

CITY OF DALY CITY

Regular Meeting - PLANNING COMMISSION

AGENDA

Tuesday, October 7, 2025 - 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 June 3, 2025 Planning Commission Meeting Minutes

PUBLIC HEARINGS:

2. **Use Permit UPR-01-23-016044, Design Review DR-01-23-016046** Demolition of an existing service station and new construction of a service station, convenience store and car wash.

STAFF: Sam Fielding, Associate Planner

RECOMMENDATION:

PUBLIC APPEARANCES, STAFF COMMUNICATIONS:

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

ADJOURNMENT:

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

333 90th Street

Tuesday, June 3, 2025 – 7:00 PM

OPENING OF MEETING:

PLEDGE TO THE FLAG:

ROLL CALL:

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

APPROVAL OF MINUTES: December 3, 2024 and of May 6, 2025 Planning Commission Meetings

PUBLIC HEARING:

1. **Sign Program SP-0325-016768** for Planet Fitness 2945 Junipero Serra Boulevard – A request for approval of sign program to allow the addition of a digital message board on an existing pole sign. The message board would be placed in the lower portion of the two-section sign. As part of the Sign Program, the Planning Division is requiring improvements to the second tenant pylon sign location along Junipero Serra Boulevard and other sign improvements on the property.–

Staff report presented by: Sam Fielding Associate Planner

On June 3, 2025, the Planning Commission voted 3-0 (two commissioners absent) to recommend the City Council approve the sign program for 2945 Junipero Serra Boulevard (Planet Fitness). The Planning Commissioners appreciated the applicant's willingness to work with staff to improve the signage for the Planet Fitness business and they support efforts of businesses to improve signs that will benefit the community and businesses in the city.

Moved by Commissioner Catuar, seconded by Commissioner Nuris to adopt the Findings as outlined herein. Motion carried 3-0

Moved by Commissioner Cataur, seconded by Commissioner Nuris to recommend that the City Council affirm the Environmental Assessment. Motion carried 3-0

Moved by Commissioner Cataur, seconded by Commissioner Nuris, to recommend City Council approve **Sign Program SP-03-25-016768**, subject to Conditions of Approval outlined herein. Motion carried 3-0.

2. **Zone Change ZC-04-24-16507** – Rezoning Parcels to CC Commercial Cannabis Combining District. Amendments to the zoning map rezoning parcels to be included in the existing CC Commercial Cannabis Combining District.

Staff report presented by: Tatum Mothershead, Director - Economic and Community Development

On June 3, 2025, the Planning Commission voted 2-1 (two commissioners absent) to recommend the City Council approve the proposed rezonings.

Planning Commission discussion topics are as follows:

- Commissioner Faapuaa clarified the distancing requirements for cannabis retail businesses with staff and expressed her opinion that Bayshore residents needed businesses other than a cannabis dispensary such as grocery store or a clinic.
- Commissioner Cataur clarified that one cannabis dispensary is allowed per zone and expressed surprise that the subject properties were being re-considered for cannabis zoning because she stated that there are several already operating, as evidenced by the signage on several businesses on Mission Street. She added that these areas are highly residential, and the city was trying to redevelop and improve the area with festivals, and that the signage is not okay. She asked why the city was contemplating new zones if there are already a lot.
- Commissioner Nuris asked if this has been brought to the attention of city officials and why hadn't anything been done about it. Commissioner Faapuaa stated that she had not actually seen cannabis being sold from these businesses. Commissioner Nuris asked how this issue impacts the Planning Commission's decision to rezone additional areas for cannabis dispensaries. He suggested that vacancies along Mission Street and Geneva Avenue are not the result of the existing dispensaries.
- Commissioner Cataur stated that she understood that the cannabis businesses added to the city revenues but that there were other ways to generate this revenue.
- Sara Turner, a resident of the Mission Street area, pointed out that there are several dispensaries and vape shops already in Daly City and San Francisco. She added that State law requires a 600-foot separation between a daycare and a dispensary, that there was an existing daycare at 6133 Mission Street, and that also Lincoln Park and George Washington School were in close proximity.
- Alfredo Delarosa, a dentist at 6063 Mission Street, stated that there were inaccuracies in the staff report, that most residents in the area were renters, and that the city did not invite renters to have a say in the

- public hearing. He also cited the safety associated with the dispensaries and that there is double parking in front of Mission Street dispensaries in San Francisco. He also cited a recent study that showed that cannabis consumption led to heart disease and that recent newspaper articles had reported that cannabis dispensaries were closing and not paying their taxes.

Commissioner Nuris stated the people were not complaining about dispensaries and that maybe it was because the dispensaries were not that big of a concern. He stated that liquor stores were also detrimental to the public health and contribute to drunk driving, but a liquor store would be legal and could be opened very easily. He stated that he was not an advocate of cannabis himself but saw this as an opportunity to allow a legal business

Moved by Commissioner Nuris, seconded by Commissioner Catuar to adopt the Findings as outlined herein. Motion carried 2-1.

Moved by Commissioner Nuris, seconded by Catuar, find that the proposed rezonings are exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section of 15061 – Review for Exemption
Motion carried 2-1

Moved by Commissioner Nuris, seconded by Commissioner Cataur recommend that the City Council approve **Zone Change ZC-04-24-16507**. Motion carried 2-1 (Faapuaa – “no”)

PUBLIC APPEARANCES, STAFF COMMUNICATIONS:

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

ADJOURNMENT: Moved by Commissioner Nuris, seconded by Commissioner Faapuaa to adjourn the meeting at 7:55 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.



Daly City Planning Commission Agenda Report

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

Meeting Date: October 7, 2025

Application: Use Permit UPR-01-23-016044
Design Review DR-01-23-016046

Project Planner: Sam Fielding, Associate Planner

Project Location: 101 South Mayfair Avenue, Daly City, CA 94015

Project Description: Demolition of an existing service station and new construction of a service station, convenience store and carwash.

Applicant: Ed Hadad
1307 South Mary Avenue, 201
Sunnyvale, CA 94087

Property Owner: Ed Hadad
101 South Mayfair Avenue
Daly City, CA 94015

Environmental Assessment: Categorical Exemption, 15302, Class 2, (b) Replacement or Reconstruction.

Applicable Daly City Municipal Code Sections: Chapter 17.18 – C-1 Light Commercial District
Chapter 17.34 – Off-Street Parking and Loading
Chapter 17.44 – Use Permits
Chapter 17.45 – Design Review

Site Information

Property Sizes	Existing Use	Proposed Use	General Plan Designation	Current Zoning
22,500 Sq. Ft. (0.5 acres)	Service Station	Service Station, Convenience Store and Carwash	Service (C-S)	Light Commercial (C-1)

Area Information

Land Use	Zoning
North: Single Family Residential	R-1 Single-Family Residential District
South: Multi-Family Residential	R-3 Multi-Family Residential Development
West: Single Family Residential	R-1 Single- Family Residential District
East: Service and Multi Family Residential	C-1 Light Commercial; R-3 Multi-Family Residential Development

Background

The applicant, Ed Hadad, is requesting approval of a Use Permit and Design Review for a new service station, convenience store and carwash. The 22,500 square foot (sf) project site is located on one primary parcel (#APN 002-072-030) located at 101 South Mayfair Avenue. In addition, the applicant has reached an agreement to include landscape and streetscape improvements to the sidewalk and driveways on the adjacent parcel to the south (#APN 002-072-250), owned by CP VIII WESTLAKE OWNER 4 LLC (Attachment A - Location Map). The existing property, located at 101 South Mayfair Avenue, is bordered by South Mayfair Avenue to the north and Poncetta Drive to the east. The surrounding development consists of predominantly single family residences to the north, multi-family residences to the west and commercial (restaurant) and multi-family residences to the east, and multi-family residence to the south.

The project would demolish the existing service station with snack shop and construct a new service station, new convenience store and carwash at the project site (Attachment B – Project Description). The new buildings include a single-story, 2,304 sf convenience store, 971 sf carwash, 252 sf equipment room and 3,002 sf fueling canopy. The project also includes new driveways, sidewalk connections, medians and landscaping improvements along both the Poncetta Drive and South Mayfair Avenue frontages. The height of the single-story building will range from 17 feet to 23 feet - 6 inches in height to top of roof. The project includes the following components: new buildings, fuel canopy, landscaping, signage, new paving, pedestrian improvements and vehicle access and circulation improvements at the project site. (Attachment C – Plans)

Business Operation

Items to be sold at the property include gas at the gas station and the convenience store will sell pre-packaged food items, sundry items, some automobile accessories (air fresheners, cell phone accessories, anti-freeze, motor oil, etc.), self-service beverages, fresh and or pre-packaged pastries and can and or bottles of soda, water and sports/energy drinks.

The proposed hours of operation of the gas station and convenience store will be 24 hours a day, seven days a week, 365 days per year. The hours of operation of the carwash shall be 8:00 am to 9:00 p.m., seven days a week, 365 days per year. Fuel will be delivered seven times a week. There will be truck deliveries to the food store one time a week (Attachement B - Project Description)

Use Permit

The applicant has submitted an application requesting a use permit to allow the construction of a gas station, car wash and convenience store. The proposed project is developed according to the C-1 Light Commercial standards and complies with Chapter 17.18 – C-1 Light Commercial District of Daly City Code, which allows a full-service gasoline station at this address.

The proposed use complies with the Findings of Chapter 17.44.050 and will not be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood, or be injurious or detrimental to the property and improvements in the neighborhood or to the general welfare of the city. Also, an additional finding can be made that the new construction or operation of the proposed gasoline service state, will not significantly adversely affect or limit the public chealth, safety or welfare in providing public availaibility for minor emergency help and safety services such as light mechanical repairs, open public restrooms; and the public availability of full-service gasoline service statsion to those individual needing refueling assistance.

Design Review

The new convenience store building exterior materials and colors will consist of a combination cement plaster with sand finish (“porpoise fin”), and tan fiber cement plank lap siding (“khaki brown”) and allura woodgrain (“cedar”) type lap siding on the west elevation. The cornice will be cement plaster, finish painted white (“cloud white”). The coping will be painted to match the fiber cement lap siding and the front exterior fascia will be painted white (“bone white”). The exterior entry will be clear anodized aluminum. The west and north elevations shall include metal decorative trellises to add architectural detail to the blank wall.

The service station canopy shall consist of canopy columns with round cladding (“metallic silver”) with guard posts painted orange (“wave orange”). The canopy fascia will be silver (“metallic silver”) with internally illuminated orange wave and internally illuminated 76 fuel brand logo sign at the corners of canopy. (Attachment C - Plans)

The exterior wall signs shall be internally illuminated. A separate sign permit application for all project signs including wall signs, fuel canopy signs, monument signs and ground signs, shall be required at building permit submittal. All buildings, any applicable retaining walls, fences and trash enclosure materials and colors must match those as approved. High quality materials shall be utilized and final finishes shall be approved by the Director of Economic and Community Development.

All exterior site lighting levels will be illuminated to ensure the safety of the facility, but will not provide glare or excessive light spillage onto adjacent properties or the public right-of-way.

Exterior lighting will be LED fixture, down-lit and fully shielded to avoid potential glare toward the street and adjacent properties.

Staff has reviewed the architectural design of the buildings and site plan and determined that the project complies with applicable provisions of Design Review Section 17.45 of the Zoning Ordinance.

Parking and Circulation

A consultant, TJKM Consultants, was hired by the applicant to examine parking and traffic circulation for the proposed gas station, convenience store and carwash.

The existing service station canopy, service islands and snack shop would be demolished and a new modernized service station canopy constructed with a convenience store and car-wash. The service station canopy and service islands would be relocated from the northern side of the site to the east side of the site and would expand from four service aisles to eight service aisles. This will allow for greater capacity to service vehicles and a more efficient traffic circulation configuration and parking access for the new convenience store and entrance to the car-wash.

The applicant proposes to provide seventeen parking spaces for the convenience store service station and carwash uses. The proposed project parking layout is consistent with the DCMC 17.34.020 (O) of the Zoning ordinance in that a total of fifteen parking spaces are required for the service station, convenience store and carwash uses and seventeen spaces are provided. There will be eight parking spaces for the convenience store, including one accessible space. The applicant proposes to use the under canopy spaces at a ratio of .5 spaces per dispenser to meet the parking requirement. The five spaces for the car wash will be provided in the queuing lane.

Site Circulation

Access to the car wash and convenience store will be from either South Mayfair Avenue (two-way traffic), the Poncetta Drive north entrance driveway (enter-only) or the Poncetta south end driveway (two-way traffic). The car wash entrance will be located on the north west side of the site and exist on the south west side. The four, canopy covered, fuel pump islands will be configured in a west to east configuration allowing access from South Mayfair Avenue and Poncetta Drive (Attachment D – Traffic Circulation Memorandum).

Pedestrian Improvements

The proposed new gas station, convenience store and car wash include upgraded sidewalks and driveways that are designed to American Disability Act (ADA) accessible standards. The existing unconnected sidewalk located on the west side of Poncetta Drive will be upgraded to include a fully connected sidewalk, driveways and landscaping with ADA tactile domes at the entrances to the driveways. New medians, island and landscaping will be installed along the north, south and east sides of the property. The applicant will work with the adjacent property owner, Westlake LLC, to develop an easement agreement for the sidewalk improvements along the Poncetta Drive frontage and this will be a condition of approval, prior to building permit submittal.

Based on the traffic circulation study prepared for the applicant and reviewed by the City, the proposed site plan for the gas station, convenience store and car-wash provides a functional layout as well as an aesthetically pleasing design that retains space for landscaping, medians and islands for smooth traffic and pedestrian circulation at the service station, car wash and convenience store uses at the project site.

Landscaping

The project proposes approximately 462 square feet of new landscaping that would include a variety of trees, shrubs and groundcover plants on-site, exceeding the two percent parking lot landscape mandated by the Zoning Ordinance. The tree species selected are Muskogee Crape Myrtle and Sweet Bay trees (15 Gallon), shrubs Purple Hopseed Bush and Boston Ivey (5 Gallon) and groundcover Rosemary (1 Gallon), Myoporum (1 Gallon), Large Cape Rush (5 Gallon) and Moonstruck Marigold (4" pots) (Attachment C – Plans).

The proposed Conditions of Approval require a detailed landscape plan approved by the Planning Division prior to the issuance of any building permits. Since the project exceeds the 1,000 square feet of landscaped area, triggering specific requirements for outdoor water use efficiency and Tier 1 landscape requirements of the Daly City Landscaping Ordinance. The landscaping plan will be required to meet all applicable requirements including water efficient irrigation. The project is also subject to the San Mateo County Stormwater Water Pollution Prevention Program requiring submittal and approval of a stormwater management and inspection plan and maintenance agreement.

Noise

The City requested the applicant contract a consultant to prepare a noise study for the proposed project. A Noise and Vibration Assessment was prepared for the applicant in December 2023 by DUDEK consultants, that examined the existing noise at the site and with the proposed project (Attachment E – Noise and Vibration Assessment).

The General Plan Noise Element establishes objectives, policies, and actions to protect its inhabitants against exposure of noise-sensitive uses to loud noise and to prevent encroachment of noise-sensitive uses on existing noise producing facilities. The General Plan establishes an exterior noise level standard and maximum allowable noise exposure level for residential uses of no more than 70 dBA (Policy NE-2). The noise level guidelines were presented in terms of the 24- hour CNEL or DNL noise level in dBA. The intent of these guidelines is to protect noise-sensitive land uses from new project development, through the discretionary review process to reduce potential noise exposure and excessive noise within the community. Policy NE-3 of the General Plan limits noise generation for new non-residential land uses which are adjacent to residential land uses, to 70 dBA DNL at the residential property line. The assessment prepared by DUDEK evaluated construction noise and vibration, on-site operational noise, traffic noise and project operational vibration.

Construction Noise and Vibration: The analysis concluded that construction noise levels during construction would be a maximum of approximately 65 dBA, and would not interfere with conversation or other daytime activities indoors and even at the closest residences would not be

considered significant temporary noise impact, especially with the prohibition against nighttime construction. Based on an assessment of vibration source level of construction equipment and distance to closest residence, project construction vibration would have no potential to cause structural damage to the closest residences, or result in annoyance for the occupants.

On-site Operational Noise: The assessment analyzed stationary producers of noise, including the gas station, convenience store, and car wash. The evaluation found that the carwash would produce noise exceeding 70 dBA, however, the assessment determined that with the installation of a 7-foot masonry wall noise barrier, located along the westside of the carwash exit, the operational noise impact from the stationary sources would be less than significant. The assessment found that under conservative sound modeling conditions (use of gas station pumps, occupied convenience store parking spaces and operation of the carwash), no exceedances with respect to the noise element limits are expected and with incorporation of the recommended noise barrier wall at the carwash exit, operation noise impact from stationary sources would be less than significant. The applicant has incorporated the masonry wall noise barrier in the plans as recommended by the consultant (Attachment C – Plans).

Litter Control and Site Maintenance

An approved litter control and site maintenance plan will be required prior to building permit issuance. The plan must include a schedule of maintenance for the site and adjacent sidewalks and a graffiti abatement program.

The proposed trash enclosure is accessed directly from the car wash exit lane. The litter control and maintenance plan shall also require that the bin, which must be pulled out along exit lane drive aisle, cannot be placed or stored in such a way as to block the on-site drive aisles or create a circulation hazard. Staff has added a condition of approval requiring that the trash enclosure receive design elements similar to those of the convenience store, including color, materials, and roof design.

Signs

The applicant proposes to install two corner monument signs, canopy station signage and car wash entrance signs. “Do No Enter” ground signs will be installed at the car wash exit driveway to alert drivers not to entry the car wash from the south end. The convenience store wall signs, monument signs and canopy signs shall be internally illuminated. The applicant shall submit a sign permit to the Building Division for proposed signage subject for review and approval by the City (Attachment C - Plans).

Fiscal Analysis & Impacts

The proposed project consists of a new service station configuration, commercial building, carwash and site improvements. Prior to project completion, the applicant will be required to pay building permit plan check and AB1600 fees to the City. Additionally, the value of the new commercial uses will be added to the current assessed value of the subject property, which will result in additional property tax collection by the County, a portion of which would be distributed

to the City. Ongoing retail sales tax may also result in additional tax revenue distributions to the City.

Environmental Assessment

Staff has reviewed the proposal under the requirements of the California Environmental Quality Act (CEQA) and has determined the project is Categorical Exempt per Section 15302(b) Replacement or Reconstruction. The proposed project involves the replacement of a commercial structure with a new structure of substantially the same size, purpose, and capacity.

Findings

Staff finds that, as conditioned, the proposed use permit is in compliance with 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 or working in the vicinity. Approval of the proposed Use Permit UPR-01-23-016044 and Design Review DR-01-23-016046 are in accordance with Chapter 17.44 Use Permits and Chapter 17.45 Design Review, as conditioned herein, is in the best interest of the public health, safety, and general welfare of the community, and that the general site, architecture, and landscape considerations have been incorporated to ensure compatibility with adjacent buildings and to provide an attractive environment. 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 October 7, 2025; notice of said hearing was by newspaper publication, and posting and first class mailing to property owners within 300 feet of the site, on September 25, 2025.
2. Staff has reviewed the proposal under the requirements of the California Environmental Quality Act (CEQA) and has determined the project is Categorical Exempt per Section 15302(b) Replacement or Reconstruction;
3. 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.
4. The subject property is zoned C-1 (Light Commercial) which requires a Use Permit for the service station with accessory uses;
5. The subject use is consistent with the General Plan and the C-1 standards and, together with the provisions for its design and operation, would not be detrimental to the public health, safety, morals, comfort and general welfare of the neighborhood;
6. The project complies with the applicable provisions of User Permit Section 17.44 of the Zoning Ordinance;

7. The project complies with applicable provisions of Design Review Section 17.45 of the Zoning Ordinance;
8. 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 buildings, building materials, and colors.
9. The project, as conditions, will incorporate noise reduction measures to ensure noise generated is no greater than 65 dBs and compliant with the Daly City General Plan, maintaining ambient noise comparable to the existing neighborhood.
10. The proposed project parking layout is consistent with the DCMC 17.34.020 (O) of the Zoning ordinance in that a total of fifteen parking spaces are required for the service station, convenience store and carwash uses and seventeen spaces are provided. The applicant proposes to use the under canopy spaces at a ratio of .5 spaces per dispenser to meet the parking requirement. The five spaces for the car wash will be provided in the queuing lane.

CONDITIONS OF APPROVAL:

Staff recommends approval of a Use Permit UP-01-23-016044 and Design Review DR-01-23-016046, based on the following conditions as specified by each Department and Division. The applicant shall comply with these conditions prior to or in conjunction with any building permit issuance for the proposed improvements. 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. ECONOMIC AND COMMUNITY DEVELOPMENT DEPARTMENT

General

1. The applicant shall file a declaration of acceptance of all conditions with the City Clerk within thirty (30) days of Council approval. Until said Declaration is filed, the permits shall not be valid for any purpose.
2. The use permit and design review approval shall be valid for a period of one year from the date of City Council approval. The approvals shall terminate if a building permit has not been obtained and construction commenced within one-year of City Council approval of the project or if the applicant fails to obtain a valid business license.
3. The use permit and design review shall be valid only in conjunction with detailed plans submitted with this project. Any significant modifications required, due to the Conditions of Approval and minor changes to the plan, must be approved by the Planning Division. Major

site or architectural modifications shall be treated as an amendment and shall be subject to review by a Council Committee appointed by the Mayor.

4. The demolition, renovation or removal of asbestos-containing building materials is subject to the limitations of District Regulation 11, Rule 2: Hazardous Materials; Asbestos Demolition, Renovation and Manufacturing. The District's Enforcement Division shall be consulted prior to commencing demolition of a building containing asbestos building materials. Any demolition activity subject to but not complying with the requirements of District Regulation 11, Rule 2 would be considered to have a significant impact.
5. An approved litter control and site maintenance plan is required prior to building permit issuance. The plan must include a schedule of maintenance for the site and adjacent sidewalks, a graffiti abatement program, and also require that the trash and/or recycling bins are stored in the trash enclosure, which must be pulled out of the drive aisle for servicing, cannot be placed or stored in such a way as to block the on-site drive aisles or create a circulation hazard.
6. All buildings, any applicable retaining walls, fences and trash enclosure materials and colors must match those as approved. High quality materials shall be utilized and final finishes shall be approved by the Director of Economic and Community Development.
7. Noise reduction shall be required to reduce the noise at the nearest residential receptor to the west of the project site. The applicant plans shall include a 7-ft. high, 34 ft. long masonry sound wall located along the westside exist lane of the carwash. Building permit plan submittals shall include documentation from a qualified noise specialist that demonstrates the plans and equipment utilize noise attenuation equipment employed in other nearby projects.
8. A soil management plan shall be submitted and approved by the San Mateo County Groundwater Protection Program office prior to building permit submittal.

Building and Site Design

9. The proposed trash enclosure shall be constructed from concrete (CMU is acceptable) and shall receive design elements similar to those of the convenience store, including color, materials, and roof design. The enclosure's doors shall receive a powder-coated metal door painted to match the enclosure's wall color. The capacity, design, and location of the structure shall be approved by both the Planning Division and Allied Waste Services prior to incorporation in the project plans that are submitted to the Building Division for permit issuance.
10. The applicant shall supply a manufacturer cut-sheet of the veneer material proposed for the building prior to building permit application.
11. The applicant shall supply a manufacturer cut-sheet of all proposed lighting fixtures, including wall fixtures, to the Planning Division prior to building permit application. The

fixtures shall match or closely reflect those fixtures identified in the illumination model submitted with the use permit application.

12. Any new rooftop mechanical equipment shall be completely screened from view in a manner acceptable to the Planning Division.
13. The applicant shall stripe the project parking lot in conformance with the approved parking lot layout. All parking spaces shall conform to the Daly City Zoning Ordinance parking dimensions. All parking spaces shall receive wheel stops.
14. The applicant shall consider the placement of photovoltaic equipment of the canopy roof, the design of which may be approved administratively by the Planning Division. The equipment shall be reviewed so as not to cause light and glare on adjacent residents.

Landscaping

15. The project landscaping exceeds the 1,000 square feet of landscaped area and is subject to the Daly City Landscaping Ordinance. The landscaping plans shall be required to meet all applicable requirements including water efficient irrigation and will incorporate Bay Area Friendly species that are drought tolerant. Irrigation systems will incorporate water efficiency measures and shall show the details on the building permit plans. No building permit may be issued until this condition is met.
16. All trees approved as a part of this project shall be retained in perpetuity and all diseased and/or dying trees shall be replaced immediately or upon notification by the Planning Division to do so.
17. The applicant shall provide establishment, and where necessary, long-term irrigation to all trees, shrubs, and groundcover.
18. The applicant shall triple-stake all trees and this staking shall be subject to initial inspection by the City. Trees shall remain triple-stake through the establishment period. The planted trees shall be 24-inch box.

Operational Requirements and Restrictions

19. The applicant shall provide free compressed air, water, and an air pressure gauge during operating hours, to customers purchasing fuel.
20. Truck and trailer rental operations shall be prohibited at the site. Rental vehicle drop-off shall be prohibited.
21. The use of exterior lighting shall not result in adverse glare to adjacent residential neighbors. Should the Planning Division determine that exterior lighting is causing adverse glare, the applicant may be required to make adjustments to lighting, provide additional shielding to lights, or reduce or eliminate the use of certain lights to comply with this Condition.

22. The service station shall continually provide functioning bathroom facilities to customers.
23. The automated car wash hours of operation shall only be allowed from 8 A.M. to 9 P.M.

Stormwater Treatment

24. 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.
25. Additional stormwater information and updated forms may be required during the building permit review stage when more details of the construction drawings are known. Information and/or designs that may be required if there are any changes that impact the forms submitted for the subdivision application. No building permit may be issued until acceptable storm water requirements are met.
26. 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.
27. 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.
28. The applicant shall enter into a 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 the approved Maintenance Plan.
29. The applicant shall arrange and pay for final inspection of installed treatment measure by municipality's Special Inspector within 45 days of installation or project construction completion, whichever comes first.

Signs

30. All signs at the subject property shall receive sign permits and shall remain in conformance with the Daly City Municipal Code. Banners, streamers, balloons, and any other device intended to attract visual attention shall be prohibited. Box signs shall be prohibited, except where allowed on the monument and pole sign.
31. All signs shall be architecturally integrated to match the building on the site. For example, the monument sign at the corner of South Mayfair and Poncetta intersection shall receive a solid base, with veneer and decorative trim and cap to complement the design of the new convenience store.
32. Illuminated wall signs shall incorporate halo-illumination.

Site Maintenance

33. The site shall be maintained in a safe, sanitary and litter free condition at all times.
34. No outside storage shall be allowed, except in the approved trash enclosure area.
35. Doors to the trash enclosure area shall be kept closed except when necessary to dispose of trash or to store material to be recycled.
36. The buildings and appurtenances shall be painted as often as necessary to maintain a weatherproof coating.
37. A maintenance plan for on-site litter control acceptable to the Public Works Streets Supervisor shall be submitted by the applicant and will include: All sidewalks, walkways, driveways, parking lot facilities, and easements within and adjacent to the property, including weeds. The requirement shall not apply to adjacent State-owned highway.
38. All outdoor storage areas shall be screened from public view.
39. Garbage storage areas are to be kept sanitary and free of litter and debris.
40. During construction, litter and construction debris shall be put into closed containers at the end of each day. Subsequent to construction activity, all recyclable material shall be stored exclusively inside the recycling material enclosure area.
41. The accumulation of trash in the garbage dumpster or located anywhere on the premises shall be removed and disposed of in a proper manner. Motor oil that has accumulated in parking stalls and driveway areas shall be cleaned as soon as possible to prevent oil from entering the storm drain system.
42. The applicant shall submit a site maintenance program that includes maintaining the sidewalk area in front of the business prior to the issuance of any building permits.

B. DEPARTMENT OF WATER AND WASTEWATER RESOURCES

43. All water and sewer system work outside of the building foundation shall follow the Daly City Standard Specifications and Drawings.
44. All water and sewer system work outside of the building foundation require additional permitting through the Daly city Engineering Department.
45. Daly City Standard Specifications and Drawings shall prevail when a conflict arises with the plans and specifications.
46. Building water system chlorination and bacteriological testing is required to be approved by the DWWP prior to TCO.

47. All water services shall incorporate a reduced pressure principle back flow device in its design.

C. PUBLIC WORKS-ENGINEERING DIVISION

GENERAL

48. The applicant shall comply with the applicable requirements of the City of Daly City General Conditions of Approval: Use Permits, Variances, Design Reviews, Planned Developments, and Subdivisions, in effect at the time of subdivision and design review application submittal, final map submittal and/or at the time of building permit application.
49. Plans submitted for building or grading permit shall show all existing and proposed utilities, on-site and in the street, including water, sanitary sewer, and storm drain mains.
50. The applicant shall comply with the applicable requirements of the City of Daly City Standard Details and Specifications.
51. Applicant and/or contractor shall provide at least one large project sign that includes basic project information and a phone number where members of the public may report concerns such as off-site tracking, dust control, noise complaints, ground shaking and any related construction activities and obtain information or assistance as needed. The complaints and responses shall be logged, and copies provided to the City Engineer with action status on a weekly basis.
52. 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.
53. Prior to issuance of first permit (Grading, Site Improvement, and Building, etc.), existing structures on the property shall be demolished, and all existing utility service connections shall be abandoned per City standards.
54. Provide “will serve letters” from all applicable utility agencies.
55. 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 (BMP) 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 when notified of dust complaints.
56. All improvements shall be completed and functioning, and as-built record plans of all improvements submitted in a form acceptable to the City before any occupancy permit is issued or public service improvements are accepted by the City for maintenance.

57. All improvements, including on-site and off-site improvements, and all public service and utility facilities required to serve the project, shall be completed by the applicant prior to issuance of a Building Permit. The improvements shall be consistent with the plans approved by the City Engineer and the Conditions of Approval. All construction shall meet the latest California Building Code, California Fire Code, Daly City Municipal Code and the City Standard Specifications and Drawings. Securities for all required improvements, and applicable fees and charges, shall be submitted to the City for approval. The applicant shall obtain all required permits before commencing work. All required improvements shall be constructed at no cost to the City except where specifically agreed to by the City under the provisions of a written agreement.
58. 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 extension of the City's sewer, water, storm drain, safety lighting, landscaping, and other public service facilities. All utility services shall be underground. Said improvements shall conform to Daly City and affected Agency's standards. Plans shall be accompanied by all required calculations and studies including geotechnical and impact studies to justify design. Submit photo-mylar reproducible (24"x36"), electronic files (to City AutoCAD Standards) and blueprints as required for City's inspection and filing before permits are issued for construction of improvements. All required improvements shall be constructed at no cost to the City except where specifically agreed to by the City under the provisions of a written agreement.
59. All site 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.
60. All utility services shall be provided through underground connections. There shall be no overhead drops.
61. 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.
62. 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, storm drain, safety lighting, landscaping, and other public service facilities.
63. 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.

