



PLANNING COMMISSION

AGENDA REPORT

MEETING DATE: APRIL 27, 2015

ITEM NUMBER: PH-4

SUBJECT: PLANNING APPLICATION PA-15-11 FOR A CONDITIONAL USE PERMIT TO CONSTRUCT A HYDROGEN DISPENSING STATION ON A LOT WITH AN EXISTING GAS STATION, SMOG SERVICE BAY, AND CONVENIENCE STORE WITH A VARIANCE TO ALLOW COMPACT PARKING STALLS 2050 HARBOR BLVD

DATE: APRIL 20, 2015

FROM: PLANNING DIVISION/DEVELOPMENT SERVICES DEPARTMENT

PRESENTATION BY: DANIEL INLOES, ASSOCIATE PLANNER

**FOR FURTHER INFORMATION CONTACT: DANIEL INLOES (714) 754-5088
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DESCRIPTION

The proposed project involves the following:

1. A Conditional Use Permit to allow for the construction of a hydrogen fuel dispensing station on a lot with an existing gas station. The Conditional Use Permit also involves the consolidation of an existing CUP under Planning Application PA-98-95 for the gas station, smog check, and convenience store; and
2. Variance to allow deviation for compact parking spaces (6 standard spaces required; 8 spaces proposed inclusive of 3 compact stalls).

APPLICANT

The applicant is Sean Scully (Black & Veatch), authorized agent for the property owner, Superior Station Inc.

RECOMMENDATION

Adopt resolution to approve the project, subject to conditions.

PLANNING APPLICATION SUMMARY

Location: 2050 Harbor Blvd
 APN 419-191-01

Application Number: PA-15-11

Request: Add a hydrogen fueling dispensing station.

SUBJECT PROPERTY:

Zone: C1
 General Plan: General Commercial
 Lot Dimensions: Approx. 130.83' x 125'
 Lot Area: 16,183 SF
 Existing Development: Gasoline service station with SMOG Check Service Bay and Convenience Store.

SURROUNDING PROPERTY:

North: Motor Vehicle Retail- General Commercial
 South: Rental Vehicle Services – General Commercial
 East: Auto Service Repair Shops – General Commercial
 West: Auto Service and Retail –General Commercial

DEVELOPMENT STANDARD COMPARISON

C1	Required/Allowed	Proposed/Provided
Minimum Lot Area	12,000	16,183
Minimum Lot Width	120	130.83
Maximum Floor Area Ratio (High Traffic)	.20 (2,520 SF)	.10 (1,210+448=1658)
Maximum Building/Structure Height	2 stories/30 ft.	Existing Bldg -1 story/18 ft (Proposed Dispensing Station is 13 ft).
Building Setbacks:		
Front (Harbor Boulevard)	20 ft.	Existing Bldgs 13 ft Additional station approx. 77 ft. ¹
Side (Bay Street)	0 ft. and 15ft	Existing Bldgs 15 ft Additional station approx. 90 ft.
Rear (interior)	0 ft.	0
Landscape Setbacks:		
Bay Street	20 ft.	0-14 ft
Harbor Blvd.	20 ft.	0-15 ft.
Landscaping	25 SF/Parking Space 150 SF	41 SF/ Parking Space 1,029 SF
Parking (4 spaces per 1,000 sq. ft. for convenience store)	6 standard spaces	8 spaces (5 Standard and 3 Compact) ²
Standard	6	5
Small Car	0	3
Total:	6	8
Final Action	Planning Commission	
CEQA Review	Exempt, Class 3, New Construction of Small Structures	

¹ The location of the existing canopies (12 feet from the property lines) was approved under PA-98-95.

² Variance to allow 1 required standard stall to be compact in size.

BACKGROUND

Project Site/Environs

The property is located at the Harbor Boulevard and Bay Street intersection on the southwest corner. The property is zoned C1 (Local Business District) with a General Plan land use designation of General Commercial. The subject property is square shaped, 16,183-square feet in area, and developed with a 1,210-square foot building which houses a SMOG Service Center and Convenience Store, three pump islands and 5 total gas dispensers. There is one large canopy structure that covers all three islands. The southern portion of this parcel approximately 26 feet from the southern property line is divided from the gas station by a fence and is used by the car rental business south of the gas station.

The property can be accessed by two driveways; one on Harbor Boulevard and one on Bay Street. The third drive was closed but not removed by PA-98-95. There are vapor extraction units currently located along the south edge of this use. The gasoline station was originally constructed in the 1950s. The abutting property to the south is occupied by Enterprise Car Rental and the property across Bay Street to the north is a Ford Car Dealership. The site currently includes 6 short trees on the south side and two planters', one for each monument sign. Overall the project site has almost no landscaping and does not meet the landscaping minimum. There is a trash enclosure along the south edge of this use.

CUP Required for Hydrogen Fuel Dispensing Station

The applicant requests approval of a conditional use permit (CUP) to allow construction of a hydrogen fuel dispensing station. The dispensing station would be located towards the south east corner of the lot. The gas station will maintain all current services; 5 pump stations, convenience store, and SMOG check service station. The hydrogen fuel dispensing station consists of a hydrogen fuel pump and equipment stored inside a 13 foot wall. Access to the equipment is through two roll up doors; one facing north and the other facing west.

Variance Required for Compact Parking

The applicant requests approval of a variance from parking regulations to allow eight parking spaces, with 5 standard spaces instead of the required 6 standard spaces. The proposed site plan provides 5 standard size parking spaces; two tandem spaces along the back of the 1,210 square foot building and 3 perpendicular spaces facing the south edge of this use, one being a van handicap space. The three additional compact spaces are those closest to Harbor but still facing the south edge of this use.

These three spaces are compact due to the necessary clearance between the parking spaces and the fueling dock stations. Applicant went through multiple formation and placement of parking to configure six standard-sized parking spaces, but no other formation provided the clearance necessary on the site for circulation and accessibility for the various uses on the site. Although compact stalls are proposed, the site would exceed the number of required parking spaces.

Background/ Prior Entitlements

Planning Application PA-85-56

On April 8, 1985, the Planning Commission approved the Conditional Use Permit to remodel an existing gas station built in 1956 and to convert a portion of the 1,210 square foot building into a mini-market. The existing 25' x 69' canopy and three pump islands were not altered. A cashier's booth was removed at this time. A minimum of six parking spaces were required and provided. The landscaping was nonconforming before this planning application and was not altered due to the very wide driveways on the property. Staff report noted that the two main driveways had to remain because of the lot size and pump island location, but recommended that the third driveway on Bay furthest from Harbor could be modified. Building Permits were never obtained.

Planning Application PA-98-95

On February 8, 1999, the Planning Commission approved the Conditional Use Permit to convert one service bay of a gas station to a sandwich shop/mini-mart. An ABC license for off-sale beer and wine was approved in December of 1984 prior to the requirement for concurrent sales of alcoholic beverages and gasoline. This CUP was to expand the existing mini-mart by converting a service bay. No additional building square footage was added. The size and location of the canopy and the number of pumps did not change.

ANALYSIS

Site Plan

The applicant intends to relocate the existing trash enclosure and air and water filling station and construct the hydrogen fuel dispensing station on the southern edge of this property use. The hydrogen pump station will be north facing and provide more than 22 feet of clearance between it and the existing building which is the minimum required by transportation. Six parking spaces, three standard and three compact, will be to the west of the pump and the trash enclosure to its east. The canopy and pump islands will not be altered. Two standard tandem spaces will be added to the back of the convenience store. The third unusable driveway on Bay Street will be removed and a standard curb will be put in its place and the existing landscaping will be squared off and extended along the north side of the existing building and proposed parking spaces. Additional landscaping area will be added to the landscaping along Harbor Blvd as well. Trees will be added to further screen the utility structure of the hydrogen fuel dispensing station.

The existing conditions of the site already have legal nonconforming encroachment into the perimeter setbacks along the west and north of the property. The proposed additions to landscaping will create a stronger buffer between the streets and the site but all structural encroachments will remain the same. The placement of the proposed dispensing station and the equipment structure are within all setbacks. One proposed parking space does encroach into the 15 foot setback on the side by 5 feet.

Parking Variance

The parking requirements for this site and its use is 6 standard size parking spaces. While 3,250 square feet of this parcel is being used by the rental company to the south for parking: the remaining 12,933 square feet is for the gas station and with the existing and proposed uses and the necessary circulation for those uses the applicant has been able to place 8 parking spaces on the property. The variance is required for the compact parking design and configuration. The three compact spaces cannot extend an additional 2 feet to meet standard length because it would not allow the minimum clearance between the spaces and the pump stations.

The applicant submitted a parking study from Kimley-Horn which shows that parking is adequate to accommodate the parking demand for the weekday they observed. The average parking utilization was 4 spaces and the most cars observed on the property during the study was 8. The study also noted that employees from Enterprise Rentals are parking in gas station parking spaces throughout the day and constituted almost 50% of the utilization of the parking on site. It is recommended that the property owner discourage and restrict the use of their parking within the 12,933 square feet used by the gas station by other neighboring tenants. There are also no code enforcement complaints on file against the property in regards to parking or circulation on the site. The Transportation Division reviewed the site plan and has no objections to the site configuration.

Hydrogen Fuel Dispensing Station

The proposed hydrogen fuel dispensing station includes a dispenser for fueling, electrical enclosure, high pressure hydrogen compressor & storage module, medium pressure hydrogen storage module, and entrenched cooling block. The electrical unit is screened by the trash enclosure and protected by two bollards. The rest of the equipment is enclosed by a 13 foot tall CMU wall and accessible by two roll up doors, one facing north and the other facing west. The overall area occupied by this addition is less than 500 square feet.

Hydrogen fuel cell vehicles are electric cars where the reactants within the battery can be replenished instead of recharging stored chemical reactants like existing electrical vehicles. So instead of plugging your car in you fill it up with hydrogen gas. This changes you charging/fueling time for a long drive from approximately 45 minutes for an electric vehicle to 3 to 5 minutes for a Fuel Cell Vehicle. This makes FCVs a more competitive option against standard petroleum based vehicles and more practical for the end user than electric vehicles.

Fuel Cell Vehicles (FCVs) use a polymer exchange membrane fuel cell system. The hydrogen is forced through a platinum catalyst under pressure, which splits it into two ions and two electrons. The electrons power the vehicle's electric motor and the hydrogen combines with oxygen to form water which the vehicle emits as steam. Therefore, these vehicles take in hydrogen gas, create energy, and emit water.

While this fuel source is far greener at the consumer level there are concerns at the production level for this type of fuel production since it involves hydraulic fracturing and produces carbon monoxide and a small amount of CO₂. However, this process provides a much more sustainable and competitive option to petrol. Converting more individuals to a greener fuel source is paramount to decreasing our greenhouse gas emissions. The

state regulators have further incentivized FCV when they decreased the fueling time necessary to travel 285 miles in order for a manufacturer to receive the maximum California Zero-Emission Vehicle credits available. These are the same credits which subsidized Tesla and helped them recently reach their first profitable quarter. This reduction in fueling time is not only a push to improve electric vehicles but is also supporting the creation of FCVs as well.

Many manufacturers are various stages of providing a FCV alternative. Hyundai already has the Tucson FCV that came out last year. Toyota and Honda will be launching FCVs potentially this year: the models being the Marai and FCW Clarity respectively. As for performance and eco-friendliness, the existing and proposed FCVs use the same electric motors as EVs and perform similarly. Toyota has promised a 0 to 60mph time of around 10 seconds for the Marai and an EV-trouncing range of 434 miles. Fuel-cells are a much more practical option for pickup trucks and SUVs.

The station is part of a network of hydrogen fueling stations throughout the state of California. Southern California has the highest concentration of FCV fueling stations in the state. A large portion of the funding for this station is public money from the State-Funded Governor's Action Plan for Zero Emission Vehicle Fueling.

Justifications for Approval

Pursuant to Title 13, Section 13-29(g), Findings, of the Costa Mesa Municipal Code, the Planning Commission shall find that the evidence presented in the administrative record substantially meets specified findings. Staff recommends approval of the proposed project, based on an assessment of facts and findings which are also reflected in the draft resolution as noted below:

- *The proposed use is supporting an existing fueling network and a more eco-friendly mode of transportation.* This station increases the ability for community members within the City of Costa Mesa to use Hydrogen Fuel Cell Vehicles. Currently there is just one station in each of the following Cities near Costa Mesa; Fountain Valley, Irvine, and Newport Beach. Adding this station would allow for residence to fuel up closer to their homes. Vehicles that run on hydrogen fuel cells have no negative impacts to the air quality since they only emit water vapor. These vehicles also can fuel up in less than 15 minutes where an electrical vehicle takes hours to completely charge.
- *The proposed use, as conditioned, is compatible with the uses in the surrounding area.* The existing uses on the lot as well and the uses of the surrounding properties are all auto-centric. Providing an additional auto service at this location only further supports the existing synergistic relationship within the area. Furthermore this station potentially will be servicing vehicles sold or leased from the multiple automotive retail locations on Harbor.
- *The proposed use, as conditioned, is an improvement to the overall aesthetic and services provide in our community.* The proposed hydrogen fueling station and site improvements of landscaping and pedestrian walkways are a significant upgrade to the property at a highly visible intersection. As proposed, additional landscaping and trees will be provided along both street frontages. Equipment will be screened or not

within line of sight of either street. The dispensing station will provide additional fueling support for a growing greener fueling alternative.

Conditions of approval:

The use of the parking lot must be maintained for and used by the patrons of the SMOG check, convenience store, and fueling stations only.

All roof equipment on convenience store and service bay shall be removed, relocated or replaced so as not to be visible from adjacent streets.

The façade of the convenience and SMOG building shall be improved in appearance by reducing posters, banners, and unifying the façade of the building by applying the same treatment which exists on the front of the building to the back as well.

- *The unique shape of the property is a basis to approve a variance for the compact parking stall.* The small area of the lot limits the development area of the site and the location of the various uses and the required six parking spaces. The applicant revised the plans based on staff recommendations to provide eight parking spaces on the lot with five of those being standard size spaces and 3 compact to accommodate a sufficient drive aisle. One parking space is encroaching into the 15 foot setback on Bay Street but the one encroaching into the setback is buffered by landscaping. Due to the area limitations the sites overall circulation had to be maximized for efficiency. Locations to park are more defined with the additional landscaping and defunct driveways being removed. The purposed plan allows for a common drive aisle between 2050 Harbor Blvd and the abutting property to the east. The property owner to this east approved the easement. The Transportation Division has approved the parking and circulation plan.

Conditions of approval:

The parking lot shall be slurry sealed and restriped.

In addition to the total number of trees on the site; A minimum of three, 24-inch box canopy-type trees shall be planted within the landscaped area fronting Harbor Boulevard; A minimum of three 24-inch box trees shall be planted in the landscaped areas facing Bay Street. The type of trees shall be decided by the City Arborist.

- *The overall total number of parking spaces exceed Code requirements (Six spaces required, Eight spaces proposed).* The proposed plan has 8 parking spaces instead of just six. The applicant went through multiple rendering of the site to develop a site plan which provides exactly 6 parking spaces to meet the parking regulations but all proposals infringed on the circulation or safety on the site and was not supported by the Transportation Division. However the clearance was so close that if the parking spaces were made compact along the south edge of the gas station than the minimum clearance was met and parking spaces could be placed there. So the applicant cannot create space for 6 standard spaces do to the shape and size of the property but the applicant can provide 8 parking spaces with 3 of them being compact.
- *The deviation granted will be subject to such conditions as will assure that the deviation authorized shall not constitute a grant of special privileges inconsistent with the limitation upon other properties in the vicinity and zone in which the property is situated.* The applicant provided a parking study by Kimley Horn showing that for this particular gas station the average parking utilization is 4 cars. With the highest

number of observed cars being 8. The parking study also mentioned that approximately half of the parking is used by neighboring tenants therefore conditions will be applied that will mandate that none of the 8 parking spaces can be used by any neighboring tenant to ensure sufficient parking on the property. As proposed the applicant will need to upgrade the landscaping and hardscaping to ensure ease of circulation throughout the site and clear markers and signage for the various types of parking spaces on the property.

GENERAL PLAN CONFORMANCE

The General Plan permits a wide range of commercial uses in the General Commercial designation, including gasoline service stations. The proposed hydrogen fuel dispensing station at the gasoline station would provide a new service to the community, and employment opportunities in consideration of the needs of the businesses and residential segments of the community, as called for in the General Plan (LU-1A.1). The proposed hydrogen fuel dispensing station would result in a floor area ratio (FAR) of 0.10, which is below the maximum allowed 0.20 FAR for high traffic generating uses in the General Commercial designation. Therefore, the proposed project is consistent with the General Plan.

