

North Fair Oaks Community Council San Mateo County Coordinated

Departmental Response



October 18, 2019 DATE:

NFOCC MEETING DATE: October 24, 2019

10 days, within 300 feet SPECIAL NOTICE/HEARING:

> VOTE REQUIRED: Majority

To: Members, North Fair Oaks Community Council

From: Planning Staff

Subject: Consideration of a Use Permit to allow outdoor dining within courtyard

> areas and on the rooftop of a 1,725 sq. ft. restaurant/bar in a new building, and a Non-Conforming Use Permit to allow an existing building with a commercial kitchen to maintain a zero-foot rear yard setback where 20foot is the minimum required, pursuant to Section 6401 and Section 6137 of San Mateo County's Zoning Regulations, respectively. The project also consists of a Design Review Permit for construction of the new building at 2635 Middlefield Road, remodel of an existing 2,540 sq. ft. building used as a commercial kitchen at 2655 Middlefield Road, and a new 21-space parking lot for a single restaurant use on three adjacent parcels. No significant trees will be removed. Two existing structures located at 2635-

2647 Middlefield will be demolished and the parcels will be merged.

County File Number: PLN 2018-00488 (Capelo)

PROPOSAL

The applicant is proposing to construct a restaurant/bar for on-site indoor dining and outdoor dining on patio and rooftop areas. The outdoor dining use requires a Use Permit pursuant to Section 6401 of the San Mateo County Zoning Regulations. The proposed development is on three parcels which must be merged, as the property would support a singular business with associated buildings and parking areas. Merging the parcels will result in the designation of MacArthur Avenue as the front of the parcel and Middlefield Road as a street side. The existing building would be located on the rear property line, and will become non-conforming, as a 20-ft, setback is required by the C-2/NFO Zoning District. A Non-Conforming Use Permit pursuant to Section 6137 is required to allow the zero-foot rear setback.

The restaurant development, including the new building, redesign of the existing building, and a new 21-space parking area, has been reviewed by the Bayside Design Review Committee and recommended for approval on October 2, 2019. The indoor restaurant use does not require a Use Permit under the C-2/NFO Zoning District, as the project was deemed complete prior to the re-zoning of the property to the current CMU-3 Zoning District. The Use Permit for outdoor seating, Non-Conforming Use Permit for a non-conforming rear yard setback, and Design Review Permit for the new development and building remodel will be considered by the Planning Commission at a future hearing.

RECOMMENDATION

That the North Fair Oaks Community Council provide a recommendation to the Planning Commission on the proposed Use Permits to allow outdoor seating on the proposed patio and rooftop and to allow the existing commercial kitchen building to maintain a zero-foot rear yard setback.

BACKGROUND

Report Prepared By: Erica Adams, Project Planner

Owner/Applicant: John Capelo

Location: 2635-2655 Middlefield Road, North Fair Oaks

APNs: 054-233-310, 054-223-330, and 054-223-350

Parcel Size (combined): 15,110 sq. ft.

Applicable Zoning: C-2/NFO/S-1/DR (General Commercial District/North Fair Oaks) at

time of application, and CMU-3 (Neighborhood Commercial) as of July 23, 2019

General Plan Designation: Commercial Mixed Use Urban

Existing Land Use: Take out/catering food service

Proposed Land Use: Restaurant with outdoor dining/take-out/catering food service

Water Supply: City of Redwood City Municipal Water Department

Sewage Disposal: Fair Oaks Sewer District

Flood Zone: Zone X (area of minimal flood risk); FEMA Panel No. 06081C0302E,

Effective October 16, 2012

Environmental Evaluation: The project is categorically exempt from the California Environmental Quality Act (CEQA), pursuant to Section 15301 (2655 Middlefield Road) and Section 15303 (2635 Middlefield Road). Section 15301 exempts the minor

alteration of existing private structures (i.e., remodel of existing commercial kitchen building), involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. Section 15303 exempts construction of new, small facilities or structures (new restaurant building that replace the auto repair building to be demolished), including exemption of new construction of a restaurant use not exceeding 2,500 sq. ft. in floor area.

Setting: The project site is located along Middlefield Road, one of the main commercial corridors in North Fair Oaks. The surrounding area is currently a mix of light industrial use along Middlefield Road within the CMU-3 (Neighborhood Mixed Use) Zoning District. The subject parcels are currently developed with a take-out restaurant and catering kitchen (2655 and 2647 Middlefield Road), and an auto repair shop (2635 Middlefield Road).

CHRONOLOGY:

<u>Date</u>	Action
December 12, 2018	The applicant submitted a Design Review Permit application PLN2018-00488 without a Use Permit application, while plans reflected an outdoor seating area.
December 31, 2018	Applicant was advised to either apply for the Use Permit to be processed at the same time or revise plans to eliminate outdoor seating areas.
April 1, 2019	Applicant submitted revised plans and the Use Permit application.
July 15, 2019	Project deemed complete.
July 23, 2019	CMU-3 Zoning District was adopted by the County Board of Supervisors
August 7, 2019	Project reviewed by the Bayside Design Review Committee. Committee requests the applicant to review items of concern (including compliance with design review standards and general functionality) which were discussed. The project was continued.
August 23, 2019	CMU-3 zoning took effect.
October 2, 2019	Project reviewed by the Bayside Design Review Committee and recommended for approval.
October 24, 2019	North Fair Oaks Community Council Meeting.