64. Comply with the applicable requirements of the City's General Condition of Approval: Variances, Design Reviews, Planned Developments and Subdivisions, dated December 8, 1999.
65. The applicant shall enter into a 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, and irrigation 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.
66. A notarized letter shall be submitted by the owners of Parcel Number APN 002-072-190 and APN 002-072-250 acknowledging the proposed improvements on their property as part of the 101 S. Mayfair Avenue project.
67. Current title reports (within the last 6 months) for Parcel Number APN 002-072-190 and APN 002-072-250 shall be provided for confirmation of public rights of access through the property.
68. Separate Site Improvement Permits shall be required for each property impacted by the scope of work associated with the 101 S. Mayfair Avenue project.

SITE

69. All project improvements shall be ADA compliant. This includes the sidewalk and driveways within private property.
70. The applicant shall repair and/or replace additional areas of street pavement, sidewalk, curb, and gutter, street lights, 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.
71. All accessible parking spaces shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the building.
72. Provide documentation from adjacent property owners of APN 002-072-190 and APN 002-072-250 approve the proposed improvements within their properties.

GRADING

73. 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.
74. 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.

75. The Engineer 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 grading plans has been implemented as approved.

STORMWATER

76. 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 and Caltrans Standards.
77. Storm drain laterals and mains shall be CCTV'ed at the end of construction. Owner is responsible for providing videos of laterals/mains prior to the City Engineer's permit signoff/acceptance. If cleanouts are utilized instead of manholes or drainage inlets, it is up to the owner to make required changes to provide camera access if access is not available via cleanouts.
78. Full trash capture devices approved by the City Engineer shall be installed on the drainage system.
79. The applicant shall submit stormwater pollution prevention plans at the time of each building permit submittal.
80. Bio-retention constructed along South Mayfair Ave. shall be maintained by the owner of the 101 S. Mayfair Ave. property in perpetuity. An agreement acceptable to the City shall be recorded on the property.

UTILITY

81. Following new utility installation, the applicant shall replace areas of street pavement, sidewalk, curb and gutter damaged by construction. Such repair shall be per City standard specifications.
82. Disconnect all sewer laterals and water services at the main in the street prior to installation of new services. Inspections shall be required by the Department of Water and Wastewater Resources.
83. The project's electrical transformer shall not be installed within the public right-of-way.
84. City standard utility separations shall be provided between existing and proposed utilities.

MAPPING

85. All easement language shall be reviewed and approved by the City Engineer.

PERMIT

86. Encroachment permits and/or a site improvement permit shall be required to be issued by the Public Works Department for all work proposed within the public right-of-way.

D. FIRE DEPARTMENT

87. Applicant shall comply with adopted Building & Fire Codes as well as, Daly City Municipal Code.
88. Fire sprinkler systems required. Applicant shall submit plans to NCFA under separate fire permit.
89. Applicant shall provide fire flow information per CFC, Appendix B.
90. Fire extinguishing/hood system may be required. Applicant shall submit plans to NCFA under separate fire permit.
91. Monitored fire alarm system is required. Applicant shall submit plans to NCFA under separate permit.
92. Knox Key Box will be required of not a 24hr/365day operation. Applicant shall apply for approved hardware at NCFA Administration.
93. Portable fire extinguishers(s) are required. Fire extinguishers shall be mounted 3-5 feet above floor.
94. Applicant shall provide illuminated address identification.
95. Utility identification is required.
96. Doors shall be easily openable in one motion without special knowledge, key or effort per CBC. Use of thumb operated deadbolts prohibited unless integrated with latch.
97. Illuminated exit signs and emergency egress illumination is required.
98. Flammable liquids storage tank installation permit required. Applicant shall submit plans to NCFA under separate permit.
99. Carbon Dioxide permit required if 100 or more pounds. Applicant shall submit to NCFA under separate permit.

E. BUILDING DIVISION

100. Hours of operation for all construction work associated with the subject project shall be 8:00 a.m. to 5:30 p.m., Monday through Friday. There will be no start-up of machines or equipment, no delivery of materials or equipment, and no cleaning or servicing of machines or equipment prior to 7:30 a.m. or after 6:00 p.m. Additionally, there will be no construction work, deliveries, and servicing of the machines and equipment between 6:00 p.m. and 7:30 a.m. and at any time during Saturdays, Sundays and Legal City Holidays. Exceptions to these time restrictions may be granted by the Building Official for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3) other work, if work and equipment will not create noise or conditions that may be unreasonably offensive to neighbors as to constitute a nuisance. The Building Official must be notified and approval given, in writing, in advance of said work.

Recommendation

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

1. Adopt the Findings as outlined herein;
2. Adopt the Categorical Exemption determination for the project;
3. Approve, Use Permit UPR-01-23-016044 and Design Review DR-01-23-016046, as conditioned herein.

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

Respectfully submitted,



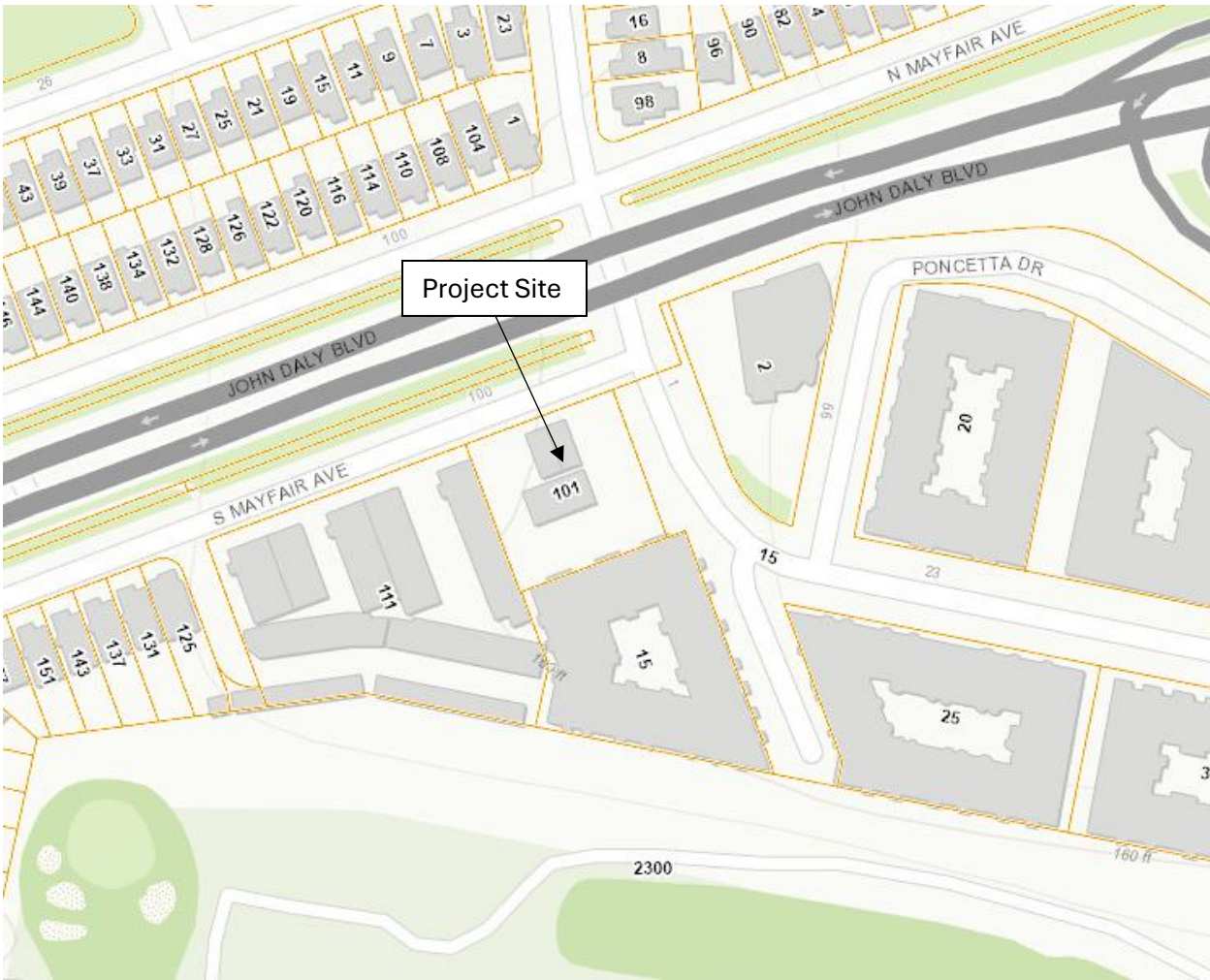
Sam Fielding
Associate Planner



Tatum Mothershead
Director of Economic and Community
Development

Attachments

Attachment A – Location Map
Attachment B – Project Description
Attachment C – Plans
Attachment D – Traffic Circulation Memorandum
Attachment E – Noise and Vibration Assessment





M I Architects, Inc. A California Corporation

ARCHITECTURE . PLANNING . MANAGEMENT . DESIGN

2221 OLYMPIC BLVD., SUITE 100, WALNUT CREEK, CALIFORNIA 94595

Muthana Ibrahim
Architect
President

Telephone :
(925) 287-1174

Facsimile:
(925) 943-1581

Cell:
(925) 878-9875

Email:
muthana@miarchitect.com

Website:
www.miarchitect.com

Written Project Description for:

76 Gas Station, Convenience Store & Carwash 101 S. Mayfair Ave., Daly City, CA 94105

On behalf of our client, Mr. Ed Hadad, we are submitting the planning application for the reconstruction of the gas station located at the above referenced site. The project scope of the work includes removing +/- 1,600 sf. snack shop with service bay and +/- 2,288 sf. fueling canopy, covering four (4) fuel dispensers, removing the underground storage tanks & associated underground piping, removing one driveway on Poncetta Drive and two driveways on South Mayfair Avenue. The northeast driveway on Poncetta Drive will be widened. The new project consists of approximately 2,304 sf. convenience store, a 971 sf. roll-over carwash tunnel with 247 sf. carwash equipment room, and 3,002 sf. canopy covering (4) fuel dispensers, (2) 20K gallon underground storage tanks with new fuel system. The site improvements include, onsite parking stalls, accessible path of travel to the right-of-way, masonry trash enclosure, site lighting, landscaping, self-service air & water equipment, vacuum unit and a new monument sign. The following are items to be considered in this project:

- **ITEMS TO BE SOLD AT THIS FACILITY:** The gas station will sell gasoline, the Convenience Store will sell pre-packaged food items, sundry items, some automobile accessories (i.e.- air fresheners, cell phone accessories, anti-freeze, motor oil, etc.) self-service beverages, fresh and/or pre-packaged pastries & can and/or bottles of soda, water & sports/energy drinks.
- **EMPLOYEES:** The proposed gas station & convenience store will have the following employees: (2) employees per shift for (3) shifts per day, 5 days per week. (2) employees per shift for (3) shifts per day, 2 days per week. A total of (6) full-time employees for (5) days, and (6) part-time employees for (2) days
- **HOURS OF OPERATION:** The proposed hours of operation of the gas station and convenience store are: 24 hrs. /day, 7days a week, 365 days per year. The hours of operation of the carwash are 8:00am to 9:00pm, 7days a week, 365 days per year
- **FUEL DELIVERY:** The fuel delivery truck will make deliveries 7 times / week. There will be truck deliveries to the food mart 1 time / week.
- **SITE LIGHTING:** The exterior lighting levels will be enough to ensure the safety of the facility, but to not provide glare or excessive light spillage onto adjacent properties or the public right-of-way. Exterior lighting is LED fixture, down-lit and fully shielded to avoid potential glare toward the street and adjacent properties.
- **RECYCLED CARWASH WATER:** Prior to discharge to the public sewer system, the used carwash water runs through (2) types of treatment tanks the first tank is the sand/oil separator. This tank includes (2) compartments. The sand oil separator intercepts the sand in the first compartment and the oil in the second compartment. The access water then leaves the sand /oil separator tank to the clarifier tank. The clarifier tank consists of (3) compartments to clear the water for the reuse by the carwash equipment. The percentage of the recycled water to be re-used in the carwash will be controlled by the reclaim system.

Please don't hesitate to call, if you have any questions. I can be reached at (925) 287-1174 x1.

Sincerely,

Muthana Ibrahim

Architect, President
M I Architects, Inc.

SOUTH MAYFAIR AVENUE

PONCETTA DRIVE

(E) MULTI-FAMILY RESIDENCE

1 SITE PLAN
SCALE: 1" = 10'-0"

NOTE: ALL BUILDINGS WILL COMPLY WITH DAILY CITY MUNICIPAL CODE SECTION 15.32.100 FOR FIRE SPRINKLER PROTECTION.

SD1	SITE PLAN
SD-TP	TRUCK PATH SITE PLAN
SDO	DEMOLITION SITE PLAN
SD1-L	SITE LIGHTING PHOTOMETRIC
SD2	SITE DETAILS
SD3	NEIGHBORHOOD CONTEXT
C1	TOPOGRAPHIC SURVEY
1of4	PRELIMINARY GRADING & UTILITY PLAN
2of4	PRELIMINARY GRADING & UTILITY PLAN
3of4	PRELIMINARY STORMWATER CONTROL PLAN
4of4	PRELIMINARY EROSION CONTROL PLAN
LA1	LANDSCAPE PLAN
A1.1	CONVENIENCE STORE & CARNASH FLOOR PLAN
A2.1	EXTERIOR ELEVATIONS
A2.2	EXTERIOR ELEVATIONS
CA1	CANOPY ELEVATIONS

APN# 002-012-030	
JURISDICTION: DALY CITY, CA	
CURRENT ZONING: LIGHT COMMERCIAL (C-1)	
<u>SITE AREA GROSS :</u>	22,500 SF.
<u>EXISTING BUILDING TO BE REMOVED</u>	
SNACK SHOP AND SERVICE BAY :	± 1,610 SF.
FUELING CANOPY :	± 2,288 SF.
<u>NEW BUILDINGS:</u>	
CONVENIENCE STORE :	2,304 SF.
CARWASH TUNNEL :	471 SF.
EQUIPMENT ROOM :	263 SF.
FUELING CANOPY :	3,002 SF.
TOTAL BUILDING AREA :	6,540 SF.
<u>LANDSCAPE</u>	1,662 SF. (7.4 %)
<u>PARKING REQUIREMENTS</u>	
CONVENIENCE STORE (2,304 / 300) :	8 SPACES
CARWASH :	5 SPACES
FUEL CANOPY :	2 SPACES
TOTAL PARKING REQUIRED :	15 SPACES
<u>PARKING PROVIDED:</u>	
STANDARD PARKING STALLS (8.5' x 19') :	4 SPACES
VAN ACCESSIBLE PARKING STALL (17' x 19') :	1 SPACE
VACUUM PARKING STALL (12' x 19') :	1 SPACE
AIR / WATER PARKING STALL (12' x 19') :	1 SPACE
50 % FUEL CANOPY PARKING :	4 SPACES
CARWASH :	5 SPACES
<u>TOTAL PARKING PROVIDED:</u>	16 SPACES

	NEW LANDSCAPING
	NEW CONCRETE PAVING
	4 FT. WIDE (MIN) ACCESSIBLE ROUTE OF TRAVEL, SHALL NOT EXCEED 5% SLOPE IN THE DIRECTION OF TRAVEL AND 2% CROSS SLOPE
	BIO PLANTER, SEE CIVIL DWGS.
	EXISTING TO REMAIN
	EXISTING CURB TO REMAIN
	NEW CONCRETE CURB

ARCHITECT

M I ARCHITECTS, INC.
1801 BLVD, SUITE 300
MALNUT CREEK, CA 94596
TEL: (925) 281-1174 x1
FAX: (925) 943-1581
CELL: (925) 878-9875
MR. MUTHANA IBRAHIM, ARCHITECT

DEVELOPER

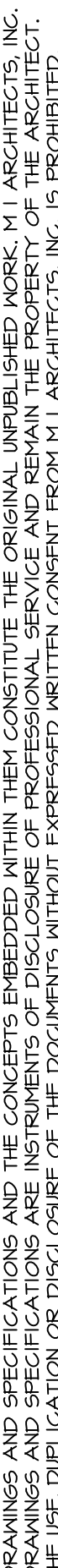
MR. ED HADAD
700 S. BERNARDO AVE. #103
SUNNYVALE, CA 94087
TEL: (408) 691-1971

LANDSCAPE ARCHITECT

CIARDELLA ASSOCIATES
200 CLOCK TOWER PLACE, SUITE D100-A
CARMEL, CA 43923
TEL: (831) 624-6100
MR. RICHARD CIARDELLA

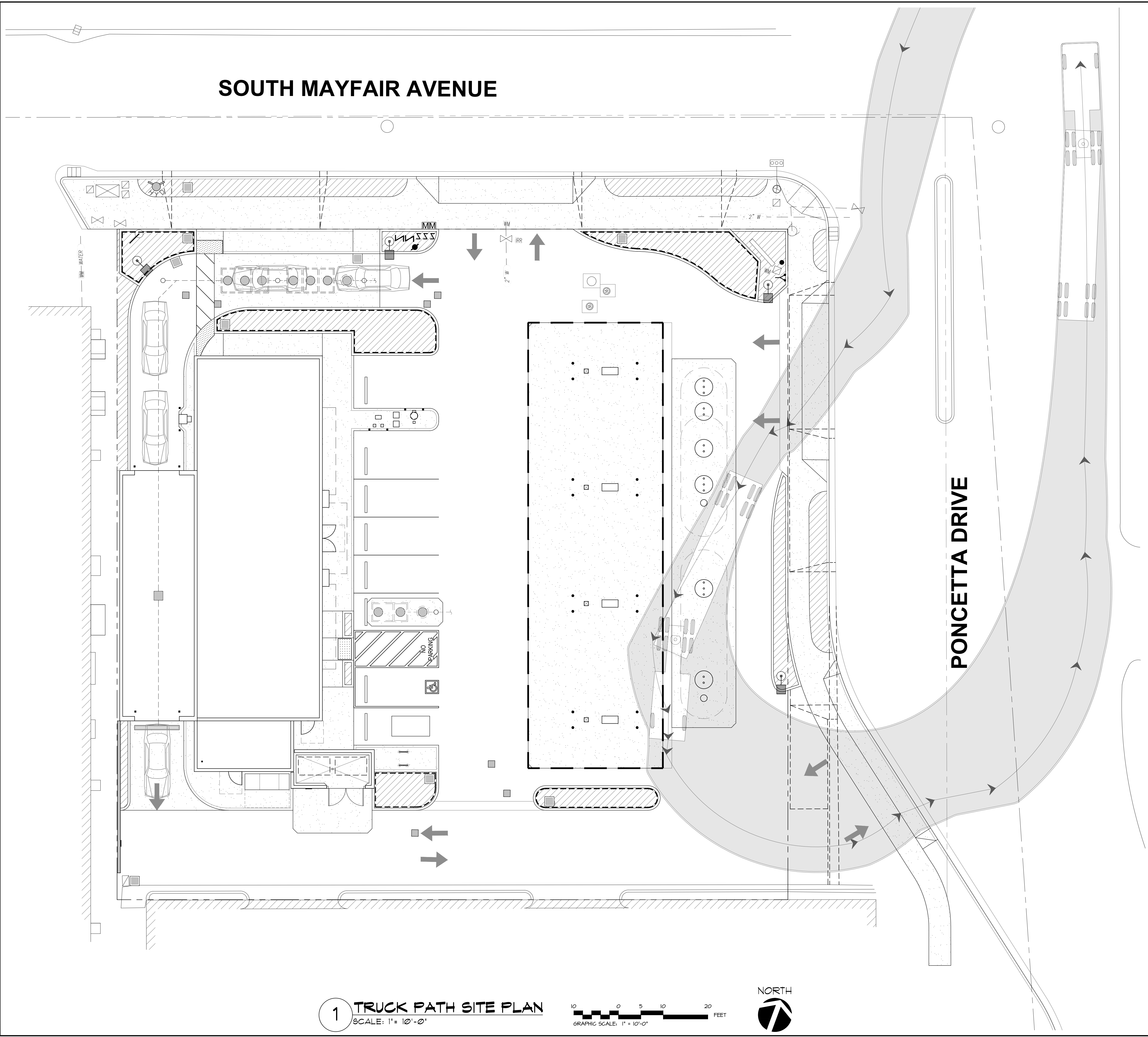
CIVIL ENGINEER

STUKAM CONSULTING ENGINEERS, INC.
15501 COLONIA ROAD, SUITE 235C
GOLD RIVER, CA 95670
TEL: (916) 835-5741
FAX: (916) 988-6316
MR. FAREED T. SIDDIQUI, P.E.

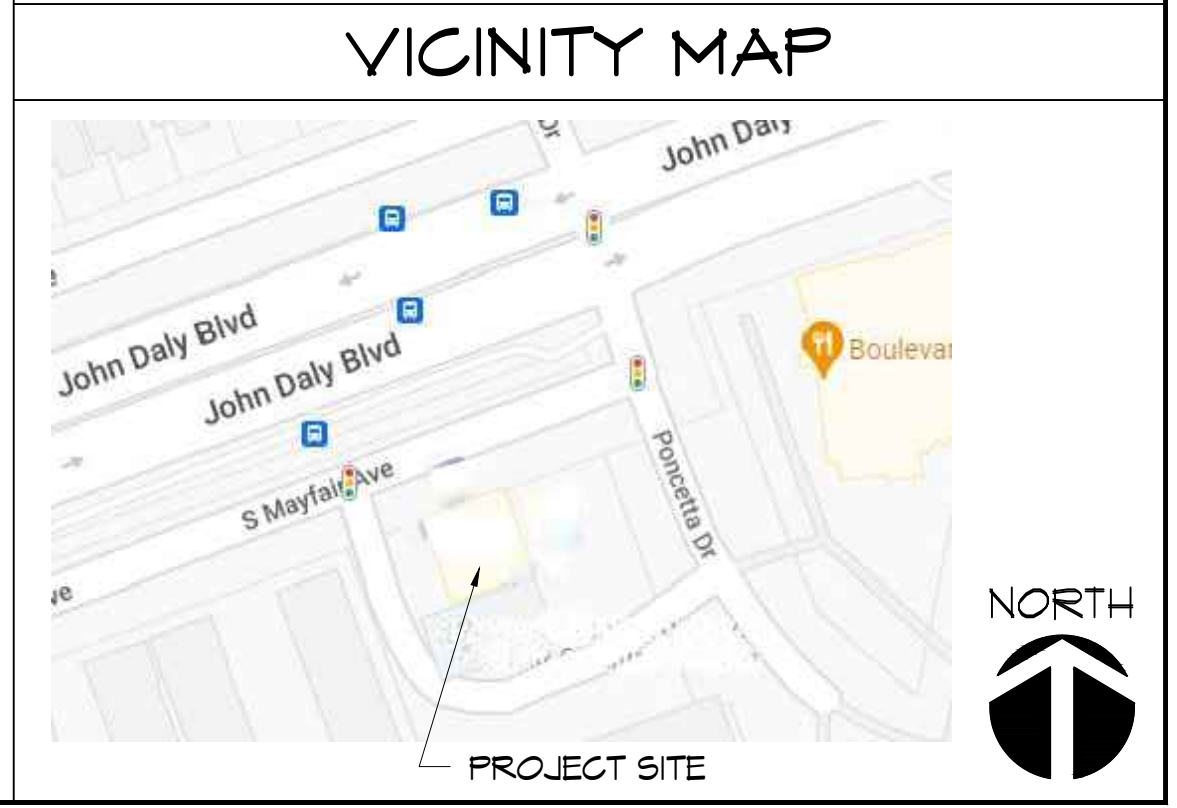
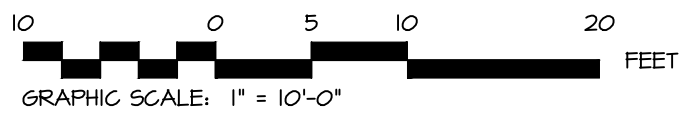


NOTE: ALL BUILDINGS WILL COMPLY WITH DALY CITY MUNICIPAL CODE SECTION 15.32.100 FOR FIRE SPRINKLER PROTECTION.

S:\1-Projects\20-11304-101 S Mayfair Ave Day City\DWG's\Planning\20-11304-101.dwg modified by Multinational at Jul 21, 2025 - 4:38pm



1 TRUCK PATH SITE PLAN
SCALE: 1" = 10'-0"



ISSUED FOR CONSTRUCTION		
ISSUED FOR PLAN CHECK		
ISSUED FOR PLANNING		
NO.	DATE	DESCRIPTION
△		
△		
△		
△		
△		
TRUCK PATH SITE PL.		
PROJECT #: 20-11304		
DRAWN: EMQ CHECKED:		
SCALE: AS NOTED DATE: 04		
SD-TI		
SHEET OF		



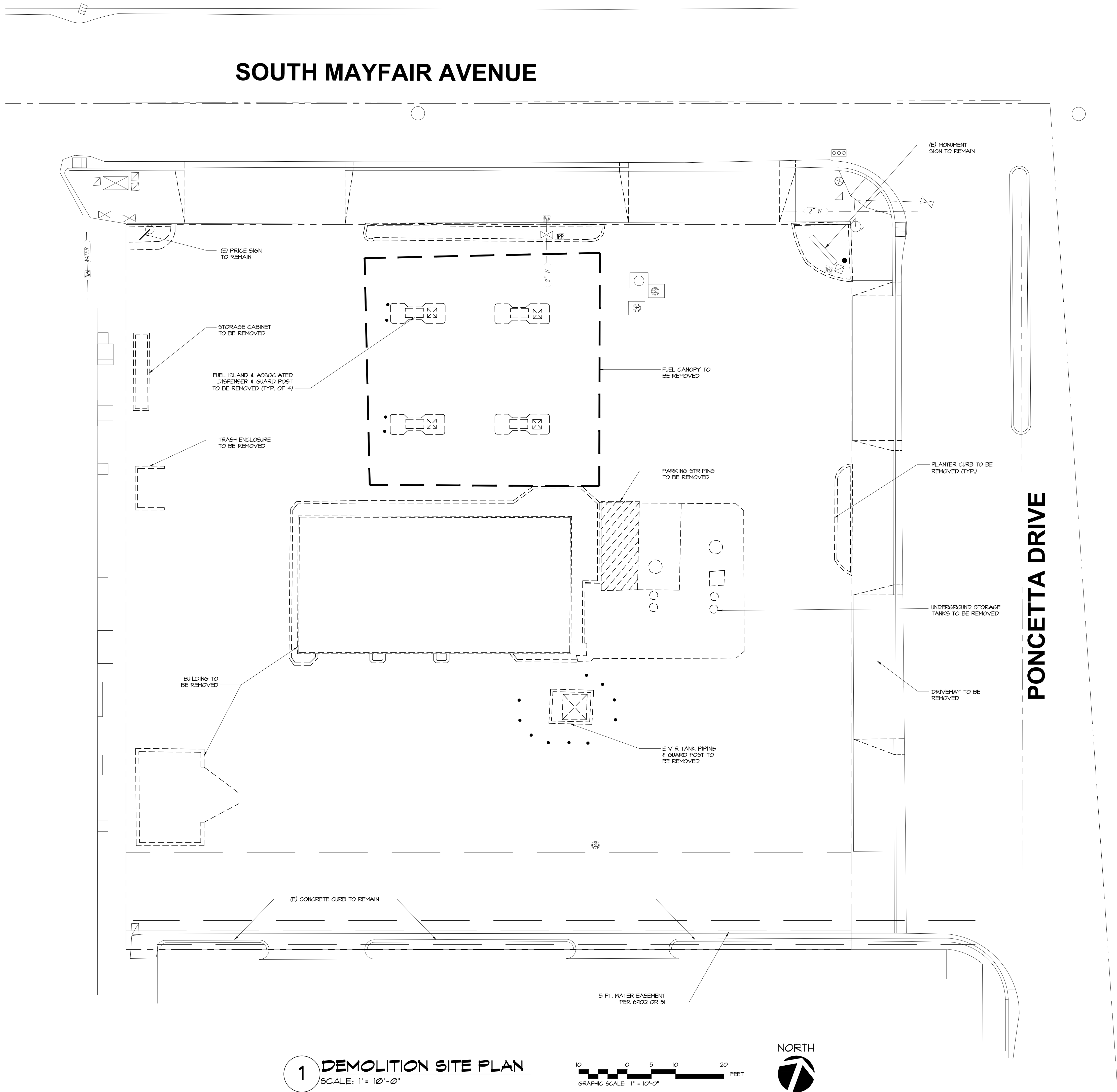
Architects

M I Architects, Inc.
ARCHITECTURE
PLANNING
MANAGEMENT
DESIGN
1801 OAKLAND BLVD.
SUITE 300
WALNUT CREEK, CA
94596
925-287-1174 Tel
925-943-1581 Fax
925-878-9875 Cell
muthana@miarchitect.com
www.miarchitect.com

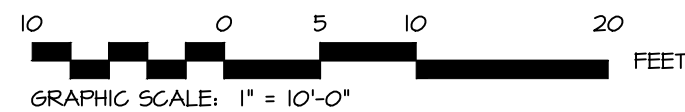
NOT FOR
CONSTRUCTION

76 GAS STATION, CARWASH
& CONVENIENCE STORE
101 SOUTH MAYFAIR AVE.
DALY CITY, CA 94015

S:\1-Projects\20-11304-101 S Mayfair Ave Day City\DWG's\Planning\20-11304-530.dwg modified by Muthana Ibrahim at Dec 28, 2023 - 2:33pm



1 DEMOLITION SITE PLAN
SCALE: 1" = 10'-0"



Architects

M I Architects, Inc.

ARCHITECTURE
PLANNING
MANAGEMENT
DESIGN

1801 OAKLAND BLVD.,

SUITE 300

WALNUT CREEK, CA

94596

925-287-1174 Tel

925-943-1581 Fax

925-878-9875 Cell

muthana@miarchitect.com

www.miarchitect.com

NOT FOR
CONSTRUCTION

76 GAS STATION, CARWASH
& CONVENIENCE STORE
101 SOUTH MAYFAIR AVE.
DALY CITY, CA 94015

DRAWINGS AND SPECIFICATIONS AND THE CONCEPTS EMPLOYED WITHIN THEM CONSTITUTE THE ORIGINAL UNPUBLISHED WORK OF M I ARCHITECTS, INC. ANY REUSE, REPRODUCTION, OR DISSEMINATION OF THESE DRAWINGS AND SPECIFICATIONS WITHOUT THE WRITTEN CONSENT OF M I ARCHITECTS, INC. IS PROHIBITED.

