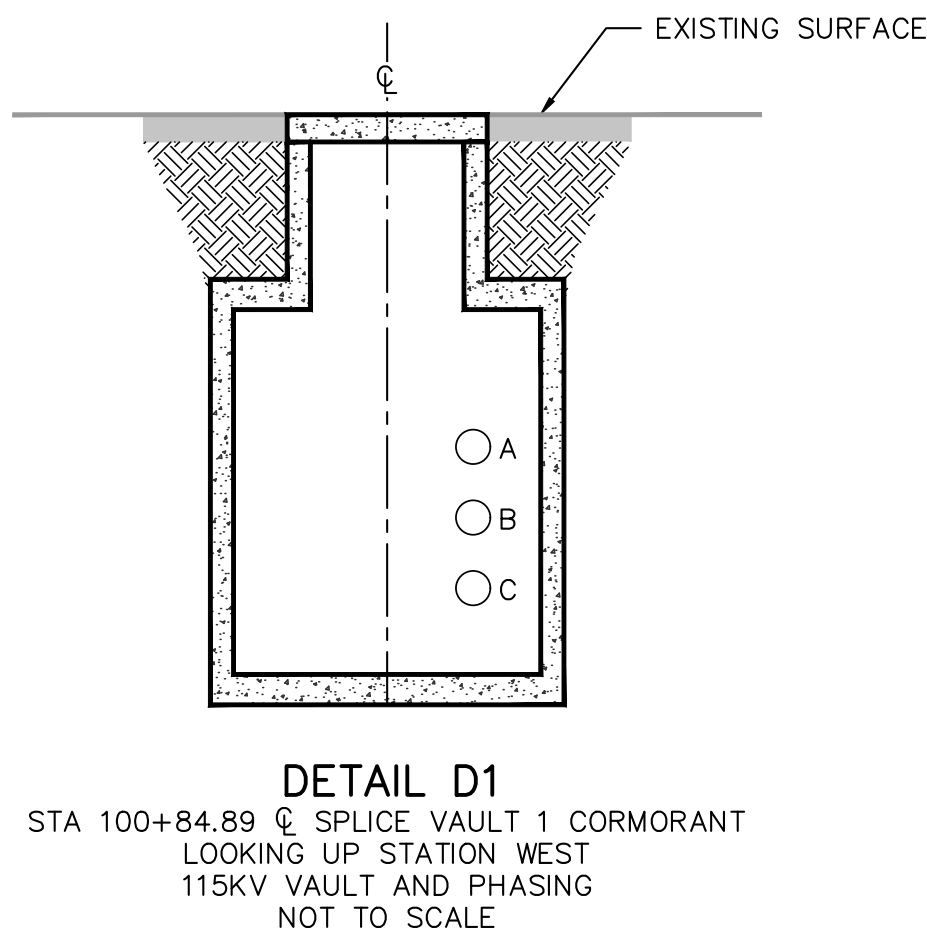
CORMORANT UNDERGROUND 115KV
GEN-TIE

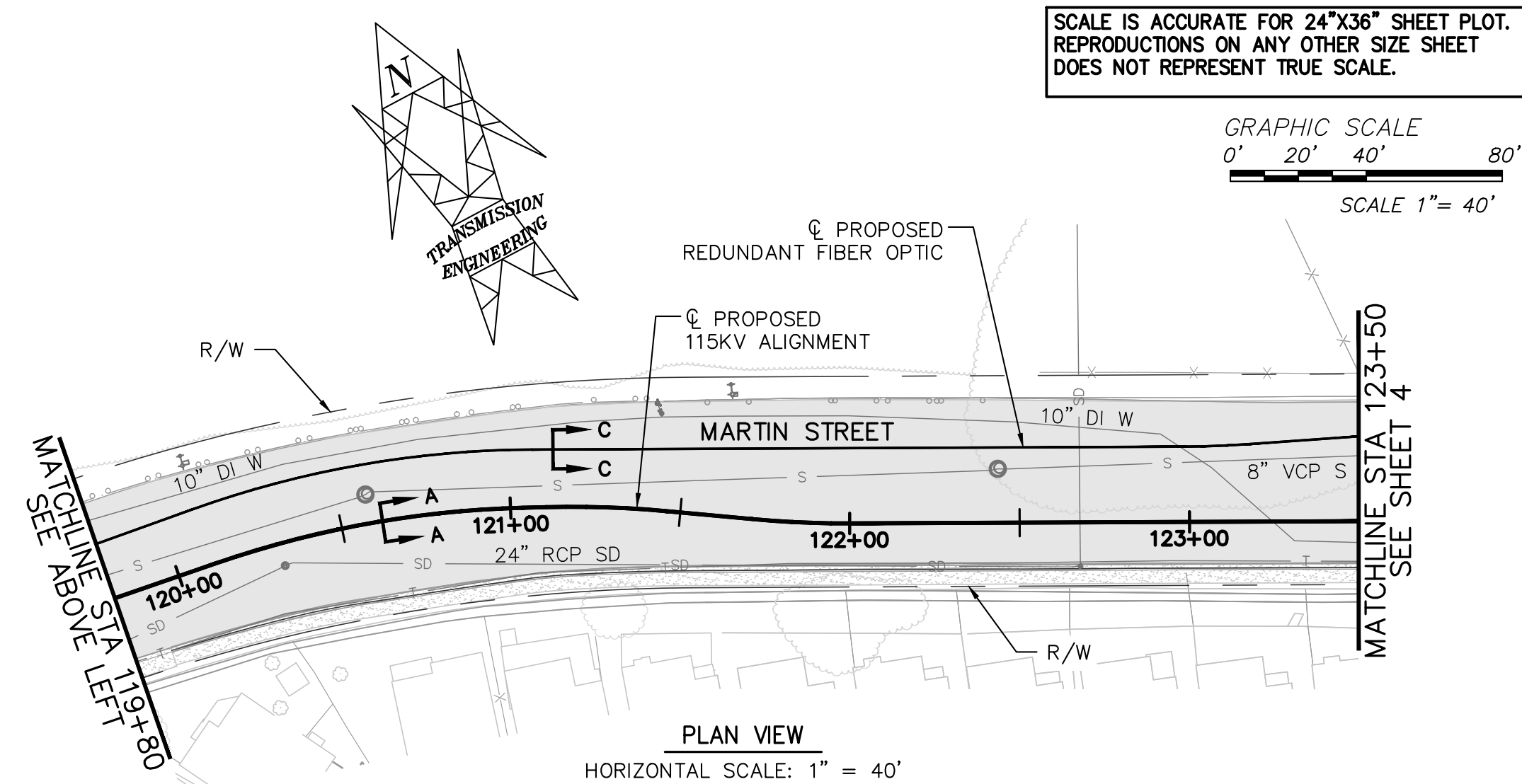
DRAWING NUMBER
24-CGT115-1

10% PRELIMINARY - NOT FOR CONSTRUCTION



CURVE TABLE						
CURVE	STATION	DELTA	RADIUS	LENGTH	BC (N,E)	EC (N,E)
C1	BC 100+35.74 EC 100+60.29	056°15'00"	25.00'	24.54'	2085668.8, 6005385.4	2085686.8, 6005370.0
C2	BC 103+21.52 EC 103+41.16	045°00'00"	25.00'	19.63'	2085781.1, 6005126.4	2085780.6, 6005107.3
C3	BC 103+65.69 EC 103+85.33	045°00'00"	25.00'	19.63'	2085770.7, 6005084.8	2085756.9, 6005071.6
C4	BC 105+82.71 EC 105+97.44	033°45'00"	25.00'	14.73'	2085572.8, 6005003.0	2085561.2, 6004991.6
C5	BC 106+08.29 EC 106+23.01	033°45'00"	25.00'	14.73'	2085554.9, 6004982.8	2085543.3, 6004974.0
C6	BC 106+35.93 EC 106+45.75	022°30'00"	25.00'	9.82'	2085531.1, 6004969.7	2085521.4, 6004968.5
C7	BC 106+54.35 EC 106+64.17	022°30'00"	25.00'	9.82'	2085512.9, 6004969.1	2085503.2, 6004967.8

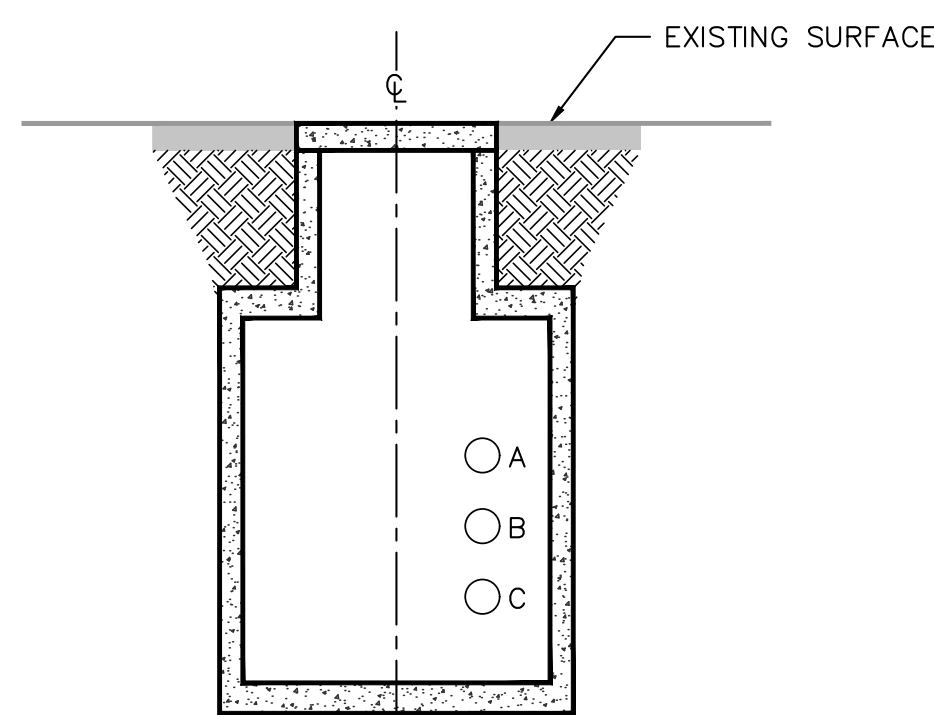
[illegible]



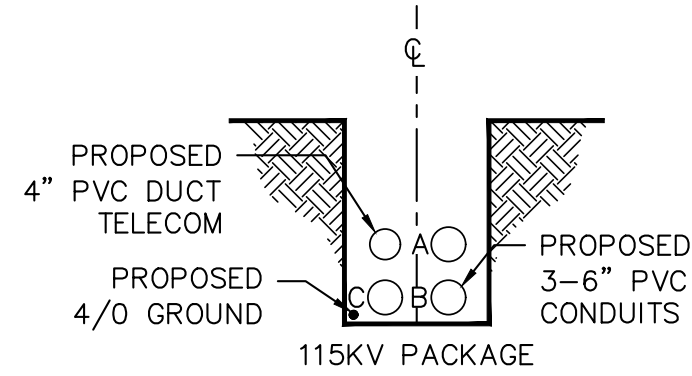
CURVE TABLE						
CURVE	STATION	DELTA	RADIUS	LENGTH	BC (N.E.)	EC (N.E.)
C8	BC 113+04.52 EC 113+09.43	011°15'00"	25.00'	4.91'	2084871.7, 6004957.7	2084867.0, 6004959.0
C9	BC 118+20.60 EC 118+54.96	078°45'00"	25.00'	34.36'	2084388.9, 6005136.0	2084369.7, 6005161.3

TRENCH NOTES

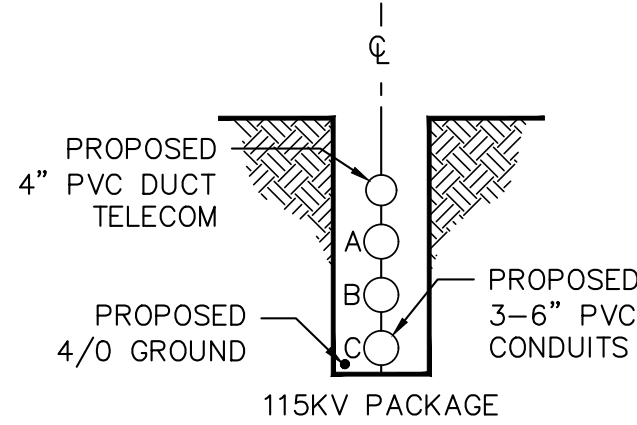
STA. 111+50.00 TO 117+14.23, REF. SECTION A-A/B-B
STA. 117+14.23 TO 117+35.44, REF. DETAIL D2
STA. 117+35.44 TO 123+50.00, REF. SECTION A-A/B-B



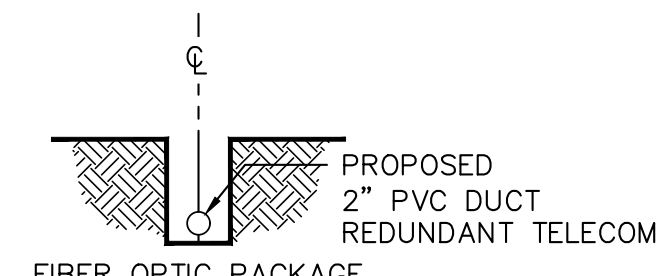
DETAIL D2
STA 117+24.83 @ SPLICE VAULT 2 CORMORANT
LOOKING UP STATION SOUTH
115KV VAULT AND PHASING
NOT TO SCALE



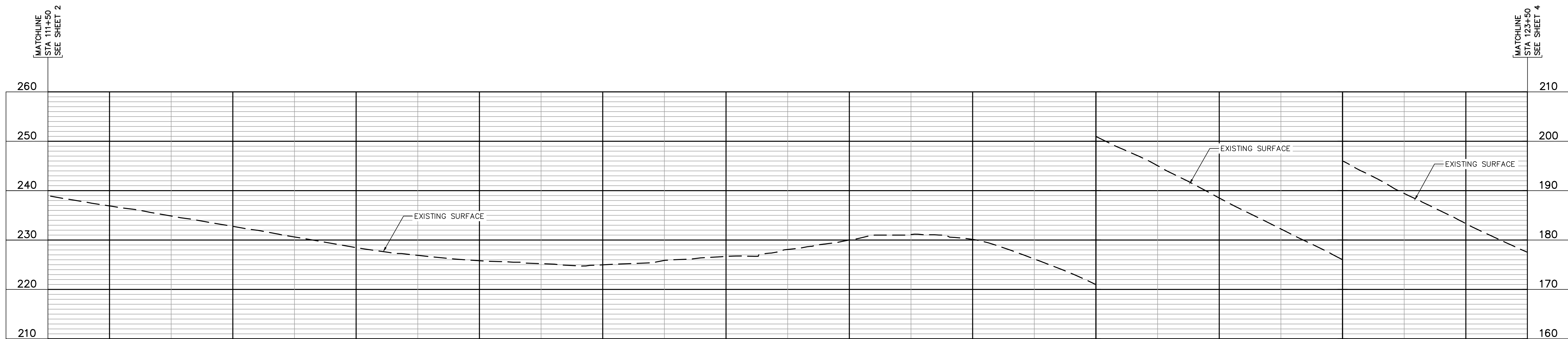
SECTION A-A
(REF. DETAIL 1 SHEET 7)
NOT TO SCALE



SECTION B-B
(REF. DETAIL 2 SHEET 7)
NOT TO SCALE



SECTION C-C
(REF. DETAIL 3 SHEET 7)
NOT TO SCALE



PROFILE VIEW
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'

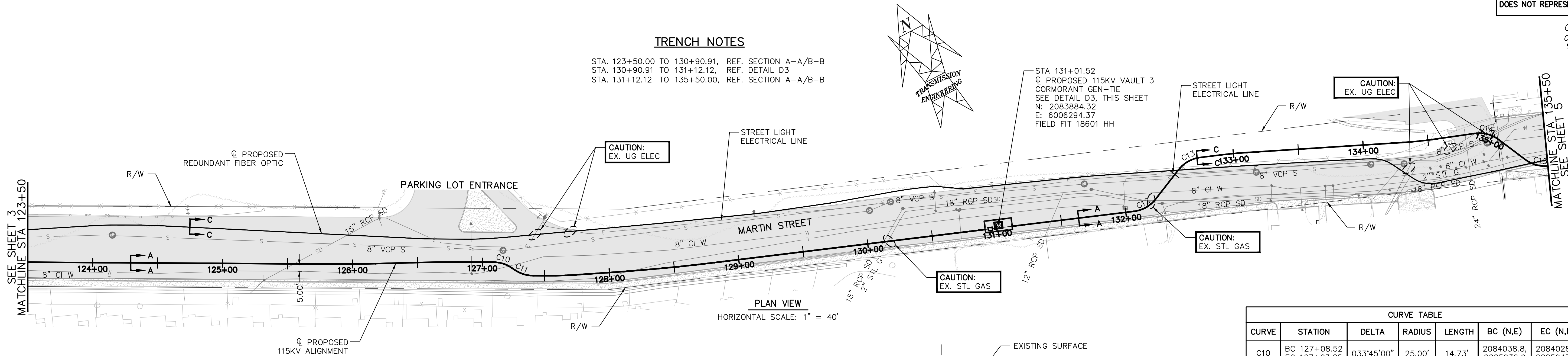
 15062 AVENUE OF SCIENCE, SUITE 200 658.365.1500 TEL. 658.365.0400 FAX SAN DIEGO, CA 92128 WWW.NIVS.COM	 Call 2 Working Days Before You Dig! 811	DRAWN BY: NVS DATE: 7/25/2024 NVS JOB: ---- PROJ. NO. ---- CONST. NO. ----	E D C B A	PLAN & PROFILE HORIZONTAL: 1"=40' VERTICAL: 1"=10'	TRENCH & SUBSTRUCTURES	SK IP NV5 DK	DWN CHKD APPV DATE	 PLAN & PROFILE CORMORANT 115KV	CORMORANT UNDERGROUND 115KV GEN-TIE	DRAWING NUMBER 24-CGT115-3
		REV BUDGET CONST ORDER CHANGE	SCALE: AS SHOWN	SHEET 3 OF 8						

SCALE IS ACCURATE FOR 24"x36" SHEET PLOT.
REPRODUCTIONS ON ANY OTHER SIZE SHEET
DOES NOT REPRESENT TRUE SCALE.

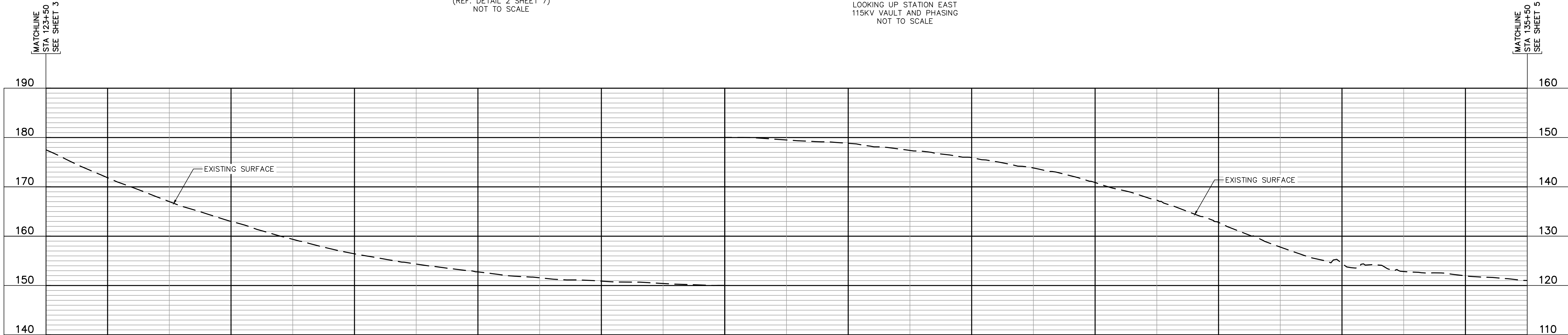
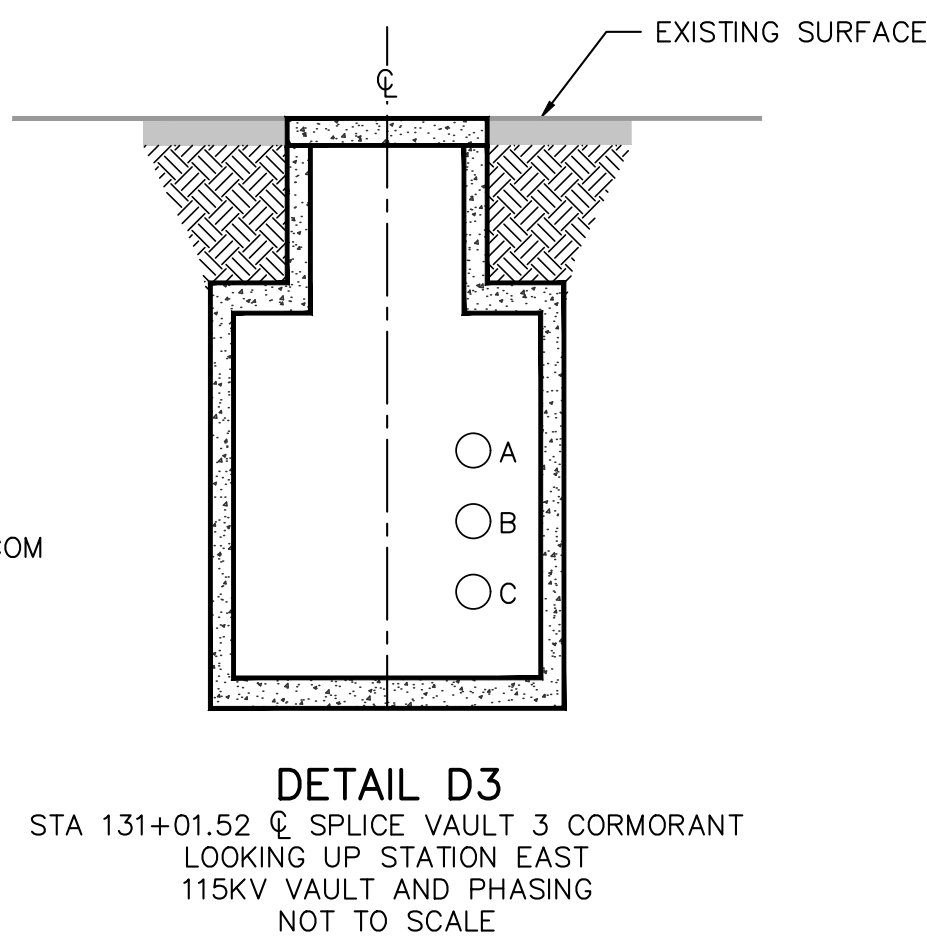
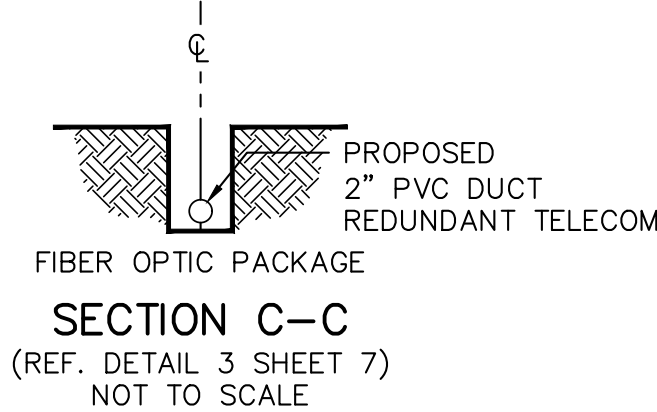
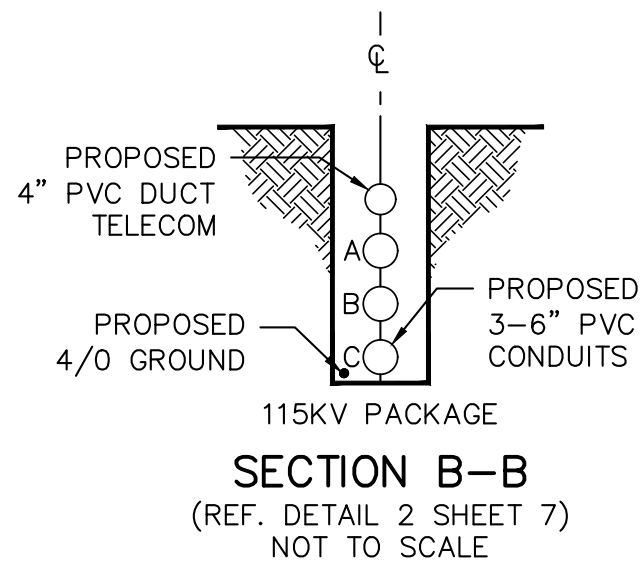
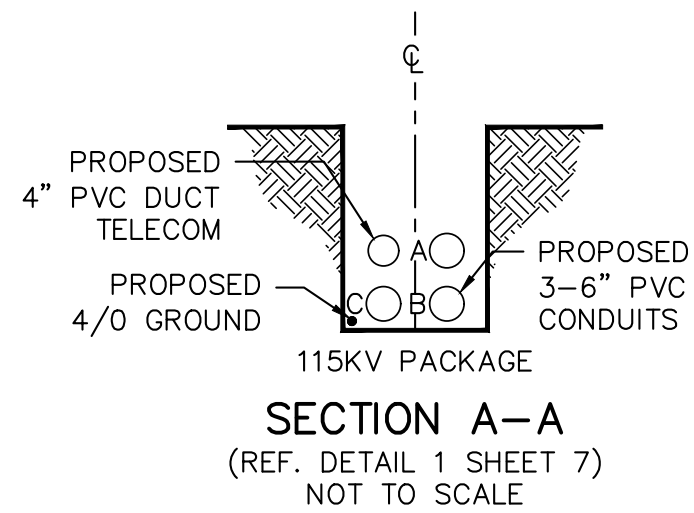
GRAPHIC SCALE
0' 20' 40' 80'
SCALE 1"= 40'

TRENCH NOTES

STA. 123+50.00 TO 130+90.91, REF. SECTION A-A/B-B
STA. 130+90.91 TO 131+12.12, REF. DETAIL D3
STA. 131+12.12 TO 135+50.00, REF. SECTION A-A/B-B



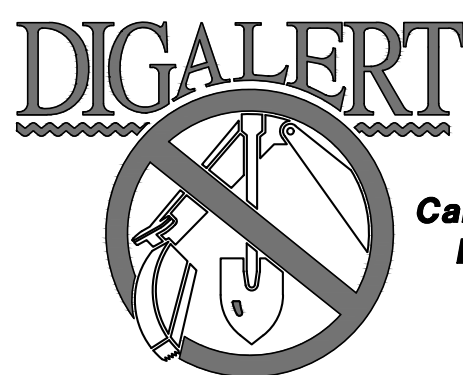
CURVE TABLE									
CURVE	STATION	DELTA	RADIUS	LENGTH	BC (N,E)	EC (N,E)			
C10	BC 127+08.52 EC 127+23.25	033°45'00"	25.00'	14.73'	2084038.8, 6005936.9	2084028.6, 6005947.2			
C11	BC 127+26.39 EC 127+41.11	033°45'00"	25.00'	14.73'	2084025.9, 6005948.7	2084015.6, 6005959.0			
C12	BC 132+06.36 EC 132+26.00	045°00'00"	25.00'	19.63'	2083845.6, 6006391.8	2083846.2, 6006410.9			
C13	BC 132+54.68 EC 132+74.31	045°00'00"	25.00'	19.63'	2083858.1, 6006437.0	2083858.7, 6006456.2			
C14	BC 134+86.32 EC 135+05.96	045°00'00"	25.00'	19.63'	2083777.4, 6006651.9	2083764.7, 6006666.1			



PROFILE VIEW
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'

NV5

15002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
658.385.0500 TEL 658.385.0400 FAX
WWW.NV5.COM



Call 2 Working Days
Before You Dig!
811

DRAWN BY: NV5
DATE: 7/25/2024
NV5 JOB: ----
PROJ. NO. ----
CONST. NO. ----

PLAN & PROFILE
HORIZONTAL: 1"=40'
VERTICAL: 1"=10'

E
D
C
B
A

REV BUDGET CONST ORDER

TRENCH & SUBSTRUCTURES
CHANGE

SK IP NV5 DK
DWN CHKD APPV DATE



PLAN & PROFILE
CORMORANT 115KV

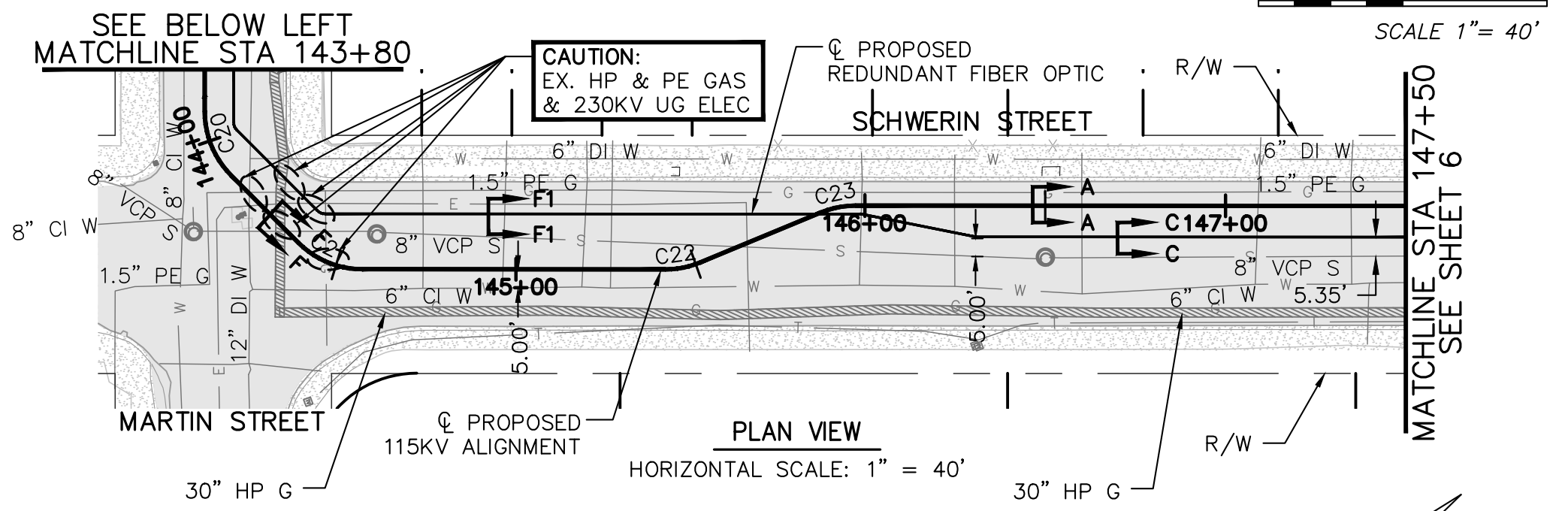
SCALE: AS SHOWN SHEET 4 OF 8

CORMORANT UNDERGROUND 115KV
GEN-TIE

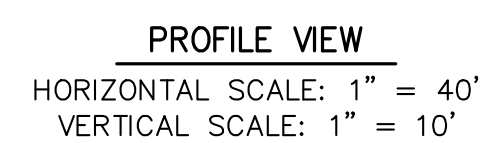
DRAWING NUMBER
24-CGT115-4

10% PRELIMINARY - NOT FOR CONSTRUCTION

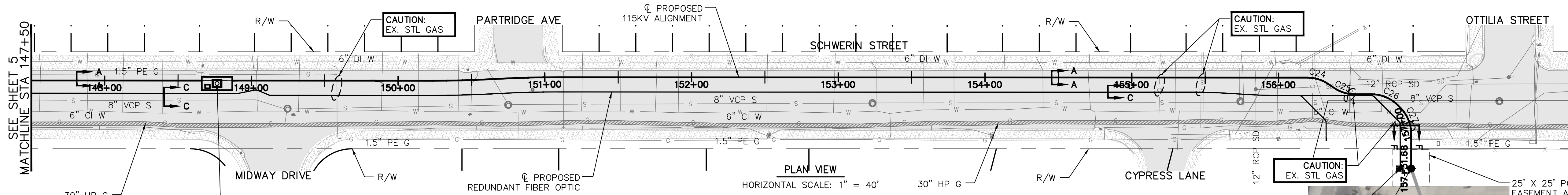
GRAPHIC SCALE
0' 20' 40' 80'
SCALE 1" = 40'



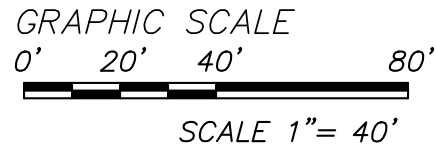
TRENCH NOTES



SHEET 5 OF 8



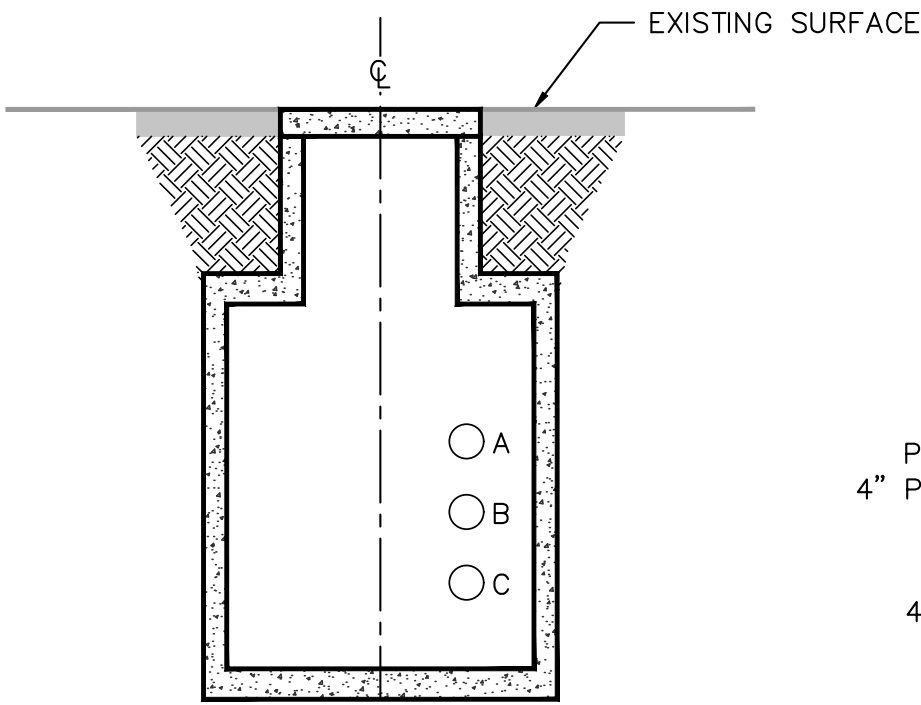
SCALE IS ACCURATE FOR 24"x36" SHEET PLOT.
REPRODUCTIONS ON ANY OTHER SIZE SHEET
DOES NOT REPRESENT TRUE SCALE.



CURVE TABLE						
CURVE	STATION	DELTA	RADIUS	LENGTH	BC (N,E)	EC (N,E)
C24	BC 156+19.86	033°45'00"	25.00'	14.73'	2084568.6,	2084580.2,
	EC 156+34.59				6007926.5	6007935.3
C25	BC 156+39.72	033°45'00"	25.00'	14.73'	2084583.1,	2084594.7,
	EC 156+54.45				6007939.5	6007948.3
C26	BC 156+66.06	045°00'00"	25.00'	19.63'	2084605.5,	2084619.5,
	EC 156+85.70				6007952.4	6007965.5
C27	BC 156+88.40	045°00'00"	25.00'	19.63'	2084620.6,	2084621.2,
	EC 157+08.03				6007967.9	6007987.1

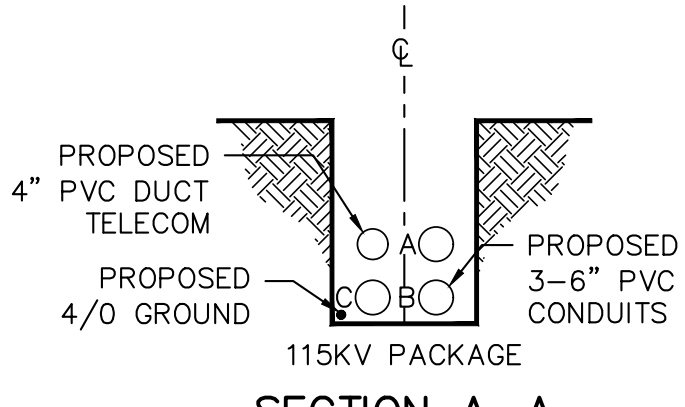
TRENCH NOTES

STA. 147+50.00 TO 148+65.98, REF. SECTION A-A/B-B
STA. 148+65.98 TO 148+87.19, REF. DETAIL D4
STA. 148+87.19 TO 157+31.67, REF. SECTION A-A/B-B

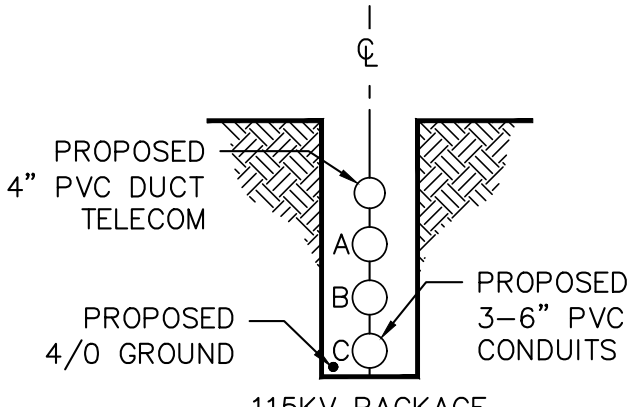


DETAIL D4

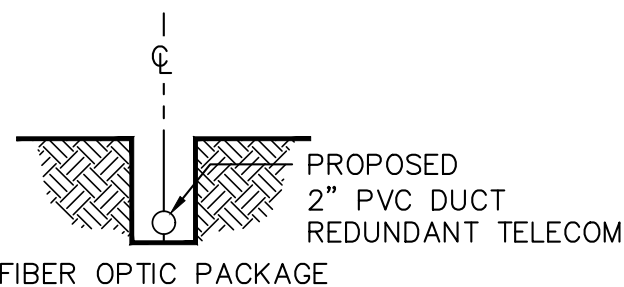
STA 148+76.58 @ SPLICE VAULT 4 CORMORANT
LOOKING UP STATION NORTH
115KV VAULT AND PHASING
NOT TO SCALE



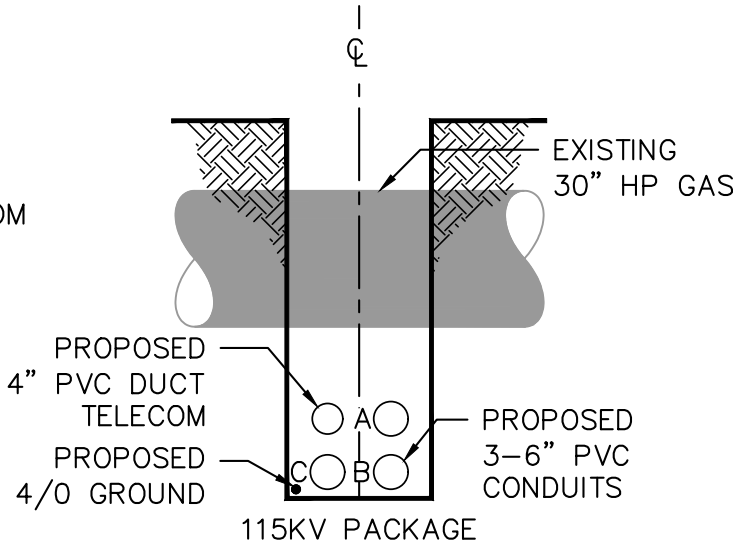
SECTION A-A
(REF. DETAIL 1 SHEET 7)
NOT TO SCALE



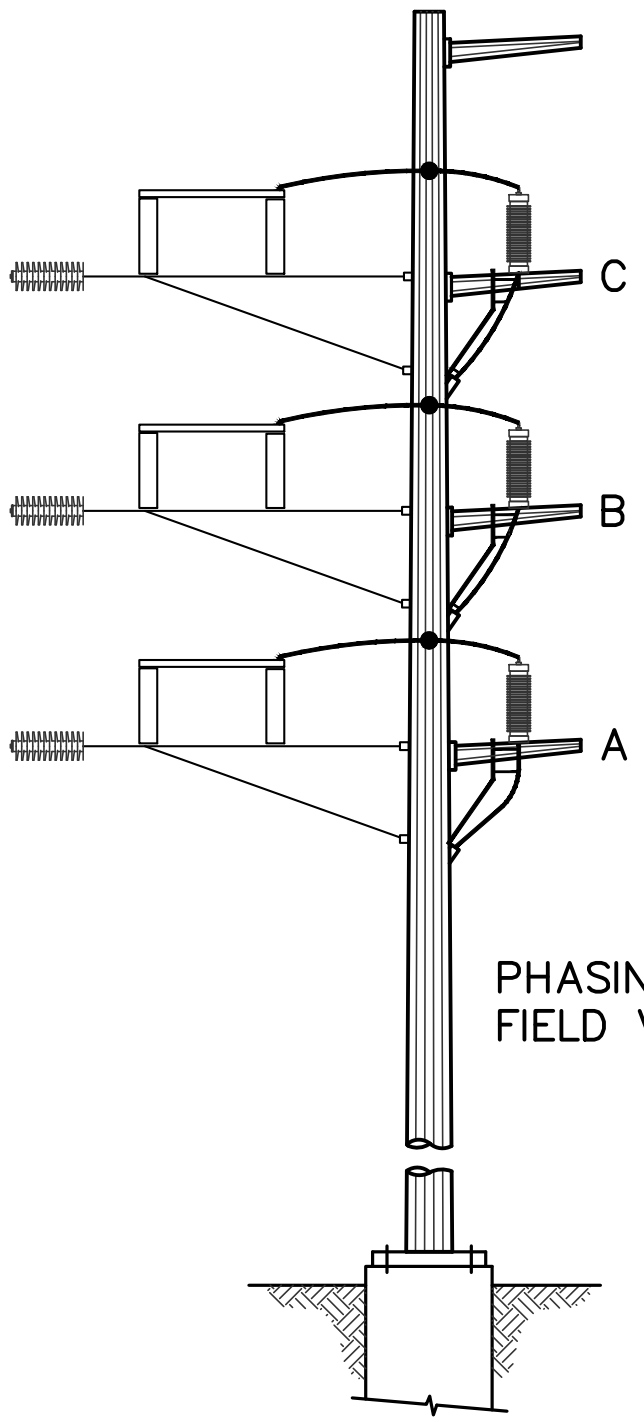
SECTION B-B
(REF. DETAIL 2 SHEET 7)
NOT TO SCALE



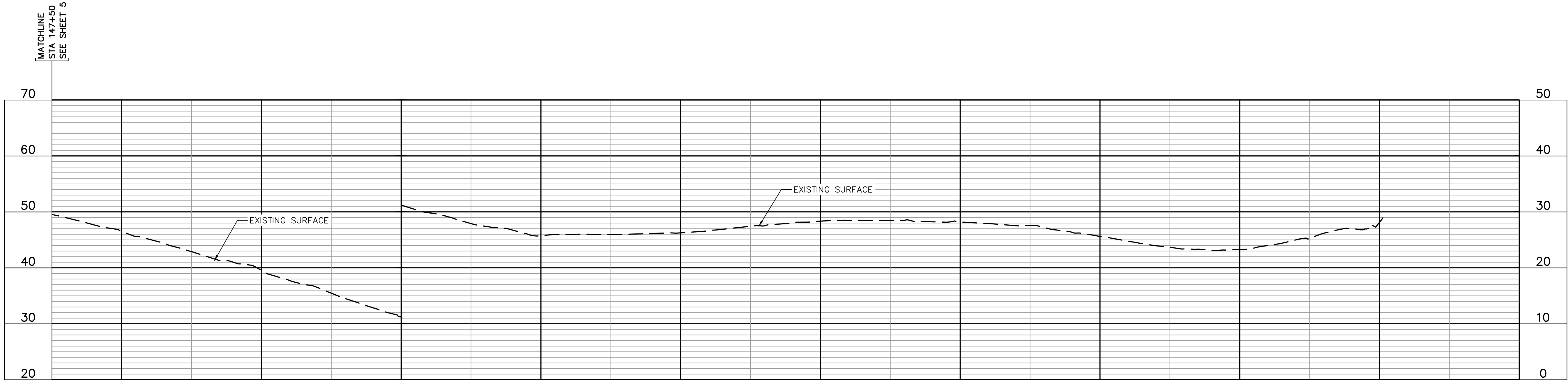
SECTION C-C
(REF. DETAIL 3 SHEET 7)
NOT TO SCALE



SECTION F-F
(REF. DETAIL 4 SHEET 8)
NOT TO SCALE



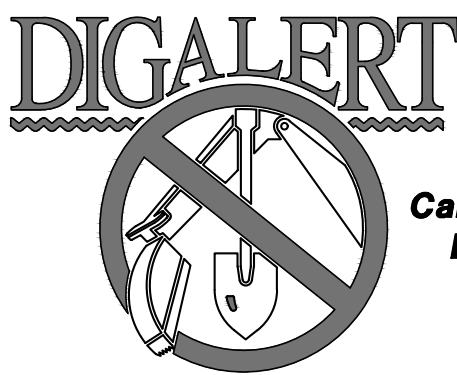
DETAIL C3
STEEL RISER POLE (BY OTHERS)
& PHASING DETAIL
LOOKING EAST
NOT TO SCALE



PROFILE VIEW
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'

NV5

15002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
658.385.0500 TEL 658.385.0400 FAX
WWW.NV5.COM



Call 2 Working Days
Before You Dig!
811

DRAWN BY: NV5
DATE: 7/25/2024
NV5 JOB: ----
PROJ. NO. ----
CONST. NO. ----

PLAN & PROFILE
HORIZONTAL: 1"=40'
VERTICAL: 1"=10'

E
D
C
B
A

REV BUDGET CONST ORDER

TRENCH & SUBSTRUCTURES				SK	IP	NV5	DK
CHANGE				DWN	CHKD	APPV	DATE



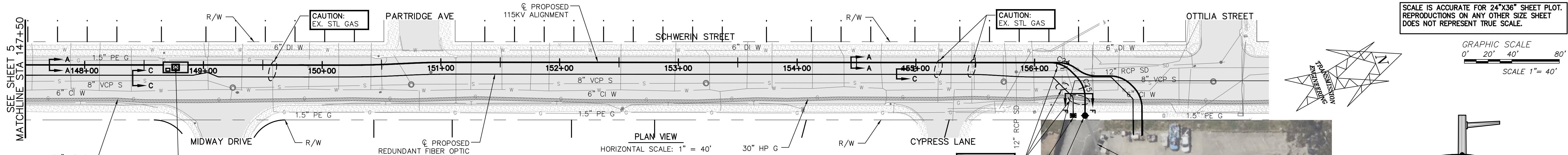
PLAN & PROFILE
CORMORANT 115KV

SCALE: AS SHOWN SHEET 6 OF 8

CORMORANT UNDERGROUND 115KV
GEN-TIE

DRAWING NUMBER
24-CGT115-6

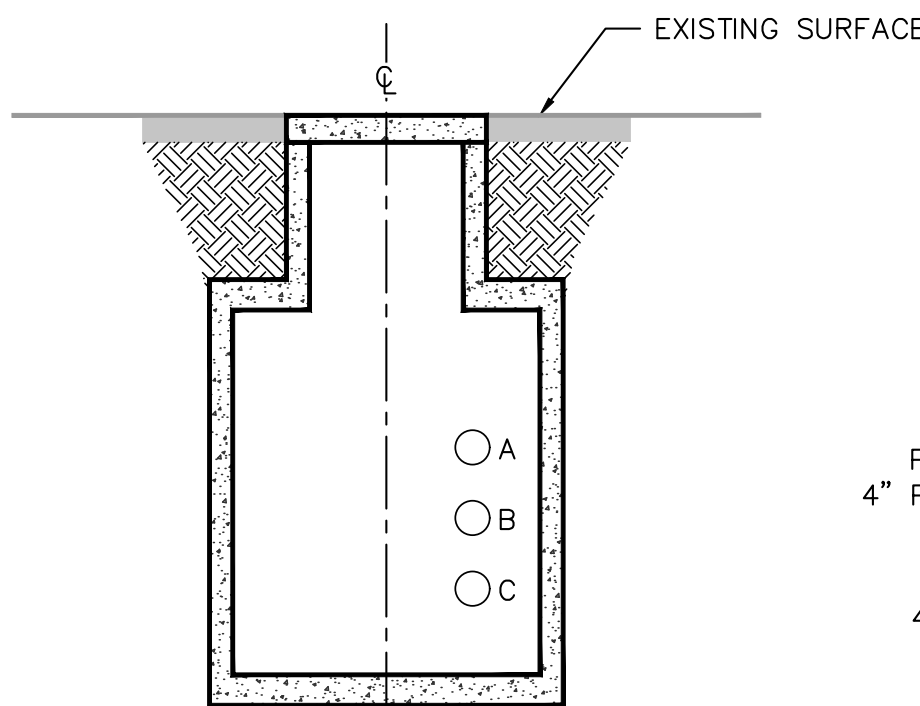
10% PRELIMINARY - NOT FOR CONSTRUCTION



CURVE TABLE						
CURVE	STATION	DELTA	RADIUS	LENGTH	BC (N,E)	EC (N,E)
C24	BC 156+13.03 EC 156+32.67	045°00'00"	25.00'	19.63'	2084562.3, 6007924.1	2084576.2, 6007937.1
C25	BC 156+38.92 EC 156+58.56	045°00'00"	25.00'	19.63'	2084578.8, 6007942.8	2084579.4, 6007962.0