ENVIRONMENTAL DETERMINATION

The project is Categorically Exempt under California Environmental Quality Act Guidelines Section 15303, New Construction of Small Structures. Class 3 consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures. In urbanized areas, the exemption applies to commercial buildings not exceeding 10,000 square feet in floor area on sites zoned for such use, if not involving the use of significant amounts of hazardous substances where all necessary public services and facilities are available and the surrounding area is not environmentally sensitive. The proposed hydrogen fuel dispensing station is less than 500 square feet in area, and located on the site of an existing gasoline station. The hydrogen fueling station does not involve the use of hazardous substances, especially since there is only compressed gas storage, and is not in an environmentally sensitive area.

ALTERNATIVES

The Planning Commission has the following alternatives:

1. Approve the project with modifications. The Planning Commission may suggest specific changes that are necessary to alleviate concerns. If any of the additional requested changes are substantial, the item should be continued to a future meeting to allow a redesign or additional analysis. In the event of significant modifications to the proposal, should the Planning Commission choose to do so, staff will return with a revised resolution incorporating new findings and/or conditions.
2. Deny the project. If the Planning Commission believes that there are insufficient facts to support the findings for approval, Planning Commission must deny the application and provide facts in support of denial to be included in the draft resolution for denial. If the project were denied, all of the outdoor equipment would be required to be removed

and the applicant could not submit substantially the same type of application for six months.

CONCLUSION

The proposal will involve the first eco-friendly hydrogen fuel dispensing station in the City of Costa Mesa. Staff is requiring renovation and upgrade of the existing property in conjunction with the CUP for the fuel station. The proposed renovation of the gasoline service station and construction of a hydrogen fuel dispensing station conforms to the City's General Plan goals and objectives and provides a significant upgrade to the property without negatively impacting the surrounding properties. Therefore, staff recommends approval of the conditional use permit and variance to allow compact parking for the construction of the hydrogen fuel dispensing station.



DANIEL INLOES, AICP
Associate Planner



CLAIRE FLYNN, AICP
Asst. Director of Development Services

- Attachments:
- 1. Draft Planning Commission Resolutions and Exhibits
 - 2. Location Map
 - 3. Applicant's Letter
 - 4. Parking Study
 - 5. Site Photos
 - 6. Project Plans

Distribution: Director of Economic & Development Services/Deputy CEO
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RESOLUTION NO. PC-15-

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COSTA MESA APPROVING PLANNING APPLICATION 15-11 FOR A CONDITIONAL USE PERMIT AND VARIANCE FOR COMPACT PARKING FOR A HYDROGEN FUEL DISPENSING STATION AT 2050 HARBOR BOULEVARD

THE PLANNING COMMISSION OF THE CITY OF COSTA MESA HEREBY RESOLVES AS FOLLOWS:

WHEREAS, an application was filed by William Mettee, as the authorized agent on behalf of the property owner, Superior Station Inc., requesting approval of a conditional use for the construction of a hydrogen fuel dispensing station and variance to allow compact parking at the gasoline service station located at 2050 Harbor Boulevard in the C1 zone;

WHEREAS, the proposed hydrogen fuel dispensing station will be an additional use to the existing gasoline service station;

WHEREAS, a duly noticed public hearing held by the Planning Commission on April 27, 2015 with all persons having the opportunity to speak for and against the proposal;

WHEREAS, on April 8, 1985, the City Council approved the Conditional Use Permit for the remodeling of the gas station for a mini-market to replace the existing use of a portion of the 1,210 square foot building.

WHEREAS, on, February 8, 1998, the Planning Commission approved Conditional Use Permit to convert one service bay of the service station to a mini-mart.

WHEREAS, the applicant is supporting the approved conditions of approval for the entire property.

BE IT RESOLVED that, based on the evidence in the record and the findings contained in Exhibit A, and subject to the conditions of approval contained within Exhibit B, the Planning Commission hereby **APPROVES** Planning Application PA-15-11 with respect to the property described above.

BE IT FURTHER RESOLVED that the Costa Mesa Planning Commission does hereby find and determine that adoption of this Resolution is expressly predicated upon the activity as described in the staff report for Planning Application PA-15-11 and upon applicant's compliance with each and all of the conditions in Exhibit B, and compliance of all applicable federal, state, and local laws. Any approval granted by this resolution shall be subject to review, modification or revocation if there is a material change that occurs in the operation, or if the applicant fails to comply with any of the conditions of approval.

BE IT FURTHER RESOLVED that if any section, division, sentence, clause, phrase or portion of this resolution, or the documents in the record in support of this resolution, are for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions.

PASSED AND ADOPTED this 27th day of April, 2015.

Robert L. Dickson Jr., Chair
Costa Mesa Planning Commission

EXHIBIT A

FINDINGS

- A. The information presented substantially complies with Costa Mesa Municipal Code section 13-29(g)(2) because:

Finding: The proposed development or use is substantially compatible with developments in the same general area and would not be materially detrimental to other properties within the area.

Facts in Support of Finding: The proposed addition of a hydrogen fuel station at 2050 Harbor is in keeping with the uses surrounding it. All neighboring uses relate to the retail and maintenance of motor vehicles. The adjacent properties are an auto dealership to the north, auto repair services to the east, auto rental to the south, and auto retail to the west.

Finding: Granting the conditional use permit will not be materially detrimental to the health, safety and general welfare of the public or otherwise injurious to property or improvements within the immediate neighborhood.

Facts in Support of Finding: Since the site is already a gas station the addition of one more fueling station will not be any more detrimental to the health, safety and general welfare of the public. To the contrary, the increase of an additional hydrogen fueling station supports the growth of an alternative fueling source which produces zero pollutants and increases the health of the general public. The project is also including several improvements to the site such as; increased landscaping and removal of an unusable driveway. The circulation of this property does depend on an easement with the property to the east but the owner of that property has agreed to the project and signed an application for this proposal as well.

Finding: Granting the conditional use permits will not allow a use, density or intensity which is not in accordance with the General Plan designation for the property.

Facts in Support of Finding: The General Plan permits a wide range of commercial uses in the General Commercial designation, including gasoline service stations. The proposed hydrogen fueling dispensing station at the gasoline station would provide an additional commercial good and service to the community in consideration of the needs of the businesses and residential segments of the community, as called for in the General Plan (LU-1A.1). In accordance with Land Use Objective LU-1F.1, compliance with the conditions of approval will help protect established residential neighborhoods from potentially disruptive land uses and activities. The proposed convenience store would result in a floor area ratio (FAR) of 0.1. The maximum allowed FAR for high traffic generating uses in the General Commercial designation is 0.20. Therefore, the proposed project is consistent with the General Plan.

- B. The information presented substantially complies with Costa Mesa Municipal Code section 13-29(g)(1) because:

Finding: Because of special circumstances applicable to the property, the strict application of development standards deprives such property of privileges enjoyed by others in the vicinity under identical zoning classifications.

Facts in Support of Finding: The property size is very small for a gas station. The average size lot for a gas station, calculated by selecting 5 gas stations on Harbor Boulevard, is around 24,000 square feet. That makes this lot only two-thirds of the size of a typical lot. This is further compounded by 3,250 square feet of the lot being used by Enterprise Car Rental company to the south. This leave the gas station with only 12,933 square feet which is about half the size of a typical gas station lot.

This addition of a Hydrogen Fuel Station on this property also will benefit from the unique location of this property. The gas station is synergistically nestled among other car uses that will benefit from the positive externalities from the hydrogen fueling station. All of the neighbors of the property are auto-related commercial properties. They include two vehicular retail locations, one vehicle service location, one auto- parts vendor, and a car rental franchise. Not to mention that the gas station abuts Harbor Boulevard which is a major arterial for the City, access to the freeway, and provides access to most of the major car dealerships in the City.

The project has been reviewed for compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines, and the City environmental procedures, and has been found to be categorically exempt under Section 15303, Class 3, Construction of Small Structures, of the CEQA Guidelines.

Finding: The deviation granted shall be subject to such conditions as will assure that the deviation authorized shall not constitute a grant of special privileges inconsistent with the limitation upon other properties in the vicinity and zone in which the property is situated.

Facts in Support of Finding: The combination of the small size of the lot and the legal nonconforming setbacks and structures results in existing poor circulation on the site. The proposed compact parking spaces allow for the site to come closer to conformance and improve parking circulation by creating a 22 feet clearance between the spaces and the pump islands. To ensure that this is enforced signage and marking will be made conditions of approval so these spaces are used by the appropriate type of vehicles. Furthermore, a parking study was provided by the applicant showing that the average parking utilization on the site is 4. Therefore, this variance is not providing special privilege but increasing conformance on a site and allowing parking to meet demand.

Finding: The granting of the deviation will not allow a use, density, or intensity which is not in accordance with the general plan designation and any applicable specific plan for the property.

Facts in Support of Finding: The General Plan permits a wide range of commercial uses in the General Commercial designation, including gasoline service stations. The proposed hydrogen fueling dispensing station at the gasoline station would provide an additional commercial good and service to the community in consideration of the needs of the businesses and residential segments of the community, as called for in the

General Plan (LU-1A.1). In accordance with Land Use Objective LU-1F.1, compliance with the conditions of approval will help protect established residential neighborhoods from potentially disruptive land uses and activities. The proposed convenience store would result in a floor area ratio (FAR) of 0.1. The maximum allowed FAR for high traffic generating uses in the General Commercial designation is 0.20. Therefore, the proposed project is consistent with the General Plan.

- C. The project is exempt from Chapter XII, Article 3, Transportation System Management, of Title 13 of the Costa Mesa Municipal Code.

EXHIBIT B

CONDITIONS OF APPROVAL

- Plng.
1. The use shall be limited to the type of operation as described in the applicant's letter of description and staff report. Any change in the operational characteristics shall require review by the Planning Division and may require an amendment to the conditional use permit, subject to either Zoning Administrator or Planning Commission approval, depending on the nature of the proposed change. The applicant is reminded that Code allows the Planning Commission to modify or revoke any planning application based on findings related to public nuisance and/or noncompliance with conditions of approval [Title 13, Section 13-29(o)].
 2. The conditional use permit herein approved shall be valid until revoked, but shall expire upon discontinuance of the activity authorized hereby for a period of 180 days or more. The conditional use permit may be referred to the Planning Commission for modification or revocation at any time if the conditions of approval have not been complied with, if the use is being operated in violation of applicable laws or ordinances, or if, in the opinion of the development services director or his designee, any of the findings upon which the approval was based are no longer applicable.
 3. The use shall be conducted, at all times, in a manner that will allow the quiet enjoyment of the surrounding neighborhood. The applicant and/or business owner shall institute appropriate security and operational measures are necessary to comply with this requirement.
 4. A copy of the conditions of approval for the conditional use permit must be kept on premises and presented to any authorized City official upon request. New business/property owners shall be notified of conditions of approval upon transfer of business or ownership of land.
 5. The trash enclosure shall incorporate the use of decorative block and finishes that will be complementary to other structures on site.
 6. All parking spaces must be maintained so that striping is always visible.
 7. The conditions of approval and ordinance or code provisions of Conditional Use Permit PA-15-11 shall be blueprinted on the face of the site plan.
 8. The use of the parking lot must be maintained for and used by the patrons of the SMOG check, convenience store, and fueling stations only.
 9. All roof equipment on convenience store and service bay shall be removed, relocated or replaced so as not to be visible from adjacent streets.
 10. The façade of the convenience and SMOG building shall be improved in appearance by reducing posters, banners, and unifying the façade of the building by applying the same treatment which exists on the front of the building to the back as well.
 11. The driveway along the north side of the building shall be removed and the curb replacement shall meet all engineering requirements.
 12. Small car spaces must be identified by markings on the ground and/or post signs facing the space.
 13. The parking lot shall be slurry sealed and restriped.
 14. In addition to the total number of trees on the site; A minimum of three, 24-inch box canopy-type trees shall be planted within the landscaped area fronting Harbor Boulevard; A minimum of three 24-inch box trees shall be

planted in the landscaped areas facing Bay Street. The type of trees shall be decided by the City Arborist.

15. No exterior roof access ladders, roof drain scuppers, or roof drain downspouts are permitted. This condition relates to visually prominent features of scuppers or downspouts that not only detract from the architecture but may be spilling water from overhead without an integrated gutter system which would typically channel the rainwater from the scupper/downspout to the ground. An integrated downspout/gutter system which is painted to match the building would comply with the condition. This condition shall be completed under the direction of the Planning Division.
16. Demolition permits for existing structures or hardscape shall be obtained and all work and inspections completed prior to final building inspections. Applicant is notified that written notice to the Air Quality Management District may be required ten (10) days prior to demolition.
17. The applicant shall contact the Planning Division to arrange Planning inspection of the site prior to the release of occupancy. This inspection is to confirm that the conditions of approval and code requirements have been satisfied
18. The applicant shall defend, indemnify, and hold harmless the City, its elected and appointed officials, agents, officers and employees from any claim, action, or proceeding (collectively referred to as "proceeding") brought against the City, its elected and appointed officials, agents, officers or employees arising out of, or which are in any way related to, the applicant's project, or any approvals granted by City related to the applicant's project. The indemnification shall include, but not be limited to, damages, fees and/or costs awarded against the City, if any, and cost of suit, attorney's fees, and other costs, liabilities and expenses incurred in connection with such proceeding whether incurred by the applicant, the City and/or the parties initiating or bringing such proceeding. This indemnity provision shall include the applicant's obligation to indemnify the City for all the City's costs, fees, and damages that the City incurs in enforcing the indemnification provisions set forth in this section. City shall have the right to choose its own legal counsel to represent the City's interests, and applicant shall indemnify City for all such costs incurred by City.
- Bldg. 19. Comply with the requirements of the adopted 2013 California Building Code, 2013 California Electrical code, 2013 California Mechanical code , 2013 California Plumbing code , 2013 California Green Building Standards Code and 2013 California Energy Code (or the applicable adopted, California Building code California Electrical code, California Mechanical code California Plumbing Code, California Green Building Standards and California Energy Code at the time of plan submittal or permit issuance) and California Code of Regulations also known as the California Building Standards Code, as amended by the City of Costa Mesa.
- Eng. 20. Maintain the public right-of-way in a "wet-down" condition to prevent excessive dust and promptly remove any spillage from the public right-of-way by sweeping or sprinkling.

CODE REQUIREMENTS

The following list of federal, state and local laws applicable to the project has been compiled by staff for the applicant's reference. Any reference to "City" pertains to the City of Costa Mesa.

- Plng. 1. Once the use is legally established, the planning application herein approved shall be valid until revoked. The Development Services Director or his/her designee may refer the planning application to the Planning Commission for modification or revocation at any time if, in his opinion, any of the following circumstances exist: 1) the use is being operated in violation of the conditions of approval; 2) the use is being operated in violation of applicable laws or ordinances or 3) one or more of the findings upon which the approval was based are no longer applicable.
2. Parking stalls shall be double-striped in accordance with City standards.
3. All landscaped areas shall be separated from paved vehicular areas by 6" high continuous Portland Cement Concrete curbing.
4. Permits shall be obtained for all signs according to the provisions of the Costa Mesa Sign Ordinance.
5. Two (2) sets of detailed landscape and irrigation plans, which meet the requirements set forth in Costa Mesa Municipal Code Sections 13-101 through 13-108, shall be required as part of the project plan check review and approval process. Plans shall be forwarded to the Planning Division for final approval prior to issuance of building permits.
6. Two (2) sets of landscape and irrigation plans, approved by the Planning Division, shall be attached to two of the final building plan sets.
7. Landscaping and irrigation shall be installed in accordance with the approved plans prior to final inspection or occupancy clearance.
8. Trash enclosure or other acceptable means of trash disposal shall be provided. Design of trash enclosure shall conform with City standards. Standard drawings are available from the Planning Division.
- Const Hrs 9. All noise-generating construction activities shall be limited to 7 a.m. to 7 p.m. Monday through Friday and 9 a.m. to 6 p.m. Saturday. Noise-generating construction activities shall be prohibited on Sunday and the following Federal holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
- Bldg. 10. Comply with the requirements of the following adopted codes 2013 California Building Code, 2013 California Electrical code, 2013 California Mechanical code, 2013 California Plumbing code, 2013 California Green Building Standards Code, and 2013 California Energy Code (or the applicable adopted, California Building code, California Electrical code, California Mechanical code, California Plumbing Code, California Green Building Standards, and California Energy Code at the time of plan submittal or permit issuance) and California Code of Regulations also known as the California Building Standards Code, as amended by the City of Costa Mesa.
11. Submit precise grading plans, an erosion control plan and a hydrology study. A precise grading and a hydrology report plan shall not be required if any of the following are met:

1- An excavation which does not exceed 50 CY on any one site and which is less than 2 ft in vertical depth, or which does not create a cut slope greater than 1 ½:1 (excluding foundation area).

2- A fill less than 1 foot in depth placed on natural grade with a slope flatter than 5:1, which does not exceed 50 CY on any one lot and does not obstruct a drainage course.