ISSUED FOR CONSTRUCTION
ISSUED FOR PLAN CHECK
ISSUED FOR PLANNING

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DEMOLITION
SITE PLAN

PROJECT #: 20-11304
DRAWN: EMG CHECKED: MI
SCALE: AS NOTED DATE: 04-26-22

SDO

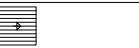
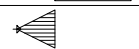
SHEET OF

PHOTOMETRIC EVALUATION
NOT FOR CONSTRUCTION

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

Calculation Summary							
Label	Qty	CalcType	Units	Avg	Max	Min	Avg/Min
ALL CALC POINTS	16	A	ILLUMINANCE	4.83	48.1	0.0	N.A.
CANDPY	4	B	ILLUMINANCE	40.53	48.1	25.1	1.61
INSIDE CURB	8	C	ILLUMINANCE	11.13	31.1	0.7	15.90

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	Mounting Height	LLD	LLF	Arr. Lum. Lumens	Arr. Watts
	16	A	SINGLE	SCV-LED-15L-SC-50	16'-10"	1.000	1.000	14963	102
	4	B	SINGLE	SLM-LED-18L-SIL-FT-50-70CRI-IL-SINGLE	18'POLE+2'BASE	1.000	1.000	12043	135
	8	C	SINGLE	XWM-FT-LED-06L-50	10'	1.000	1.000	6557	47



Total Project Watts
Total Watts = 2548





100% ALLIANCE, LLC, CHICAGO, ILL 60607, USA
CELL: 773-382-1111 • FAX: 773-382-1111

LIGHTING PROPOSAL

LD-156823-3B

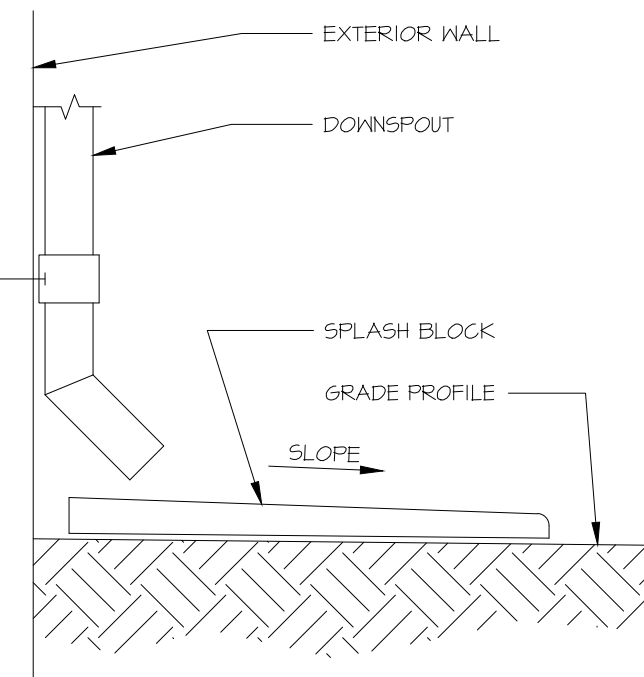
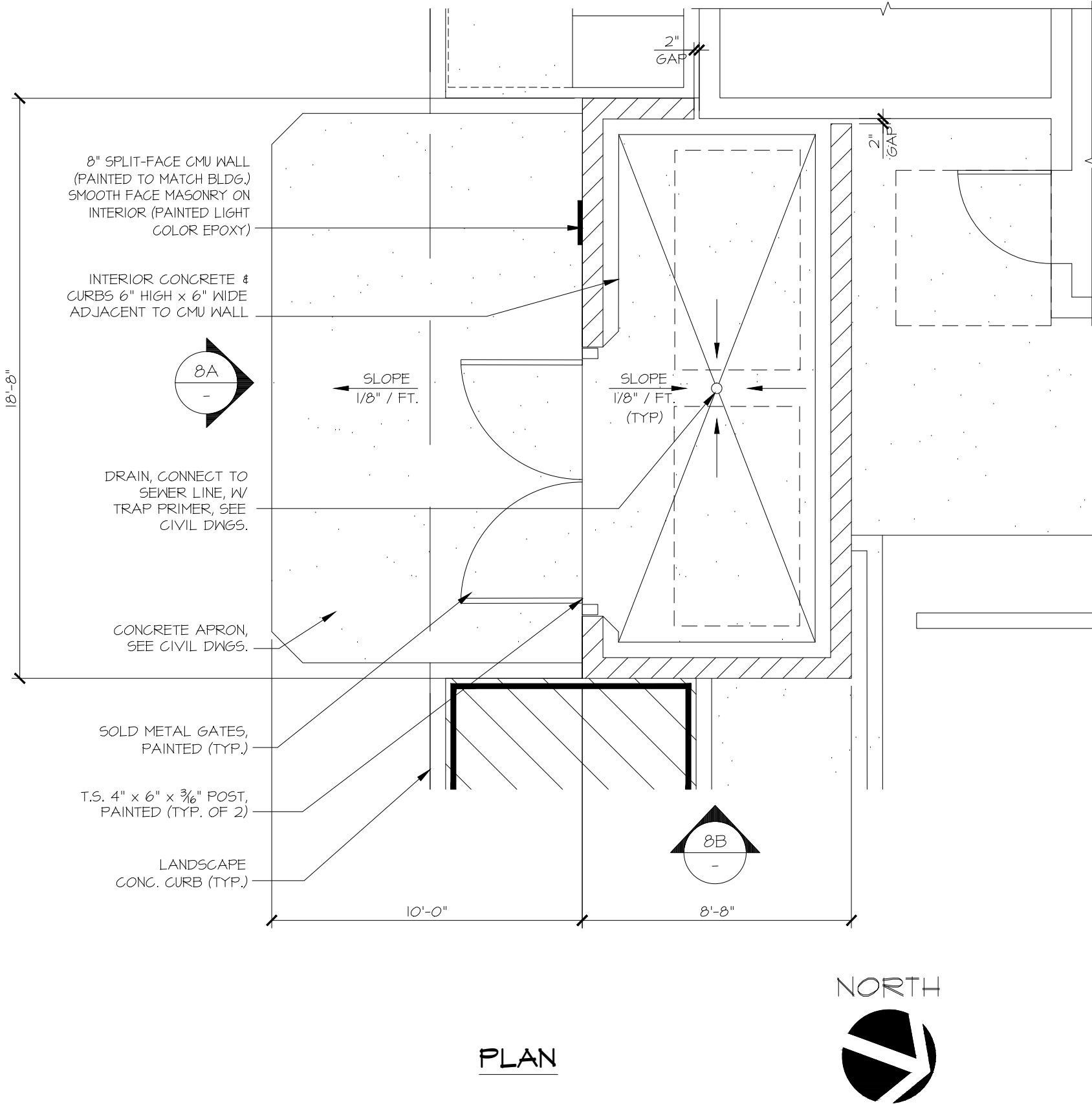
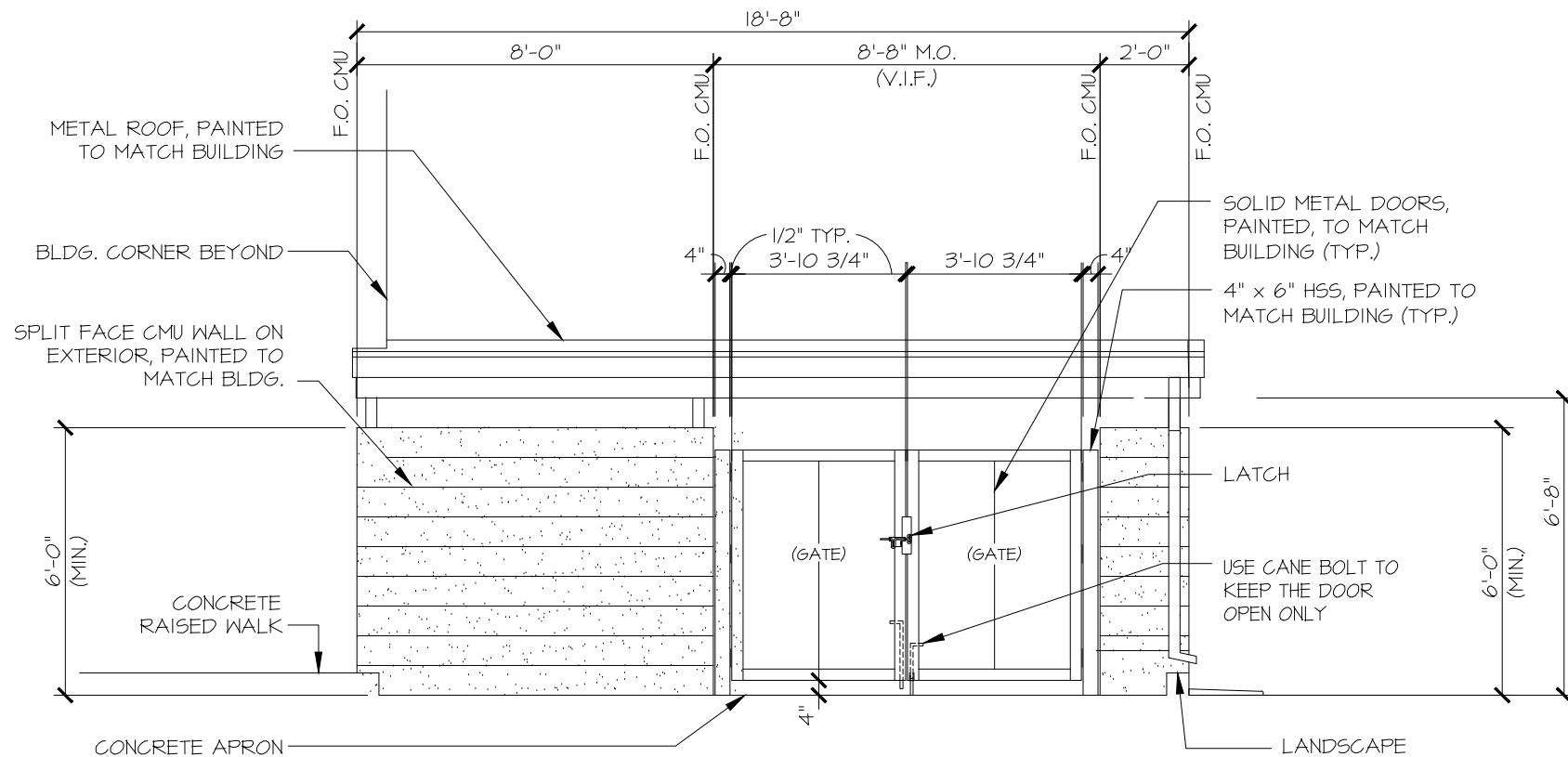
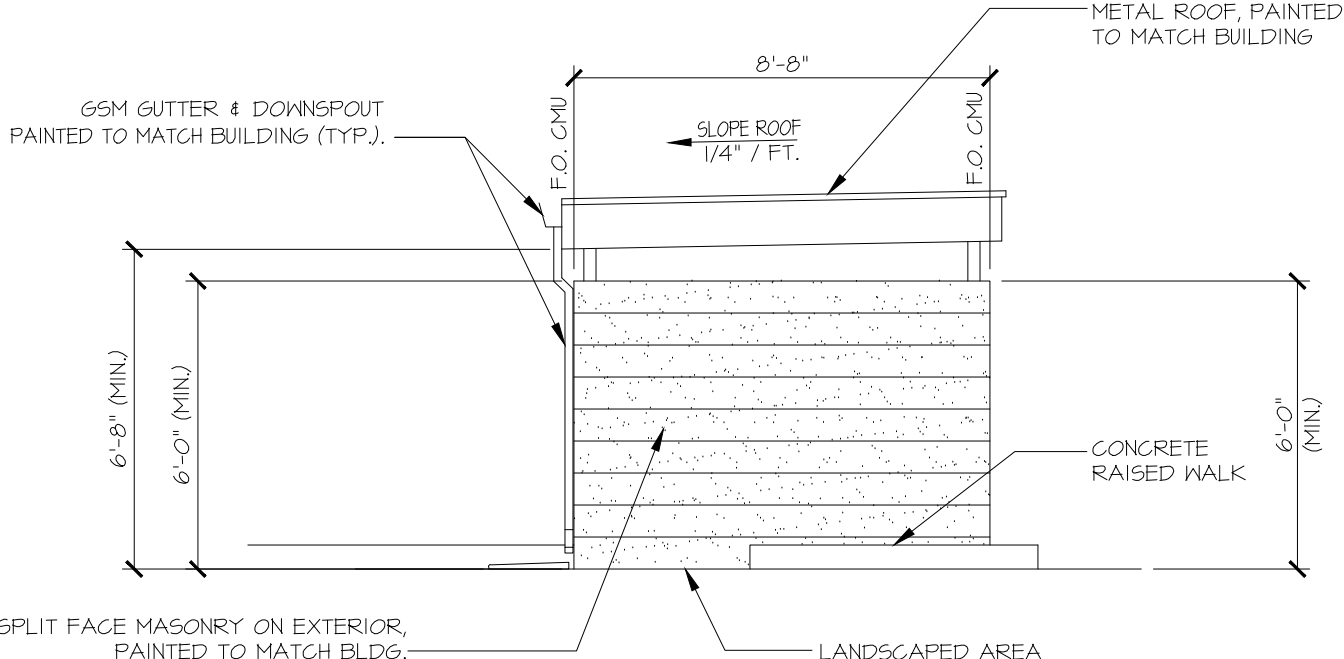
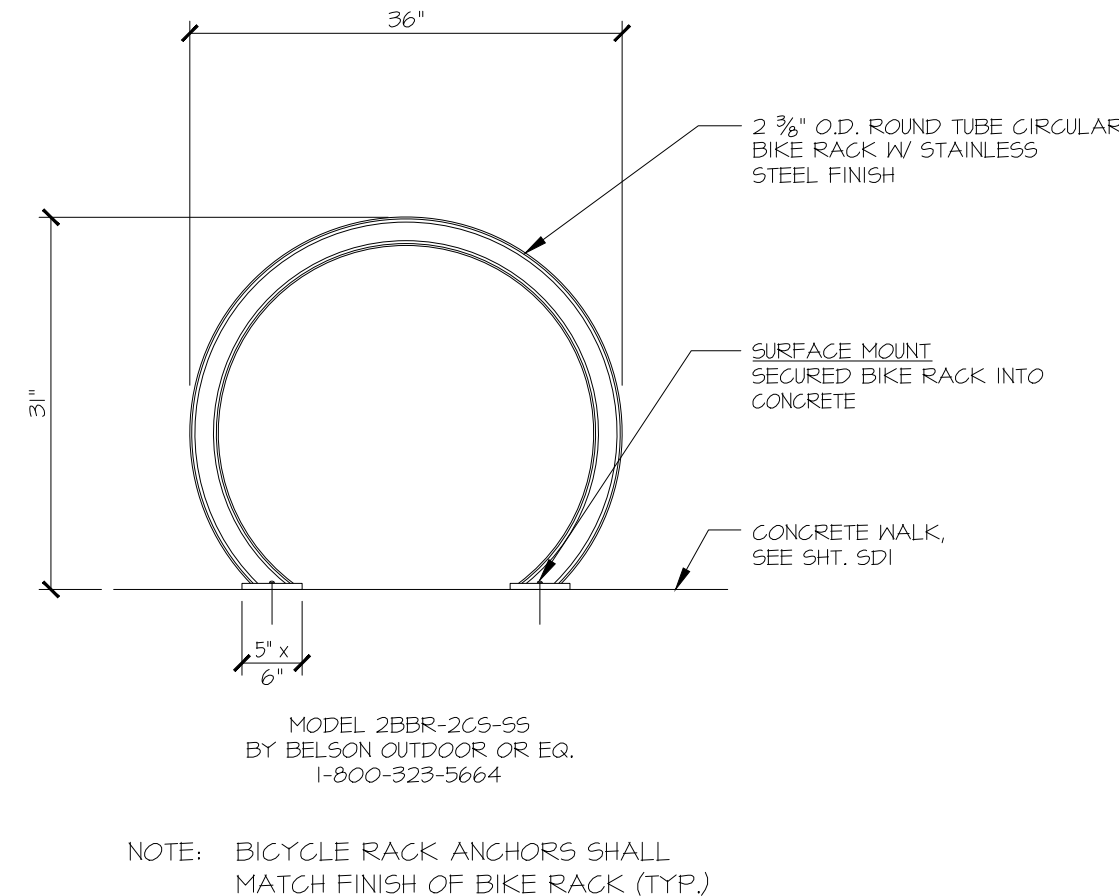
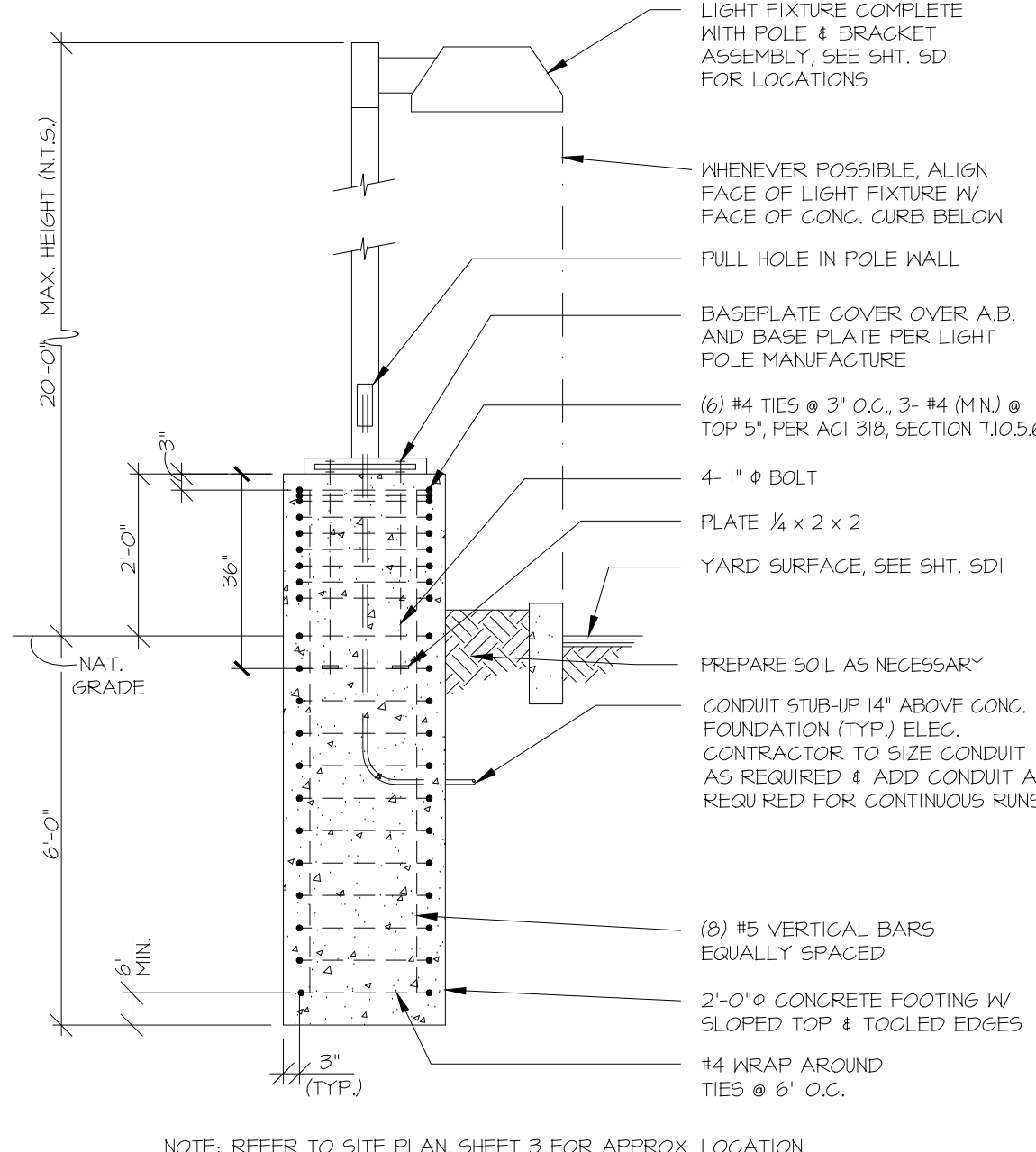
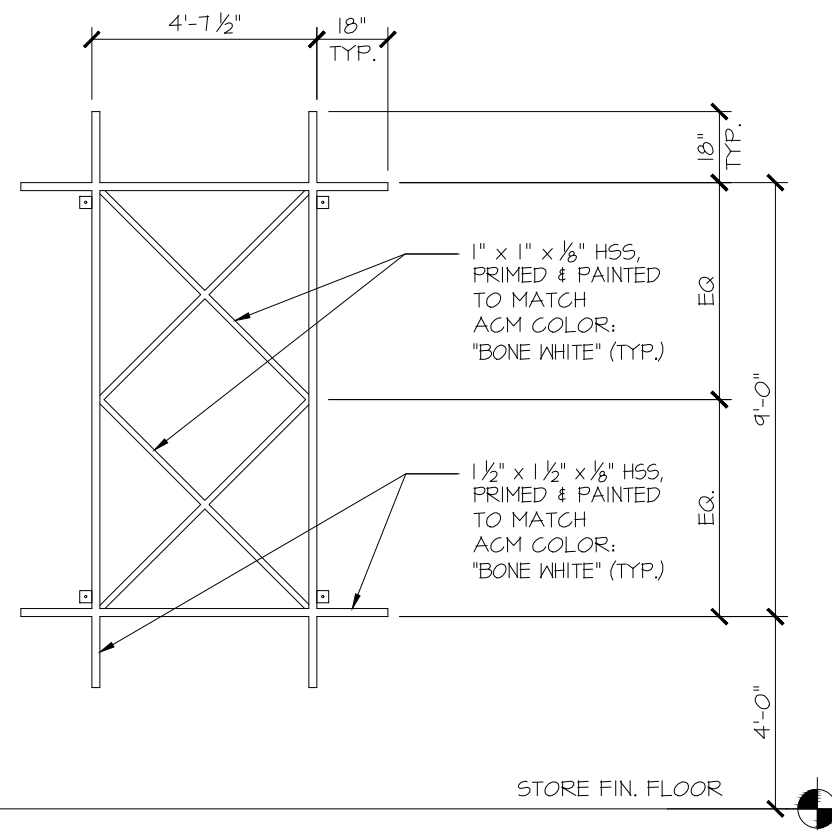
76 STATION
101 SOUTH MAYFAIR AVE
DALY CITY, CA

BY: HCE
DATE: 10-19-22
REV: 07-22-24
SHEET 1
OF 1

SCALE: 1"=16'



S:\1-Projects\20-11304-101 S Mayfair Ave Day City\img's\Planning\20-11304-SD2.dwg modified by mouser at Jul 17, 2024 - 3:24pm

							
5	NOT USED	4	DOWNSPOUT TO SPLASH BLOCK				
							
10	NOT USED	9	NOT USED	CONVENIENCE STORE TRASH ENCLOSURE PLAN & ELEVATIONS			
							
15	NOT USED	14	NOT USED	13	NOT USED	12	BIKE RACK
							
20	NOT USED	19	NOT USED	18	NOT USED	17	WALL MTD. TRELLIS
						16	AREA LIGHT

M | Architects

M | Architects, Inc

ARCHITECTURE
PLANNING
MANAGEMENT
DESIGN

1801 OAKLAND BLVD.,
SUITE 300
WALNUT CREEK, CA
94596
925-287-1174 Tel
925-943-1581 Fax
925-878-9875 Cell
muthana@marchitect.com
www.marchitect.com

NOT FOR
CONSTRUCTION

T6 GAS STATION, CARNASH
& CONVENIENCE STORE
101 SOUTH MAYFAIR AVE.
DALY CITY, CA 94015

ISSUED FOR CONSTRUCTION

ISSUED FOR PLAN CHECK

ISSUED FOR PLANNING

NO. DATE DESCRIPTION

△

△

△

△

△

SITE DETAILS

PROJECT #: 20-11304

DRAHN: EMQ

CHECKED: M

SCALE: AS NOTED

DATE: 04-26-

SD2

SHEET OF

Page 30 of 87



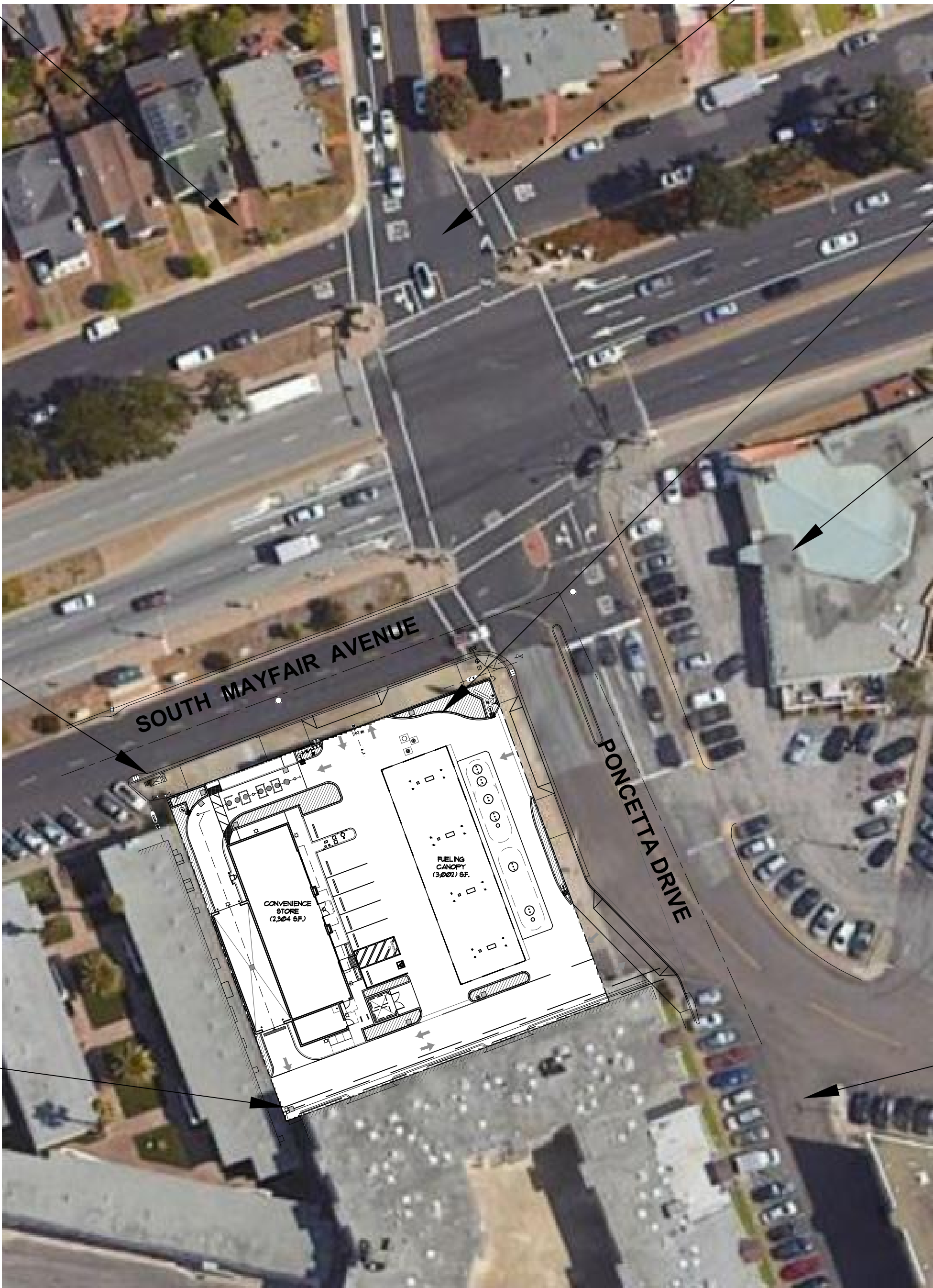
NORTHWEST VIEW: SINGLE DETACHED HOMES ALONG SOUTH MAYFAIR AVENUE



NORTH VIEW: SINGLE DETACHED HOMES ALONG SOUTH MAYFAIR AVENUE



SOUTHWEST VIEW: MULTIFAMILY HOMES BEHIND THE EXISTING CONVENIENCE STORE



PROJECT SITE:
101 SOUTH MAYFAIR AVENUE



NORTHEAST VIEW: RESTAURANT ACROSS THE CONVENIENCE STORE



SOUTHEAST VIEW: MULTIFAMILY HOMES ADJACENT TO THE EXISTING CONVENIENCE STORE



EAST VIEW: CLUSTER OF MULTIFAMILY HOMES ALONG PONCETTA DRIVE.
(FOREFRONT) EXISTING DRIVEWAY TO THE GAS STATION.

1 NEIGHBORHOOD CONTEXT
NOT TO SCALE



Architects

M I Architects, Inc.
ARCHITECTURE
PLANNING
MANAGEMENT
DESIGN
1801 OAKLAND BLVD.,
SUITE 300
WALNUT CREEK, CA
94596
925-287-1174 Tel
925-943-1581 Fax
925-878-9875 Cell
muthana@miarchitect.com
www.miarchitect.com

NOT FOR
CONSTRUCTION

T6 GAS STATION, CARWASH
& CONVENIENCE STORE
101 SOUTH MAYFAIR AVE.
DALY CITY, CA 94015

THESE DRAWINGS AND SPECIFICATIONS AND THE CONCEPTS EXPRESSED HEREIN, WHEN USED IN CONNECTION WITH THE PROJECT, SHALL BE THE PROPERTY OF M I ARCHITECTS, INC. ANY REUSE, REPRODUCTION, OR DISSEMINATION OF THESE DRAWINGS AND SPECIFICATIONS WITHOUT THE WRITTEN CONSENT OF M I ARCHITECTS, INC. IS PROHIBITED.