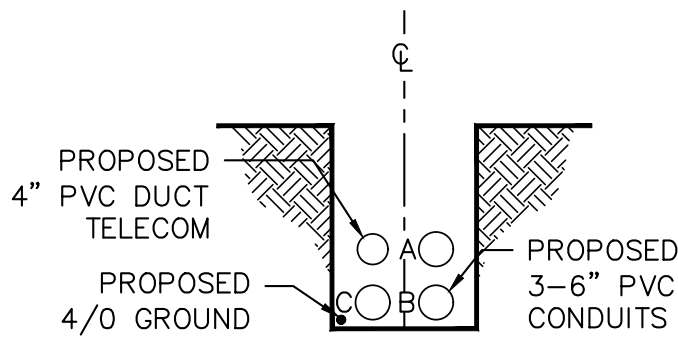
TRENCH NOTES

STA. 147+50.00 TO 148+65.98, REF. SECTION A-A/B-B
STA. 148+65.98 TO 148+87.19, REF. DETAIL D4
STA. 148+87.19 TO 156+73.81, REF. SECTION A-A/B-B



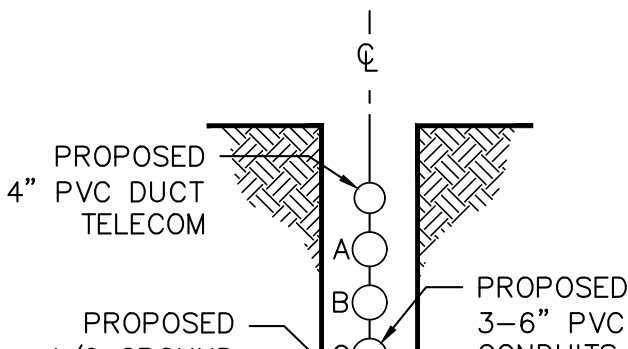
DETAIL D4

STA 148+76.58 @ SPLICE VAULT 4 CORMORANT
LOOKING UP STATION NORTH
115KV VAULT AND PHASING
NOT TO SCALE



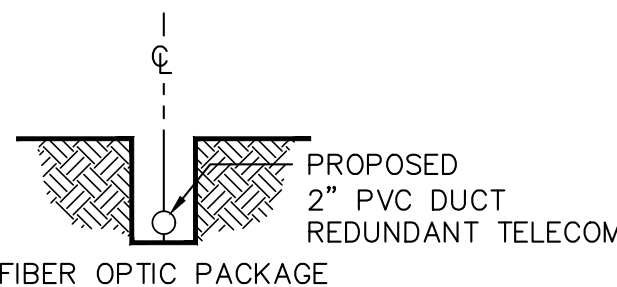
SECTION A-A

(REF. DETAIL 1 SHEET 7)
NOT TO SCALE



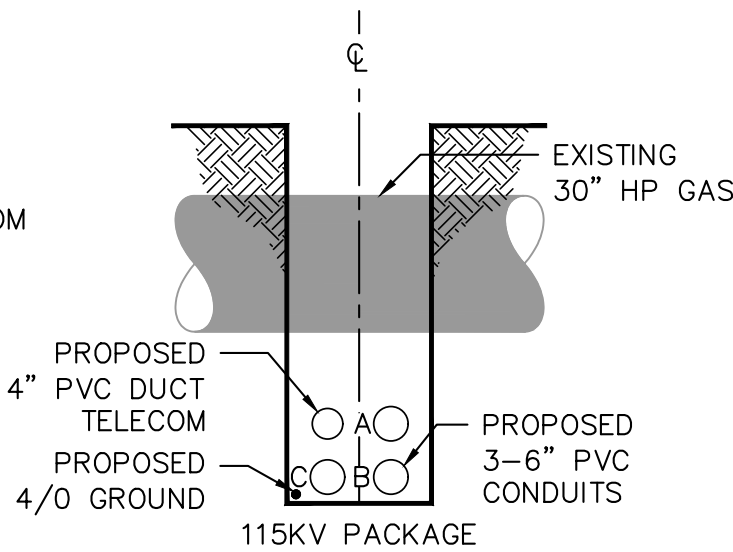
SECTION B-B

(REF. DETAIL 2 SHEET 7)
NOT TO SCALE



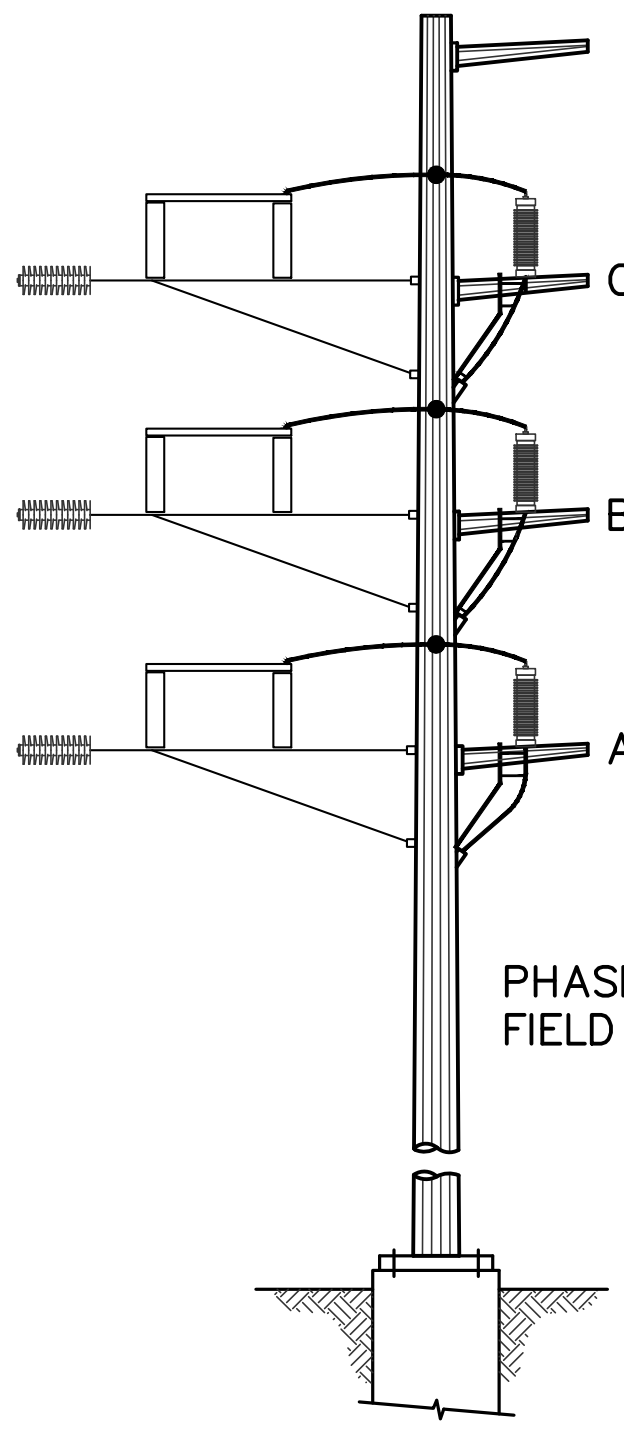
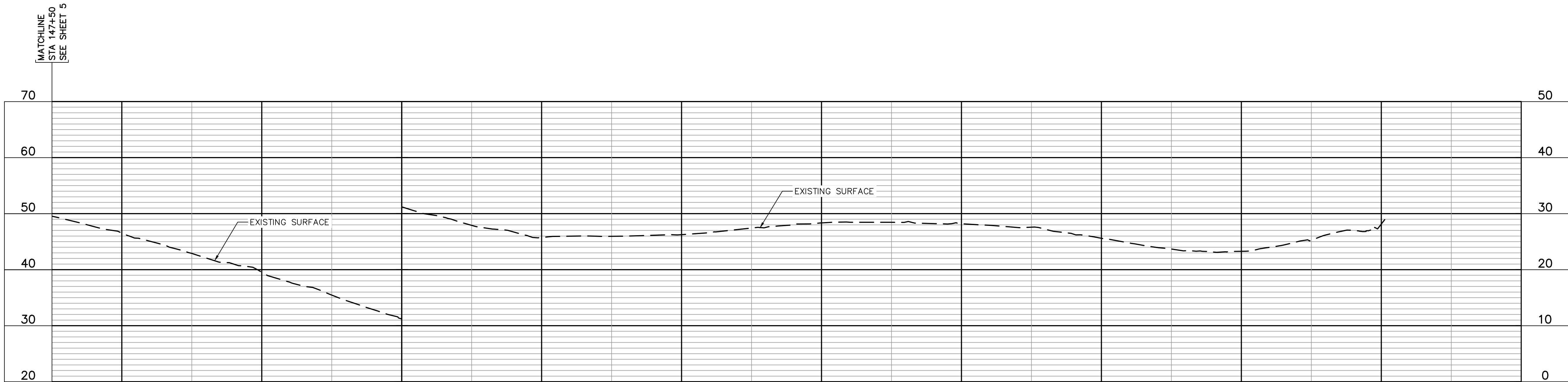
SECTION C-C

(REF. DETAIL 3 SHEET 7)
NOT TO SCALE



SECTION F-F

(REF. DETAIL 4 SHEET 8)
NOT TO SCALE

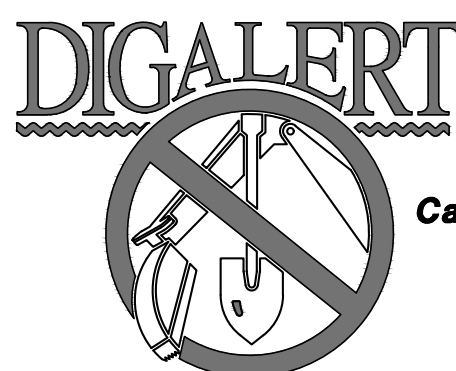


DETAIL C3

STEEL RISER POLE (BY OTHERS)
& PHASING DETAIL
LOOKING EAST
NOT TO SCALE

NV5

15002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
658.385.0500 TEL 658.385.0400 FAX
WWW.NV5.COM



Call 2 Working Days
Before You Dig!
811

DRAWN BY:	NV5	E
DATE:	7/25/2024	D
NV5 JOB:	----	C
PROJ. NO.	----	B
CONST. NO.	----	A

PLAN & PROFILE		
HORIZONTAL: 1"=40'	----	----
VERTICAL: 1"=10'	----	----

REV	BUDGET	CONST ORDER
-----	--------	-------------

TRENCH & SUBSTRUCTURES

CHANGE

SK	IP	NV5	DK
DWN	CHKD	APPV	DATE



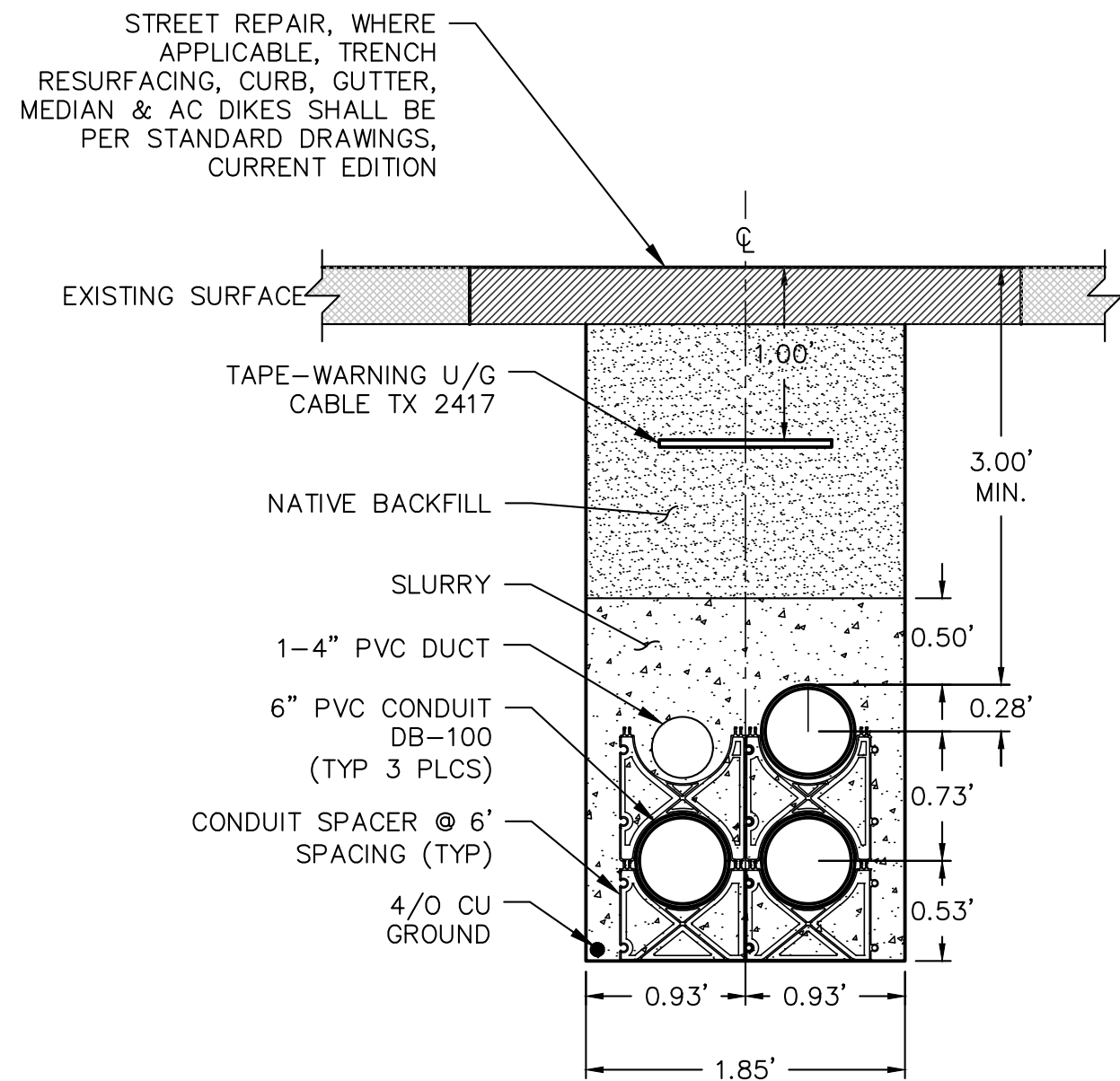
PLAN & PROFILE
CORMORANT 115KV

SCALE: AS SHOWN SHEET 6A OF 8

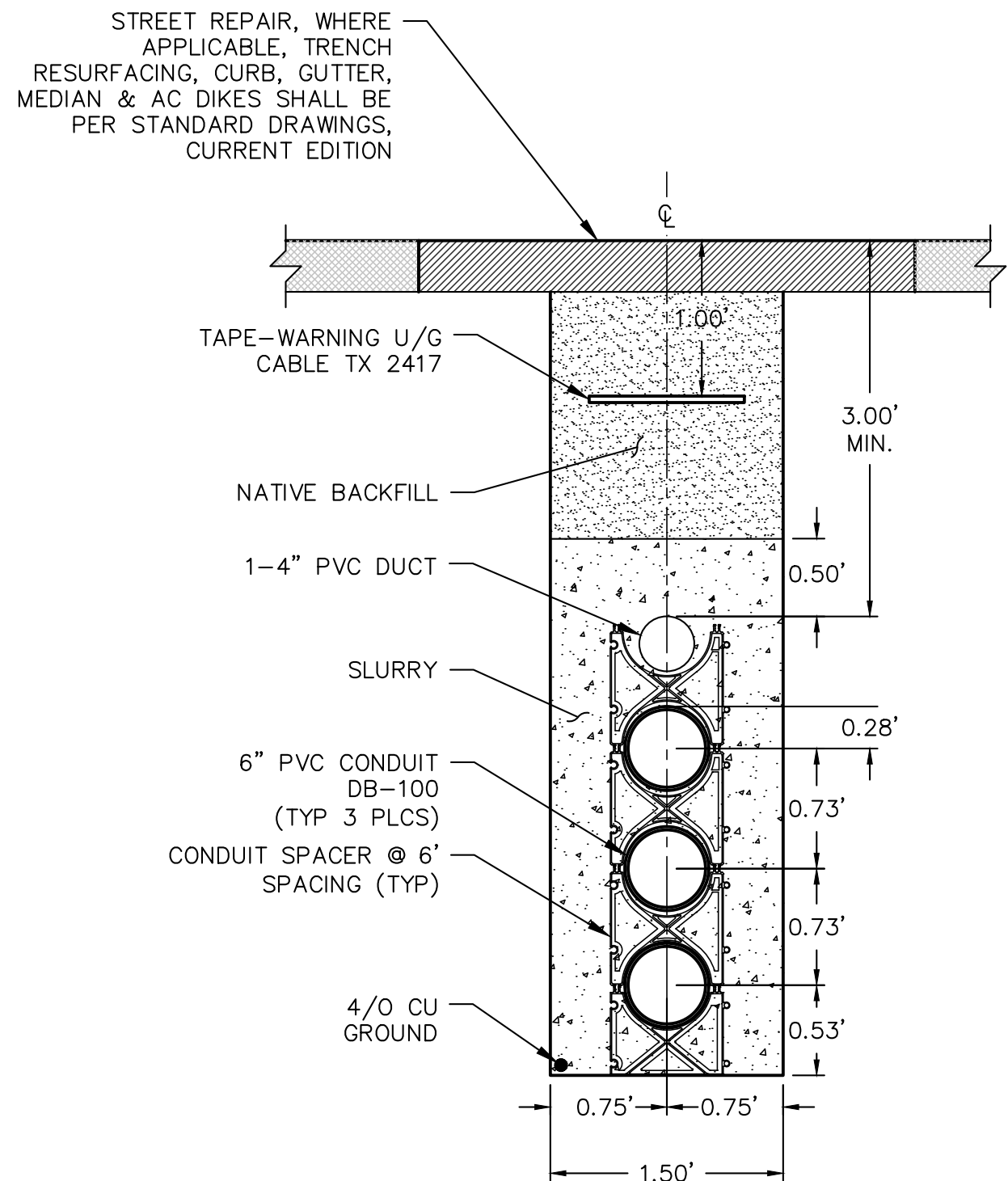
CORMORANT UNDERGROUND 115KV
GEN-TIE

DRAWING NUMBER
24-CGT115-6A

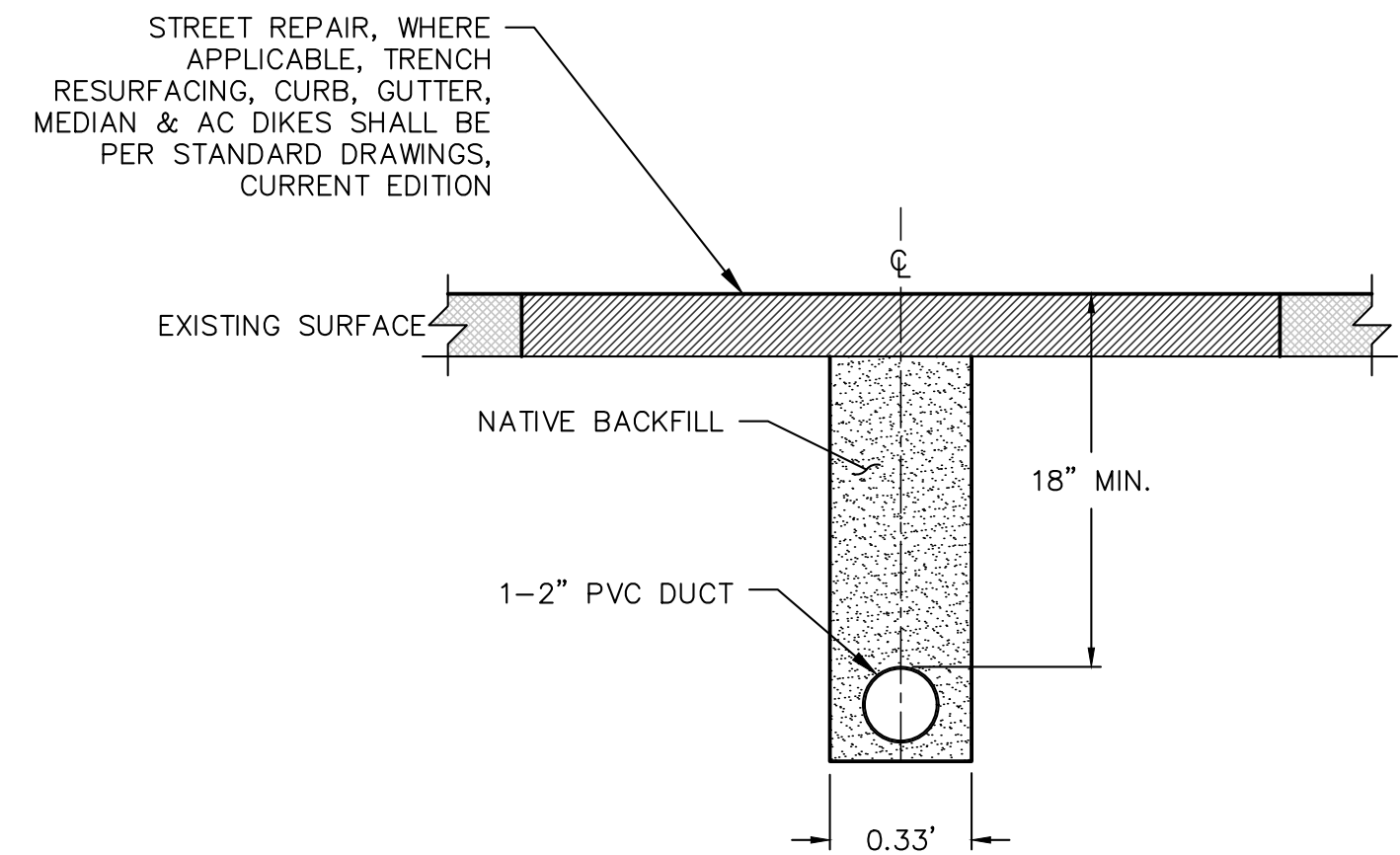
10% PRELIMINARY - NOT FOR CONSTRUCTION



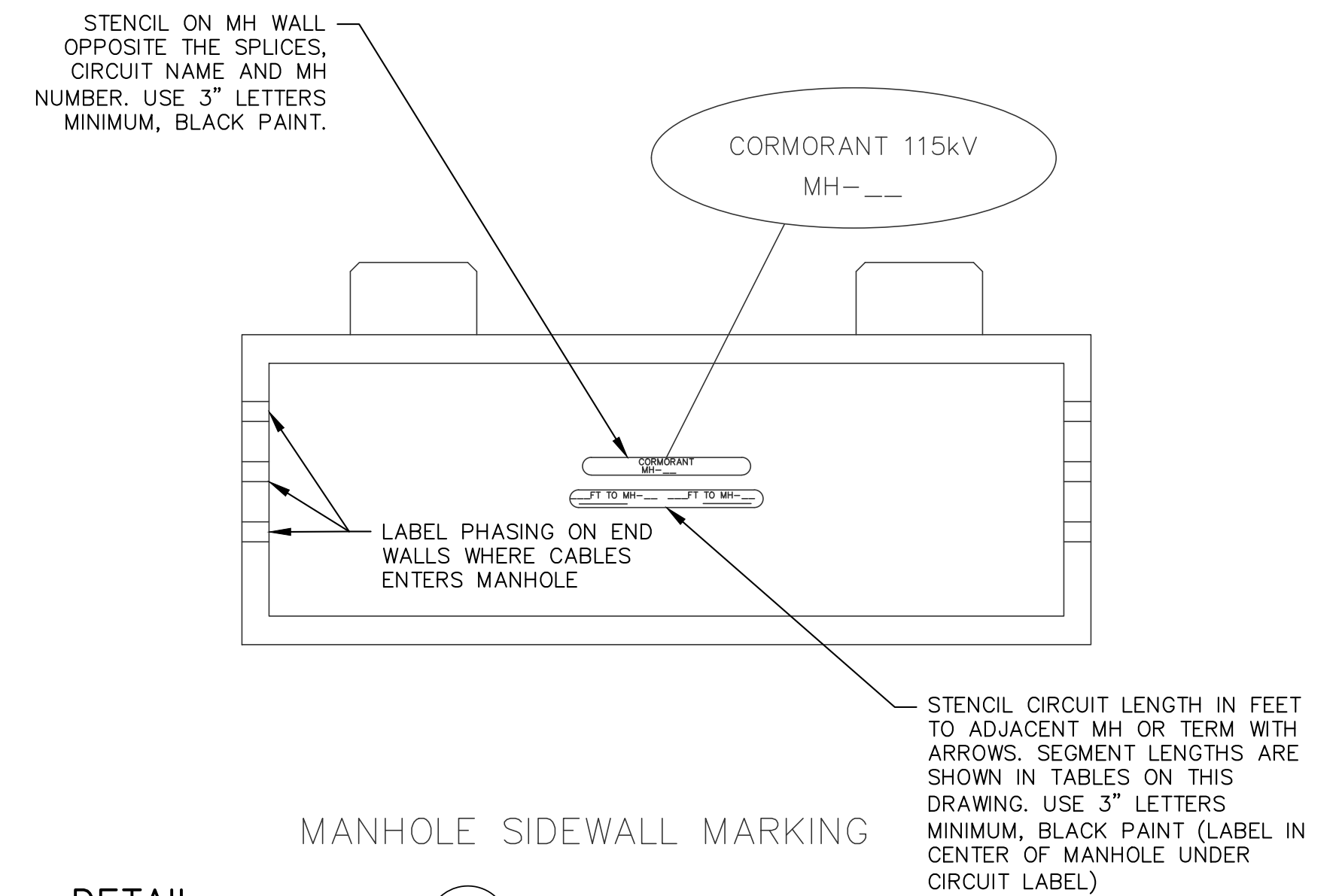
DETAIL 1
SQUARE CONFIG. THREE CONDUITS - SIX INCH DIAM.
NOT TO SCALE



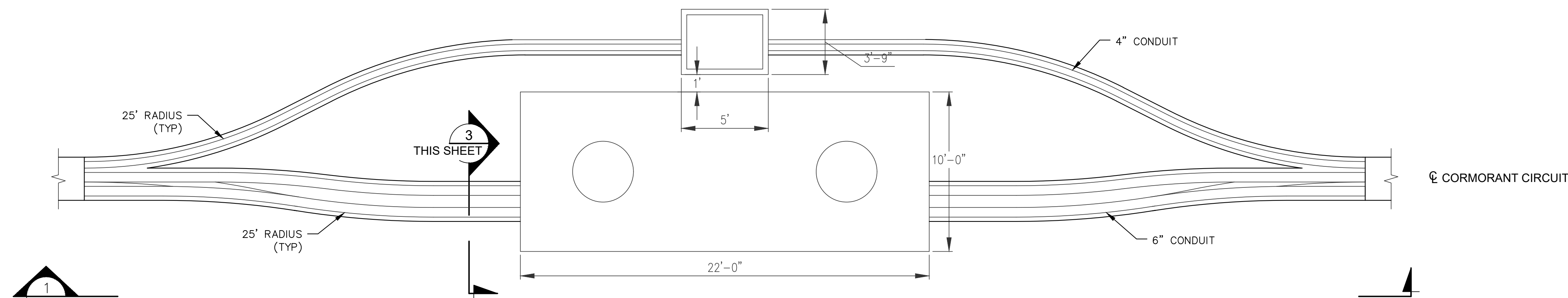
DETAIL 2
THREE CONDUITS - SIX INCH DIAM.
NOT TO SCALE



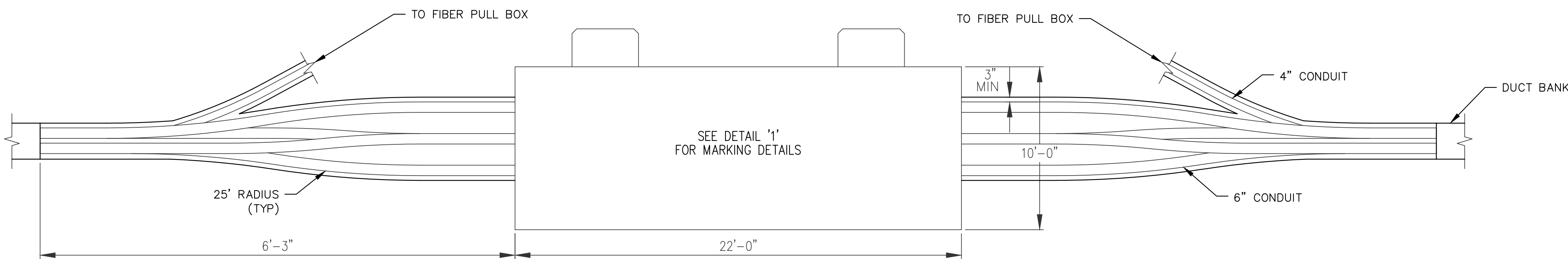
DETAIL 3
ONE CONDUIT - FOUR INCH DIAM.
NOT TO SCALE



DETAIL
SCALE 1"=4'-0"
1 THIS SHEET

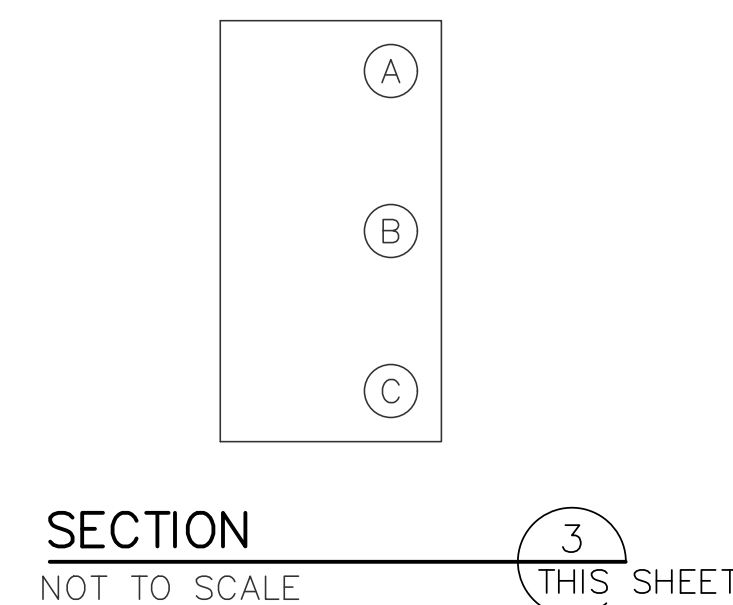


TYPICAL MANHOLE TRANSITION LAYOUT

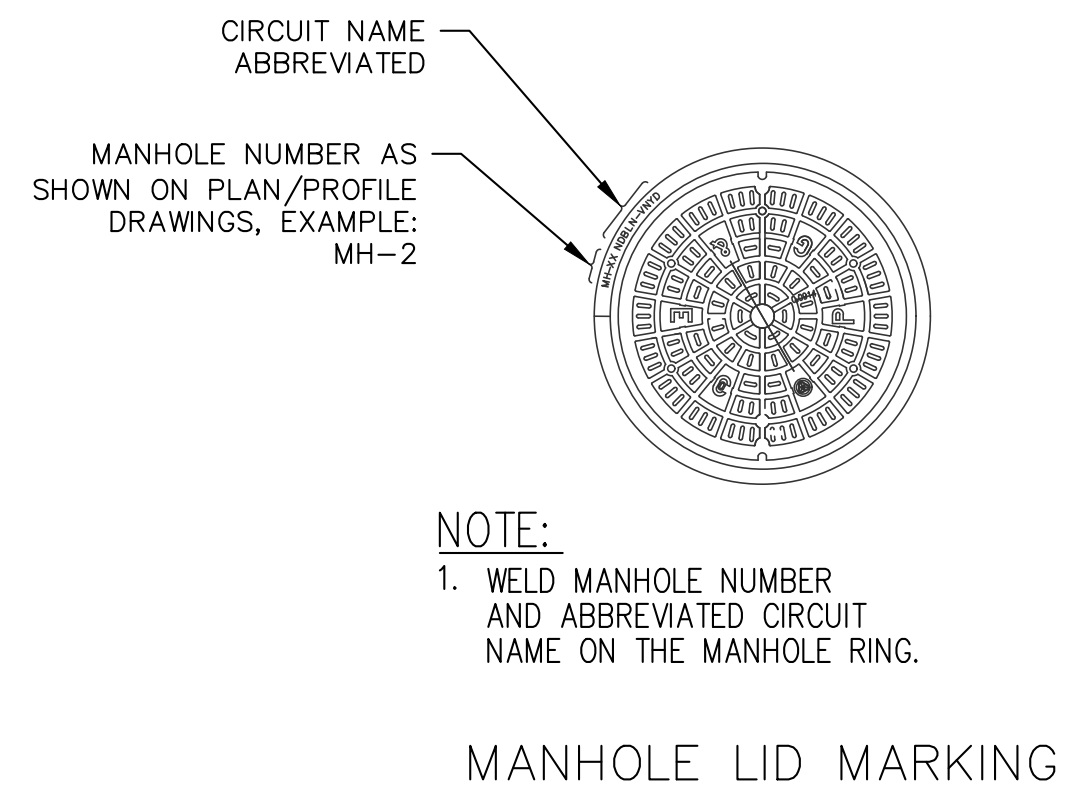


SECTION
NOT TO SCALE
1 THIS SHEET

SCALE IS ACCURATE FOR 24"x36" SHEET PLOT.
REPRODUCTIONS ON ANY OTHER SIZE SHEET
DOES NOT REPRESENT TRUE SCALE.



SECTION
NOT TO SCALE
3 THIS SHEET

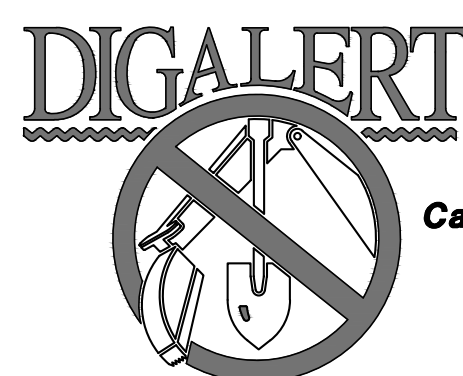


NOTE:
1. WELD MANHOLE NUMBER
AND ABBREVIATED CIRCUIT
NAME ON THE MANHOLE RING.

MANHOLE LID MARKING

NIV5

15002 AVENUE OF SCIENCE, SUITE 200 SAN DIEGO, CA 92128
658.385.0500 TEL. 658.385.0400 FAX WWW.NIV5.COM



Call 2 Working Days
Before You Dig!
811

DRAWN BY:	NVS	E
DATE:	7/25/2024	D
NVS JOB:	----	C
PROJ. NO.:	----	B
CONST. NO.:	----	A

PLAN & PROFILE	----	----
HORIZONTAL:	N/A	----
VERTICAL:	N/A	----

REV BUDGET CONST ORDER

TRENCH & SUBSTRUCTURES
CHANGE

SK IP NV5 DK
DWN CHKD APPV DATE

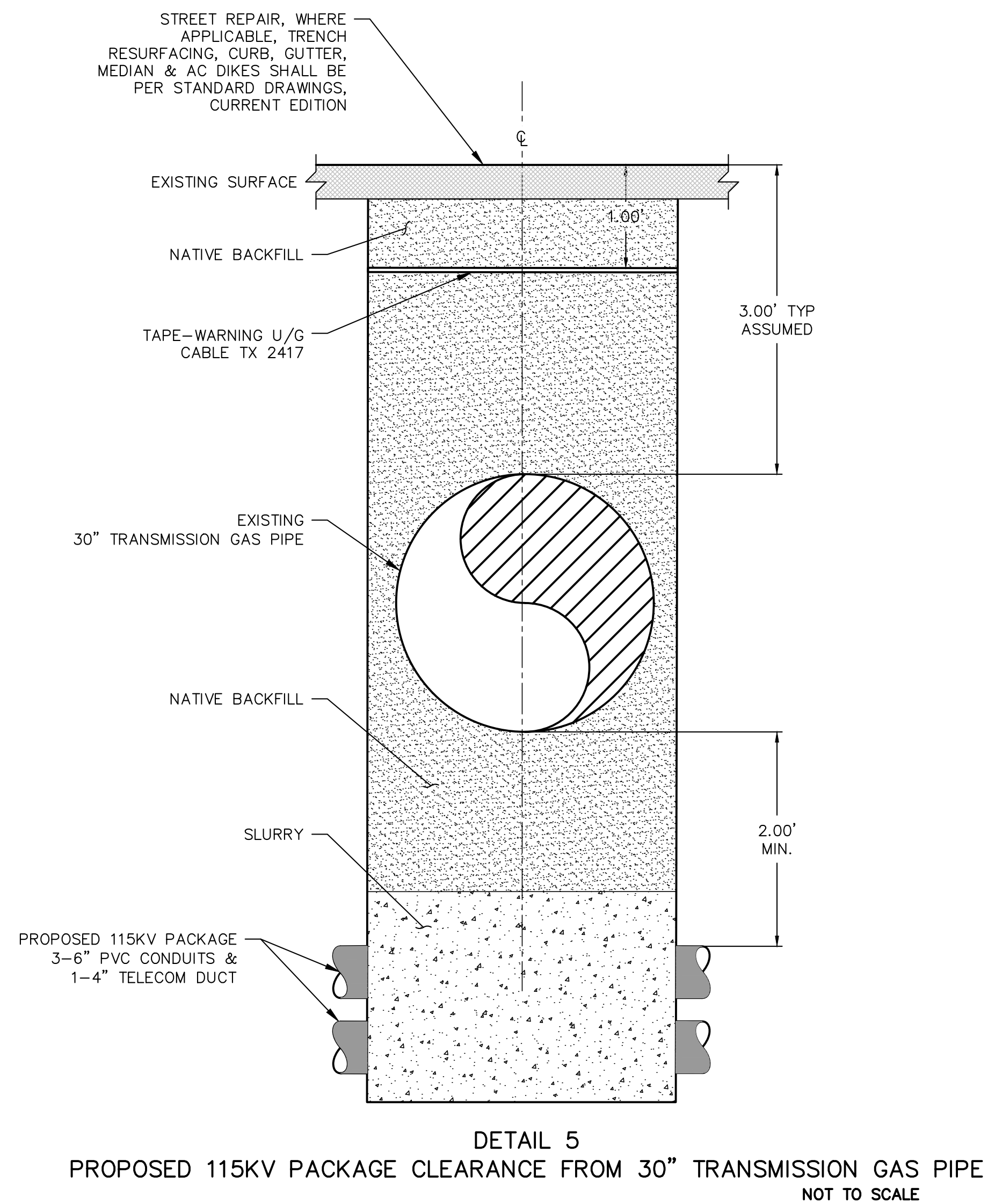
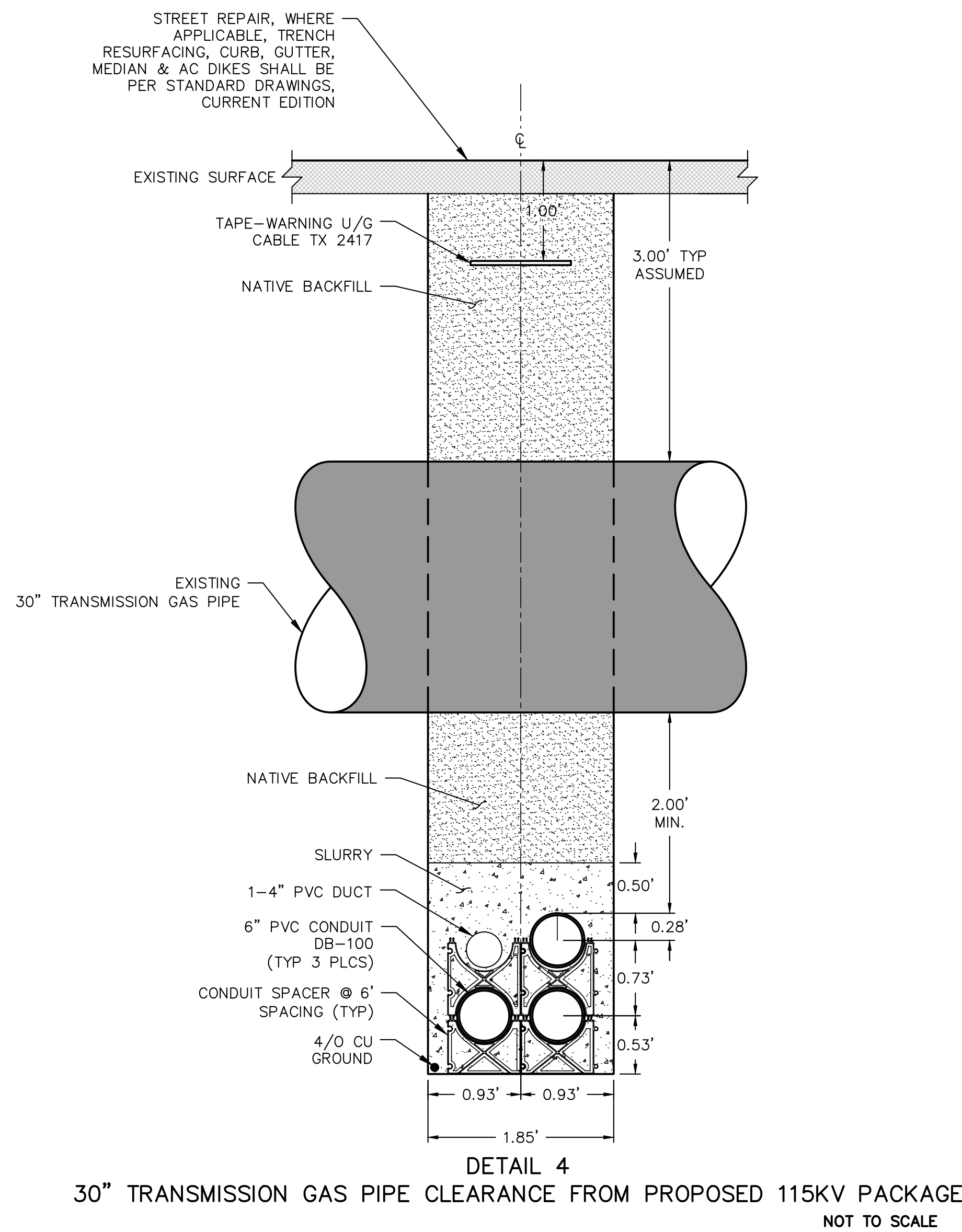


DETAILS
CORMORANT 115KV

SCALE: AS SHOWN SHEET 7 OF 8

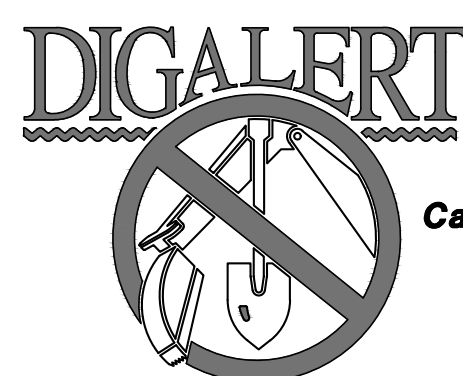
CORMORANT UNDERGROUND 115KV
GEN-TIE

DRAWING NUMBER
24-CGT115-7



N|V|5

15002 AVENUE OF SCIENCE, SUITE 200
858.385.0500 TEL 858.385.0400 FAX
SAN DIEGO, CA 92128
WWW.NV5.COM



**Call 2 Working Days
Before You Dig!
811**

DRAWN BY: NV5
DATE: 7/25/2024
NV5 JOB: -----
PROJ. NO. -----
CONST. NO. -----

PLAN & PROFILE
HORIZONTAL: N/A
VERTICAL: N/A

E
D
C
B
A

REV BUDGET CONST ORDER

TRENCH & SUBSTRUCTURES

CHANGE

SK IP NV5 DK
DWN CHKD APPV DATE



**GAS CLEARANCE DETAILS
CORMORANT 115KV**

SCALE: AS SHOWN

SHEET 8 OF 8

**CORMORANT UNDERGROUND 115KV
GEN-TIE**

DRAWING NUMBER
24-CGT115-8



Project Phasing Outline

Economic and Community Development
City of Daly City
333 90th Street
Daly City, CA 94015

In relation to:
2150 Geneva Avenue (APN # 005-050-020)
Construction and Operation of a 250 MW Battery Storage System
General Plan Amendment: GPA-11-22-015959
Zoning Amendment: ZC-11-22-015960
Design Review Minor: DR-11-22-015961
Use Permit Concurrent: UPR-11-22-015962

Daly City Economic and Community Development,

As our Cormorant project is intended to be constructed in two phases, we would like to submit this outline of activities as part of our completeness review. It is our understanding that this letter, as well as the details in the project description and design package, will allow for our Use Permit to be applicable for both phases of our project.

The first phase will include proposed offsite improvements, including the entirety of the proposed generation transmission line and telecommunications lines. Regarding onsite improvements, the initial phase will include all perimeter fencing, site grading, access road construction, and stormwater facilities. This phase will also include placement of approximately 75% of the proposed BESS modules and related medium voltage collection lines, medium voltage transformers, and inverters; and one of the two proposed high voltage transformers.

The second phase of construction is anticipated to be completed approximately one to six years after the initial phase of construction is completed and would include installation of the remaining 25% of the proposed BESS modules and related medium voltage collection lines, medium voltage transformers, and inverters; and the second of the two proposed high voltage transformers.

Thank you for your consideration,

Cormorant Energy Storage, LLC
c/o Sam Walch
8800 N. Gainey Center Drive, Suite 100
Scottsdale, AZ 85258



Memorandum

To: John Meinecke, Arevon Energy

Sam Walch, Arevon Energy

From: Peter Piller, Managing Principal

Jared Rodio, Manager

Date: June 2024

Re: **Cormorant Energy Storage – Executive Summary of Fiscal Revenue Analysis**

The Cormorant Energy Storage project (the “Project”) is located within the City of Daly (“City”) adjacent to the Cow Palace Arena Event Center along Carter Street. The site was originally a drive-in movie theater and has been marketed as a potential retail site, however after a decade the landowner has not been able to get a retailer or retail developer to develop the site due to the limited access and low visibility from Geneva Avenue, the closest major roadway. At the request of Arevon Energy, the Project applicant, DPFG has prepared a Fiscal Revenue Analysis to estimate the major **annual fiscal tax revenues** that the Project may generate, under multiple scenarios, when at full build-out, and under stabilized operating conditions for the City. The development scenarios analyzed in this report are the Project, an energy storage facility, an office development, a multi-family residential development, and a retail garden center. The assessed value for the Project was provided by Arevon Energy. The assessed values for the other land uses were determined by using recent market data and recent sales within the area, which are noted and detailed in the Appendices. Additional research and averages were used to determine the potential characteristics of the alternative scenarios. For several of the uses the market data provided ranges and to be conservative in our comparison, this analysis used the higher ranges for purposes of generating revenue.

The major annual fiscal tax revenues analyzed include the following:

- **Property Taxes:** In addition to other ad valorem charges imposed by various local agencies, landowners in the State of California (“State”) are required to pay annual property taxes of 1% on the assessed value of their property pursuant to Proposition 13. Each City in California is divided into tax rate areas (“TRA”). After the basic 1% property tax is collected by the County, the tax is allocated to various local agencies based on each agency’s share of the basic tax within the property’s applicable TRA.
- **Property Taxes In-Lieu of Vehicle License Fees (“VLF”):** In May 2004, Governor Schwarzenegger proposed a swap of city and county VLF revenue for additional property tax share as part of a budget agreement between the State and local governments. Under this legislation, property tax in-lieu of VLF is allocated to cities and counties pursuant to a complex formula involving each agency’s

relative share of assessed value. The property tax in-lieu of VLF revenue that will be generated by the Project can be estimated by determining the (i) percentage growth in the total assessed value of the City attributable to the Project and multiplying this result by (ii) the property tax in-lieu of VLF revenue expected to be received by the City.

- **On-Site Sales Tax:** Under the California Sales Tax Law, a tax is imposed on the sale of tangible personal property on all retailers in the State. This tax is measured by the retailer's gross receipts and the city that the business is located in receives a base 1.00% of the total sales taxes paid. In addition to the base 1.00%, on November 8, 2020, a voter approved 0.50% sales tax known as Measure Q was passed increasing the total City sales tax to 1.50%.