3-A fill less than 3 ft in depth, not intended to support structures, which does not exceed 50 CY on any one lot and does not obstruct a drainage course.

12. Submit a soil's report for the project. Soil's Report recommendations shall be blueprinted on both the architectural and grading plans.
13. The ground adjacent immediately to the foundation shall be slopes away from the building at a slope of not less than 5% for a minimum distance of 10 feet measured perpendicular to the face of the wall CBC sec. 1804.3. See also exception. On graded sites the top of exterior foundation shall extend above the elevation of the street gutter at point of discharge or the inlet of an approved discharge devise a minimum of 12 inches plus two percent (2%).
- Bus. Lic. 14. All contractors and subcontractors must have valid business licenses to do business in the City of Costa Mesa. Final inspections, final occupancy and utility releases will not be granted until all such licenses have been obtained.
- Fire. 15. LPG exchange stations shall be located at least 10 feet from building doorways. CFC Table 6109.12
16. Combustible materials shall be kept at least 10 feet from containers. CFC Table 6109.12
17. When exposed to potential vehicular damage, LP-gas containers shall be protected. CFC 312 and 6107.4
18. Containers shall be located to minimize exposure to heat and physical damage and shall be stored in a covered and locked enclosure designed to prevent tampering. CFC 6109.2 and 6109.13
19. Used, empty containers shall be considered to be full when calculating the maximum quantity allowed. CFC 6109.5
20. Screw-on type caps or collars that are securely in place shall protect valves on all containers stored CFC 6109.8
21. Approved warning signs (e.g., "LIQUEFIED PETROLEUM GAS" and "NO SMOKING") shall be posted.
22. The plan shall show compliance with all applicable CFC sections and include the size and type of rack, size and quantity of bottles stored, and their location relative to exits, unprotected openings, roadways, and storage of other sales materials.
23. An operational permit is required for the storage and use of LP-gas. CFC 6101.2 and Section 105.6.

SPECIAL DISTRICT REQUIREMENTS

The requirements of the following special districts are hereby forwarded to the applicant:

- AQMD 1. Applicant shall contact the Air Quality Management District (AQMD) at (800) 288-7664 for potential additional conditions of development or for additional permits required by AQMD.
- CDFA 2. Comply with the requirements of the California Department of Food and Agriculture (CDFA) to determine if red imported fire ants exist on the property prior to any soil movement or excavation. Call CDFA at (714) 708-1910 for information.
- OC Health Dept. 3. Provide a plan to the County of Orange Health Department for review and approval.

RESOLUTION NO. PC-15-

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COSTA MESA DENYING PLANNING APPLICATION 15-11 A CONDITIONAL USE PERMIT and VARIANCE FOR A HYDROGEN FUEL DISPENSING STATION AT 2050 HARBOR BOULEVARD

THE PLANNING COMMISSION OF THE CITY OF COSTA MESA HEREBY RESOLVES AS FOLLOWS:

WHEREAS, an application was filed by William Mettee, as the authorized agent on behalf of the property owner, Superior Station Inc., requesting approval of a conditional use permit and variance for the construction of a hydrogen fuel dispensing station at the existing gasoline service station located at 2050 Harbor Boulevard in the C1 zone; and

WHEREAS, a duly noticed public hearing held by the Planning Commission on February 9, 2015 with all persons having the opportunity to speak for and against the proposal.

BE IT RESOLVED that, based on the evidence in the record and the findings contained in Exhibit "A", the Planning Commission hereby **DENIES** Planning Application PA-15-11 with respect to the property described above.

PASSED AND ADOPTED THIS 27TH DAY OF APRIL 2015.

Robert L. Dickson Jr. Chair,
Costa Mesa Planning Commission

EXHIBIT A

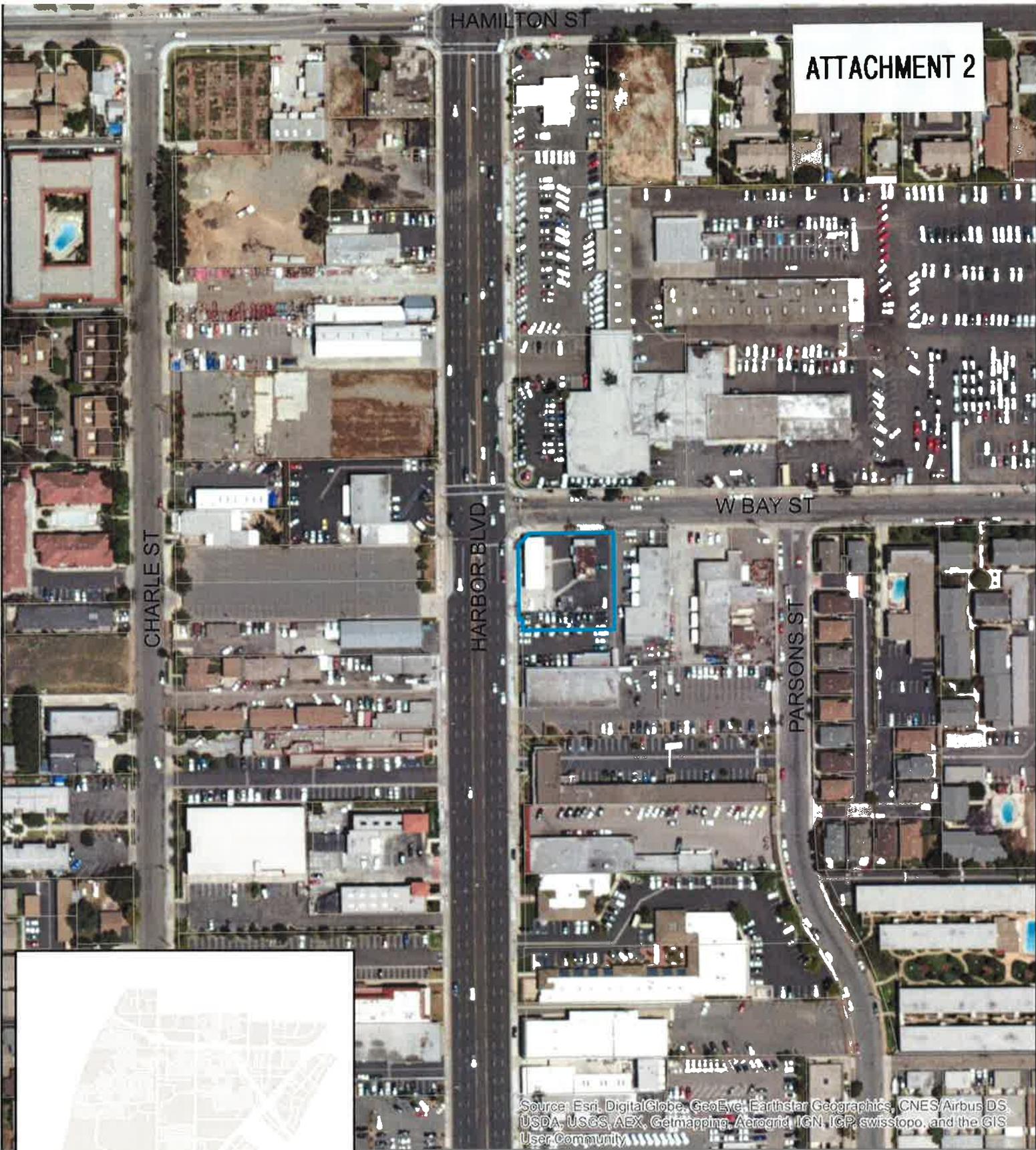
FINDINGS

- A. The information presented substantially does not comply with Costa Mesa Municipal Code Section 13-29(g)(2) in that:
 - 1. The proposed use is not substantially compatible with developments in the same general area and would be materially detrimental to other properties within the area.
 - 2. Granting the conditional use permit and variance will be materially detrimental to the health, safety and general welfare of the public or otherwise injurious to property or improvements within the immediate neighborhood.
 - 3. Granting the conditional use permit and variance will allow a use, density, or intensity which is not in accordance with the General Plan designation and any applicable specific plan for the property.

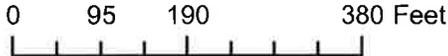
- B. The Costa Mesa Planning Commission has denied Planning Application PA-14-39. Pursuant with the Public Resources Code Section 21080(b)(5) and the CEQA Guidelines Section 15270(a) CEQA does not apply to this project because it has been rejected and will not be carried out.

- C. The project is exempt from Chapter XII, Article 3, Transportation System Management, of Title 13 of the Costa Mesa Municipal Code.

ATTACHMENT 2



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Geomapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Vicinity of Site
2050 Harbor Boulevard

R2-MD

C2

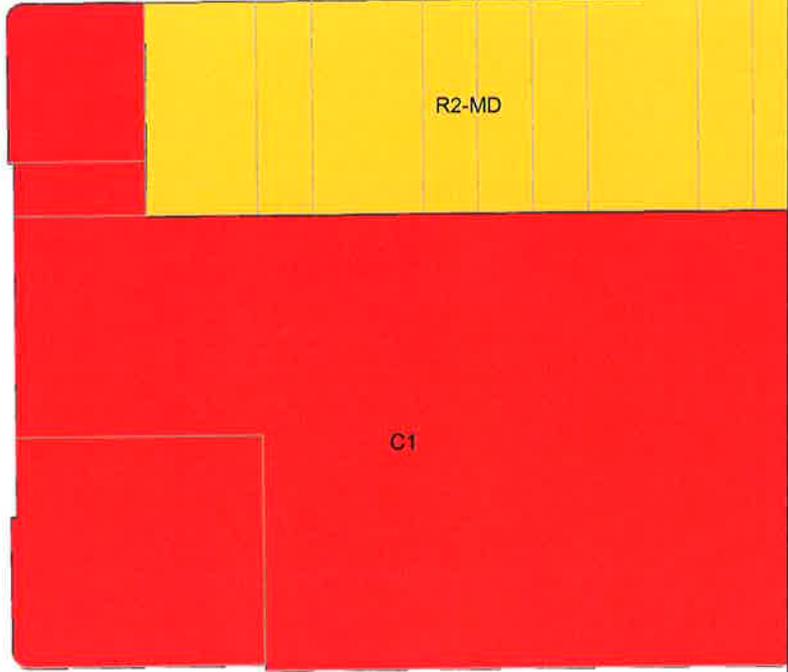
HAMILTON ST



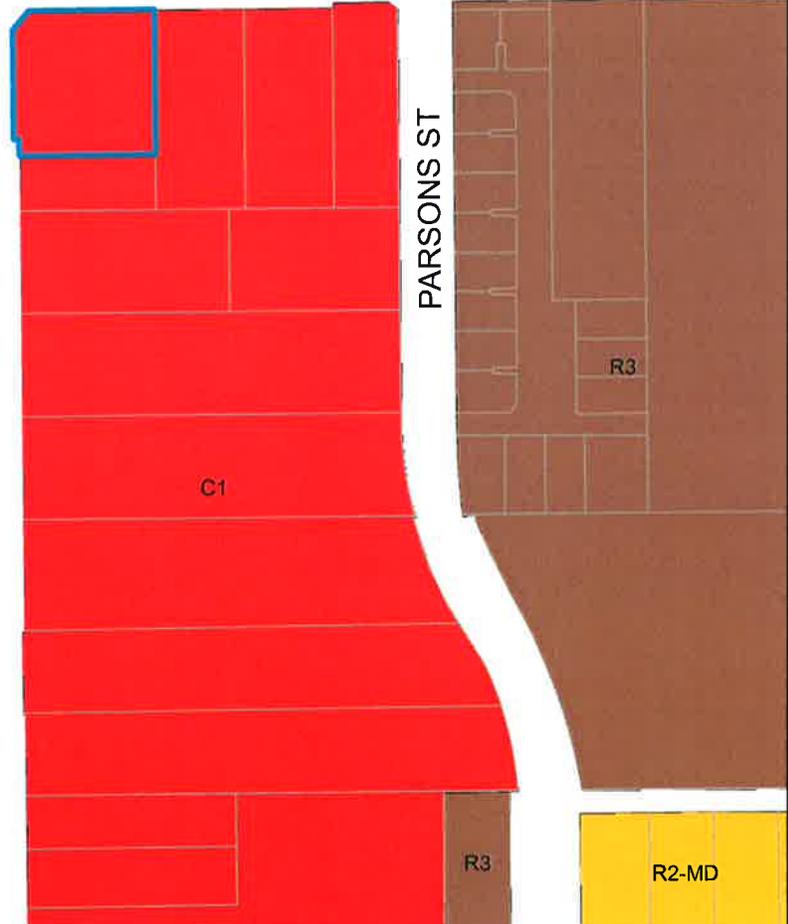
CHARLE ST



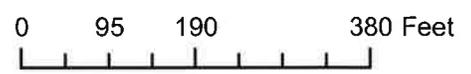
HARBOR BLVD



W BAY ST



PARSONS ST



Zoning for Site
 2050 Harbor Boulevard

24

**ATTACHMENT 3
APPLICANTS LETTER AND EXHIBITS**



...Developer of the world's first hydrogen network

www.firstelementfuel.com

Applicant Letter

Address: 2050 Harbor Boulevard, Costa Mesa, CA 92627

Project Description

First Element Fuel is proposing the installation of a hydrogen fuel cell dispensing facility located in on the Southern line of the existing service station at 2050 Harbor Boulevard. This installation will include an above ground hydrogen tank and associated mechanical equipment reaching an approximate height of 12 feet. The tank and associated equipment will be screened from view within a compound wall 8' in height that will be CMU construction with a finish to match the existing architecture of the adjacent on-site development; as well as the Hydrogen fuel dispenser and canopy, which will be consistent and compatible with the primary use of the subject property. The existing gas station property is approximately 12,546 square feet. First Element's equipment and hydrogen dispensing facility will take up roughly 1,210 square feet.

Operational Statement

The First Element Hydrogen refueling station at 2050 Harbor Boulevard will be serviced by a two-tank fueling truck. By the year 2016, the tank-truck will refuel on-site approximately 1.2 times a week. By 2016, approximately 8.6 customer trips a day are anticipated.

This facility will operate 24/7. There will be no on-site employees, however existing gas station personnel will be educated and trained on the equipment and can provide some supplemental support for customers and to the ERAM (Enterprise Remote Access Monitoring) system. The ERAM system will monitor the facility's activity via on-site surveillance equipment. A 1-800 number will be posted onsite to reach a live person 24/7.



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Conditional Use Permit Statement of Justification:

The proposed use is substantially compatible with uses permitted in the general area and will not be materially detrimental to other properties in the same area.

The subject property is zoned General Commercial, and according to City of Costa Mesa's municipal code, gasoline service stations are a conditionally permitted use. This gas station was originally designed and developed in a manner that is compliant with City of Costa Mesa's Development Standards. The installation of the hydrogen refueling facility will be an accessory to the existing use and will be compatible with the existing uses on site.

The project as designed will be accessory and compatible with the existing uses on site. The proposed Hydrogen Tank and Equipment will be screened from view by a compound wall 8' in height that will be CMU construction with a stucco finish to match the existing structures at this location. The Hydrogen fuel dispenser and canopy are consistent and compatible with the primary use of the subject property. The proposed Hydrogen Fueling facilities will be developed in a manner that is consistent in design and compatible in quality with the existing structures on the subject property.

Due to the small size of the project area, this installation will not interfere with the use and enjoyment of any other property in the immediate vicinity, nor will it be detrimental to the public health, safety, morals or general welfare. The subject facility has been very carefully sited to maximize its distance from all the surrounding sensitive uses (existing residences).

Moreover, this project will provide infrastructure that is of the highest environmental quality and is consistent with the State of California's Zero emissions standards. This project will undoubtedly result in improved air quality, and will result in supporting transportation that is both energy conserving and Greenhouse gas emission free. This project will provide a vast network of facilities that will allow consumers the option and availability to purchase zero emission fuel cell vehicles and help reduce our dependence on oil, improve air quality, and reduce greenhouse gases helping further many of the State's goals, as well as the sustainability goals of local communities such as the City of Costa Mesa.

Prepared by FirstElement Fuel Inc.
... Developer of the world's first hydrogen network
www.firstelementfuel.com

Overview of Hydrogen and Fuel Cell Vehicles

Major automakers - including Toyota, Honda, Mercedes-Benz, and Hyundai – will begin the sale of hydrogen-powered fuel cell vehicles (FCVs) starting next year. FCVs are zero-emission vehicles that improve air quality and reduce greenhouse gases, helping support California's energy and environment goals. The State of California is supporting the development of a hydrogen network to help assure that FCV customers are able to fill their cars as this market grows.

Here we will try to provide an overview of hydrogen and fuel cell vehicles by covering the following areas:

- How does a hydrogen fuel cell vehicle work?
- Which communities are planned for the California hydrogen network?
- What are the properties of hydrogen fuel
- What does a hydrogen fueling add-on consist of?
- What are the environmental and economic benefits

How does a hydrogen fuel cell vehicle work?