- ISSUED FOR CONSTRUCTION
- ISSUED FOR PLAN CHECK
- ISSUED FOR PLANNING

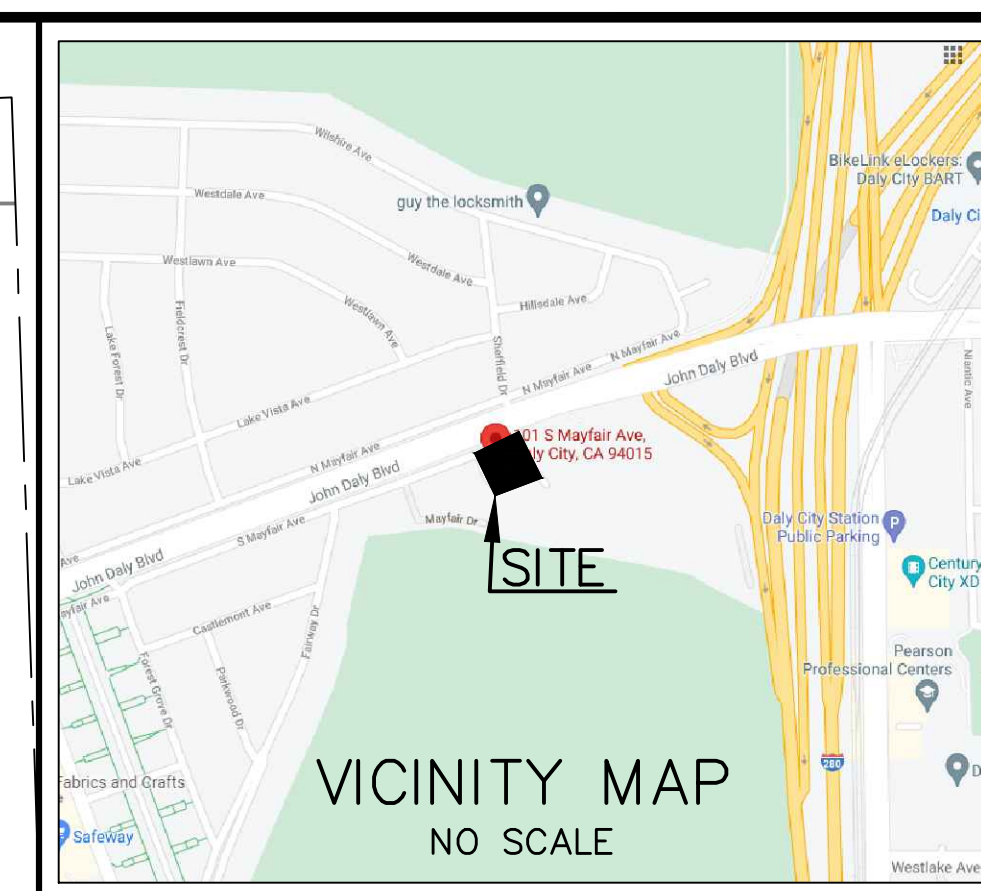
NO.	DATE	DESCRIPTION
△		
△		
△		
△		

NEIGHBORHOOD CONTEXT

PROJECT #: 20-11304
DRAWN: EMQ CHECKED: MII
SCALE: AS NOTED DATE: 04-26-22

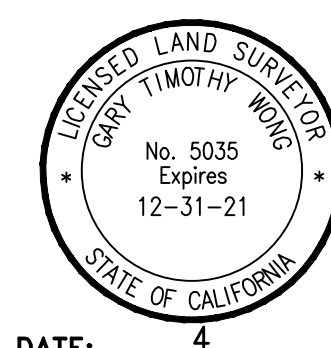
SD3

SHEET OF



MANHOLE	
DRAIN INLET	
WATER LINE	
DRAIN LINE	
SEWER LINE	
GAS LINE	
FIRE HYDRANT	
WATER VALVE	
SEWER CLEAN OUT	
WATER METER	
FIRE DEPT. CONNECTION	
EDGE OF PAVEMENT	
BACK FLOW PREVENTER	
CONCRETE CURB	
SPOT ELEVATION	
TRAFFIC SIGNAL	
TRAFFIC SIGNAL WITH LIGHT	
PARKING LIGHT	
PULL BOX	
GAS VALVE	
UTILITY POLE	
GAS METER	
OVER HEAD WIRE	
UTILITY POLE W/GUY	
PUBLIC STREET LIGHT	
SIGN	
FENCE	
WALL	
GUARD POST	
TREE	
VAULT	
TRANSFORMER	
RAIN WATER LEADER	
UNDERGROUND TELEPHONE LINE	
UNDERGROUND ELECTRICAL LINE	
U.G. CABLE LINE	
RIDGE LINE	

- 1) A PRELIMINARY TITLE REPORT WAS PROVIDED BY Orange Coast Title Company of Northern California ORDER NUMBER Order No. 520--2225363--60 DATED JULY 8, 2021, FOR THE PREPARATION OF THIS SURVEY.
- 2) THE POSITION OF IDENTIFIED RECORD EASEMENTS HAVE BEEN PLOTTED USING RECORD DESCRIPTIONS. SURFACE FACILITIES HAVE BEEN PLOTTED USING FIELD INFORMATION. THE ACTUAL LOCATIONS OF UNDERGROUND FACILITIES SHOULD BE VERIFIED PRIOR TO ANY NEW CONSTRUCTIONS.
- 3) THE BOUNDARY SHOWN HEREON IS FROM RECORD, HOLDING FOUND CONCRETE MONUMENTS IN SOUTH MAYFAIR AVE AND FAIRWAY DRIVE PER WESTLAKE SUBDIVISION NO 3 (PER 31 M 18). LOSS OF THESE MONUMENTS OR DISCOVERY OF NEW MONUMENTS MAY ALTER THE PROPERTY LINE.
- 4) THE TYPES, LOCATION, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. INTERESTED PARTIES ARE CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. STUKAM CONSULTING ENGINEERS, INC. ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS. DESCRIBED EASEMENTS MAY EXIST OUTSIDE THOSE FACILITIES WHICH ARE NOT WITHIN THE RECORD EASEMENT.
- 5) NO MONUMENTS WERE SET AS A PART OF THIS SURVEY.



PROJECT NO. 2021-004		TOPOGRAPHIC & BOUNDARY SURVEY		 STUKAM CONSULTING ENGINEERS, INC. 235C GOLD RIVER CA 95670 (916) 835-5791 (916) 858-8241 FAX		DATE: 07-29-2021		NO. DATE		REVISION DESCRIPTION		ENGR APPROVED BY		DATE	
SHEET 1 OF 1		101 SOUTH MAYFAIR AVENUE UNION 76 GAS STATION		CALIFORNIA		SCALE: 1"=10'		1		1		FTS		1	
		CITY OF DALY CITY APN: 002-072-030				DRAWN BY: JLM/AF									
						DESIGNED BY: FTS									
						CHECKED BY: GARY THOMAS WONG									

SOUTH MAYFAIR AVENUE

PROPOSED IMPROVEMENT NOTES:

- 1 PLACE AC PAVING.
- 2 PLACE PCC PAVING. FOR ADA PARKING MAXIMUM 1.9% SLOPE IN ALL DIRECTIONS.
- 3 CONSTRUCT 6" VERTICAL CURB.
- 4 CONSTRUCT RETAINING WALL WITH HAND RAIL. RETAINING WALL DESIGN, BY OTHERS.
- 5 PLACE PCC FUELING PAD WITH MAXIMUM 1.9% SLOPE IN ALL DIRECTIONS. PLACE 1/4" LIP BETWEEN FUELING PAD AND SURROUND AC OR PCC PAVING.
- 6 EXISTING AC PAVING IN ACCESS EASEMENT TO REMAIN WHERE SHOWN. PLACE NEW AC PAVING BETWEEN BACK OF NEW DRIVEWAY AND EXISTING AC PAVING.
- 7 CONSTRUCT 2' VALLEY-GUTTER WITH 1/4" LIP AT FUELING CANOPY.
- 8 SAWCUT EXISTING PAVEMENT IN OR ADJACENT TO ACCESS EASEMENT.
- 9 PLACE PCC AND PEA GRAVEL FOR FUELING TANKS PER ARCHITECT PLANS.
- 10 CONSTRUCT SIDEWALK. SLOPE SIDEWALK WITH 4.8% (MAX) SLOPE IN DIRECTION OF TRAVEL AND 1.9% (MAX) CROSS-SLOPE
- 11 CONSTRUCT SIDEWALK WITH MAXIMUM 1.9% SLOPE IN ALL DIRECTIONS.
- 12 CONSTRUCT CURB RAMP WITH 1:12 (MAX) SLOPE IN DIRECTION OF TRAVEL AND 1.9% (MAX) CROSS-SLOPE. INSTALL HAND RAILS WHERE RAMP HEIGHT EXCEEDS 6 INCHES.
- 13 CONSTRUCT 18" STANDARD CURB CUT WITH CHAMFERED SIDES AT 45° ADJACENT TO FLOW-THROUGH PLANTER. PLACE 4" COBBLES SURROUND CURB CUT WITHIN FLOW-THROUGH PLANTER EXTENDING 2' RADIIALLY. SEE DETAIL BELOW.
- 14 REMOVE EXISTING DRIVEWAYS, CORNER RAMP, SIDEWALK, CURB AND GUTTER ALONG FRONTAGE. PLACE NEW DRIVEWAYS, SIDEWALK, CURB AND GUTTER ALONG SITE FRONTAGE PER DAILY CITY STANDARD DETAIL S-2 AND S-3. CORNER RAMP TO BE REPLACED PER CALTRANS DETAIL AB8A CASE A.
- 15 CONSTRUCT FLOW-THROUGH PLANTER USING 18" BSM LAYER OVER A 12" PERMEABLE ROCK LAYER. SEE DETAIL BELOW FROM SECTION 6.2 OF SAN MATEO COUNTYWIDE WATER POLLUTION PREVENTION PROGRAM (SMCWPPP) C.3 REGULATED PROJECTS GUIDE, DATED NOV 2023. WALL DESIGN, BY OTHERS.
- 16 CONSTRUCT PLANTER STRIP BEHIND CURB. SLOPE PLANTER 1.5% TOWARDS CURB. INSTALL ROOT CONTROL BARRIER PER DAILY CITY STANDARD DETAIL PR-3 IF TREES ARE PLANTED. BERM PLANTER SO IT CAN POND 1" (MIN). SEE DETAIL 4 ON SHEET 4.
- 17 CONSTRUCT TERRACED FLOW-THROUGH PLANTER USING 18" BSM LAYER OVER A 12" PERMEABLE ROCK LAYER ALONG S. MAYFAIR AVENUE FOR OFFSITE STORMWATER TREATMENT USING A CHECK DAM. SEE DETAIL BELOW FROM SECTION 6.1 OF SMCWPPP C.3 REGULATED PROJECTS GUIDE, DATED NOV 2023. WALL DESIGN, BY OTHERS.

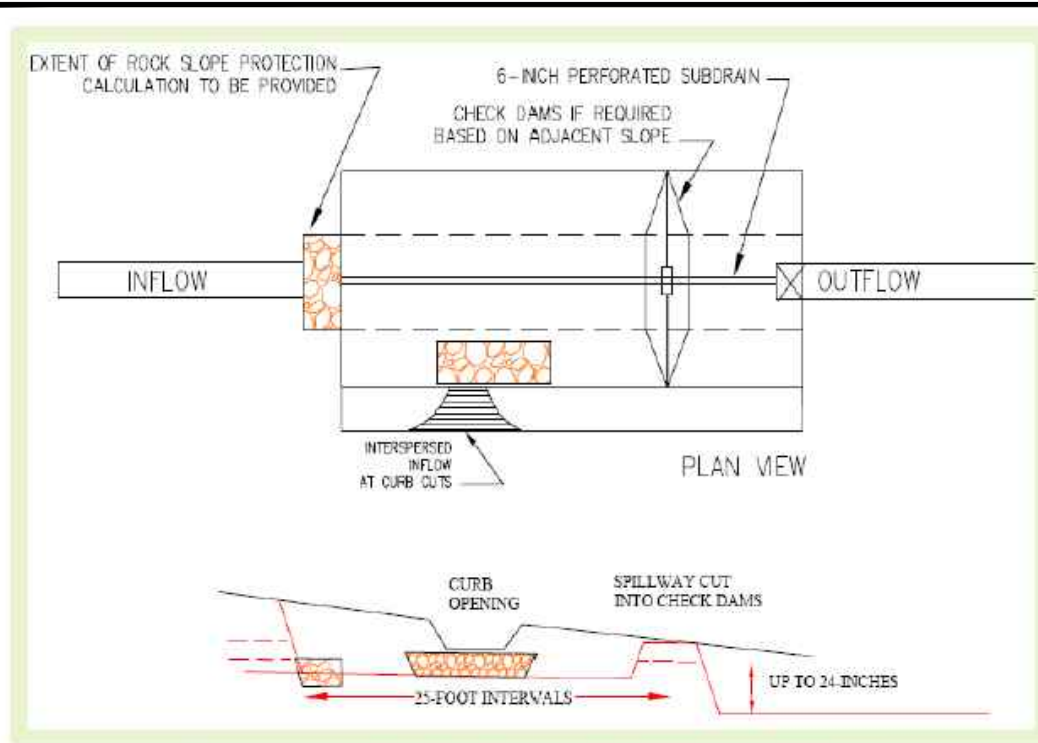


Figure 6-8: Check dam (plan view and profile) for installing a series of linear bioretention cells in sloped area

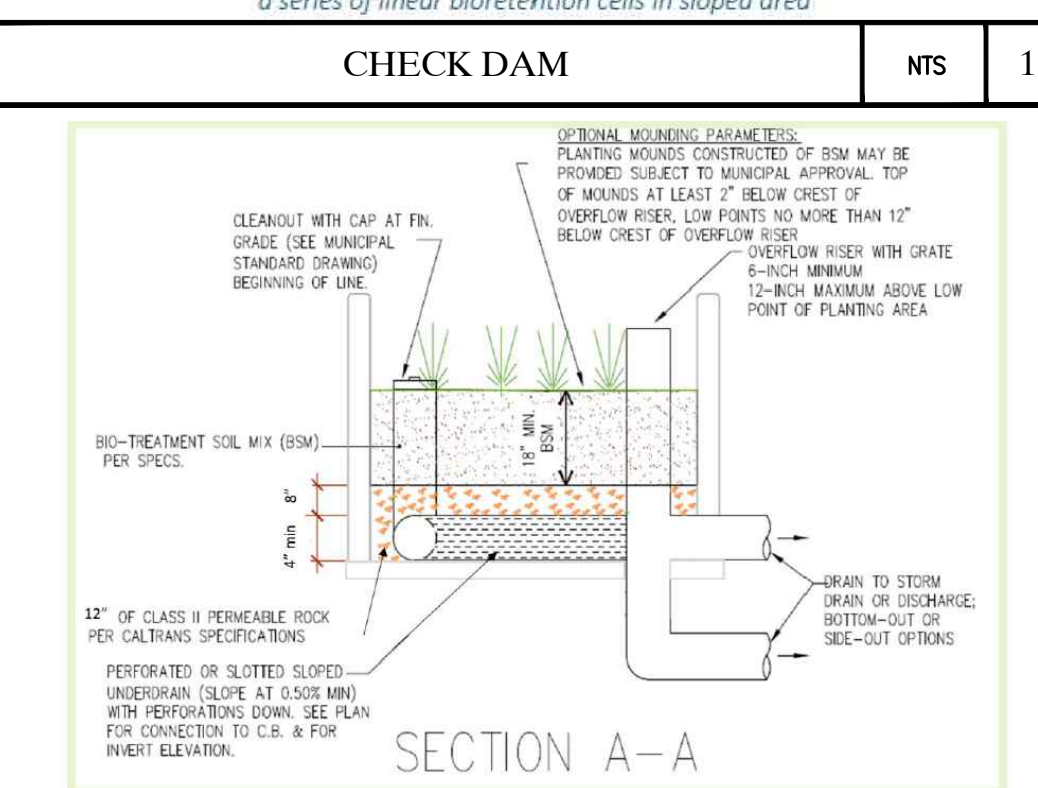
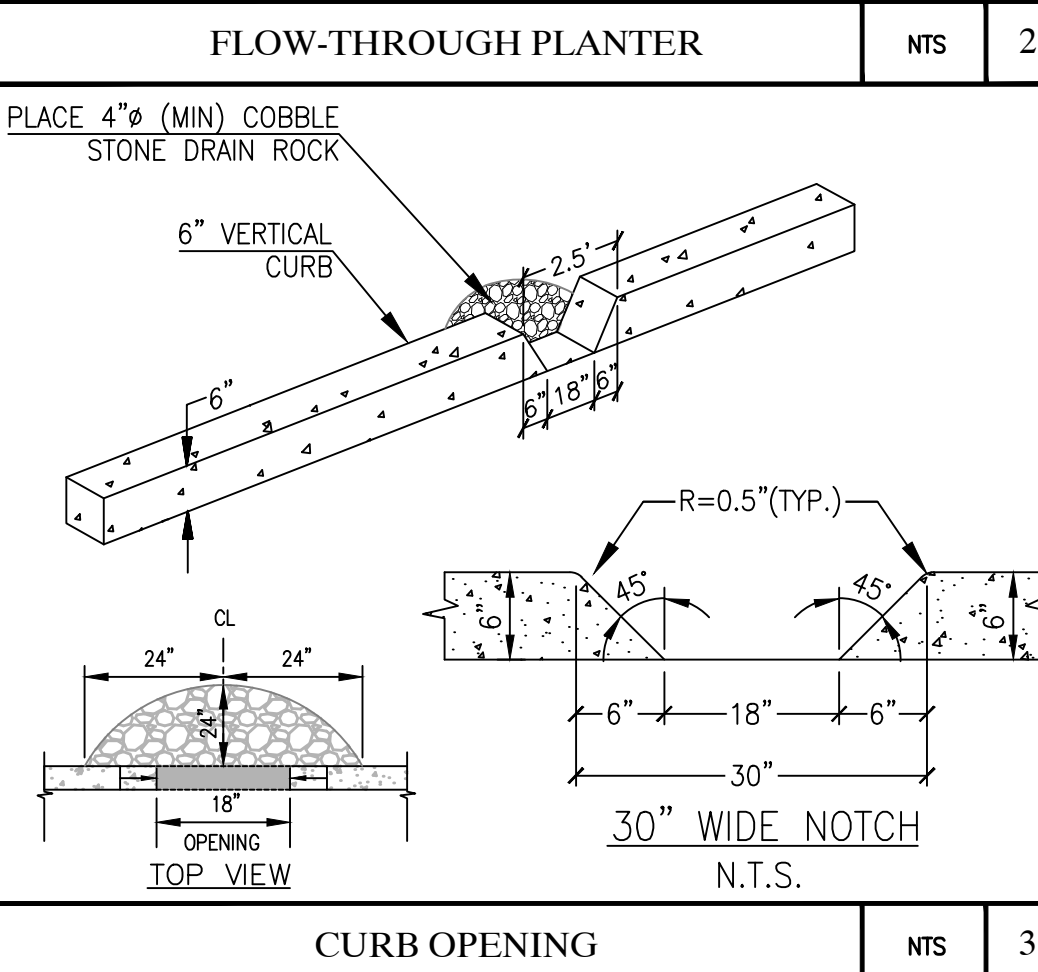
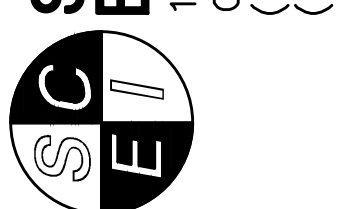
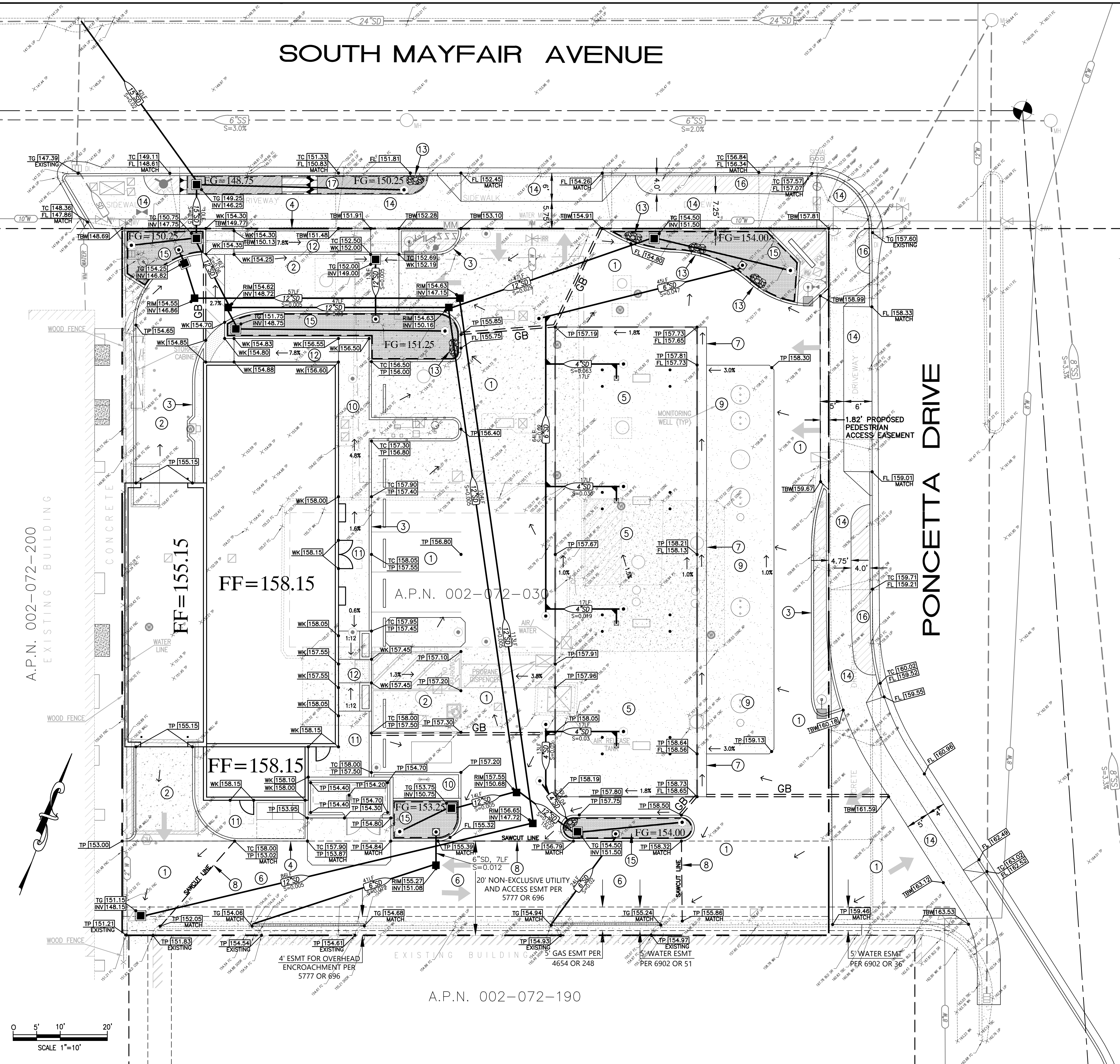


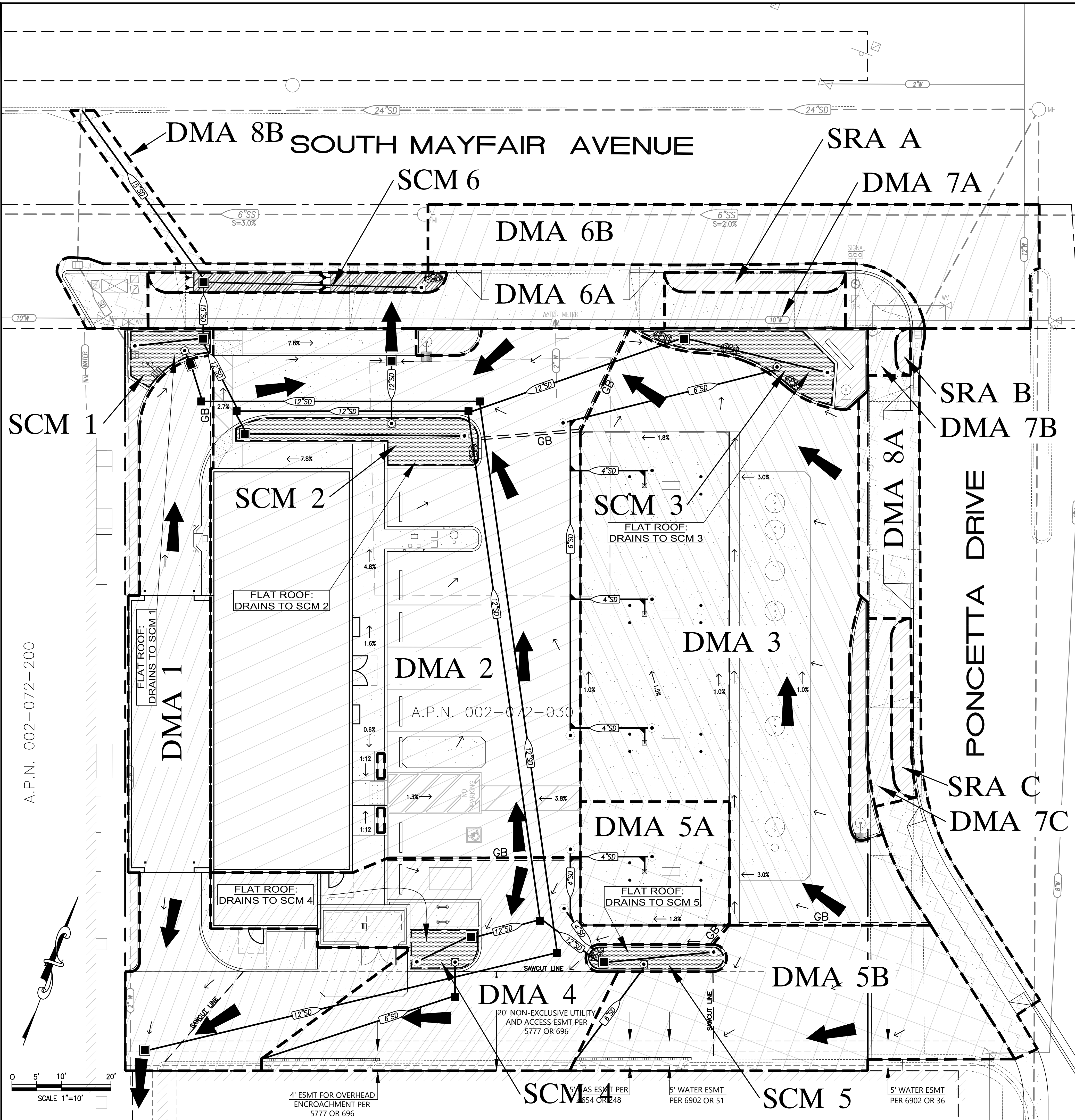
Figure 6-17: Cross section A-A of flow-through planter, shows side view of underdrain (Not to Scale)



REVISIONS			
NO.	DATE	BY	DC
			
DEVELOPER ED HADAD 700 S. BERNARDO AVE. #103 SUNNYVALE, CA 94087 PH: (408) 691-7971			
STUKAM CONSULTING ENGINEERS, INC. 11344 COLOMA RD, SUITE 235C GOLD RIVER, CA 95670 (916) 858-8241 PHONE (916) 988-6316 FAX			
			
PRELIMINARY GRADING PLAN 101 S. MAYFAIR AVENUE GAS STATION, CONVENIENCE STORE & CARWASH APN: 002-072-030 SAN MATEO COUNTY DAILY CITY JOB NO: 2021-004 Designed: FTS Checked: FTS Date: 10/22/2024			
SHEET 1 Of 4 SHEETS JOB NUMBER: 2021-004			







IMP NAME: SCM-1

IMP TYPE: FLOW-THROUGH PLANTER
SOIL TYPE:C

DMA NAME	DMA AREA (SQ. FT.)	POST PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP SIZING		
					IMP SIZING FACTOR	RAIN ADJUST-MENT FACTOR	PROPOSED AREA
DMA 1	2916	ROOF & PAVING	1.00	2916	0.04	1.00	118
TOTAL:			1.00	2916			

IMP NAME: SCM-2

IMP TYPE: FLOW-THROUGH PLANTER
SOIL TYPE:C

DMA NAME	DMA AREA (SQ. FT.)	POST PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP SIZING		
					IMP SIZING FACTOR	RAIN ADJUST-MENT FACTOR	PROPOSED AREA
DMA 2	7776	ROOF & PAVING	1.00	7776	0.04	1.00	314
TOTAL:			1.00	7776			

IMP NAME: SCM-3

IMP TYPE: FLOW-THROUGH PLANTER
SOIL TYPE:C

DMA NAME	DMA AREA (SQ. FT.)	POST PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP SIZING		
					IMP SIZING FACTOR	RAIN ADJUST-MENT FACTOR	PROPOSED AREA
DMA 3	5625	ROOF & PAVING	1.00	5625	0.04	1.00	242
TOTAL:			1.00	5625			

IMP NAME: SCM-4

IMP TYPE: FLOW-THROUGH PLANTER
SOIL TYPE:C

DMA NAME	DMA AREA (SQ. FT.)	POST PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP SIZING		
					IMP SIZING FACTOR	RAIN ADJUST-MENT FACTOR	PROPOSED AREA
DMA 4	2500	ROOF & PAVING	1.00	2500	0.04	1.00	103
TOTAL:			1.00	2500			

IMP NAME: SCM-5

IMP TYPE: FLOW-THROUGH PLANTER
SOIL TYPE:C

DMA NAME	DMA AREA (SQ. FT.)	POST PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP SIZING		
					IMP SIZING FACTOR	RAIN ADJUST-MENT FACTOR	PROPOSED AREA
DMA 5A	750	STANDARD ROOF	1.00	750			
DMA 5B	1960	AC PAVING	1.00	1960	0.04	1.00	114
TOTAL:			1.00	2710			

IMP NAME: SCM-6

IMP TYPE: FLOW-THROUGH PLANTER
SOIL TYPE:C

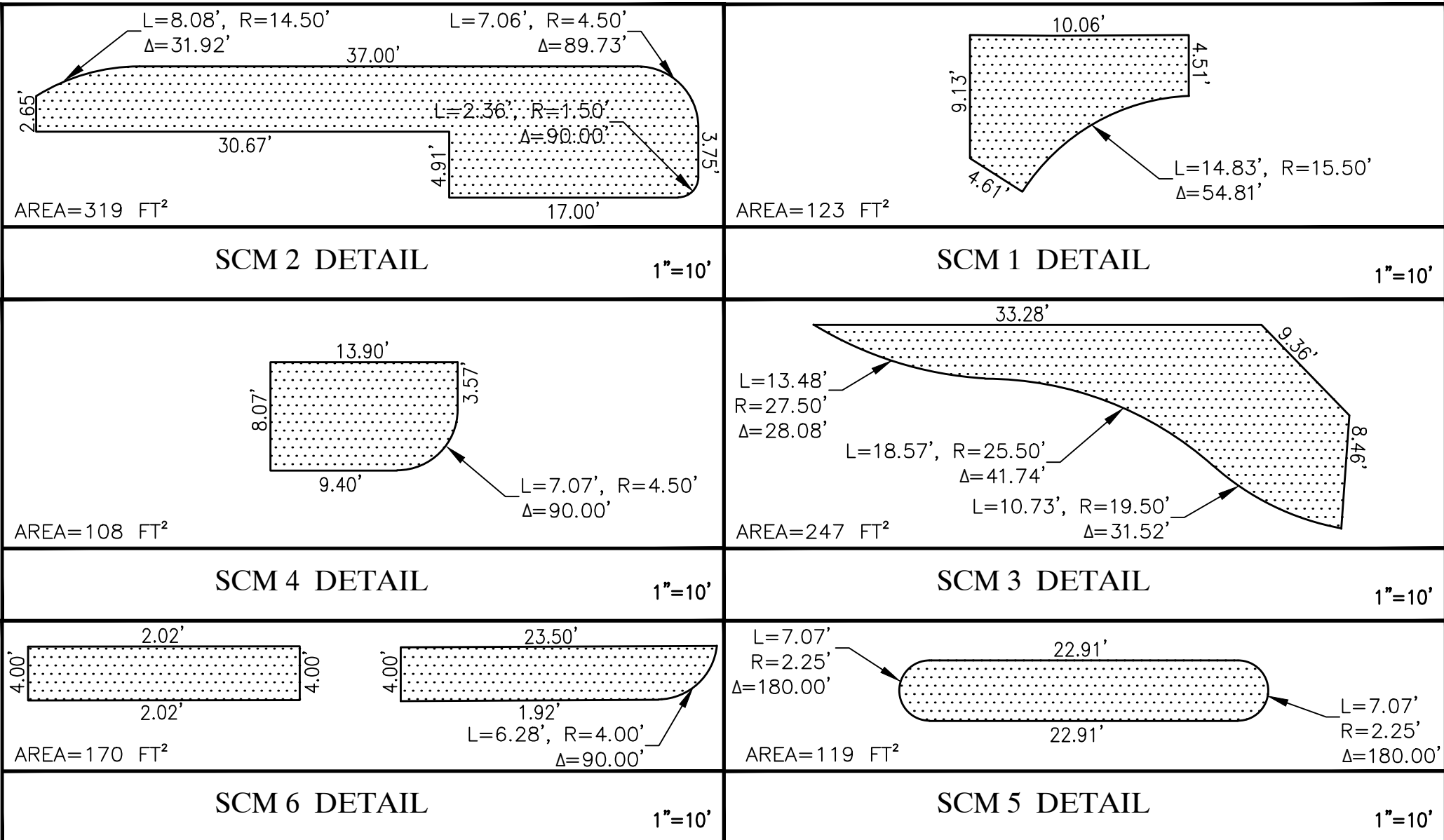
DMA NAME	DMA AREA (SQ. FT.)	POST PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP SIZING		
					IMP SIZING FACTOR	RAIN ADJUST-MENT FACTOR	PROPOSED AREA
DMA 6A	1236	PCC WALK & GUTTER	1.00	1236			
DMA 6B	1817	EX AC PAVING	1.00	1817	0.04	1.00	165
TOTAL:			1.00	3053			

IMP NAME: SRA A,B & C

IMP TYPE: SELF-RETAINING AREA
SOIL TYPE:C

DMA NAME	DMA AREA (SQ. FT.)	POST PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP SIZING		
					IMP SIZING FACTOR	RAIN ADJUST-MENT FACTOR	PROPOSED AREA
DMA 7A	272	PCC WALK	1.00	272			
DMA 7B	58	PCC WALK	1.00	58			
DMA 7C	186	PCC WALK	1.00	186	0.5	1.00	304
TOTAL:			1.00	516			

NOTE: DMA 8A & 8B's COMBINED 1707 SQ. FT. OF IMPERVIOUS AREA IS TREATED IN-LIEU BY DMA 6B.