The major annual fiscal tax revenues for each scenario result in an estimated annual fiscal revenue, for the City, of **\$1,071,747** for the Cormorant Energy Storage, **\$179,685** for the Office, **\$759,234** for the Multi-Family Residential, and **\$80,831** for the Garden Center. The scenario results are summarized on Table 1 below.

Table 1: Annual Fiscal Revenue Analysis Summary

Scenario	Property Taxes	Property Taxes In-Lieu of VLF	On-Site Sales Tax	Total
Cormorant Energy Storage	\$851,781	\$219,966	\$0	\$1,071,747
Office	\$142,807	\$36,879	\$0	\$179,685
Multi-Family Residential	\$552,506	\$142,681	\$64,047	\$759,234
Garden Center	\$16,556	\$4,275	\$60,000	\$80,831

Based on the above table and the analysis included in the appendices, our report concludes the following:

1. Given the inability of the current landowner to sell the land as a designated retail site the analyzed scenarios represent a diverse mix of potential uses that could be developed. However, the site has significant access difficulties which makes development under most real estate uses not feasible as detailed below.
 - a. The site has only a single access point at Carter St., which is a two-lane street. For most uses this entry point would need to be redeveloped and a traffic light added. This is especially true for the residential use which would generate approximately 1,800 Average Daily Trips ("ADT") assuming 300 units and 6 ADTs per unit. The other uses would also require street improvements for Carter St. and the street would likely need to be widened depending on the commercial use to allow for larger volume of vehicles or increases in traffic.
 - b. Because the site has only a single access point from Carter St. there is no alternative access for emergency responder vehicles and no alternative access to the site for residents or commercial tenants. This could limit the intensity of development options and create a potential safety issue when evacuating or accessing the site and is one of the primary reasons that most real estate uses, especially residential development, is problematic.

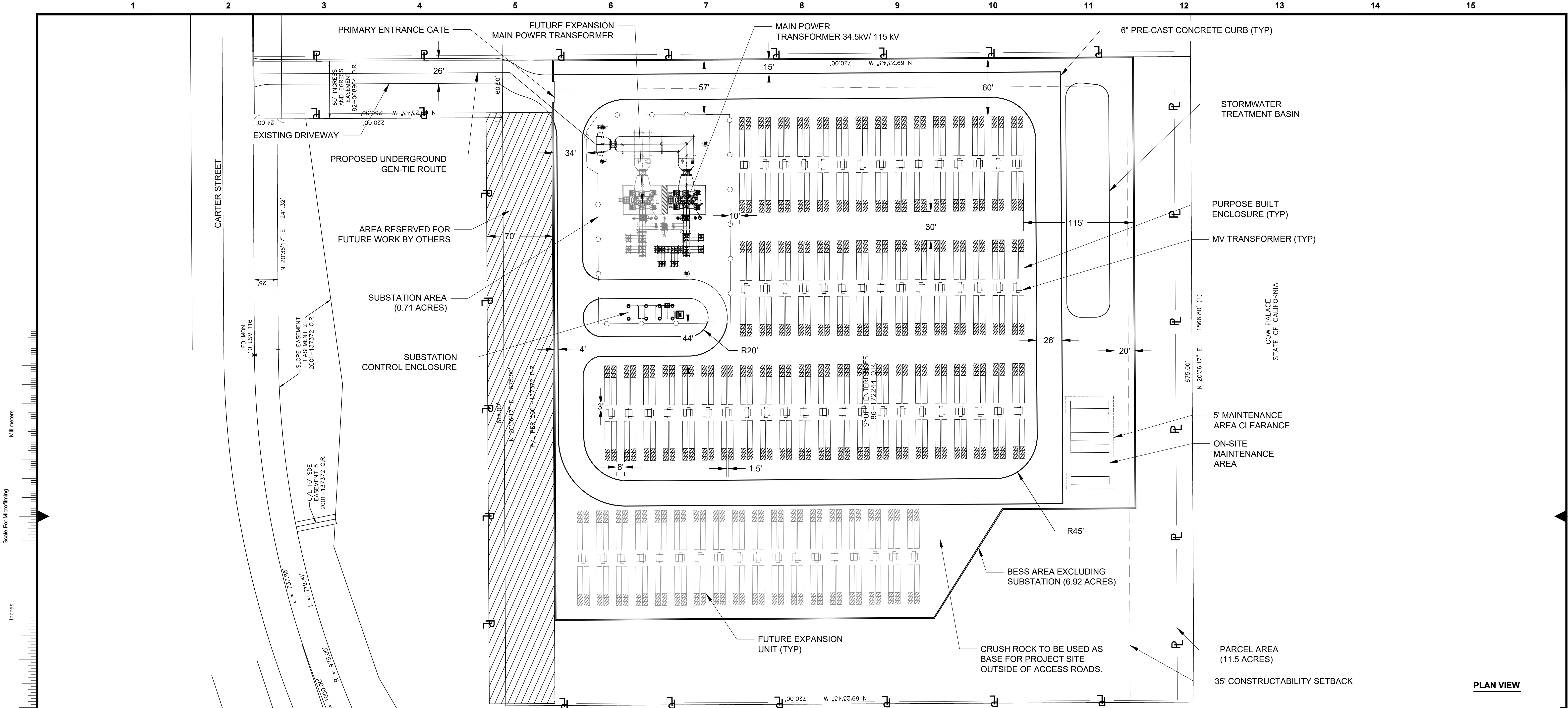
- c. The site also has low visibility from traffic due to the site sitting significantly below Carter St., away from Geneva Avenue, and the nearby Cow Palace Arena landscaping which is detrimental to commercial uses.
2. The use that generates the largest annual fiscal revenues of the uses analyzed is the Project. Although the site does not generate sales tax, it has the highest required site improvements for development, resulting in a higher total revenue for the City.
3. The second highest revenue land use is assumed to be a 300 unit for sale multifamily residential development. Please note however that this analysis **does not** include an estimation of costs and expenditures that would need to be incurred by the City for each of the uses. Based on standard fiscal impact methods for analyzing City expenditures, the residential use would also incur the highest amount of expenses for the City to serve of all the scenarios analyzed in this report. The current site does not have any full-time equivalent employees that need to be served by the City. After development all the scenarios analyzed, except for the Cormorant Energy Storage site, will generate residents or employees. This will result in a higher cost for the City to maintain these uses over the existing use or the Project use thereby reducing the total annual fiscal surplus received by the City. This expense analysis is outside the scope of this report and the totals shown in Table 1 are gross revenues and do not reflect the additional costs that these scenarios would cause the City to incur.
4. Several other uses were analyzed, including single family detached (“SFD”), which were not included in this report. Public storage was not feasible as the site was too large and the return to the City would be very small compared to the other uses. SFD was analyzed based on a very hypothetical land plan for the site using estimates from recent sales in the general vicinity. This resulted in an average sale price of \$1,520,000 for an average size of 2,180 SqFt being built on an average sized lot of 3,600 SqFt. The site is 11.16 acres which results in an estimated 486,130 SqFt. Assuming 30% of the site is streets, parks, or other non-residential space, this results in 340,291 SqFt of building space which yields approximately 95 SFD units. These homes would have a total assessed value of \$144,400,000 which would generate approximately \$332,425 in property taxes to the City. This is significantly below the \$552,506 generated by the multi-family development in Exhibit D. The SFD development would also result in lower sales taxes due to lower anticipated residents from the loss of density.

Additionally, we have estimated that the proposed Cormorant Energy Storage scenario will generate approximately **\$2,925,000 for Phase 1 in 2026 and \$1,050,000 for Phase 2 in 2030** in ONE-TIME sales tax revenues to the City from the purchase of materials and equipment related to the proposed Project for a total One-Time sales tax of **\$3,975,000** going to the City, as shown in Appendix F.

Appendices:

Appendix A – Cormorant Energy Storage Site Map
Appendix B – Fiscal Revenue Analysis for Cormorant Energy Storage
Appendix C – Fiscal Revenue Analysis for Office Development
Appendix D – Fiscal Revenue Analysis for Multi-Family Residential Development
Appendix E – Fiscal Revenue Analysis for Garden Center Development
Appendix F – Cormorant Energy Storage One-Time Sales Taxes
Appendix G – DPFPG Experience

Appendix A: Cormorant Energy Storage Site Map



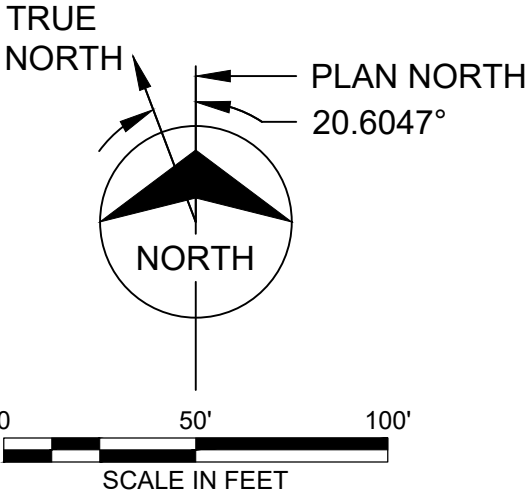
ENERGY STORAGE SYSTEM DESCRIPTION	
NAMEPLATE PHASE 1	188 MW / 752 MWH
NAMEPLATE PHASE 2	62 MW / 248 MWH
NAMEPLATE TOTAL	250 MW / 1000 MWH

BESS MATERIAL LIST	
NUMBER OF BATTERY ENCLOSURES (BOL)	212
NUMBER OF BATTERY ENCLOSURES (EOL)	284
NUMBER OF MV TRANSFORMERS (BOL)	53
NUMBER OF MV TRANSFORMERS (EOL)	71

LEGEND:	
	PROPERTY LINE
	8'-6" PRE-CAST CONCRETE WALL W/ 1'-6" CLIMBING DETERRENT
	8' TUBULAR METAL FENCE
	SLIDING GATE

ABBREVIATION LIST:	
BESS	- BATTERY ENERGY STORAGE SYSTEM
MV	- MEDIUM VOLTAGE
POI	- POINT OF INTERCONNECTION
TYP	- TYPICAL
BOL	- BEGINNING OF LIFE
EOL	- END OF LIFE

NOTES:	
1. FINAL LAYOUT SUBJECT TO CHANGE BASED ON FINAL ENVIRONMENTAL AND CIVIL SETBACK DISTANCES.	
2. EQUIPMENT QUANTITIES, CONFIGURATION, AND FOOTPRINT SUBJECT TO CHANGE BASED ON FINAL BESS TECHNOLOGY SELECTION AND ADDITIONAL PROJECT DUE DILIGENCE.	
3. EXISTING DRIVEWAY TO BE ASPHALTED AT COMPLETION OF CONSTRUCTION IN COMPLIANCE WITH CALTRANS ROAD BASED DESIGN AND CITY STANDARD DWG S-3 DETAIL.	
4. PROPOSED SERVICE ROADS WITHIN BESS PROJECT FACILITY SHALL USE NON-DUST GENERATING GRAVEL ROAD BASE IN ACCORDANCE WITH MRP.	



PRELIMINARY - NOT FOR CONSTRUCTION

no.	date	by	ckd	description
B	05/10/24	EDV	AR	ISSUED FOR CONDITIONAL USE PERMIT
A	04/02/24	EDV	AR	ISSUED FOR CONDITIONAL USE PERMIT

no.	date	by	ckd	description

9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.

designed
E. VILA

detailed
E. VILA

SAN MATEO COUNTY, CALIFORNIA

CORMORANT ENERGY STORAGE, LLC BATTERY ENERGY STORAGE SYSTEM SITE PLAN	
project	contract
drawing	rev.
LAYOUT — B	
sheet 1 of 1 sheets	file: CormorantLayout188MW.dwg

Appendix B:

Fiscal Revenue Analysis for Cormorant Energy Storage

Table 1
Fiscal Revenue Analysis Summary
Comorant Energy Storage

MAJOR TAX REVENUES					
<u>Recurring Annual Revenues:</u>	<u>Phase 1 - 2026</u>		<u>Phase 2 - 2030</u>		<u>Total</u>
Property Taxes	\$	633,080	\$	218,700	\$ 851,781 Table 3
Property Taxes In Lieu of MVLF		163,488		56,478	219,966 Table 4
Offsite Sales Tax		-		-	-
Total Annual Tax Revenue	\$	796,569	\$	275,178	\$ 1,071,747

Table 2
Land Use and Assessed Value Assumptions
Comorant Energy Storage

Energy Storage	
Probable Tenant Type	Total Assessed Value
Phase 1 - 2026	275,000,000
Phase 2 - 2030	95,000,000
Subtotal Energy Storage	\$ 370,000,000
Total Project Assessed Value	\$ 370,000,000

Footnotes:

(a) Total assessed value per Developer. Assessed Value represents estimated costs as of May 2024. Actual assessed value is subject to change pending final purchase of equipment and development of the site.

Table 3
Share of the Basic Tax Calculation
Comorant Energy Storage

Agency	TRA (a)
	005-061
General County Tax	19.691511%
City of Daly	23.021098%
Bayshore Elementary General Purpose	24.127753%
Jefferson High General Purpose	20.373872%
Sm Jr College General Purpose	5.634519%
Bayshore Sanitary District	3.752420%
Bay Area Air Quality Management	0.173633%
County Harbor District	0.292908%
County Education Tax	2.932287%
Total	100.0000%
City of Daly Total	23.0211%
Total Assessed Value - Phase 1 - 2026	\$ 275,000,000
Base 1% Ad-Valorem Tax	1.00%
Base Ad-Valorem Revenue	\$ 2,750,000
City of Daly Allocation	\$ 633,080
Total Assessed Value - Phase 2 - 2030	\$ 95,000,000
Base 1% Ad-Valorem Tax	1.00%
Base Ad-Valorem Revenue	\$ 950,000
City of Daly Allocation	\$ 218,700
Total City of Daly Property Tax	\$ 851,781

Footnotes:

Source: Fiscal Year 2023-24 Share of the Basic Tax per County of San Mateo Auditor-Controller's Office.

(a) Shares of the basic tax that are received by the City for each TRA are highlighted in bold print.

Table 4
Property Taxes In Lieu of MVLF
Comorant Energy Storage

FY 2023/24 In Lieu MVLF Allocation to City	\$	9,600,000	(a)
FY 2023/24 City of Daly Assessed Value		16,147,933,014	(b)
Total Project Assessed Value Phase 1 -2026 from Table 2		275,000,000	
AV Growth from Project		1.703%	
Annual City Property Taxes In Lieu of MVLF	\$	163,488	

FY 2023/24 In Lieu MVLF Allocation to City	\$	9,600,000	(a)
FY 2023/24 City of Daly Assessed Value		16,147,933,014	(b)
Total Project Assessed Value Phase 2 - 2030 from Table 2		95,000,000	
AV Growth from Project		0.588%	
Annual City Property Taxes In Lieu of MVLF	\$	56,478	

Annual City Property Taxes In Lieu of MVLF	\$	219,966	
---	-----------	----------------	--

Footnotes:

(a) Per City of Daly Comprehensive Annual Operating and Capital Budget FY 24; General Fund - Comparison of Revenue Budgets (Page 43).

(b) Per San Mateo County Assessor-Recorder-Clerk Office 2023-24 Assessment Roll.

Appendix C: Fiscal Revenue Analysis for Office Development

Table 1
Fiscal Revenue Summary
Office Development

MAJOR TAX REVENUES			
<u>Recurring Annual Revenues:</u>		<u>2023 - 2024</u>	
Property Taxes	\$	142,807	Table 3
Property Taxes In Lieu of MVLF		36,879	Table 4
On-site Sales Tax		-	Table 5
Total Annual Tax Revenue	\$	179,685	

Table 2
Land Use and Assessed Value Assumptions
Office Development

Business and Warehouse	
Probable Tenant Type	Total Assessed Value (a)
Office Building	62,032,920
Subtotal Business and Warehouse	\$ 62,032,920
Total Project Assessed Value	\$ 62,032,920

Footnotes:

(a) Estimated assessed value per nearby commercial office properties. Analysis estimates approximately \$5,560,000 per acre in assessed value. Estimated building SqFt of 200,000 results in an estimated assessed value of \$310 per SqFt.

Table 3
Share of the Basic Tax Calculation
Office Development

Agency	TRA (a)
	005-061
General County Tax	19.691511%
City of Daly	23.021098%
Bayshore Elementary General Purpose	24.127753%
Jefferson High General Purpose	20.373872%
Sm Jr College General Purpose	5.634519%
Bayshore Sanitary District	3.752420%
Bay Area Air Quality Management	0.173633%
County Harbor District	0.292908%
County Education Tax	2.932287%
Total	100.0000%
City of Daly Total	23.0211%
Total Assessed Value - Phase 1	\$ 62,032,920
Base 1% Ad-Valorem Tax	1.00%
Base Ad-Valorem Revenue	\$ 620,329
City of Daly Allocation	\$ 142,807

Footnotes:

Source: Fiscal Year 2023-24 Share of the Basic Tax per County of San Mateo Auditor-Controller's Office.

(a) Shares of the basic tax that are received by the City for each TRA are highlighted in bold print.

Table 4
Property Taxes In Lieu of MVLF
Office Development

FY 2023/24 In Lieu MVLF Allocation to City	\$	9,600,000	(a)
FY 2023/24 City of Daly Assessed Value		16,147,933,014	(b)
Total Project Assessed Value from Table 2		62,032,920	
AV Growth from Project		0.384%	
Annual County Property Taxes In Lieu of MVLF	\$	36,879	

Footnotes:

(a) Per City of Daly Comprehensive Annual Operating and Capital Budget FY 24; General Fund - Comparison of Revenue Budgets (Page 43).

(b) Per San Mateo County Assessor-Recorder-Clerk Office 2023-24 Assessment Roll.

Table 6
Full Time Equivalent Employment
Office Development

Business and Warehouse	
Tenant Type	Estimated Employees
Office Building	400
Total Estimated Employees	400

Footnotes:

(a) Estimated employees per square foot per the U.S. Energy Information Administration and DPFG estimates based on industry knowledge and review of various data sources.

Appendix D:

Fiscal Revenue Analysis for Multi-Family Residential Development

Table 1
Fiscal Revenue Summary
Multi-Family Residential Development

MAJOR TAX REVENUES			
<u>Recurring Annual Revenues:</u>		<u>2023 - 2024</u>	
Property Taxes	\$	552,506	Table 3
Property Taxes In Lieu of MVLF		142,681	Table 4
On-site Sales Tax		64,047	Table 5
Total Annual Tax Revenue	\$	759,234	

Table 2
Land Use and Assessed Value Assumptions
Multi-Family Residential Development

Business and Warehouse	
Probable Tenant Type	Total Assessed Value
Multi-Family Residential Development	240,000,000
Subtotal Business and Warehouse	\$ 240,000,000

Total Project Assessed Value	\$ 240,000,000
-------------------------------------	-----------------------

Footnotes:

(a) Total Assessed value estimate per recent sales in the area for condominiums. This resulted in an average assessed value of \$800,000 per unit. Site is estimated to include 300 units.

Table 3
Share of the Basic Tax Calculation
Multi-Family Residential Development

Agency	TRA (a)
	005-061
General County Tax	19.691511%
City of Daly	23.021098%
Bayshore Elementary General Purpose	24.127753%
Jefferson High General Purpose	20.373872%
Sm Jr College General Purpose	5.634519%
Bayshore Sanitary District	3.752420%
Bay Area Air Quality Management	0.173633%
County Harbor District	0.292908%
County Education Tax	2.932287%
Total	100.0000%
City of Daly Total	23.0211%
Total Assessed Value - Phase 1	\$ 240,000,000
Base 1% Ad-Valorem Tax	1.00%
Base Ad-Valorem Revenue	\$ 2,400,000
City of Daly Allocation	\$ 552,506

Footnotes:

Source: Fiscal Year 2023-24 Share of the Basic Tax per County of San Mateo Auditor-Controller's Office.

(a) Shares of the basic tax that are received by the City for each TRA are highlighted in bold print.

Table 4
Property Taxes In Lieu of MVLF
Multi-Family Residential Development

FY 2023/24 In Lieu MVLF Allocation to City	\$	9,600,000	(a)
FY 2023/24 City of Daly Assessed Value		16,147,933,014	(b)
Total Project Assessed Value from Table 2		240,000,000	
AV Growth from Project		1.486%	
Annual County Property Taxes In Lieu of MVLF		\$	142,681

Footnotes:

(a) Per City of Daly Comprehensive Annual Operating and Capital Budget FY 24; General Fund - Comparison of Revenue Budgets (Page 43).

(b) Per San Mateo County Assessor-Recorder-Clerk Office 2023-24 Assessment Roll.

Table 5
Off-Site Sales Tax Revenue
Multi-Family Residential Development

Spending by Residents:	Multi Family Residential	
	Factor	Off-Site Sales Tax
Aggregate Incomes (from table below)	\$15K per Unit	\$ 47,400,000
Consumer Expenditures (a)	72.9%	34,553,138
Taxable Spending (a)	24.7%	\$ 8,539,590
Less: On-site Capture	0.0%	\$ -
Less: Capture Outside City Boundaries (b)	50.0%	(4,269,795)
Net Taxable Spending in City		\$ 4,269,795
Annual Sales Taxes to City	1.0%	\$ 42,698
Measure Q Annual Sales Tax	0.5%	\$ 21,349
Total Annual Sales Tax to City	1.5%	\$ 64,047

Household Income Calculation:		
Avg. Sales Price / Monthly Rent (c)		\$ 800,000
Down Payment	20%	160,000
Loan Amount		640,000
Interest Rate		5.0%
Term (years)		30
Annual Mortgage / Rent Payment		\$ 41,228
HOA	\$ 350	\$ 4,200
Maintenance/Insurance	\$ 50	600
Property Taxes	1.1769%	9,415
Total Annual Housing Costs		\$ 55,443
% Income spent on Housing		35%
Annual Income Required		158,409
Annual Income Required (rounded)		\$ 158,000

Footnotes:

(a) Per U.S. Department of Labor, Bureau of Labor Statistics Consumer Expenditure Survey, 2021-22 for San Francisco Metropolitan Statistical Area (MSA).

(b) Capture percentage represents DPFG's estimate based on location relative to other retail establishments in the market area.

Appendix E:

Fiscal Revenue Analysis for Garden Center Development

Table 1
Fiscal Revenue Summary
Garden Center

MAJOR TAX REVENUES			
<u>Recurring Annual Revenues:</u>		<u>2023 - 2024</u>	
Property Taxes	\$	16,556	Table 3
Property Taxes In Lieu of MVLF		4,275	Table 4
On-site Sales Tax		60,000	Table 5
Total Annual Tax Revenue	\$	80,831	

Table 2
Land Use and Assessed Value Assumptions
Garden Center

Business and Warehouse			
Probable Tenant Type	Land (a)	Improvements - Building (b)	Total Assessed Value
Plant Nursery	4,691,561	2,500,000	7,191,561
Subtotal Business and Warehouse			\$ 7,191,561
Total Project Assessed Value			\$ 7,191,561

Footnotes:
(a) Land value per site tax bill.
(b) Nursery improvement value estimated value per 2024 Assessed value of nearby nurseries.

Table 3
Share of the Basic Tax Calculation
Garden Center

Agency	TRA (a)
	005-061
General County Tax	19.691511%
City of Daly	23.021098%
Bayshore Elementary General Purpose	24.127753%
Jefferson High General Purpose	20.373872%
Sm Jr College General Purpose	5.634519%
Bayshore Sanitary District	3.752420%
Bay Area Air Quality Management	0.173633%
County Harbor District	0.292908%
County Education Tax	2.932287%
Total	100.0000%
City of Daly Total	23.0211%
Total Assessed Value - Phase 1	\$ 7,191,561
Base 1% Ad-Valorem Tax	1.00%
Base Ad-Valorem Revenue	\$ 71,916
City of Daly Allocation	\$ 16,556

Footnotes:

Source: Fiscal Year 2023-24 Share of the Basic Tax per County of San Mateo Auditor-Controller's Office.

(a) Shares of the basic tax that are received by the City for each TRA are highlighted in bold print.

Table 4
Property Taxes In Lieu of MVLF
Garden Center

FY 2023/24 In Lieu MVLF Allocation to City	\$	9,600,000	(a)
FY 2023/24 City of Daly Assessed Value		16,147,933,014	(b)
Total Project Assessed Value from Table 2		7,191,561	
AV Growth from Project		0.045%	
Annual County Property Taxes In Lieu of MVLF	\$	4,275	

Footnotes:

(a) Per City of Daly Comprehensive Annual Operating and Capital Budget FY 24; General Fund - Comparison of Revenue Budgets (Page 43).

(b) Per San Mateo County Assessor-Recorder-Clerk Office 2023-24 Assessment Roll.

Table 5
On-Site Sales Tax Revenue
Garden Center

Probable Tenant Type (a)		Total Estimated Taxable Sales (b)	
Plant Nursery		4,000,000	
Total		\$	4,000,000
Annual Sales Tax to City (Bradley-Burns)		1.00%	\$ 40,000
Annual Sales Tax to City (Measure Q)		0.50%	\$ 20,000
Total Annual Sales Tax to City		1.50%	\$ 60,000

Footnotes:

(a) Estimated tenant types per Developer.

(b) Total estimated sales per DPFG fiscal experience and research from various sources including the Giannini Foundation of Agricultural Economics University of California, Nursery Management. Values ranged from \$1,290,000 to \$3,000,000 in annual sales. This analysis assumes the higher value, increased by 33%, to compensate for the size of the nursery and to represent a higher end nursery than those currently found in the area.

Table 6
Full Time Equivalent Employment
Garden Center

Business and Warehouse	
Tenant Type	Estimated Employees
Plant Nursery	25
Total Estimated Employees	25

Footnotes:

(a) Estimated employees per square foot per the U.S. Energy Information Administration and DPFGE estimates based on industry knowledge and review of various data sources.

Appendix F:

Cormorant Energy Storage One-Time Sales Taxes

One-Time Sales Tax Revenue
Comorant Energy Storage

Probable Tenant Type (a)		Total Estimated Taxable Sales (a)	
Phase 1 - 2026		\$	195,000,000
Phase 2 - 2030			70,000,000
Toal		\$	265,000,000
Phase 1 - 2026 - One-Time Sales Tax to City			
One-Time Sales Tax to City (Bradley-Burns)	1.00%	\$	1,950,000
One-Time Sales Tax to City (Measure Q)	0.50%		975,000
Total Phase 1 - 2026 - One-Time Sales Tax to City	1.50%	\$	2,925,000
Phase 2 - 2030 - One-Time Sales Tax to City			
One-Time Sales Tax to City (Bradley-Burns)	1.00%	\$	700,000
One-Time Sales Tax to City (Measure Q)	0.50%		350,000
Total Phase 2 - 2030 - One-Time Sales Tax to City	1.50%	\$	1,050,000
Total One-Time Sales Tax to City	1.50%	\$	3,975,000

Footnotes:

(a) Per Developer. Represents the estimated point of sale value of anticipated equipment and fixtures as of May 2024.

Appendix G: DPFG Experience

DPFG is a national real estate consulting firm that represents land developers and builders on many land use related matters. The firm specializes in providing land development and financing solutions in the local market for its clients which include, but are not limited to, to the following areas:

Consulting Milestones:

- Completed over 2,500 Land Secured Public Financings with over \$16 billion in bonds.
- Completed over 275 Fiscal Impact Analysis Reviews and Reports.

DPFG has also prepared multiple energy storage fiscal analysis in Southern California. This includes a storage site in the County of Orange and another site in Los Angeles County.

- Negotiated over 350 School Mitigation Agreements.
- Completed over 70 Public Facilities Financing Reports.
- Completed over 600 Project Cash Flows, Valuation and Feasibility Analysis.
- Completed over 4,000 Disclosure Analysis Reviews and Reports.
- Completed over 100 Redevelopment projects.
- Restructured over 100 Land Secured Public Financing Districts.
- Completed over 4,000 Property Tax Appeals nationwide.
- Look Back Diagnostic findings reached over \$125 million.

The Management Team at DPFG has over 300 years of combined real estate experience in performing the firm's core services and other general real estate consulting services as follows:

DPFG Executive Management Team:

- Chris Austin – Managing Principal 21 Years Experience
- Chris Cole – Managing Principal 20 Years Experience
- Chris Lightburne – Managing Principal 32 Years Experience
- Peter Piller – Managing Principal 35 Years Experience

DPFG Senior Management Team:

- Lucy Gallo – Managing Principal 20 Years Experience
- Rick Rosenberg – Managing Principal 40 Years Experience
- Chris Hall – Director 16 Years Experience
- Kelly Restelli – Sr. Manager 8 Years Experience
- Mary Lu – Sr. Manager 15 Years Experience
- Vanessa Stowe – Sr. Manager 8 Years Experience
- Zach Crawford – Sr. Manager 6 Years Experience
- Marc Santos – Disclosure Manager 14 Years Experience
- Eric Quinlan – Manager 16 Years Experience
- Joey Lujan – Manager 10 Years Experience
- Manju Pokharel – Manager 5 Years Experience
- Matt Johnson – Manager 16 Years Experience
- Nathan Morris – Manager 11 Years Experience

DPFG has over 40 other professionals that are at work with the Management Team to help process and solve their client's jobs and problems.



July 15, 2024

Tatum Mothershead
Director of Economic and Community Development
City of Daly City
333 90th Street
Daly City, CA 94015

To the Department of Economic and Community Development:

We are pleased to submit this summary letter of benefits and commitments we intend and anticipate for the proposed Cormorant Energy Storage project at 2150 Geneva Avenue. As we seek a General Plan amendment, we felt it was important that we articulate some of the project benefits, beyond the immediate climate action benefits associated with renewable energy.

About the Project

Arevon is proposing to build the Cormorant Energy Storage project in Daly City using Tesla's advanced Megapack 2XL batteries. This state-of-the-art energy storage system will support grid reliability and help maximize the use of clean, renewable energy sources. By storing excess renewable energy when it is abundant and dispatching it back to the grid when it is needed most, this project will play a vital role in enhancing the stability and resilience of our local power grid and reducing reliance on fossil fuels. We are committed to being a good neighbor and working closely with the City of Daly City and the community to ensure that the project is developed and operated responsibly.

Tax Benefits

As Cormorant is still in early-stage development and final equipment costs are subject to change, below are high-level projections of how our project will help support state and local government through both sales and property tax.

- **Sales Tax Revenue:** The first phase of development will reach operations in 2026 and will generate over \$3 million in sales tax revenue for Daly City. The second phase is projected to come online in 2030 and generate over \$1 million in additional sales tax revenue. Cormorant, when fully built, will have generated over \$4 million in sales tax revenue for Daly City.
- **Property Tax Revenue:** The project is estimated to provide more than \$27 million in property tax payments over its lifespan which will support city, state, and county government activities as well as the local school district.



Labor and Workforce Agreements

We have also committed to prioritizing the hiring of union contractors and subcontractors during the construction phase of the Cormorant Energy Storage project. This commitment ensures that the economic benefits of the project will directly support the local workforce and businesses by providing quality jobs with good wages and benefits, which will contribute to the economic growth and stability of Daly City.

Specifically, we have entered or are planning to enter into the following agreements to ensure a skilled and trained workforce:

- **Agreement with the State Building and Construction Trades Council of California:** We will employ union labor to construct each project within our BESS portfolio. We are committed to establishing a project-specific partnership that guarantees the provision of skilled workers. The Project Engineering, Procurement, and Construction contractor (EPC) will sign this agreement, which will conform to industry standard practices.
- **Agreement with IBEW Local 617:** This agreement will cover the construction of transmission and distribution lines, outside substations, switchyards, and ground grids. It ensures the availability of skilled workers necessary for the construction and completion of the projects. The Project EPC will also sign the Outside Line Agreement with IBEW Local 617.

These agreements underscore our dedication to quality, efficiency, and the support of the local union workforce, ensuring that the Cormorant Energy Storage project is completed on schedule and to the highest standards.

Community Benefits

We recognize the importance of community engagement as part of the entitlements process and have been immersed in that work since the fall of 2023. From the feedback we have received, we have worked to craft a thoughtful community giving strategy to ensure our project prioritizes Daly City residents and the diverse communities surrounding our site. As a company, we are committed to giving back to the community and enhancing the quality of life for residents where our projects are located.

As we look ahead to our further involvement in the community, we have pledged a minimum budget of \$500,000 for community benefits. This investment will support partnerships with local community-based organizations and programs that benefit the public, reinforcing our dedication to the area's growth and well-being.

Our commitment to the community goes far beyond financial contributions. We firmly believe that true engagement involves giving our time and personal effort to become an integral part of the local fabric. We have actively participated in local events such as the



Thanksgiving Turkey Giving hosted by the Pilipino Bayanihan Resource Center and Senior Scholarship Award ceremonies at local high schools and look forward to continuing and expanding our commitment.

We are eager to work closely with elected officials, community leaders, and local stakeholders to identify and prioritize the initiatives that will best serve the needs and interests of Daly City residents. Identified initiatives include:

- Support for Local Organizations: Sponsorship packages and donations to local organizations such as:
 - - Daly City Partnership
 - Superposition Daly City
 - Pilipino Bayanihan Resource Center
 - Bayshore Community Center
 - Peninsula Family Services
 - Bayshore School District
 - Filipino American Arts Exposition (FAAE)
 - Pacific Islanders Together (PIT)
 - Pacific Islander Community Partnership
 - Thrive, Daly City Parks & Rec
 - Jefferson Union School District
 - Bay Area Community Health Advisory Council (BACHAC)
- Community Engagement Events: Participation in local events such as the Chow Fun Event, SHINE Family Day Festival, and Pistahan Parade and Festival to strengthen community ties and actively engage with residents.
- STEM Scholarships: Cormorant has committed to annually awarding STEM scholarships to students graduating from Jefferson and Westmoor High Schools.

We are excited about the potential of the Cormorant Energy Storage project to make a significant and lasting impact on the community and its local economy. By partnering closely with the City of Daly City and its leadership, local residents, and other civic stakeholders, we aim to ensure that this project is one that Daly City is proud to add to its civic tapestry.

If you have any questions about our project or these various commitments, please contact me at jmeinecke@arevonenergy.com and I can make any members of my team available to discuss further.

Sincerely,

John Meinecke
Director of Development

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

City of Daly City
333 90th Street
Daly City, CA 94015
Attn: City Manager

THIS SPACE ABOVE FOR RECORDER'S USE

DEVELOPMENT AGREEMENT BETWEEN THE CITY OF DALY CITY AND CORMORANT ENERGY STORAGE, LLC

THIS DEVELOPMENT AGREEMENT (the “**Agreement**”) is entered into this []th day of [month], 2024, between CORMORANT ENERGY STORAGE, LLC, a Delaware limited liability company (“**Developer**”), and the CITY OF DALY CITY (“**City**”), pursuant to the authority of Sections 65864 et seq. of the California Government Code.

RECITALS AND FINDING

This Agreement is based on the following facts, understandings and intentions of the parties:

A. To strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, the California Legislature enacted the Development Agreement Statute (Government Code, Section 65864 et seq.), which authorizes any city to enter into binding, long-term agreements with persons or entities having legal or equitable interests in real property, for which agreements provide for the development of the property.

B. Developer is a unit of Arevon Energy, Inc., a leading renewable energy company with a proven track record of safely constructing and operating utility-scale energy projects across the United States.

C. Developer proposes to build a 250 MW battery energy storage system (“**BESS**”) in two phases using Tesla’s advanced Megapack 2XL batteries in battery storage containers at the Project Site (defined herein) commonly known as 2150 Geneva Avenue; a transmission line (“**Gen-Tie**”) connecting the BESS to the Martin substation primarily underground through Carter Street, Martin Street, and Schwerin Street; and ancillary facilities pertinent to the operation of a BESS, including but not limited to racks of batteries, battery augmentation units, control units, fire prevention and fire protection equipment, voltage transformers and inverters, a small on-site substation, and the public infrastructure associated with the Project Site, all in accordance with this Agreement, the Exhibits thereto, and the other Project Approvals (defined herein) (collectively, “**Project**”). This state-of-the-art energy storage system will support grid reliability and help maximize

the use of clean, renewable energy sources. By storing excess renewable energy when it is abundant and dispatching it back to the grid when it is needed most, the Project will play a vital role in enhancing the stability and resilience of the local power grid and reducing reliance on fossil fuels.

D. In addition to this Agreement, the Project includes a General Plan Amendment and Zone Change pursuant to Chapter 17.48 of the Daly City Municipal Code (“**DCMC**”), a Use Permit pursuant to Chapter 17.44 of the DCMC, and Design Review pursuant to Chapter 17.45 of the DCMC, and authority for the Project to encroach in the public ROW. Such approvals are including in the Project Approvals as further defined in Article 1.

E. The Project and the Agreement are consistent with the goals and policies of the 2030 Daly City General Plan, as amended by the 2015 Housing Element, for the reasons described in the findings for the other Project Approvals and the land use chapter of the Project’s CEQA documentation, all incorporated by reference herein.

F. On [month] [day], 2024, after a duly noticed public hearing, the City’s Planning Commission voted to recommend approval of the Project Approvals, including the proposed General Plan Amendment GP-11-22-015959, Zone Change ZC-11-22-015960, Use Permit UPR-11-22-015962, Design Review DR-11-22-015961, Development Agreement, and ROW encroachment authority, as well as the Project’s Mitigated Negative Declaration.

G. [PLACEHOLDER FOR CITY COUNCIL ACTION: On [month] [day], 2024, after a duly noticed public hearing, the City Council voted to approve the Development Agreement via the Enacting Ordinance (defined herein) and the other Project Approvals, including the proposed General Plan Amendment GP-11-22-015959, Zone Change ZC-11-22-015960, Use Permit UPR-11-22-015962, Design Review DR-11-22-015961, Development Agreement, and ROW encroachment authority, as well as [environmental approval] via Resolutions ____, ____, ____,]

H. [PLACEHOLDER FOR CITY FINDING OF CONSISTENCY, IF SO FOUND: The City Council hereby finds that this Development Agreement furthers the public health, safety and general welfare and is consistent with the City’s General Plan as amended. The City Council further finds that the City has taken all necessary proceedings in accordance with the City’s ordinances, rules and regulations for the approval of this Agreement.]

AGREEMENT

ARTICLE 1: DEFINITIONS

Section 1.1 “**City**” is the City of Daly City, a municipal corporation organized and existing under the laws of the State of California.

Section 1.2 **“City Council”** is the City Council of the City.

Section 1.3 **“City Manager”** is the City Manager of the City or the City staff person (s)he designates to carry out all or part of the City’s responsibilities for implementing this Agreement.

Section 1.4 **“City Planning Manager”** is the senior City official authorized to administer the City’s planning and development procedures and projects, including its development agreements.

Section 1.5 **“Conflict”** with any Project Approvals shall mean (1) an express inconsistency with the Project Approvals or (2) a material limitation on or interference with the ability of Developer, whether it be technical, economic, or otherwise, to construct and operate the Project according to the Project Approvals.

Section 1.6 **“Days”** shall refer to calendar days.

Section 1.7 **“Developer”** is Cormorant Energy Storage, LLC, a Delaware limited liability company, and its successors and assigns, with a legal or equitable interest in the Project Site as an optionee to lease the Project Site from Syufy Enterprises.

Section 1.8 **“Development Impact Fees”** shall mean monetary exactions which are charged by City in connection with any approval, permit or entitlement relating to development, for the purpose of financing all or a portion of the cost of public facilities, programs or services related to the Project, including but not limited to any Fair Share Fees, other Assembly Bill 1600 fees (pursuant to the Mitigation Fee Act [California Government Code section 66000 et seq]), general facilities fees, parks facilities fees, fire fees, sewage fees, water fees, or police fees.

Section 1.9 **“Effective Date”** is the date this Agreement is executed by the City Manager.

Section 1.10 **“Enacting Ordinance”** means City Ordinance No. [New Ord #], enacted by the City Council on [date], 2024, approving this Agreement. This Agreement shall constitute a part of the Enacting Ordinance as if incorporated therein in full, and a copy of this ordinance is attached hereto as Exhibit F.

Section 1.11 **“Existing Ordinances”** means Ordinances in effect as of the Vested Rights Date of this Agreement. City has separately compiled the Existing Ordinances and intends to maintain them in an appropriate file indexed to this Agreement. Developer has reviewed said compilation, as of the time of this Agreement, and agrees thereto; for convenience, some of

the Existing Ordinances are attached hereto in Exhibit E.¹ Developer shall have the right to waive its vested rights as to any particular vested law, regulation, development standard, Existing Ordinance or other requirement, at its sole discretion, consistent with the terms of Section 3.2 of this Agreement.

Section 1.12 **“Fair Share Fees”** shall be those existing fees for development enacted pursuant to Daly City Municipal Code Chapter 3.36, including any fees for City administrative facilities, fire facilities and equipment, libraries, police facilities and equipment, community recreation centers, street improvements, and water and sewage facilities.

Section 1.13 **“Force Majeure Event”** refers to delay or other circumstances that materially and negatively impact Developer’s ability to develop this Project as contemplated in the Project Approvals, including this Agreement and its Exhibits, including but not limited to: acts of God, including without limitation floods, earthquakes, fires, pandemics, casualties; acts of war or civil unrest, a public enemy, terrorism, insurrections, riots, mob violence, sabotage, and malicious mischief; strikes, walk-outs, labor disputes, and other labor stoppages; unfavorable market conditions, including without limitation a recession or depression, that render development economically and otherwise infeasible; delay attributable to the actions or inaction of any governmental agency, including without limitation delays in the issuance of permits, approvals, or other actions required for development of the Project, including without limitation Project Approvals and Subsequent City Approvals, or the enactment of conflicting state or federal laws or regulations; delays of the City in processing any Subsequent City Approval beyond periods of time permitted by law or required by this Agreement; boycotts or other shortages or limits on the availability of necessary equipment, materials, or supplies; failure of transportation (but not attributable to a mere increase in price unless such price is commercially unreasonable and will extend for a period of time under the circumstances); a development moratorium (including but not limited to a sewer or water moratorium) approved by the City or other entity having jurisdiction; environmental conditions on the Project Site or other properties in the vicinity; any litigation, administrative action, or judicial or administrative decision, ruling, or order preventing or delaying the development of the Project or adversely affecting the ability of the City, Developer to obtain financing for the Project; the commencement of circulation of an initiative or referendum petition or the filing of any court action to set aside or modify this Agreement, the Project Approvals, or any Subsequent City Approvals; delay attributable to insufficient water available to serve the Project or any phase

or portion thereof; or any delay claimed by a party in the performance of any term, covenant, condition or obligation under this Agreement caused by a default of the other party. For the purpose of this definition, a cause shall be beyond the control of the party whose performance would otherwise be obligated only if such cause would prevent or hinder the performance of an obligation by any reasonable person similarly situated and shall not apply to causes peculiar to the party claiming the benefit of a Force Majeure Event (such as the failure to order materials in a timely fashion).

Section 1.14 **“Future Ordinances”** means Ordinances enacted after the Vested Rights Date of this Agreement (including amendments which may be made to Existing Ordinances). Any ordinance amendment to the Project Approvals that is sought by Developer and approved by the City shall not be considered a “Future Ordinance.”

Section 1.15 **“Ordinances”** means the ordinances, resolutions, codes, rules, regulations and official policies of City governing the permitted uses of land, density, design, improvement, and construction standards and specifications applicable to the use and development of the Project Site. Said Ordinances include without limitation City’s General Plan, Zoning Ordinance, and construction codes.

Section 1.16 **“Planning Commission”** is the Planning Commission of the City.

Section 1.17 **“Project”** means the planned development of the Project Site or a portion thereof as an energy storage system, as further described in Recital C and in the Project description in the CEQA document analyzing development at the Project Site, both incorporated herein by reference.

Section 1.18 **“Project Approvals”** shall mean this Agreement and its Exhibits; a General Plan amendment; a Zone Change; a Use Permit; Design Review; ROW encroachment authority any other land use entitlements or agreements related to the Project that are considered and approved by the City concurrent with this Agreement; and any and all amendments to the foregoing that are sought by Developer and approved by the City. As used in this Agreement, the phrase “other Project Approvals” shall refer to the Project Approvals other than this Agreement. The other Project Approvals cover all phases and aspects of development and operation of the Project as described in the Project description.

Section 1.19 **“Project Site”** or **“Site”** means that certain real property graphically depicted on Exhibit A and legally described in Exhibit B.

Section 1.20 **“Subsequent”** means occurring after the Effective Date.

Section 1.21 **“Subsequent City Approvals”** means any subsequent land use or development permits, approvals, or entitlements applied for by Developer or its successors in interest, assigns, agents, development partners, lessees, licensees, or sublessee with respect to development of the Project Site, including but not limited to:

- (a) Development Applications and Conformance Review, including Design Review
- (b) Amendments to the Project Approvals
- (c) Site Improvement Plans
- (d) Environmental Review pursuant to the California Environmental Quality Act
- (e) Ministerial grading permits, building permits, demolition permits/approvals, and/or certificates of occupancy for all phases of the Project.

Section 1.22 **“Vested Rights Date”** means December 1, 2024.

ARTICLE 2: LIST OF EXHIBITS

[PROPOSED EXHIBIT LIST]

EXHIBIT A: SITE MAP

EXHIBIT B: LEGAL DESCRIPTION OF PROJECT SITE

EXHIBIT C: MITIGATION MONITORING AND REPORTING PROGRAM

EXHIBIT D: FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

EXHIBIT E: COPY OF EXISTING ORDINANCES

EXHIBIT F: ENACTING ORDINANCE

EXHIBIT G: ROW ENCROACHMENT AUTHORIZATION

ARTICLE 3: DEVELOPMENT OF PROJECT SITE

Section 3.1 **General Vested Right.** Developer shall have the vested right to develop the Project on the Project Site in accordance with the Applicable Ordinances, Project Approvals, and any subsequent amendments to the Project Approvals that are sought by Developer and approved by the City,

and City shall have the right to regulate development and use of the Project Site in accordance with the provisions of this Agreement.

Section 3.2 Applicable Ordinances. Subject to the terms of this Agreement and the other Project Approvals and any amendments thereto, the Existing Ordinances shall control the permitted uses of the Project Site, the density and intensity of such uses, the maximum height and size of proposed buildings, the requirements for reservation and dedication of land for public purposes, and development standards. Except as otherwise provided in exceptions to vested rights below, to the extent that any Existing or Future Ordinances purport to be applicable to the Project Site but are in conflict with this Agreement or the other Project Approvals, the Agreement and Project Approvals shall prevail. Developer shall have the right, at its sole election, to waive any of the foregoing vested rights, in whole or in part, in conducting construction or operations on the Project Site or in pursuing any particular Subsequent City Approval or other entitlement or permit. The ordinances that govern pursuant to this Section 3.2 shall be known as the **"Applicable Ordinances."**

The parties acknowledge that Developer cannot at this time predict when or at what rate the Project will be constructed. Such decisions depend upon numerous factors that are not all within Developer's control. In exchange for Developer's Extraordinary Benefits identified herein, DCMC Section 17.44.100 regarding the expiration of a use permit if not initiated within a year shall not be applicable to the Project and is therefore not an Applicable Ordinance.

Section 3.3 City Conditions. This Agreement shall not prevent the City from denying or reasonably conditioning approval of any application for a Subsequent City Approval on the basis of Applicable Ordinances and Project Approvals, and which do not conflict with the same. In the event of a conflict between a Project Approval and any conditions of approval for the Project or Subsequent Project Approvals, the Project Approvals, including this Agreement, shall prevail.

Section 3.4 Processing of Subsequent City Approvals. The parties recognize that in order to implement the development of the Project Site as contemplated in this Agreement, Developer may require subsequent approvals, including without limitation the Subsequent City Approvals. Provided that Developer pays all required processing fees and files full and complete applications in conformity with this Agreement, the other Project Approvals, and Applicable Ordinances, as set forth in Section 3.2, City shall expeditiously review and process all applications for Subsequent City Approvals required to develop the Project consistent with the terms of this Agreement, the other Project Approvals, and Applicable Ordinances. City

shall use its best efforts to process and act upon all such applications within the time periods set forth in the Project Approvals, or in the Applicable Ordinances for those approvals not addressed in the Project Approvals.

Notwithstanding any other provision of this Agreement, no future amendment of any Existing Ordinance or resolution or any subsequent ordinance, resolution or moratorium, enacted either by the City Council or by voter approved initiative, that purports to impose or result in a limitation on the Project, imposed by City, shall apply to govern, or regulate the Project or development or use of the Property during the Term. In the event of any such subsequent action by City, Developer shall continue to be entitled to apply for and receive Subsequent Development Approvals in accordance with the Applicable Ordinances.

Section 3.5 Fair Share Fees and Exactions. Except as otherwise provided in this Agreement, the development of the Project under the Project Approvals, and the Subsequent City Approvals shall be subject only to those types of Fair Share Fees, exactions, and amounts of Fair Share Fees and exactions which are in effect at the time of the Vested Rights Date, subject to adjustment of fee amounts only for inflation and deflation where the Existing Ordinances have established inflation adjustment indexing. Any such Fair Share Fees applicable to an industrial battery energy storage system project shall only apply to the square footage of the battery energy storage system containers.