Technology – FCVs are electric vehicles powered by hydrogen. They use a new type of generator called a fuel cell to produce electricity on-board the automobile and power an electric motor. A fuel cell combines hydrogen from the car's tank with oxygen from the air in a clean, efficient reaction that generates electric power. Clean water vapor is the only exhaust from the vehicle.



Performance – FCVs can fill their tank in less than five minutes and have a driving range of at least 300 miles between fills. The electric drive system on the vehicle is almost completely silent, provides high instantaneous torque for fast pick-up, and requires no transmission so acceleration is smooth.

Fueling - Fuel cell vehicles require hydrogen as the fuel, so existing service stations within select communities are being modernized to include the capability to fill with hydrogen.

Which communities are planned for the CA hydrogen network?

To enable the commercialization of fuel cell vehicles select communities within California have been identified as “early adopter” markets by automakers and other stakeholders. Existing service stations within these communities have been carefully selected for an add-on hydrogen dispenser. These communities are typically characterized by their environmental leadership and by the public’s enthusiasm for advanced transportation technologies like hybrids, plug-in vehicles, or CNG vehicles. Some of the communities selected for a hydrogen dispensing add-on provide key points of connectivity throughout the state so that fuel cell vehicle drivers can drive from one part of California to another, just like they would with their gasoline vehicle.

The proposed site for each project was selected based on careful consideration of market factors, input from automakers, requirements from the state of California, and spatial layout. Based on all of these factors, the California Energy Commission has awarded a grant for a hydrogen dispenser add-on at each of the specific locations.

The communities identified for the initial phase of the Hydrogen Network are the result of careful planning to best enable the initial market entry of fuel cell vehicles. Eventually we expect every community in California to become part of the Hydrogen Network.



Properties of hydrogen fuel

General Characteristics – Hydrogen is non-toxic and is used commercially in the form of a gas or liquid. It is also the lightest molecule on earth so it disperses and travels upward very quickly (at a rate of 65 feet per second). Like any fuel hydrogen is combustible and must be treated with caution. Hydrogen is colorless and odorless so hydrogen station equipment must be outfitted with appropriate sensors to provide immediate notification in the case that a leak ever occurs. In the case of vehicle refueling, hydrogen is typically stored as a compressed gas, though in some cases it can be stored as a super-cooled liquid as well. When it is dispensed through the hose and into the vehicle it is always in the form of a compressed gas.

Safety – Hydrogen is just as safe as other fuels, including gasoline and natural gas. In fact, hydrogen is in some ways safer when compared to gasoline or other fuels. However, all fuels including hydrogen must be handled responsibly. Like gasoline and natural gas, hydrogen is flammable and can behave dangerously under specific conditions. Hydrogen can be handled safely when simple guidelines are observed and the user has an understanding of its



behavior. Hydrogen has been used in a multitude of industrial applications for nearly 100 years so its properties are well understood and protocols for safe handling are well developed.

In the Case of a Release – Hydrogen should never leak from the storage and dispensing equipment, however, incidents may rarely occur which produce a leak. Unlike gasoline and diesel, hydrogen is non-toxic and when released it travels upwards and disperses into the atmosphere more quickly than any other substance on earth. Therefore, ground contamination, toxicity, or buildup of fuel in an area is not an issue with Hydrogen. In the case that a release of hydrogen that catches fire, a flare will burn directly above the storage vessel and will burn out in a matter of minutes.

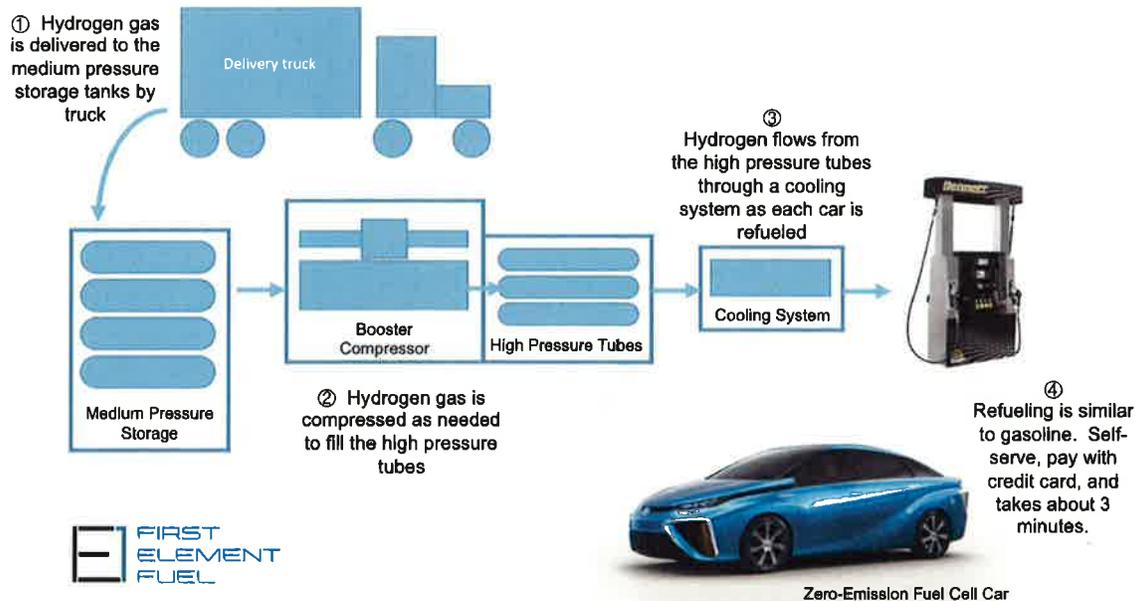
What does a hydrogen fueling add-on consist of?

Hydrogen dispensers are being added on to existing gasoline stations to “modernize” them with hydrogen refueling capability. So when fuel cell vehicle customers fill their cars with hydrogen the experience is already familiar to them as a retail fueling location that is outfitted with a convenience store, restrooms, and other commonly accessible conveniences.

A hydrogen dispenser add-on fits into around 650 square feet and consists of the following three components:

- (1) **Hydrogen storage** – 250 kilograms of compressed hydrogen is stored above ground behind a wall (that amount is equal in energy to about 250 gallons of gasoline)
- (2) **Hydrogen pretreatment components** – hydrogen needs to be further compressed and pre-cooled from the storage vessel before it is dispensed into a car. A compressor and cooling system are located behind the same wall to handle this “pretreatment.”
- (3) **Hydrogen dispenser** – a hydrogen dispenser operates very similarly to a gasoline dispenser. It has a similar user interface, payment system, and two hoses for dispensing hydrogen into the car. This is the component of the hydrogen dispensing add-on that the customer will interface with.

Overview of Hydrogen Dispenser Add-on



Environmental and Economic Benefits

Fuel cell vehicles and hydrogen offer many environmental and economic benefits that help meet the sustainability goals of our communities, and of the state as a whole. Among those benefits, fuel cell vehicles and hydrogen:

1. Eliminate tailpipe emissions to help clean the air
2. Run on domestically sourced hydrogen to improve energy security
3. Cut greenhouse gases in half compared to gasoline to help address climate change
4. Operate on an electric drivetrain to help abate noise pollution
5. Eliminate toxic fuels that can contaminate soil or groundwater



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of State grant monies and subsequently the failure of the project. This site is an integral part of the States initial hydrogen fueling network.

Additionally, we wish to remind you that one of the principals of First Element, Dr. Shane Stephens, has already been in contact with the City Manager to inform him of the State's award of a Grant for the development of the proposed facility and provide other details and background about the project, as well as important Grant requirements and schedules. We are continually engaging the City of Campbell to rally support for this exciting, first of a kind project.

The team at FirstElement Fuel is truly excited to be modernizing the station at 2855 Winchester Boulevard and working with the City of Campbell to enable your community to purchase and drive zero emission fuel cell vehicles. We look forward to working in partnership with you to make this project a success.

Sincerely,

William Mettee | Sr. Site Acquisition and Planning Specialist

Authorized Agent for First Element Fuel

Black & Veatch **Building a World of Difference.**[®]

Authorized Partner of FirstElement, Inc.

7760 France Avenue South, Suite 1200, Bloomington, MN 55435

+1 952-896-0893 P | +1 952-831-1445 F | MetteeW@bv.com

Other cities with planned hydrogen stations:

(Reference for existing stations: <http://cafcp.org/stationmap>)

- | | |
|-----------------------------|----------------------------|
| <i>Los Angeles</i> | <i>Coalinga</i> |
| <i>Saratoga</i> | <i>Truckee</i> |
| <i>Campbell</i> | <i>South San Francisco</i> |
| <i>Redwood City</i> | <i>South Pasadena</i> |
| <i>San Diego</i> | <i>Laguna Niguel</i> |
| <i>Long Beach</i> | <i>Lake Forest</i> |
| <i>Costa Mesa</i> | <i>Santa Barbara</i> |
| <i>La Canada Flintridge</i> | <i>Mill Valley</i> |
| <i>Hayward</i> | <i>San Jose</i> |

**ATTACHMENT 4
PARKING STUDY**

TECHNICAL MEMORANDUM

To: Sean Scully
Senior Zoning Manager
Smart Infrastructure, Black and Veatch

From: Vikas Sharma, P.E. and David Shaw, EIT
Kimley-Horn and Associates, Inc. (KHA)

Date: April 8, 2015

Subject: Parking Demand Analysis for 2050 Harbor Boulevard, Costa Mesa, CA

INTRODUCTION

Kimley-Horn and Associates, Inc. has completed a parking demand analysis for an existing gas station, smog station, and convenience store in the city of Costa Mesa located at 2050 Harbor Boulevard. The study site is located on the southeast corner of Harbor Boulevard and Bay Street adjacent to Enterprise Car Rental. This technical memorandum provides an overview of the parking demand for the current seven parking spaces on the study site on Thursday, April 2, 2015. The study site is illustrated in **Figure 1**.

BACKGROUND

This study was completed to determine parking demand of an existing gas station where a Hydrogen Fueling Station has been proposed which has a total project area of 1,210 square feet. As per the latest site plan, 7 standard parking spaces are currently provided and the number of required parking spaces is 6 standard spaces. Furthermore, 3 existing standard parking spaces will be removed and replaced with 3 compact spaces, causing a deficiency in standard parking. City of Costa Mesa Code requires 6 standard parking spaces, thus a Variance is required. The proposed site plan shows a total of 4 standard, 1 handicap, and 3 compact parking spaces. Access to the gas station is provided by 3 driveways; one driveway along Harbor Boulevard on the west side and 2 driveways along Bay Street on the north side.

In terms of available parking, the gas station provides 4 striped parking spaces located on the south side of the study site adjacent to Enterprise rent-a-car. Out of the 4 striped parking spaces, one space is designated for handicap parking only. During field data collection, multiple vehicles were observed to use undesignated parking spaces on-site.

35

The study provides an overview of parking usage patterns throughout a typical weekday (7:00am to 8:00pm). Kimley-Horn staff conducted parking demand counts of the on-site parking lot to quantify the amount of parking utilized by the existing site uses.

FIGURE 1 – SITE LOCATION



ANALYSIS AND FINDINGS

Kimley-Horn & Associates completed an existing parking demand analysis for Thursday, April 2, 2015. An hour-by-hour tally and the distribution of parking demand for striped and undesignated parking during the entire study period is shown in **Appendix A**. The parking lot occupancy, including the daily average and peak is shown in **Table 1**. The following summarizes some of our key field observations and findings:

- The average parking utilization was 4 spaces out of 7 at the beginning of each hour observed.
- Peak demand of 8 vehicles was observed at 5:00pm with 2 vehicles in striped parking spaces and 6 vehicles in undesignated parking spaces. Two striped parking spaces remained unoccupied.
- The handicap designated parking space was observed to be occupied at 7:00am and was not noted to be used during the study period.
- Enterprise rent-a-car employees were observed parking in undesignated parking spaces along the east side of the convenience store throughout the day.

CONCLUSIONS

Following are the conclusions from field observations and analysis.

- Currently Enterprise rent-a-car employees are using almost 50% of the available parking at site.
- The current parking at the gas station is adequate to accommodate the parking demand for the weekday observed.

36

Table 1

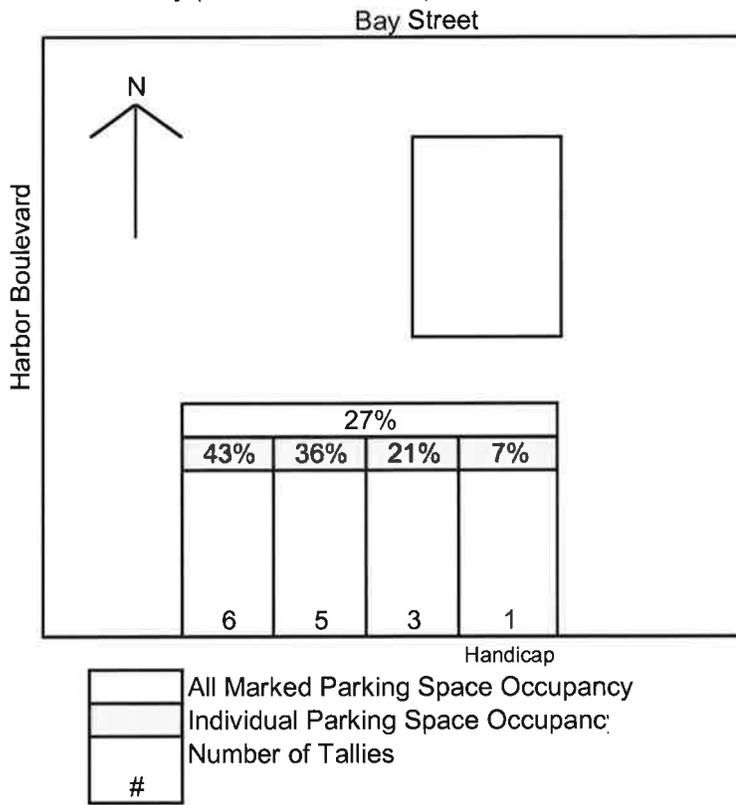
Gas Station Parking Lot Occupancy

Date (2015)	Day	7am	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm
April 2	Thursday	1	2	6	4	4	4	5	4	4	5	8	4	3

Kimley»Horn

Appendix

Study Period Summary (7:00 AM - 8:00 PM)