REVISIONS

DATE

BY

DC

DEVELOPER

ED HADAD

700 S. BERNARDO AVE. #103

SUNNYVALE, CA 94087

PH: (408) 691-7971

STUKAM CONSULTING ENGINEERS, INC.

11344 COLOMA RD, SUITE 235C

GOLD RIVER, CA 95670

(916) 858-8241 PHONE

(916) 988-6316 FAX

STORMWATER CONTROL PLAN

101 S. MAYFAIR AVENUE

GAS STATION, CONVENIENCE STORE & CARWASH

APN: 002-072-030

DAILY CITY

SAN MATEO COUNTY

CALIFORNIA

JOB NO: 2021-004

Designed: FTS

Checked: FTS

Date: 10/22/2024

SHEET

3

Of 4 SHEETS

JOB NUMBER:

2021-004



Page 36 of 87



Architects

M I Architects, Inc.
ARCHITECTURE
PLANNING
MANAGEMENT
DESIGN
1801 OAKLAND BLVD.,
SUITE 300
WALNUT CREEK, CA
94596
925-287-1174 Tel
925-443-1581 Fax
925-878-4875 Cell
mthana@miarchitect.com
www.miarchitect.com

76 GAS STATION, CARWASH
& CONVENIENCE STORE
101 SOUTH MAYFAIR AVE.
DALY CITY, CA 94015

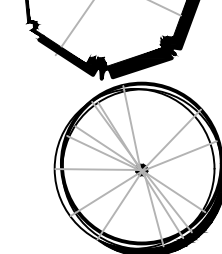
DRAWINGS AND SPECIFICATIONS AND THE CONCEPTS EMBEDDED WITHIN THEM CONSTITUTE THE ORIGINAL UNPUBLISHED WORK OF M I ARCHITECTS, INC. ANY REPRODUCTION OR USE OF THESE DRAWINGS OR SPECIFICATIONS WITHOUT THE WRITTEN CONSENT OF M I ARCHITECTS, INC. IS PROHIBITED.

PLANTING LEGEND

Symbol BOTANICAL NAME COMMON NAME H2O SIZE

Tree

Lagerstroemia indica Muskogee Muskogee Grape Myrtle L 15 Gallon



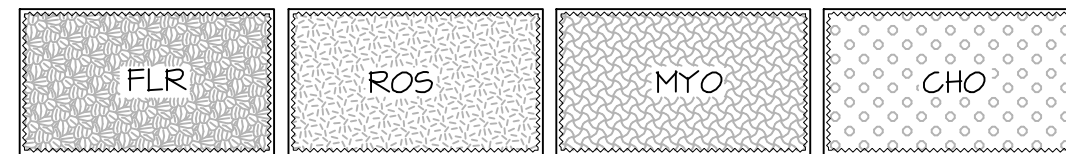
Laurus nobilis Sweet Bay L 15 Gallon

Shrubs and Vines

Dodonea viscosa 'Purpurea' Purple Hopseed Bush L 5 Gallon
Parthenocissus tricuspidata Boston Ivy L 5 Gallon

Ground Cover

ROS Rosmarinus officinalis 'Huntingt Carpet' Rosemary L 1 Gallon @ 30" oc
MYO Myoporum parvifolium Myoporum parvifolium L 1 Gallon @ 30" oc
CHO CHO Chondropetalum elephanthum Large Cape Rush L 5 Gallon @ 42" oc
FLR Tagetes erecta 'Moonstruck' Moonstruck Marigold M 4" Pots @ 14" oc



PLANTING NOTES

- All trees are to be staked as shown in the staking diagram per city requirement.
- Plant locations are to be adjusted as necessary to screen utilities but not block windows or impede access.
- All ground cover and shrub areas shall be top-dressed with a 3" layer of bark mulch. Provide non-floatable mulch in the bioretention areas.
- All ground cover planting will be placed no farther than 6" from edge of pavement, edge of header or back of curb. Spacing shall ensure full coverage in one year.
- There shall be no storing of material or equipment, permitting of any burning or operating or parking of equipment under branches of any existing plants to remain. If existing plants to remain are damaged during construction, the plants shall be replaced with the same species an size as those damaged.
- All plant material shall be nursery grown stock. All plant materials shall be tagged at the nursery at least 1 month prior to planting for the Landscape Architects review.
- Review layout of all landscape elements with the Landscape Architect prior to installation. Field modifications may be necessary. Final layout to be reviewed by the Landscape Architect.
- Written dimensions supersede scaled dimension. Measurements are from the wall face, back of curb, edge of walk, building wall, property line or center line as graphically indicated.
- All layout corners are at 90 degrees right angles unless otherwise indicated. All curves shown are segments of circles with noted radii or diameter if noted. Circles can be scaled and be connected by freeform curves.
- HERBICIDE APPLICATION: Herbicide shall not be used until all plant material has been planted a minimum of 20-days. All planting areas shall be kept weed-free by non-herbicide methods during this time period. Herbicide shall not be applied to any areas which are or have been seeded. Contractor must be licensed by the State and County for fertilizer application, and must have current registration on file with the County.
- Landscape shall be maintained in a manner to prevent landscaping from growing above 3' in height in the areas indicated in the plans as being located within a safety visibility triangle area.
- CERTIFICATION: Prior to occupancy, the Landscape Architect shall certify in writing in a manner acceptable to the Building Inspection Division, that the landscaping has been installed in accordance with all aspects of the approved landscape plans.
- A minimum of 8" of non-mechanically compacted soil shall be available for water absorption and root growth in planted areas.
- Incorporate compost or natural fertilizer into the soil to a minimum depth of 8" at a minimum rate of 6 cubic yards per 1000 square feet.
- All Plantings shall be automatically irrigated utilizing state of the art system, components and installation techniques.
- All planting and irrigation shall comply with the city of San Jose Water Efficient Landscape Requirements for larger landscapes.
- All details shall comply with city standard details.

VICINITY MAP



ISSUED FOR CONSTRUCTION
ISSUED FOR PLAN CHECK
ISSUED FOR PLANNING

NO.	DATE	DESCRIPTION
△		
△		
△		
△		
△		

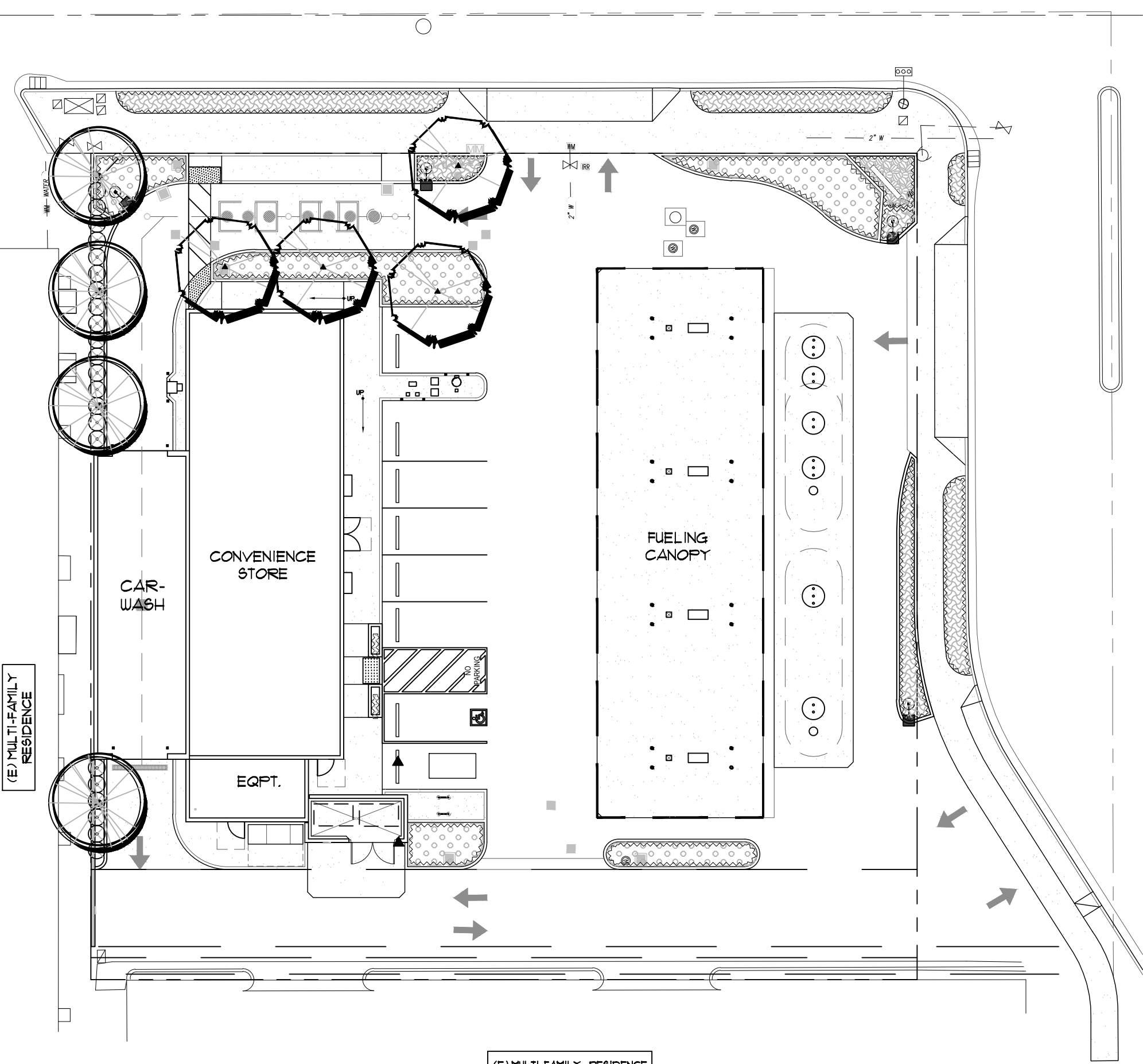
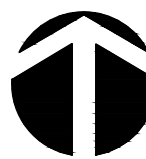
LANDSCAPE PLAN

PROJECT # 20-11304
DRAWN: dd CHECKED: rc
SCALE: AS NOTED DATE: 04-26-22

LA1

SHEET OF

NORTH

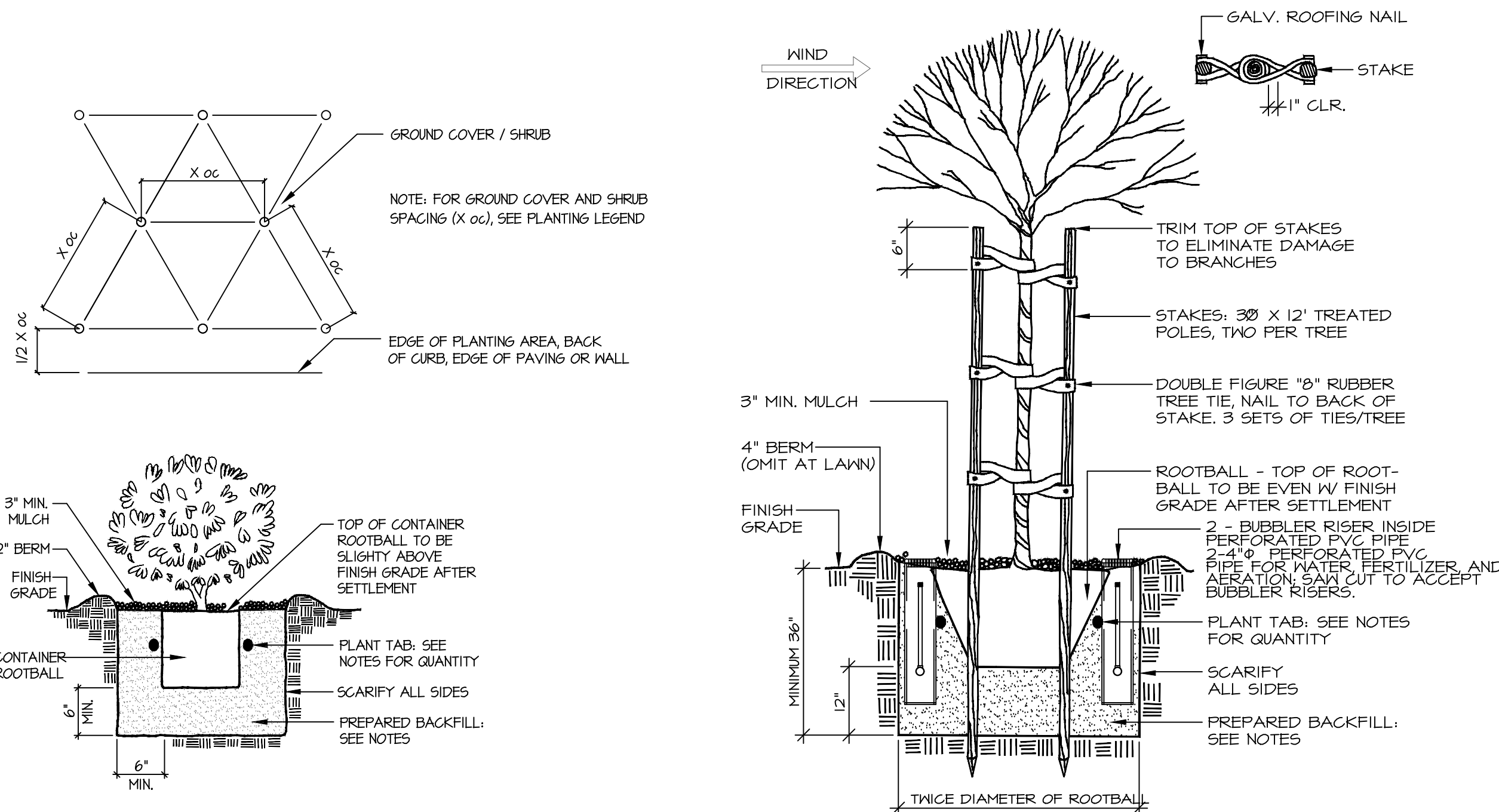


1 LANDSCAPE PLAN

1" = 20'-0"

GRAPHIC SCALE: 1" = 10'-0"

NORTH



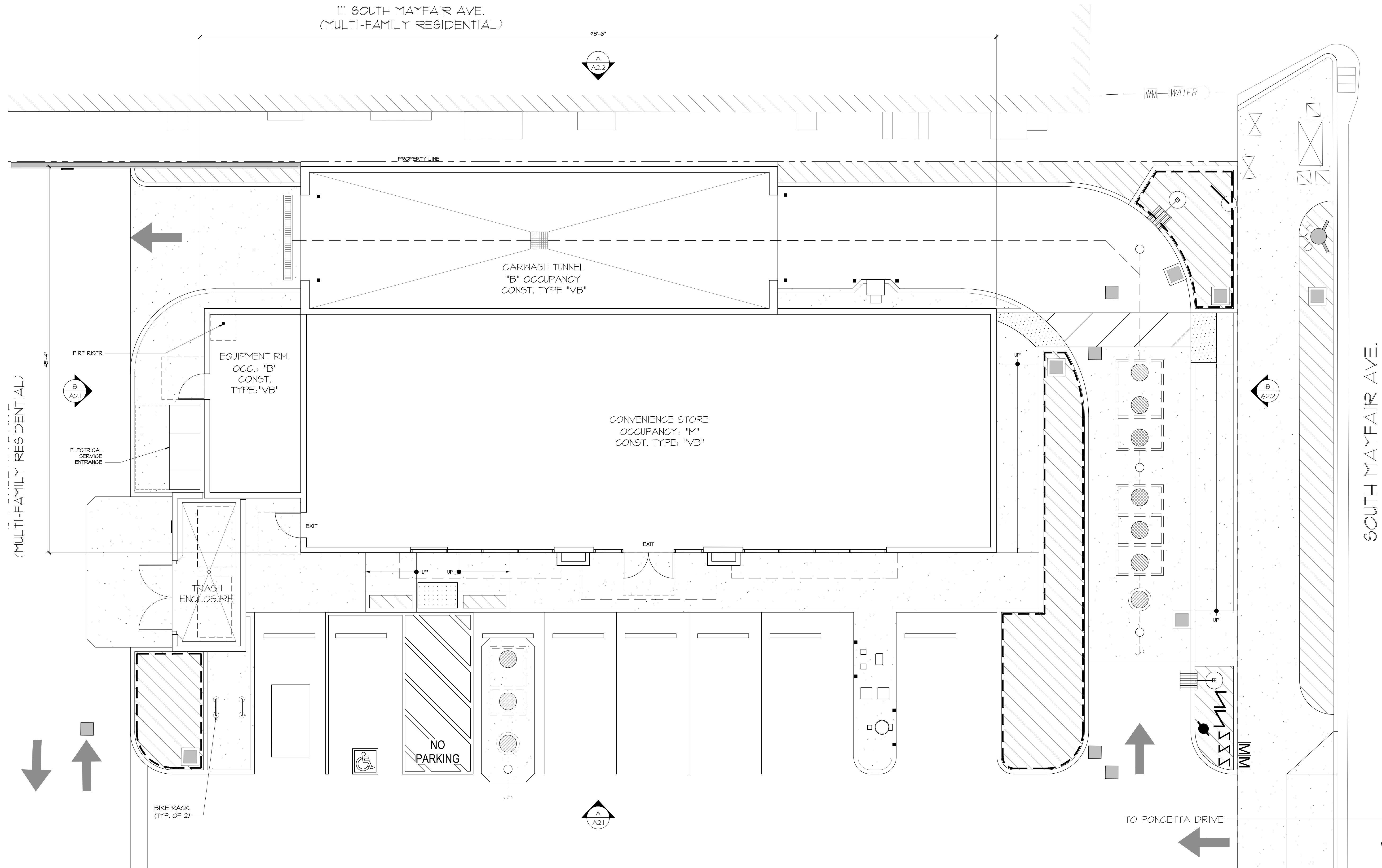
PLANTING INSTALLATION AND LAYOUT

TREE PLANTING AND STAKING



Ciardella
associates
Landscape Architecture
Urban Design
200 Clock Tower Place
Suite D100-A
Carmel, CA 93921
Tel 831 624 6100
Tel 650 326 6100
ca@ciardella-assoc.com

S:\1-Projects\20-11304-101 S Mayfair Ave Day City\img's\Planning\20-11304-A1.dwg modified by Muthana@rahm at Jul 21, 2025 - 4:41pm



1

CONVENIENCE STORE & CARWASH FLOOR PLAN

3/16" = 1'-0"

GRAPHIC SCALE: 3/16" = 1'-0"



NOT FOR
CONSTRUCTION

76 GAS STATION, CARWASH
& CONVENIENCE STORE
101 SOUTH MAYFAIR AVE.
DALY CITY, CA 94015

ISSUED FOR CONSTRUCTION
ISSUED FOR PLAN CHECK
ISSUED FOR PLANNING

NO.	DATE	DESCRIPTION
△		
△		
△		
△		

CONVENIENCE STORE
CARWASH FLOOR PL.

PROJECT #: 20-11304
DRAWN: EMQ CHECKED:
SCALE: AS NOTED DATE: 04

A1.1



Architects

M I Architects, Inc.

ARCHITECTURE
PLANNING
MANAGEMENT
DESIGN
1801 OAKLAND BLVD.,
SUITE 300
WALNUT CREEK, CA
94596
925-287-1174 Tel
925-943-1581 Fax
925-878-9875 Cell
muthana@miarchitect.com
www.miarchitect.com

NOT FOR
CONSTRUCTION

76 GAS STATION, CARWASH
& CONVENIENCE STORE
101 SOUTH MAYFAIR AVE.
DALY CITY, CA 94015

THESE DRAWINGS AND SPECIFICATIONS AND THE CONCEPTS EMPLOYED HEREIN ARE THE PROPERTY OF M I ARCHITECTS, INC. ANY REUSE, REPRODUCTION, OR DISSEMINATION OF THESE DRAWINGS AND SPECIFICATIONS WITHOUT THE WRITTEN CONSENT OF M I ARCHITECTS, INC. IS PROHIBITED.

- ISSUED FOR CONSTRUCTION
- ISSUED FOR PLAN CHECK
- ISSUED FOR PLANNING

NO.	DATE	DESCRIPTION
△		
△		
△		
△		
△		

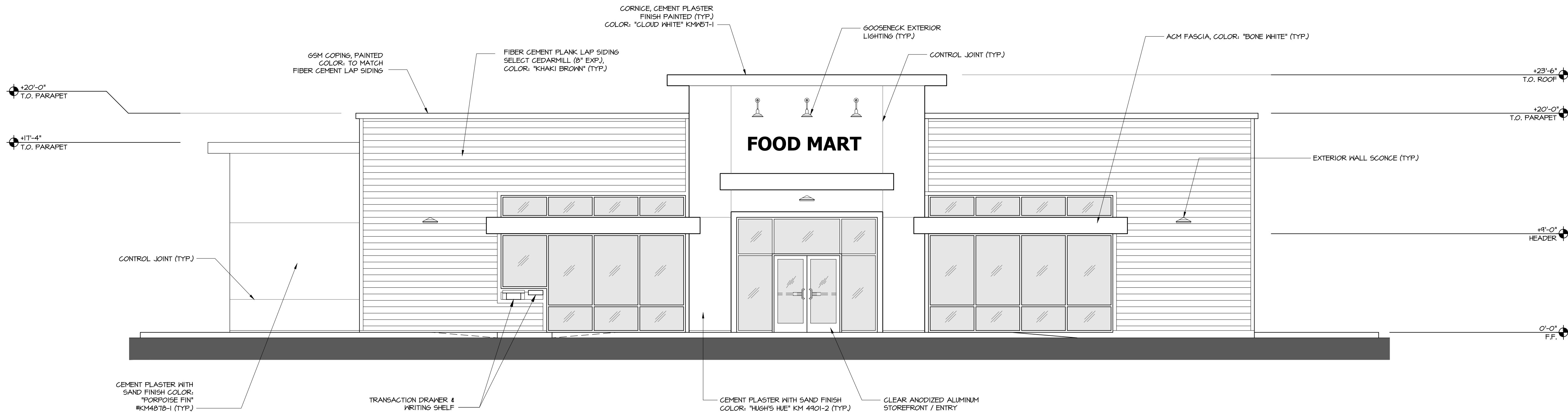
EXTERIOR ELEVATIONS

PROJECT #: 20-11304
DRAWN: EMQ CHECKED: MI
SCALE: AS NOTED DATE: 04-26-22

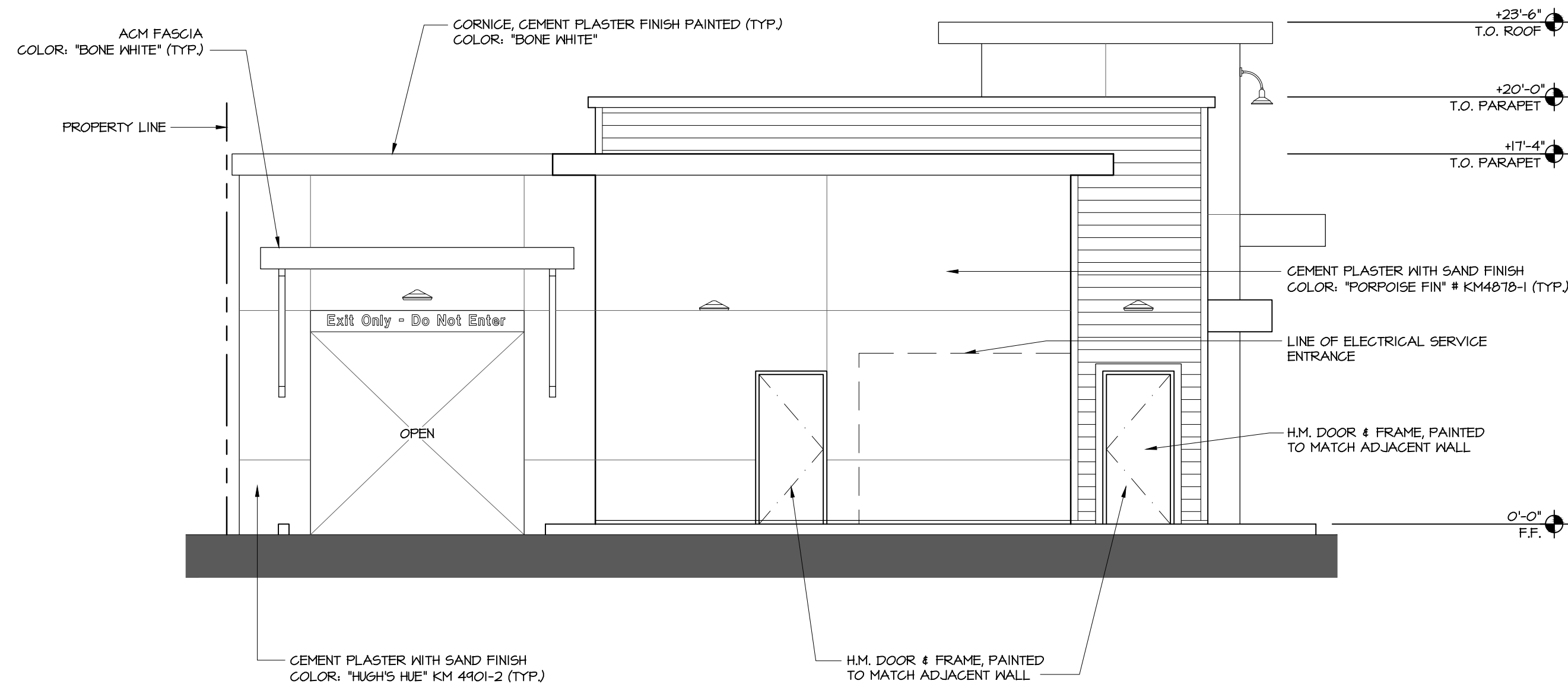
A2.1

SHEET OF

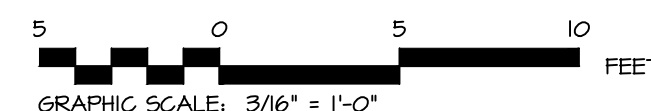
Page 39 of 87



A EAST ELEVATION (PONCETTA DRIVE)
3/16" = 1'-0"



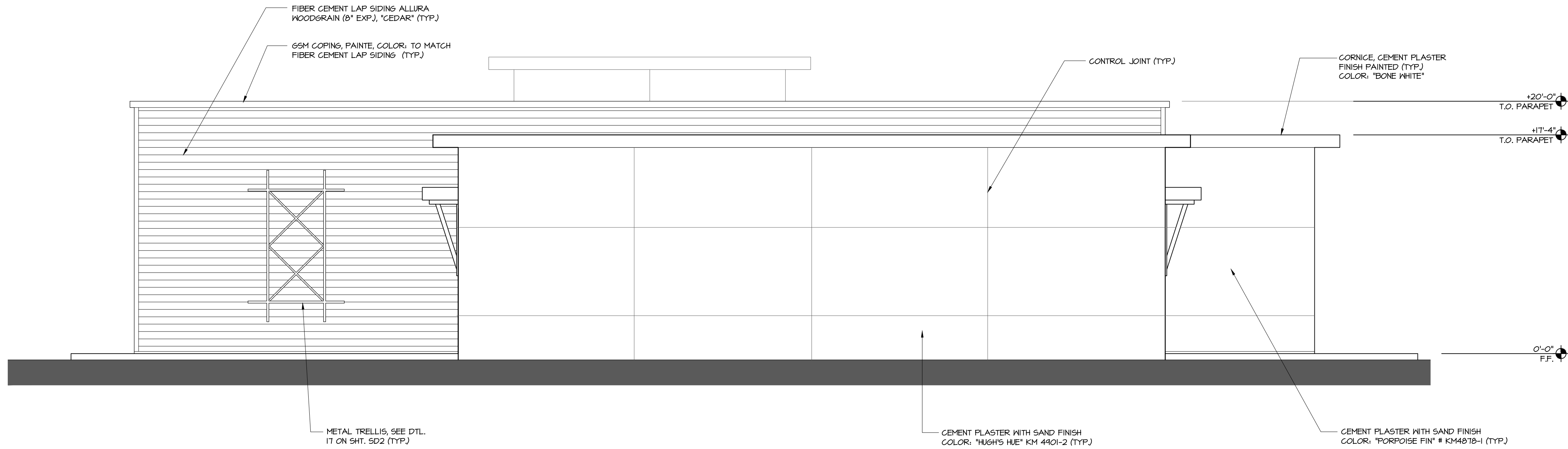
B SOUTH ELEVATION
3/16" = 1'-0"