To the extent the City subsequently repeals or otherwise reduces a Fair Share Fee in existence at the time of the Vested Rights Date, said fee shall be reduced or no longer apply to the Project.

Section 3.6 Timing of Payment for Fair Share Fees. Any Fair Share Fees paid by Developer shall be paid at the time of issuance of building permit on a building-by-building basis.

Section 3.7 City Pass Through Fees. Sections 3.5 and 3.6 of the Agreement shall not apply to any City fees that are pass-through fees from non-City governmental agencies. For any Project Approvals or Subsequent City Approvals that incur a pass-through fee, Developer shall pay the fee lawfully required for all similarly situated projects at the time of the approval, permit, or entitlement. As used in this section, a “pass-through fee” refers to any fee, the amount of which is set by a non-City governmental agency, and is either collected by the City for the purposes of transmitting to that same non-City governmental agency or is collected by the City for the purposes of recouping payments in the fee amount already made by the City to the non-City governmental agency.

Section 3.8 Other Governmental Permits. At its sole expense, Developer shall apply for and obtain such other permits and approvals, including without limitation Project Approvals, as may be required from other governmental or quasi-governmental agencies having jurisdiction over the Project as may be required for the development of, or provision of services to, the Project consistent with this Agreement. City shall cooperate in good faith with Developer to obtain such permits and approvals.

Section 3.9 Application, Processing, and Inspection fees. All Subsequent City Approvals shall be subject to generally applicable application, processing, and inspection fees (including any reimbursement policies for work performed by outside plan checkers) in effect at the time the Subsequent City Approvals are issued or, if any such fees are due prior to issuance thereof, at the time the application(s) for such Subsequent City Approvals is/are filed.

Section 3.10 Exception to Vested Rights –Construction Codes. Ordinances establishing construction requirements and specifications, including without limitation the California Building Code, California Energy Code, California Green Building Standards, California Electrical Code, California Plumbing Code, California Fire Code, and California Mechanical Code, which are adopted or revised during the term of this Agreement shall apply as of the time of application for the construction and building permits for development of the Project.

Section 3.11 Exception to Vested Rights -- State and Federal Requirements. This Agreement shall not preclude the application of changes in Ordinances, the terms of which are specifically mandated and required by changes in State or Federal laws or regulations as provided in Government Code section 65869.5, to the development and use of the Project Site. In the event that State or Federal laws, or regulations enacted after the Vested Rights Date of this Agreement, or actions by any governmental jurisdiction other than City, prevent or preclude compliance with one or more provisions of this Agreement, or require changes in Project Approvals or Subsequent City Approvals issued by City, this Agreement shall be automatically modified, extended, and/or suspended to the extent reasonably necessary to comply with such State or Federal laws or regulations.

Section 3.12 Developer's Extraordinary Benefit Obligations – Corporate Goodwill Contributions to Non-Recreational Community Organizations Developer shall provide at least \$250,000 in corporate goodwill donations (including donations made prior to the Effective Date of the Agreement) that benefit the public within five years of issuance of a certificate of occupancy for phase one of the Project. Developer has and shall continue to make a good faith effort to work closely with elected officials, community leaders,

and local stakeholders to identify and prioritize the non-recreational initiatives that will best serve the needs and interests of local residents. Such initiatives may include, but are not limited to, sponsorship packages and donations to non-recreational local organizations, participation in local community engagement events to strengthen community ties and actively engage with residents, and the awarding of STEM scholarships to students graduating from Jefferson and Westmoor High Schools. Any time after the fifth anniversary of the certificate of occupancy on the phase one of the Project, upon written request from the City, Developer shall provide the City's Director of Finance and Administrative Services Department an itemized accounting of at least \$200,000 in corporate goodwill donations (including donations made prior to the Effective Date of the Agreement.)

Section 3.13 Developer's Extraordinary Benefit Obligations – Corporate Goodwill Contributions to Recreational Community Organizations. Developer shall provide at least \$250,000 in corporate goodwill donations supporting partnerships with local community-based organizations with a mission to expand recreational opportunities within five years of issuance of a certificate of occupancy for phase one of the Project. Any time after the fifth anniversary of the certificate of occupancy on the phase one of the Project, upon written request from the City, Developer shall provide the City's Director of Finance and Administrative Services Department an itemized accounting of at least \$250,000 in corporate goodwill donations to one or more local community-based organizations with a mission to expand recreational opportunities.²

Section 3.14 Developer's Extraordinary Benefit Obligations – Sales Tax Guarantee.

(a) During the Term of this Agreement, to the extent feasible and allowed by applicable law, Developer agrees to use commercially reasonable efforts to maximize the total amount of all Sales and Use Tax Revenue received by the City from development and construction of the Project, for the purchase, sale or use of any and all materials, equipment, fixtures or other items upon which sales or use tax is due, including any and all sales or use tax due from any third party vendors or other contractors involved in the development and construction of the Project pursuant to the terms and conditions of a contractual agreement with Developer or its contractors ("**Project Sales and Use Tax Revenue**"). It is anticipated the City will receive a total of at least Three Million Dollars (\$3,000,000.00) in Project Sales and Use Tax Revenue in the Project's first development phase and One Million Dollars (\$1,000,000.00) in the Project's second development phase. At the end of

the first full City fiscal year following completion of each phase of the Project to its operational stage connected to the electrical grid, once the data is available, the City shall provide Developer with an accounting, identifying the amount of all Project Sales and Use Tax Revenue received in relation to the Project, including funds received in preceding City fiscal years prior to completion of the Project as applicable. If the City determines that amount of Project Sales and Use Tax Revenue received by the City is less than \$3,000,000.00 for the first phase or \$1,000,000.00 for the second phase, the City shall invoice Developer for the difference (i.e., \$3,000,000.00 less the amount of Project Sales and Use Tax Revenue actually received for phase one and \$1,000,000.00 less the amount of Project Sales and Use Tax Revenue actually received for phase two) and provide Developer with the information relied upon by the City in making such determination. Developer shall have thirty (30) days to either remit payment to the City's Director of Finance and Administrative Services Department or provide any comments or additional information to the City regarding the amount of the Project Sales and Use Tax Revenue, which the City shall consider in good faith. No later than thirty (30) days following the receipt of any such information from Developer, the City shall notify Developer in writing whether its determination of the Project Sales and Use Tax Revenue has changed and, if so, issue a revised invoice to Developer. Developer will remit payment to the City's Director of Finance and Administrative Services Department within thirty (30) days of receipt of such notice, regardless of whether or not the invoice has been revised.

(b) Developer shall timely report and pay all sales and use taxes relating to the Project in accordance with the laws, rules and regulations applicable to such payment.

(c) Once available to Developer, Developer shall supply the City with information to assist the City in determining the Project Sales and Use Tax Revenue. Such information may include (i) sales and use tax returns filed with the California Department of Tax and Fee Administration ("**CDTFA**") by Developer or its contractors, (ii) invoices relating to Developer's or its contractors' purchase of taxable items in connection with the development or operation of the Project, (iii) business records reflecting payment of sales or use tax to vendors or the CDTFA relating to purchase or use of taxable items in connection with the development or operation of the Project, and/or (iv) names of contractors, vendors, or other parties who may remit sales or use tax to the CDTFA in connection with the development or operation of the Project. For the avoidance of doubt, nothing in this Section 3.14(c) shall require Developer to provide each of the items enumerated in this subsection or prohibit Developer from providing additional information as contemplated by Section 3.14(a).

(d) Project Sales and Use Tax Revenue shall be deemed to have been received by the City if and to the extent the CDTFA elects to offset the payment of any such Project Sales and Use Tax Revenue against any other obligations of the City. Section 3.14. Developer's Extraordinary Benefit Obligations – Contribution to Improvement of City Parks and Open Space. Prior to the issuance of the occupancy permit for phase one of the Project, Developer shall tender to the City's Director of Finance and Administrative Services Department³ a \$400,000.00 contribution for the City's use in improving the City park and open space areas ("**Park Projects**"). Prior to the issuance of the occupancy permit for phase two of the Project, Developer shall tender to the City's Director of Finance and Administrative Services Department a \$100,000.00 contribution for the City's use in improving the Park Projects. For the sake of clarity, the Park Projects are City public improvement projects with independent utility from the Project, for which the City is responsible for processing all necessary entitlements. The City shall include Developer in, and publicly recognized Developer's contribution during, all groundbreaking or other ceremonies celebrating any City Park Project improvement funded or partially funded pursuant to this Agreement.

Section 3.14. ROW Encroachment Authorization. By entering into this Agreement, the City hereby grants Developer encroachment authorization into, under, over and through City rights-of-way and public service easements for development of the Gen-tie line and appurtenant project facilities in accordance with the terms of the ROW Encroachment Authorization attached hereto as Exhibit G.

Section 3.15. Development Intensity, Permitted Uses, Maximum Height and Size, Dedication of Land for Public Purposes. Consistent with Government Code Section 65865.2, the Project's development intensity, permitted uses, maximum height and size limitations, and any applicable requirements for dedication of land for public purposes are those described in the other Project Approvals and are incorporated herein by reference.

ARTICLE 4: PERIODIC REVIEW OF AGREEMENT

Pursuant to Government Code Section 65865.1, the City's Planning Manager shall conduct an annual review of this Agreement to ascertain the parties' good faith compliance with its terms. Upon request, Developer shall provide the City's Planning Manager with information reasonably necessary to carry out this determination. If the Planning Manager finds, after an administrative review, that Developer is in good faith compliance with this Agreement, the Planning Manager shall issue Developer a certificate of compliance. If the Planning Manager finds Developer is not in good faith

compliance with this Agreement, then the Planning Manager shall notify Developer and schedule a meet and confer with the Developer to discuss the alleged non-compliance. Following the meeting, if the Planning Manager determines the Project is in fact not in compliance, then the Planning Manager shall notify the Developer in writing. Developer shall have 30 days to either submit a written plan for bringing the Project back into compliance or appeal the notice of non-compliance to the City Council. If after such hearing the City Council determines Developer is not in good faith compliance with this Agreement, City may pursue available rights and remedies in accordance with this Agreement. If the Planning Manager does not initiate an annual review in any given year, Developer shall be deemed to be in good faith compliance with this Agreement.

ARTICLE 5: AMENDMENT

Section 5.1 In General. This Agreement may be canceled, modified or amended only by mutual written consent of the parties, in accordance with the provisions of Government Code Sections 65867, 65867.5 and 65868. No amendment shall disturb the Vested Rights Date, scope, or other element of the rights vested under Article 3 of this Agreement.

Section 5.2 Major Amendments. Any amendment to this Agreement concerning the legal boundaries of the Project Site as depicted in Exhibits A and B, Developer's obligations as stated in Sections 3.12, 3.13 or 3.14, or the Agreement's provisions regarding fees and exactions in Section 3.5 shall be considered a Major Amendment, and shall require giving of notice and a public hearing before the Planning Commission and City Council pursuant to the provisions of Section 5.1 above. Any amendment to any of the other Project Approvals shall be governed by the terms of those documents and shall not require any amendment to this Agreement.

Section 5.3 Minor Amendments. The parties acknowledge that refinement and implementation of the Project might demonstrate that certain minor changes might be appropriate with respect to the details and performance of the parties under this Agreement. The parties desire to retain a certain degree of flexibility with respect to the details of the Project and with respect to those items covered in the general terms of this Agreement. If and when the parties find that clarifications, minor changes, or minor adjustments are necessary and do not constitute a Major Amendment under Section 5.2, they shall effectuate such clarifications, minor changes, or minor adjustments through a written Minor Amendment approved in writing by Developer and the City Manager. Unless otherwise required by law, no such Minor Amendment shall require prior notice or hearings, nor shall it constitute an amendment to this Agreement as defined by the Government Code.

ARTICLE 6: GENERAL PROVISIONS

Section 6.1 Covenants. The provisions of this Agreement shall constitute covenants or servitudes which shall run with the land comprising the Project Site, and the burdens and benefits hereof shall bind and inure to the benefit of all estates and interests in the Project Site and all successors in interest to the parties hereto.

Section 6.2 Term. The Term of this Agreement shall commence upon the Effective Date and extend until the expiration of thirty (30) years after the Effective Date.

Notwithstanding the foregoing, the Term of this Agreement shall be automatically extended for the period that development is prevented or delayed, in whole or in part, due to a Force Majeure Event. At any time, any party claiming an extension as a result of a Force Majeure Event shall provide the other party with written notice of such extension, the reason for the delay and an estimated length of delay. Upon the other party's receipt of such notice, the period of time for performance of any obligation or duty shall be automatically extended for the period of the Force Majeure Event, unless the other party objects in writing within thirty (30) days after receiving the notice. In the event of such objection, the parties shall meet and confer within thirty (30) days after the date of objection to arrive at a mutually acceptable solution to the disagreement regarding the delay. If no mutually acceptable solution is reached at the conclusion of the meet and confer session(s), either party may initiate dispute resolution proceedings as set forth in Section 6.7 of this Agreement.

The Term may also be extended upon mutual written consent by both parties.

Expiration of this Agreement shall have no legal effect on any other Project Approval, including but not limited to the General Plan Amendment, Zone Change, Use Permit, ROW encroachment authorization and Design Review, and their applicability to the Project.

Section 6.3 Default: Remedies; Termination. Failure or unreasonable delay by either party to perform any obligation under this Agreement for a period of thirty (30) days after written notice thereof from the other party shall constitute a default under this Agreement, subject to extensions of time by mutual consent in writing. Said notice shall specify the nature of the alleged default and the manner in which said default may be satisfactorily cured. If the nature of the alleged default is such that it cannot reasonably be cured within such thirty (30) day period, the commencement of the cure within such

time period and the diligent prosecution to completion of the cure shall be deemed a cure within such period.

Subject to the prior paragraph, after notice and expiration of the thirty (30) day period without cure, the other party to this Agreement, at its option, may institute legal proceedings pursuant to this Agreement and/or give notice of intent to terminate the Agreement pursuant to Government Code Section 65868. Following any such City notice of intent to terminate, the matter shall be scheduled for consideration and review by the City Council within thirty (30) calendar days in the manner set forth in Government Code Sections 65865.1, 65867 and 65868. Following consideration of the evidence presented in said review before the City Council, and a determination by the City Council based thereon, the City may give written notice of termination of this Agreement to the other party.

For any default relating to the Project, any such remedies shall be limited to specific performance, injunctive or declaratory relief (and the right to recover reasonable attorney's fees in connection with such proceedings). The waiver by either party of any default under this Agreement shall not operate as a waiver of any subsequent breach of the same or any other provision of this Agreement.

Section 6.4 Enforced Delay: Extension of Time of Performance. In addition to specific provisions of this Agreement, performance by either party hereunder shall not be deemed to be in default where delays or defaults are due to a Force Majeure Event.

Section 6.5 Cooperation in the Event of Third-Party Legal Challenge. In the event of any legal or equitable action or proceeding instituted by a third party challenging the validity of any provision of this Agreement or the procedures leading to its adoption or the issuance of Project Approvals or Subsequent City Approvals for the Project, the parties hereby agree to cooperate in defending said action or proceeding.

Section 6.6 Effect of Termination. Except as otherwise provided in this Agreement, termination of this Agreement shall not affect Developer's obligation to comply with the standards, terms and conditions of any other Project Approvals or Subsequent City Approvals issued with respect to the Project Site or any portion thereof; nor shall it affect any covenants of Developer which are specified in this Agreement to continue after termination.

The following provisions of this Agreement shall survive and remain in effect following termination or cancellation of this Agreement for so long as necessary to give them full force and effect: (1) Section 6.5 (Cooperation in

the Event of Third-Party Legal Challenge) and (2) Section 6.7 (Legal Actions; Remedies; Attorney's Fees).

Termination of this Agreement shall have no legal effect on any other Project Approval, including but not limited to the General Plan Amendment, Zone Change, Use Permit, Design Review, and ROW encroachment authorization.

Section 6.7 Legal Actions; Remedies; Attorney's Fees. Subject to the provisions of Section 6.3, in addition to any other rights and remedies, either party may institute legal action to cure, correct, or remedy any default, enforce any covenant or agreement herein, and enjoin any threatened or attempted violation or enforce by specific performance the obligations and rights of the parties hereto. In no event shall either party or its officers, agents or employees be liable for monetary or other damages for any breach or violation of this Agreement, it being expressly understood and agreed that the sole legal remedy available to either party for a breach or violation of this Agreement by the other party shall be a legal action in mandamus, specific performance, injunctive or declaratory relief to enforce the provisions of this Agreement. In any such legal action, the prevailing party, as defined in CCP § 1032, shall be entitled to recover all litigation expenses, including reasonable attorney's fees and court costs.

Section 6.8 Construction of Agreement. This Agreement shall be construed and enforced in accordance with the laws of the State of California and City, as they may be amended, provided that such amendments do not substantially alter the rights granted to the parties by this Agreement. Both parties and their legal counsel have reviewed this Agreement and agree that any rule that ambiguities are to be construed against the drafting party shall not apply. This Agreement, including the text and all Exhibits hereto, is intended to be interpreted as an integrated whole. Where provisions appear to be in conflict, they will be harmonized if possible. In the event that an irreconcilable conflict exists between the Agreement text and one or more of the Exhibits, the text shall control. In the event that an irreconcilable conflict exists between the Agreement and one or more of the other Project Approvals or Mitigation Monitoring and Reporting Program, the Agreement shall control.

Section 6.9 No Joint Venture, Partnership or Agency. It is specifically understood and agreed by City and Developer that the development of the Project Site is a non-City development. No partnership, joint venture, agency or other association of any kind between City and Developer is formed by this Agreement. The only relationship between City and Developer is that of a governmental entity regulating the development. City and Developer agree that nothing contained herein or in any document executed in connection

herewith shall be construed as making City and Developer joint venturers, partners or agents of one another.

Section 6.10 Severability. If any term, provision, covenant or condition of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement shall continue in full force and effect.

Section 6.11 Further Documents. Each of the parties shall cooperate with and provide reasonable assistance to the other to the extent contemplated hereunder in the performance of all obligations under this Agreement and the satisfaction of the conditions of this Agreement. Upon the request of either party at any time, the other party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary under the terms of this Agreement to carry out the intent and to fulfill the provisions of this Agreement.

Section 6.12 Notices. Any notice or communication required hereunder between City and Developer must be in writing, and may be given either personally or by registered or certified mail, return receipt requested. If given by registered or certified mail, the same shall be deemed to have been given and received on the first to occur of (i) actual receipt by any of the addressees designated below as the party to whom notices are to be sent, or (ii) five (5) days after a registered or certified letter containing such notice, properly addressed, with postage prepaid, is deposited in the United States mail. If personally delivered, a notice shall be deemed to have been given when delivered to the party to whom it is addressed. Any party hereto may at any time, by giving ten (10) days' written notice to the other party hereto, designate any other address in substitution of the address to which such notice or communication shall be given. Such notices or communications shall be given to the parties at their addresses set forth on the below:

City: City of Daly City
333 90th Street
Daly City, CA 94015
Attn: City Manager

with a copy to: City of Daly City
333 90th Street
Daly City, CA 94015
Attn: City Attorney

Developer: Cormorant Energy Storage, LLC
c/o Arevon Energy
8800 North Gainey Center Drive
Suite 100
Scottsdale, AZ 85258
Attn: Director of Development – Energy Storage

with a copy to: Sheppard, Mullin, Richter & Hampton LLP
501 W. Broadway, 18th Floor
San Diego, CA 92101
Attn: Jeffrey W. Forrest, Esq.

Section 6.13 Assignment; Collateral Transfer; Mortgagee Protection.

(a) The rights and obligations of Developer hereunder shall not be assigned or transferred, except that on no less than thirty (30) days written notice to City, Developer may assign all or a portion of Developer's rights and obligations hereunder to any person or persons, limited liability company, partnership, corporation, or any other entity who purchases all or a portion of Developer's right, title and interest in the Project, provided such assignee or grantee assumes in writing each and every obligation of Developer hereunder yet to be performed with respect to the assigned portion of the Project, and such assignee or grantee shall have the same assignment and transfer rights and obligations. The notice to City shall include the identity of any such assignee or grantee and a copy of the written assumption of the assignor's or grantor's obligations hereunder pertaining to the portion assigned or transferred. After such notice, the assignor or grantor shall have no further obligations or liabilities hereunder. Notice under this Section shall not be required for an assignment or transfer to the extent resulting from a restructuring or name change involving Developer and affiliated entities. Notwithstanding anything in this Agreement, Developer may implement its obligations under this Agreement through the use of Developer employees, representatives, agents, contractees, and other third parties selected by Developer. In the event of a partial assignment, a default of the assignee shall not be deemed a default of the Developer and a default of the Developer shall not be deemed a default of the assignee.

(b) Without limiting the generality of the foregoing, Developer may, without prior written notice to the City, mortgage, collaterally assign, or otherwise encumber and grant security interests in all or any part of its interest in this Agreement and/or the Project and its related facilities to any Mortgagee (defined below). However, Developer shall give the City notice information as to any Mortgagee, and thereafter, the City shall deliver any Notice of Default to any Mortgagee at the same time it delivers any Notice of

Default to Developer. Each Mortgagee shall have the right, but not the obligation, to cure the Event of Default. The cure period available to Mortgagee shall be extended for the time period reasonably required for Mortgagee to obtain possession of the Property, provided that Mortgagee diligently and continuously proceeds to use commercially reasonable efforts to so obtain possession of the Property and to complete such cure. Any Mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the Mortgage or deed of trust, or deed in lieu of such foreclosure, or otherwise, shall take the Property, or part thereof, subject to the terms of this Agreement. However, in the event a court determines this Agreement is terminated due to the bankruptcy or insolvency of Developer, upon the written request of any Mortgagee, the City shall agree to a development agreement with such Mortgagee(s) on substantially similar terms and conditions as agreed to herein). **"Mortgagee"** as used herein shall mean a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security device, a lender, or any party providing tax equity financing in connection with the Project, and each of their respective successors and assigns.

(c) Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law.

Section 6.14 Authorized Applicants for Project Approvals. Notwithstanding anything else in this Agreement, the following may apply for Subsequent City Approvals: successors, assignees, or grantees of Developer; and any third party with the written consent of Developer, including without limitation any agents, joint development partners, lessees, licensees, or sublessees.

Section 6.15 Right to Lease Project Facilities. Notwithstanding anything else in this Agreement, the parties acknowledge and agree that nothing in this Agreement prohibits Developer from leasing or licensing any portion of the Project Site (each a **"Project Component"**) to affiliated or third parties for any purpose consistent with the terms of this Agreement, including, but not limited to constructing, operating, subleasing, and any other permitted use. Any such lease, license, or sublease of a Project Component will not require any notification to or consent by the City provided that the tenant or occupant is required, in the subject lease, license, or sublease, to comply with the obligations and requirements of this Agreement that would be applicable to the Project Component occupied or used by such tenant, licensee or occupant. The parties agree that, if Developer and a third party enter into a lease or license (or like rights to use and operate) for a Project Component, then if a default occurs that is caused by the use or operation of such Project Component, then any enforcement or remedy for such

default other than specific enforcement, declaratory relief and any attorney's fees and costs for such proceedings, shall be further subordinated to the interests of any ground lease tenant, leasehold mortgagee or other interest holder in the Project Component, and the City will enter into a subordination agreement confirming such subordination in the form reasonably required by the interest holder in such Project Component.

Section 6.16 Entire Agreement. This written Agreement, including the Exhibits hereto, contains all the representations and the entire agreement between the parties with respect to the subject matter hereof. Except as otherwise specified in this Agreement, any prior or contemporaneous correspondence, drafts, memoranda, agreements, warranties or representations are superseded in total by this Agreement. This Agreement also supersedes any previous development agreements or land use entitlements that may affect or govern the Project Site or its development.

Section 6.17 No Third Party Beneficiaries. This Agreement shall not be construed to be an agreement for the benefit of any third party or parties and no third party or parties shall have any claim or right of action under this Agreement, including without limitation its Exhibits, for any cause whatsoever.

Section 6.18 Recitals Not Incorporated. The Recitals preceding this Agreement are not incorporated into this Agreement and are not part of the representations or the entire agreements between the parties with respect to the subject matter hereof.

Section 6.19 Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

Section 6.20 Warranty of Authority. The person(s) executing this Agreement on behalf of each of the parties hereto represent and warrant that (i) such party, if not an individual, is duly organized and existing, (ii) they are duly authorized to execute and deliver this Agreement on behalf of said party, (iii) by so executing this Agreement such party is formally bound to the provisions of this Agreement, and (iv) the entering into this Agreement does not violate any provision of any other agreement to which such party is bound.

Section 6.21 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original Agreement, and all of which shall constitute one and the same Agreement.

Section 6.22 Recordation. Within ten (10) days after the Enacting Ordinance takes effect, the City Manager shall execute this Agreement on

behalf of City, and the City Clerk shall record this Agreement with the San Mateo County Recorder. If this Agreement is terminated, modified or amended pursuant to Article 5 or 6 of this Agreement, the City Clerk shall record notice of such action with the San Mateo County Recorder.

Section 6.23 No Obligation to Construct. Nothing herein shall be interpreted as requiring Developer to construct phase one or phase two of the Project and Developer shall not be required to fulfill extraordinary benefit obligations related to any phase not constructed.

Section 6.24 No Discrimination. Developer covenants that, by and for itself, there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, sexual orientation or gender preference, national origin, or ancestry in the performance of this Agreement.

Section 6.25 Estoppel Certificates. Either party hereto (or a Mortgagee) may at any time during the Term deliver written notice to the other party requesting an estoppel certificate ("**Estoppel Certificate**"):

- (a) certifying that the Agreement is in full force and effect and is a binding obligation of the parties hereto;
- (b) certifying that the Agreement has not been amended or modified or, if so amended or modified, identifying such amendments and/or modifications;
- (c) certifying that there are no existing defaults under the Agreement to the actual knowledge of the party signing the Estoppel Certificate, or if there are any, identifying the same; and
- (d) containing any other reasonable certifications that may be requested by either Party (or a Mortgagee).

A party receiving a request for an Estoppel Certificate shall provide a signed certificate to the requesting party within ten (10) business days after receipt of the request. Failure to timely deliver an Estoppel Certificate shall be deemed to certification of the requested certifications ("**Deemed Estoppel Certificate**"). An Estoppel Certificate or Deemed Estoppel Certificate may be relied on by Developer's assignees and Mortgagees.

Section 6.26 Warranty & Representation of Non-Collusion. No official, officer, or employee of City has any financial interest, direct or indirect, in this Agreement, nor shall any official, officer, or employee of City participate in any decision relating to this Agreement which may affect his/her financial interest or the financial interest of any corporation, partnership, or

association in which (s)he is directly or indirectly interested, or in violation of any corporation, partnership, or association in which (s)he is directly or indirectly interested, or in violation of any State or municipal statute or regulation. The determination of "financial interest" shall be consistent with State law and shall not include interests found to be "remote" or "noninterests" pursuant to Government Code §§ 1091 or 1091.5.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first set forth above.

Developer:

CORMORANT ENERGY STORAGE, LLC,
a Delaware limited liability company

By: _____

Name: _____

Title: _____

City:

CITY OF DALY CITY,
a municipal corporation

By: _____

Name: _____

Title: _____

Approved as to form:

CITY ATTORNEY

By: _____

Name: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of

STATE OF CALIFORNIA

COUNTY OF SAN MATEO

On _____, 202__, before me, _____, personally appeared _____, proved to me on the basis of satisfactory evidence to be the person(s) whose names(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____

ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of

STATE OF _____

COUNTY OF _____

On _____, 202__, before me, _____, personally appeared _____, proved to me on the basis of satisfactory evidence to be the person(s) whose names(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of _____ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of

STATE OF CALIFORNIA

COUNTY OF SAN MATEO

On _____, 2024, before me, _____, personally appeared _____, proved to me on the basis of satisfactory evidence to be the person(s) whose names(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____

EXHIBIT A
[PLACEHOLDER FOR SITE MAP]

DRAFT

EXHIBIT B

[PLACEHOLDER FOR LEGAL DESCRIPTION]

DRAFT

EXHIBIT C

[PLACEHOLDER FOR MITIGATION MONITORING AND REPORTING PROGRAM]

DRAFT

EXHIBIT D

**[PLACEHOLDER FOR FINDINGS PURSUANT TO THE CALIFORNIA
ENVIRONMENTAL QUALITY ACT]**

DRAFT

EXHIBIT E

[PLACEHOLDER FOR COPY OF EXISTING ORDINANCES]

DRAFT

EXHIBIT F

[PLACEHOLDER FOR ENACTING ORDINANCE]

DRAFT

EXHIBIT G
ROW ENCROACHMENT AUTHORIZATION
[SEE PAGE THAT FOLLOWS]

DRAFT

**RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:**

Cormorant Energy Storage, LLC
c/o Arevon Energy, Inc.
8800 N. Gainey Center Dr., Suite 100
Scottsdale, AZ 85282
Attn: Asset Management

THIS SPACE ABOVE FOR RECORDER'S USE

ENCROACHMENT AGREEMENT

This Encroachment Agreement (this “**Agreement**”) is entered into as of _____, 202__, (the “**Effective Date**”) by and between the City of Daly City, a municipal corporation of the State of California (the “**City**”), and Cormorant Energy Storage, LLC, a Delaware limited liability company (collectively with any successors-in-interest “**Cormorant**”). The City and Cormorant may be referred to herein individually as a “**Party**” and collectively as the “**Parties**.”

RECITALS

- A. Cormorant is leasing certain real property located within the City for purposes of developing and operating a battery energy storage system (the “**Project**”).
- B. Cormorant desires to install, operate and maintain a generation interconnection line and related appurtenances within certain of the City’s public rights-of-way in connection with Cormorant’s operation of the Project, as further set forth herein.
- C. The City has the authority to regulate the terms and conditions for the use of public rights-of-way within the City consistent with applicable law and has determined that the rights granted to Cormorant herein will not adversely affect the City’s obligation to provide for and protect the public health, safety and general welfare.
- D. Subject to the terms and conditions of this Agreement, the City is willing to grant Cormorant the right to encroach into certain public rights-of-way, as further set forth herein.

NOW, THEREFORE, in consideration of the promises and the mutual covenants of the Parties, the legal sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

AGREEMENT

This Agreement shall run with the land.

The City hereby grants Cormorant the right to encroach into those certain public rights-of-way more commonly known as [Carter Street, Martin Street and Schwerin Street] (collectively, the “**ROW**”) within that certain area more particularly described on Exhibit A attached hereto and incorporated herein and depicted on Exhibit B attached hereto and incorporated herein (such area, the “**Encroachment Area**”) for purposes of (the following purposes, the “**Permitted Purposes**”) installing, inspecting, operating, repairing, replacing, removing from time-to-time, modifying and maintaining a generation interconnection line and related appurtenances (the “**Encroachment**”).

Cormorant shall conduct the Permitted Purposes in a safe and sanitary manner at the sole cost, risk and responsibility of Cormorant.

With respect to any liability, including but not limited to claims asserted, demands, causes of action, costs, expenses, losses, attorneys’ fees, damages, expenses or payments that the City may sustain or incur in any manner for damages or injuries, including those to any person (including disability, dismemberment, illness damages, or death) or property, arising from, related to, or resulting from the Permitted Purposes or presence of the Encroachment within the ROW, Cormorant agrees to defend, indemnify, protect and hold harmless the City, its agents, officers, and employees from and against any and all liability.

Also covered by this Section 4 is liability arising from, related to, connected with, caused by, or claimed to be caused by the active or passive negligent acts or omissions of the City, its agents, officers, or employees that may be in combination with active or passive negligent acts or omissions of Cormorant, its employees, agents or officers, or any third party. Cormorant’s duty to defend, indemnify, protect and hold harmless shall not include any claims or liabilities arising from the sole negligence or sole willful misconduct of the City, its agents, officers or employees.

Cormorant further agrees to pay any and all costs the City incurs to enforce the indemnity and defense provisions of this Section 4.

If the City reasonably determines that the Encroachment interferes with, impairs or otherwise impedes the City’s use of the ROW and any abutting private property, then Cormorant shall work with the City to determine a commercially feasible plan for the relocation of the Encroachment to a new encroachment area within the City’s public right(s)-of-way at Cormorant’s sole expense (the “**Relocation Plan**”). Cormorant shall include anyone with legal and/or financial interest in the Project in the preparation of the Relocation Plan. The Relocation Plan shall be prepared within sixty (60) days of the City’s written notice to Cormorant that relocation is reasonably required, and Cormorant shall commence relocation of the Encroachment within thirty (30) days of receiving all necessary permits and/or approvals. Cormorant shall complete the relocation of the Encroachment within three hundred and sixty-five (365) days of Cormorant’s receipt of all necessary permits and/or approvals. The City’s request to relocate the Encroachment shall not be arbitrary or without reason, and the City shall give as much notice as possible to

Cormorant in the event the City reasonably determines that the Encroachment must be relocated. The City and Cormorant shall mutually agree to a new encroachment area within the City's public rights-of-way as aforesaid, and the Parties shall enter into a replacement agreement approving such new encroachment area on substantially the same terms and conditions as agreed to herein.

If the Encroachment is located over or under a public facility within the ROW, Cormorant agrees to provide an alternate right-of-way on Cormorant-controlled property or assist the City in obtaining new right-of-way, as well as relocate said public facility to a new alignment, all without cost or expense to the City, whenever it is reasonably determined by the City that the public facility cannot be economically placed, replaced, or maintained due to the presence of the Encroachment.

All rights and obligations that were acquired by the City with respect to the ROW shall remain and continue in full force and effect and shall in no way be affected by this Agreement.

Cormorant shall maintain a policy of liability insurance with the City and its respective elected officials, officers, employees, agents, and representatives named as additional insureds, in an amount approved by the City. Such policy shall protect the City from any potential claims that may arise from the Encroachment.

The terms and conditions of any permit or approval required by the City in connection with the Project, including but not limited to any permit required pursuant to Chapter 12 of the City's Municipal Code, shall be consistent with the terms and conditions of this Agreement. In the event that any permit or approval issued by the City in connection with the Project is inconsistent with this Agreement, this Agreement shall control.

This Agreement may be executed in one or more identical counterparts and all such counterparts together shall constitute a single instrument for the purpose of the effectiveness of this Agreement. This Agreement shall be recorded in the Official Records of the County of San Mateo, California.

(Signature Pages Follow)

IN WITNESS WHEREOF, the City has caused this Agreement to be executed by its duly authorized representative as of the Effective Date.

CITY:

City of Daly City,
a municipal corporation of the State of
California

Thomas J. Piccolotti, City Manager

ATTEST:

K. Annette Hipona, City Clerk

APPROVED AS TO FORM:

Rose Zimmerman, City Attorney

IN WITNESS WHEREOF, Cormorant has caused this Agreement to be executed by its duly authorized representative as of the Effective Date.

CORMORANT:

Cormorant Energy Storage, LLC,
a Delaware limited liability company

By: _____
Name: _____
Title: _____

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of _____)
County of _____)

On _____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of _____ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

EXHIBIT A

Legal Description of Encroachment Area

(See Attached)

DRAFT

EXHIBIT B

Depiction of Encroachment Area

(See Attached)

Initial Study Cormorant Energy Storage Project

Prepared by



November 2024

Table of Contents

Section 1.0	Introduction and Purpose	1
Section 2.0	Project Information	3
Section 3.0	Project Description	8
Section 4.0	Environmental Setting, Checklist, and Impact Discussion	17
4.1	Aesthetics.....	18
4.2	Agriculture and Forestry Resources	27
4.3	Air Quality	30
4.4	Biological Resources.....	44
4.5	Cultural Resources	54
4.6	Energy	60
4.7	Geology and Soils	66
4.8	Greenhouse Gas Emissions	74
4.9	Hazards and Hazardous Materials.....	83
4.10	Hydrology and Water Quality.....	93
4.11	Land Use and Planning	101
4.12	Mineral Resources.....	105
4.13	Noise	107
4.14	Population and Housing	120
4.15	Public Services.....	122
4.16	Recreation.....	127
4.17	Transportation	129
4.18	Tribal Cultural Resources.....	134
4.19	Utilities and Service Systems.....	137
4.20	Wildfire	145
4.21	Mandatory Findings of Significance.....	146
Section 5.0	References.....	149
Section 6.0	Lead Agency and Consultants	154
Section 7.0	Acronyms and Abbreviations.....	156

Figures

Figure 2.8-1: Regional Map	5
Figure 2.8-2: Vicinity Map	6
Figure 2.8-3: Aerial Photograph and Surrounding Land Uses	7
Figure 3.2-1: Conceptual Site Plan.....	12
Figure 3.2-2: Conceptual Equipment Elevations.....	13
Figure 3.2-3: Conceptual Transmission Line Alignment 1	14
Figure 3.2-4: Conceptual Transmission Line Alignment 2/3	15
Figure 4.1-1: Photo Locations.....	20
Figure 4.3-1: Location of Off-Site MEI	41
Figure 4.4-1: Biological Land Cover	47
Figure 4.13-1: Noise Measurement Locations.....	111

Photos

Photos 1 & 2	21
Photos 3 & 4	22
Photos 5 & 6	23
Photos 7 & 8	24

Tables

Table 4.3-1: Sources and Health Effects of Criteria Air Pollutants and Toxic Air Contaminants	31
Table 4.3-2: BAAQMD Air Quality Significance Thresholds.....	36
Table 4.3-3: BAAQMD Health Risks and Hazards Thresholds	36
Table 4.3-4: Construction Criteria Pollutant Emissions	37
Table 4.3-5: Project Health Risk Impacts at the MEI.....	42
Table 4.3-6: Unmitigated Cumulative Health Risk Impacts at the MEI	42
Table 4.13-1: Summary of Short-Term Measurements (dBA)	110
Table 4.13-2: BESS and Substation Construction Noise Levels	114
Table 4.13-3: Estimated Noise Levels of Proposed BESS Facility and Substation.....	117
Table 4.13-4: Vibration Source Levels for Construction Equipment	118

Appendices

Appendix A:	Construction Health Risk Assessment
Appendix B:	Arborist Report
Appendix C:	Biological Confirmation Memo
Appendix D:	Phase I Environmental Site Assessment
Appendix E:	Hazards Analysis Final Report
Appendix F:	Noise and Vibration Assessment

All appendices are incorporated herein by reference.

Section 1.0 Introduction and Purpose

1.1 Purpose of the Initial Study

The City of Daly City, as the Lead Agency, has prepared this Initial Study for the Cormorant Energy Storage project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of City of Daly City, California.

The project proposes to construct a battery energy storage system (BESS), substation, and an underground transmission line along one of three alignments connecting to the substation to the Pacific Gas & Electric (PG&E) Martin Substation. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 Public Review Period

Publication of this Initial Study marks the beginning of a 30-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 30-day public review period should be sent to:

Sam Fielding
City of Daly City, Planning Division
333 90th Street
Daly City, CA 94015
(650) 991-8156; sfielding@dalycity.org

1.3 Consideration of the Initial Study and Project

Following the conclusion of the public review period, the City of Daly City will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 Notice of Determination

If the project is approved, the City of Daly City will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office

for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

Section 2.0 Project Information

2.1 Project Title

Cormorant Energy Storage Project (GP-11-22-015959, ZC-11-22-015960, UPR-11-22-015962, DR-11-22-015961)

2.2 Lead Agency Contact

Sam Fielding
City of Daly City, Planning Division
333 90th Street
Daly City, CA 94015
(650) 991-8156; sfielding@dalycity.org

2.3 Project Applicant

Aron Branam
Arevon Energy
8800 N Gainey Center Dr Suite 250
Scottsdale, AZ 85258
(713) 899-5193

2.4 Project Location

The project is located at 2150 Geneva Avenue in the City of Daly City. Regional, vicinity, and aerial maps of the project site are shown on Figure 2.8-1, Figure 2.8-2, and Figure 2.8-3, respectively.

2.5 Assessor's Parcel Number

Assessor's Parcel Number (APN): 005-050-020

2.6 General Plan Designation and Zoning District

General Plan Designation:	Commercial Retail and Office (C-RO)
Existing Zoning Designation:	Light Commercial (C1)

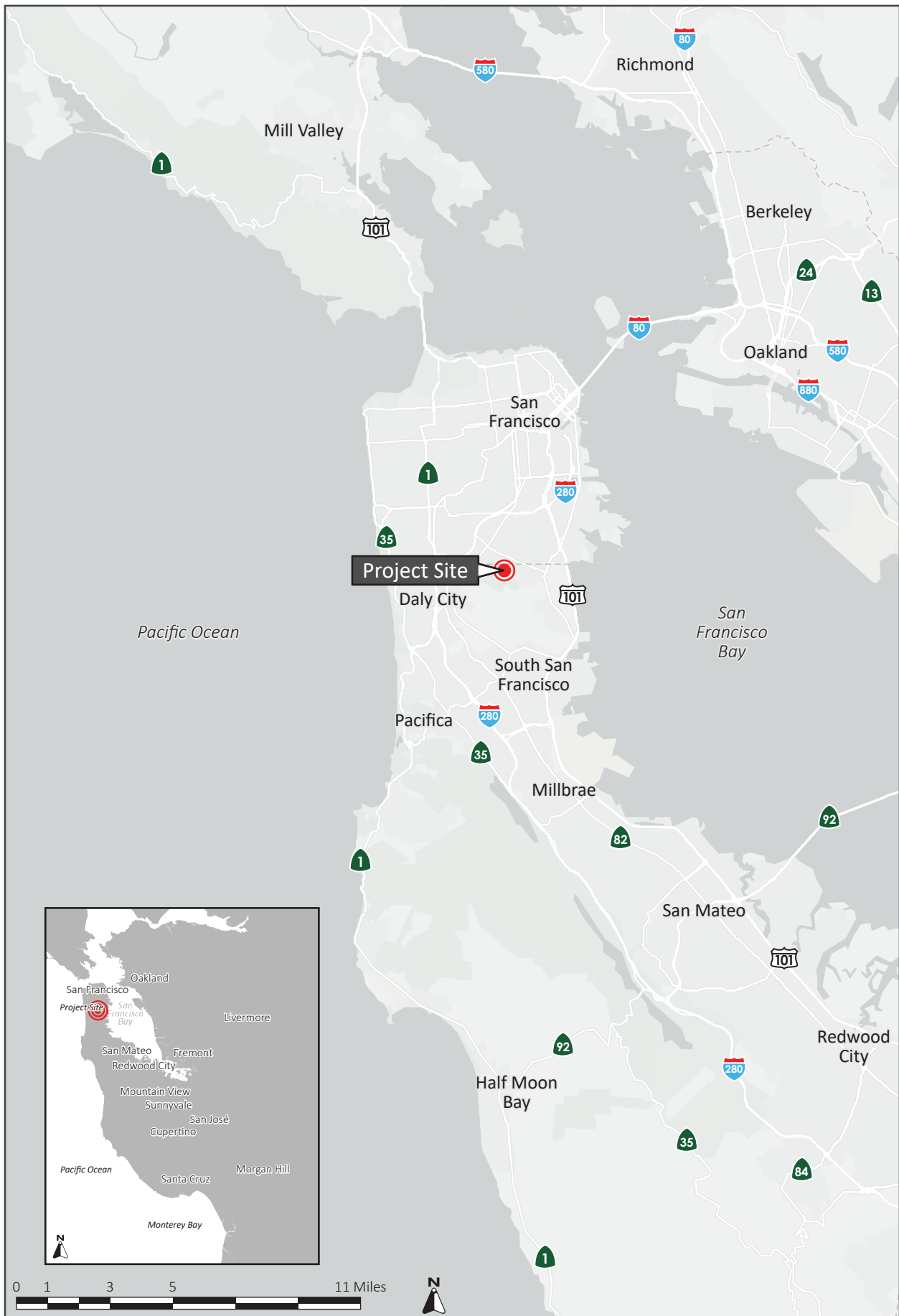
2.7 Habitat Plan Designation

The project site is not located within the San Bruno Mountain Habitat Conservation Plan limits.

2.8 Project-Related Discretionary Approvals, Agreements, and Permits

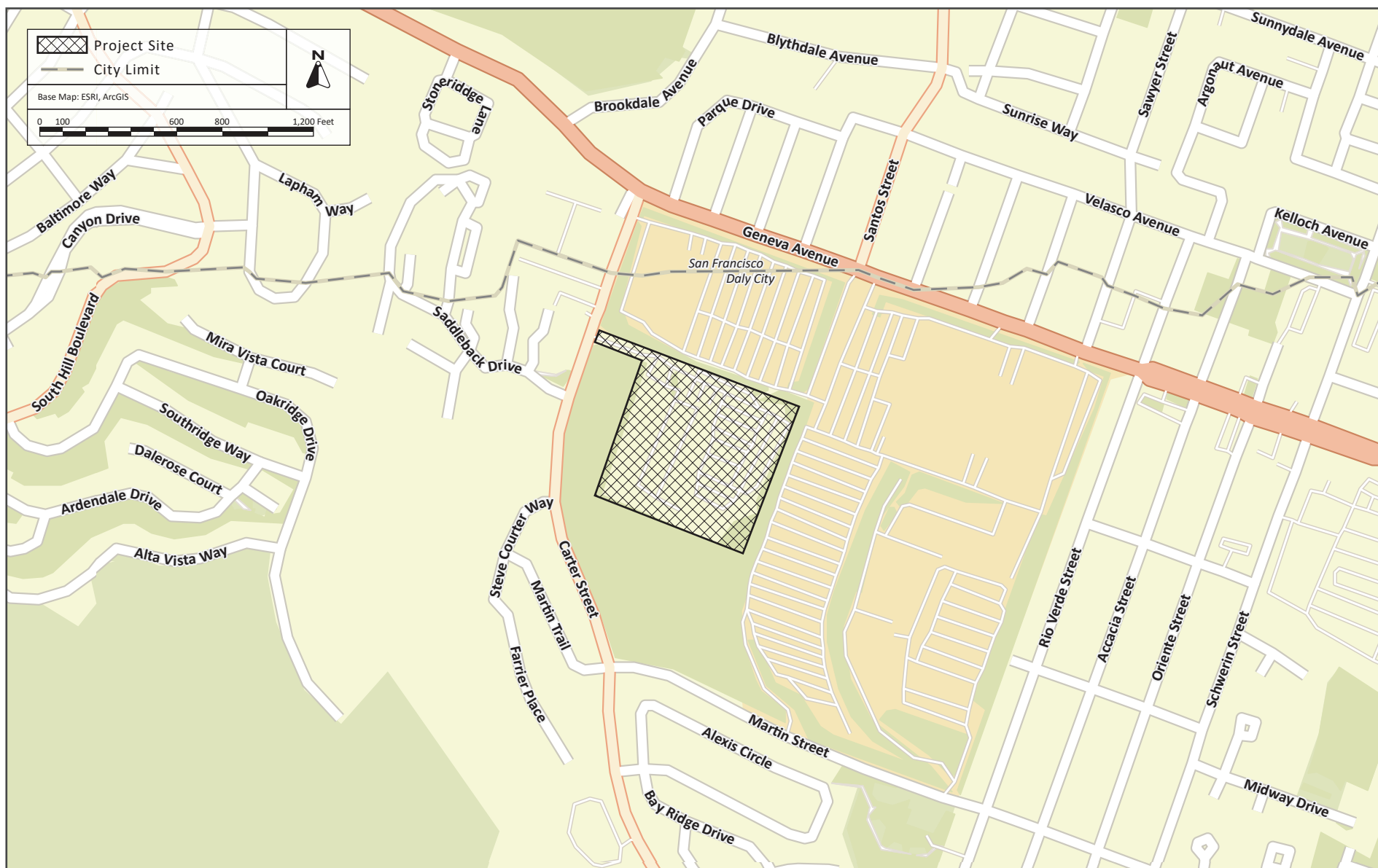
This Initial Study/MND provides decision-makers in the City of Daly City (the Lead Agency), responsible agencies, and the general public with relevant environmental information to use in considering the proposed project. It is intended that this Initial Study be used for discretionary approvals necessary to implement the project, as proposed. These discretionary actions may include, but are not limited to, the following:

- General Plan Amendment
- Rezoning
- Design Review Permit
- Use Permit



REGIONAL MAP

FIGURE 2.8-1



VICINITY MAP

FIGURE 2.8-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.8-3

Section 3.0 Project Description

3.1 Project Location

The proposed project is located in the northeastern portion of the City of Daly City. The project at 2150 Geneva Avenue (APN 005-050-020) has two main components: 1) the approximately 6.9-acre BESS facility with associated 0.71-acre substation, and 2) an underground 115 kilovolts (kV) transmission line to the PG&E Martin Substation. The transmission line would travel underground for up to 1.2 miles along one of three alignments to the PG&E Martin Substation, as described below.

3.1.1 Existing Site Conditions

The BESS and substation site at 2150 Geneva Avenue is designated in the General Plan as Commercial Retail and Office (C-RO) and zoned Light Commercial (C1). The project site is bordered by the Bay Club South San Francisco building and Cow Palace parking lot to the north, the Cow Palace to the east, open space to the south, and Carter Street and residential condos to the west. The project site is currently vacant and used for vehicle and building material storage. Trees and shrubs surround the project site on all sides.