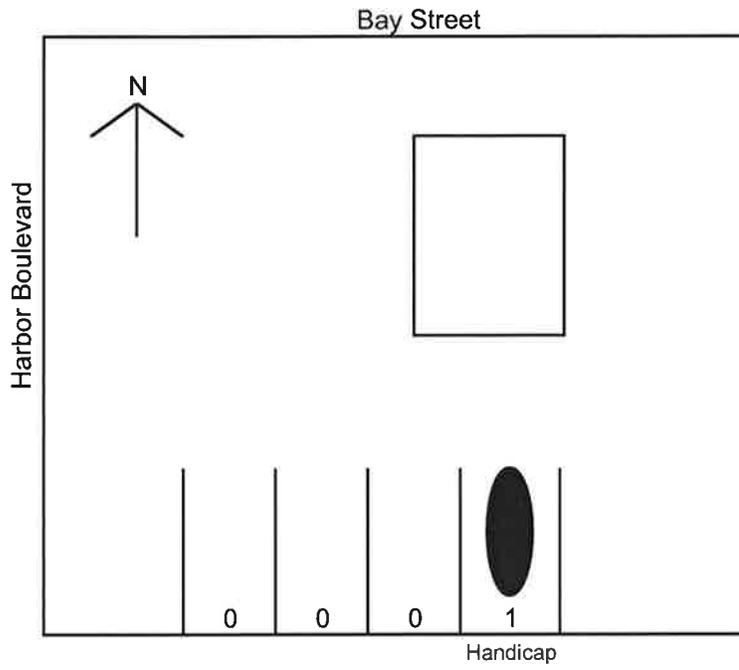


Total Parked	59
<i>Striped</i>	15
<i>Undesignated</i>	44

Study Site Parking Occupancy
60%

*Occupancy = total parked vehicles /

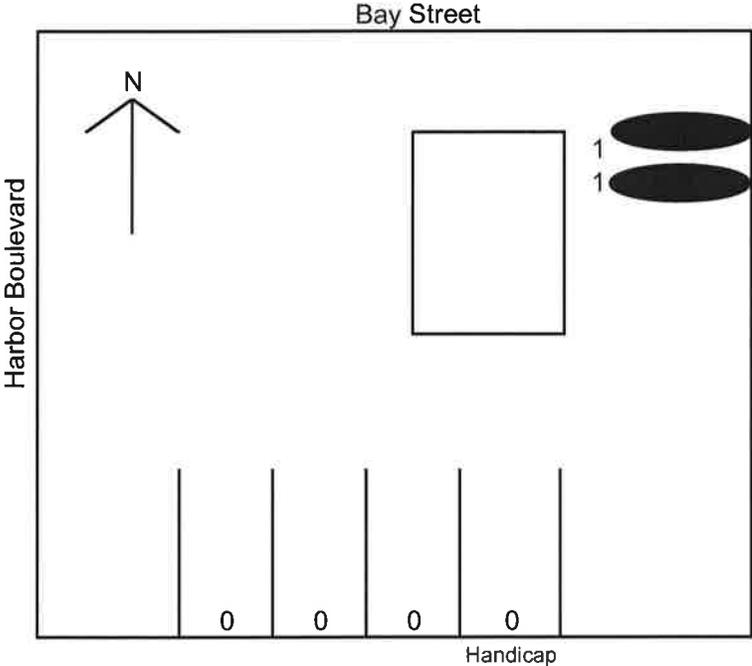
7am



Total Parked	1
<i>Striped</i>	1
<i>Undesignated</i>	0
Parking Occupancy	14%

*Parking Occupancy = total parked ve

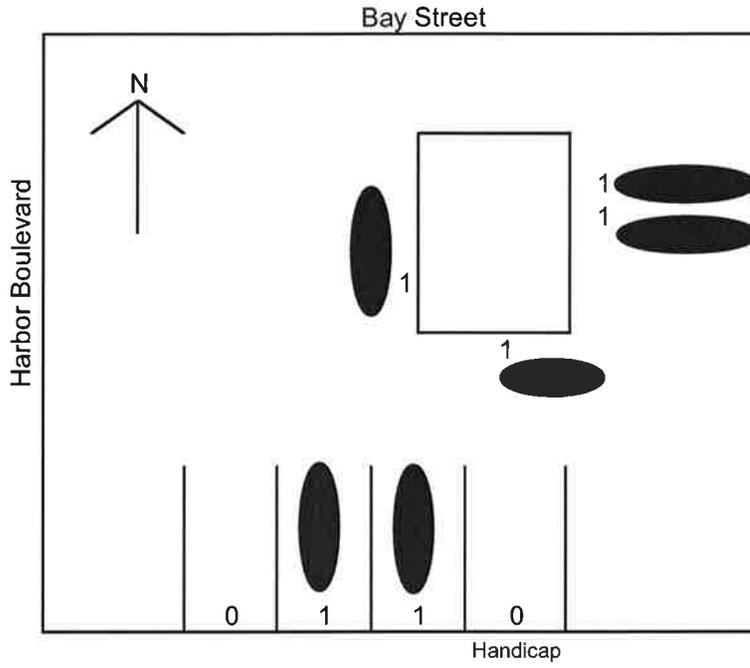
8am



Total Parked	2
<i>Striped</i>	0
<i>Undesignated</i>	2
Parking Occupancy	29%

*Parking Occupancy = total parked

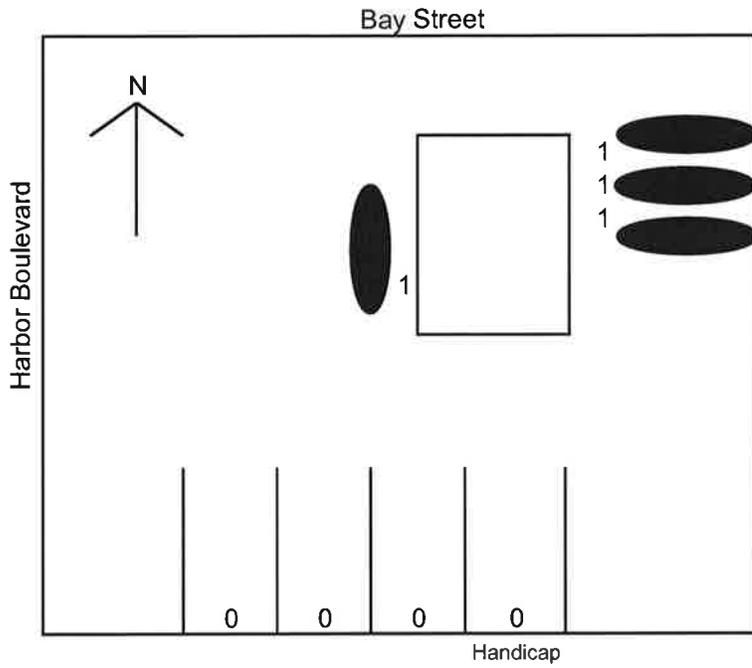
9am



Total Parked	6
<i>Striped</i>	2
<i>Undesignated</i>	4
Parking Occupancy	86%

*Parking Occupancy = total parked v

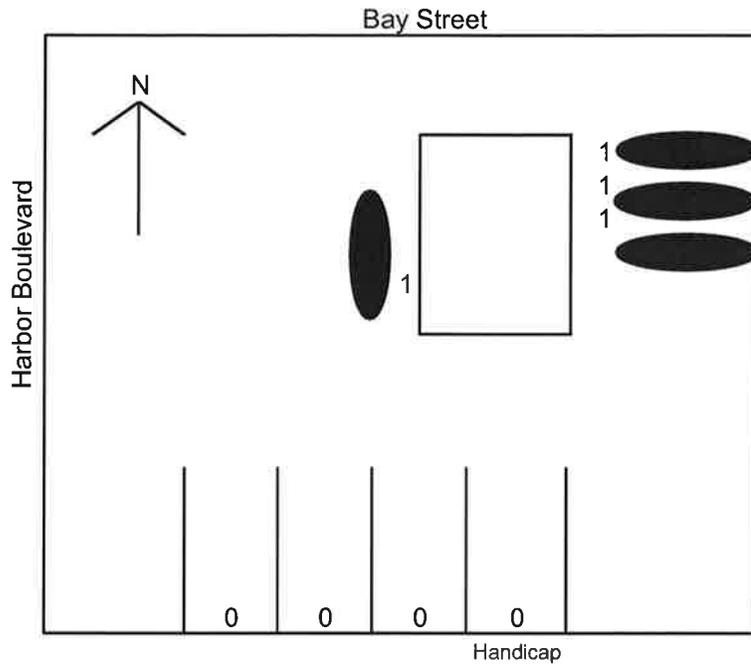
10am



Total Parked	4
Striped	0
Undesignated	4
Parking Occupancy	57%

*Parking Occupancy = total parked v

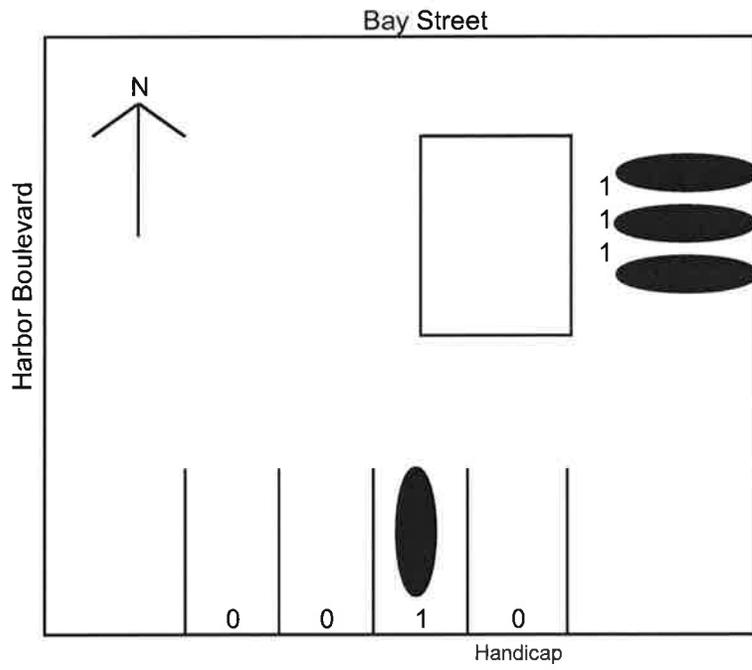
11am



Total Parked	4
Striped	0
Undesignated	4
Parking Occupancy	57%

*Parking Occupancy = total parked v

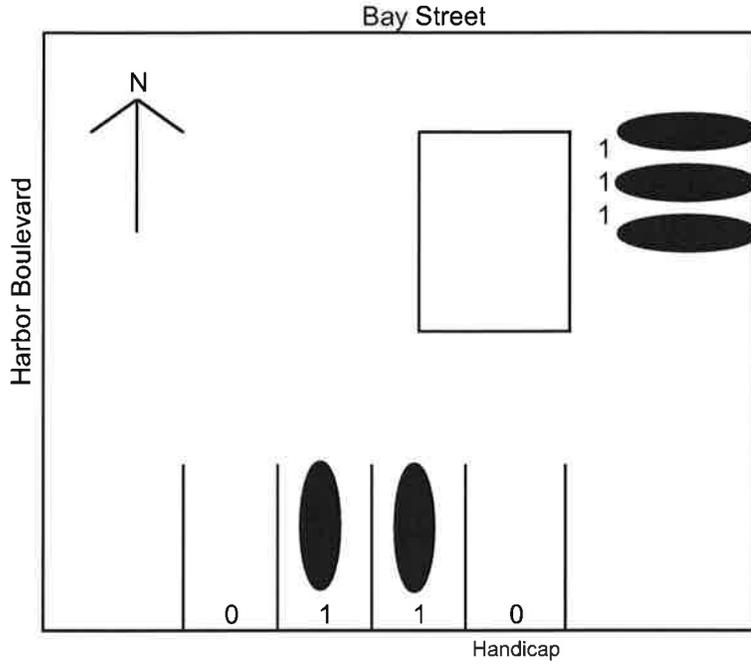
12pm



Total Parked	4
<i>Striped</i>	1
<i>Undesignated</i>	3
Parking Occupancy	57%

*Parking Occupancy = total parked v

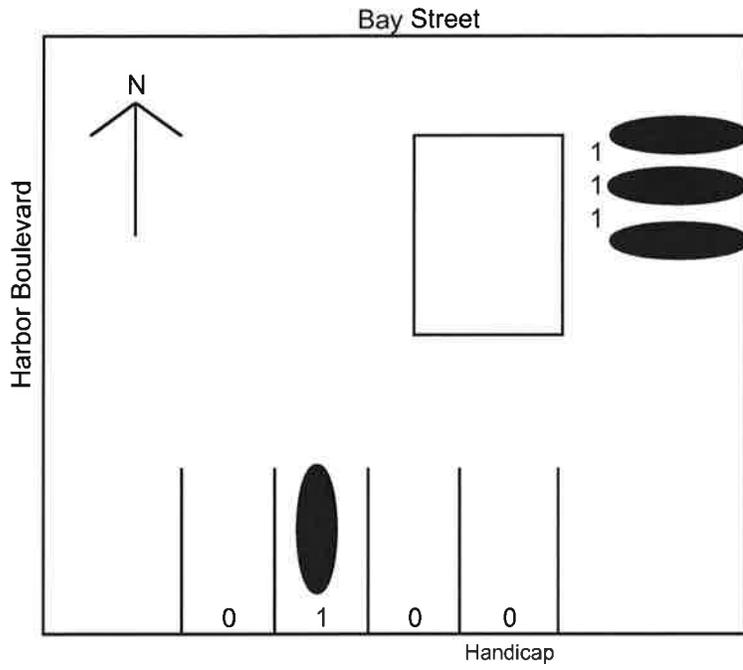
1pm



Total Parked	5
Striped	2
Undesignated	3
Parking Occupancy	71%

*Parking Occupancy = total parked v

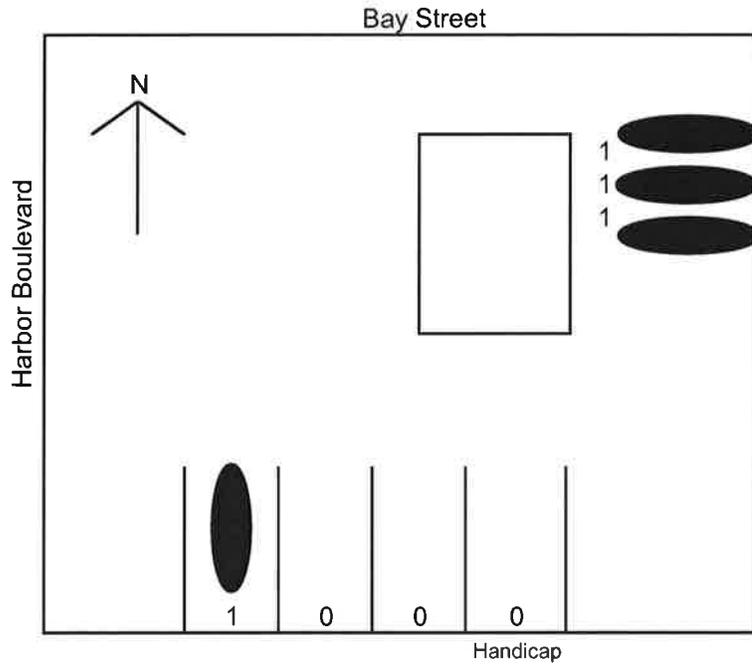
2pm



Total Parked	4
<i>Striped</i>	1
<i>Undesignated</i>	3
Parking Occupancy	57%

*Parking Occupancy = total parked ve

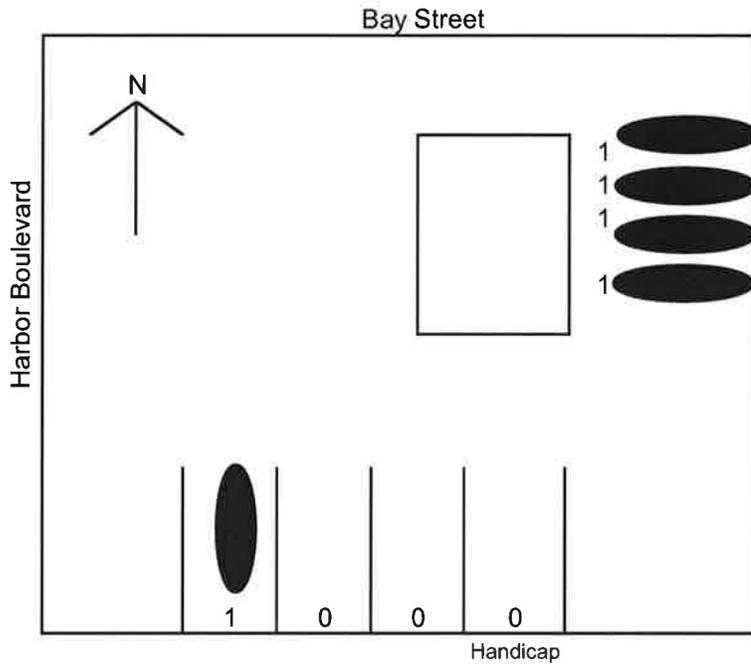
3pm