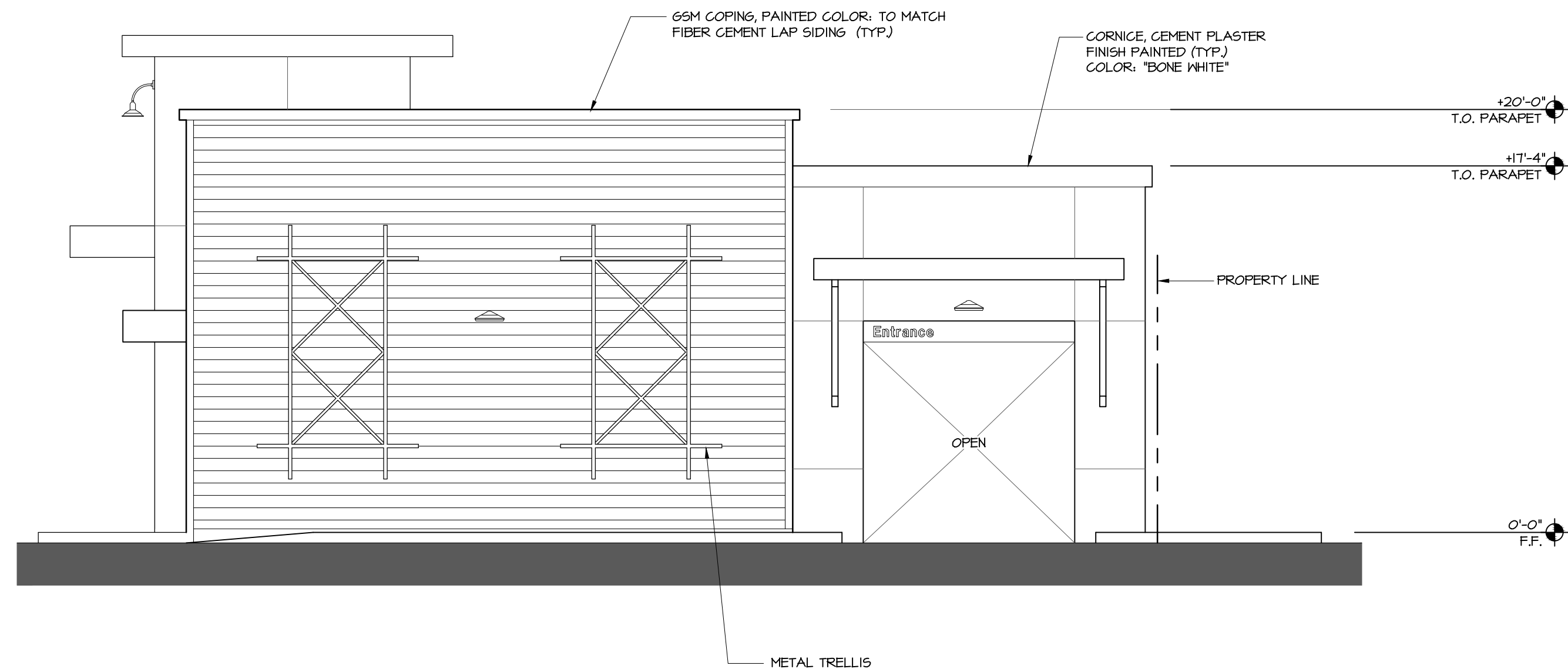
COLOR & MATERIAL NOTES

- FIBER CEMENT LAP SIDING: JAMES HARDIE, HARDIE PLANK LAP SIDING, CEDARMILL DREAM COLLECTION, 3/8" THICK, WIDTH: 8 1/4" (1" EXPOSURE), INSTALLED PER MANUFACTURER REQUIREMENTS, (PRIMED & PAINTED), PPG COLOR: "KHAKI BROWN"
- COPING & TRIMS, TO MATCH LAP SIDING
- CORNICE, CEMENT PLASTER FASCIA, SMOOTH FINISH, PAINTED KELLY MOORE, COLOR: "CLOUD WHITE" KM451-1
- CEMENT PLASTER WALL, SAND FINISH, PAINTED KELLY MOORE, COLOR: "PORPOISE FIN" #KM487B-1
- CEMENT PLASTER TOWER, SAND FINISH, PAINTED BENJAMIN MOORE, COLOR: "HUGH'S HUE" #KM4491-2
- ACM PANEL: ALPOLIC MATERIALS, ALPOLIC / PE, ARCHITECTURAL SOLID, COLOR: #4-BNT-30 "BONE WHITE"
- "OLDCASTLE" CLEAR ANODIZED STOREFRONT, 215 CLEAR CLASS 1

S:\1-Projects\20-11304-101 S Mayfair Ave Daly City\Drawings\Planning\20-11304-A2.1-A2.2.dwg modified by mhausen2 at Oct 23, 2024 -- 2:44pm



A WEST ELEVATION
3/16" = 1'-0"



B NORTH ELEVATION (S. MAYFAIR AVENUE)
3/16" = 1'-0"

5 0 5 10
FEET
GRAPHIC SCALE: 3/16" = 1'-0"



Architects

M I Architects, Inc.
ARCHITECTURE
PLANNING
MANAGEMENT
DESIGN
1801 OAKLAND BLVD.,
SUITE 300
WALNUT CREEK, CA
94596
925-287-1174 Tel
925-943-1581 Fax
925-878-9875 Cell
muthana@miarchitect.com
www.miarchitect.com

NOT FOR
CONSTRUCTION

**T6 GAS STATION, CARWASH
& CONVENIENCE STORE
101 SOUTH MAYFAIR AVE.
DALY CITY, CA 94015**

DRAWINGS AND SPECIFICATIONS AND THE CONCEPTS EMPLOYED WITHIN THEM CONSTITUTE THE ORIGINAL UNPUBLISHED WORK OF M I ARCHITECTS, INC. ANY REUSE, REPRODUCTION, OR DISTRIBUTION OF THESE DRAWINGS OR SPECIFICATIONS WITHOUT THE WRITTEN CONSENT OF M I ARCHITECTS, INC. IS PROHIBITED.

- ISSUED FOR CONSTRUCTION
- ISSUED FOR PLAN CHECK
- ISSUED FOR PLANNING

NO.	DATE	DESCRIPTION
△		
△		
△		
△		

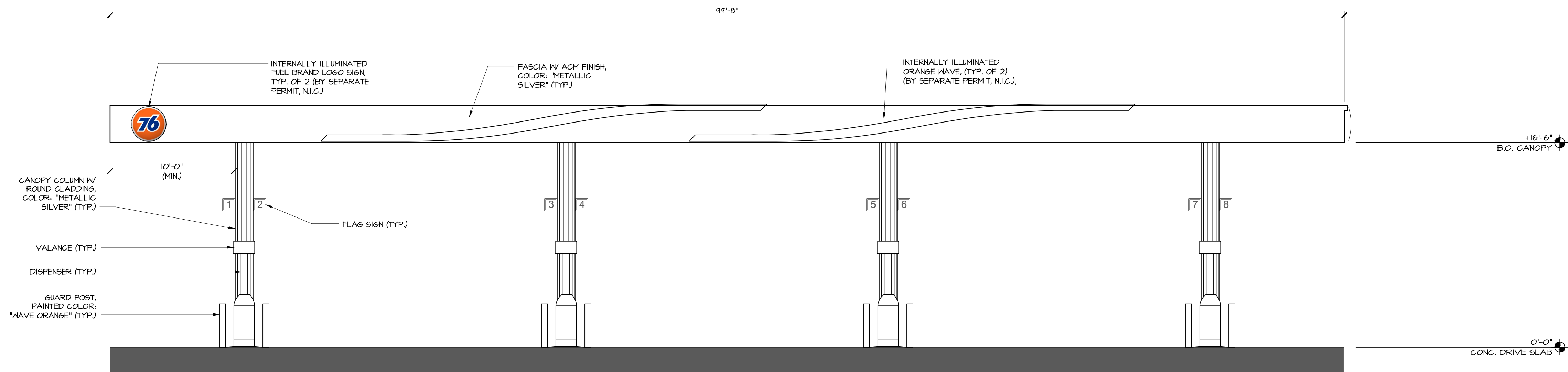
EXTERIOR ELEVATIONS

PROJECT #: 20-11304
DRAWN: EMQ CHECKED: MII
SCALE: AS NOTED DATE: 04-26-22

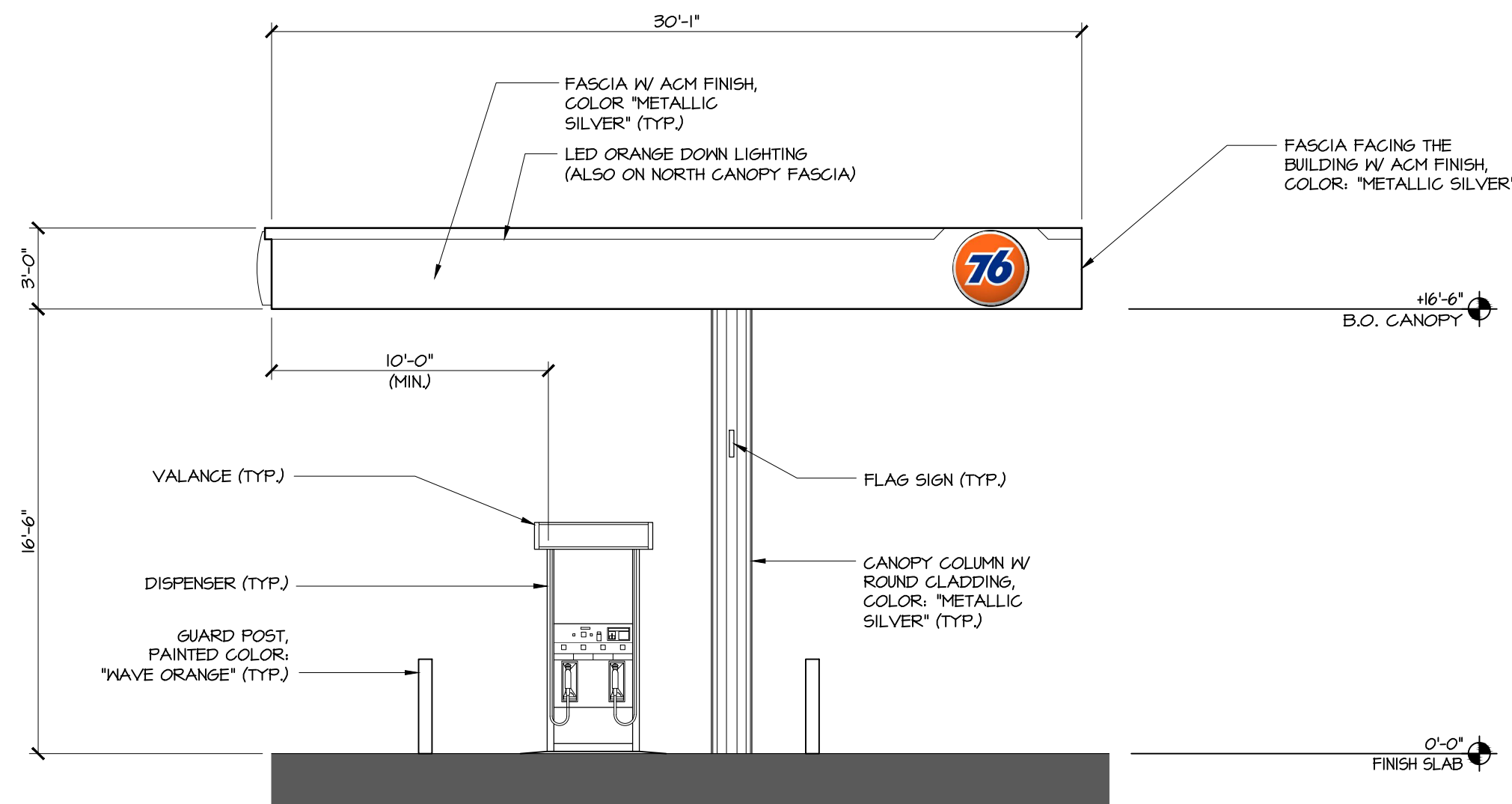
A2.2

SHEET OF

S:\1-Projects\20-11304-101 S Mayfair Ave Daly City\dwg\Planning\20-11304-CA1.dwg modified by mrouse4 at Dec 21, 2023 - 10:16am



A EAST ELEVATION (PONCETTA DRIVE)
3/16" = 1'-0"



B NORTH ELEVATION
3/16" = 1'-0"

5 0 5 10 FEET
GRAPHIC SCALE: 3/16" = 1'-0"



Architects

M I Architects, Inc.
ARCHITECTURE
PLANNING
MANAGEMENT
DESIGN
1801 OAKLAND BLVD.,
SUITE 300
WALNUT CREEK, CA
94596
925-287-1174 Tel
925-943-1581 Fax
925-878-9875 Cell
muthana@miarchitect.com
www.miarchitect.com

NOT FOR
CONSTRUCTION

**T6 GAS STATION, CARNASH
& CONVENIENCE STORE
101 SOUTH MAYFAIR AVE.
DALY CITY, CA 94015**

THESE DRAWINGS AND SPECIFICATIONS AND THE CONCEPTS EXPRESSED HEREIN ARE THE PROPERTY OF M I ARCHITECTS, INC. NO PART OF THESE DRAWINGS AND SPECIFICATIONS ARE TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF M I ARCHITECTS, INC. THE USE, REPRODUCTION OR DISCLOSURE OF THESE DRAWINGS WITHOUT THE WRITTEN PERMISSION OF M I ARCHITECTS, INC. IS PROHIBITED.

- ISSUED FOR CONSTRUCTION
- ISSUED FOR PLAN CHECK
- ISSUED FOR PLANNING

NO.	DATE	DESCRIPTION
△		
△		
△		
△		
△		

FUELING CANOPY
ELEVATIONS

PROJECT #: 20-11304
DRAWN: EMQ CHECKED: MII
SCALE: AS NOTED DATE: 04-26-22

CA1

SHEET OF



TECHNICAL MEMORANDUM

Date: April 11, 2024
To: Ed Hadad Hadad, Inc.
CC: Muthana Ibrahim M I Architects, Inc.
From: Steven Matthew Dauterman, P.E., T.E., PTOE, RSP₁ TJKM
Subject: 101 S. Mayfair Avenue Redevelopment – Site Circulation Review (Daly City, California)

This memorandum presents the findings of a site circulation review conducted for a proposed redevelopment project at 101 South Mayfair Avenue in Daly City ("City"), California. This assessment was conducted to address a comment that was received from City staff on the site plan as part of the application's initial review. The comment pertained to the circulation conditions surrounding the exit to a proposed carwash facility and two existing garage entrances to an apartment complex, located on the site's southern property line (the apartment complex has an established non-exclusive utility and access easement agreement that extends 20 feet inside the project's property).

The property can be identified with the following assessor's parcel number (APN): 002-072-030. The property is currently zoned Light Commercial (C-1) and is approximately 0.51 acres. The project would involve the renovation of an existing gas station facility with a convenience store/smog check station and eight pumping positions and would clear the site to construct a new approximately 2,300 square-foot (SF) convenience store building, a new fueling canopy (maintaining eight pumping positions, similar to existing conditions), and the aforementioned roll-over carwash. Access to the site is currently provided via two driveways along Poncetta Drive and two driveways along S. Mayfair Avenue; with the redevelopment, the driveways along S. Mayfair Avenue will be consolidated. The current site plan is illustrated in **Figure 1**.

Site Circulation Review

The proposed carwash facility will be located on the west side of the property, behind the convenience store. Vehicles would enter the carwash near South Mayfair Avenue and would exit towards the existing apartment complex and within the existing easement. Vehicles exiting the carwash would have to turn left towards Poncetta Drive (thereby crossing the two apartment garage entrances) to exit the property.

Based on the site's current circulation, TJKM expects that the conditions surrounding the carwash exit would not create a substantial conflict for the following reasons:

1. Vehicles exiting the carwash are expected to operate at low speeds as the car would not be in motion during the drying cycle.

CALIFORNIA | FLORIDA | TEXAS

Corporate Office 4305 Hacienda Drive, Suite 550, Pleasanton, CA 94588 925.463.0611
www.TJKM.com

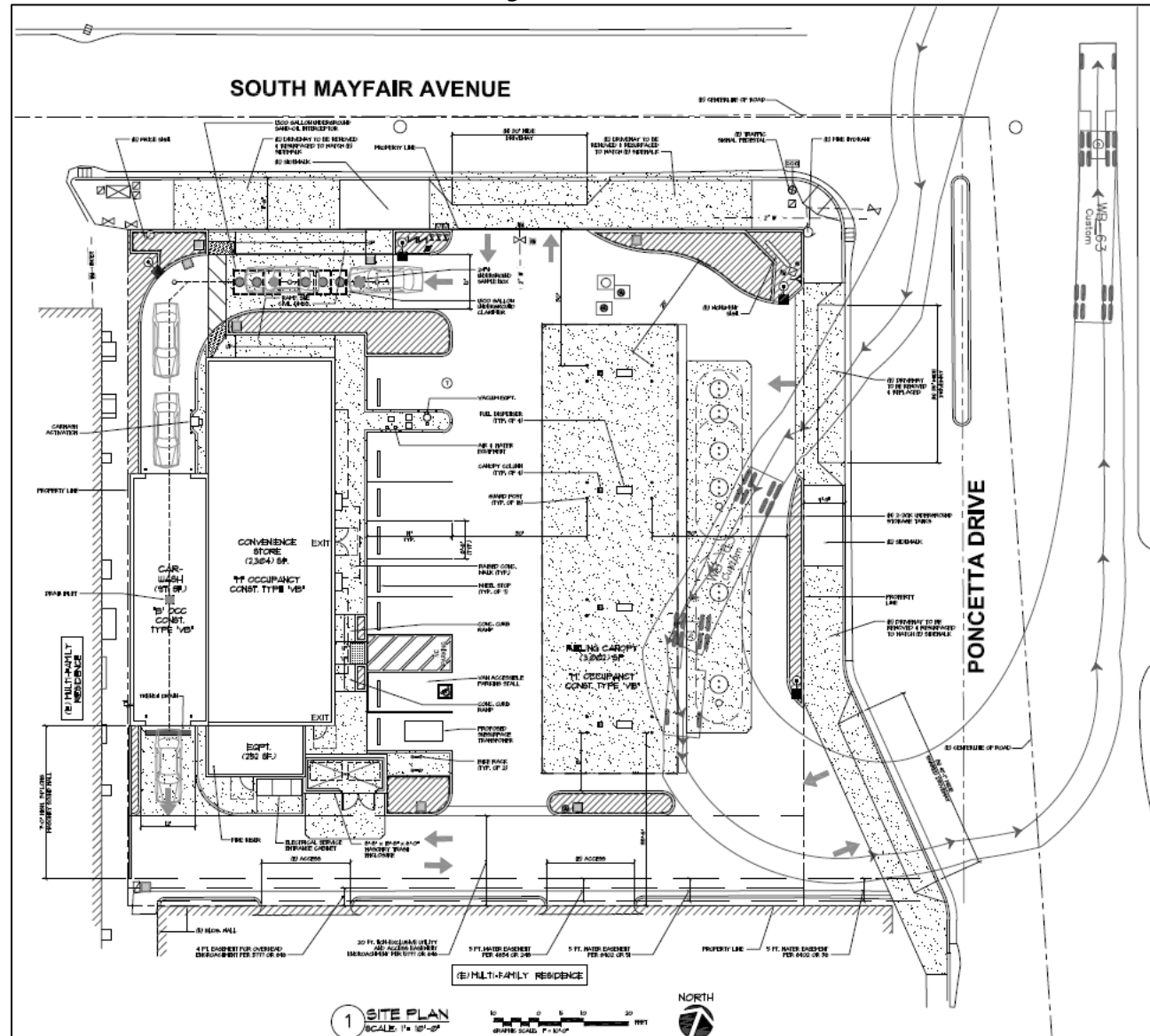
2. It is expected that there is adequate sight distance available between the carwash exit and the garage entrances. Based on the site plan, there are no obstructions anticipated to block the view of drivers along the access easement.
3. Once the carwash is in operation, vehicles exiting the carwash would be within other drivers' expectations (i.e., it would not be an unexpected event). This is relatively similar to existing conditions as there is a garbage bin located currently where the carwash exit will be and there is a smog check station across from the garage (meaning that safe vehicle-to-vehicle navigation/interaction already occurs within the easement).
4. The frequency of the carwash's utilization is not expected to create a substantial amount of traffic. Based on two months' worth of data (January and February 2024) collected by TJKM for another existing gas station with an automated carwash in San Lorenzo, California, the proposed carwash will likely experience approximately 110 and 150 vehicles per day.
 - a. Average hourly utilization was observed at 11-12 vehicles per hour (vph), or one vehicle every five minutes.
 - b. Maximum hourly utilization was observed at 19-20 vehicles per hour (vph), or one vehicle every three minutes. It should be noted that the proposed carwash facility is expected to take approximately 4.5 minutes between a vehicle entering and exiting the carwash; the observed location used a conveyor system which allowed for a slightly faster processing time so the expected maximum hourly utilization noted above should be considered conservative.
5. The distance between the carwash and the western garage entrance would allow the queuing of one vehicle exiting the carwash to stop in the event that one or more cars are exiting the garage.

Based on the above, TJKM expects that the current circulation conditions surrounding the car wash exit on the site plan would be adequate; however, should the City require additional measures, the following may be considered:

- Install pavement markings (e.g., sharks teeth, demarcation bar, "Car Wash Exit Only", "Exit", or "Do Not Enter"). Please note that the feasibility of providing restrictive pavement markings may not be fully feasible due to the conditions surrounding the access easement agreement.
- Install signage ("One-way", "Do Not Enter", "Two Way Traffic", "STOP" or "YIELD") near the car wash exit.

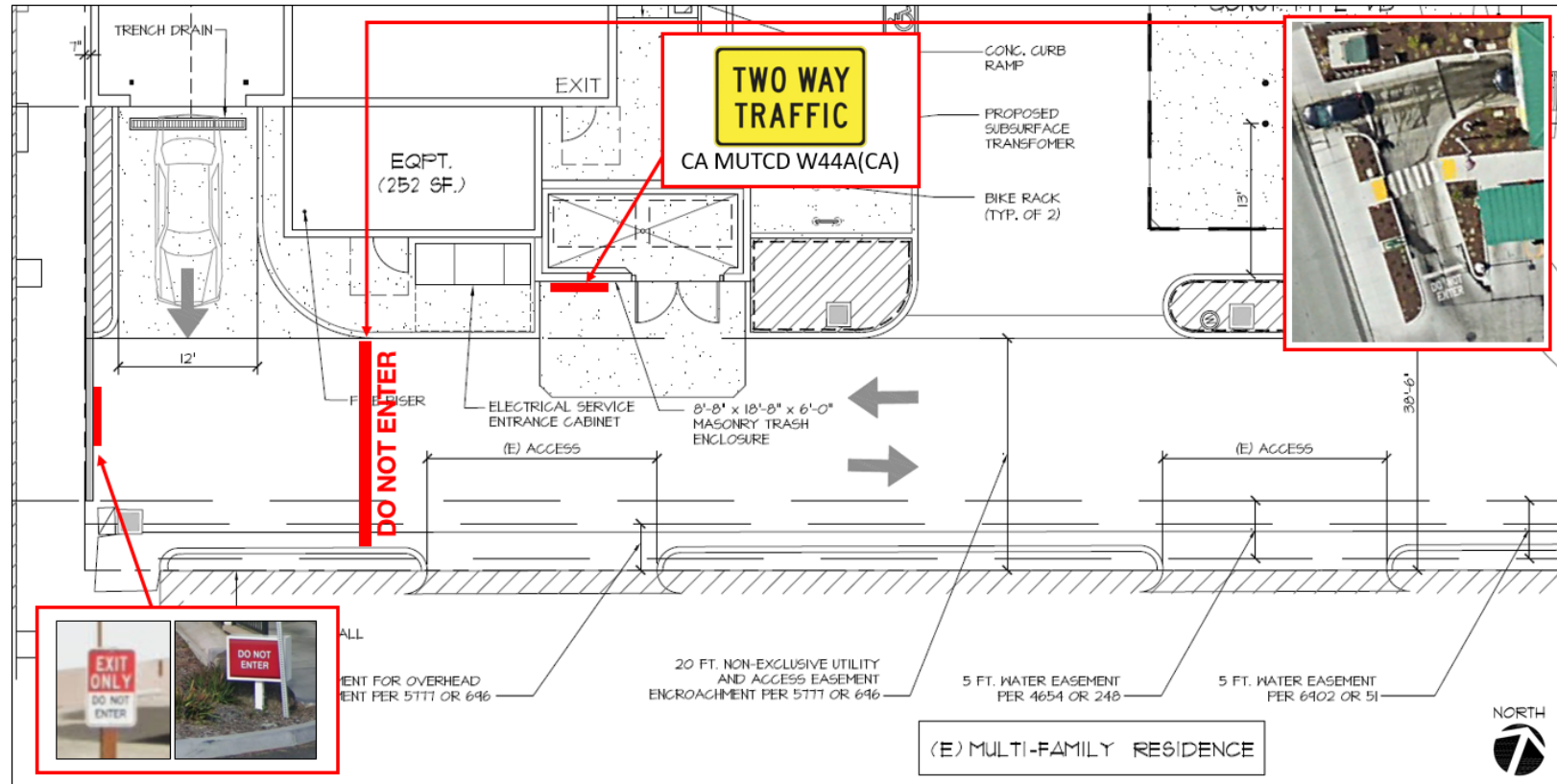
See **Figure 2** as an example.

Figure 1: Site Plan



Source: M I Architects, Dated April 26, 2022

Figure 2: Potential Circulation Enhancements (Example)



Please note that the feasibility of providing restrictive pavement markings (illustrated above with the "DO NOT ENTER") may not be fully feasible due to the conditions surrounding the access easement agreement.

Environmental Noise and Vibration Assessment

101 South Mayfair Gas Station Car Wash Project Daly City

DECEMBER 2023

Prepared for:

HADAD ENTERPRISES INC.

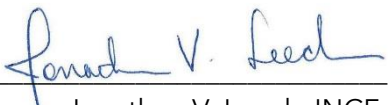
700 Bernardo Avenue
Sunnyvale, California 94087
Contact: Ed Hadad

Prepared by:

DUDEK

1904 Franklin Street, Ste 600
Oakland, CA 94612

Contacts: Carson Wong, Jonathan Leech



Jonathan V. Leech, INCE.
Senior Acoustician

Table of Contents

SECTION	PAGE NO.
1	Introduction1
1.1	Noise Analysis Study Area1
1.2	Project Description1
2	Existing Noise Environment.....1
2.1	Existing Ambient Noise Survey2
2.2	Existing Traffic Noise3
2.3	Existing Aircraft Operations.....3
2.4	Existing Vibration4
3	Regulatory Criteria4
3.1	Daly City General Plan4
3.2	Federal Transit Authority.....4
4	Methodology.....4
4.1	Construction Noise5
4.1.1	Construction Equipment Inventory6
4.2	Construction Vibration.....6
4.3	On-Site Operational Noise.....7
4.4	Traffic Noise.....8
4.5	Project Operational Vibration.....8
5	Project Analysis8
5.1	Construction Noise Assessment.....8
5.2	Construction Vibration Assessment9
5.3	Long-Term Operational Noise Sources..... 10
5.3.1	Off-Site Roadway Traffic Noise..... 10
5.3.2	Gas Station, Convenience Store, and Car Wash..... 10
5.4	Long-term Operational Groundborne Noise and Vibration 12
6	References 12

APPENDICES

A	Acoustic Fundamentals
B	Noise Measurement Data
C	Construction Noise Model Input and Output Data
D	Manufacturer Reference Noise Level Data
E	Operational Noise Model Input and Output Data

FIGURE(S)

Figure 1	Project Location	13
Figure 2	Proposed Site Plan	14
Figure 3	Baseline Noise Measurement Locations	15
Figure 4	Noise Prediction Receiver Locations.....	16
Figure 5	Recommended Masonry Wall Segment Heights and Lengths	17
Figure 6	Predicted Onsite Operations Noise Contours	18

TABLE(S)

Table 1. Summary of Long-Term Ambient Noise Measurements	2
Table 2. Summary of Short-Term Ambient Noise Measurements	3
Table 3. Selected Powered Equipment Noise Emission Levels from RCNM.....	5
Table 4. Construction Equipment Per Phase	6
Table 5: Vibration Source Levels for Construction Equipment	7
Table 7: Construction Vibration Levels at Closest Residence.....	10
Table 8. Predicted Project Stationary Operations Noise at Nearest Sensitive Receptors	11

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
A	Agriculture Zoning District
ADT	Average Daily Traffic
ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
City	The City of San Jose
CN	Commercial Neighborhood Zoning District
CNEL	Community Noise Equivalent Level
CP	Commercial Pedestrian Zoning District
dB	decibel
dBA	A-weighted decibel
DNL	Day night noise level
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HVAC	heating, ventilation, and air conditioning
In./sec.	inches per second
ISO	International Organization of Standardization
L _{dn}	day-night sound level
L _{eq}	equivalent sound level
NSLU	Noise-sensitive land use
PPV	peak particle velocity
PQP	Public/Quasi-Public Zoning Districts
Project	Tully Road 76 Station Car Wash Project
R-1-8	Residential Zoning District
SJC	San Jose International Airport
TNM	Traffic Noise Model

1 Introduction

This report reviews applicable noise standards and criteria, evaluates the existing noise environment, and describes modeling assumptions and methodologies used to predict noise impacts and effects associated with the proposed 101 South Mayfair Gas Station and Car Wash project (project). The report assesses the potential for project-generated noise levels (including construction, on-site operations, and off-site roadway traffic contributions) to result in noise impacts on nearby noise-sensitive receptors and the compatibility of the proposed project with existing and future noise levels in the area. This report also assesses project-generated vibration levels, both from construction and operation. Appendix A provides a glossary of terminology and acoustical concepts used in this memorandum. Appendix B contains data from the ambient noise survey. Appendix C contains construction noise modeling inputs and results. Appendix D presents manufacturer reference noise level data for mechanical equipment to be employed with the project. Appendix E presents details on the studied onsite operational noise sources considered in this assessment.

1.1 Noise Analysis Study Area

The project applicant proposes to reconstruct an existing fuel station and convenience store at the southwestern corner of Poncetta Drive and South Mayfair Avenue in Daly City, California (City). The proposed reconstruction effort includes the demolition of the existing convenience store, underground storage tanks, fuel dispensers and fueling canopy. The new facility would include a new fueling canopy, new underground storage tanks, a 2,304 square foot square foot convenience store, and a car wash with a drive-through. The site is bounded by South Mayfair Avenue to the north, Poncetta Drive to the east, and multi-family residential structures to the south and west. The project location is shown on Figure 1.

1.2 Project Description

The proposed project would serve the neighborhood by providing a convenience store, gas station with covered fueling, a car wash with a drive-through, an air/water dispenser, and a self-service vacuum station. The automated car wash structure, a feature adjoining the planned convenience store building, would be located on the western portion of the project site, encompassing approximately 971 square feet of space. The car wash tunnel and convenience store building adjoin an included indoor equipment room to house the mechanical equipment for the car wash and storage. The car wash would have a queueing capacity for approximately five (5) vehicles along the northern/eastern façade of the building, with the entrance to the car wash on the northern façade and the exit on the southern façade facing adjacent multi-family residences. The proposed project site plan is shown in Figure 2.