The proposed transmission line would run along one of three potential alignments. Alignment 1 would run through the northern end of the Cow Palace, which is designated in the General Plan as Public Facility (PF) and zoned Heavy Commercial (C2), and then turn east and run along Ottilia Street, a two-lane roadway through a residential neighborhood (General Plan-designated and zoned residential), until it reaches the PG&E Martin Substation. Alignment 2 and 3 would run south along Carter Street and then turn east onto Martin Street. Alignment 2 would turn north along Schwerin Street, while Alignment 3 would turn north along Oriente Street and then east on Ottilia Street. Carter Street, Martin Street, Schwerin Street, and Oriente Street are all two-lane roadways through residential neighborhoods (General Plan-designated and zoned residential).

3.2 Project Description

The project involves construction of a 250 megawatt (MW) BESS, substation, and underground transmission line, which will provide a service to the regional electric grid by receiving energy (charging) from the PG&E electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the point of interconnection. At project completion, the 11.5-acre parcel would be developed with the BESS facility on 6.9 acres, substation on 0.71-acre, and the remainder of the site used for a driveway, access road, and landscaping.

3.2.1 Project Components

3.2.1.1 *General Plan Amendment and Rezoning*

The project site has a General Plan land use designation of Commercial Retail and Office (C-RO) and is zoned Light Commercial (C1). In order to develop the proposed project, the project proposes to amend the General Plan land use designation to Industrial (I) and rezone the site to Heavy Commercial (C2). Rezoning the site would allow the project to develop the BESS and substation with a use permit.

3.2.1.2 *Battery Energy Storage System (BESS)*

The proposed project would construct a BESS facility to house lithium-iron phosphate batteries that would store excess energy generated by the electrical grid during the day (see Figure 3.2-1). No power would be generated on-site. The batteries would be housed in approximately nine-foot-tall purpose-built enclosures (see Figure 3.2-2), version Megapack 2 XL produced by Tesla, and mounted on racks that are seismically anchored to the ground and constructed of non-flammable aluminum and steel. In addition to the batteries, inverters and medium-voltage transformers would be installed outside the battery enclosures. Once fully operational, the BESS would be able to store up to 250 MW of electricity from the PG&E Martin Substation.

Chemicals are contained within the individual sealed battery cells. Risk of exposure occurs only if the battery is mechanically or electrically abused or altered. The batteries are not considered hazardous as the electrolyte is non-toxic and does not contain cobalt or other toxic elements.

A fire protection system would be installed as part of the BESS and include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire.

Intermittently throughout the lifetime of the project, there may be a requirement to provide additional energy storage augmentation, which will result in several trips to the site to deliver and install additional battery augmentation units over a period of several weeks. All grading and foundations necessary to accommodate these augmentation units will be completed with the initial construction of the project, such that installation of the augmentation units will require no additional site preparation or disturbance.

3.2.1.3 *Substation*

Open rack, air insulated switchgear, a power transformer, and additional electrical equipment would be installed adjacent to the BESS facility within a 0.71-acre substation (see Figure 3.2-1). The substation is needed to transform the electricity voltage for storage and use consistent with PG&E requirements. The substation would operate 24 hours per day and 365 days per year, similar to other area electrical substations. Substation electrical equipment would be housed in National Electrical Manufacturers Association (NEMA) enclosures and screened from view. Substation

electrical cabling would be installed underground. The substation equipment would be approximately 65 feet in height (see Figure 3.2-2).

3.2.1.4 *Transmission Line*

The BESS and substation would connect to the PG&E Martin Substation via a 115 kV transmission line. The transmission line would follow one of three potential alignments to the PG&E Martin Substation. All three alignments would be entirely underground.

Alignment 1 is approximately 0.7-mile long and would exit the project site near the northeast property line and travel through the Cow Palace parking lot. The transmission line would be located along the northern border of the Cow Palace and then turn south along the eastern border of the Cow Palace property for approximately 600 feet. The transmission line would then exit the Cow Palace property at Ottilia Street and ultimately connect into the PG&E Martin Substation on Schwerin Street approximately 150 feet south of Ottilia Street (see Figure 3.2-3).

Alignment 2 is approximately 1.1 miles long and would exit the project site via the existing driveway along Carter Street. The transmission line would then travel south along Carter Street until it turns east along Martin Street. The transmission line would then travel east along Martin Street until it turns north along Schwerin Street for approximately 1,200 feet to ultimately connect into the PG&E Martin Substation at the same location as Alignment 1 (see Figure 3.2-4).

Alignment 3 is approximately 1.2 miles long and would follow the same initial route as Alignment 2, except Alignment 3 would turn north along Oriente Street instead of Schwerin Street. The transmission line would extend north along Oriente Street for approximately 1,300 feet until it turns east onto Ottilia Street and ultimately connects into the PG&E Martin Substation at the same location as Alignment 1 (see Figure 3.2-4).

In order to connect the transmission line to the Martin Substation, all three alignments would connect to a Point of Change of Ownership (POCO) pole, up to 120 feet tall. PG&E identified the following improvements to be completed by PG&E within the existing Martin Substation area:

- Install a line relay package, voltage transformers, dead-end, underground riser, line switch, and fiber terminations.
- Complete breaker and a half (BAAH) bay, install two circuit breakers.
- Construction of a 115 kV transmission line from the POCO pole to the termination point within the substation (0.25-mile above ground and 0.05-mile underground).

3.2.2 Site Access and Circulation

Access to the BESS and substation would be provided via an existing driveway from Carter Street, at the northwest corner of the project site. An eight-foot-tall concrete wall with wrought iron climbing deterrent would surround the project site, including a sliding security gate at the entry driveway. A

26-foot-wide public access road and associated retaining wall would be constructed on the west side of the security fencing (see Figure 3.2-1).

3.2.3 Operation and Staffing

The BESS would be monitored remotely with maintenance staff visiting the site periodically throughout the year. No permanent employees would occupy the project site. Remote access to battery status, meters, schedules, and other data would be available to off-site personnel.

In the event of an unforeseen emergency, including but not limited to a change in battery temperature, the monitoring system would immediately notify local operations and maintenance personnel in the vicinity. If necessary, a temporary shutdown of the facility would be automatically triggered until the issue is diagnosed and resolved.

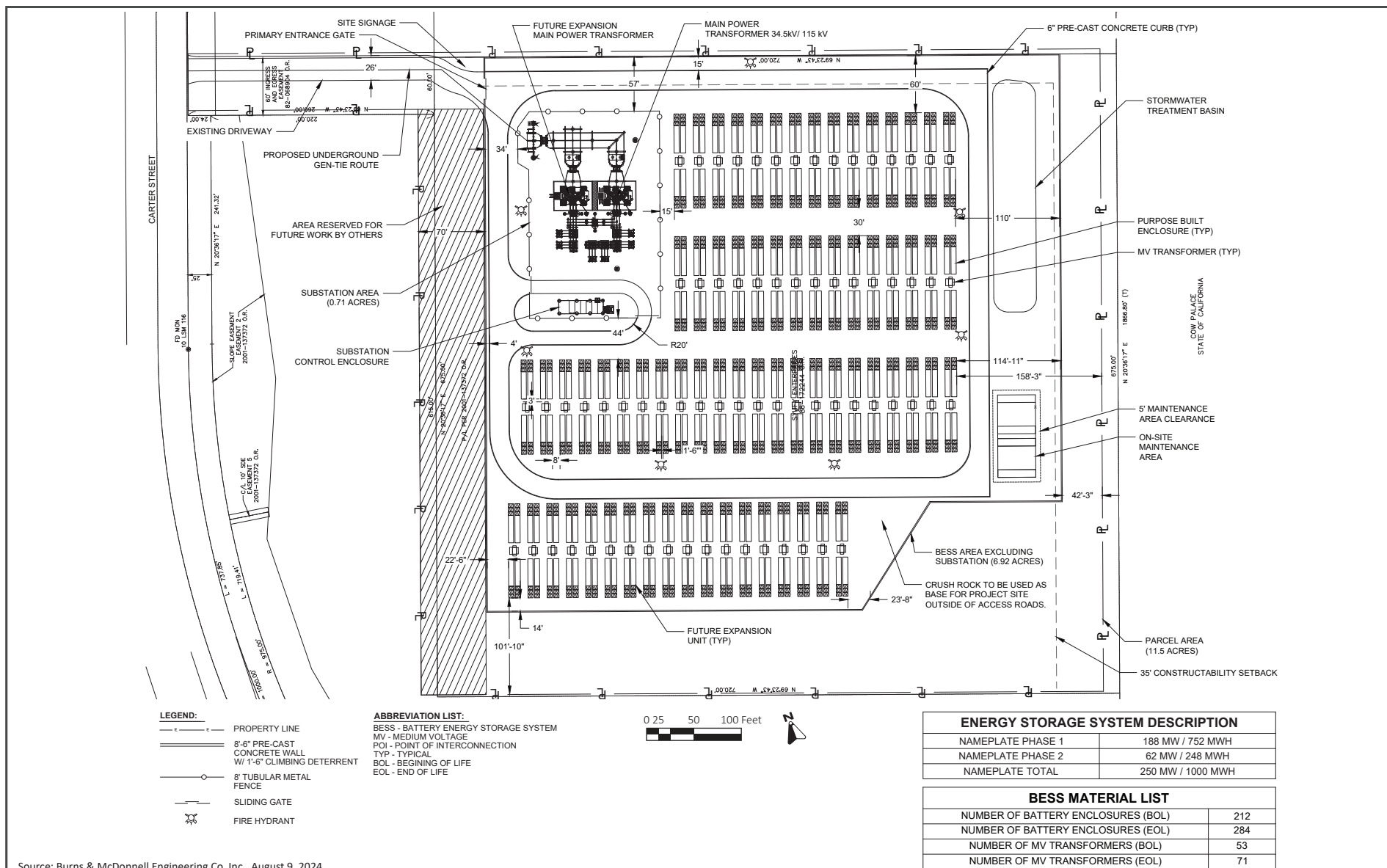
3.2.4 Stormwater Treatment and Landscaping

The project proposes a stormwater treatment area in the northeast corner of the BESS facility. The project would also plant approximately 95 trees on the site at the entry driveway, along the west side of the access road, and along the southerly fence line of the BESS facility and substation.

3.2.5 Construction

3.2.5.1 *Battery Energy Storage System and Substation*

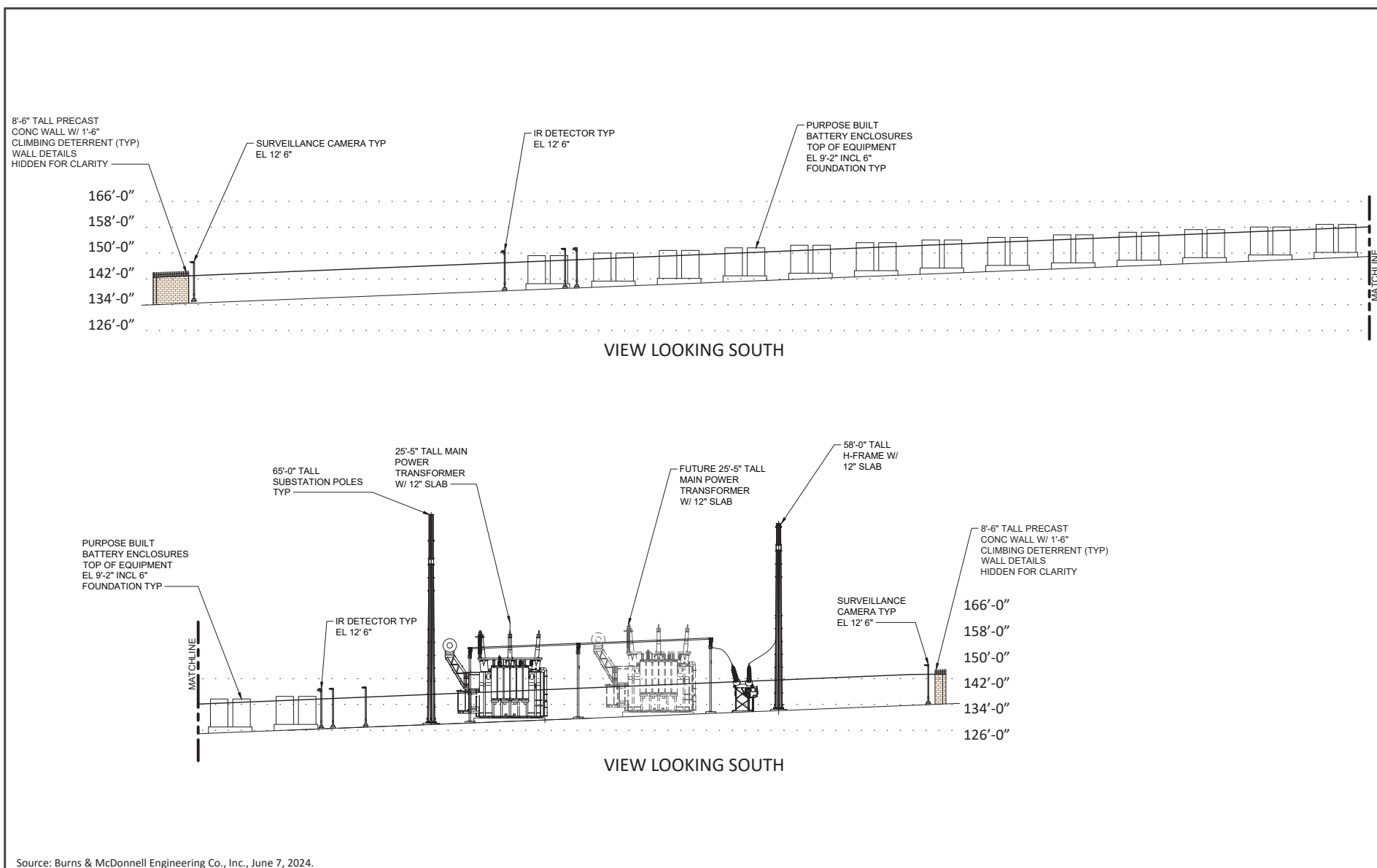
Construction of the proposed BESS and substation would take approximately 10 months and require site grading and excavation to a depth of up to approximately five feet across the majority of the site to allow installation of the underground electrical equipment. A small portion of the site will be excavated up to 15 feet to accommodate the main power transformer foundation. Overall, construction of the project would require 26,400 cubic yards (cy) of soil export. At the end of the project's operational term, the project may be decommissioned and all BESS and substation infrastructure removed. Decommissioning of the project site would take approximately one month. Aboveground equipment that would be removed includes battery containers/enclosures, inverters, transformers, substation steel bus work and enclosures, electrical wiring, etc. Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off site to be recycled or disposed of at an appropriately licensed disposal facility. Site infrastructure would be removed, including the fences and the concrete pads that may support the battery containers/enclosures, inverters, transformers, and related equipment.



Source: Burns & McDonnell Engineering Co, Inc., August 9, 2024.

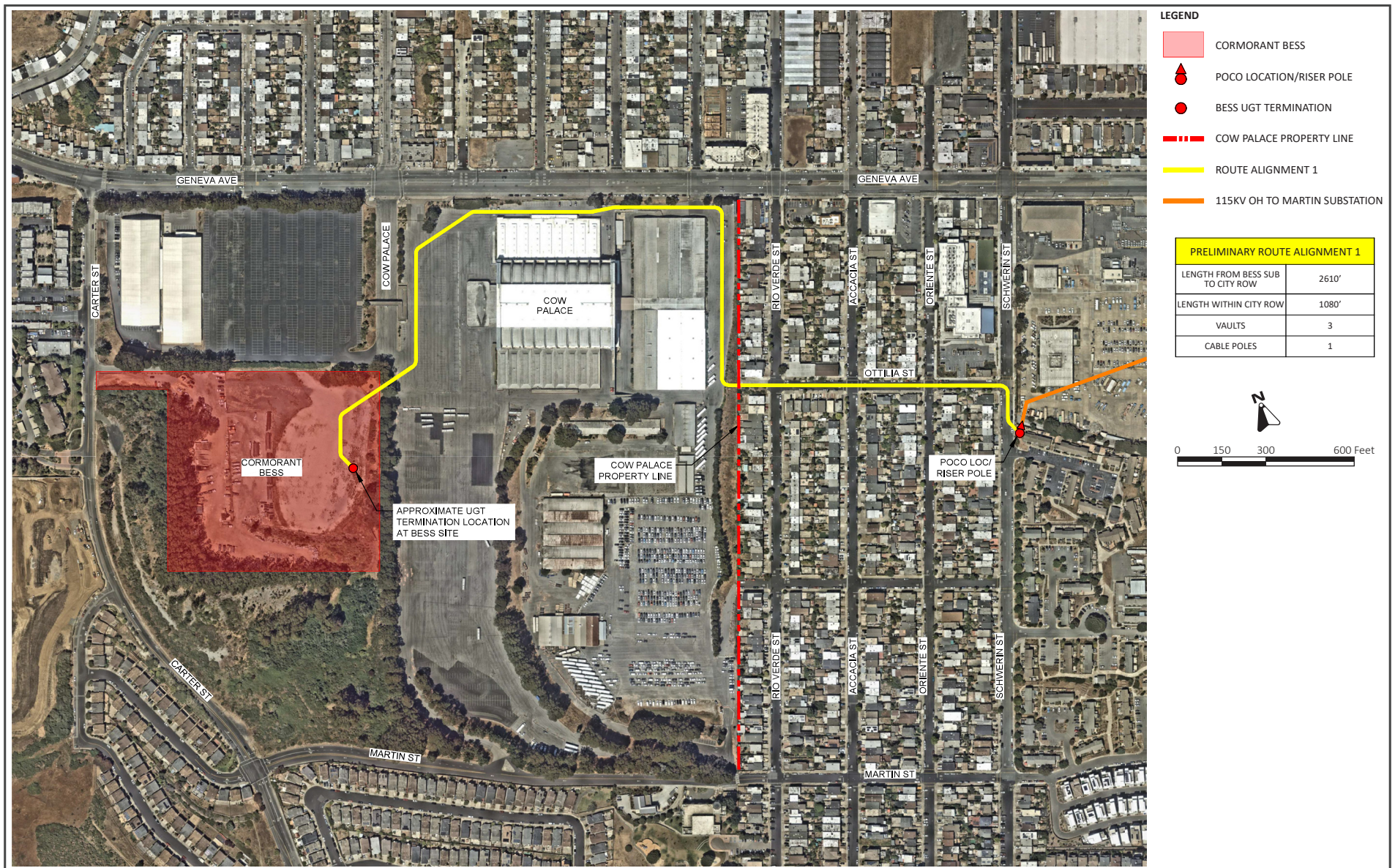
CONCEPTUAL SITE PLAN

FIGURE 3.2-1



CONCEPTUAL EQUIPMENT ELEVATIONS

FIGURE 3.2-2



CONCEPTUAL TRANSMISSION LINE ALIGNMENT 1

FIGURE 3.2-3



CONCEPTUAL TRANSMISSION LINE ALIGNMENT 2/3

FIGURE 3.2-4

3.2.5.2 *Transmission Line*

Construction of the transmission line would take approximately three months and occur primarily within the City right-of-way (ROW) in developed areas, or on state lands (within parking areas and on the perimeter of the Cow Palace property). The work area would be located within the roadway ROW and/or franchise position, and a permit application will be submitted to the City under separate cover.¹ The transmission line would exit the proposed substation and would immediately transition to underground before exiting the project site via one of the three alignments described above and shown in Figure 3.2-3 and Figure 3.2-4. A three-foot-wide by six-foot-deep trench would be dug to accommodate the transmission line and occur within an approximately 20-foot-wide work area. Once the transmission lines reach the PG&E Martin Substation east of the project site, the transmission line would transition to above-ground via a POCO pole.² The connection will cross overhead into the Martin Substation and continue overhead for approximately 0.25-mile and then return underground for the remainder of the routing into the substation. The POCO pole and overhead lines within the Martin Substation would require a seven-foot-wide by 30-foot-deep foundation to be excavated. The construction of the PG&E portion of the transmission line is anticipated to take up to eight months to complete and would occur entirely within the PG&E Martin Substation property.

3.2.5.3 *Tree Removal*

Construction of the BESS and substation would require the removal of 326 trees. Construction of the transmission line along Alignment 1 would require the removal of seven trees as the transmission line exits the BESS site and enters the Cow Palace property to the northeast. Construction of the transmission line along Alignments 2 and 3 would not require the removal or pruning of trees.

¹ Franchise positions are contracts with public/private utility companies granting them the right to use the public ROWs for installation, maintenance, and repair of their facilities, typically underground pipes and conduits or above-ground cables and lights on poles.

² Point of change of ownership (POCO)

Section 4.0 Environmental Setting, Checklist, and Impact Discussion

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project’s impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. “Mitigation measures” are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.2 refers to the second mitigation measure for the first impact in the Biological Resources section.

4.1 Aesthetics

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Scenic Highways Program

The California Scenic Highway Program is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. State laws governing the Scenic Highway Program are found in the Streets and Highway Code, Sections 260 through 263. There are three eligible State scenic highways within the City of Daly City, although none are officially designated; Skyline Boulevard (State Route (SR) 35), Cabrillo Highway (SR 1), and the Junipero Serra Freeway (I-280).

Local

Daly City General Plan

The Daly City 2030 General Plan (General Plan) includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies and task are specific to aesthetics and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy LU-16	Regulate the size, quantity, and location of signs to maintain and enhance the visual appearance of Daly City.
Policy RME-20	Recognize the physical differences between different parts of the City and regulate land uses within these areas accordingly.
Task RME-20.4	Incorporate design features in new development that reflect the character of the neighborhood, to ensure that new construction is compatible with existing development.
Policy LU-17	Ensure that private development is responsible for providing any on-or off-site improvements related to and/or mitigating the impacts it causes.

4.1.1.2 *Existing Conditions*

The project site, located at 2150 Geneva Avenue, is currently vacant and used as a construction staging area and for vehicle storage. Numerous mature trees are present around the perimeter of the project site.

An underground transmission line would run from the proposed substation at 2150 Geneva Avenue to the PG&E Martin Substation to the east along one of three alignments. Alignment 1 would travel through the parking lot and along the northern and eastern borders of the Cow Palace before turning east along Ottilia Street. Alignments 2 and 3 would travel along Carter Street and Martin Street before turning north towards the PG&E Martin Substation along Schwerin Street or Oriente Street. Carter Street, Martin Street, Ottilia Street, Schwerin Street, and Oriente Street are two-lane roadways. Views of the project site can be seen in Figure 4.1-1 and Photos 1 through 8 below.

Surrounding Land Uses

The surrounding area contains a mix of land uses and building types, including multi-family homes to the west, single-family homes to the south, and commercial uses to the north (Bay Club) and to the east (Cow Palace). As a result, there is no dominant visual character in the project area. The multi-family residential buildings to the west are four-stories with painted wood siding. Single-family homes to the south are two-stories with a mix of wood and stucco siding. The commercial use to the north is the Bay Club sports building, which is a large concrete warehouse building and associated surface parking. The commercial use to the east is the Cow Palace, a concrete event center with associated surface parking and warehouses.

Scenic Vistas and Resources

San Bruno Mountain reaches approximately 1,000 feet in elevation and is visible from various locations throughout the City, including the project site, which is about 1.5 miles north of the San Bruno Mountain summit. Views of the coastline or San Francisco Bay are not visible from the project site. The project site is not visible from any state or County designated scenic highways or roadways.



PHOTO LOCATIONS

FIGURE 4.1-1



Photo 1 - Photo Point 1, facing east: View of site from access on Carter Street.



Photo 2 - Photo Point 2, facing east: View of northern perimeter of site parcel.

Source: Dudek, October 2022.

PHOTOS 1 & 2



Photo 3 - Photo Point 2, facing south: View of western side of site parcel.



Photo 4 - Photo Point 3, facing south: View of eastern side of site parcel.

Source: Dudek, October 2022.

PHOTOS 3 & 4



Photo 5 - Photo Point 3, facing west: View toward center of site parcel.



Photo 6 - Photo Point 4, facing north: View toward northern end of site parcel.

Source: Dudek, October 2022.

PHOTOS 5 & 6



Photo 7 - Photo Point 4, facing northeast: View toward center of site parcel.



Photo 8 - Photo Point 5, facing northwest: View toward center of site parcel.

Source: Dudek, October 2022.

PHOTOS 7 & 8

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? ³ If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Would the project have a substantial adverse effect on a scenic vista?

The City's General Plan does not identify any State or County designated scenic highways located in Daly City. However, several roadways have been recognized as having scenic quality. The General Plan identifies John Daly Boulevard and Lake Merced Boulevard as scenic corridors; however, these roadways are not located within the vicinity of the project site. The County has also recognized Guadalupe Canyon Parkway as having scenic quality which indicates that it has the potential to be designated as an official scenic highway by the State or County. Elements of the roadway that contribute to its scenic quality include views of San Bruno Mountain and the San Francisco Bay.

The project proposes the construction of a BESS and substation on-site. The BESS enclosures would have a low profile at a height of approximately nine feet and the substation equipment would have a maximum height of 65 feet. In addition, the project site is downhill from the surrounding residential uses and shielded from view due to the elevation changes and mature trees surrounding the project site. The removal of trees within the project site would not impact mature trees around the perimeter that provide screening of the proposed facility. All three proposed transmission line alignments would be entirely underground and not visible from surrounding viewpoints. The proposed POCO pole in the PG&E Martin Substation would be up to 120 feet tall and the overhead poles within the substation would be approximately 100 feet tall; however, these poles would be of similar height and style to existing poles within the PG&E Martin Substation and surrounding area.

³ Public views are those that are experienced from publicly accessible vantage points.

For these reasons, the project would not have an adverse effect on a scenic vista. **(Less than Significant Impact)**

-
- b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
-

As previously noted, SR 35, SR 1, and I-280 are the three eligible State scenic highways within the City of Daly City. The project site is not visible from any of these highways; therefore, the project would not damage scenic resources within a state scenic highway. **(Less than Significant Impact)**

-
- c) Would the project conflict with applicable zoning and other regulations governing scenic quality?
-

The project site is partially visible from Carter Street at the project driveway; however, the project site is mostly obscured from view from all directions by tree cover and sloping topography. Although tree removal would occur within the project site, mature trees on the site perimeter would provide screening from adjacent roadways. In addition, the proposed POCO and PG&E poles would be of similar height and style to existing poles within the PG&E Martin Substation and surrounding area. While the proposed project would result in a change in visual character at the site, the project would be consistent with the urban and commercial uses in the project area. Due to the limited public viewshed of the project site, and the character of the surrounding area, the proposed project would have a less than significant impact on the visual character and quality of the site. **(Less than Significant Impact)**

-
- d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?
-

The light and glare that exists within the project area is typical of its urban setting. Nighttime lighting impacts are considered significant when they interfere with or intrude into sensitive adjacent uses, including neighboring residences. Light pollution is typically related to the use of high voltage light fixtures with inadequate shields and improper positioning or orientation. The project proposes permanent motion-sensitive, directional security lights to provide adequate illumination around the substation area and points of ingress/egress. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. The project would also comply with the Design Review process outlined in the City's Zoning Ordinance, which requires that general architectural considerations, such as exterior lighting, are compatible with the design and character of other adjacent buildings. For these reasons, the proposed project would not result in significant light and glare impacts. **(Less than Significant Impact)**

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is identified as Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.⁴

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.⁵

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.⁶ Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.⁷

⁴ California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed April 3, 2023. <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

⁵ California Department of Conservation. "Williamson Act." Accessed April 3, 2023. <http://www.conservation.ca.gov/dlrp/lca>.

⁶ Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

⁷ California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed April 3, 2023. <http://frap.fire.ca.gov/>.

4.2.1.2 Existing Conditions

According to the San Mateo County Important Farmland 2018 Map, the project site is designated as Other Land. Other land is defined as land not included in any other mapping category, such as vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as other land.⁸

The project site is not zoned or used for agricultural purposes, nor it is the subject of a Williamson Act contract.⁹ The project site is located in an urban area of Daly City and is not used for agricultural or timber production.

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

⁸ California Department of Conservation. *San Mateo County Important Farmland Map 2018*. September 2019.

⁹ San Mateo County. "Williamson Act Parcels" Accessed April 3, 2023. <https://data.smcgov.org/Housing-Development/Williamson-Act-Parcels/sq6e-7j5j>.

-
- a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
-

The project site is designated Other Land in the San Mateo County Important Farmland 2018 Map and is not considered a significant agricultural resource under CEQA Section 21060.1(a); therefore, the project would not convert farmland to a non-agricultural use. **(No Impact)**

- b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?
-

The project site is not designated for agricultural uses in the General Plan; nor is it zoned or used as farmland or for other agricultural purposes. The project site is not under a Williamson Act contract. Thus, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract and there would be no impact. **(No Impact)**

- c) Would the project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production?
-

The project site and surrounding area are not zoned forest land, timberland, or Timberland Production; therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Thus, there would be no impact. **(No Impact)**

- d) Would the project result in a loss of forest land or conversion of forest land to non-forest use?
-

The project site and surrounding area are not forest land. The proposed project would not result in a loss of forest land or conversion of forest land to non-forest use and there would be no impact. **(No Impact)**

- e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?
-

The proposed project does not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. The project, therefore, would have no impact to agriculture or forest land. **(No Impact)**

4.3 Air Quality

The following discussion is based in part on a Construction Health Risk Assessment prepared by Illingworth & Rodkin, Inc. in September 2024. This document is included as Appendix A to this Initial Study.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Criteria air pollutants are pollutants that have established federal or state standards for outdoor concentrations to protect public health. Pursuant to the federal and state Clean Air Act, the United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established and enforce the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), respectively. The NAAQS and CAAQS address the following criteria air pollutants: ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter with a diameter of 10 microns or less (PM₁₀), particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), sulfur dioxide (SO₂), and lead. The CAAQS also includes visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Toxic Air Contaminants

Toxic air contaminants (TACs) include airborne chemicals that are known to have short- and long-term adverse health effects. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Unlike criteria air pollutants, which have a regional impact, TACs are highly localized and regulated at the individual emissions source level.

DPM is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).¹⁰ Chemicals in diesel exhaust, such as benzene and formaldehyde, are also TACs identified by the CARB.

An overview of the sources of criteria pollutants and TACs, as well as their associated health effects, is provided in Table 4.3-1.

¹⁰ California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed July 5, 2023. <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>.

Table 4.3-1: Sources and Health Effects of Criteria Air Pollutants and Toxic Air Contaminants

Pollutants	Description and Sources	Primary Effects
Ozone (O ₃)	O ₃ is a secondary criteria air pollutant that is the result of a photochemical (sunlight) reaction between reactive organic gases (ROG) and nitrogen oxides (NO _x). Pollutants emitted by motor vehicles, power plants, industrial boilers, refineries, and chemical plants are the common source for this reaction. High O ₃ levels are caused by the cumulative emissions of ROG and NO _x . These precursor pollutants react under certain meteorological conditions to form high O ₃ levels. Common sources of ROG and NO _x are vehicles, industrial plants, and consumer products	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO ₂)	NO ₂ is a reactive gas that combines with nitric oxide (NO) to form NO _x . NO ₂ the byproduct of fuel combustion with common sources of NO ₂ being emissions from cars, trucks, buses, power plants, and off-road equipment. Sources of NO ₂ include motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Carbon Monoxide (CO)	CO is a colorless, odorless, and toxic gas that is the product of incomplete combustion of carbon-containing substances (e.g., when something is burned). Common outdoor sources of CO include mobile vehicles (passenger cars and trucks) and machinery that burn fossil fuels.	• Interferes with oxygen delivery to the body's organ due to binding with the hemoglobin in the blood • Fatigue, headaches, confusion, and dizziness
Fine Particulate Matter (PM _{2.5}) and Coarse Particulate Matter (PM ₁₀)	Particulate Matter is any material that is emitted as liquid or solid particles or a gaseous material, such as dust, soot, aerosols, and fumes. PM ₁₀ and PM _{2.5} are both small enough particulates to be inhaled into the human lungs, and PM _{2.5} is small enough to deposit into the lungs, which poses an increased health risk compared to PM ₁₀ . Typical sources of particulate matter include stationary combustion of solid fuels, construction activities, vehicles, industrial processes, and atmospheric chemical reactions.	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Sulfur Dioxide (SO ₂)	SO ₂ is a pungent and colorless gaseous pollutant that is part of the sulfur oxides (SO _x) group and is the pollutant of greatest concern in the SO _x group. SO _x can react with other compounds in the atmosphere to form small particles. These particles contribute to particulate matter pollution. SO ₂ is primarily formed from fossil fuel combustion at power plants and other industrial facilities. Sources of SO ₂ include motor vehicles, locomotives, ships, and off-road diesel equipment that are operated with fuels that contain high levels of sulfur. Industrial processes, such as natural gas and petroleum extraction, oil refining, and metal processing.	• Aggravation of respiratory illness • Respiratory irritation such as wheezing, shortness of breath and chest tightness • Increased incidence of pulmonary symptoms and disease, decreased pulmonary function

Pollutants	Description and Sources	Primary Effects
Lead	Lead is a naturally occurring element that can be found in all parts of the environment including the air, soil, and water. As an air pollutant, lead is present in small particles. The most common historic source of lead exposure was the past use of leaded gasoline in motor vehicles. The exhaust resulting from use of leaded gasoline would release lead emissions into the air. Now, major sources of lead in the air are from ore and metals processing plants and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. The highest air concentrations of lead are usually found near lead smelters.	Adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system
Toxic Air Contaminants (TACs)	TACs include certain air pollutants known to increase the risk of cancer and/or other serious health effects that range from eye irritation, respiratory issues, and neurological damage. Sources of TAC include, but are not limited to, cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	- Cancer - Chronic eye, lung, or skin irritation - Neurological and reproductive disorders

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.3.1.2 Regulatory Framework

Federal and State

Clean Air Act

At the federal level, the EPA is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously): PM, O₃, CO, SO₂, NO₂, and lead.¹¹

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act.

¹¹ NO_x is the group of nitrogen compounds (NO₂ and nitric oxide [NO]) that typically represents NO₂ emissions because NO₂ emissions contribute the majority of NO_x exhaust emissions emitted from fuel combustion.

The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Diesel Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, this plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in addition to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_x.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how federal and state air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan. The 2017 Clean Air Plan focuses on the following two related BAAQMD goals and how to achieve them:

- Protect air quality and health at the regional and local scale by attaining all state and national air quality standards and eliminating disparities among Bay Area communities in cancer health risk from TAC; and
- Protect the climate by reducing Bay Area GHG emissions 40 percent below 1990 levels by 2040 and 80 percent below 1990 levels by 2050.¹²

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures. The latest CEQA Air Quality Guidelines are the 2022 CEQA Air Quality Guidelines adopted in April 2023 by the Air District Board of Directors.

¹² Bay Area Air Quality Management District. *Final 2017 Clean Air Plan*. April 19, 2017. Page 12.

Local

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies and tasks are specific to air quality and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy RME-5	Assess projected air emissions from new development and associated construction and demolition activities in conformance with the BAAQMD CEQA Guidelines, and relative to state and federal standards.
Task RME-5.3	Consider cumulative air quality impacts consistent with the region's Clean Air Plan and State law.
Task RME-5.4	Require the preparation of a Transportation Systems Management plan for new development that has been determined to contribute to a reduction in location air quality.
Task RME-5.5	Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.
Policy RME-6	Minimize exposure of residents to objectionable smoke and odors by proactively regulating potential sources.

4.3.1.3 *Existing Conditions*

The project is located in San Mateo County, which is in the San Francisco Bay Area Air Basin. The project area's proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on the climate. The Bay Area is considered a nonattainment area for ground-level O₃ and PM_{2.5} under both the federal Clean Air Act and state Clean Air Act. The area is also considered in nonattainment for PM₁₀ under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O₃ and PM₁₀, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O₃ precursor pollutants (ROG and NO_x), PM₁₀, and PM_{2.5}, and apply to both construction period and operational period impacts.

The closest sensitive receptors to the project are the residences along Martin Street, Oriente Street, Schwerin Street, and Otilia Street that are approximately 30 feet from where the future transmission line would be placed underground. The nearest sensitive receptors to the proposed BESS and substation are existing residences located approximately 700 feet to the west and 800 feet to the southwest, as measured from the center of the BESS and substation site.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Note: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the determinations.

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Daly City has considered the air quality thresholds updated by BAAQMD in April 2023 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and PM_{2.5}. The BAAQMD CEQA Air Quality thresholds for criteria air pollutants and fugitive dust used in this analysis are identified in Table 4.3-2. Table 4.3-3 below lists the BAAQMD health risk and hazards thresholds for single-source and cumulative sources.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds

Criteria Air Pollutant	Construction Thresholds*	Operation Thresholds	Operation Thresholds
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
ROG and NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	

Note: * The Air District recommends for construction projects that require less than one year to complete, lead agencies should annualize impacts over the scope of actual days that peak impacts would occur rather than over the full year. Additionally, for phased projects that result in concurrent construction and operational emissions, construction-related exhaust emissions should be combined with operational emissions for all phases where construction and operations overlap.

Source: Bay Area Air Quality Management District. *2022 California Environmental Quality Act Air Quality Guidelines*. April 2023. Pages 3-5 and 3-6.

Table 4.3-3: BAAQMD Health Risks and Hazards Thresholds

Health Risk	Single Source	Combined Cumulative Sources
Cancer Risk	10 per one million	100 per one million
Non-Cancer Hazard Index	1.0	10.0
Annual PM _{2.5} Concentration	0.3 µg/m ³	0.8 µg/m ³ (average)

Notes: µg/m³ = micrograms per cubic meter; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less

Thresholds are applicable to construction and operational activities.

Source: Bay Area Air Quality Management District. *2022 California Environmental Quality Act Air Quality Guidelines*. April 2023. Pages 3-5 and 3-6.

- a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

BAAQMD recommends that the agency approving a project where an air quality plan consistency determination is required analyze the project with respect to the following questions.

- Does the project support the primary goals of the CAP?
- Does the project include applicable control measures from the CAP?
- Does the project disrupt or hinder the implementation of any CAP control measures?

The proposed project supports the primary goals of the 2017 CAP. As discussed below, project construction and operation would not exceed the BAAQMD thresholds for ozone precursor pollutant (ROG, NO_x) and exhaust (PM₁₀, PM_{2.5}) emissions during the construction period with implementation of mitigation measures MM AIR-1.1 and MM AIR-1.2.

The 2017 CAP also contains control strategy BL2, intended to decarbonize buildings. The proposed project would store clean energy (wind and solar) so that peak-hour dependence of natural gas or coal-fired electricity could be lessened, fulfilling control strategy BL2. For these reasons, the proposed project would not inhibit BAAQMD or partner agencies from attaining state and federal air quality standards. Therefore, the project would not result in a significant impact related to consistency with the 2017 CAP. **(Less than Significant Impact with Mitigation Incorporated)**

Construction Period Emissions

The California Air Pollution Control Officers Association's California Emissions Estimator Model (CalEEMod) computes annual emissions for construction of projects based on the project type, size, and acreage. CalEEMod provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activities include worker and truck traffic. The CalEEMod modeling of project-generated construction emissions was based on the applicant-provided schedule and equipment usage assumptions for construction of the BESS, substation, and transmission line. It is estimated that the project would be built over a period of approximately 20 months. The decommissioning phase of the project was also included and is anticipated to occur in the year 2051 and take one month to complete.

Table 4.3-4 below shows project's estimated average daily construction emissions of ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust.

Table 4.3-4: Construction Criteria Pollutant Emissions

Year	ROG	NO _x	PM ₁₀ Exhaust	PM _{2.5} Exhaust
Average Daily (pounds/day)*				
<i>Construction</i>				
2025 (220 construction workdays)	6.14	55.83	2.26	2.08
2026 (184 construction workdays)	1.12	10.39	0.38	0.35
<i>Decommissioning</i>				
2051 (23 construction workdays)	3.26	30.77	1.26	1.17
Significance Threshold (pounds per day)	54	54	82	54
Significant?	No	Yes	No	No

Note: *Average daily emissions calculated by dividing the construction emissions by the number of construction workdays.

As shown in Table 4.3-4 above, the project would generate significant levels of average daily NO_x emissions during construction of the project. Additionally, construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices (BMPs) are implemented to reduce these emissions.

Impact AIR-1: Construction of the project would generate fugitive dust emissions and result in significant NO_x emissions. **(Significant Impact)**

Mitigation Measures: The project shall implement the following mitigation measures to reduce fugitive dust and NO_x emissions to a less than significant level:

MM AIR-1.1: BAAQMD Best Management Practices: The project shall implement the Bay Area Air Quality Management District's (BAAQMD's) recommended best management practices (BMPs) and additional measures to reduce construction equipment exhaust emissions. These measures shall include the following:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as practicable. Building pads shall be laid as soon as practicable after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to site located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
- Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within

48 hours. The Air District's General Air Pollution Complaints number shall be visible to ensure compliance with applicable regulations.

- Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize the amount of excavated material or waste materials stored at the site.
- Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, that are inactive for at least 10 calendar days.

MM AIR-1.2: Selection of Construction Equipment: All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. Environmental Protection Agency (EPA) Tier 4 emission standards for NO_x.

MM AIR-1.1 and MM AIR-1.2 would reduce NO_x emissions by 12 percent, to 49.07 pounds/day, resulting in NO_x emissions below the BAAQMD significance threshold. Therefore, with implementation of MM AIR-1.1 and MM AIR-1.2, project construction emissions would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Operational Period Emissions

The proposed BESS batteries would be housed in purpose-built enclosures located outside. The project would be remotely monitored throughout the day and night, with no permanent full-time or part-time employees commuting to the site on a daily basis. Operational emissions would be generated primarily by electricity use (security lighting and remote monitoring equipment) and occasional maintenance vehicles accessing the project site. The BAAQMD CEQA Air Quality Guidelines contain screening thresholds for operational criteria air pollutants. If a project is below the screening threshold, it is assumed to have less than significant operational criteria air pollutant emissions. The BAAQMD screening threshold for the proposed project (general heavy industry) is 1.009 million square feet.¹³ The BESS and substation would be approximately 436,000 square feet,

¹³ Bay Area Air Quality Management District. *CEQA Air Quality Guidelines*. April 2022. Page 4-4.

which is below the BAAQMD screening threshold; therefore, the project would have less than significant operational period emissions. **(Less than Significant Impact)**

-
- b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
-

As discussed in Section 4.3.1.3 Existing Conditions, the Bay Area is considered a non-attainment area for ground-level O₃, PM_{2.5}, and PM₁₀ under federal and/or state acts. As part of an effort to attain and maintain ambient air quality standards for O₃ and PM₁₀, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O₃ precursor pollutants (ROG and NO_x), PM₁₀, and PM_{2.5}, and apply to both construction period and operational period impacts. The project's construction and operational period air pollutant emissions were estimated and discussed under Impact AIR-1. As discussed under Impact AIR-1, the project's construction period emissions would be below the BAAQMD thresholds of significance with implementation of MM AIR-1.1 and MM AIR-1.2, and the project's operational period emissions are screened out (i.e., assumed to be less than significant); therefore, the project would have a less than significant increase in criteria pollutants. **(Less than Significant Impact with Mitigation Incorporated)**

-
- c) Would the project expose sensitive receptors to substantial pollutant concentrations?
-

Community Health Risk

Projects may result in impacts due to increased community health risk by introducing new sources of pollutant emissions during either construction or operation, or by introducing new sensitive receptors, including residents, to TAC emissions from existing sources.

Project operation is not expected to result in localized air pollutant emissions or TACs, due to the low vehicle traffic due to remote monitoring, and the absence of any stationary emissions sources, such as generators.

Construction Health Risk

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Community risk impacts are addressed by predicting increased lifetime cancer risk, the increase in annual PM_{2.5} concentrations and computing the Hazard Index (HI) for non-cancer health risks. The maximum modeled annual DPM and PM_{2.5} concentrations, which includes both the DPM and fugitive PM_{2.5} concentrations, were identified at nearby sensitive receptors, including the maximally exposed individual (MEI). The construction off-site MEI is shown on Figure 4.3-1.



LOCATION OF OFF-SITE MEI

FIGURE 4.3-1

Table 4.3-5 summarizes the maximum cancer risks, PM_{2.5} concentrations, and HI for project related construction activities (including all three transmission line alignments) affecting the off-site MEI. The unmitigated maximum increased cancer risk, PM_{2.5} concentration, and HI do not exceed the BAAQMD single-source thresholds of greater than 10 per million, 0.3 µg/m³, and 1.0, respectively. The health risk at other nearby sensitive receptors would be lower than at the MEI. **(Less than Significant Impact)**

Table 4.3-5: Project Health Risk Impacts at the MEI

Source	Cancer Risk (per million)	Annual PM _{2.5} (µg/m ³)	Hazard Index
Project Site Construction with Alignment 1	9.16	0.09	0.01
Project Site Construction with Alignment 2	9.75	0.09	0.01
Project Site Construction with Alignment 3	9.72	0.09	0.01
BAAQMD Single-Source Threshold	10	0.3	1.0
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>

Cumulative Community Health Risk

The geographic area for cumulative health risk impacts to sensitive receptors is within 1,000 feet of the project site. This distance is recommended by BAAQMD because adverse effects are the greatest within this distance. A review of the project area indicated existing sources of TACs within 1,000 feet of the project site with the potential to affect the MEI that include Geneva Avenue (high-volume roadway) and one stationary source (diesel generator). Table 4.3-6, below, summarizes the cumulative community risk at the off-site MEI from project construction with Alignment 2, vehicles traveling on Geneva Avenue, and stationary source emissions. Cumulative health risks for Alignments 1 and 3 would be less than those shown in Table 4.3-6. The results show cumulative community risk at the off-site MEI would not exceed the cumulative-source threshold for cancer risk, PM_{2.5}, or HI. **(Less than Significant Impact)**

Table 4.3-6: Unmitigated Cumulative Health Risk Impacts at the MEI

Source	Cancer Risk (per million)	Annual PM _{2.5} (µg/m ³)	Hazard Index
Project Construction with Alignment 2	9.75	0.09	0.01
New Cingular Wireless PCS LLC dba AT&T Mobility (Facility ID #200387, Generator)	0.25	<0.01	<0.01
Geneva Avenue	3.25	0.09	0.01
Cumulative Total	13.25	<0.19	<0.03
BAAQMD Cumulative Source Threshold	100	0.8	10.0
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>

Health Effects from Project Criteria Air Pollutant Emissions

In a 2018 decision (*Sierra Club v. County of Fresno*), the state Supreme Court determined CEQA requires that when a project's criteria air pollutant emissions would exceed applicable thresholds and contribute a cumulatively considerable contribution to a significant cumulative regional criteria pollutant impact, the potential for the project's emissions to affect human health in the air basin must be disclosed. State and federal ambient air quality standards are health-based standards, and exceedances of those standards result in continued unhealthy levels of air pollutants. As stated in the 2022 BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project has a less than significant impact for criteria pollutants, it is assumed to have no adverse health effect.

As discussed under Impact AIR-1, the project would not generate significant amounts of criteria air pollutant emissions during construction or operation with mitigation incorporated. For this reason, the project's less than significant criteria air pollution emissions is concluded to have no adverse health effect. **(Less than Significant Impact with Mitigation Incorporated)**

-
- d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?
-

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable by adjacent receptors; however, the odors from these emissions would be localized and temporary and would not affect a substantial number of people. Additionally, the project would implement BAAQMD BMPs as part of mitigation measure MM AIR-1.1 (see Impact AIR-1), which includes measures that would further reduce odor generated during construction. For these reasons, implementation of the proposed project would not result in significant odors affecting a substantial number of people. **(Less than Significant Impact)**

4.4 Biological Resources

The following discussion is based in part on an Arborist Report prepared by Dudek in June 2024, and a Biological Resources Constraints Memo prepared by WRA, Inc. in September 2024. These documents are included as Appendix B and Appendix C to this Initial Study, respectively.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To “take” a listed species, as defined by the State of California, is “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. This includes direct and indirect acts, except for harassment and habitat modification, which are not included unless they result in direct loss of birds, nests, or eggs. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to

regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional

San Bruno Mountain Habitat Conservation Plan

The San Bruno Area Habitat Conservation Plan (HCP) was executed as an Agreement in November 1982 with the US Fish and Wildlife Service, California Department of Fish and Game, County of San Mateo, the cities of Brisbane, Daly City and South San Francisco, and several private property owners. The HCP was created to provide for the indefinite perpetuation of the Mission blue butterfly and to protect habitat of the other Species of Concern. It includes the establishment of public ownership of sufficient habitat area to support the species as well as funding for the ongoing maintenance of the habitat. Funding is provided by limited development that was excluded from such habitat area and devoted to urban uses, including, among others, residential, community service, commercial and recreational uses.

Given that the San Bruno Mountain encompasses approximately 3,600 acres, with various ownerships and within various cities, the HCP presents a single unifying and coordinating document to provide protection, enhancement and funding for the entire San Bruno Mountain ecological community. The HCP provides for the perpetuation of conserved habitat areas through eradication of exotic species; re-vegetation with grassland species; effective yearly monitoring of the species of concern to control reintroduction of exotics; and patrol of the area to discourage destructive human activities.