Total Parked	4
<i>Striped</i>	1
<i>Undesignated</i>	3
Parking Occupancy	57%

*Parking Occupancy = total parked v

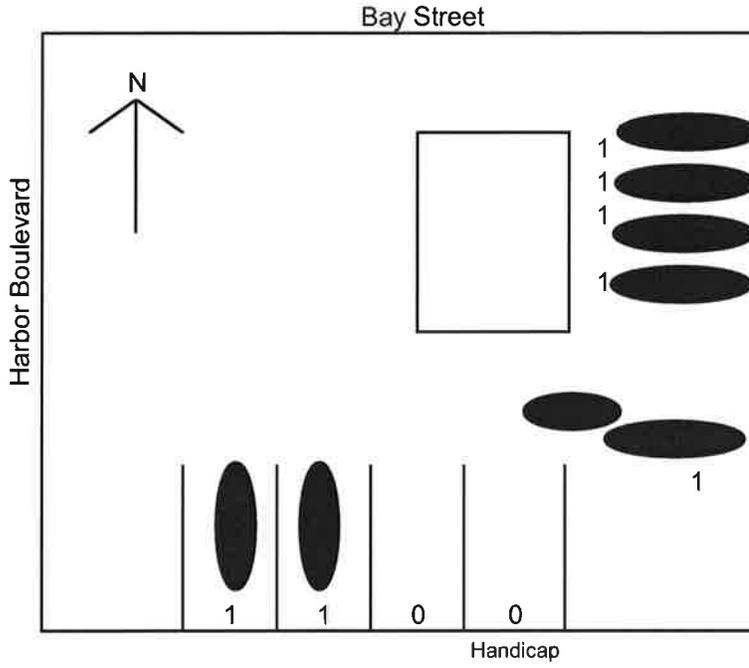
4pm



Total Parked	5
<i>Striped</i>	1
<i>Undesignated</i>	4
Parking Occupancy	71%

*Parking Occupancy = total parked v

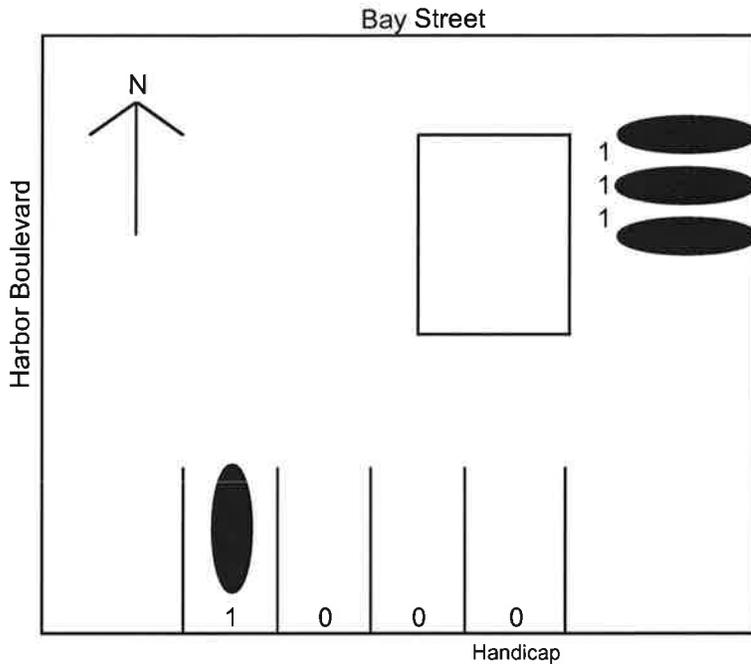
5pm



Total Parked	8
Striped	2
Undesignated	6
Parking Occupancy	114%

*Parking Occupancy = total parked v

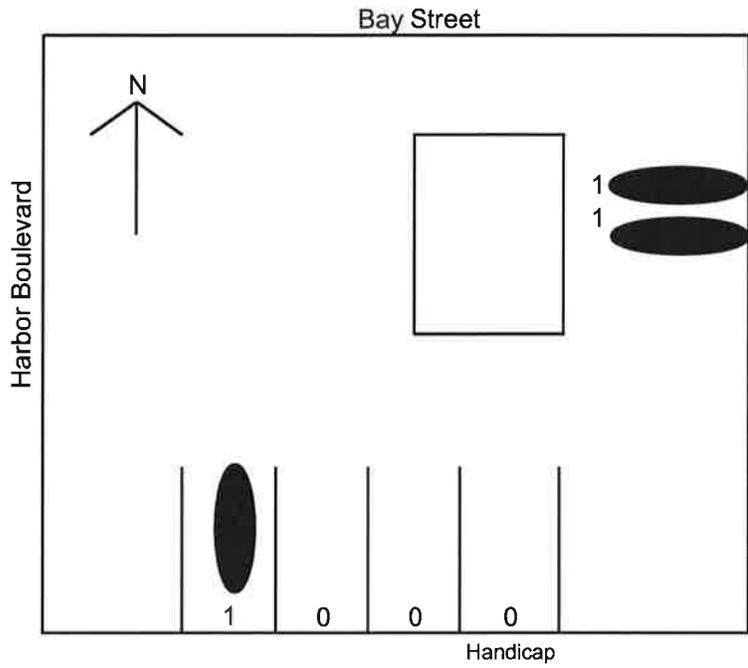
6pm



Total Parked	4
Striped	1
Undesignated	3
Parking Occupancy	57%

*Parking Occupancy = total parked v

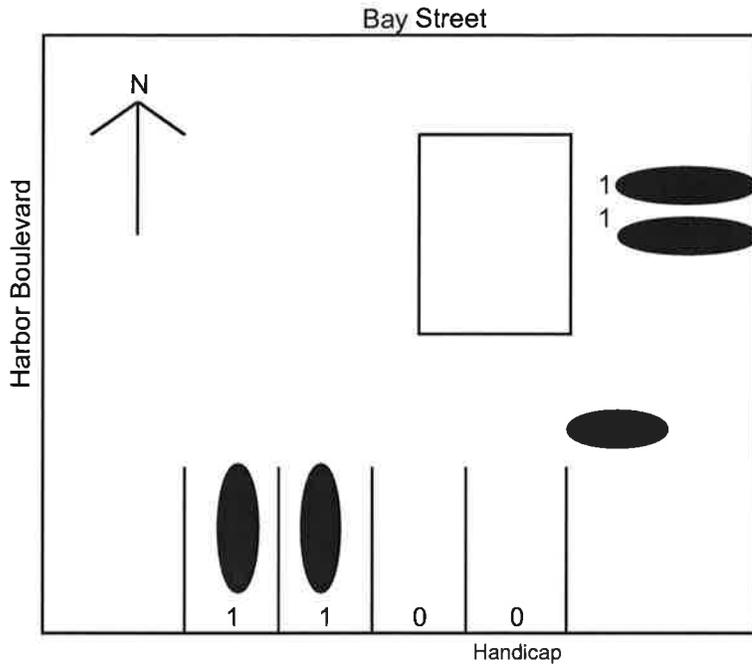
7pm



Total Parked	3
<i>Striped</i>	1
<i>Undesignated</i>	2
Parking Occupancy	43%

*Parking Occupancy = total parked ve

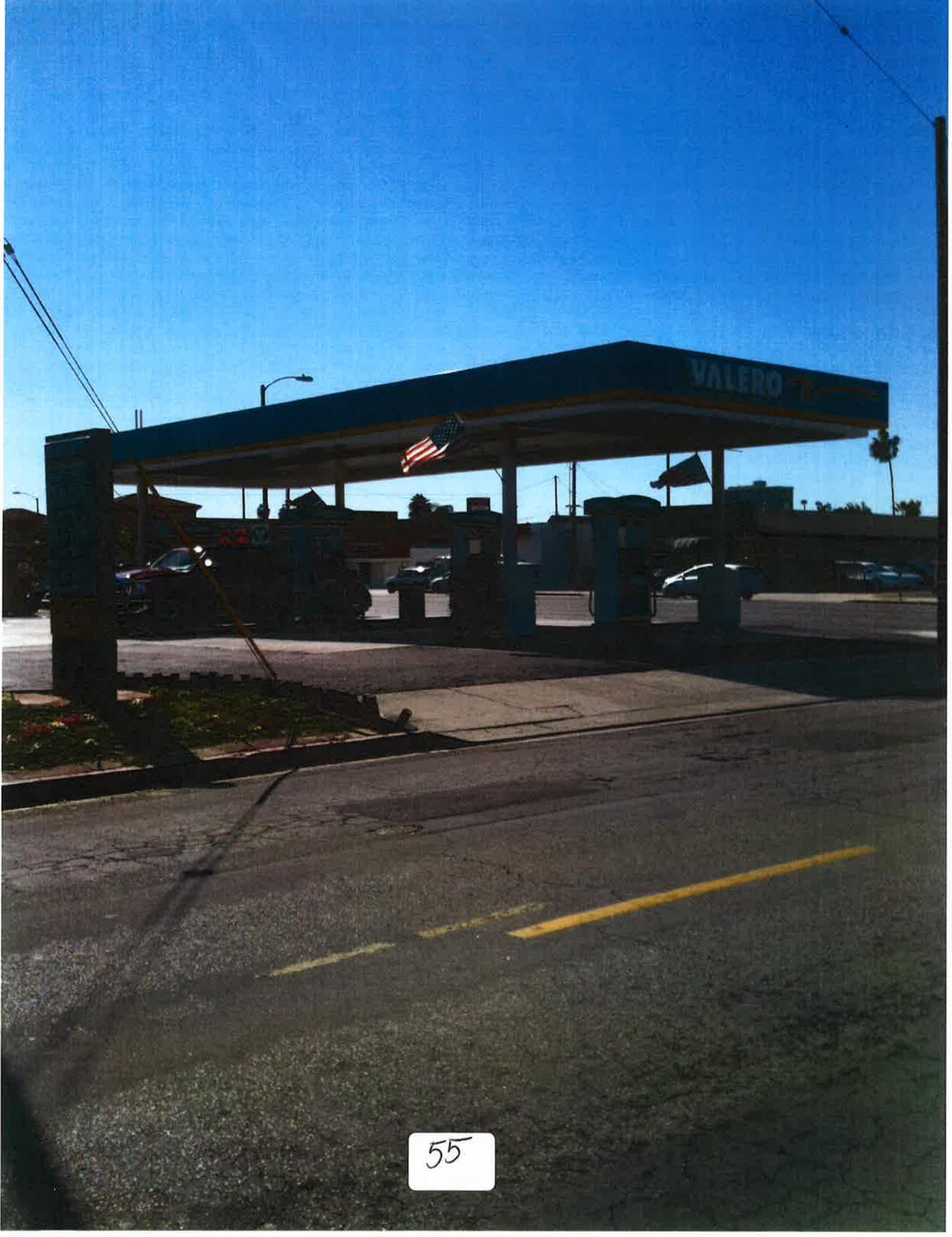
8pm



Total Parked	5
<i>Striped</i>	2
<i>Undesignated</i>	3
Parking Occupancy	71%

*Parking Occupancy = total parked v

**ATTACHMENT 5
SITE PHOTOS**



55



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TEST ONLY
STATION

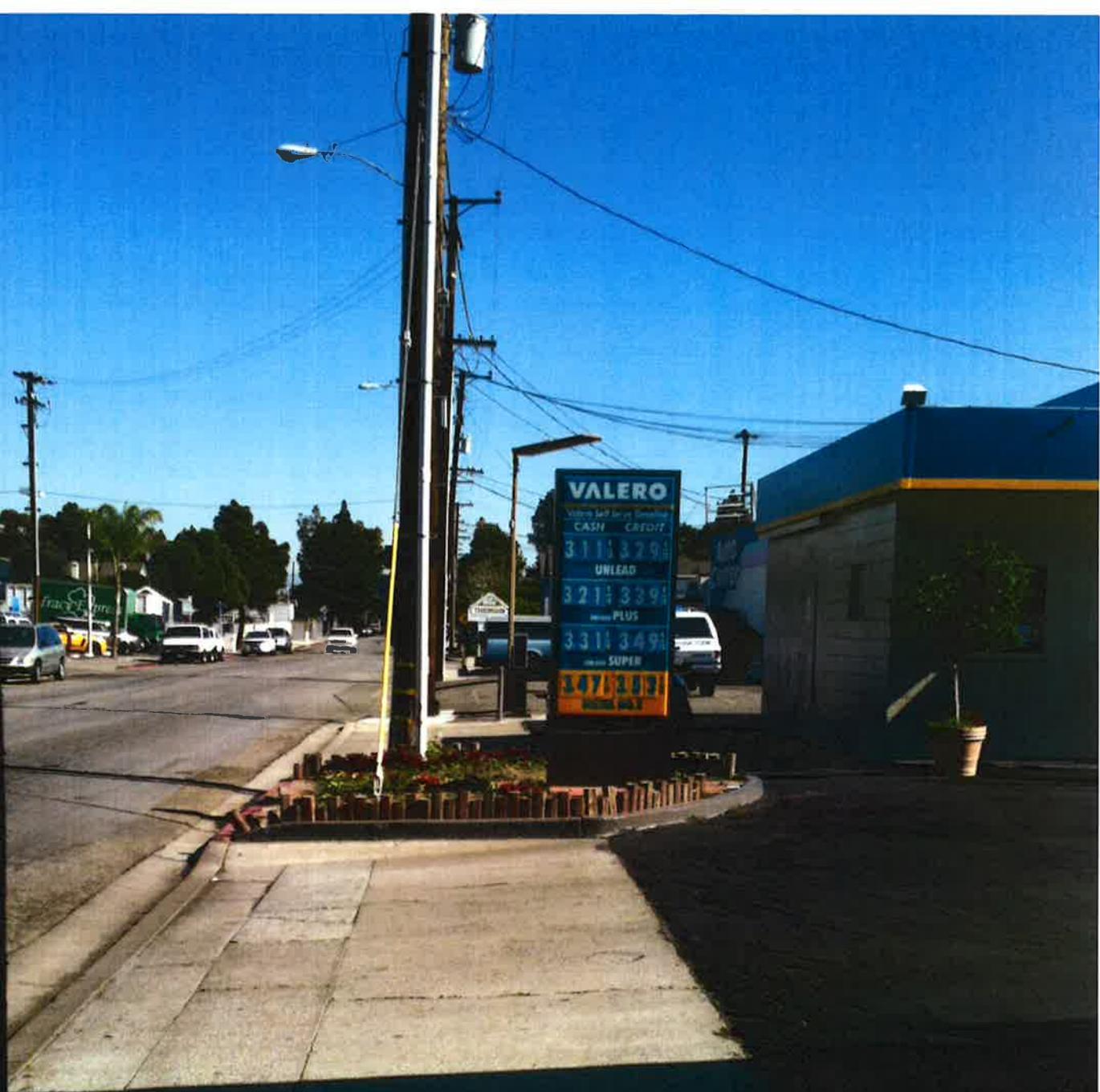


57





58

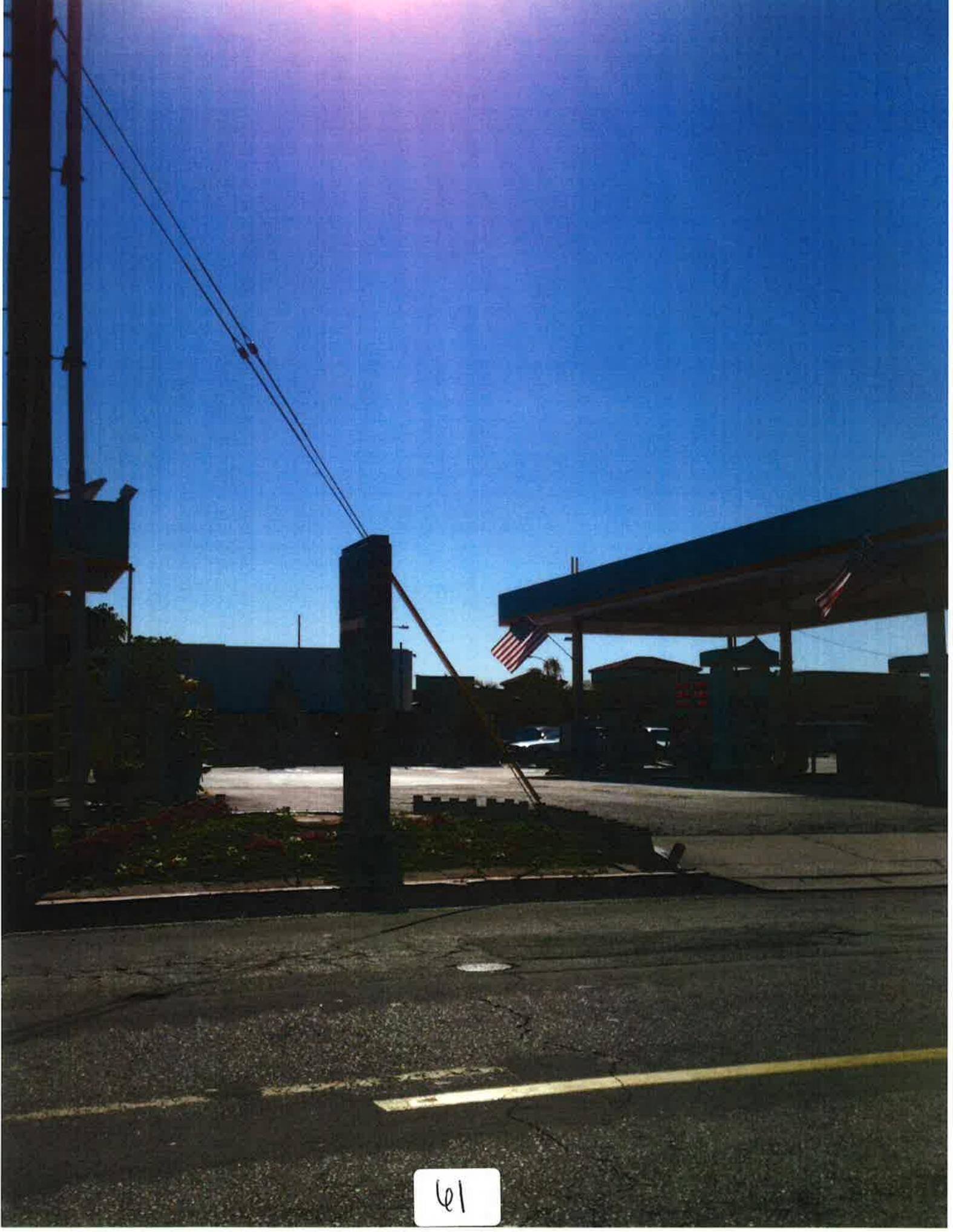


59



3.79
3.79
1.99
3.53

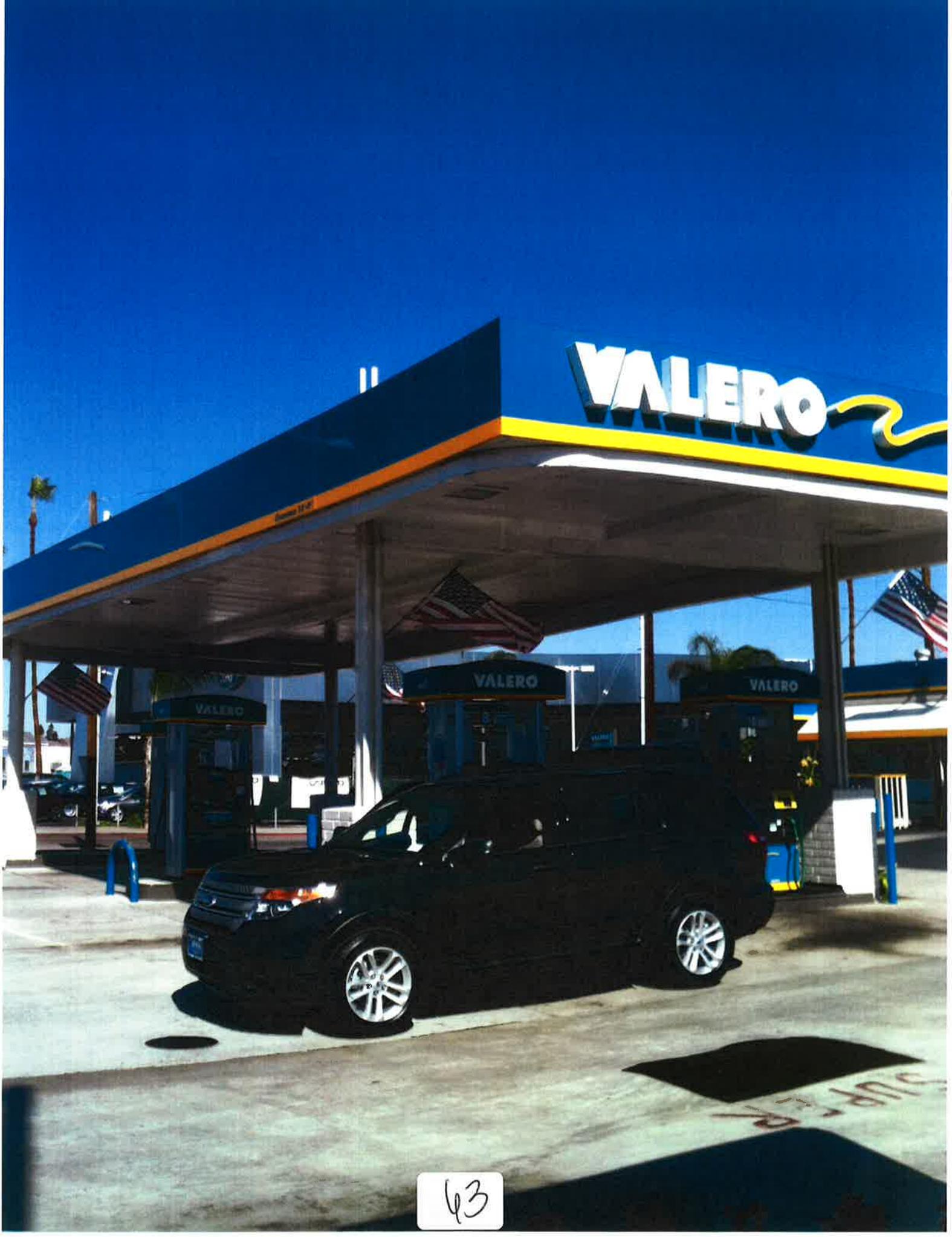
60



41



62

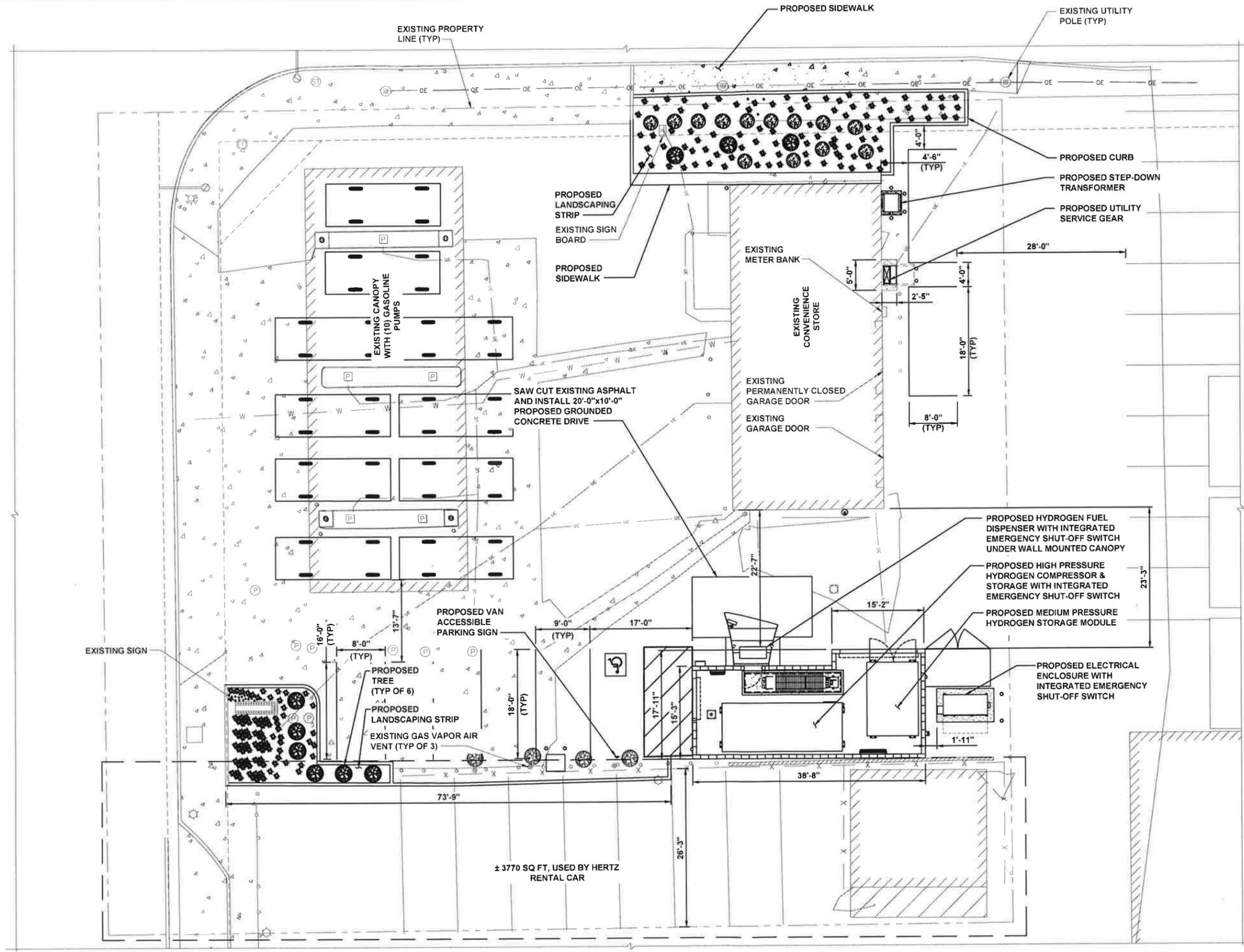


43



64

**ATTACHMENT 6
PROJECT PLANS**



5151 CALIFORNIA AVENUE, #220
IRVINE, CA 92617
(949) 205-5553



10950 GRANDVIEW DRIVE
OVERLAND PARK, KS 66210
(913) 458-2000

PROJECT NO: 182622
DRAWN BY: JKR
CHECKED BY: NMB

REV	DATE	DESCRIPTION