2 Existing Noise Environment

The proposed project is located in Daly City, California. The project site is zoned as C1 (General Commercial Zoning District) while neighboring parcels are zoned R-3 (Medium Density Residential). The dominant noise source affecting the overall area is transportation noise, primarily generated from vehicular traffic on the local roadway network. The existing ambient noise environment in the project area was quantified through noise measurement surveys of the existing area.

2.1 Existing Ambient Noise Survey

An ambient noise survey was performed by Dudek from December 12 to 13, 2023, to document the existing noise environment in the project area. Specific consideration was given to documenting noise levels in the vicinity of nearby noise-sensitive receptors and existing transportation noise levels in the project area. Noise measurements were performed in accordance with American National Standards Institute (ANSI) and American Standards for Testing and Measurement guidelines at three (3) locations in the Project vicinity, shown on Figure 3. Long-term monitoring was performed at one location, along the South Mayfair frontage of the project site, presented as LT1; this location also had unobstructed exposure to traffic along John Daly Blvd., the primary traffic noise contributor to ambient noise levels at the project site and adjacent properties. The long-term noise level data provides information on the daily ambient sound levels, hourly average sound levels and the diurnal patterns of sound in the project vicinity. Long-term noise monitoring results are presented in Table 1. Short-term noise monitoring was conducted at two (2) locations to provide insight into the existing ambient noise environment in the proposed project vicinity. Ambient noise level data cataloged at the short-term monitoring locations is summarized in Table 2. Detailed monitoring data is provided in Appendix B.

The short-term measurements were conducted by an attending Dudek investigator with a SoftdB “Piccolo” model sound level meter equipped with a windscreen-protected, 0.5-inch diameter pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current ANSI standard for a Type 2 (General Use) sound level meter.

The unattended long-term SPL monitor deployed and retrieved by the Dudek investigator was also a SoftdB “Piccolo” model sound level meter equipped with a windscreen-protected, 0.5-inch diameter pre-polarized condenser microphone with pre-amplifier.

The accuracy of each sound level meter was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately five feet above the ground.

Meteorological conditions during the monitoring periods were stable with temperature of 62 degrees; winds were measured at 7 mph representing a moderate speed breeze. The sky was partly cloudy with no precipitation occurring during the monitoring period. The primary noise source affecting the noise monitoring locations was vehicular traffic on the local roadway network.

Table 1. Summary of Long-Term Ambient Noise Measurements

Site	Location	Date	Time	L _{dn} (dBA)	Daytime	Nighttime
					L _{eq} Range (dBA)	L _{eq} Range (dBA)
LT1	Attached to the hedge at the northwest corner of the Project site	12/12/23 to 12/13/23	4:00 PM to 4:00 PM	71	64 - 78	60 - 66

Source: Dudek performed this analysis.

Notes: dBA = A-weighted decibels; L_{dn} = Day Night noise level; L_{eq} = average equivalent noise level.

Locations of noise monitoring sites are shown on Figure 3.

1- L_{dn} (24-hour) noise levels calculated based on the recorded hourly noise levels at measurement location LT1.

Table 2. Summary of Short-Term Ambient Noise Measurements

Site	Location	Date	Time						
				L _{eq}	L _{min}	L _{max}	L ₉₀	L ₅₀	L ₁₀
ST1	On the eastern side of Poncetta Drive across from the Project site	12/13/23	4:56 PM to 5:06 PM	62	54	76	56	60	65
ST2	Immediately west of the project frontage along South Mayfair Street.	12/13/23	5:10 PM to 5:15 PM	65	56	78	59	-	-

Source: Dudek performed this analysis.

Notes: dBA = A-weighted decibels; L_{eq} = average equivalent noise level; L_{min} = minimum noise level; L_{max} = maximum noise level; L₉₀/L₅₀/L₁₀ = sound level exceeded 90/50/10 percent of the period.

Locations of noise monitoring sites are shown on Figure 3.

2.2 Existing Traffic Noise

Observations and cataloged noise level data collected during the ambient noise survey indicate that the noise level exposure at receptors in the area surrounding the project site is primarily attributable to vehicular traffic. The magnitude of the noise level exposure at each receptor location would be dependent on the relative distance from nearby roadways to noise measurement locations, the volume of vehicles on the roadway, and shielding provided by nearby structures.

Daily City traffic counts performed for the General Plan Update (Daly City 2020) indicate that the segments of John Daly Blvd. immediately adjacent to the project site carry approximately 1,419 vehicles during the peak hour. The long-term measurement conducted along the south edge of South Mayfair Avenue (LT1) documents an ambient noise level of 71 dBA CNEL, which is slightly above the maximum recommended limit of 70 dBA CNEL in the General Plan Noise Element. However, over the depth of the project site, traffic noise levels should attenuate to approximately 68 dBA CNEL at the northern façade of the multi-family residential structure immediately south of the project site. This attenuation is based upon an outdoor attenuation rate of 3 dBA each time the distance from a line source (such as a roadway) to a receiver is doubled.

2.3 Existing Aircraft Operations

The project site is approximately 6.5 miles northwest of the San Francisco International Airport (SFO). The proposed project is not located within any currently adopted 60-, 65- or 70-dBA community noise equivalent level (CNEL)\L_{dn} airport noise contours. As such, noise associated with existing and future aircraft operations in the area is not a substantial contributor to the ambient noise environment.

2.4 Existing Vibration

There are no major sources of groundborne vibration in the project area. Transportation-related vibration from roadways in the vicinity of the project site is the primary source of groundborne vibration. Heavy truck traffic can generate groundborne vibration, which varies considerably depending on vehicle type, weight, and pavement conditions. However, groundborne vibration levels generated from vehicular traffic are not typically perceptible outside of the roadway right-of-way (Caltrans 2013).

3 Regulatory Criteria

The City has developed and adopted goals and policies with the intent of controlling and diminishing environmental noise and to protect its inhabitants from exposure to excessive noise levels. Local noise standards applicable to the proposed project are contained in the City's General Plan Noise Element and are summarized in the following sections.

3.1 Daly City General Plan

The General Plan Noise Element establishes objectives, policies, and actions to protect its inhabitants against exposure of noise-sensitive uses to loud noise and to prevent encroachment of noise-sensitive uses on existing noise producing facilities.

The General Plan establishes an exterior noise level standard and maximum allowable noise exposure level for residential uses of no more than 70 dBA (Policy NE-2). The noise level guidelines are presented in terms of the 24-hour CNEL or DNL noise level in dBA. The intent of these guidelines is to protect noise-sensitive land uses from new project development, through the discretionary review process to reduce potential noise exposure and excessive noise within the community.

Policy NE-3 of the General Plan limits noise generation for new non-residential land uses which are adjacent to residential land uses, to 70 dBA DNL at the residential property line.

3.2 Federal Transit Authority

In its Transit Noise and Vibration Impact Assessment guidance manual, the FTA recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an eight-hour period when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project (FTA 2018). Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the state and local jurisdictional levels.

4 Methodology

Potential noise impacts associated with the project were calculated and analyzed based on project information presented in the project description, information contained in the project site plan provided by the applicant, information gathered from other similar projects, presentations/papers, and data obtained during on-site noise

monitoring. Observations made during the site survey, along with land-use information and aerial photography, was used to determine potential locations of noise-sensitive receptors in the project vicinity.

4.1 Construction Noise

One of the most extensive and widely used databases for sound levels from motorized or powered equipment is the FHWA RCNM. While the focus of data compilation was for equipment that would typically be employed for the construction of transportation facilities, the list is comprehensive enough to be useful in assessing sound levels for nearly every activity for which powered equipment is used. Table 3 provides an excerpt from RCNM of the sound levels generated by various powered equipment that could be associated with construction of the project. Note that the equipment noise levels presented in Table 3 are maximum noise levels. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 3. Selected Powered Equipment Noise Emission Levels from RCNM

Equipment	Maximum Sound Level (dBA L_{max}) – 50 feet from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76
Scraper	89
Truck	88

Source: FHWA 2006a, 2006b.

Notes: dBA = decibel (A-weighted).

Noise emissions from the construction phase of the Project were estimated based upon default construction scenario information provided by CalEEMod for the type and size of proposed development, and included phasing, equipment mix, and vehicle trips. The construction equipment mixes used for estimating the Project-generated construction noise emissions are included in Appendix C.

A Microsoft Excel-based noise prediction model emulating and using reference data from the FHWA RCNM was used to estimate construction noise levels at the nearest and second-nearest noise-sensitive land uses (i.e., residences), based upon the distance between the closest project construction boundary and these residences.

Aggregate noise emission from project construction activities, broken down by sequential phase of construction, was predicted for the worst-case construction activity occurring along the closest construction boundary to the off-site closest residences. Dudek compared predicted construction noise levels to the recommended FTA construction noise exposure standard and to measured ambient noise levels.

4.1.1 Construction Equipment Inventory

The California Air Resources Board CalEEMod (California Emissions Evaluation Model) was used to identify the construction equipment anticipated for development of the Project, including earthwork, building construction, and paving activities. The equipment list is based upon the Project description CalEEMod (Version: CalEEMod.2016.3.1) identified the following anticipated equipment for each phase of the project construction.

Table 4. Construction Equipment Per Phase

Construction Activity	Demolition		
Equipment Needed	Dozer	Backhoe	Concrete Saw
Construction Activity	Site Preparation		
Equipment Needed	Dozer	Backhoe	Grader
Construction Activity	Grading		
Equipment Needed	Dozer	Front End Loader	Grader
Construction Activity	Building Construction		
Equipment Needed	Forklift Backhoe	Crane Generator	Welder
Construction Activity	Paving		
Equipment Needed	Paver Roller	Dump Truck Concrete Mixer Truck	Backhoe
Construction Activity	Architectural Coating		
Equipment Needed	Air Compressor		

4.2 Construction Vibration

Construction activity can result in varying degrees of ground vibration at local receptors, depending on the equipment and methods used, distance to the affected structures, and soil type. Ground-borne vibration levels resulting from typical construction activities occurring within the project site were estimated by data and methods published by Caltrans (2020). Ground vibration levels associated with various types of construction equipment are summarized in Table 5 (Caltrans 2020).

Table 5: Vibration Source Levels for Construction Equipment

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Loaded Trucks	0.076
Large bulldozer	0.089

Source: Caltrans 2020

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in Caltrans guidance (Caltrans 2020). The following equation is used to calculate Peak Particle Velocity (PPV) at any distance of interest from the operating construction equipment.

$$PPV_{rcvr} = PPV_{ref} * (25/D)^{1.5}$$

In the above equation, PPV_{rcvr} is the predicted vibration velocity at the receiver position, PPV_{ref} is the reference value at 25 feet from the vibration source (as listed in Table 7), and D is the actual horizontal distance to the receiver.

4.3 On-Site Operational Noise

The aggregate noise emission from outdoor-exposed sound sources has been predicted with the Datakustik CadnaA sound propagation program. CadnaA is a commercially available software program for the calculation, presentation, assessment, and prediction of environmental noise based on algorithms and reference data per International Organization of Standardization (ISO) Standard 9613-2, “Attenuation of Sound During Propagation Outdoors, Part 2: General Method of Calculation” (ISO 1996). The CadnaA computer software allows one to position sources of sound emission in a simulated three-dimensional (3-D) space having heights and footprints consistent with project architectural plans and elevations. In addition to the above-mentioned sound source inputs and building-block structures that define the three-dimensional sound propagation model space, the following assumptions and parameters are included in this CadnaA-supported stationary noise source assessment:

- Ground effect acoustical absorption coefficient equal to 0.5, which intends to represent an average or blending of ground covers that are characterized largely by hard reflective pavements and existing building surfaces across the project site and the surroundings;
- Reflection order of 1, which allows for a single reflection of sound paths on encountered structural surfaces such as the modeled building masses;
- Off-site residential structures and buildings have not been rendered in the model;
- Calm meteorological conditions (i.e., no wind) with 68 degrees Fahrenheit and 50% relative humidity; and
- All of the modeled noise sources are operating concurrently and continuously for a minimum period of 1 hour.

Noise prediction receivers were placed within the noise model, representing noise-sensitive receptors (i.e., multi-family residences), locations of key interest, and the locations of the noise monitoring sites used during the field survey. Noise prediction receivers are shown on Figure 4. Noise levels at the specified noise prediction receivers

are calculated as discussed above, based on the assessment methodologies and algorithms applicable to various noise sources discussed below (i.e., stationary/operational sources). In addition to computing sound levels at specific receiver locations, CadnaA was used to develop noise contours showing areas of equal and similar sound level (aka, isopleths). Noise contours generated by CadnaA are displayed in Figure 6.

4.4 Traffic Noise

Based upon the Institute of Transportation Engineers Trip Generation Manual (2021) a carwash facility generates approximately 78 peak hour trips (39 arriving and 39 departing). Applying this rate to the proposed project would result in an extremely conservative analysis, because most of the car wash customers are likely to have traveled to the site for gas, and then decide to remain for a carwash. Even using the conservative number of 78 peak hour trips, this contribution would represent less than a 5% increase in the traffic volumes on Jonh Daly Blvd. adjacent to the project site. Because a doubling of traffic would result in no more than a 3 dBA CNEL increase (which is a barely noticeable change in the ambient noise environment), a 5% increase in traffic levels would have no discernible increase in traffic noise. The project would therefore not result in discernible traffic noise increases at residential properties in the project vicinity.

4.5 Project Operational Vibration

Groundborne vibration impacts were qualitatively assessed based on existing reference documentation, through the application of Caltrans methodology outlined within the Transportation- and Construction- Induced Vibration Guidance Manual, and the relative distance to potentially sensitive receptors from a given vibration source.

5 Project Analysis

5.1 Construction Noise Assessment

With the noise sources identified in Section 4.1.1, a noise analysis was performed with a Microsoft Excel-based noise prediction model emulating and using reference data from the FHWA RCNM. Input variables consist of the receiver / land use types, the equipment type (i.e., backhoe, crane, truck, etc.), the number of equipment pieces, the duty cycle for each piece of equipment (i.e., percentage of each hour the equipment typically works), and the distance from the sensitive noise. Refer to Appendix C for the inputs used in the RCNM-based model, as well as results.

Noise-sensitive land uses in the vicinity of the Project include residences on properties to the southeast, south, and west of Project site. The closest off-site residences are located approximately 15 feet from the closest boundary of the proposed Project site (to the south and west); the second closest residence is located approximately 250 feet to the southeast. Therefore, the construction noise assessment is focused on noise levels that would occur at the distance of the closest off-site residences (i.e., at 15 feet and 250 feet), construction noise levels at greater distances from the site would be less. Using the provided construction information and the distance identified for the closest receivers, the RCNM-based construction noise model was used to predict noise from on-site construction activities. The results are summarized in Table 6 (see Appendix C for complete results).

Table 6. Construction Noise Levels Per Phase at Closest Residences

Task/Activity	Nearest Residence (15 Feet)		Second Nearest Residence (250 Feet)	
	L _{max}	Leq 8-hr	L _{max}	Leq 8-hr
Demolition	94.7	90.1	77.3	71.3
Site Preparation	93.9	89.8	73.3	69.3
Grading	93.7	89.7	74.0	70.1
Building Erection	92.7	86.1	72.7	68.0
Architectural Coating	88.5	84.5	64.0	60.0
Paving	89.8	85.8	71.2	66.7
Highest Noise Level All Phases	94.7	90.1	77.3	71.3

Daly City Noise Element, program NE-2 prohibits construction that creates excess noise disturbance across a residential property line from 8:00 a.m. to 5:00 p.m. Given that construction noise levels at the closest residence would be up to 25 dBA greater than measured daytime noise levels at the closest residence, construction at night would be anticipated to result in a noise disturbance at this and other vicinity residences. The project would therefore be required to adhere to a daily construction schedule of 8:00 a.m. to 5:00 p.m., in accordance with program NE-2.

With respect to the FTA recommended daytime 8-hour average of 80 dBA at vicinity residences, construction noise levels at the closest residences are predicted to reach an 8-hour average of approximately 90 dBA L_{eq} (also referred to as 90 dBA L_{eq} 8hr.) and would therefore exceed the FTA recommended limit. These noise levels are considered to be a peak exposure, applicable not more than 10-15% of the total construction period, only while the construction activity is taking place along the western or southern construction site boundary (i.e., closest to the nearest off-site receivers). The more typical construction noise levels experienced at the closest receivers (represented by the acoustic center for construction noise, or the distance from the center of the construction zone to the closest off-site receiver), would range from 68 to 80 dBA L_{eq} 8hr. and would therefore remain within the FTA recommended limits (refer to Appendix C). The construction noise levels at the next nearest residential receivers (southeast of the project across Poncetta Drive), would range from 60 to 71 dBA L_{eq} 8hr and would therefore remain comfortably below the recommended FTA limit.

With respect to 8-hour average construction noise levels at the closets residences while equipment is working along the common property boundary, noise levels could reach up to 90 dBA L_{eq} 8hr. With typical outdoor to indoor attenuation of 25 dBA for standard construction residential structures, interior noise levels at the closest residence during construction would be a maximum of approximately 65 dBA L_{eq} , which should not interfere with conversation or other daytime activities indoors. Therefore, construction noise levels even at the closest residences would not be considered significant temporary noise impact, especially with the prohibition against nighttime construction.

5.2 Construction Vibration Assessment

Using the vibration source level of construction equipment provided in Table 5, the distance to the closest sensitive receiver (i.e., residence), and the equation supplied in the Caltrans (2020) construction vibration assessment methodology (above), Dudek estimated the Project construction-related vibration impacts at the closest residence. The closest residence is at a distance of approximately 15 feet north from the Project site property line and future

construction zone boundary. Table 7 presents the results of the construction vibration assessment for the closest residence.

Table 7: Construction Vibration Levels at Closest Residence

Equipment	PPV (in/sec) at Nearest Residence (200 Feet)	Significance Threshold PPV (in/sec)	Significant ?
Small bulldozer	0.006	0.24	No
Loaded Trucks	0.16		No
Large bulldozer	0.19		No

As illustrated in Table 7, project construction-related vibration levels at the residence closest to the project would in all cases remain below significance threshold for human annoyance (0.24 PPV in/sec). The threshold for structural damage to typical residential structures is even higher (0.5 PPV in/sec). As such, project construction would have no potential to cause structural damage to the closest residences, or to result in annoyance for the occupants of such residences.

5.3 Long-Term Operational Noise Sources

5.3.1 Off-Site Roadway Traffic Noise

As discussed above under methodology, the project trip generation would represent less than a 5% increase in the traffic volumes on Jonh Daly Blvd. adjacent to the project site. Because a doubling of traffic would result in no more than a 3 dBA CNEL increase (which is a barely noticeable change in the ambient noise environment), a 5% increase in traffic levels would have no discernible increase in traffic noise. The project would therefore not result in discernible traffic noise increases at residential properties in the project vicinity.

5.3.2 Gas Station, Convenience Store, and Car Wash

The proposed project is expected to feature “stationary” producers of noise associated with onsite operations that are distinct from the transportation noise studied in the preceding section. The assumed major onsite operating noise sources are as follows:

- The 2,304 square foot convenience store would likely feature a set of packaged air-conditioners or refrigeration units on its roof, which one could assume might feature five 5-ton air-cooled condensing units that each resemble a Bryant BH16-060 (Bryant 2017) or comparable model and thus having a reference sound power level of 79.3 dBA. These rooftop HVAC units would also operate during some or all nighttime hours.
- An approximately 911 square-foot car wash. Sound sources include:
 - The three car wash tunnel exit air dryers (blowers) exhibit a total of approximately 97.3 dBA sound power level.

- Five (5) idling vehicles queued up for the car-wash and one (1) idling vehicle at the car-wash exit. Conservatively, a vehicle is considered idling with an overall sound power level of 85 dBA. Four (4) additional vehicles are idling in parking stalls near the proposed convenience store, with a 3 dB attenuation to account for half of the vehicles being off and empty.
- Up to four (4) fuel pumps operate during the day for no more than 20 minutes in any hour (33% of the time), and each generates no more than 80 dBA sound power level.
- A self-service vacuum unit, exhibiting 77 dBA sound power level.

A masonry wall segment located adjacent to the car wash tunnel structure exit and situated on the southwestern property boundary was also included in the model to assist in achieving applicable Daly City noise element limits. The wall was modeled to have 7 feet height. Figure 5 provides a visual representation of the masonry wall location.

Table 8 compares the predicted aggregate proposed project operation noise emission levels (i.e., at the modeled receptor locations appearing in Figure 4) with the applicable Daly City noise element thresholds. It should be noted that the sound model predicts noise levels from simultaneous operation of all mechanical equipment on the site, for a continuous period over a complete hour of operation. Reported sound levels are therefore in units of hourly average L_{eq} . The hours of operation for the carwash are proposed to be from 7 AM to 9 PM daily.

Figure 6 displays predicted hourly L_{eq} levels from project stationary sources out to a modeled calculation boundary. Appendix E, Operational Noise Model Input and Output Data, provides details of the calculated values appearing in Table 8.

Table 8. Predicted Project Stationary Operations Noise at Nearest Sensitive Receptors

Evaluated Quantity	Modeled Nearest Noise-Sensitive Receptors				
	M1	M2	M3	M4	M4 W/ 7 ft Barrier
Predicted Stationary Ops Noise Level (hourly L_{eq})	43	34	45	80	67.4
Predicted Stationary Ops Noise Level (CNEL)	42.5	33.5	44.5	78.5	66.9
Exceedance?	No	No	No	yes	No

1 Calculated using data results in appendix D and Appendix E

In accordance with Policy NE-5 outlined in the Daly City Noise Element, the CNEL limit for residential zones must consistently remain below 70 CNEL. The CNEL value at M4 with no included walls or noise barriers would be 78.5 dBA, exceeding the established noise element limit. Nevertheless, the installation of a 7-foot barrier along the southwest corner of the property would result in sound levels at M4 decreasing to 66.9 CNEL dBA, thereby falling below the noise element limit.

Under these conservative sound modeling conditions (such as all gas station pumps in use, four [4] convenience store parking spaces occupied by idling vehicles, the self-service vacuum and air compressor in operation, and a full queue of cars waiting to use the car-wash), no exceedances with respect to the noise element limits (i.e., no predicted noise level greater than the threshold for the analyzed land use as shown in Table 8) are expected; thus,

with incorporation of the recommended noise barrier wall at the carwash exit, operational noise impact from stationary sources would be **less than significant**.

5.4 Long-term Operational Groundborne Noise and Vibration

The proposed project does not incorporate any project elements that would generate substantial groundborne noise and vibration levels during its long-term operation. Therefore, this potential environmental impact would be **less than significant**.

6 References

- Caltrans (California Department of Transportation). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. Prepared by R. Hendriks, B. Rymer, D. Buehler, and J. Andrews. Sacramento: Caltrans. April 2020.
- Caltrans. 2020a. *Traffic Noise Analysis Protocol, for New Highway Construction, Reconstruction Projects, and Retrofit Barrier Projects*. Sacramento: Caltrans. April 2020.
- Caltrans. 2020b. *Transportation and Construction Vibration Guidance Manual*. Prepared by J. Andrews, D. Buehler, H. Gill, and W.L. Bender. Sacramento: Caltrans. April 2020.
- Guyer, Paul J. An Introduction to Sound Level Data for Mechanical and Electrical Equipment. 2013. <https://www.cedengineering.com/userfiles/An%20Introduction%20to%20Sound%20Level%20Data%20for%20Mech%20&%20Elec%20Equip%20R1.pdf>
- DOT (U.S. Department of Transportation). 2006. FHWA Roadway Construction Noise Model: User's Guide. Final Report. FHWA-HEP-06-015. DOT-VNTSC-FHWA-06-02. Cambridge, Massachusetts: DOT, Research and Innovative Technology Administration. August 2006.
- FHWA. 2008. Roadway Construction Noise Model, Software Version 1.1. U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Environmental Measurement and Modeling Division. December 8, 2008.
- FTA (Federal Transit Administration). 2018. *Transit Noise and Vibration Impact Assessment Manual*. Prepared by John A. Volpe National Transportation Systems Center. Washington, DC: FTA. September 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.
- Institute of Transportation Engineers (ITE). 2017. *Trip Generation Manual*, 10th Edition. September 2017.
- International Organization of Standardization (ISO). 1996. Standard 9613-2 (Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation). Geneva.



SOURCE: Google 2023; Dudek 2023



0 59.5 119 Feet

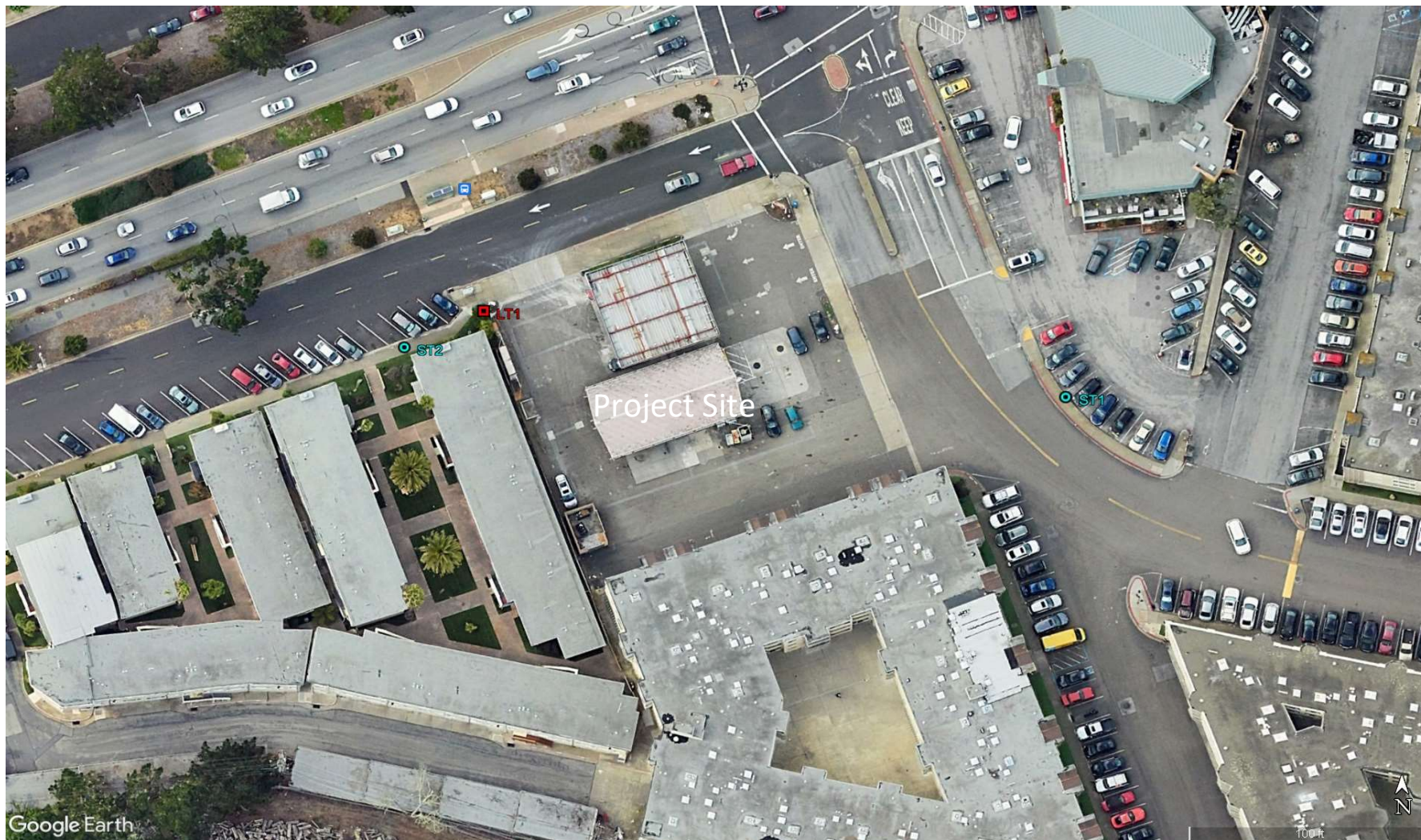
FIGURE 1
Project Location

101 South Mayfair Gas Station Car Wash Project



DUDEK

101 South Mayfair Gas Station Car Wash Project



SOURCE: Google 2023; Dudek 2023

DUDEK

Legend

LT# - Long-term Measurement Location

ST# - Short-term Measurement Location

FIGURE 3
Noise Measurement Locations

101 South Mayfair Gas Station Car Wash Project



FIGURE 4

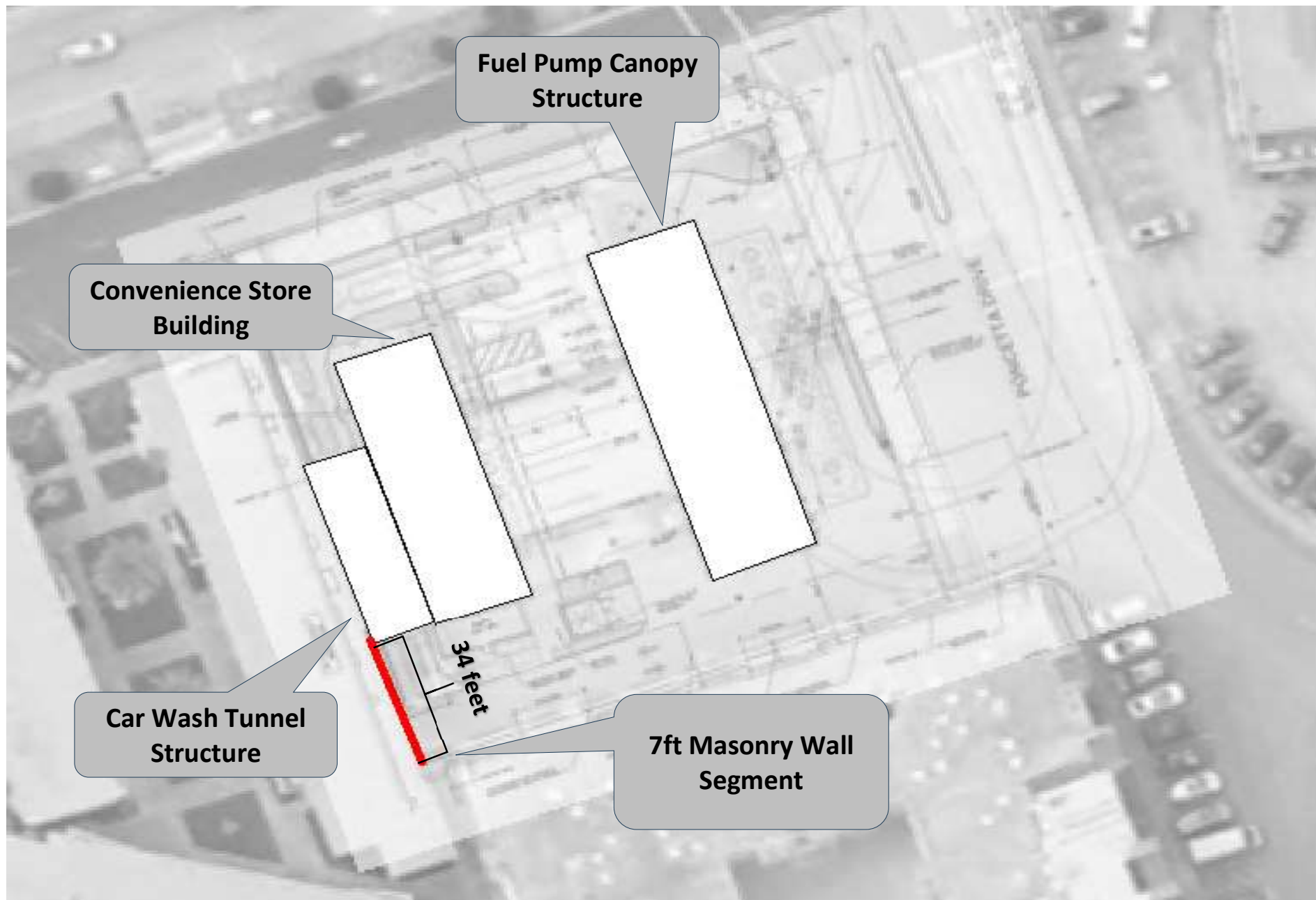
SOURCE: Google 2023; Dudek 2023

DUDEK

0 39.5 79 Feet

Noise Prediction Receiver Locations

101 South Mayfair Gas Station Car Wash Project



SOURCE: Google 2023; Dudek 2023

FIGURE 5

Recommended Masonry Wall Segment Heights and Lengths

101 South Mayfair Gas Station Car Wash Project



SOURCE: Dudek 2022

DUDEK



0 59.5 119 Feet

FIGURE 6
Predicted Onsite Operations Noise Contours
 101 South Mayfair Gas Station Car Wash Project

Appendix A

Acoustic Fundamentals

Appendix A – Acoustic Fundamentals

FUNDAMENTALS OF SOUND

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (SPL, referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 20,000 Hz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called “A” weighting is typically used for quieter noise levels which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the “noise level” and is referenced in units of dBA.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear. Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily noticeable. The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (e.g., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual’s noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources, such as traffic volume, as well as changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening hours when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. In order to evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed “community noise equivalent level” (CNEL) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence. A complete definition of CNEL and other terminology used to describe noise is provided in the following list.

Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
A-Weighted Sound Level (dBA)	The sound pressure level (SPL) in decibels as measured on a sound level meter (SLM) using the A-weighted filter network, which de-emphasizes the very low and very high frequency components of the measured sound in a manner similar to the frequency response of the average healthy human ear.
Background Sound Level	The amalgam of sounds from indistinct and/or distant sources (e.g., roadway traffic, residential HVAC systems, etc.) that are not nearby or are otherwise the focus of study.
Decibel (dB)	The unit for expressing SPL and is equal to 10 times the logarithm (to the base 10) of the ratio of the measured sound pressure squared to a reference pressure, which is 20 micropascals.
Equivalent Sound Level ($L_{eq[xh]}$)	The value corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. The L_{eq} may feature notation in its subscript indicating the

	time period (e.g., eight hours as “8h” to populate “[Xh]”) of energy averaging.
Octave Band Center Frequency (OBCF)	Commonly discussed octave frequency bands are: 31.5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz and 16 kHz. Each of these “center frequencies” represents an octave band defined by a lower band limit equal to 0.707 times the center frequency, and an upper band limit equal to 1.414 times the center frequency.
Sound Transmission Loss (TL)	The amount of sound, in decibels (dB), that is isolated by a material or partition in a particular OBCF or 1/3-OBCF. Example: 1/2” drywall has a TL at 125 Hz of 15 dB.
Sound Transmission Class (STC)	A single-number rating that can be used to conveniently compare, acoustical isolation properties of different materials or assemblies. Generally, higher numbers indicate a material will provide more sound insulation when used as a barrier. Plotted against standardized STC curves, with established curve-fit tolerances, the TL of a material (in dB) at 500 Hz serves as the STC rating.
Statistical Sound Level (L_{xx})	A sound level exceed for a cumulative XX percentage of time within a defined measurement period. The L50 (“L-fifty”) value is thus often called the “median” sound level; and the L90 (“L-ninety”) value is a dB level exceed 90% of the measurement period and hence typically used to evaluate specific continuous or steady-state sound sources, or describe the background sound level (see above definition).

EXTERIOR NOISE DISTANCE ATTENUATION

Noise sources are typically classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically “hard” sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically “soft” sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of sound attenuation discussion, a “hard” or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically “soft” or absorptive site is characteristic of unpaved loose soil or vegetated ground.

FUNDAMENTALS OF VIBRATION

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. The response of humans to vibration is very complex. However, it is generally accepted that human response is best approximated by the vibration velocity level associated with the vibration occurrence.

When evaluating human response, ground-borne vibration is usually expressed in terms of root mean square (RMS) vibration velocity. RMS is defined as the average of the squared amplitude of the vibration signal. As for sound, it is common to express vibration amplitudes in terms of decibels defined as: $L_v = 20 \cdot \text{LOG}(v_{rms}/v_{ref})$ where v_{rms} is the RMS vibration velocity amplitude in inches/second and v_{ref} is the decibel reference of 1×10^{-6} inches/second (0.000001 ips).

Appendix B

Noise Measurement Data

FIELD NOISE MEASUREMENT DATA

PROJECT	101 SOUTH MAY FAIR GAS/CHAMBERS		PROJECT #	15766
SITE ID	ST1			
SITE ADDRESS	PONCETTA DRIVE		OBSERVER(S)	JVL
START DATE	12/13/23	END DATE	12/13/23	
START TIME	4:56	END TIME	5:06	

METEOROLOGICAL CONDITIONS

TEMP 42 F HUMIDITY 61 % R.H. WIND CALM LIGHT MODERATE
 WINDSPD 7 MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
 SKY SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT SOFTC3 PICOLO II TYPE 1 2 SERIAL # 3104
 CALIBRATOR REBO R-8090 SERIAL # 6321
 CALIBRATION CHECK PRE-TEST 94.0 dBA SPL POST-TEST 94.0 dBA SPL WINDSCRN X

SETTINGS

A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: _____

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)
<u>29</u>	<u>4:56</u>	<u>5:06</u>	<u>62.1</u>	<u>76.0</u>	<u>53.9</u>	<u>56.3</u>	<u>60.0</u>	<u>65.1</u>	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE PONCETTA DR. TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: _____

ROADWAY TYPE: ARTERIAL DIST. TO RDWY C/L OR EOP: 3 FEET

TRAFFIC COUNT DURATION: _____ MIN		SPEED _____ MIN		SPEED _____ MIN		SPEED _____ MIN	
DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB
AUTOS	<u>57</u>						
MED TRKS	<u>0</u>						
HVY TRKS	<u>0</u>						
BUSES	<u>0</u>						
MOTRCLS	<u>0</u>						

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE

POSTED SPEED LIMIT SIGNS SAY: 45

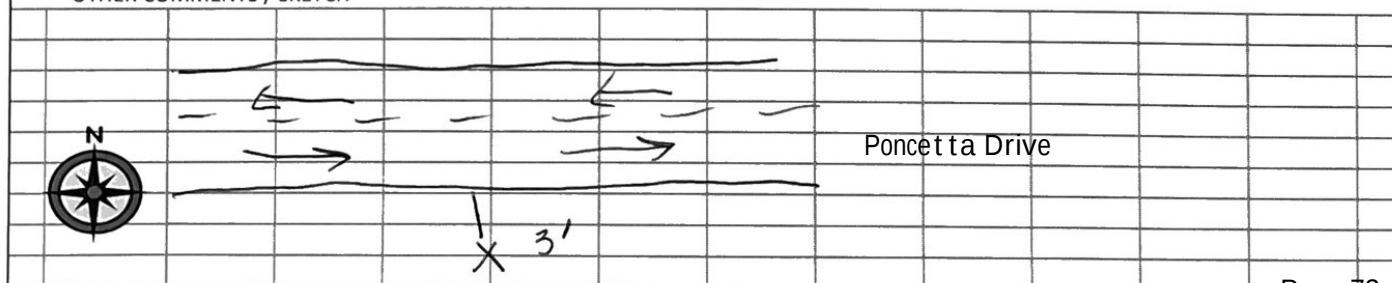
OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
 DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
 OTHER: _____

DESCRIPTION / SKETCH

TERRAIN HARD SOFT MIXED FLAT OTHER: _____

PHOTOS _____

OTHER COMMENTS / SKETCH _____



FIELD NOISE MEASUREMENT DATA

PROJECT	101 SOUTH MAYFAIR GAS/CARWASH		PROJECT #	157666
SITE ID	ST2			
SITE ADDRESS	S. MAYFAIR AVE / JOHN DALY BLVD.		OBSERVER(S)	JVL
START DATE	12/13/23	END DATE	12/13/23	
START TIME	5:10	END TIME	5:15	

METEOROLOGICAL CONDITIONS

TEMP 102 F HUMIDITY 61 % R.H. WIND CALM LIGHT MODERATE
 WINDSPD 7 MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
 SKY SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT SOFTC B Piccolo II TYPE 1 (2) SERIAL # 3104
 CALIBRATOR REED R-8090 SERIAL # 6321
 CALIBRATION CHECK PRE-TEST 94.0 dBA SPL POST-TEST 94.0 dBA SPL WINDSCRN X

SETTINGS

A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: _____

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)
<u>30</u>	<u>5:10</u>	<u>5:15</u>	<u>64.9</u>	<u>78.1</u>	<u>56.0</u>	<u>59.0</u>	<u>64.2</u>	<u>61.2</u>	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE ROADWAY TYPE: COLLECTOR TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: 4 FEET
 DIST. TO RDWY C/L OR EOP: 4 FEET
 TRAFFIC COUNT DURATION: _____ MIN SPEED _____ MIN SPEED _____

COUNT 1 (OR RDWY 1)	DIRECTION		MIN	SPEED	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	DIRECTION		MIN	SPEED
	NB/EB	SB/WB					NB/EB	SB/WB		
AUTOS	<u>268</u>				<u>X</u>					
MED TRKS	<u>0</u>									
HVY TRKS	<u>0</u>									
BUSES	<u>1</u>									
MOTRCLS	<u>0</u>									

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE

POSTED SPEED LIMIT SIGNS SAY: 30

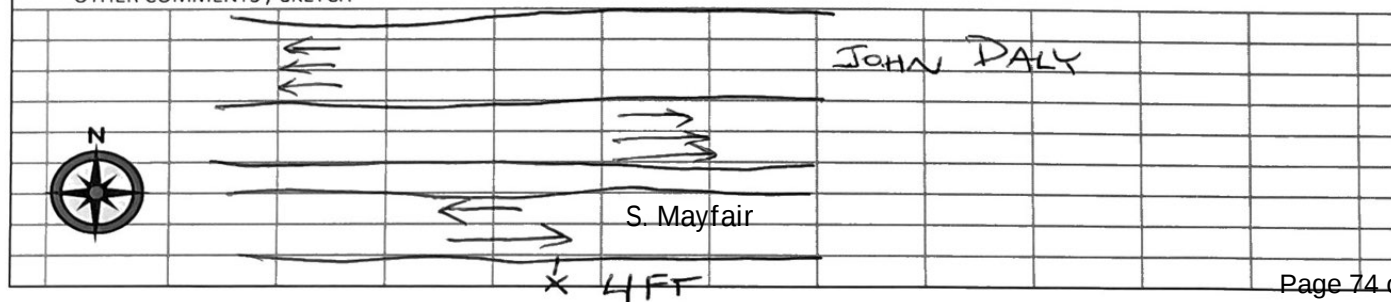
OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
 DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
 OTHER: _____

DESCRIPTION / SKETCH

TERRAIN HARD SOFT MIXED FLAT OTHER: _____

PHOTOS _____

OTHER COMMENTS / SKETCH



Number	Start Date	Start Time	End Time	SPL Time Weight	Freq Weight	Leq	Lmax	Lmin	L10	L50	L90	L95
Location ST1												
29	12/13/2023	4:56:00 PM	5:06:00 PM	Slow	dBA	62.1	76.0	53.9	65.1	60.0	56.3	55.4
Number	Start Date	Start Time	End Time	SPL Time Weight	Freq Weight	LAeq	LAmx	LAmn	LApk	L50	L90	L95
Location ST2												
30	10/5/2022	5:10:00 PM	5:15:00 PM	Slow	dBA	64.9	78.1	56.0	67.2	64.2	59.0	58.1

Start Date	Start Time	End Time	SPL Time Weight	Freq Weight	Leq	Lmax	Lmin	L10	L50	L90	L95
12/12/2023	4:00:02 PM	5:00:00 PM	Slow	dB(A)	67.3	89.8	53.5	67.9	64.1	58.2	57.3
12/12/2023	5:00:02 PM	6:00:00 PM	Slow	dB(A)	64.5	83.5	53.0	66.8	63.2	57.6	56.6
12/12/2023	6:00:02 PM	7:00:00 PM	Slow	dB(A)	64.7	81.9	53.3	67.1	63.4	57.9	56.8
12/12/2023	7:00:02 PM	8:00:00 PM	Slow	dB(A)	63.8	76.6	52.1	66.6	62.4	56.6	55.5
12/12/2023	8:00:02 PM	9:00:00 PM	Slow	dB(A)	64.1	86.5	52.0	66.3	62.6	57.0	55.9
12/12/2023	9:00:02 PM	10:00:00 PM	Slow	dB(A)	64.2	82.7	51.1	66.3	61.5	56.3	55.2
12/12/2023	10:00:02 PM	11:00:00 PM	Slow	dB(A)	62.8	86.3	49.7	65.3	60.2	54.7	53.4
12/12/2023	11:00:02 PM	12:00:00 AM	Slow	dB(A)	61.7	81.5	48.4	64.4	58.7	52.6	51.3
12/13/2023	12:00:02 AM	1:00:00 AM	Slow	dB(A)	59.4	73.4	44.2	63.0	56.4	49.0	47.7
12/13/2023	1:00:02 AM	2:00:00 AM	Slow	dB(A)	57.5	75.2	42.8	61.3	53.2	46.5	45.3
12/13/2023	2:00:02 AM	3:00:00 AM	Slow	dB(A)	56.3	70.7	41.8	60.4	52.3	44.0	43.0
12/13/2023	3:00:02 AM	4:00:00 AM	Slow	dB(A)	57.0	75.9	41.7	60.5	51.3	44.7	43.9
12/13/2023	4:00:02 AM	5:00:00 AM	Slow	dB(A)	59.8	75.8	47.1	63.4	56.2	50.1	49.0
12/13/2023	5:00:02 AM	6:00:00 AM	Slow	dB(A)	63.3	82.4	51.5	66.2	60.4	55.4	54.2
12/13/2023	6:00:02 AM	7:00:00 AM	Slow	dB(A)	65.9	83.9	56.2	68.3	64.1	61.1	60.1
12/13/2023	7:00:02 AM	8:00:00 AM	Slow	dB(A)	66.6	81.9	56.1	69.2	64.9	60.8	59.8
12/13/2023	8:00:02 AM	9:00:00 AM	Slow	dB(A)	68.7	94.5	57.2	69.7	65.4	60.7	60.0
12/13/2023	9:00:02 AM	10:00:00 AM	Slow	dB(A)	66.0	84.5	55.7	68.4	64.0	58.9	58.1
12/13/2023	10:00:02 AM	11:00:00 AM	Slow	dB(A)	64.5	81.6	54.6	67.4	62.9	58.1	57.4
12/13/2023	11:00:02 AM	12:00:00 PM	Slow	dB(A)	66.5	88.2	54.3	68.4	63.9	58.6	57.6
12/13/2023	12:00:02 PM	1:00:00 PM	Slow	dB(A)	66.9	92.2	54.5	67.4	63.4	58.2	57.4
12/13/2023	1:00:02 PM	2:00:00 PM	Slow	dB(A)	66.0	90.1	54.5	67.5	63.5	58.9	58.2
12/13/2023	2:00:02 PM	3:00:00 PM	Slow	dB(A)	65.7	87.9	52.6	67.2	63.7	57.8	56.7
12/13/2023	3:00:02 PM	4:00:00 PM	Slow	dB(A)	66.5	92.3	52.9	67.4	63.6	57.4	56.5
Daytime Hourly L _{eq} Range (7 AM - 10 PM):						64 - 78 dBA					
Nighttime Hourly L _{eq} Range (10 PM - 7 AM):						60 - 66 dBA					
L _{dn}						71 dBA					

Appendix C

Construction Noise Model Input and Output Data

Noise level limit for construction phase at residential land use, per FTA guidance = 80

Averaging Period (in hours): 8

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Lmax @ 50 ft. for quantify of equipment	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Demolition	dozer	1	40	82	82.0	15	92.5	8	480	88
	backhoe	3	40	78	82.8	35	85.9	8	480	82
	concrete saw	1	20	90	90.0	55	89.2	8	480	82
					Total Lmax for phase:		94.7	Total Leq 8hr for phase:		90.1
Site Preparation	dozer	1	40	82	82.0	15	92.5	8	480	88
	grader	1	40	85	85.0	35	88.1	8	480	84
	backhoe	1	40	78	78.0	55	77.2	8	480	73
					Total Lmax for phase:		93.9	Total Leq 8hr for phase:		89.9
Grading	dozer	1	40	82	82.0	15	92.5	8	480	88
	front end loader	2	40	79	82.0	35	85.1	8	480	81
	grader	1	40	85	85.0	55	84.2	8	480	80
					Total Lmax for phase:		93.7	Total Leq 8hr for phase:		89.7
Building Erection	crane	1	16	81	81.0	15	91.5	8	480	83
	gradall	1	40	83	83.0	35	86.1	8	480	82
	generator	1	50	72	72.0	55	71.2	8	480	68
	backhoe	1	40	78	78.0	75	74.5	8	480	70
	welder / torch	3	40	73	77.8	95	72.2	8	480	68
					Total Lmax for phase:		92.7	Total Leq 8hr for phase:		86.1
Architectural Coating	compressor (air)	1	40	78	78.0	15	88.5	8	480	84
					Total Lmax for phase:		88.5	Total Leq 8hr for phase:		84.5
Paving	backhoe	1	40	78	78.0	15	88.5	8	480	84
	concrete mixer truck	1	40	79	79.0	35	82.1	8	480	78
	Paver	1	50	77	77.0	55	76.2	8	480	73
	Roller	1	20	80	80.0	75	76.5	8	480	69
	Dump Truck	1	40	76	76.0	95	70.4	8	480	66
					Total Lmax for phase:		89.8	Total Leq 8hr for phase:		85.8

Noise level limit for construction phase at residential land use, per FTA guidance = 80

Averaging Period (in hours): 8

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Lmax @ 50 ft. for quantify of equipment	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Demolition	dozer	1	40	82	82.0	95	76.4	1	480	72
	backhoe	3	40	78	82.8	95	77.2	1	480	73
	concrete saw	1	20	90	90.0	95	84.4	1	480	77
					Total Lmax for phase:		85.7	Total Leq 8hr for phase:		79.7
Site Preparation	dozer	1	40	82	82.0	95	76.4	1	480	72
	grader	1	40	85	85.0	95	79.4	1	480	75
	backhoe	1	40	78	78.0	95	72.4	1	480	68
					Total Lmax for phase:		81.7	Total Leq 8hr for phase:		77.8
Grading	dozer	1	40	82	82.0	95	76.4	1	480	72
	front end loader	2	40	79	82.0	95	76.4	1	480	72
	grader	1	40	85	85.0	95	79.4	1	480	75
					Total Lmax for phase:		82.4	Total Leq 8hr for phase:		78.5
Building Erection	crane	1	16	81	81.0	95	75.4	1	480	67
	gradall	1	40	83	83.0	95	77.4	1	480	73
	generator	1	50	72	72.0	95	66.4	1	480	63
	backhoe	1	40	78	78.0	95	72.4	1	480	68
	welder / torch	3	40	73	77.8	95	72.2	1	480	68
					Total Lmax for phase:		81.1	Total Leq 8hr for phase:		76.4
Architectural Coating	compressor (air)	1	40	78	78.0	95	72.4	1	480	68
					Total Lmax for phase:		72.4	Total Leq 8hr for phase:		68.4
Paving	backhoe	1	40	78	78.0	95	72.4	1	480	68
	concrete mixer truck	1	40	79	79.0	95	73.4	1	480	69
	Paver	1	50	77	77.0	95	71.4	1	480	68
	Roller	1	20	80	80.0	95	74.4	1	480	67
	Dump Truck	1	40	76	76.0	95	70.4	1	480	66
					Total Lmax for phase:		79.6	Total Leq 8hr for phase:		75.1

Noise level limit for construction phase at residential land use, per FTA guidance = 80

Averaging Period (in hours): 8

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Lmax @ 50 ft. for quantify of equipment	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Demolition	dozer	1	40	82	82.0	300	66.4	1	480	62
	backhoe	3	40	78	82.8	300	67.2	1	480	63
	concrete saw	1	20	90	90.0	300	74.4	1	480	67
					Total Lmax for phase:		75.7	Total Leq 8hr for phase:		69.7
Site Preparation	dozer	1	40	82	82.0	300	66.4	1	480	62
	grader	1	40	85	85.0	300	69.4	1	480	65
	backhoe	1	40	78	78.0	300	62.4	1	480	58
					Total Lmax for phase:		71.7	Total Leq 8hr for phase:		67.8
Grading	dozer	1	40	82	82.0	300	66.4	1	480	62
	front end loader	2	40	79	82.0	300	66.4	1	480	62
	grader	1	40	85	85.0	300	69.4	1	480	65
					Total Lmax for phase:		72.5	Total Leq 8hr for phase:		68.5
Building Erection	crane	1	16	81	81.0	300	65.4	1	480	57
	gradall	1	40	83	83.0	300	67.4	1	480	63
	generator	1	50	72	72.0	300	56.4	1	480	53
	backhoe	1	40	78	78.0	300	62.4	1	480	58
	welder / torch	3	40	73	77.8	300	62.2	1	480	58
					Total Lmax for phase:		71.1	Total Leq 8hr for phase:		66.4
Architectural Coating	compressor (air)	1	40	78	78.0	300	62.4	1	480	58
					Total Lmax for phase:		62.4	Total Leq 8hr for phase:		58.5
Paving	backhoe	1	40	78	78.0	300	62.4	1	480	58
	concrete mixer truck	1	40	79	79.0	300	63.4	1	480	59
	Paver	1	50	77	77.0	300	61.4	1	480	58
	Roller	1	20	80	80.0	300	64.4	1	480	57
	Dump Truck	1	40	76	76.0	300	60.4	1	480	56
					Total Lmax for phase:		69.7	Total Leq 8hr for phase:		65.2

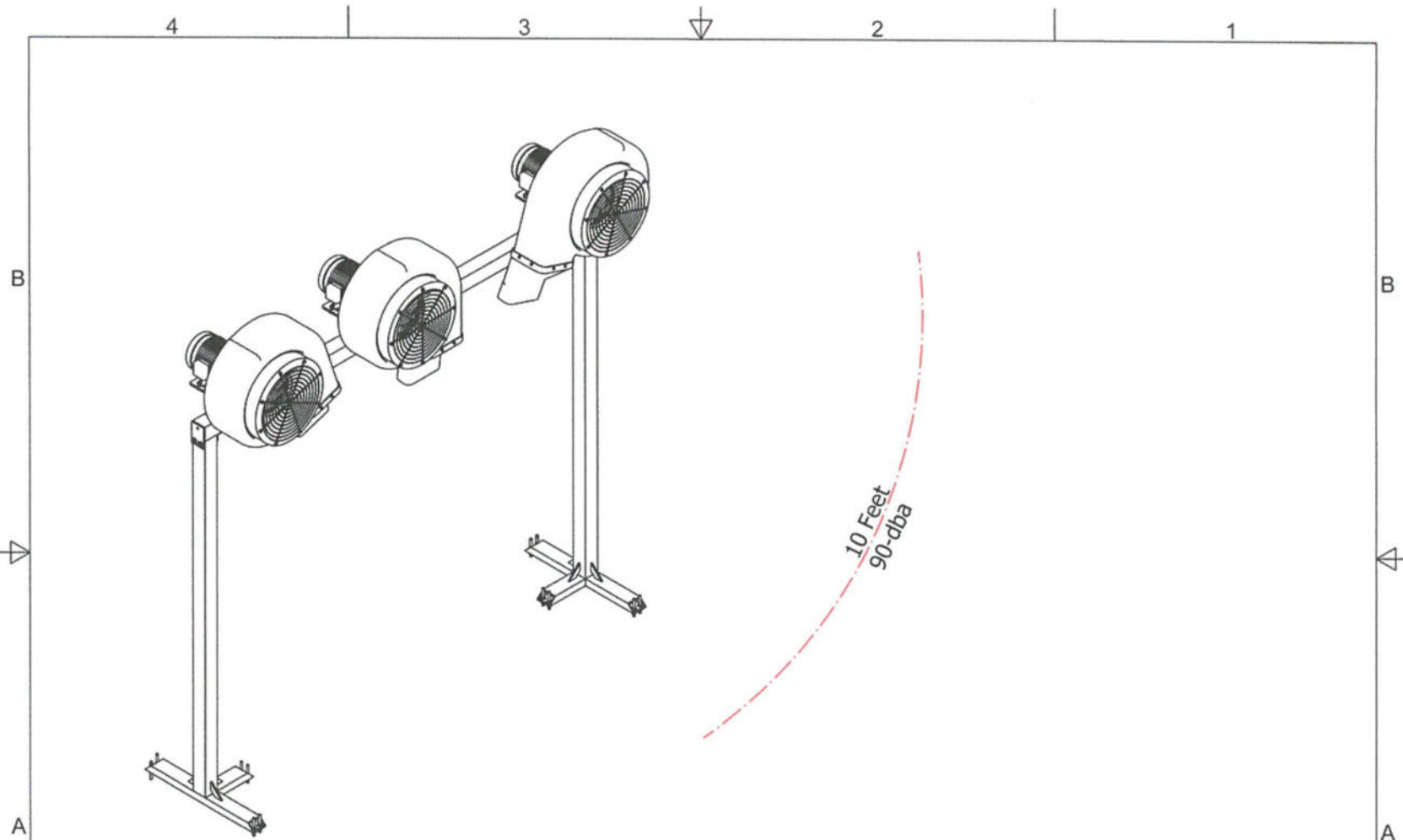
Noise level limit for construction phase at residential land use, per FTA guidance = 80

Averaging Period (in hours): 8

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Lmax @ 50 ft. for quantify of equipment	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Demolition	dozer	1	40	82	82.0	250	68.0	1	480	64
	backhoe	3	40	78	82.8	250	68.8	1	480	65
	concrete saw	1	20	90	90.0	250	76.0	1	480	69
					Total Lmax for phase:		77.3	Total Leq 8hr for phase:		71.3
Site Preparation	dozer	1	40	82	82.0	250	68.0	1	480	64
	grader	1	40	85	85.0	250	71.0	1	480	67
	backhoe	1	40	78	78.0	250	64.0	1	480	60
					Total Lmax for phase:		73.3	Total Leq 8hr for phase:		69.3
Grading	dozer	1	40	82	82.0	250	68.0	1	480	64
	front end loader	2	40	79	82.0	250	68.0	1	480	64
	grader	1	40	85	85.0	250	71.0	1	480	67
					Total Lmax for phase:		74.0	Total Leq 8hr for phase:		70.1
Building Erection	crane	1	16	81	81.0	250	67.0	1	480	59
	gradall	1	40	83	83.0	250	69.0	1	480	65
	generator	1	50	72	72.0	250	58.0	1	480	55
	backhoe	1	40	78	78.0	250	64.0	1	480	60
	welder / torch	3	40	73	77.8	250	63.8	1	480	60
					Total Lmax for phase:		72.7	Total Leq 8hr for phase:		68.0
Architectural Coating	compressor (air)	1	40	78	78.0	250	64.0	1	480	60
					Total Lmax for phase:		64.0	Total Leq 8hr for phase:		60.0
Paving	backhoe	1	40	78	78.0	250	64.0	1	480	60
	concrete mixer truck	1	40	79	79.0	250	65.0	1	480	61
	Paver	1	50	77	77.0	250	63.0	1	480	60
	Roller	1	20	80	80.0	250	66.0	1	480	59
	Dump Truck	1	40	76	76.0	250	62.0	1	480	58
					Total Lmax for phase:		71.2	Total Leq 8hr for phase:		66.7

Appendix D

Manufacturer Reference Noise Level Data



MATERIAL	 THIRD ANGLE PROJECTION BREAK ALL SHARP CORNERS PART TO BE FREE OF BURRS UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES	MACHINING TOLERANCES FRACTIONS 1/16" XX DECIMAL ± 0.030 XXX DECIMAL ± 0.005 ANGULARITY ± 2° FINISH 125	DRAWN LVerdecia APPROVED CATEGORY BLOWER THIS SHEET CONTAINS CONFIDENTIAL INFORMATION. IMAGES AND TRADE SECRETS OF SONNY'S ENTERPRISES, INC. ANY UNAUTHORIZED USE OR DISCLOSURE OF ANY PORTION THEREOF IS STRICTLY PROHIBITED. THIS WORK IS THE EXCLUSIVE PROPERTY OF SONNY'S ENTERPRISES, INC. ALL RIGHTS RESERVED.	SONNY'S ENTERPRISES THE CARWASH FACTORY		
				8/26/2011 8/1/2012		
				DESCRIPTION BLOWER ASSEMBLY, ONE ARCH 45HP		
				PART NUMBER BL1-45HP-1		
				SHEET 2 OF 2	SIZE A	SCALE N.T.S.

JE Adams Vacuum Reference Noise Level Data



9209

2 Motor Vac - Small Dome															
Wide Open With Attachment	Distance From Vac in Feet														
	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Sound Level (dB)	76.4	70.4	66.9	64.4	62.4	60.9	59.5	58.4	57.3	56.4	55.6	54.8	54.1	53.5	52.9
Sealed Attachment	Distance From Vac in Feet														
	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Sound Level (dB)	80.5	74.5	71.0	68.5	66.5	64.9	63.6	62.4	61.4	60.5	59.7	58.9	58.2	57.6	57.0
Attachment Removed	Distance From Vac in Feet														
	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Sound Level (dB)	74.5	68.5	65.0	62.5	60.6	59.0	57.6	56.5	55.4	54.5	53.7	52.9	52.3	51.6	51.0

Appendix E

Operational Noise Model Input and Output Data

	Sum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
dB	94.57587	92.74756	86.65056	83.18156	80.78355	80.55055	77.35056	72.57956	69.65855
dB(A)	85.01097	66.54756	70.55056	74.58156	77.58356	80.55055	78.55055	73.57956	68.55856

Car, no-load/ ground run

Original title:"Pkw, Standlauf"

A-weighted sound power level, related to a continuous work

Source type: point
Height of emission: 0,5 m
Reference spectrum: traffic noise

Particularly it is pointed out that the emission data do not include adjustment values for special noise characteristics in accordance with OENORM S 5004 like impulsiveness and tonality.

Source:
forum SCHALL, Emissionsdatenkatalog, August 2016

Last updated 23-10-2017