Portions of three of the four HCP planning areas are located within the jurisdiction of Daly City (Saddle, Radio Ridge, and Guadalupe Hills). Within those areas, all designated development has been completed including Point Pacific, Village in the Park, South Hills Estates, Linda Vista, and Bay Ridge. All of this development resulted in a net gain of available habitat either through dedication, easements, or on-site restoration. Furthermore, all of these projects continue to contribute to a trust fund that is used to maintain and monitor the habitat in perpetuity.

The majority of the project site is approximately 0.2-mile north of the San Bruno HCP boundary; however, the end point of the proposed transmission line, within the PG&E Martin Substation, is located within the San Bruno HCP boundary.

Local

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to biological resources and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy LU-17:	Ensure that private development is responsible for providing any on- or off-site improvements related to and/or mitigating the impacts it causes.
Policy LU-18:	Development activities shall not be allowed to significantly disrupt the natural or urban environment and all reasonable measures shall be taken to identify and prevent or mitigate potentially significant effects.
Policy RME-16:	The City shall continue to recognize the importance of the San Bruno Mountain Habitat Conservation Plan (HCP), uphold the integrity of the concepts behind the plan, and respect the agreements that serve to implement it.

Daly City Municipal Code

Chapter 12.40 – Urban Forestry of the Daly City Municipal Code provides regulations to optimize the use of trees and other landscaping within the city. This chapter requires plans submitted to the City for the construction, repair, or alteration of any building, housing, or structure to include provisions for sufficient guards or protectors to prevent injury to any existing publicly owned trees, shrubs, flowers, or vines. It also imposes conditions regarding the displacement of public trees, where a comparable size tree shall be planted or a fee is paid to the City to cover the cost of replacing a removed tree.

4.4.1.2 Existing Conditions

The project site is located within an urbanized area of Daly City and consists mostly of developed land, including buildings, paved and concrete areas, landscaped areas, bare dirt, and gravel. Small portions of the project site, located east and south of the proposed BESS and substation and east of the Cow Palace along the proposed transmission line, contain ruderal areas of non-native plant species. These ruderal areas are mostly comprised of non-native herbs such as Cretan mallow (*Malva multiflora*), ripgut brome (*Bromus diandrus*), Italian thistle (*Carduus pycnocephalus*), fennel (*Foeniculum vulgare*), Bermuda buttercup (*Oxalis pes-caprae*), rattail fescue (*Festuca myuros*), bird's-foot trefoil (*Lotus corniculatus*), fumitory (*Fumaria sp.*), purple pampas grass (*Cortaderia jubata*), Harding grass (*Phalaris aquatica*), cotoneaster (*Cotoneaster sp.*), French broom (*Genista monspessulana*), and gorse (*Ulex europaeus*). Eucalyptus stands are located along the project site boundaries surrounding the proposed BESS and substation. The overstory of these stands are comprised of blue gum eucalyptus (*Eucalyptus globulus*), with occasional Monterey pine (*Pinus radiata*). A map showing the different biological land cover types is shown in Figure 4.4-1 below.



Source: WRA, Inc., September 6, 2024.

BIOLOGICAL LAND COVER

FIGURE 4.4-1

Sensitive Natural Communities

No riparian, native grassland, valley oak woodland, or other sensitive natural communities are present within the project site. As documented in Appendix C, there are no rare or threatened plants on the project site; therefore, the project site does not meet CDFW's definition of a sensitive natural community with special status under federal and state law (refer to Section 4.4.1.1 Regulatory Framework).

Special-Status Species

Special-status species are plants and animals that are legally protected under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. For purposes of this analysis, special-status plant species include the following:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as California Rare Plant Rank (CRPR) 1A, 1B, 2, 3, or 4.

For purposes of this analysis, special-status wildlife species include the following:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).

Special-Status Plants

No special-status plant species were observed on the project site during surveys conducted by WRA. Based on a review of resource databases, 66 special-status plant species have been documented in the vicinity of the project site; however, all are unlikely or have no potential to occur on the project site due to lack of suitable conditions (i.e., soil conditions, topography, unique pH, associated natural communities, low levels of disturbance).

Special-Status Wildlife

No special-status wildlife species were observed during surveys conducted by WRA. Based on a review of resource databases, 32 special-status wildlife species have been documented in the vicinity of the project site; however, most of the special-status wildlife species are excluded from

the project site due to lack of habitat features (i.e., tidal march, old growth redwood or fir forest, grassland, sandy beaches, and specific plant hosts).

Bird nests of migratory bird species are protected under federal and state law (refer to Section 4.4.1.1 Regulatory Framework). No evidence of bird nests was observed during the aforementioned site visits, but suitable nesting habitat exists in the trees located along the project site perimeter.

There are no recorded occurrences of any special-status bat species within the project site and surrounding vicinity. However, the eucalyptus trees surrounding the project site could be used by bats for roosting.

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

-
- a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?
-

As discussed in Section 4.4.1.2 Existing Conditions above, there are no known occurrences of special-status plants or wildlife within the project site. However, trees and buildings present on-site may provide suitable nesting and roosting habitat for protected and/or special-status birds and bats. The potential impacts of the project on these species are discussed below.

Nesting Birds

As previously noted, trees located within and along the project site perimeter may provide nesting habitat for migratory birds as well as native nesting birds. If vegetation removal, demolition, and construction activities occur during the nesting season (February 1 through August 31), these activities could result in the destruction or abandonment of an active nest and loss of any eggs or younglings in the nest, which would constitute a significant adverse effect and a violation of the federal Migratory Bird Treaty Act and State Fish and Game code.

Impact BIO-1: Construction of the project could result in significant impacts to nesting birds protected under the federal Migratory Bird Treaty Act and State Fish and Game Code. **(Significant Impact)**

Mitigation Measure: The project shall implement the following mitigation measure to reduce impacts to nesting birds to a less than significant level:

MM BIO-1.1: Initiation of construction activities during the avian nesting season (February 1 through August 31) shall be avoided to the extent feasible. If construction initiation during the nesting season cannot be avoided, pre-construction nesting bird surveys shall be conducted by a qualified biologist within 14 days of initial ground disturbance or vegetation removal to avoid disturbance to active nests, eggs, and/or young of nesting birds. Surveys shall be used to detect the nests of special-status as well as non-special-status birds. Surveys shall encompass the entire construction area and the surrounding 500 feet. An exclusion zone where no construction would be allowed shall be established around any active nests of any protected avian species found in the Study Area until a qualified biologist has determined that all young have fledged and are independent of the nest. Suggested exclusion zone distances differ depending on species, location, and placement of the nest, and shall be at the discretion of the biologist and, if necessary, the California Department of Fish and Wildlife. These surveys would remain valid as long as construction activity is consistently occurring in a given area and shall be completed again if there is a lapse in construction activities of more than 14 consecutive days during the breeding bird season.

A report of findings shall be prepared by the qualified biologist and submitted to the Director of Economic and Community Development or Director's designee for review and approval prior to initiation of construction during the nesting season (February 1 to August 31). The report shall either confirm absence of any active nests or should confirm that any young are located within a designated no-disturbance zone and construction can proceed. No report of findings is required if construction is initiated during the non-nesting season (September 1 to January 31) and continues uninterrupted according to the above criteria.

With implementation of MM BIO-1.1, the project would avoid disturbance to birds nesting on or near the site and would result in a less than significant impact. **(Less than Significant Impact with Mitigation Incorporated)**

Special-Status Bats

The eucalyptus trees located within and along the perimeter of the project site may provide roosting habitat for special-status bats and other designated priority bat species. Tree trimming/removal could displace any roosting bats, if present. Destruction of active roosts or indirect visual or acoustic disturbance to roosting special-status bats would constitute a significant impact under CEQA.

Impact BIO-2: Construction of the project could result in significant impacts to roosting special-status bats. **(Significant Impact)**

Mitigation Measure: The project shall implement the following mitigation measure to reduce impacts to roosting bats to a less than significant level:

MM BIO-2.1: Initiation of construction activities during the bat maternity season (generally April through October) shall be avoided to the extent feasible, any tree removal or trimming should be conducted outside of the bat maternity season. If this work window is not feasible, pre-construction bat roost assessments conducted by a qualified biologist at least 14 days and no more than 30 days prior to removal shall be conducted to determine if bats roosts are present that may be impacted by project activities. If special-status bat species or maternity roosts are detected during these surveys, a qualified biologist shall identify any additional measures required to protect the roosts, such as including avoidance of the roost sites until the end of the maternity roosting season.

Regardless of the timing of tree removal or trimming activities, all felled trees or large limbs should remain on the ground for at least 24-hours prior to chipping, off-site removal, or other processing to allow any roosting individual bats to vacate the premises of their own volition.

A report of findings shall be prepared by the qualified biologist and submitted to the Director of Economic and Community Development or Director's designee for review and approval prior to initiation of construction during the maternity roosting season (April through October). The report shall either confirm absence of any active maternity roosts or specify any additional measures necessary to protect roosts until the end of the maternity roosting season. No report of findings is required if construction is initiated during the non-maternity roosting season (November through March) and continues uninterrupted according to the above criteria.

With implementation of MM BIO-2.1, impacts to individual bats and non-special status individuals and colonies of bats would be avoided during project construction. **(Less than Significant Impact with Mitigation Incorporated)**

-
- b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?
-

As discussed in Section 4.4.1.2 Existing Conditions above, no riparian habitat or sensitive natural communities are present within the project site. Therefore, since construction and operation of the proposed project would be constrained to the project site, the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. **(No Impact)**

-
- c) Would the project have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means?
-

As discussed in Section 4.4.1.2 Existing Conditions above, there are no wetlands present on or adjacent to the project site. Thus, the project would not have a substantial adverse effect on any state or federally protected wetlands. **(No Impact)**

-
- d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
-

As documented in Section 4.4.1.2 Existing Conditions above, the project site is located in an urban area and has been previously disturbed. No watercourses or other natural features are present that would serve as a movement corridor for migratory fish or wildlife species, or as a native wildlife nursery. The majority of trees and understory grasses, forbs, and other plants located on the perimeter of the project site would be preserved and continue to serve as habitat for local wildlife. Any wildlife present within the vicinity of the project site is already acclimated to human activity, and construction activities would not cause any significant impacts on wildlife movement in the

area. For these reasons, the project would not interfere with fish and wildlife movement or in the use of native wildlife nursery sites. **(Less than Significant Impact)**

-
- e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
-

As discussed under Impact BIO-1, the project would mitigate potential impacts to nesting birds and bats to a less than significant level (consistent with General Plan policies LU-17 and LU-18). Additionally, the project would not conflict with the San Bruno Mountain Habitat Conservation Plan (refer to the discussion under Impact BIO-6), consistent with General Plan Policy RME-16. Construction of the BESS and substation would require the removal of 326 trees and construction of the transmission line along Alignment 1 would require the removal of seven trees. Construction of the transmission line along Alignment 2 and Alignment 3 would not require the removal of trees. The City's Urban Forestry Ordinance applies to trees within the public right-of-way, the trees to be removed/pruned by the project are not within the public right-of-way; therefore, the Urban Forestry Ordinance does not apply to the proposed project. Accordingly, the project would not conflict with any local policies or ordinances protecting biological resources. **(Less than Significant Impact)**

-
- f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?
-

The PG&E Martin substation, the end point of the proposed transmission line, is located within the San Bruno HCP boundary. This PG&E Martin Substation, however, is fully developed with industrial uses, contains no special-status species habitat or other sensitive habitats, and is not a designated priority management area in the HCP. Thus, the construction of the proposed transmission line and its connection to the PG&E Martin Substation would not conflict with the provisions of the San Bruno HCP. **(Less than Significant Impact)**

4.5 Cultural Resources

The following discussion is based in part upon an Archaeological Sensitivity Analysis prepared by Archaeological/Historical Consultants in May 2024. A copy of the Archaeological Sensitivity Analysis, which is a confidential report, is on file at the City of Daly City Planning Division and is available upon request with appropriate credentials.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.¹⁴

Historical resources eligible for listing in the CRHR must meet the significance criteria and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” The processes of determining integrity are

¹⁴ California Office of Historic Preservation. “CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6.” Accessed August 31, 2020.
<http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf>.

similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

Senate Bill 18

The intent of SB 18 is to aid in the protection of traditional tribal cultural places through local land use planning by requiring city governments to consult with California Native American tribes on projects that include adoption or amendment of general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Local

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies and tasks are specific to cultural resources and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy LU-19	Archeological resources should be preserved where possible.
Task LU-19.1	Archeological resources are a valuable educational resource for the residents of the city. Every effort should be made to preserve them in their natural state when found or be excavated by professional archeologists for display in a museum.
Policy RME-19	Undertake measures to protect and preserve historic and archaeological resources.
Task RME-19.1	Comply with State statutes related to historical and archaeological resources.

4.5.1.2 *Existing Conditions*

Project Area

There are no known archaeological sites on the project site or PG&E Martin Substation, within the proposed transmission line alignments, or within 0.25-mile of the site. The nearest known archaeological sites are located 0.8- to 1.5-miles northeast of the project site and are Native American shellmounds near the San Francisco Bay.

The project site is vacant and, therefore, contains no historical resources on-site. The project site is, however, directly adjacent to the Cow Palace. The Cow Palace was built between 1935-1941 as a Works Progress Administration (WPA) project and is an indoor arena and event space. It has been used for sports, expositions, concerts, rodeos, and various other events. The Cow Palace is eligible for listing in the NRHP and is listed in the CRHR. No other historic resources are located within the project area.

Native American Consultation

The NAHC was contacted by Archaeological/Historical Consultants to request a review of the Sacred Land Files (SLF) for any evidence of cultural resources or traditional properties of potential concern that might be known on lands within or adjacent to the project area. On February 18, 2023, the NAHC responded that no tribal cultural resources were identified during the SLF review. The NAHC provided a contact list of eight Native American individuals/organizations who may know of cultural resources in this area or have specific concerns about the project. Per SB 18, the City of Daly City requested a tribal consultation list from the NAHC of tribes affiliated with the project area. The City received a list from the NAHC on December 27, 2022, and sent an email and physical letter to each of the identified individuals/organizations on January 5, 2023, inquiring whether they had any concerns about the proposed project. No responses were received within the 90-day response period and the City concluded consultation on April 4, 2023.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as pursuant to CEQA Guidelines Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

- a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

The project site is a vacant lot with no existing permanent structures; thus, the project would not result in the demolition or physical alteration of any historic structures. The project site is adjacent to the Cow Palace, an NRHP eligible and CRHR listed resource; however, construction of the project would not affect the Cow Palace or its historic integrity. The proposed BESS and substation would not physically alter the Cow Palace, would be shielded from view of the Cow Palace by the existing tree line, and would be consistent with the existing land uses surrounding the Cow Palace. In addition, while the transmission line along Alignment 1 would run through the Cow Palace parking lot and along the northern and eastern borders of the Cow Palace property, it would be underground and would not physically alter the Cow Palace or its historic integrity. The project, therefore, would not result in impacts to historic resources. **(Less than Significant Impact)**

- b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

As discussed above, there are no known archaeological resources within 0.25-mile of the project site, PG&E Martin Substation, or proposed transmission line route. In addition, the Archaeological Sensitivity Analysis concluded that the area near the Cow Palace along transmission line Alignment 1 has low sensitivity for historic-era resources. Based on the project location and lack of known resources, the archaeological sensitivity analysis concluded that the project area has a low sensitivity for archaeological resources. The project, however, could still result in significant impacts to undiscovered subsurface archaeological resources if encountered during construction-related ground disturbing activities.

Impact CUL-1: Construction of the project could result in significant impacts to previously undiscovered subsurface archeological resources. **(Significant Impact)**

Mitigation Measures: The project shall implement the following mitigation measures to reduce impacts to archaeological resources to a less than significant level:

MM CUL-1.1: Undiscovered Archaeological Resources. If evidence of an archaeological site or other suspected cultural resource as defined by CEQA Guideline Section 15064.5, including darkened soil representing past human activity (“midden”), that could conceal material remains (e.g., worked stone, worked bone, fired clay vessels, faunal bone, hearths, storage pits, or burials) is discovered during construction related earth-moving activities, all ground-disturbing activity within 100 feet of the resources shall be halted and the City’s Planning Manager shall be notified. The project sponsor shall hire a qualified archaeologist to conduct a field investigation. The City’s Planning Manager shall consult with the archaeologist to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a qualified archaeologist and that are consistent with the Secretary of the Interior’s Standards for Archaeological documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-J) form and filed with the NWIC.

MM CUL-1.2: Report of Archaeological Resources. If archaeological resources are identified, a final report summarizing the discovery of cultural materials shall be submitted to the City’s Planning Manager prior to issuance of certificate of occupancy. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found and conclusion, and a description of the disposition/curation of the resources.

Implementation of MM CUL-1.1 would ensure that any potentially undiscovered archaeological resources are identified and appropriately treated and protected by a qualified archaeologist in accordance with the Secretary of the Interior’s standards. Mitigation addressing subsurface archaeological resources would be documented and enforced through implementation of MM CUL-1.2. Therefore, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

-
- c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?
-

Human remains have the potential to be discovered during construction. If human remains were unearthed during project construction, damage to or destruction of significant human remains would be a potentially significant impact.

Impact CUL-2: Construction of the project could result in significant impacts to previously undiscovered human remains. **(Significant Impact)**

Mitigation Measure: The project shall implement the following mitigation measure to reduce impacts to human remains to a less than significant level:

MM CUL-2.1: Human Remains. If human remains are discovered during project construction, all ground-disturbing activity within 100 feet of the resources shall be halted and the City's Planning Manager and the San Mateo County coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project sponsor shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including the excavation and removal of the human remains. The City of Daly City shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of State law, as set forth in CEQA Guidelines section 15064.5(e) and Public Resources Code section 5097.98. The project sponsor shall implement approved mitigation, to be verified by the City of Daly City, before the resumption of ground-disturbing activities within 100 feet of where the remains were discovered.

By following the process set forth in MM CUL-2.1, the project would ensure that any human remains encountered during ground-disturbing activities are appropriately identified and treated. **(Less than Significant Impact with Mitigation Incorporated)**

4.6 Energy

The following discussion is based in part on a Construction Health Risk Assessment prepared by Illingworth & Rodkin, Inc. in September 2024. This document is included as Appendix A to this Initial Study.

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued an executive order, EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO₂ from the atmosphere through sequestration.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a

legislative mandate to reduce California’s energy consumption. Title 24 is updated approximately every three years.¹⁵ Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.¹⁶

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.¹⁷

Local

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to energy and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy HE-24	Mandate the inclusion of green building techniques into most new construction.
Policy HE-28	Promote alternative sources of energy in all homes.

¹⁵ California Building Standards Commission. “California Building Standards Code.” Accessed April 3, 2023. <https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo>.

¹⁶ California Energy Commission (CEC). “2019 Building Energy Efficiency Standards.” Accessed April 3, 2023. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>.

¹⁷ California Air Resources Board. “The Advanced Clean Cars Program.” Accessed April 3, 2023. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>.

Daly City's Green Vision

Daly City's Green Vision, A Climate Action Plan (CAP) for 2011-2020 and Beyond, was adopted in December 2010. Daly City's Green Vision guides the City towards a sustainable future that reduces GHG emissions from current levels, while promoting economic prosperity for present and future generations. The Green Vision identifies ten goals and seeks to achieve these goals through cost-effective strategies by the year 2020. The GHG reduction goals include adopting a general plan with measurable policies for sustainable development, reducing energy use in buildings, reducing transportation emissions, reducing solid waste disposal, and GHG emissions reductions from municipal operations. Daly City completed an update to the General Plan which incorporated these goals in March 2013.

Daly City Municipal Code

The City's Recycling and Diversion of Construction and Demolition ordinance (Municipal Code 15.64) requires that all projects meet the minimum diversion percentage required under the latest locally adopted CALGreen standard for waste tonnage from construction, demolition, and alteration projects. Waste shall be diverted from disposal. This may be accomplished by delivering mixed debris to a recycling facility approved by the city, separating recyclables at the job site and delivering them to reuse and recycling facilities approved by the city, and/or reusing concrete or other waste materials at the jobsite.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,359 trillion British thermal units (Btu) in the year 2021, the most recent year for which this data was available.¹⁸ Out of the 50 states, California is ranked second in total energy consumption and 48th in energy consumption per capita. The breakdown by sector was approximately 20 percent (1,473 trillion Btu) for residential uses, 19 percent (1,397 trillion Btu) for commercial uses, 23.2 percent (1,704 trillion Btu) for industrial uses, and 37.8 percent (2,785 trillion Btu) for transportation.¹⁹ This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

In 2022, California's in-state electricity generated equaled about 80 percent of California electricity sales and the remaining 20 percent of the State's electricity supply came from out of state sources. In 2022, non-hydroelectric renewables provide 42 percent of California's total in-state electricity generation. The remaining source percentages are as follows: 42 percent from natural gas-fired power plants, eight percent from hydroelectric renewable resources, and eight percent from nuclear power.²⁰

¹⁸ United States Energy Information Administration. "California State Energy Profile." Last Updated April 20, 2023. Accessed September 29, 2023. <https://www.eia.gov/state/print.php?sid=CA>.

¹⁹ Ibid.

²⁰ Ibid.

In 2022, a total of approximately 4,177 GWh of electricity was consumed in San Mateo County. The non-residential sector consumed approximately 2,580 GWh (62 percent) and the residential sector consumed approximately 1,597 GWh (38 percent).²¹

Peninsula Clean Energy (PCE) is a public and locally controlled electricity provider for the County of San Mateo. Electricity provided by PCE is delivered through PG&E transmission lines. Commercial and residential customers in San Mateo County are included in the PCE service area and can choose to have 50 to 100 percent of their electricity supplied from carbon-free and renewable sources. Customers are automatically enrolled in the ECOplus plan, which generates its electricity from 100 percent carbon-free sources, with at least 50 percent from renewable sources. Customers have the option to enroll in the ECO100 plan, which generates its electricity from 100 percent carbon-free, renewable sources.²² The project site is vacant and does not use any electricity.

Natural Gas

PG&E provides natural gas services within the City of Daly City. In 2022, California's natural gas supply came from a combination of in-state production and imported supplies from other western states and Canada.²³ In 2021, residential and commercial customers in California used 33 percent of the state's natural gas, power plants used 0.01 percent, the industrial sector used 33 percent.²⁴ In 2020, San Mateo County used less than one percent of the state's total consumption of natural gas.²⁵ The project site is vacant and does not use any natural gas.

Fuel for Motor Vehicles

In 2022, California produced approximately 124 million barrels of crude oil.²⁶ Approximately 13.64 billion gallons of gasoline and 2.3 billion gallons of diesel were sold in California in 2022.²⁷ The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to

²¹ California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed October 9, 2023. <https://ecdms.energy.ca.gov/Default.aspx>.

²² Sources: 1) Peninsula Clean Energy. "Frequently Asked Questions." Accessed March 13, 2023. <https://www.peninsulacleanenergy.com/faq/>. 2) Peninsula Clean Energy. "Energy Choices." Accessed March 13, 2023. <https://www.peninsulacleanenergy.com/faq/>.

²³ California Gas and Electric Utilities. 2022 *California Gas Report*. Accessed March 13, 2023. https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf.

²⁴ United States Energy Information Administration. "Natural Gas Consumption by End Use. 2021." Accessed March 13, 2023. <https://www.eia.gov/state/?sid=CA#tabs-2>.

²⁵ California Energy Commission. "Natural Gas Consumption by County." Accessed March 13, 2023. <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

²⁶ U.S. Energy Information Administration. "Petroleum & Other Liquids, California Field Production of Crude Oil." September 27, 2023. <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pets&s=mcrfpca1&f=a>

²⁷ California Energy Commission. "2022 California Annual Retail Fuel Outlet Report Results (CEC-A15) Energy Assessments Division." August 16, 2023. Accessed September 29, 2023. <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>

25.4 mpg in 2021.²⁸ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was updated in April 2022 to require all cars and light duty trucks achieve an overall industry average fuel economy of 49 mpg by model year 2026.^{29,30} The project site is currently used as a construction staging and vehicle storage area. While there are periodic vehicle trips to and from the project site, for the purposes of this analysis, it is assumed that no gasoline is used under existing conditions.

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐
a) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				

Construction

Construction activities associated with the proposed project are estimated to occur at the site over an approximate 23-month period and would consist of site preparation, trenching, grading, paving, installation of the substation, installation of the transmission line, and improvements to the PG&E Martin Substation. The overall construction schedule and process is designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel are not typically used wastefully on the site because of the added expense associated with renting the equipment, as well as maintaining and fueling it. In addition, as discussed in Section 3.3 Air Quality, the project would implement mitigation measures to minimize the idling of construction equipment thus reducing the potential for energy waste. Further, the project would recycle at least 65 percent of construction and

²⁸ United States Environmental Protection Agency. "The 2022 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." December 2022.

<https://www.epa.gov/system/files/documents/2022-12/420r22029.pdf>.

²⁹ United States Department of Energy. *Energy Independence & Security Act of 2007*. Accessed March 13, 2023.

<http://www.afdc.energy.gov/laws/eisa>.

³⁰ United States Department of Transportation. "USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026." Accessed March 13, 2023. <https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026>

demolition waste consistent with CALGreen requirements. For these reasons, construction of the project would not use energy in a wasteful manner. **(Less than Significant Impact)**

Operation

The project would develop a vacant lot and would result in an increase in energy use compared to existing conditions. The proposed BESS would be located outside in purpose-built enclosures; thus, the project would not require the typical energy needs of buildings (i.e., heating, cooling, water heater, indoor lighting). Electricity would be used to power outdoor security lighting and to run the remote monitoring equipment. No permanent full-time or part-time employees would occupy the site and the BESS would be monitored remotely with maintenance staff visiting the facilities periodically throughout the year. Assuming a 22-mile round trip for the maintenance truck, the project would generate 1,056 vehicle miles and associated gasoline use of 42 gallons per year. To ensure that energy is not wasted or unnecessarily consumed, the project would comply with Title 24 and CALGreen energy efficiency measures, as well as City of Daly City Green Vision requirements. These various requirements would reduce project energy demand by ensuring that the project would be built to current energy efficiency standards. For these reasons, operation of the project would not use energy in a wasteful manner. **(Less than Significant Impact)**

-
- b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?
-

The project would conform to General Plan policies and regulations which promote the use and expansion of renewable energy resources, including solar and wind, by providing needed storage when the renewable energy is generated—thereby reducing the need for natural-gas electricity generation. By conforming to applicable General Plan policies related to renewable energy and energy efficiency, and the CBC and CALGreen, the project would not preclude the City from meeting local or state renewable energy or energy efficiency goals; rather, it would facilitate the City's objectives and state RPS requirements to meet these goals. **(Less than Significant Impact)**

4.7 Geology and Soils

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These materials are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to geology and soils and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy SE-1.1	Continue to investigate the potential for seismic and geologic hazards as part of the development review process and maintain this information for the public record. Update Safety Element maps as appropriate.
Policy SE-1.2	Require site specific geotechnical, soils, and foundation reports for development proposed on sites identified in the Safety Element and its Geologic and Hazard Maps as having moderate or high potential for ground failure.
Policy SE-1.3	Permit development in areas of potential geologic hazards only where it can be demonstrated that the project will not be endangered by, nor contribute to, the hazardous condition on the site or on adjacent properties. All proposed development is subject to the City's Zoning Ordinance and Building Codes.
Policy SE-1.4	Prohibit development—including any land alteration, grading for roads and structural development—in areas of slope instability or other geologic concerns unless mitigation measures are taken to limit potential damage to levels of acceptable risk.
Policy SE-6.1	Regulate building construction practices to prevent hazardous structures and assure structural safety. Measures may include requiring conformance to an accepted set of construction standards, authorizing inspection of suspected dangerous structures, discontinuing improper construction activities, and eliminating hazardous conditions.

Daly City Municipal Code

Title 15 of the Daly City Municipal Code includes Chapter 15.62 “Grading, Erosion, and Sediment Control”, which is intended to provide for safe grading operations, to safeguard public health and property, and to preserve and enhance the natural environment, including, but not limited to, water quality, by regulating site clearing, grading and erosion control on all public and private properties. Among other conditions, Chapter 15.62 requires projects to prepare an erosion and

sediment control plan, an engineering geology report, and when requested, a soil/geotechnical engineering report in order to address geological and soils related hazards and engineering issues.

4.7.1.2 *Existing Conditions*

Soils

The project site is relatively flat and situated at an elevation of approximately 140 feet above mean sea level (msl). The project site is underlain by Urban land soils, which contain variable soil types textures.³¹ The proposed transmission line route ranges from approximately 140 feet msl to 20 feet msl and is underlain by Urban land and Urban land-Orthents.³² Urban land and Urban land-Orthents soils could contain expansive clays; thus, there is potential for expansive soils to be located on the project site and along the proposed transmission line route.³³

Seismicity and Seismic-Related Hazards

The project site is situated in an area of high seismic activity. Several major fault zones are present in the Bay Area, including the San Andreas, San Gregorio, Hayward and Monte Vista faults. The project site would experience intense ground shaking in the event of a large earthquake. The project site is not, however, within a mapped State of California Earthquake Fault Zone, Fault Rupture Hazard Zone.³⁴ The closest active fault is the San Andreas fault, located approximately four miles southwest of the project site.

Liquefaction

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. The project site and proposed transmission line route are located within a State of California Hazard Zone for potential liquefaction.³⁵

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of sloping, saturated soil deposits caused by earthquake-induced liquefaction, and often occurs along sloping creek banks. There are no creeks on or near the project site or proposed transmission line route.

³¹ United States Department of Agriculture. "Web Soil Survey". Accessed April 5, 2023. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

³² Ibid.

³³ University of California Davis. "SoilWeb". Accessed April 5, 2023. <https://casoilresource.lawr.ucdavis.edu/gmap/>.

³⁴ California Department of Conservation. "California Earthquake Hazards Zone Application". Accessed April 5, 2023. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>.

³⁵ Ibid.

Landslides

Landslide zones in the vicinity of the project site are located near the intersection of Carter Street and Martin Street. The project site is located on gently sloping land and would not be exposed to substantial slope instability, erosion, or landslide-related hazards. The proposed transmission line route would also not cross any designated landslide hazard areas.³⁶

Paleontological Resources

The project site is not known to contain any subsurface paleontological or geological features. The project site is vacant and underlain with Urban land and Urban land-Orthent soils, which are a mix of various soil types and textures. These soils do not typically contain unique paleontological resources or geologic features. The proposed transmission line route would follow existing urban development and be located within the PG&E Martin Substation, which required previous excavation and grading to construct; thus, paleontological resources are unlikely to be found near the ground surface.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☒	☐
– Strong seismic ground shaking?	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
– Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

³⁶ Ibid.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐

- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?

The project site is not located on or adjacent to a known earthquake fault, such that potential substantial adverse effects, including the risk of loss, injury, or death would occur from rupture of an earthquake fault. The project site is not prone to landslides; therefore, there would be no impact.

An earthquake of moderate to high magnitude generated within the San Francisco Bay Region could cause considerable ground shaking and seismic-related ground failure, including liquefaction, at the site. Consistent with the findings of the Daly City 2030 General Plan Environmental Impact Report (General Plan EIR), compliance with the building codes and construction standards established by the CBC as required by law would be sufficient to protect against building collapse and major injuries during a seismic event.³⁷ The project would comply with current CBC building codes and standards and be constructed in accordance with the recommendations of a site-specific geotechnical investigation (as required by the CBC) and the engineering geology report prepared as required by Chapter 15.62 of the Daly City Municipal Code.

³⁷ City of Daly City. *General Plan Update Draft Environmental Impact Report*. October 2012. Page 3.5-15.

The project, in conformance with applicable regulations and with the implementation of the recommendations in the geotechnical report, would not result in significant impacts from seismicity and seismic-related hazards, including ground shaking and liquefaction. **(Less than Significant Impact)**

b) Would the project result in substantial soil erosion or the loss of topsoil?

Construction-related ground disturbing activities (grading, excavation, etc.) proposed by the project are expected to result in the exposure of soil to wind and water erosion. If managed improperly, construction could result in substantial soil erosion or loss of topsoil.

The City's National Pollutant Discharge Elimination System (NPDES) Municipal Permit and Chapter 15.62 of the City's Municipal Code are the City's primary means of enforcing erosion control measures through the grading and building permit process. Consistent with the findings of the General Plan EIR, compliance with the erosion control provisions included in the NPDES Municipal Permit and the erosion and sediment control plan required by Chapter 15.62 of the Municipal Code would ensure that the project would not result in substantial soil erosion or loss of topsoil.³⁸ **(Less than Significant Impact)**

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

As discussed under Impact GEO-1, the project would be required by law to comply with current CBC building codes and standards and be constructed in accordance with the recommendations of the site-specific geotechnical investigation and engineering geology report, which would ensure that the project would not exacerbate the risk of ground failure, including liquefaction, lateral spreading, landsliding, and other related phenomenon. As such, the project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. **(Less than Significant Impact)**

d) Would the project be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?

Soils on the project site and along the transmission line route could be considered expansive. By conforming with current CBC building codes and standards and the recommendations of the site-specific geotechnical investigation and the engineering geology report, the project would not create direct or indirect risks to life or property. **(Less than Significant Impact)**

³⁸ Ibid. Page 3.5-17.

-
- e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
-

The proposed project would not generate wastewater and would not require the use of septic tanks or alternative wastewater disposal systems. **(No Impact)**

- f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?
-

Construction of the proposed BESS and substation would require excavation of up to 15 feet, construction of the proposed transmission line would excavation of up to six feet, and construction of the POCO pole would require excavation up to 30 feet. While it is unlikely that paleontological resources will be encountered at these excavation depths, the proposed project could potentially disturb undiscovered paleontological resources during construction activities.

Impact GEO-1: Construction of the project could result in significant impacts to previously undiscovered paleontological resources. **(Significant Impact)**

Mitigation Measure: The project shall implement the following mitigation measure to reduce impacts to human remains to a less than significant level:

MM GEO-1.1: Unique Paleontological and/or Geologic Features and Reporting. Should a unique paleontological resource, site, or unique geological feature be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet shall cease and the City's Planning Manager notified immediately. A qualified paleontologist shall evaluate the find and prescribe mitigation measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is implemented. Treatment may include, but is not limited to, preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The project applicant shall be responsible for implementing the recommendations of the qualified paleontologist. Upon completion of the paleontological assessment, a report shall be submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology.

Implementation of MM GEO-1.1 would ensure that any paleontological resource or unique geological feature encountered during project construction would be identified and subsequently evaluated and protected in accordance with California Public Resources Code Section 5097.5. As

such, impacts to unique paleontological resources would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

4.8 Greenhouse Gas Emissions

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO₂ equivalents (CO₂e). The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion
- N₂O is associated with agricultural operations such as fertilization of crops
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty
- HFCs are now used as a substitute for CFCs in refrigeration and cooling
- PFCs and SF₆ emissions are commonly created by industries such as aluminum production and semiconductor manufacturing

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

State

Assembly Bill 32 and State Bill 32

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources. The first Scoping Plan was approved by CARB in 2008 and must be updated at least every five years. Since 2008, there have been two updates to the Scoping Plan.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO₂e (MMTCO₂e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO₂e.

2022 Scoping Plan

On December 15, 2022, CARB approved the 2022 Scoping Plan. The 2022 Scoping Plan provides a sector-by-sector guide on how to reduce man-made (i.e., anthropogenic) GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045 over a 25-year horizon.³⁹ The primary focus of the 2022 Scoping Plan is to reduce the usage of fossil fuels by electricizing the transportation sector, procuring electricity from renewable resources, phasing out natural gas in land use developments, and building transit-oriented communities that encourage multi-modal transportation. If implemented successfully, the 2022 Scoping Plan would not only reduce GHG emissions but also reduce smog-forming air pollution (NO_x) by 71 percent and reduce fossil fuel demand by 94 percent. The 2022 Scoping Plan also details natural carbon capture and storage process along with mechanical carbon capture programs to address the remaining 15 of anthropogenic GHG emissions that will remain post-2045. To meet these goals, CARB also includes a revised goal of reducing state GHG emissions 48 percent below 1990 levels by 2030.

Senate Bill 375 and Plan Bay Area 2050

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per capita GHG emissions reduction targets for passenger vehicles in the Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

³⁹ CARB. *2022 Scoping Plan for Achieving Carbon Neutrality*. November 16, 2022. Page 5.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2050.

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified priority development areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.⁴⁰

Plan Bay Area 2050 includes a goal to increase the number of households that live within 0.5 mile of frequent transit by 2050. Plan Bay Area 2050 promotes strategies that support active and shared modes, combined with a transit-supportive land use patterns, which together are forecasted to lower the share of Bay Area residents that drive to work alone from 50 percent in 2015 to 33 percent in 2050, resulting in a decrease in GHG emissions. Plan Bay Area 2050 also includes goals to expand transportation demand management (TDM) initiatives that support and augment employers' commute programs, providing a path to emissions reductions.

Senate Bill 100

SB 100, known as "The 100 Percent Clean Energy Act of 2018," was adopted on September 10, 2018. The overall goal is to have all retail electricity sold in California procured from 100 percent renewable and zero-carbon resources by the year 2045. SB 100 also modified the renewables portfolio standard to 50 percent by 2025 and 60 percent by 2030.

Executive Order B-55-18 and Assembly Bill 1279

Executive Order B-55-18 was issued in September 2018. It ordered a new statewide goal of achieving carbon neutrality no later than 2045 and to maintain net negative emissions thereafter.

Assembly Bill 1279, also known as the California Climate Crisis Act, was approved in September 2022 and codifies the statewide goal set by Executive Order B-55-18 of achieving net zero GHG emissions no later than the year 2045 and maintaining net negative emissions thereafter. In addition, this bill has a statewide goal of reducing anthropogenic GHG emissions by 85 percent below the 1990 levels by the year 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and implement strategies that enable CO₂ removal solutions and carbon capture, utilization, and storage technologies in California. The bill requires CARB to submit an annual report.

⁴⁰ Association of Bay Area Governments and Metropolitan Transportation Commission. Plan Bay Area 2050. October 21, 2021. Page 20.

Advanced Clean Cars II Regulation

To continue reducing air pollutants and GHG emissions in the transportation sector, CARB adopted the Advanced Clean Cars II Regulations (Resolution 22-12) in August 2022. The new regulation requires that by 2035 all new passenger cars, trucks, and SUVs sold in California will be zero emissions. This regulation bans the sale of new gasoline or diesel passenger cars, trucks, and SUVs in California from automakers. Beginning in the year 2026, 35 percent of new vehicle sales must be zero-emission vehicles and plug-in hybrid electric vehicles and that percentage will increase per year. By 2030, 70 percent of new vehicle sales will be zero-emissions vehicles and by the 2035 model year 100 percent of new vehicle sales will be zero-emissions. CARB will limit the use of plug-in hybrid electric vehicles in the percentage requirements to keep the manufacturing of zero-emissions as the primary goal. Existing gasoline cars can continue to be driven and sold as used cars beyond 2035. CARB is required to track and report on the zero-emissions vehicle market development annually.

California Building Standards Code – Title 24 Part 11 and Part 6

The CALGreen Code is part of the California Building Standards Code under Title 24, Part 11.⁴¹ The CALGreen Code encourages sustainable construction standards that incorporate planning/design, energy efficiency, water efficiency resource efficiency, and environmental quality. These green building standard codes are mandatory statewide and are applicable to residential and non-residential developments. The most recent CALGreen Code (2022 CALGreen Code) was effective as of January 2023.

The California Building Energy Efficiency Standards (California Energy Code) is under Title 24, Part 6 and is overseen by the CEC. This code includes design requirements to conserve energy in new residential and non-residential developments. This Energy Code is enforced and verified by cities during the planning and building permit process. The 2022 Energy Code replaced the 2019 Energy Code as of January 1, 2023. There are new 2022 standards for single-family residences, multi-family residences, and non-residential uses.^{42,43,44} Major changes include electric-ready single-family and multi-family residence and solar photovoltaic systems and energy storage systems for residential and commercial developments.

CALGreen also requires new construction and demolition projects to have a diversion of at least 65 percent of the construction waste generated.

⁴¹ Refer to <https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen#:~:text=CALGreen%20is%20the%20first%2Din,to%201990%20levels%20by%202020>.

⁴² California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Single-Family Residential." Revised July 15, 2022. Accessed January 18, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Single-family_Whats_New_Summary_ADA.pdf.

⁴³ California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Multifamily." Revised August 4, 2022. Accessed January 18, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Multifamily_Whats_new_Summary_ADA.pdf.

⁴⁴ California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Nonresidential." Revised August 4, 2022. Accessed January 18, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Nonresidential_Whats_New_Summary_ADA.pdf.

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 Clean Air Plan prepared by BAAQMD includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

BAAQMD CEQA Thresholds for Evaluating Climate Impacts from Land Use Projects and Plans

In April 2022, the BAAQMD Board of Directors adopted the Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. The report includes BAAQMD's thresholds of significance for use in determining whether a proposed project or plan will have a significant impact on climate change and provides substantial evidence to support these thresholds. The April 2022 GHG thresholds replace the GHG thresholds set forth in the May 2017 BAAQMD CEQA Air Quality Guidelines and represent what is required of new land use development projects and plans to achieve California's long-term climate goal of carbon neutrality by 2045.

Daly City General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to GHGs and are applicable to the proposed project.

General Plan Policies and Tasks

Policy	Description
Policy HE-24	Mandate the inclusion of green building techniques into most new construction.
Policy HE-28	Promote alternative sources of energy in all homes.

Daly City Reach Code

In April 2021, the City Council of Daly City adopted a reach code ordinance to electrify buildings and vehicles in new construction. The new requirements are intended to result in safer and more comfortable buildings, increase electric vehicle charging infrastructure, and reduce carbon emissions. The ordinance requires all new buildings to be all-electric with some exceptions, such as non-residential buildings containing a commercial kitchen that may contain non-electric cooking appliances. The ordinance also requires electric vehicle charging infrastructure beyond that required in the 2019 California Green Building Standards Code.

Daly City's Green Vision

Daly City's Green Vision, A Climate Action Plan (CAP) for 2011-2020 and Beyond, was adopted in December 2010. Daly City's Green Vision guides the City towards a sustainable future that reduces GHG emissions from current levels, while promoting economic prosperity for present and future

generations. The Green Vision identifies ten goals and seeks to achieve these goals through cost-effective strategies by the year 2020. The GHG reduction goals include adopting a general plan with measurable policies for sustainable development, reducing energy use in buildings, reducing transportation emissions, reducing solid waste disposal, and GHG emissions reductions from municipal operations. Daly City completed an update to the General Plan which incorporated these goals in March 2013.

4.8.1.3 Existing Conditions

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of GHGs have a broader, global impact. Global warming is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth and changes in weather patterns. The project site is currently vacant and used as a construction staging area and for vehicle storage. GHG emissions are generated from vehicle trips to and from the site.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☒	☐	☐

The BAAQMD threshold of significance for land use development projects is to either A) incorporate project design elements and achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan or B) be consistent with a local GHG reduction strategy that meets the criteria of CEQA Guidelines Section 15183.5 (b).

Project-Level Impact

Pursuant with BAAQMD, for land use projects to result in a less than significant GHG emissions impact, the land use project would need to comply with threshold A or B below.

A. Projects must include, at a minimum, the following project design elements:

1. Buildings

a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

- b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
 2. Transportation
 - a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
 - i. Residential projects: 15 percent below the existing VMT per capita
 - ii. Office projects: 15 percent below the existing VMT per employee
 - iii. Retail projects: no net increase in existing VMT
 - a. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
- B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

-
- a) Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
-

Construction

Construction of the project would generate approximately 1,574 metric tons (MT) of CO₂e from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips.⁴⁵ Neither the City nor BAAQMD have an adopted threshold of significance for construction related GHG emissions. There is nothing atypical or unusual about the project's construction. In addition, the project would implement mitigation measure MM AIR-1.1 to restrict idling of construction equipment and utilize energy-efficient equipment, which would in turn reduce GHG emissions. For these reasons, the project's construction GHG emissions are less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Operation

Pursuant to the BAAQMD thresholds of significance, if a land use project meets the following criteria, it would have a less than significant greenhouse gas impact;

- Projects must either not include natural gas appliances or plumbing;
- Not result in wasteful, inefficient, or unnecessary energy use;

⁴⁵ Illingworth & Rodkin, Inc. *2150 Geneva Avenue Battery Storage Construction Health Risk Assessment*. April 29, 2024.

- Achieve a 15 percent reduction in project-generated vehicle miles traveled (VMT) below the regional average; and
- Include off-street electric vehicle infrastructure consistent with CALGreen Tier 2 requirements.

The project would not include any natural gas and, as discussed in Section 4.6 Energy, would comply with Title 24 and CALGreen energy efficiency measures, as well as City of Daly City Green Vision requirements. In addition, the project would achieve a VMT rate of 15 percent below the regional average (see Section 4.17 Transportation). Since the project would be monitored remotely and not have any permanent employees, it does not propose any parking spaces for vehicles; thus, it is not subject to off-street electric vehicle infrastructure requirements. For these reasons, the project would not use energy in a wasteful or inefficient manner and would meet current BAAQMD GHG thresholds; therefore, the project would result in a less than significant operational GHG emissions impact. **(Less than Significant Impact)**

-
- b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?
-

2022 Scoping Plan

The 2022 Scoping Plan is a document that plans how the State will achieve carbon neutrality by 2045 and reduce anthropogenic emissions to 85 percent below 1990 levels by 2045. The BAAQMD qualitative thresholds were designed to ensure future projects complete their “fair share” of implementing carbon reduction design features to help achieve the State’s carbon neutrality goal. A project that can meet the energy and transportation design elements outlined in the BAAQMD thresholds or is consistent with a qualified GHG reduction strategy is then consistent with the goals outlined in the 2022 Scoping Plan and would not hinder the State from achieving carbon neutrality. As described in Checklist Question a), the project would be consistent with the BAAQMD GHG energy and transportation design thresholds. In addition, the project itself, an energy storage project, would help the State achieve its goal of carbon neutrality. Therefore, the proposed project would not exacerbate the cumulative GHG problem and the project’s contribution would not be cumulatively considerable as it does not impede California’s ability to achieve carbon neutrality.

2017 Clean Air Plan

The BAAQMD 2017 CAP focuses on two goals: protecting public health and protecting the climate. The 2017 CAP includes air quality standards and control measures designed to reduce emissions of methane, carbon dioxide, and other super-GHGs. As discussed in Section 4.3 Air Quality under Impact AIR-1, the project is consistent with the 2017 Clean Air Plan because the project would not exceed BAAQMD criteria air pollutant emissions thresholds during construction with implementation of BAAQMD BMPs (MM AIR-1.1) and during operation. In addition, the project construction would implement mitigation measure MM AQ-1.1 by using energy-efficient alternative

fueled construction equipment to reduce air pollutant (DPM and PM_{2.5}) emissions. For these reasons, the proposed project would not conflict with the 2017 CAP goal to reduce GHG emissions. **(Less than Significant Impact with Mitigation Incorporated)**

Daly City General Plan

The project would be consistent with General Plan policy HE-24 because the project would comply with the requirements of the Green Building Ordinance and the Title 24 Building Code, which requires proposed buildings to be constructed with various measures that would reduce GHG emissions from the project. The project would be consistent with General Plan policy HE-28 because the project proposes to store electricity generated by renewable sources to be used as an alternative energy source. For these reasons, the project would be consistent with the City's General Plan. **(Less than Significant Impact)**

4.9 Hazards and Hazardous Materials

The following discussion is based in part on a Phase I Environmental Site Assessment (ESA) prepared by Alta Environmental in September 2020 and a Hazards Analysis Final Report prepared by MRS Environmental in September 2023. These documents are included as Appendix D and Appendix E to this Initial Study, respectively.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives the EPA the authority to control hazardous waste from the "cradle to the grave." This includes the

generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.⁴⁶

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).⁴⁷

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The San Mateo County Environmental Health Department reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-

⁴⁶ United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed April 5, 2023. <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>.

⁴⁷ California Environmental Protection Agency. "Cortese List Data Resources." Accessed April 5, 2023. <https://calepa.ca.gov/sitecleanup/corteseelist/>.

friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by the Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Hazardous Materials Business Plan

California's Health and Safety Code requires that any business that handles hazardous materials prepare a hazardous materials business plan (HMBP), which must include the following:

- Details, including floor plans, of the facility and business conducted at the site;
- An inventory of hazardous materials that are handled or stored on-site;
- An emergency response plan; and
- A safety and emergency response training program for new employees with annual refresher courses.

The goal of the HMBP program is to protect human and environmental health from adverse effects as a result of the storage or possible release of hazardous materials. This is done primarily by documenting significant amounts of hazardous materials so that emergency responders can effectively protect the public.

Regional

Municipal Regional Permit Provision C.12.f

Polychlorinated biphenyls (PCBs) were produced in the United States between 1955 and 1978 and used in hundreds of industrial and commercial applications, including building and structure materials such as plasticizers, paints, sealants, caulk, and wood floor finishes. In 1979, the EPA banned the production and use of PCBs due to their potential harmful health effects and persistence in the environment. PCBs can still be released to the environment today during demolition of buildings that contain legacy caulks, sealants, or other PCB-containing materials.