5	04/17/15	REISSUED FOR ZONING
4	04/01/15	REISSUED FOR ZONING
3	03/20/15	REISSUED FOR ZONING
2	02/17/15	REISSUED FOR ZONING
1	02/08/15	REISSUED FOR ZONING
0	11/24/14	ISSUED FOR ZONING



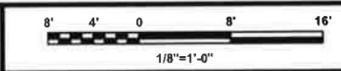
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S COSTA MESA
2050 HARBOR BOULEVARD
COSTA MESA, CA 92627

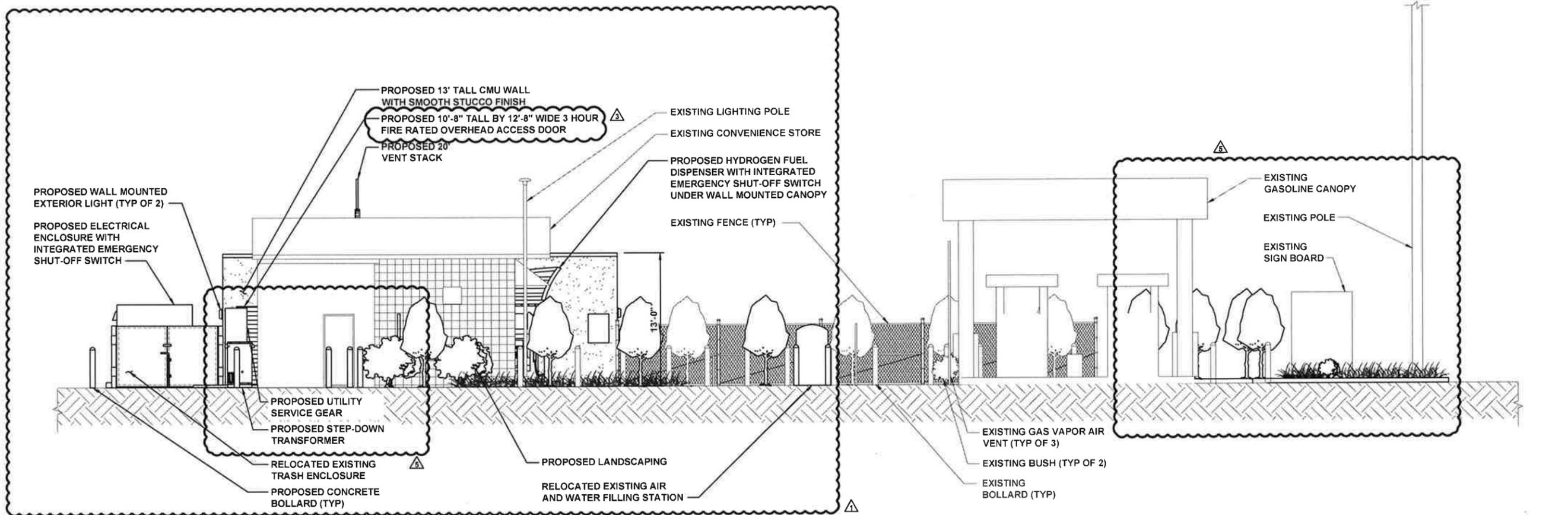
SHEET TITLE
LOCATION PLAN

SHEET NUMBER
2-4.1

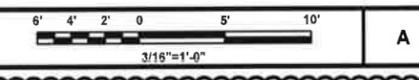
LOCATION PLAN



W/T



NORTH ELEVATION



FEFUEL

5151 CALIFORNIA AVENUE, #220
IRVINE, CA 92617
(949) 205-5553

BLACK & VEATCH

10950 GRANDVIEW DRIVE
OVERLAND PARK, KS 66210
(913) 458-2000

PROJECT NO:	182622
DRAWN BY:	JKR
CHECKED BY:	NMB

REV	DATE	DESCRIPTION
5	04/17/15	REISSUED FOR ZONING
4	04/01/15	REISSUED FOR ZONING
3	03/20/15	REISSUED FOR ZONING
2	02/17/15	REISSUED FOR ZONING
1	02/06/15	REISSUED FOR ZONING
0	11/24/14	ISSUED FOR ZONING

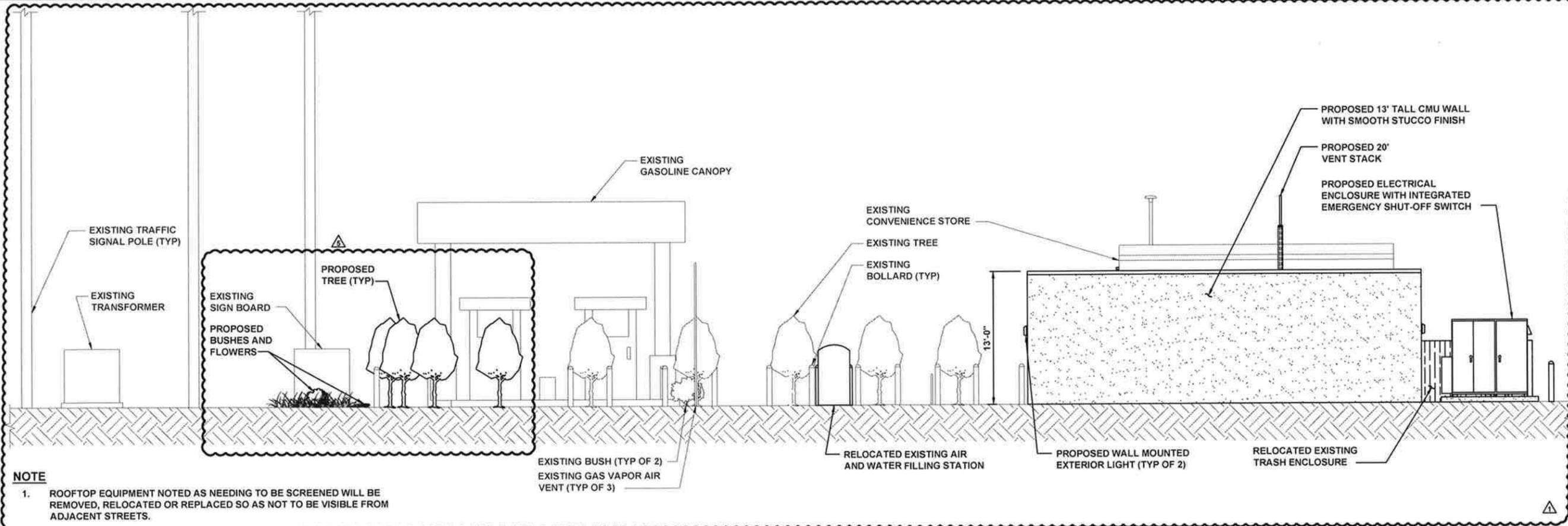
REGISTERED PROFESSIONAL ENGINEER
P.H. DOYLE
No. 74199
CIVIL
STATE OF CALIFORNIA

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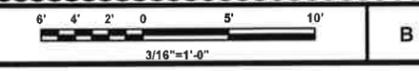
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S COSTA MESA
2050 HARBOR BOULEVARD
COSTA MESA, CA 92627

SHEET TITLE
SITE ELEVATIONS

SHEET NUMBER
Z-5

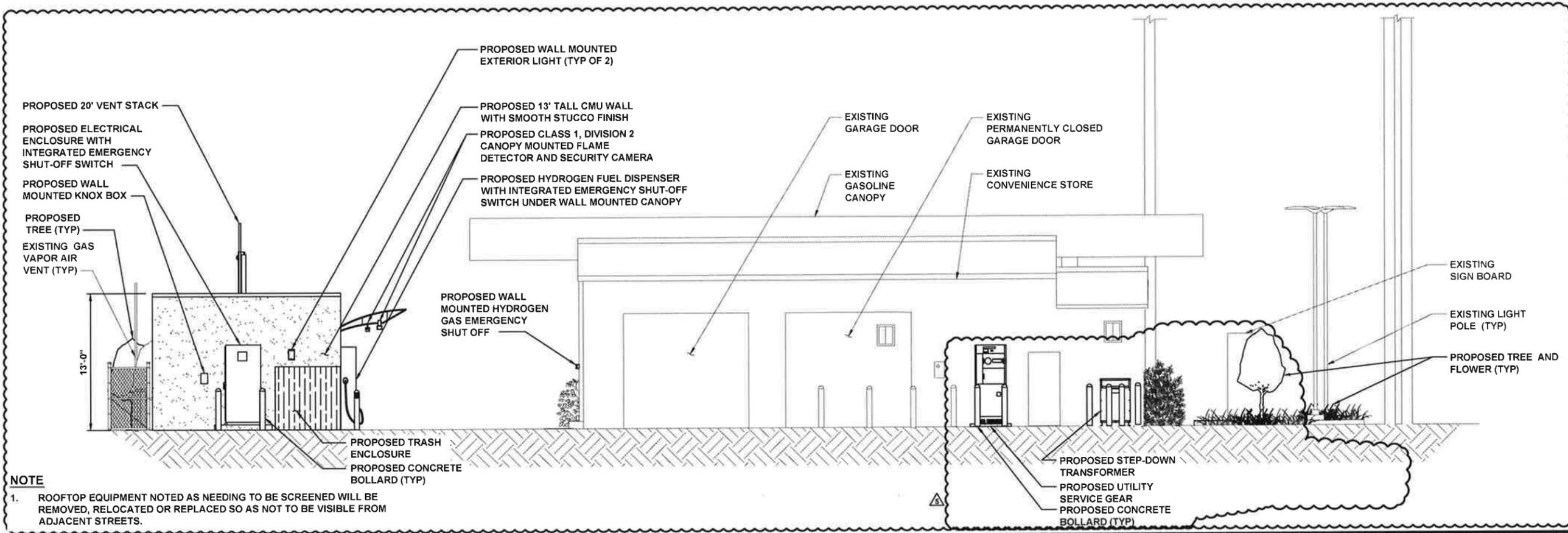


SOUTH ELEVATION



NOTE
1. ROOFTOP EQUIPMENT NOTED AS NEEDING TO BE SCREENED WILL BE REMOVED, RELOCATED OR REPLACED SO AS NOT TO BE VISIBLE FROM ADJACENT STREETS.

68



NOTE
 1. ROOFTOP EQUIPMENT NOTED AS NEEDING TO BE SCREENED WILL BE REMOVED, RELOCATED OR REPLACED SO AS NOT TO BE VISIBLE FROM ADJACENT STREETS.

EAST ELEVATION

5151 CALIFORNIA AVENUE, #220
 IRVINE, CA 92617
 (949) 205-5553

10950 GRANDVIEW DRIVE
 OVERLAND PARK, KS 66210
 (913) 458-2000

PROJECT NO:	182622
DRAWN BY:	JKR
CHECKED BY:	NMB

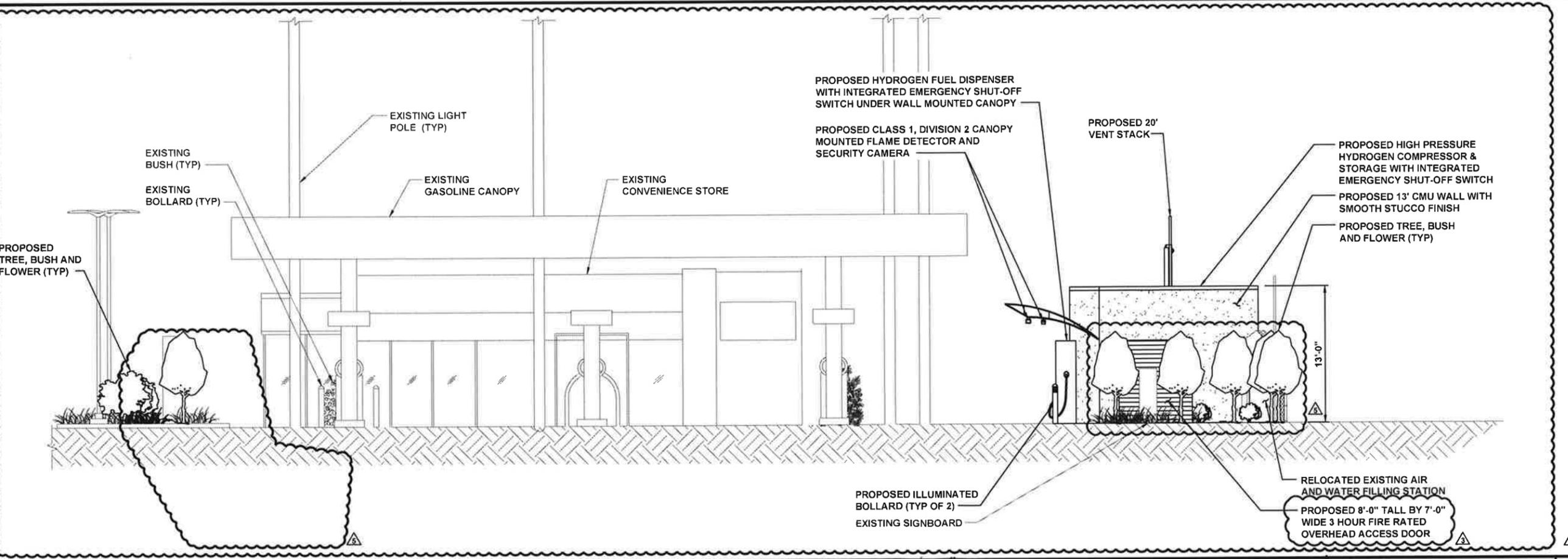
REV	DATE	DESCRIPTION
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4	04/01/15	REISSUED FOR ZONING
3	03/20/15	REISSUED FOR ZONING
2	02/17/15	REISSUED FOR ZONING
1	02/08/15	REISSUED FOR ZONING
0	11/24/14	ISSUED FOR ZONING

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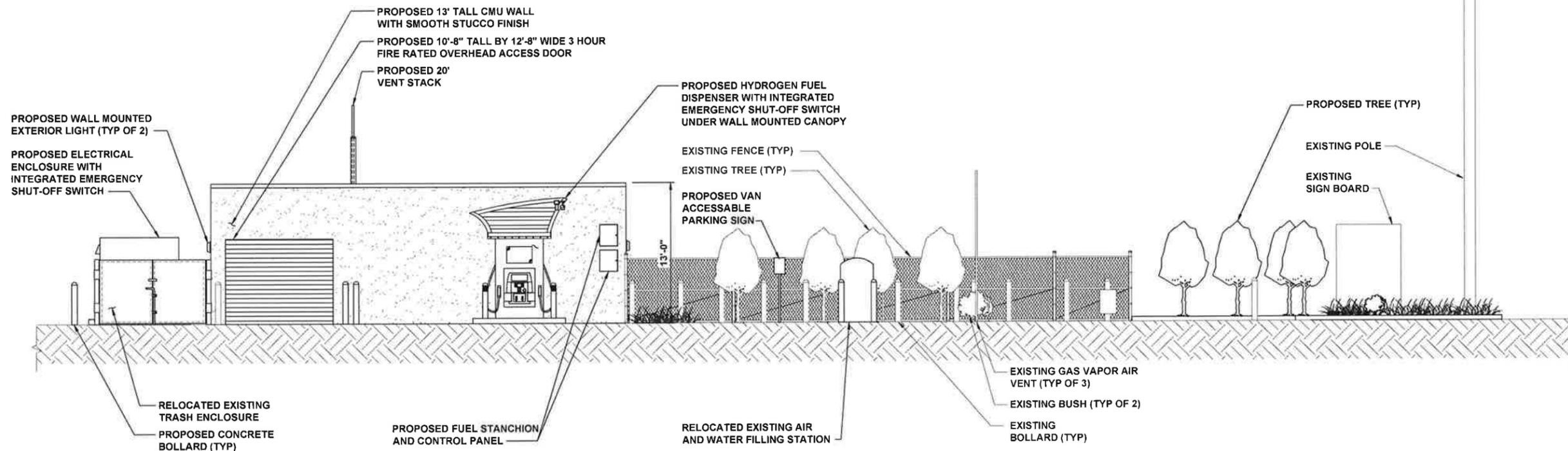
SHEET TITLE
SITE ELEVATIONS

SHEET NUMBER
Z-6

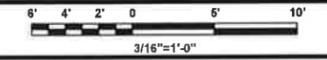


WEST ELEVATION

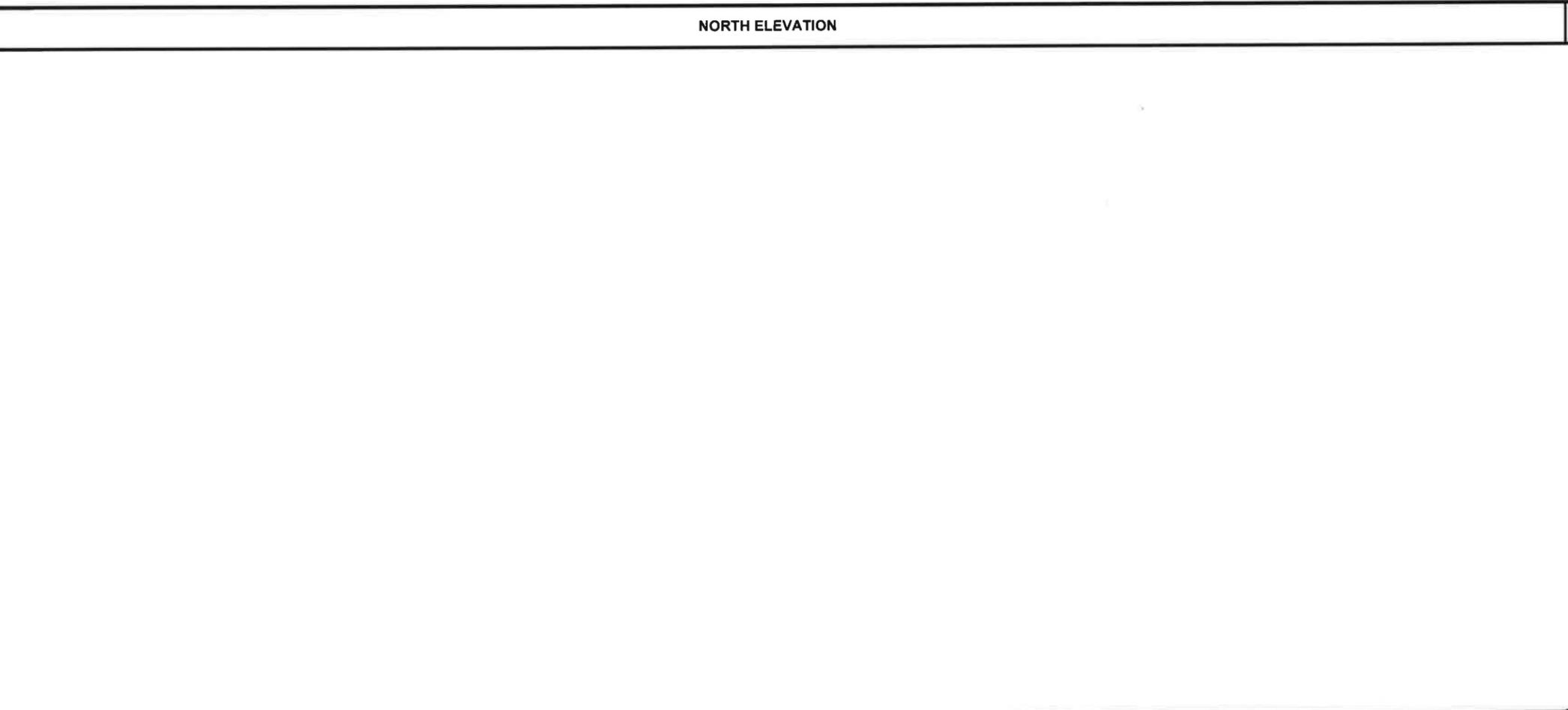
69



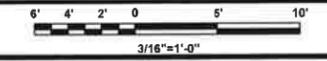
NORTH ELEVATION



A



DETAIL NOT USED



B



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IRVINE, CA 92617
(949) 205-6553

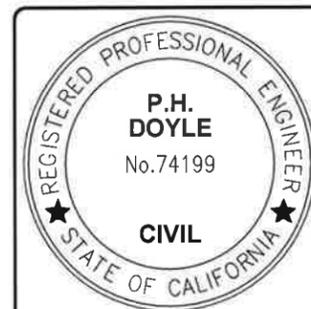


BLACK & VEATCH

10950 GRANDVIEW DRIVE
OVERLAND PARK, KS 66210
(913) 468-2000

PROJECT NO:	182622
DRAWN BY:	JKR
CHECKED BY:	NMB

REV	DATE	DESCRIPTION
5	04/17/15	REISSUED FOR ZONING
4	04/01/15	REISSUED FOR ZONING
3	03/20/15	REISSUED FOR ZONING
2	02/17/15	REISSUED FOR ZONING
1	02/06/15	REISSUED FOR ZONING
0	11/24/14	ISSUED FOR ZONING



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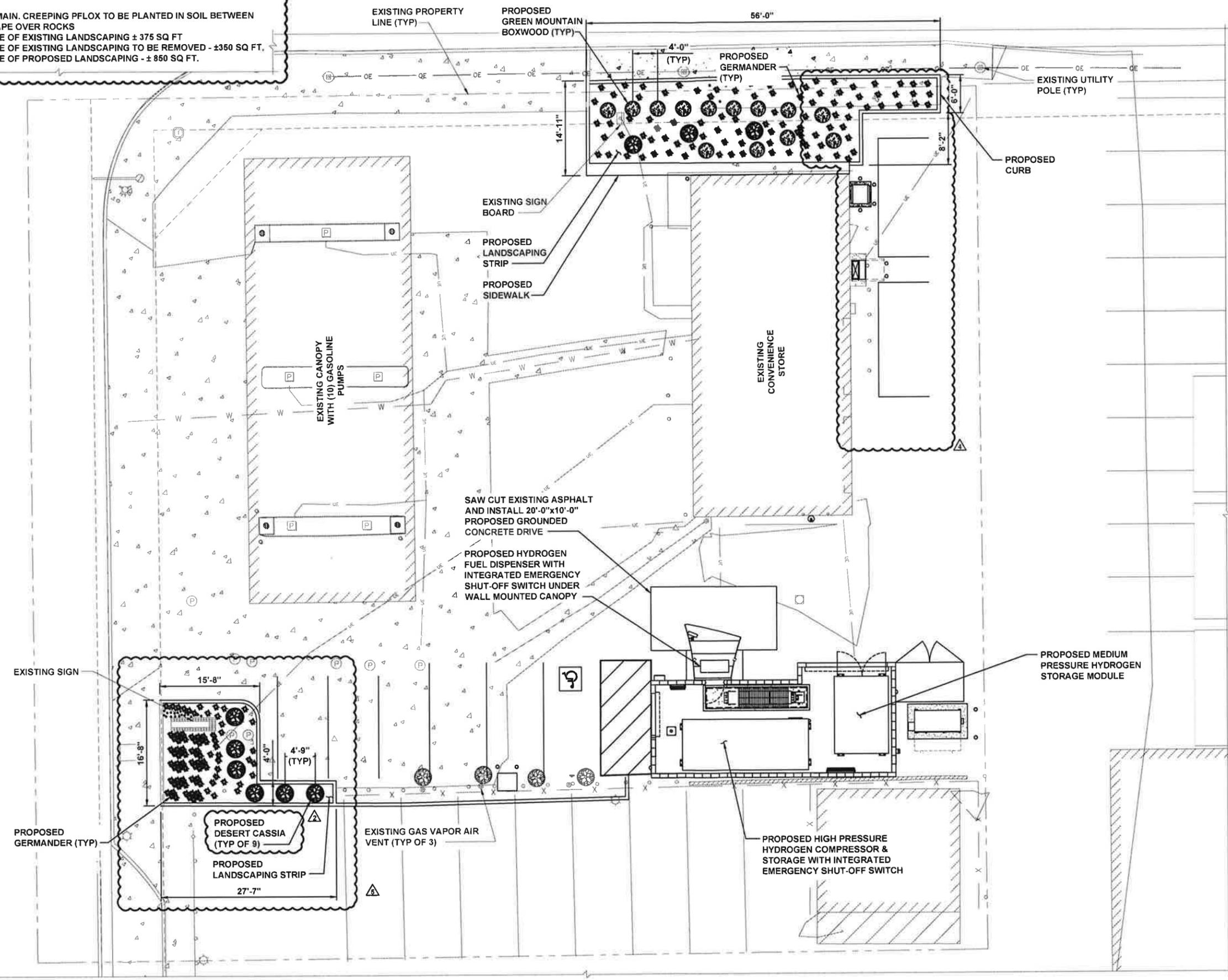
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2050 HARBOR BOULEVARD
COSTA MESA, CA 92627

SHEET TITLE
SITE ELEVATIONS

SHEET NUMBER
Z-6.1

110

- NOTES**
1. ROCKS HILL SIDE TO REMAIN. CREEPING PFLOX TO BE PLANTED IN SOIL BETWEEN ROCKS. FOLIAGE TO DRAPE OVER ROCKS
 2. TOTAL SQUARE FOOTAGE OF EXISTING LANDSCAPING ± 375 SQ FT
 3. TOTAL SQUARE FOOTAGE OF EXISTING LANDSCAPING TO BE REMOVED - ±350 SQ FT.
 4. TOTAL SQUARE FOOTAGE OF PROPOSED LANDSCAPING - ± 850 SQ FT.



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IRVINE, CA 92617
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BLACK & VEATCH
10950 GRANDVIEW DRIVE
OVERLAND PARK, KS 66210
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PROJECT NO:	182622
DRAWN BY:	JKR
CHECKED BY:	NMB

REV	DATE	DESCRIPTION
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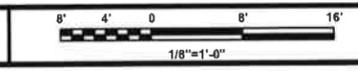
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SHEET TITLE
LANDSCAPING PLAN

SHEET NUMBER
Z-14

PROPOSED LANDSCAPING PLAN



A