With the adoption of the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) by the San Francisco Bay Regional Water Quality Control Board on November 19, 2015, Provision C.12.f requires that permittees develop an assessment methodology for applicable structures planned for demolition to ensure

PCBs do not enter municipal storm drain systems.⁴⁸ Municipalities throughout the Bay Area are currently modifying demolition permit processes and implementing PCB screening protocols to comply with Provision C.12.f. Buildings constructed between 1950 and 1980 that are proposed for demolition must be screened for the presence of PCBs prior to the issuance of a demolition permit.

San Mateo County Comprehensive Airport Land Use Plan

Daly City is within the jurisdiction of the San Francisco Airport (SFO) Land Use Plan component of the San Mateo County Comprehensive Airport Land Use Compatibility Plan (ALUCP), adopted in December 1996 and updated in 2001. Established in the CLUP are procedures used by the San Mateo City and County Association of Governments (C/CAG) to review land use decisions in the vicinity of San Mateo County airports. Airport planning boundaries define where height, noise and safety standards, policies, and criteria are applied to certain proposed land use policy actions.

Local

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies and task are specific to hazards and hazardous materials and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy LU-18	Development activities shall not be allowed to significantly disrupt the natural or urban environment and all reasonable measures shall be taken to identify and prevent or mitigate potentially significant effects.
Task LU-18.1	Ensure that potentially significant environmental impacts associated with development proposals are properly mitigated through conditions of approval, mitigation measures, project design, or project denial. In cases where the impacts may not be completely preventable but will not significantly disrupt the community, the City may recognize that the benefits of a project may outweigh the environmental consequences. In no case shall the City approve a project that endangers the health, safety, or welfare of the public.
Policy SE-4.1	Support efforts to locate, regulate, and maintain information regarding hazardous materials located or transported within the City.
Policy SE-4.2	Cooperate with the County of San Mateo in the regulation of hazardous materials and transportation in the Fire Prevention Services Bureau within the City.

⁴⁸ California Regional Water Quality Control Board. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit*. November 2015.

4.9.1.2 Existing Conditions

On-Site Conditions

BESS and Substation

The project site was originally developed in 1938 with a grandstand and greyhound racetrack associated with the adjacent Cow Palace. Between 1946 and 1956, the site was redeveloped with a drive-in movie theater. In 2002, the structures on-site were demolished and the site has remained vacant since. The site is currently used as a construction staging area and for vehicle storage. According to the RCRA Small Quantity Generator database, the site was previously listed as a generator of hazardous waste under the facility name North Bay Pacific Theater. The type of hazardous waste was not listed, but no violations, leaks, or releases were reported. A review of federal, state, and local databases reveal there are no known hazardous materials spills or leaks at the project site.

Transmission Line and PG&E Martin Substation

A review of federal, state, and local databases reveals there is only one hazardous materials site along the proposed transmission line routes. The PG&E Martin Substation (end point of the proposed transmission line) is listed on the Cortese List due to a gas manufacturing plant (MGP) using oil as a feedstock operated at this site between the 1905 and 1916.⁴⁹ When it was dismantled, the soil beneath the Site became impacted by MGP residues including polycyclic aromatic hydrocarbons (PAHs). The contaminated soil was never removed and the site is subject to a land use covenant between the Department of Toxic Substances Control (DTSC) and PG&E. The land use covenant restricts certain land uses on the site and requires PG&E to submit project-specific Soil Management and Air Monitoring Plans to DTSC for any earthmoving projects.

Off-Site Conditions

A review of federal, state, and local databases shows there are three closed, leaking underground storage tank (LUST) cases near the project site. These LUST cases were located at the Cow Palace (LUST case closed as of 1995), 2750 Geneva Avenue (LUST case closed as of 2015), and at the intersection of Carter Street and Martin Street southwest of the project site (LUST case closed as of 1993). Based on location, distance, regulatory status, and/or apparent groundwater gradient, the Phase I ESA determined these sites were not of environmental concern. Refer to Appendix D for more information regarding nearby off-site sources of contamination.

Airport Hazards

The project site is approximately five miles north from the San Francisco International Airport (SFO). The project site is not located within the SFO CLUP Airport Influence Area B, safety compatibility zones, or Community Noise Equivalent Level (CNEL) noise contours for the airport.

⁴⁹ Department of Toxic Substances Control. "EnviroStor". Accessed April 5, 2023.
https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=41360100.

Wildland Fire Hazards

The project site is in a Local Responsibility Area (LRA) which has not been mapped by CAL FIRE as being within a Very High Fire Hazard Severity Zone (refer to Section 3.20 Wildfire). San Bruno Mountain is identified as a Moderate Fire Hazard Severity Zone in a State Responsibility Area (SRA).⁵⁰

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

⁵⁰ CAL FIRE. "Fire Hazard Severity Zones in State Responsibility Area." Accessed August 9, 2023. <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008>.

-
- a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
-

No hazardous materials, liquids, or chemicals that would create a significant hazard are required to construct or operate the BESS. The chemicals associated with the lithium ion batteries that would be housed in seismically anchored, non-flammable purpose-built enclosures are contained within the individual sealed battery cells. Risk of exposure occurs only if the battery is mechanically or electrically abused or altered, leading to rupture of the cells. The batteries are not considered hazardous as the electrolyte is non-toxic and they do not contain cobalt or other toxic elements.

The battery system is designed with automatic software that monitors the system and can take certain batteries offline or power the whole system down (such as in the case of smoke or fire detection, loss of grid power, or other similar high-level threat). The battery system would be designed such that the batteries are isolated from each other, the power conversion system, and the grid. Additionally, on-call local contractors will be available 24 hours a day, 365 days a year to take action in the event of an issue and troubleshoot any issues that arise on-site.

During operation of the energy storage facility, some electronic waste would be generated from battery repair and maintenance work. Waste will be disposed of in accordance with applicable local, state, and federal requirements. For the reasons described above, the project would not create a significant hazard through routine transport, use, or disposal of hazardous materials.

The transformers located within the BESS and substation will use mineral transformer oil in transformers, high-voltage capacitors, fluorescent lamp ballasts, and high-voltage switches, and circuit breakers. A Spill Control and Countermeasure Plan and/or HMBP would be prepared for the site describing emergency procedures, secondary containment for the oil-filled transformers, and clean-up requirements. Compliance with these documents would ensure that a release of transformer oil at the substation would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

-
- b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
-

Soil Contaminants

As discussed under Section 4.9.1.2 Existing Conditions, there are no hazardous materials sites on the project site or along the proposed transmission line routes, except at the end point of the PG&E Martin Substation. Soil in and around the PG&E Martin Substation may contain PAH residues from a past MGP. If not handled correctly during excavation, soils containing these chemicals could be

disturbed resulting in a release that could significantly impact the environment, project construction workers, or the public.

Impact HAZ-1: Construction of the transmission line near the PG&E Martin Substation could result in the release of contaminated soil. **(Significant Impact)**

Mitigation Measure: The project shall implement the following mitigation measure to reduce the possible release of contaminated soil to a less than significant level:

MM HAZ-1.1: Prior to any grading, excavation, or construction of the transmission line, the Department of Toxic Substances Control (DTSC) shall be notified of the proposed construction activities at the PG&E Martin Substation. Per the Land Use Covenant for the PG&E Martin Substation, a Soil Management Plan (SMP) and Health and Safety Plan (HSP) shall be prepared by a qualified environmental professional and submitted to DTSC for review and approval. The SMP and HSP and evidence of regulatory oversight shall be provided to the Director of Economic and Community Development.

With implementation of MM HAZ-2.1, impacts associated with the construction of the transmission line would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Project Operations

A Hazards Analysis Final Report was prepared for the project to evaluate the reasonable, worst-case scenario, defined as the BESS control system failing or a puncture of one of the battery enclosures. The project includes an Emergency Response Guide for the BESS detailing hazards, firefighting measures, shutting down and disposal of materials and also recommends a number of firefighting measures. Fire prevention systems would include proposed cabinets designed to limit or eliminate the potential for fire to spread from one cabinet to another, infrared camera monitoring at the site for external fire detection and on-site fire hydrants. Additional items include video monitoring of the site, site lighting, site security, training, fire access planning and fire water flow design. The Battery Management System would monitor all cell voltages, currents and temperatures and shut down equipment if unsafe conditions are detected with monitoring and control by the Tesla Operations Center.

As determined in the Hazards Analysis Report for the Project, the reasonable worst-case battery cell malfunction scenarios would result in manageable hazards, with ground-level toxic, thermal and deflagration hazards remaining on-site (see Appendix E for detailed analysis). In the event of an on-site battery malfunction resulting in the release of toxic gas, resulting toxic gas plumes would not result in acute concentrations of toxins off-site. In the event of a fire, worst-case ground level smoke levels would extend as far as 60 feet from the battery location. The closest batteries to the property line are located approximately 54 feet from the northern property line adjacent to the Cow Palace parking lot, meaning ground level smoke impacts may extend six feet into the parking

lot. The potential for smoke impact to create a significant hazard to the public using the Cow Palace parking lot is limited given the infrequent use of the lot, limited potential for a worst-case fire and smoke scenario, and minimal extent of smoke impact onto the adjacent property. The potential for flammable vapors to be released due to a worst-case battery malfunction was also modeled and flames and explosion impacts were found to extend approximately 41 feet and, therefore, remain on-site. Thermal radiation from a fire due to battery malfunction was modeled and found not to extend beyond the property line.

As described above, modeled worst-case scenarios for battery malfunction on the site show that a hazardous materials release would result in a less than significant hazard to the public or environment. **(Less than Significant Impact)**

-
- c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
-

The nearest school to the project site is Bayshore Elementary school, located adjacent to the proposed transmission line route along Ottilia Street. As discussed under Impact HAZ-1, the project would not emit hazardous emissions and would handle all hazardous materials in compliance with federal, state, and county regulations. In addition, the project would implement mitigation measure MM HAZ-1.1 during construction of the proposed transmission line to ensure that hazardous materials and soils would not create a significant hazard to the public or environment. **(Less than Significant Impact with Mitigation Incorporated)**

-
- d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
-

As discussed in Section 4.9.1.2 Existing Conditions, the end of the proposed transmission line routes is located on the PG&E Martin Substation site, which is listed on the Cortese List. As discussed under Impact HAZ-1 above, the project would implement mitigation measure MM HAZ-1.1 and shall implement a SMP and HSP to protect the environment, project construction workers, and the public from an accidental release of hazardous materials. **(Less than Significant Impact with Mitigation Incorporated)**

-
- e) If located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
-

The project site is located approximately five miles north of the SFO and is not within the SFO CLUP Airport Influence Area B, safety compatibility zones, or CNEL noise contours for the airport. **(No Impact)**

-
- f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
-

The proposed project would not impair or physically interfere with any adopted emergency response or evacuation plan. All project development would be constructed to comply with all applicable state and local building and fire codes. During construction and operation, roadways would not be blocked such that emergency vehicles would be unable to access the site or surrounding properties. During operation, emergency ingress and egress to the project site would be provided by the surrounding roadways. Therefore, the proposed project would not impair the implementation of or physically interfere with any emergency response or evacuation plan. **(Less than Significant Impact)**

-
- g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?
-

The project site is located in an urbanized area of Daly City and is located near a state responsibility area that is classified as a moderate fire hazard severity zone. The adopted Local Responsibility Area maps do not identify the site as being in a fire hazard severity zone. All project development would be constructed in accordance with current state and local building and fire codes to ensure structural stability and safety and the final site design would be reviewed by the Daly City Fire Department for consistency with applicable fire department standards. The project, therefore, would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. **(Less than Significant Impact)**

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

Under Section 303(d) of the federal Clean Water Act, the SWRCB and RWQCBs are required to identify impaired surface water bodies that do not meet water quality standards and develop total maximum daily loads (TMDLs) for contaminants of concern. The list of the state's identified impaired surface water bodies, known as the "303(d) list" can be found on the on the SWRCB's website.⁵¹

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) must be filed with the RWQCB by the project sponsor, and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction and filed with the RWQCB by the project sponsor. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk

⁵¹ California State Water Resources Control Board. "2020-2022 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)." May 11, 2022. Accessed April 12, 2023. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.

levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in May 2022 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.⁵² Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 5,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if: (1) the post-project impervious surface area is less than, or the same as, the pre-project impervious surface area; (2) the project is located in a catchment that drains to a hardened (e.g., continuously lined with concrete) engineered channel or channels or enclosed pipes, which extend continuously to the Bay, Delta, or flow controlled reservoir, or, in a catchment that drains to channels that are tidally influenced; or

⁵² California Regional Water Quality Control Board San Francisco Region. Municipal Regional Stormwater NPDES Permit, Order No. R2-2022-0018, NPDES Permit No. CAS612008. May 11, 2022.

(3) the project is located in a catchment or subwatershed that is highly developed (i.e., that is 70 percent or more impervious).⁵³

Local

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies and task are specific to hydrology and water quality and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy RME-8	Through the development of a Stormwater Management Program, ensure that all new development complies with the applicable Municipal Regional Stormwater Permit by incorporating controls that reduce water quality impacts over the life of the project in ways that are both technically and economically feasible, and reduce pollutants in stormwater discharges to the maximum extent practicable.
Task RME-8.5	Ensure the regular inspection of stormwater treatment facilities as required by the Municipal Regional Stormwater NPDES Permit.
Policy SE-2.1	Protect the City of Daly City from unreasonable risk to life and property caused by flood hazards by designing and constructing drainage facilities to improve the flow capacity of the City's water system in order to accommodate the storm water runoff generated by a 100-year storm.

Daly City Municipal Code

Chapter 14.04 of the Daly City Municipal Code, also known as the Daly City Stormwater Management and Discharge Control Ordinance prohibits non-stormwater discharges to the City storm drain system. The purpose of the Ordinance is to eliminate non-stormwater discharges to the municipal separate storm drain system, control the discharge of spills, dumping or disposal of materials other than stormwater, and reduce pollutants in stormwater discharges into the storm drain system to the maximum extent practicable. Chapter 14.12 gives the City the authority to inspect projects to enforce any of the provisions of Title 14.

Chapter 15.62 of the Daly City Municipal Code, also known as the City of Daly City Grading, Erosion and Sediment Control Ordinance sets forth rules and regulations to control site clearing, vegetation disturbances, land-fills, land excavations, soil storage, and other such activities which may cause sediments and other pollutants to enter the public drainage facilities. The chapter establishes the regulations, permit requirements, procedures for administration and enforcement of permits to properly control the aforementioned activities to preserve and enhance public health, safety and

⁵³ The Hydromodification Applicability Maps developed by the permittees under Order No. R2-2009-0074 were prepared using this standard, adjusted to 65 percent imperviousness to account for the presence of vegetation on the photographic references used to determine imperviousness. Thus, the maps for Order No. R2-2009-0074 are accepted as meeting the 70 percent requirement.

environment. Section 15.62.230 requires the permittee to maintain a copy of the permit, approved plans and reports and make these available for city inspection. Section 15.62.270 gives the City engineer authority to suspend or revoke a permit for violation or non-compliance with Chapter 15.62.

4.10.1.2 *Existing Conditions*

Hydrology and Drainage

The project site is located within the Sunnydale watershed which drains to the San Francisco Bay via Brisbane.

The project site is gently sloping from west to east and situated at an elevation of approximately 140 feet msl. Surface runoff on-site is collected in drains or inlets and conveyed via below grade pipes to three storm drain outfalls located along the western property line. The outfall discharges to an existing 10-inch storm drain line that connects to the larger storm drain system within the Cow Palace property. This system flows towards Bayshore Boulevard and discharges into a 60-inch storm drain line through Brisbane and ultimately into San Francisco Bay, approximately 1.6 miles east of the project site.

The project site is approximately 92 percent impervious surfaces, primarily consisting of pavement, and eight percent pervious surfaces.

Surface Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as “non-point” source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Surface runoff from the project area is collected by storm drains and discharged to San Francisco Bay. Runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, and animal feces), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain. San Francisco Bay is currently listed on the 303(d) list for chlordane, dichlorodiphenyltrichloroethane (DDT), dieldrin, dioxin compounds, furan compounds, invasive species, mercury, PCBs, and trash.^{54, 55}

⁵⁴ The Clean Water Act (CWA), Section 303, establishes water quality standards and Total Maximum Daily Load (TMDL) programs. The 303(d) list is a list of impaired water bodies.

⁵⁵ California Environmental Protection Agency, State Water Resources Control Board. “Impaired Water Bodies.” Accessed April 12, 2023.

https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml

Groundwater

The project site is located in the Visitacion Valley Groundwater Basin, which has not been identified as a groundwater basin in a state of overdraft.⁵⁶

Groundwater in the project vicinity is projected to flow generally east-southeast towards the San Francisco Bay at a depth of approximately 16 to 19 feet below ground surface.⁵⁷ Fluctuations in groundwater levels occur due to many factors including seasonal fluctuation, underground drainage patterns, regional fluctuations, and other factors.

Flooding and Other Hazards

The Federal Emergency Management Agency (FEMA) has designated the project site as being located within Flood Zone X, an area of minimal flood hazard; thus, the project site is not located in a 100-year floodplain.⁵⁸

Tsunami inundation maps prepared by the California Department of Conservation indicate that the project site is outside of tsunami hazard areas.⁵⁹ Seiches can occur in semi- or fully-enclosed bodies of water and inundate adjacent areas; the nearest semi- or fully-enclosed water body is Lake Merced, located approximately 3.6 miles west of the project site.

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

⁵⁶ California Department of Water Resources. "State Groundwater Management Act Basin Prioritization Dashboard." Accessed April 12, 2023. <https://gis.water.ca.gov/app/bp-dashboard/final/>

⁵⁷ Alta Environmental. *Phase I Environmental Site Assessment, 2150 Geneva Avenue, Daly City, CA*. September 2020.

⁵⁸ Federal Emergency Management Agency. *FIRM 06081C0035F*. April 5, 2019.

⁵⁹ California Department of Conservation. "San Mateo County Tsunami Hazard Areas." Accessed April 12, 2023. <https://www.conservation.ca.gov/cgs/tsunami/maps/san-mateo>.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
– result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
– create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
– impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐
a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				

Construction Water Quality Impacts

Potential impacts related to water quality are constrained by existing regulatory systems from the federal to the local level. The Clean Water Act sets minimum water quality standards for all surface waters in the U.S. and requires that industrial, municipal, and construction-related sources of pollution are regulated through the NPDES. The City requires project applicants to submit a stormwater management plan that illustrates full compliance with the MRP. The project would be required to include stormwater controls and construction best management practices. Compliance with the MRP would ensure that project construction would not substantially degrade surface water or ground water quality. **(Less than Significant Impact)**

Post-Construction Water Quality Impacts

The proposed project would result in approximately 405,000 square feet (95 percent) of impervious surface area and 22,650 square feet (five percent) of pervious surface area on the site. Overall, the

project would result in a net increase of approximately 10,000 square feet of impervious surface area. To reduce water quality impacts post-construction, the project is required to comply with the MRP including Provision C.3 of the MRP regarding LID site design. LID features could include self-treating and self-retaining areas to allow on-site retention, percolation, and evaporation of stormwater runoff. The project proposes a dry retention basin that would retain stormwater on-site during a 25-year storm event. In addition, stormwater not directed to the retention basin would be directed to vegetated areas to enhance infiltration into the ground. Pervious surface area provided by the project would include landscaping and bioretention areas. With the implementation of stormwater treatment measures, the project would result in a less than significant impact to water quality. **(Less than Significant Impact)**

-
- b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
-

Daly City receives a large portion of its water supply from the San Francisco Public Utilities Commission (SFPUC) and supplements the SFPUC supply with groundwater pumped from six local wells. During dry periods, groundwater makes up a larger proportion (up to 45 percent) of the City's supply. The proposed project, consisting of a BESS, substation, and transmission line, would not result in the need for excessive groundwater pumping from the local wells, and would therefore not substantially decrease groundwater supplies (refer to water supply discussion in Section 4.19 Utilities and Service Systems).

There are no designated groundwater recharge areas within the Visitacion Valley Groundwater Basin.⁶⁰ The principal sources of recharge are direct infiltration of rainfall, infiltration of irrigation water, and leakage from water and sewer pipes. As described in Impact HYD-1, the proposed project would reduce the pervious area on-site, resulting in a corresponding decrease in infiltration capacity. However, the project's Stormwater Management Plan includes a large self-retaining, self-treating, bioretention area within the landscaping that would provide opportunities for stormwater infiltration. The project would therefore not be expected to substantially interfere with groundwater recharge or impede groundwater management of the basin. **(Less than Significant Impact)**

⁶⁰ California Department of Water Resources. "Bulletin 118: Visitacion Valley Basin". Accessed May 3, 2023. <https://www.smcsustainability.org/wp-content/uploads/filebase/energy-water/groundwater/2-32.pdf>.

-
- c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?
-

The project site does not contain, nor is it adjacent to, any waterway. Therefore, the proposed project would not alter the course of a stream or river. Construction on the site will comply with the City's stormwater regulations (Chapters 14.04 and 15.62 of the City's Municipal Code) to ensure construction activities on the site do not result in increased soil erosion and siltation, exceed capacity of the drainage system, or add substantial sources of polluted runoff. Consistent with the City's requirements, the project would not increase site runoff from a 10-year storm for a duration of two hours of rainfall and will retain any increased flow due to the reduction in pervious surfaces. **(Less than Significant Impact)**

- d) Would the project risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones?
-

As described in Section 4.10.1.2 Existing Conditions, the project site is not located within a 100-year floodplain nor is it subject to tsunamis or seiches. **(No Impact)**

- e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?
-

As previously described, the project site is located within the Visitacion Valley Groundwater Basin. The Visitacion Valley Groundwater Basin is not required by the Department of Water Resources to have a sustainable groundwater management plan. The project site is not subject to a sustainable groundwater management plan and includes all required measures to treat stormwater runoff from the site. The project, therefore, would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

4.11 Land Use and Planning

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport

In 1967, the State legislature adopted legislation requiring the establishment of airport land use commissions in counties with one or more airports serving the general public. Amendments adopted by the legislature in 1970 required each commission to develop comprehensive ALUCPs. The purpose of the ALUCPs is to provide for the orderly growth of airports and the surrounding areas to minimize the public's exposure to excessive noise and safety hazards.

The project site is not located within the AIA of SFO. Properties within the AIA may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (e.g., noise, vibration, and odors). Additionally, properties located within the 70 dB CNEL aircraft noise contour for SFO warrant land use controls to promote noise compatibility. The project site is not located within SFO's 70 dB CNEL aircraft noise contour.

The ALUCP also includes airspace protection/height limitation criteria based on Federal Aviation Regulations. Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace" (referred to as FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the FAA be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above ground. For the project site, any proposed structure of a height greater than approximately 200 feet above mean ground level is required under FAR Part 77 to be submitted to the FAA for review.

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies and tasks are specific to land use and planning and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy LU-18	Development activities shall not be allowed to significantly disrupt the natural or urban environment and all reasonable measures shall be taken to identify and prevent or mitigate potentially significant effects.
Task LU-18.1	Ensure that potentially significant environmental impacts associated with development proposals are properly mitigated through conditions of approval, mitigation measures, project design, or project denial. In cases where the impacts may not be completely preventable but will not significantly disrupt the community, the City may recognize that the benefits of a project may outweigh the environmental consequences. In no case shall the City approve a project that endangers the health, safety, or welfare of the public.
Task CE-20.7	As a part of all new development, require, where appropriate, the provision of pedestrian-oriented signs, pedestrian-scale lighting, benches, and other street furniture so as to make non-motorized forms of travel comfortable and attractive alternatives to the automobile. Where necessary in new development, the City may require additional sidewalk and/or right-of-way width to accommodate these amenities.
Policy RME-20	Recognize the physical differences between different parts of the City and regulate land uses within these areas accordingly.
Task RME-20.4	Incorporate design features in new development that reflects the character of the neighborhood, to ensure that new construction is compatible with existing development.

Daly City Zoning Ordinance

The Zoning Ordinance is provided in Title 17 of the Daly City Municipal Code. The Zoning Ordinance helps promote public health, safety, morals, convenience, comfort, prosperity and general welfare of residents in the City.

4.11.1.2 *Existing Conditions*

The project site has a General Plan land use designation of Commercial Retail and Office (C-RO) and is zoned Light Commercial (C1). The C-RO land use designation is intended for retail and office uses both regional and citywide in scope. The project site is bordered by the Bay Club South San Francisco building and Cow Palace parking lot to the north, the Cow Palace to the east, open space to the south, and Carter Street and residential condos to the west. The transmission line alignments run through residential neighborhoods primarily consisting of single-family homes. The PG&E Martin Substation has a General Plan land use designation of Public Facility (PF) and is zoned Industrial (M). It is bordered by Geneva Avenue and single-family homes to the north, Bayshore Boulevard and industrial uses to the east, apartments and single-family homes to the south, and Schwerin Street, single-family homes, and Bayshore Elementary School to the west.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a) Would the project physically divide an established community?

Examples of projects that have the potential to physically divide an established community include new freeways and highways, major arterial streets, and railroad lines. The project would construct a BESS and substation on a lot that is surrounded by existing commercial and residential development. Development of the project site would be consistent with the surrounding area. In addition, the proposed transmission line would be within the existing public ROW and would be underground within the residential areas. Modifications to the PG&E Martin Substation to accommodate the project would not result in any changes to land use in the area. Thus, the project would not result in the construction of any infrastructure that would divide the community. For these reasons, the proposed project would not physically divide an established community. **(Less than Significant Impact)**

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

General Plan and Zoning

The project site has a General Plan land use designation of Commercial Retail and Office (C-RO) and is zoned Light Commercial (C1). In order to develop the proposed project, the project proposes to amend the General Plan land use designation to Industrial (I) and rezone the site to Heavy Commercial (C2). The Industrial designation allows for light manufacturing, storage of merchandise produced on the site, administrative offices, and research facilities that are subordinate to the primary business and the C2 zoning allows public utilities equipment with a use permit. The transmission line and modifications to the PG&E Martin Substation would not result in any changes to land use or zoning. The project, therefore, would be consistent with the Industrial land use designation and C2 zoning and would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

SFO Airport Land Use Compatibility Plan

The project site is located approximately five miles north of the SFO and is not within the SFO CLUP Airport Influence Area B; therefore, the project is not subject to the SFO ALUCP. **(No Impact)**

4.12 Mineral Resources

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

4.12.1.2 *Existing Conditions*

The San Mateo County General Plan identifies 13 mineral resources found in San Mateo County. Seven of these minerals: chromite, clay, expansible shale, mercury, sand and gravel, sands (specialty), and stone (dimension), are not likely to be used primarily because of limited quantities, urbanization or economic infeasibility. Daly City does not contain any mineral resources within its limits.

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

-
- a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?
-

Due to the fact that the project site is located on urban land in the City of Daly City, there are no significant mineral resources on or in the vicinity of the project site. **(No Impact)**

-
- b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?
-

Please see the discussion under checklist question a) above. **(No Impact)**

4.13 Noise

The following discussion is based in part on a Noise and Vibration Assessment prepared by Illingworth & Rodkin, Inc. in September 2024. This document is included as Appendix F to this Initial Study.

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq} , DNL, or CNEL.⁶¹ These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

⁶¹ L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq} .

4.13.1.2 Regulatory Framework

State

California Green Building Standards Code

For commercial uses, CalGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite standard transmission class (STC) rating of at least 50 or a composite outdoor/indoor transmission class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA $L_{eq(1-hr)}$ or less during hours of operation at a proposed commercial use.

Local

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies and tasks are specific to noise and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy NE-1	Use the future noise contour map to identify existing and potential noise impact areas.
Policy NE-3	Maintain a CNEL level of not more than 70 dBA L_{eq} in residential areas.
Task NE-2.1	Use the Noise Control Guidelines to assess the suitability of a site for new development in combination with the noise contours to accurately identify areas that may need additional noise study and mitigation. Noise mitigations include additional insulation, double glazing of windows and increasing building setbacks from the noise source. Mitigations should also be creative and attractive whenever possible and appropriate. Creative noise mitigation measures can include incorporation of fountains using water to mask freeway noise and noise walls of an appropriate scale painted with decorative murals.
Task NE-3.1	Continue to enforce the environmental noise requirements of the State Building Code (Title 24).
Task NE-5.1	Additional noise studies should be conducted in “Conditionally Acceptable” noise environments to ensure adequate mitigation features are employed. Usually conventional construction with closed windows and fresh air supply systems will maintain a healthy noise environment.
Task NE-9.1	Depending upon the hours of operation, intensity of use, and the location of sensitive receptors in the area, the expansion or change of use could cause noise impacts. Acoustical studies should be performed, at the applicant's expense, during the discretionary and environmental review processes and conditions should be placed on the project accordingly

Policy/Task	Description
Task NE-11.3	Require all future development within the Airport Influence Area B boundary for San Francisco International Airport to conform to the relevant height/airspace protection, aircraft noise, and safety policies and land use compatibility criteria contained within the most recent adopted version of the ALUCP for the environs of San Francisco International Airport.

Daly City Municipal Code

Title 9 – Public Peace, Morals and Welfare

Chapter 9.22 of the Daly City Municipal Code contains language to protect residents from excessive noise exposure. Section 9.22.010 prohibits an individual from causing a disturbance such that it disturbs the public peace off-site. Section 9.22.020 states that no person shall maintain, operate, or conduct any loudspeaker or amplifier in such a manner as to cause the sound to be projected outside any building or out of doors in any part of the City without first obtaining a permit to do so. Section 9.22.030 deals more specifically with noise and states that between the hours of 10:00 p.m. and 6:00 a.m. no person shall cause, create, or permit any noise which may be heard beyond the confines of the property of origin. The Police Department enforces Chapter 9.22 of the Municipal Code.

Title 17 – Zoning

Title 17 of the Daly City Municipal Code provides for discretionary review of projects through the use permit and variance process. An application for development is analyzed in light of many concerns including comparing the proposed use against the noise contours and Noise Compatibility Guidelines. The Planning Division attaches conditions of project approval to reduce noise impacts to future occupants of the proposed development as well as conditioning times construction activities may occur in order to reduce noise impacts to surrounding land uses.

4.13.1.3 *Existing Conditions*

The project site is bordered by the Bay Club South San Francisco building and Cow Palace parking lot to the north, the Cow Palace to the east, open space to the south, and Carter Street and residential condos to the west. The noise environment on the project site primarily results from vehicular traffic along Geneva Avenue and the surrounding roadway network and aircraft departures from SFO. A noise monitoring survey was conducted between April 19, 2023 and April 21, 2023. The noise monitoring survey included two long-term noise measurements (LT-1 and LT-2) and three short-term measurements (ST-1 through ST-3). Noise measurement locations are shown on Figure 4.13-1.

The closest sensitive receptors are the residences along Rio Verde Street, Ottilia Street, Schwerin Street, and Oriente Street where the future transmission line would be placed underground, and existing residences located approximately 700 feet to the west and 800 feet to the southwest, as measured from the center of the BESS and substation site.

Long-term measurement LT-1 was made along Geneva Avenue, approximately 65 feet north of the centerline. Hourly average noise levels at LT-1 typically ranged from 65 to 72 dBA L_{eq} during daytime hours (between 7:00 a.m. and 10:00 p.m.) and from 59 to 68 dBA L_{eq} during nighttime hours (between 10:00 p.m. and 7:00 a.m.). The CNEL for the 24-hour period on Thursday April 20, 2023, was 72 dBA CNEL.

Long-term measurement LT-2 was made along Carter Street, approximately 25 feet east of the centerline. Hourly average noise levels at LT-2 typically ranged from 64 to 70 dBA L_{eq} during daytime and from 54 to 66 dBA L_{eq} during nighttime. The CNEL for the 24-hour period on Thursday April 20, 2023, was 70 dBA CNEL.

The results of the three short-term noise measurements and their locations are summarized in Table 4.13-1, below.

Table 4.13-1: Summary of Short-Term Measurements (dBA)

Noise Measurement Location	L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	$L_{eq(10)}$
ST-1: 90 feet from Carter Street Centerline	75	67	61	51	44	57
ST-2: 25 feet from Martin Trail Centerline	65	61	51	46	43	49
ST-3: 40 feet from Martin Street Centerline	65	62	57	48	44	53

The project site is not within the 65 CNEL noise contour for SFO.



NOISE MONITORING LOCATIONS

FIGURE 4.13-1

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

For the purposes of this analysis, the City of Daly City relies on the following CEQA thresholds of significance as related to noise:

- A significant noise impact would be identified if the project would generate a substantial temporary or permanent noise level increase over ambient noise levels at existing noise-sensitive receptors surrounding the project site and that would exceed applicable noise standards presented in the General Plan or Municipal Code at existing noise-sensitive receptors surrounding the project site.
 - A potentially significant impact would occur if the project generated noise levels would result in a substantial temporary or periodic increase in ambient noise levels above current levels.
 - A temporary construction noise impact would be considered significant if project construction activities produced noise levels exceeding 80 dBA L_{eq} at residential land uses, 85 dBA L_{eq} at commercial land uses, and 90 dBA L_{eq} at industrial land uses surrounding the site.⁶²
 - A significant permanent noise level increase would occur if project-generated traffic generated by the project or project improvements/operations would substantially increase noise levels at sensitive receivers in the vicinity. A substantial increase would occur if: a) the noise level increase is five dBA CNEL or greater, with a future noise level of less than the “normally acceptable” standard, or b) the noise level

⁶² Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual*. 2018.

increase is three dBA CNEL or greater, with a future noise level equal to or greater than the “normally acceptable” standard.

- A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan or Municipal Code.
- A significant impact would be identified if the construction of the project would generate excessive vibration levels surrounding receptors. Ground-borne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in cosmetic damage to normal buildings.
- A significant noise impact would be identified if the project would expose people residing or working in the project area to excessive aircraft noise levels.

-
- a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
-

Construction Noise

Construction Work Hours

Construction activities for the proposed project would include: 1) BESS and substation construction at the project site; 2) transmission line construction from the proposed substation to the Martin Substation. Construction is expected to occur during weekdays between 8:00 a.m. to 5:00 p.m., with ROW work restricted to the hours of 9:00 am to 3:00 pm Monday through Friday. Construction would last approximately 20 months. The following condition of approval would be required to ensure the project complies with the City’s standard construction hours unless otherwise allowed.

Condition of Approval:

- **Construction Hours.** The City’s allowed construction hours are Monday through Friday between the hours of 8:00 am to 5:00 pm. Construction is prohibited on weekends and holidays⁶³ unless approved by the City Council and the City Manager.
- **Noise.** During the permitted construction hours, the Contractor shall ensure noise generated by construction equipment shall not exceed 85 dBA when measured at a distance of 75 feet from the construction site boundary. Additionally, no deliveries of materials or equipment are permitted outside these hours. The Contractor is permitted to stage and prepare the worksite up to one hour before the permitted hours of construction provided that no construction equipment is in use. The use of any construction equipment outside the permitted construction hours is strictly prohibited.
- **Posted Sign.** A project sign with the construction hours shall be posted five feet above ground level and shall be visible to the street at all entrances to the construction site.

⁶³ The City observes the following holidays: New Year’s Day, Martin Luther King, Jr, President’s Day, Memorial Day, Juneteenth, Independence Day, Labor Day, Veteran’s Day, Thanksgiving, Christmas, and New Year’s Eve.

- **Special Requests.** If the General Contractor wishes to work after hours (i.e., outside of 8:00 am to 5:00 pm on weekdays and/or on weekends or City Holidays) on a regular basis, this shall be approved in advance by the City Council and the City Manager. For special requests on a limited basis, the Building Official can approve alternate construction hours for projects not within or impacting the ROW. All special circumstances construction hour requests must be received no later than 10 business days before the special circumstances construction. A copy of the approval must be kept on-site and made available to any member of the public, police, and City staff.

Construction Noise Analysis

Table 4.13-2 shows the construction noise levels to the nearest surrounding receptors during the construction of the BESS and substation.

Table 4.13-2: BESS and Substation Construction Noise Levels

Phase of Construction	Calculated Hourly Average L_{eq} , dBA			
	North Tennis & Pickleball (310 feet) ¹	West Residences (610 feet) ¹	East Cow Palace (540 feet) ¹	South Residences (695 feet) ¹
BESS Site Preparation	72	66	67	65
Collector Substation Site Preparation	69	63	64	62
BESS Grading	73	67	68	66
Collector Substation Grading	70	64	65	63
Battery/Container Installation/Construction	74	68	69	67
Collector Substation Installation/Construction	74	68	69	67

Notes: ¹ Distances shown are measured from the center of the project site to the receiving property lines.

As shown in Table 4.13-2, construction of the BESS and substation would result in noise levels ranging from 62 to 68 dBA L_{eq} at existing residential uses and 64 to 74 dBA L_{eq} at existing commercial and light industrial uses. These noise levels would not exceed the exterior noise threshold of 80 dBA L_{eq} at existing residential land uses, the 85 dBA L_{eq} threshold at commercial uses, or the 90 dBA L_{eq} threshold at light industrial uses.

Existing residential and commercial receptors would be exposed to construction noise levels of 68 to 90 dBA L_{eq} during installation of the underground transmission line along Alignment 1, 71 to 90 dBA L_{eq} during installation of the underground transmission line along Alignments 2 and 3, and 61 to 86 dBA L_{eq} during installation of the transmission line within the Martin Substation. This would exceed the 80 dBA L_{eq} threshold at residential property lines.

Impact NOI-1: Construction of the transmission line would exceed the construction noise threshold of 80 dBA L_{eq} threshold at residential property lines. **(Significant Impact)**

Mitigation Measures: The project shall implement the following mitigation measures to reduce construction noise to a less than significant level:

MM NOI-1.1: The applicant shall implement the following best management practices:

- Limit construction hours, including deliveries of materials and equipment, to between 8:00 a.m. and 5:00 p.m., Monday through Friday, and prohibited on weekends and holidays in accordance with the City's General Plan, unless permission is granted by the City of Daly City's Planning Manager or the Planning Manager's designee to conduct construction outside the allowable hours with a development permit or other planning approval.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a five dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receptor and if the barrier is constructed in a manner that eliminates any cracks or gaps.
- At a minimum, the construction contractor shall implement the following control measures: improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds.
- Equipment used for project construction shall be hydraulically or electrically powered impact tools (e.g., jack hammers) wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. A muffler could lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of five dBA. Quieter procedures shall be used (such as drilling rather than impact equipment) wherever feasible.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- The construction contractor shall not allow any construction equipment, trucks, or vehicles to idle.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise

levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.

- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the project site.
- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.
- Route construction-related traffic along major roadways and as far as feasible from sensitive receptors.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- If complaints are received or excessive noise levels cannot be reduced using the measures above, erect a temporary noise control blanket barrier along surrounding building facades that face the construction sites.
- Designate a “disturbance coordinator” who shall be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and shall require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

Implementation of MM NOI-1.1 would reduce construction noise levels emanating from the project site and along the transmission line route, limit construction hours, and minimize disruption and annoyance. For residences located along Rio Verde Street, Ottilia Street, Carter Street, Martin Street, Schwerin Street, or Oriente Street, however, noise levels may still exceed 80 dBA L_{eq} even with implementation of MM NOI-1.1. Assuming an installation rate of 100 feet per day, any single residence along these streets would be exposed to noise levels exceeding 80 dBA L_{eq} for no more than five days. Due to the limited number of days that construction noise would exceed the 80 dBA L_{eq} threshold at any single receptor and implementation of mitigation measure MM NOI-1.1, the project would result in a less than significant construction noise impact. **(Less than Significant Impact with Mitigation Incorporated)**

Operational Noise

A significant impact would occur if the permanent noise level increase due to project-generated operations was three dBA CNEL or greater for future ambient noise levels exceeding 60 dBA CNEL or was five dBA CNEL or greater for future ambient noise levels at or below 60 dBA CNEL. With existing ambient noise levels exceeding 60 dBA CNEL, it is assumed future noise levels would remain over 60 dBA CNEL. Therefore, a significant impact would occur if project-generated operations increased levels by three dBA CNEL or more.

Project Traffic

The proposed project would be monitored remotely, with maintenance staff visiting the facility periodically throughout the year. No permanent full-time or part-time employees would occupy the building. At most, only one or two vehicle roundtrips to and from the project site would be generated per week. An increase of three dBA DNL is considered substantial in noise sensitive areas along roadways. A three dBA DNL noise increase would occur if the project doubled existing traffic volumes along a roadway. One to two trips would not result in a measurable noise level increase and would not double the existing traffic volumes along the surrounding roadways; therefore, the proposed project would not result in a permanent noise level increase due to project-generated traffic. **(Less than Significant Impact)**

Mechanical Equipment

The main noise sources generated by the proposed project would be from the power inverters within the BESS and the power transformers at the substation. Noise levels information for the specific equipment selected for the project is not available at this time; however, power inverters for the batteries typically generate noise levels of 80 dBA at a distance of one meter. The project proposes a minimum of 150 battery units, which would result in a noise level of approximately 93 dBA at one meter. Typical noise levels for substation power transformers are approximately 72 dBA at a distance of six feet during full load.

Table 4.13-3 summarizes the estimated noise levels generated by the project at nearby receptors. Existing ambient noise levels in the project area are 70 to 72 dBA CNEL. As shown in Table 4.13-3, operational noise would not exceed existing ambient noise levels and would not result in a significant operational noise impact. **(Less than Significant Impact)**

Table 4.13-3: Estimated Noise Levels of Proposed BESS Facility and Substation

Receptor	Inverters		Main Power Transformer		Combined CNEL, dBA
	Distance from Center, feet	L _{eq} , dBA	Distance from Center, feet	L _{eq} , dBA	
North Tennis & Pickleball Club	230	56 ¹	540	33	62
West Residences	640	47 ¹	855	29	53

Receptor	Inverters		Main Power Transformer		Combined CNEL, dBA
	Distance from Center, feet	L _{eq} , dBA	Distance from Center, feet	L _{eq} , dBA	
East Cow Palace	380	51 ¹	180	43	58
South Residences, Fire Station & Community Center	635	47 ¹	770	30	54
Notes: ¹ Conservative 10 dBA attenuation assumed for all enclosures					

- b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Future development under the project may generate perceptible vibration in the immediate vicinity when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used. Construction activities would include site preparation work, excavation of below-grade levels, foundation work, and new building framing and finishing. Construction activities, such as the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.), may generate substantial vibration in the immediate vicinity. Vibration levels would vary depending on soil conditions (e.g., rocks vs. soft soil), construction methods (the project does not propose pile driving), the equipment used (e.g., vibratory roller vs. small bulldozers and graders), and distance.

The City does not define quantitative vibration thresholds; therefore, a conservative vibration limit of 0.3 in/sec PPV has been used, consistent with California Department of Transportation guidelines. Table 4.13-4 below shows the typical vibration levels that could be expected from construction equipment at 25 feet and the distance required to meet 0.3 in/sec PPV.

Table 4.13-4: Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	Minimum Distance to Meet 0.3 in/sec PPV (feet)
Clam shovel drop		0.202	18
Hydromill (slurry wall)	in soil	0.008	1
	in rock	0.017	2
Vibratory Roller		0.210	19
Hoe Ram		0.089	9
Large bulldozer		0.089	9
Caisson drilling		0.089	9
Loaded trucks		0.076	8

Equipment	PPV at 25 ft. (in/sec)	Minimum Distance to Meet 0.3 in/sec PPV (feet)
Jackhammer	0.035	4
Small bulldozer	0.003	<1
Source: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, September 2018, as modified by Illingworth & Rodkin, Inc., June 2023.		

The nearest structures that would be affected by project construction are existing residences along Ottilia Street and the Cow Palace, located approximately 25 feet from the underground transmission line work along Alignment 1. The vibration analysis determined neither cosmetic, minor, or major damage would occur at buildings located 20 feet or more from the project construction. All structures along the three potential alignments would be equal to or farther away than the residences along Ottilia Street. As shown in Table 4.13-4, vibration levels would not exceed 0.3 in/sec PPV threshold at distances of 25 feet; therefore, the proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

-
- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
-

The project site is located approximately five miles north of SFO and is not within the SFO CLUP Airport Influence Area B. The project is not located within the 65 CNEL noise contour for SFO; therefore, the project would not expose workers to excessive aircraft noise. **(No Impact)**

4.14 Population and Housing

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.⁶⁴ The City of Daly City Housing Element and related land use policies were last updated in 2015.

Regional and Local

Plan Bay Area 2050

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified Priority Development Areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.⁶⁵

ABAG allocates regional housing needs to each city and county within the San Francisco Bay Area, based on statewide goals. These allocations are designed to lay the foundation for Plan Bay Area 2050's long-term envisioned growth pattern for the region. ABAG also develops a series of forecasts and models to project the growth of population, housing units, and jobs in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Forecasting and Modeling Report, which is a technical overview of the growth forecasts and land use models upon which Plan Bay Area 2050 is based.

⁶⁴ California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements." Accessed December 8, 2020. <http://hcd.ca.gov/community-development/housing-element/index.shtml>.

⁶⁵ Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

4.14.1.2 Existing Conditions

According to a May 2022 estimate by the California Department of Finance, Daly City has a total population of 102,875 persons.⁶⁶ There are estimated to be 33,934 housing units in the City, with the largest categories of housing consisting of 15,907 single-detached units and 8,354 structures containing five or greater units.⁶⁷ There is no housing located on the BESS site or within the three potential transmission line alignments.

4.14.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

-
- a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
-

The project site is designated in the general plan and zoned for commercial uses and is located in an urban area. The project includes construction of a BESS, substation, and transmission line. The BESS would be monitored remotely with maintenance staff visiting the facility periodically throughout the year. No permanent employees would occupy the site. For these reasons, the project would not induce unplanned population growth. **(No Impact)**

-
- b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?
-

The project site is currently vacant and contains no housing; therefore, the project would not displace existing people or housing. **(No Impact)**

⁶⁶ California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State 2011-2022 with 2020 Census Benchmark*. Accessed on May 3, 2023.

<http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

⁶⁷ Ibid.

4.15 Public Services

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by proposed development. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Local

City of Daly City Capital Plan

In 2008, the City expanded its Capital Plan to cover a 20-year period. It was estimated that 2.8 million square feet of commercial space and 2,641 residential units would be added to the City, which is slightly more than projected in the 2013 General Plan. The study also projected the extent of capital improvements for public facilities which would be needed in the City over the same time period. The City identified the capital improvements which would be needed to provide City services to all areas over the next 20 years. The relationship between the additional projected commercial and residential development and the need for improvements in public facilities was analyzed. The City formulated impact fees that are based on the extent to which any need for new public facilities is attributed to new development.

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to public services and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy SE-3.1	Support and maintain the City's Insurance Service Office rating of a Class 2, which establishes the fire insurance rates for the City.
Policy SE-3.2	Provide for a seven-minute total reflex time for arrival of a first due company to 90 percent of all emergency incidents.
Policy SE-3.3	Provide for an eleven-minute total reflex time for arrival of multiple fire companies to 90 percent of all structure fires.
Policy SE-3.4	Maintain fire company reliability, whereby 90 percent of all incidents are handled by the district fire company.

4.15.1.2 *Existing Conditions*

Fire Protection

The City of Daly City is served by the North County Fire Authority (NCFA), a Joint Powers Authority which currently serves the communities of Brisbane, Daly City, and Pacifica.⁶⁸ The NCFA responds to all fires, hazardous materials spills, and medical emergencies in the City. The closest station to the project site is Station No. 93, located at 464 Martin Street, approximately 0.3-mile southeast of the project site.

Police Protection

Police protection services for the project site are provided by the Daly City Police Department (DCPD), which is headquartered at 333 90th Street, approximately three miles southwest of the project site. The Daly City Police Department employs 111 sworn personnel.⁶⁹

Schools

The project site is located within the Bayshore Elementary School District and the Jefferson Union High School District. The nearest elementary/middle school is Bayshore Elementary, approximately 0.4-mile east of the project site, located at 155 Oriente Street. The nearest high school is Jefferson High School, approximately 2.5 miles west of the project site, located at 6996 Mission Street.

⁶⁸ City of Daly City. "Fire Department". Accessed May 3, 2023. <https://www.dalycity.org/461/Fire-Department>.

⁶⁹ City of Daly City. "Police Officer". Accessed May 3, 2023. <https://www.dalycity.org/389/Police-Officer>.

Parks

According to the General Plan, 13 municipal parks and 12 tot lots are located in Daly City, resulting in a total of 82.95 acres of developed public recreational open space. The nearest park is Bayshore Heights Park, approximately 0.3-mile southeast of the project site, located at 450 Martin Street.

Libraries, Community Centers, and Other Facilities

The Daly City Library provides library services to the residents of Daly City. The nearest library is the Bayshore Branch, approximately 0.3-mile southeast of the project site, located at 450 Martin Street.

There are two community centers, one art center, and one public clubhouse in Daly City. The nearest of these centers is the Bayshore Community Center, approximately 0.3-mile southeast of the project site, located at 450 Martin Street.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire Protection?	☐	☐	☒	☐
b) Police Protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other Public Facilities?	☐	☐	☐	☒

-
- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services?
-

As part of the permitting process, the North County Fire Authority would review project plans before permits are issued to ensure compliance with all applicable fire and building code standards

and to ensure that adequate fire and life safety measures are incorporated into the project in compliance with all applicable state and city fire safety regulations. The project would use battery systems that are National Fire Protection Agency (NFPA) 855 Code compliant and would include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. The fire protection system would automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules. The proposed project would result in an incremental increase in the demand for fire protection services. The service area of the NCFA includes the cities of Daly City, Brisbane, and Pacifica. The nearest fire station to the project site is located approximately 0.3-mile southeast of the project site. As a result, the proposed project's incremental increase in fire service demand would be insignificant compared to the total demand within the NCFA service area and the NCFA would maintain adequate response times to the project site. For this reason, the proposed project would not individually require new or altered fire protection facilities, and as a result, would have a less than significant impact on the environment. **(Less than Significant Impact)**

-
- b) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services?
-

The proposed project would result in an incremental increase in the demand for police protection services within the DCPD service area. However, the project site is already served by DCPD and the proposed project would be an unmanned facility; therefore, the increase in police service demand generated by the project would be minimal and would be served by existing police facilities. As a result, the proposed project would have a less than significant impact on the provision of police protection services and would not require the construction or alteration of existing facilities. **(Less than Significant Impact)**

-
- c) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools?
-

The project proposes a BESS and substation and would not generate students; therefore, the proposed project will not impact schools. **(No Impact)**

-
- d) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?
-

The proposed project would not generate substantial population growth in the project area or result in the use of public facilities in the City by new residents. No permanent employees would occupy the proposed BESS or substation and it would, therefore, not generate park users. For these reasons, the proposed project would not impact park facilities. **(No Impact)**

- e) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities?
-

The project proposes a BESS and substation with no permanent employees. The proposed project does not include residential development and, therefore, would not increase demand upon public facilities, such as libraries and community centers, in the project area. Thus, there would be no impact. **(No Impact)**

4.16 Recreation

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Local

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to recreation and are applicable to the proposed project.

General Plan Policies

Policy/Task	Description
Policy RME-11	Areas designated as open space recreation-public shall continue to be maintained and upgraded by the Public Works Department.
Policy RME-12	Encourage a diverse, equitable, and integrated system of park facilities throughout Daly City that are accessible to all age, social, and economic groups and all geographic areas of the City.
Policy RME-13	Require the dedication of parkland or the payment of an in-lieu fee in accordance with Subdivision Map Act.
Policy RME-14	Prioritize the dispersal of park in-lieu fees collected from the development of new subdivisions to ensure that the fees are spent in the appropriate areas.

Parkland Dedication

The City of Daly City Municipal Code currently has parkland dedication standards within Title 16 – Subdivisions. Section 16.30 of the Municipal Code has a standard for parks of three acres per 1,000 people. This requirement may be satisfied through either on-site park construction, land dedication, or an in-lieu fee equal to the land value plus ten percent towards costs of off-site improvements.⁷⁰

⁷⁰ City of Daly City. *Municipal Code 16.30.050*. Accessed December 8, 2020.

4.16.1.2 Existing Conditions

Public recreational open space within Daly City consists of City parks and facilities, and State and County Parks. Daly City has 31 city parks and open spaces as well as access to nearby regional and state parks and open spaces such as San Bruno Mountain.⁷¹ According to the Parks and Open Space Master Plan, the City contains 65.4 acres of developed parkland and 68.6 acres of open space. In addition to City parks, San Bruno Mountain State and County Park provides 2,063 acres of public park space comprising state and San Mateo County managed land. The nearest park is Bayshore Heights Park, approximately 0.3-mile southeast of the project site, located at 450 Martin Street.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

-
- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
-

The proposed project would not generate substantial population growth in the project area or result in the use of public facilities in the City by new residents. No permanent employees would occupy the proposed BESS or substation and it would, therefore, not generate park users. For these reasons, the proposed project would not impact park facilities. **(No Impact)**

-
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?
-

Please see discussion under checklist question a) above. **(No Impact)**

⁷¹ City of Daly City. *Daly City Parks & Open Space Master Plan*. March 2020.

4.17 Transportation

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including San Mateo County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2050 in October 2021, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2050.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by the Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

San Mateo County Congestion Management Program

The City/County Association of Governments (C/CAG), as the Congestion Management Agency for San Mateo County, is required to prepare and adopt a Congestion Management Program (CMP) on a biennial basis. The purpose of the CMP is to identify strategies to respond to future transportation needs, develop procedures to alleviate and control congestion, and promote countywide solutions. Also included in the CMP is the Traffic Impact Analysis (TIA) Policy, which provides uniform procedures to analyze traffic impacts. According to the CMP, an acceptable level of service at signalized intersections is LOS E.

Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies and task are specific to transportation and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy CE-6	Support regional efforts to improve traffic while accommodating future development.
Policy CE-7	Ensure an effective transit system by supporting the work of other agencies in their efforts to expand public transit in and around Daly City.
Task CE-13.3	Consider impacts to the existing and future bicycle and pedestrian network when completing environmental review for private development projects, and require mitigation measures where necessary and reasonable to ensure that these systems are not impacted.

4.17.1.2 *Existing Conditions*

Roadway Network

Regional access to the project site is provided by U.S. 101 and Interstate 280 (I-280). Local access to the project site is provided via Carter Street, Martin Street, Geneva Avenue, and Bayshore Boulevard. These roadways are described below:

U.S. 101 is an eight-lane, north-south freeway that runs along the western side of San Francisco Bay. The Bayshore Boulevard off-ramp provides access to the project site from U.S. 101 North. The Third Street/Cow Palace off-ramp provides access to the project site from U.S. 101 South.

I-280 is an eight- to 12-lane, north-south freeway that runs through the middle of Daly City. The Geneva Avenue/Ocean Avenue off-ramp provides access to the project site from I-280 in both directions.

Geneva Avenue is a four-lane, east-west arterial street that provides access to Carter Street and I-280.

Bayshore Boulevard is a four-lane, north-south arterial street that provides access to Geneva Avenue and U.S. 101.

Carter Street is a two-lane, north-south neighborhood street that runs along the west side of the project site. It provides direct access to the project site.

Martin Street is a two-lane, east-west neighborhood street that runs along the south side of the project site and along the proposed transmission line.

Bicycle and Pedestrian Facilities

There are no sidewalks providing direct access to the project site; however, there are sidewalks along the west side of Carter Street directly across from the project driveway. Sidewalks are also provided on the south side of Martin Street and both sides of Geneva Avenue. There are Class III designated bike lanes on Martin Street and Carter Street along the project frontage and Class II bike lanes along Geneva Avenue.⁷²

Transit Services

SamTrans

SamTrans provides the principal bus service in San Mateo County. It operates local and school buses, as well as express routes to San Francisco. It is also a service provider for paratransit. All scheduled buses are equipped with front-loading racks that can hold up to two bicycles. In the project vicinity, bus stops exist along Geneva Avenue and Carter Street. The closest bus stop is located at the intersection of Carter Street and Saddleback Drive, approximately 300 feet south of the project driveway.

BART

The nearest BART station is the Balboa Park BART station, located approximately 1.5 miles northwest of the project site. From the Balboa Park BART station, riders can access Fremont, Pleasanton/Dublin, Richmond and Pittsburg as well as numerous points in between. Trains run on approximately 15-minute headways during commute hours. There are also a number of bus routes and shuttles operated by SamTrans that stop at the Balboa Park BART station.

4.17.1.3 *Methodology*

VMT Analysis

At the time of this report, the City of Daly City is undertaking a process of updating its significance thresholds to be consistent with SB 743, and the CEQA 2019 Update Guidelines Section 15064.3, subdivision (b). The City has not released draft significance thresholds to determine project VMT impacts. In September 2021, C/CAG published the SB 743 Implementation Decisions document with guidelines for VMT analysis. In the absence of a City policy or draft numeric thresholds, this analysis uses C/CAG's guidelines.

⁷² Class II bike lanes are on-road, separated (striped) bike lanes. Class III bike lanes, or bike routes (with sharrows), designate a preferred route for bicyclists on streets shared with motor traffic not served by dedicated bikeways to provide continuity to the bikeway network.

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐
a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?				

Roadways

The City of Daly City does not currently have an adopted VMT policy. Per SB 743, the City's LOS standards cannot be used in CEQA analysis for transportation impacts. The CMP requires traffic impact analyses when a project generates greater than a 100 average daily trips. The project would not generate more than 100 average daily trips as it would be monitored remotely and not have any permanent employees; therefore, a County CMP analysis is not required. The project's VMT impact is discussed in Impact TRN-2, below.

Bicycle and Pedestrian Facilities

The project would not generate a large volume of pedestrian or bicycle trips, as it would be monitored remotely and not have any permanent employees and, therefore, would not exceed the capacity of existing facilities. The project would also not conflict with the City's Bicycle and Pedestrian Master Plan.

Transit

The project could generate new transit users but is not anticipated to exceed the capacity of bus service near the project site. The project would not conflict with any SamTrans policies related to the transit system. **(Less than Significant Impact)**

-
- b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
-

The VMT thresholds used for this project are based on the Governor's Office of Planning and Research (OPR)'s recommendations. Per OPR guidelines, projects that generate or attract fewer than 110 trips per day may be assumed to cause a less than significant transportation impact. The project would be monitored remotely with no permanent employees on-site. Only periodic maintenance trips would be needed throughout the year; thus, the project would generate less than 110 trips per day. Given that the project would generate less than 110 trips, the project would have a less than significant VMT impact. **(Less than Significant Impact)**

- c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
-

Vehicle access to the project site would be provided via a 26-foot-wide driveway along Carter Street. The driveway would lead to an eight-foot-tall security gate providing access to the BESS and substation, as well as a public access road that runs along the western side of the site. Internal roadways (26 feet wide), inside the security gate, would surround the BESS and provide access to the substation. No pedestrian facilities are proposed within the project site. Landscaping would be planted in a manner that would ensure no conflicts with a driver's ability to locate a gap in traffic and see oncoming bicycles and vehicles. Trees planted at the project driveway on Carter Street would be set back from the roadway and located to provide adequate sight lines for vehicles. No other objects exist or are proposed along the project frontages that would reduce vehicle sight distance. For these reasons, the proposed project would not create an operational safety hazard. **(Less than Significant Impact)**

- d) Would the project result in inadequate emergency access?
-

The project driveway would lead to internal roadways that loop around the BESS and provide direct access to the substation, ensuring adequate circulation for emergency vehicles. In addition, the project would be reviewed by City staff and NCFR to ensure adequate emergency access. For these reasons, the project would not result in inadequate emergency access. **(Less than Significant Impact)**

4.18 Tribal Cultural Resources

The following discussion is based in part upon an archaeological sensitivity analysis prepared by Archaeological/Historical Consultants in May 2024. A copy of the archaeological sensitivity analysis, which is a confidential report, is on file at the City of Daly City Planning Division and is available upon request with appropriate credentials.

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Senate Bill 18

The intent of SB 18 is to aid in the protection of traditional tribal cultural places through local land use planning by requiring city governments to consult with California Native American tribes on projects that include adoption or amendment of general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process.

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
 - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
 - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

4.18.1.2 Existing Conditions

As discussed in Section 4.5 Cultural Resources, there are no known archaeological sites on the project site, PG&E Martin Substation, or along the proposed transmission line route within 0.25-mile of the site. The NAHC was contacted on February 18, 2023, to conduct a Sacred Lands File search. The NAHC responded that no tribal cultural resources were identified during the SLF review. The NAHC provided a contact list of eight Native American individuals/organizations who may know of cultural resources in this area or have specific concerns about the project. Per SB 18, the City of Daly City requested a tribal consultation list from the NAHC of tribes affiliated with the project area. The City received a list from the NAHC on December 27, 2022, and sent an email and physical letter to each of the identified individuals/organizations on January 5, 2023, inquiring whether they had any concerns about the proposed project. No responses were received within the 90-day response period and the City concluded consultation on April 4, 2023.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

-
- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?
-

As discussed above, there are no known TCRs on or adjacent to the project site. As discussed in Section 4.5 Cultural Resources, the project site has a low potential to encounter subsurface tribal cultural resources; however, construction-related ground disturbing activities could result in a significant impact to such resources if encountered. In the event that an inadvertent discovery of a tribal cultural resource is made, mitigation measures MM CUL-1.1, MM CUL-1.2, and MM CUL-2.1 would be implemented. Implementation of these mitigation measures would ensure that any subsurface tribal cultural resources encountered during construction are appropriately treated and protected. **(Less than Significant Impact with Mitigation Incorporated)**

- b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?
-

See response to Impact TCR-1 above. **(Less than Significant Impact with Mitigation Incorporated)**

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Daly City adopted its most recent UWMP in June 2021.

Senate Bill 610

SB 610 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires preparation of a WSA containing detailed information regarding water availability to be provided to the decision-makers prior to approval of specified large development projects that also require a General Plan Amendment. This WSA must be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610, WSAs must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA. Pursuant to the California Water Code (Section 10912[a]), projects that require a WSA include a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area. WSAs are also required for projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

California Green Building Standards Code

The California Green Building Standards Code (CALGreen) establishes mandatory green building standards for all buildings in California. The code is updated every three years and was most recently updated in 2022. The CALGreen code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include mandatory measures, as well as more rigorous voluntary guidelines, to reduce water and wastewater use, provide recycling facilities, and ensure that construction projects recycle or salvage 65 percent of non-hazardous construction and demolition waste.

Local

City of Daly City General Plan

The General Plan includes policies and tasks for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies and tasks are specific to utilities and service systems and are applicable to the proposed project.

General Plan Policies and Tasks

Policy/Task	Description
Policy RME-1	Reduce average per capita demand by implementing cost effective water conservation programs that address all applicable methods of water conservation.
Policy RME-2	Require drought resistant landscaping and water conserving irrigation methods in new development, and encourage the replacement of existing water-intensive landscaping.
Task RME-2.1	Enforce the provisions of the Water Conservation in Landscaping Ordinance and conduct a public education effort to ensure that residents, businesses, and contractors are aware of the Ordinance provisions.

Policy/Task	Description
Policy RME-3	Continue to use recycled wastewater for irrigating and explore opportunities to expand capacity to accommodate its use in development projects, landscaped medians, golf courses, cemeteries, parks, and school playgrounds.
Task RME-4.1	Develop a water supply questionnaire for inclusion with any application involving 50 or more residential units, 50,000 square feet or commercial or industrial development, or other pre-defined development intensity that constitutes a significance threshold under CEQA.
Policy RME-8	Through the development of a Stormwater Management Program, ensure that all new development complies with applicable municipal stormwater Municipal Regional Stormwater NPDES Permit by incorporating controls that reduce water quality impacts over the life of the project in way that is both technically and economically feasible, and reduces pollutants in stormwater discharges to the maximum extent practicable.
Task RME-8.2	Evaluate acceptable development standards for stormwater treatment mechanisms and publish such standards for distribution to developers. Such standards shall be based on a thorough evaluation of modern stormwater control mechanisms and shall, to the extent feasible, consider soil conditions in various parts of Daly City.
Task RME-8.4	Assess projected stormwater impacts from new development in conformance with the San Mateo County Water Pollution Prevention Program, CEQA Guidelines and relative to state and federal standards.

Daly City 2020 Urban Water Management Plan

The Urban Water Management Plan (UWMP) is a long-range plan that assesses the city's water supply over a 25-year planning horizon (2045) to ensure adequate water supplies to meet existing and future demands for water. The UWMP presents forecasted supplies and demands, describes conservation programs, and includes a water shortage contingency analysis.

Daly City Municipal Code

Chapter 15.64, Recycling and Diversion of Construction and Demolition Debris, requires that all projects meet the minimum diversion percentage required under the latest locally adopted CALGreen standard for waste tonnage from construction, demolition, and alteration projects. This may be accomplished by delivering mixed debris to a recycling facility approved by the city, separating recyclables at the job site and delivering them to reuse and recycling facilities approved by the city, and/or reusing concrete or other waste materials at the jobsite.

Chapter 17.41, Water Conservation in Landscaping, establishes regulations to implement water conservation practices on existing and new landscapes. For projects containing more than 1,000 square feet of irrigated landscape, a landscape permit is required which requires irrigation design review. Further, this Chapter mandates that any owner of landscape of over one (1) acre in size shall comply with local agency programs that may be instituted relating to irrigation audits, surveys and water use analysis, and shall maintain landscape irrigation facilities to prevent water waste and runoff.

4.19.1.2 Existing Conditions

Water Service and Supply

Water service to the project site is provided by the Daly City Department of Water and Wastewater Resources (DWWR). The City relies on local groundwater pumping from five municipal wells, which extracts groundwater from the Westside Groundwater Basin, and water supply purchases from the San Francisco Public Utilities Commission (SFPUC).⁷³ The City also uses tertiary recycled water from the North San Mateo County Sanitation District wastewater treatment plant, to offset potable/aquifer water demands. Currently recycled water is used to water five golf courses, two city parks, and road median strips. Recycled water is not a source of water proposed for the project site.

The project site is currently served by a 12-inch water main in Carter Street near the entrance driveway. The project site is currently vacant and does not use any water.

Sanitary Sewer/Wastewater Treatment

Sanitary sewer lines in the project area are inspected and maintained by the Bayshore Sanitary District. Wastewater produced within the District is pumped via the Carlyle Pump Station to the San Francisco Public Utility Commission's (SFPUC) Southeast Treatment Plant (STP), which is located approximately three miles northeast of the project site. The Bayshore Sanitary District has a current agreement with the STP through July 2025.⁷⁴

The project site is vacant and does not generate any wastewater.

Storm Drainage

As discussed in Section 4.10 Hydrology and Water Quality, Sunnydale watershed which drains to the San Francisco Bay via Brisbane.

The project site is gently sloping from west to east and situated at an elevation of approximately 140 feet msl. Surface runoff on-site is collected in drains or inlets and conveyed via below grade pipes to three storm drain outfalls located along the western property line. The outfall discharges to an existing 10-inch storm drain line that connects to the larger storm drain system within the Cow Palace property. This system flows towards Bayshore Boulevard and discharges into a 60-inch storm drain line through Brisbane and ultimately into San Francisco Bay, approximately 1.6 miles east of the project site.

The project site is approximately 92 percent impervious surfaces and eight percent pervious surfaces.

⁷³ Brown and Caldwell. *Daly City 2020 Urban Water Management Plan*. June 2021. Page 6-8.

⁷⁴ Bayshore Sanitary District. "About Bayshore Sanitary District". Accessed June 24, 2024.

<http://www.bayshoresanitary.com/about-bayshore-sanitary-district/>.

Solid Waste

Solid waste is collected from Daly City homes and businesses and is processed by Republic Services of Daly City and transferred to the Ox Mountain Sanitary Landfill near Half Moon Bay. In 2001, Browning-Ferris Industries, owner of the Ox Mountain Landfill, obtained a revised solid waste facility permit for Ox Mountain to increase the permitted disposal acreage from 173 acres to 191 acres. According to CalRecycle, the landfill has a remaining capacity of 22,180,000 cubic yards and an estimated closure date of 2034.⁷⁵

Electric, Telecommunication, and Natural Gas Facilities

Peninsula Clean Energy (PCE) is a public and locally controlled electricity provider for the County of San Mateo. Electricity provided by PCE is delivered through PG&E transmission lines. PG&E supplies natural gas services to the project area. Telecommunication services are also provided through underground infrastructure by various service providers.

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

⁷⁵ CalRecycle. SWIS Facility Detail. Cordina Los Trancos (Ox Mtn) (41-AA-0002). Accessed on August 9, 2023. <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1561?siteID=3223>.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
e) Be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐
a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				

Water Facilities

The proposed project would be monitored remotely, with maintenance staff visiting the facility periodically throughout the year. The project would connect to the existing 12-inch water main in Carter Street near the project site driveway. Currently the project site uses no water and no bathroom facilities are proposed as part of the project. Water would only be used for fire suppression during emergencies and for landscaping. Thus, the project would not necessitate expansion of existing water facilities or construction of new water facilities and would have a less than significant impact. **(Less than Significant Impact)**

Wastewater Facilities

As discussed above, the project would be monitored remotely, with maintenance staff visiting the facility periodically throughout the year. No restrooms are proposed on-site; therefore, the project would not generate any wastewater and would not require the expansion of existing wastewater facilities or construction of new wastewater facilities. **(No Impact)**

Stormwater Drainage

As discussed in Section 4.10 Hydrology and Water Quality, the proposed project would result in a net increase of 10,000 square feet of impervious surface area compared to existing conditions; however, the project includes a dry detention pond designed to retain stormwater on-site during a 25-year storm event. Stormwater from the detention pond would then discharge to an existing 10-inch storm drain line along the eastern property line, connecting to the larger storm drain system within the Cow Palace property. Pervious surface area provided by the project would include landscaping and bioretention areas. Thus, the proposed project, in conformance with applicable regulations, would not result in significant impacts to the storm drain system. **(Less than Significant Impact)**

Electric Power, Natural Gas, and Telecommunication Utilities

The project site is currently served by electric power and telecommunication utilities and would not require the use of natural gas. The proposed redevelopment of the site would not require the expansion of natural gas and telecommunication utilities. The proposed project would develop additional electric power facilities on the site, including a BESS facility, substation and electric transmission line. The impacts from construction of the proposed facilities are described throughout this Initial Study. No additional electrical power lines or facilities, than those proposed by the project, would be required to serve the proposed development. **(Less than Significant Impact)**

-
- b) Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
-

As discussed above, the project would be monitored remotely and maintenance staff would visit the facility periodically throughout the year. No restrooms are proposed as part of the project and water would only be used during fire emergencies and for landscaping. Thus, the project would have little impact on the City's water supplies and the impact would be less than significant. **(Less than Significant Impact)**

-
- c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
-

As discussed previously, the proposed project does not include any restroom facilities and would not generate any wastewater. Thus, the project would not result in a determination by the wastewater treatment provider that it does not have adequate capacity. **(No Impact)**

-
- d) Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
-

As discussed above, the proposed project would be monitored remotely and maintenance staff would visit the facility periodically throughout the year. Solid waste generated by the project would be negligible and any waste generated by the project would be sent to Ox Mountain Landfill, which has a remaining capacity of 22,180,000 cubic yards.⁷⁶ Thus, the project would not generate solid waste in excess of local standards or capacity and would not impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

⁷⁶ CalRecycle. SWIS Facility Detail. Cordina Los Trancos (Ox Mtn) (41-AA-0002). Accessed on August 9, 2023. <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1561?siteID=3223>.

-
- e) Would the project be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?
-

The project would comply with solid waste management and reductions statutes and regulations including CALGreen requirements and Chapter 15.64 of the Daly City Municipal Code for recycling and salvaging of construction and demolition waste. **(Less than Significant Impact)**

4.20 Wildfire

4.20.1 Environmental Setting

4.20.1.1 *Existing Conditions*

The California Department of Forestry and Fire Protection (CAL FIRE) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZ), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. The project site is not located in a FHSZ.⁷⁷ San Bruno Mountain is identified as a Moderate Fire Hazard Severity Zone in a State Responsibility Area (SRA).⁷⁸

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

The project site is located in an urbanized area of Daly City and is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. **(No Impact)**

⁷⁷ CAL FIRE. "Fire Hazard Severity Zones in State Responsibility Area." Accessed August 9, 2023. <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008>.

⁷⁸ Ibid.

4.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				

As discussed throughout this Initial Study, the proposed project would not substantially degrade the quality of the environment with implementation of identified mitigation measures. As discussed in Section 4.4 Biological Resources, with implementation of mitigation measures MM BIO-1.1 and MM BIO-2.1, the project would not significantly impact nesting birds or roosting bats. No sensitive species or habitats would be significantly impacted by the project. As discussed in Section 4.5 Cultural Resources and Section 4.18 Tribal Cultural Resources, with implementation of mitigation measures MM CUL-1.1, MM CUL-1.2, and MM CUL-2.1, the project would result in a less than significant impact on archaeological resources and TCRs. In addition, as discussed in Section 4.9 Hazards and Hazardous Materials, the project would implement MM HAZ-1.1 to prevent exposure to existing soil contaminants. The project would have no impact on historic resources. **(Less than Significant Impact with Mitigation Incorporated)**

b) Does the project have impacts that are individually limited, but cumulatively considerable?

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects “that are individually limited, but cumulatively considerable.” As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means “that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” This Initial Study evaluates the environmental impacts of the proposed BESS, substation, and transmission line and takes into account other past, pending, and probably future projects whose impacts could combine to produce cumulative impacts.

The proposed development would result in temporary air quality, hazards and hazardous materials, and noise impacts during construction. With implementation of the identified mitigation measures and consistency with adopted City policies, the construction impacts would be mitigated to a less than significant level. As the identified impacts are temporary and would be mitigated, the project would not have cumulatively considerable impacts on air quality, hazards and hazardous materials and noise in the project area. The impacts of the project on biological resources, cultural resources, and tribal cultural resources would be avoided and minimized through the use of mitigation measures to ensure the project would not substantially contribute to a cumulative impact on those resources.

The project would have a less than significant impact on aesthetics, energy, geology and soils, greenhouse gas emissions, hydrology and water quality, land use and planning, public services, transportation, and utilities, and would not contribute to cumulative impacts to these resources given the limited scope of the project. The project would not impact agricultural and forest resources, mineral resources, population and housing, recreational facilities, or wildfire hazards. Therefore, the project would not contribute to a significant cumulative impact on these resources.
(Less than Significant Impact with Mitigation Incorporated)

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Pursuant to this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality pollutants, geological hazards, hazardous materials, and noise. As discussed in Section 4.3 Air Quality, 4.7 Geology and Soils, 4.9 Hazards and Hazardous Materials,

and 4.13 Noise, with the implementation of mitigation measures and adherence to existing laws and regulations, the project would avoid significant impacts. No other direct or indirect adverse effects on human beings have been identified. **(Less than Significant Impact with Mitigation Incorporated)**

Section 5.0 References

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

NV5/Alta Environmental. Phase I Environmental Site Assessment, 2150 Geneva Avenue, Daly City, CA. September 2020.

Archaeological/Historical Consultants. *Archaeological Sensitivity Assessment 2150 Geneva Avenue, Daly City*. May 2024.

Association of Bay Area Governments and Metropolitan Transportation Commission. Plan Bay Area 2050. October 21, 2021.

Bay Area Air Quality Management District. CEQA Air Quality Guidelines. April 2022.

---. Final 2017 Clean Air Plan. April 19, 2017.

Bayshore Sanitary District. "About Bayshore Sanitary District". Accessed June 24, 2024. <http://www.bayshoresanitary.com/about-bayshore-sanitary-district/>.

Brown and Caldwell. Daly City 2020 Urban Water Management Plan. June 2021.

CAL FIRE. "Fire Hazard Severity Zones in State Responsibility Area". Accessed August 9, 2023. <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008>.

California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed July 5, 2023. <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>.

---. "The Advanced Clean Cars Program." Accessed April 3, 2023. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>.

California Building Standards Commission. "California Building Standards Code." Accessed April 3, 2023. <https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo>.

California Department of Conservation. "California Earthquake Hazards Zone Application". Accessed April 5, 2023. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>.

---. "Farmland Mapping and Monitoring Program." Accessed April 3, 2023. <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

- . "San Mateo County Tsunami Hazard Areas". Accessed April 12, 2023. <https://www.conservation.ca.gov/cgs/tsunami/maps/san-mateo>.
- . "Williamson Act." Accessed April 3, 2023. <http://www.conservation.ca.gov/dlrp/lca>.
- . San Mateo County Important Farmland Map 2018. September 2019.
- California Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State 2011-2022 with 2020 Census Benchmark. Accessed on May 3, 2023. <http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.
- California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed April 3, 2023. <http://frap.fire.ca.gov/>.
- California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed December 8, 2020. <http://hcd.ca.gov/community-development/housing-element/index.shtml>.
- California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed April 3, 2023. <https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist>.
- California Department of Water Resources. "Bulletin 118: Visitation Valley Basin". Accessed May 3, 2023. <https://www.smcsustainability.org/wp-content/uploads/filebase/energy-water/groundwater/2-32.pdf>.
- . "State Groundwater Management Act Basin Prioritization Dashboard". Accessed April 12, 2023. <https://gis.water.ca.gov/app/bp-dashboard/final/>.
- California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed April 3, 2023. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>.
- . "2022 Building Energy Efficiency Standards What's New for Single-Family Residential." Revised July 15, 2022. Accessed January 18, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Single-family_Whats_New_Summary_ADA.pdf.
- . "2022 Building Energy Efficiency Standards What's New for Multifamily." Revised August 4, 2022. Accessed January 18, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Multifamily_Whats_new_Summary_ADA.pdf.
- . "2022 Building Energy Efficiency Standards What's New for Nonresidential." Revised August 4, 2022. Accessed January 18, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Nonresidential_Whats_New_Summary_ADA.pdf.

- . "Natural Gas Consumption by County." Accessed March 13, 2023. <http://ecdms.energy.ca.gov/gasbycounty.aspx>.
- . "State Profile and Energy Estimates, 2020." Accessed March 13, 2023. <https://www.eia.gov/state/?sid=CA#tabs-2>.
- . Energy Consumption Data Management System. "Electricity Consumption by County." Accessed March 13, 2023. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.
- California Environmental Protection Agency, State Water Resources Control Board. "Impaired Water Bodies". Accessed April 12, 2023. https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml
- California Environmental Protection Agency. "Cortese List Data Resources." Accessed April 5, 2023. <https://calepa.ca.gov/sitecleanup/corteselist/>.
- California Gas and Electric Utilities. 2022 California Gas Report. Accessed March 13, 2023.
- California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed August 31, 2020. <http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf>.
- California Regional Water Quality Control Board San Francisco Region. Municipal Regional Stormwater NPDES Permit, Order No. R2-2022-0018, NPDES Permit No. CAS612008. May 11, 2022.
- California State Water Resources Control Board. "2020-2022 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)." May 11, 2022. Accessed April 12, 2023. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.
- CalRecycle. SWIS Facility Detail. Cordina Los Trancos (Ox Mtn) (41-AA-0002). Accessed on August 9, 2023. <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1561?siteID=3223>.
- CARB. 2022 Scoping Plan for Achieving Carbon Neutrality. November 16, 2022.
- City of Daly City. "Fire Department". Accessed May 3, 2023. <https://www.dalycity.org/461/Fire-Department>.
- . "Police Officer". Accessed May 3, 2023. <https://www.dalycity.org/389/Police-Officer>.
- . General Plan Update Draft Environmental Impact Report. October 2012.
- . Municipal Code 16.30.050. Accessed December 8, 2020.

Department of Toxic Substances Control. "EnviroStor". Accessed April 5, 2023.
https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=41360100.

Federal Emergency Management Agency. *FIRM 06081C0035F*. April 5, 2019.

Federal Transit Administration. Transit Noise and Vibration Impact Assessment Manual. 2018.
https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf.

Illingworth & Rodkin, Inc. *2150 Geneva Avenue Battery Storage Construction Health Risk Assessment*. September 6, 2024.

---. *2150 Geneva Avenue Battery Storage Project Noise and Vibration Assessment*. September 6, 2024.

MRS Environmental. *Hazards Analysis Final Report Cormorant Energy Project Daley City, California*. September 2023.

Peninsula Clean Energy. "Frequently Asked Questions." Accessed March 13, 2023.
<https://www.peninsulacleanenergy.com/faq/>. 2) Peninsula Clean Energy. "Energy Choices." Accessed March 13, 2023. <https://www.peninsulacleanenergy.com/faq/>.

San Mateo County. "Williamson Act Parcels" Accessed April 3, 2023.
<https://data.smcgov.org/Housing-Development/Williamson-Act-Parcels/sq6e-7i5j>.

U.S. Energy Information Administration. "Petroleum & Other Liquids, California Field Production of Crude Oil." Accessed February 28, 2023.
<https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpca1&f=a>.

United States Department of Agriculture. "Web Soil Survey". Accessed April 5, 2023.
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

United States Department of Energy. Energy Independence & Security Act of 2007. Accessed March 13, 2023. <http://www.afdc.energy.gov/laws/eisa>.

United States Department of Transportation. "USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026." Accessed March 13, 2023.
<https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026>.

United States Energy Information Administration. "Natural Gas Consumption by End Use. 2021." Accessed March 13, 2023. <https://www.eia.gov/state/?sid=CA#tabs-2>.

---. "State Profile and Energy Estimates, 2020." Accessed March 13, 2023.

<https://www.eia.gov/state/?sid=CA#tabs-2>.

United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed April 5, 2023. <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>.

United States Environmental Protection Agency. "The 2022 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." December 2022. <https://www.epa.gov/system/files/documents/2022-12/420r22029.pdf>.

University of California Davis. "SoilWeb". Accessed April 5, 2023.

<https://casoilresource.lawr.ucdavis.edu/gmap/>.

WRA, Inc. *Cormorant Energy Storage Project Constraints Assessment*. September 9, 2024.

Section 6.0 Lead Agency and Consultants

6.1 Lead Agency

City of Daly City

Economic and Community Development Department

Michael Van Lonkhuyzen, *Planning Manager*

Sam Fielding, *Associate Planner*

6.2 Consultants

David J. Powers & Associates, Inc.

Environmental Consultants and Planners

Will Burns, *Principal Project Manager*

Tyler Rogers, *Project Manager*

Ryan Osaka, *Graphic Artist*

Archaeological/Historical Consultants, Inc.

Cultural Resources Consultant

Dan Shoup, *Principal*

Molly Fierer-Donaldson, *RPA*

Illingworth & Rodkin, Inc.

Air Quality and Noise Consultants

James A. Reyff, *Principal*

Michael S. Thill, *Principal*

Carrie J. Janello, *Senior Consultant*

Zachary Palm, *Consultant*

MRS Environmental

Environmental Consultants

NV5/Alta Environmental

Hazardous Materials Consultant

Eric Fraske, *Senior Engineer*

Bryan Stone, *Vice President and Senior Technical Reviewer*

WRA, Inc.

Biological Consultants

Justin Semion, Principal and Technical Services Director

Scott Batiuk, Plant Biologist

Section 7.0 Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-Containing Material
ALUC	Airport Land Use Commission
APN	Assessor's Parcel Number
ATCM	Asbestos Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
Bay Area	San Francisco Bay Area
BESS	Batter Energy Storage System
Btu	British Thermal Unit
CAAQS	California Ambient Air Quality Standard
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	Methane
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide

CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalents
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
DNL	Day/Night Average Sound Level
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse Gases
GHGRS	Greenhouse Gas Reduction Strategy
GWh	Gigawatt Hour
GWP	Global Warming Potential
Habitat Plan	Santa Clara Valley Habitat Plan
HSWA	Hazardous and Solid Waste Amendments
L _{eq}	Energy-Equivalent Sound/Noise Descriptor
L _{max}	Maximum A-weighted noise level during a measurement period
LOS	Level of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MMTCO ₂ e	Million Metric Tons of Carbon Dioxide Equivalent
MND	Mitigated Negative Declaration
mpg	Miles per Gallon
MSL	Mean Sea Level

MTC	Metropolitan Transportation Commission
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	Nitrogen Dioxide
NOA	Naturally Occurring Asbestos
NOD	Notice of Determination
NO _x	Nitrogen Oxides
NRHP	National Register of Historic Places
O ₃	Ozone
PCB	Polychlorinated Biphenyls
PCF	Perfluorocarbon
PDA	Priority Development Areas
PG&E	Pacific Gas and Electric Company
PM	Particulate Matter
PM ₁₀	Particulate matter with a diameter of 10 microns or less
PM _{2.5}	Particulate matter with a diameter of 2.5 microns or less
PPV	Peak Particle Velocity
R&D	Research and Development
RAP	Removal Action Plan
RCRA	Resource Conservation and Recovery Act
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	State Bill
SCS	Sustainable Communities Strategy
SF ₆	Sulfur Hexafluoride
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act

SMGB	State Mining and Geology Board
SMP	Site Management Plan
SO _x	Sulfur Oxides
SR	State Route
SRA	State Responsibility Area
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
Title 24	Title 24, Part 6 of the California Code of Regulations
TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VMT	Vehicle Miles Traveled
Williamson Act	California Land Conservation Act
WUI	Wildland-Urban Interface
ZNE	Zero Net Carbon Emission

Mitigation Monitoring and Reporting Program

Cormorant Energy Storage Project



June 2024

PREFACE

Section 21081.6 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring and Reporting Program (MMRP) whenever it approves a project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring and reporting program is to ensure compliance with the mitigation measures during project implementation.

The Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the Cormorant Energy Storage Project concluded that the implementation of the project could result in significant effects on the environment and mitigation measures were incorporated into the proposed project or are required as a condition of project approval. This MMRP addresses those measures in terms of how and when they will be implemented.

This document does *not* discuss those subjects for which the IS/MND concluded that the impacts from implementation of the project would be less than significant.

I, Joshua Coon, the applicant, on the behalf of Cormorant Energy Storage, LLC, hereby agree to fully implement the mitigation measures described below which have been developed in conjunction with the preparation of an IS/MND for my proposed project. I understand that these mitigation measures or substantially similar measures will be adopted as conditions of approval with my development permit request to avoid or significantly reduce potential environmental impacts to a less than significant level.

Project Applicant's Signature *Josh Coon*
Josh Coon (Nov 5, 2024 09:50 PST)

Date 11/5/2024

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
Air Quality				
Impact AIR-1: Construction of the project would generate fugitive dust emissions and result in significant NOx emissions. (Less than Significant Impact with Mitigation Incorporated)	MM AIR-1.1: BAAQMD Best Management Practices: The project shall implement the Bay Area Air Quality Management District's (BAAQMD's) recommended best management practices (BMPs) and additional measures to reduce construction equipment exhaust emissions. These measures shall include the following: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). • All roadways, driveways, and sidewalks to be paved shall be completed as soon as practicable. Building pads shall be laid as soon as practicable	The project applicant and contractors shall be responsible for implementing the mitigation measures during all phases of construction.	All measures shall be printed on all construction documents, contracts, and project plans and shall be reviewed by the Director of Economic and Community Development prior to the issuance of a grading permit.	Director of Economic and Community Development

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	after grading unless seeding or soil binders are used. • All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. • All trucks and equipment, including their tires, shall be washed off prior to leaving the site. • Unpaved roads providing access to site located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel. • Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall be visible to ensure compliance with applicable regulations. • Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities. • Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of			

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	construction. Wind breaks should have at maximum 50 percent air porosity. • Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. • Minimize the amount of excavated material or waste materials stored at the site. • Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, that are inactive for at least 10 calendar days.			

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	MM AIR-1.2: <u>Selection of Construction Equipment:</u> All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. Environmental Protection Agency (EPA) Tier 4 emission standards for NOx.	The applicant and contractors shall be responsible for implementing the mitigation measures during all phases of construction.	All measures shall be printed on all construction documents, contracts, and project plans and shall be reviewed by the Director of Economic and Community Development prior to the issuance of a grading permit.	Director of Economic and Community Development
Biological Resources				
Impact BIO-1: Construction of the project could result in significant impacts to nesting birds protected under the federal Migratory Bird Treaty Act and State Fish and Game Code. (Less than	MM BIO-1.1: Initiation of construction activities during the avian nesting season (February 1 through August 31) shall be avoided to the extent feasible. If construction initiation during the nesting season cannot be avoided, pre-construction nesting bird surveys shall be conducted by a qualified biologist within 14 days of initial ground disturbance or vegetation removal to avoid disturbance to active nests, eggs, and/or young of nesting birds. Surveys	The project applicant and contractors shall be responsible for implementing the mitigation measures prior to project construction, including tree	All measures shall be printed on all construction documents, contracts, and project plans and shall be reviewed by the Director of Economic and	Director of Economic and Community Development

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
Significant Impact with Mitigation Incorporated)	shall be used to detect the nests of special-status as well as non-special-status birds. Surveys shall encompass the entire construction area and the surrounding 500 feet. An exclusion zone where no construction would be allowed shall be established around any active nests of any protected avian species found in the Study Area until a qualified biologist has determined that all young have fledged and are independent of the nest. Suggested exclusion zone distances differ depending on species, location, and placement of nest, and shall be at the discretion of the biologist and, if necessary, the California Department of Fish and Wildlife. These surveys would remain valid as long as construction activity is consistently occurring in a given area and shall be completed again if there is a lapse in construction activities of more than 14 consecutive days during the breeding bird season. A report of findings shall be prepared by the qualified biologist and submitted to the Director of Community Development or Director's designee for review and approval prior to initiation of construction during the nesting season (February 1 to August 31). The report shall either confirm absence of any active nests or	removals or ground disturbance.	Community Development prior to the issuance of a grading permit. A final report of nesting bird survey findings, including any need for protection measures, shall be submitted to the Director of Community Development prior to the issuance of a grading permit or any tree removal.	

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	should confirm that any young are located within a designated no-disturbance zone and construction can proceed. No report of findings is required if construction is initiated during the non-nesting season (September 1 to January 31) and continues uninterrupted according to the above criteria.			
Impact BIO-2: Construction of the project could result in significant impacts to roosting special-status bats. (Less than Significant Impact with Mitigation Incorporated)	MM BIO-2.1: Initiation of construction activities during the bat maternity season (generally April through October) shall be avoided to the extent feasible, any tree removal or trimming should be conducted outside of the bat maternity season (generally April through October). If this work window is not feasible, pre-construction bat roost assessments conducted by a qualified biologist at least 14 days and no more than 30 days prior to removal shall be conducted to determine if bats roosts are present that may be impacted by project activities. If special-status bat species or maternity roosts are detected during these surveys, a qualified biologist shall identify any additional measures required to protect the roosts, such as including avoidance of the roost sites until the end of the maternity roosting season. Regardless of the timing of tree removal or trimming activities, all felled trees or large limbs should remain	The project applicant and contractors shall be responsible for implementing the mitigation measures prior to project construction, including tree removal and ground disturbance.	All measures shall be printed on all construction documents, contracts, and project plans and shall be reviewed by the Director of Economic and Community Development prior to the issuance of a grading permit. A findings report for bat maternity roosts, including any protection	Director of Economic and Community Development

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	on the ground for at least 24-hours prior to chipping, off-site removal, or other processing to allow any roosting individual bats to vacate the premises of their own volition. A report of findings shall be prepared by the qualified biologist and submitted to the Director of Community Development or Director's designee for review and approval prior to initiation of construction during the maternity roosting season (April through October). The report shall either confirm absence of any active maternity roosts or specify any additional measures necessary to protect roosts until the end of the maternity roosting season. No report of findings is required if construction is initiated during the non-maternity roosting season (November through March) and continues uninterrupted according to the above criteria.		measures, shall be submitted to the Director of Community Development prior to the issuance of a grading permit or any tree removal.	
Cultural Resources				
Impact CUL-1: Construction of the project could result in significant impacts to previously undiscovered	MM CUL-1.1: <u>Undiscovered Archaeological Resources.</u> If evidence of an archaeological site or other suspected cultural resource as defined by CEQA Guideline Section 15064.5, including darkened soil representing past human activity ("midden"), that	The project applicant and contractors shall be responsible for implementing the	All measures shall be printed on all construction documents, contracts, and	Director of Economic and Community Development

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
subsurface archeological resources. (Less than Significant Impact with Mitigation Incorporated)	could conceal material remains (e.g., worked stone, worked bone, fired clay vessels, faunal bone, hearths, storage pits, or burials) is discovered during construction related earth-moving activities, all ground-disturbing activity within 100 feet of the resources shall be halted and the City's Planning Manager shall be notified. The project sponsor shall hire a qualified archaeologist to conduct a field investigation. The City's Planning Manager shall consult with the archaeologist to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a qualified archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-J) form and filed with the NWIC. MM CUL-1.2: <u>Report of Archaeological Resources.</u> If archaeological resources are identified, a final report summarizing the discovery of cultural materials shall be submitted to the City's Planning Manager prior to issuance of certificate of occupancy. This report shall	mitigation measures during all phases of construction.	project plans and shall be reviewed by the Director of Economic and Community Development prior to the issuance of a grading permit. If archaeological resources are identified, a final report shall be	

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found and conclusion, and a description of the disposition/curation of the resources.		submitted to the City's Planning Manager prior to final inspection.	
Impact CUL-2: Construction of the project could result in significant impacts to previously undiscovered human remains. (Less than Significant Impact with Mitigation Incorporated)	MM CUL-2.1: <u>Human Remains</u>. If human remains are discovered during project construction, all ground-disturbing activity within 100 feet of the resources shall be halted and the City's Planning Manager and the San Mateo County coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project sponsor shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely	The project applicant and contractors shall be responsible for implementing the mitigation measures during all phases of construction.	All measures shall be printed on all construction documents, contracts, and project plans and shall be reviewed by the Director of Economic and Community Development prior to the issuance of a grading permit.	Director of Economic and Community Development

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	Descendant, including the excavation and removal of the human remains. The City of Daly City shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of State law, as set forth in CEQA Guidelines section 15064.5(e) and Public Resources Code section 5097.98. The project sponsor shall implement approved mitigation, to be verified by the City of Daly City, before the resumption of ground-disturbing activities within 100 feet of where the remains were discovered.			
Geology and Soils				
Impact GEO-1: Construction of the project could result in significant impacts to previously undiscovered paleontological resources. (Less than Significant Impact with Mitigation Incorporated)	MM GEO-1.1: <u>Unique Paleontological and/or Geologic Features and Reporting.</u> Should a unique paleontological resource or site or unique geological feature be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet shall cease and the City's Planning Director notified immediately. A qualified paleontologist shall evaluate the find and prescribe mitigation measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is implemented. Upon	The project applicant and contractors shall be responsible for implementing the mitigation measures during all phases of construction.	All measures shall be printed on all construction documents, contracts, and project plans and shall be reviewed by the Director of Economic and Community Development prior to the	Director of Economic and Community Development

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	completion of the paleontological assessment, a report shall be submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology.		issuance of a grading permit. If completed, the paleontological assessment shall be submitted to the City prior to final inspection.	
Hazards and Hazardous Materials				
Impact HAZ-1: Construction of the transmission line near the PG&E Martin Substation could result in the release of contaminated soil. (Less than Significant Impact with Mitigation Incorporated)	MM HAZ-1.1: Prior to any grading, excavation, or construction of the transmission line, the Department of Toxic Substances Control (DTSC) shall be notified of the proposed construction activities at the PG&E Martin Substation. Per the Land Use Covenant for the PG&E Martin Substation, a Soil Management Plan (SMP) and Health and Safety Plan (HSP) shall be prepared by a qualified environmental professional submitted to DTSC for review and approval. The SMP and HSP and evidence of regulatory oversight shall be provided to the Director of Economic and Community Development.	Prior to issuance of grading, or building permits, the applicant shall be responsible for notifying DTSC and preparing a SMP and HSP for review and approval by DTSC.	Prior to the issuance of grading or building permits, the applicant shall notify DTSC of the proposed construction activities and prepare a SMP and HSP for DTSC review and approval.	Director of Economic and Community Development and Department of Toxic Substances Control.

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
			The applicant shall also submit to the Director of Economic and Community Development the SMP and HSP and evidence of regulatory oversight by DTSC.	
Noise and Vibration				
Impact NOI-1: Construction of the transmission line would exceed the construction noise threshold of 80 dBA L_{eq} threshold at residential property lines. (Less than Significant Impact with Mitigation Incorporated)	MM NOI-1.1: The applicant shall implement the following best management practices: - Limit construction hours, including deliveries of materials and equipment, to between 8:00 a.m. and 5:00 p.m., Monday through Friday, unless permission is granted with a development permit or other planning approval. - Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the	The project applicant and contractors shall be responsible for implementing the mitigation measures during all phases of construction.	All measures shall be printed on all construction documents, contracts, and project plans and shall be reviewed by the Director of Economic and Community Development prior to the issuance of a	Director of Economic and Community Development

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	noise source and receptor and if the barrier is constructed in a manner that eliminates any cracks or gaps. - At a minimum, the construction contractor shall implement the following control measures: improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds. - Equipment used for project construction shall be hydraulically or electrically powered impact tools (e.g., jack hammers) wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. A muffler could lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures shall be used (such as drilling rather than impact equipment) wherever feasible. - Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that		grading or building permit.	

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	are in good condition and appropriate for the equipment. • The construction contractor shall not allow any construction equipment, trucks, or vehicles to idle. • Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors. • Utilize “quiet” air compressors and other stationary noise sources where technology exists. • Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the project site. • Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.			

MITIGATION MONITORING AND REPORTING PROGRAM Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	• Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors. • Route construction-related traffic along major roadways and as far as feasible from sensitive receptors. • The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance. • If complaints are received or excessive noise levels cannot be reduced using the measures above, erect a temporary noise control blanket barrier along surrounding building facades that face the construction sites. • Designate a “disturbance coordinator” who shall be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and shall require that reasonable measures be implemented to			

MITIGATION MONITORING AND REPORTING PROGRAM				
Cormorant Energy Storage Project				
Impacts	Mitigation and/or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.			

Source: City of Daly City. *Cormorant Energy Storage Project Initial Study*. June 2024.