DISCUSSION

A. KEY ISSUES

1. Compliance with the General Plan/North Fair Oaks Community Plan

The San Mateo County General Plan (Policy 8.8 - Designation of Existing Urban Communities) designates North Fair Oaks as an Urban Community. The North Fair Oaks Community Plan (NFOCP) designates the parcel as Commercial Mixed Use. The proposed restaurant/bar with outdoor dining, take-out, and catering food services, the project complies with these designations.

Applicable standards in the General Development Standards in Urban Areas section of the General Plan, include: a) Zoning Regulations (8.34) – Ensure that development is consistent with land use designations; b) Uses (8.35) - Allow uses in the zoning district that are consistent with the overall land use designation; c) Height, Bulk, and Setbacks (8.38) – Regulate height bulk and setback requirements in the zoning districts to: (1) ensure the size and scale of development is compatible with the parcel size, (2) provide sufficient light and air around structures; (3) ensure that development of permitted densities is feasible, and ensure public health and safety; and d) Parking Requirements (8.39) - Regulate on-site parking requirements to: (1) accommodate the development, (2) provide convenient and safe access, (3) prevent congestion of public streets, and (4) establish orderly development patterns.

The proposal is compatible with the NFOCP, specifically Chapter 7, Design Standards and Guidelines for commercial buildings. These guidelines include: a) Orientation and Layout (ES-1) and b) Building Articulation and Interface with the Public Realm (ES-15) and are discussed in Section 2.C (Compliance with Design Review Standards) of this report. The project is also compatible with elements of Chapter 8, Economic Development which has goals to Support Small Business (Goal 8.2) and Support Business Expansion (Goal 8.3), which seeks to retain and grow existing retail and service businesses and provide support for existing businesses to expand without relocating outside of North Fair Oaks.

The subject application involves three parcels which were rezoned from General Commercial (C-2/NFO/S-1) to Commercial Mixed Use (CMU-3) and took effect on August 23, 2019. Restaurant use is allowed in both zoning districts, pursuant to Section 6263.3.B ("C-2/NFO" *Uses Permitted*) and Section 6570.4.4.C. (CMU3 *Use Permitted*). The three parcels will be merged as the property would support a singular business with associated buildings and parking areas and to prevent separate sale of associated uses.

¹ No Use Permit is required for the restaurant use since it is allowed in the C-2NO Zoning District without a Use Permit, and the application was deemed complete prior to the adoption of the CMU 3 Zoning District.

2655 Middlefield Road is currently developed with an existing catering/take out service. Adjacent parcels at 2635-2647 Middlefield Road were acquired by the applicant. They are currently developed with an auto repair use which would be demolished, and replaced with a newly constructed restaurant/bar with indoor and outdoor dining and a parking area. The two buildings (the existing commercial kitchen and the proposed restaurant/bar) would have compatible exterior treatments which visually unify the site, and comply with design and development standards, with the exception of a non-conforming rear setback that would be created when the three parcels are merged. The proposal integrates building design, light, and landscaping to comply with zoning regulations and has been reviewed by the Bayside Design Review Committee. The expansion of the existing business, Capelo's Barbecue, in the North Fair Oaks community would provide additional employment opportunities for the community and expansion of dining options.

2. Compliance with the Zoning Regulations

a. <u>Development Standards</u>

On July 23, 2019, this area of North Fair Oaks along Middlefield was rezoned from General Commercial (C-2/S-1) to Commercial Mixed Use (CMU-3). The planning application was submitted prior to the rezoning; therefore the proposed project was analyzed under the previous C-2/S-1 zoning regulations. With one exception, the project complies with the C-2/NFO zoning, a non-conforming rear setback on the existing building that would be created when the parcels are merged and the front yard becomes MacArthur Avenue and the rear setback.

Development standards for this parcel are regulated by the C-2/NFO Zoning District and S-1 Combining District. Project compliance with applicable development standards is outlined in the table below.

Project Compliance	Project Compliance with Development Standards of the S-1 Zoning District										
	S-1 Development Standards Existing		Proposed								
Minimum Lot Width	Average 50 ft.	Approx. 84.56 ft.	No Change								
Minimum Lot Area	5,000 sq. ft.	15,111 sq. ft. Combined parcels	No Change								

Project Co	ompliance with [Development Standards of	the C-2/NFO Zo	ning District			
	C-2/NFO Development Standards	CMU-3 Development Standards	Proposed Development	Compliance			
	Development Standards (For reference only) Oft. Oft. Oft. 100 ft. Complies *Addressed by Use Permit No Change For parcels with side street frontage, a setback sufficient in combination with existing sidewalk to create an 8-foot sidewalk measured from back of curb Oft. Oft.						
Minimum Front Yard Setback	0 ft.	0 ft.	100 ft.	Complies			
Minimum Rear Yard Setback				•			
	20 ft.*	10* ft.	0*	No Change			
Minimum Right Side Yard Setback		street frontage, a setback sufficient in combination with existing					
	0 ft.	foot sidewalk measured	` ,	Complies with C-2 zoning			
Minimum Left Side Yard Setback	0 ft.	0 ft.	0	Complies with C-2 zoning			
Building Stepback 2 nd story	0	10 ft.	0 ft.	with C-2			
Maximum Building Height	36 ft.	40 ft.	24 ft.	Complies			
Maximum Lot Coverage	50%	N/A	26.3%	Complies			
Maximum Floor Area Ratio*	150%	150%	28.2%	Complies			
(N) – New building (E	E)- Existing buildir	ng					
* Non-conformity will	be addressed by	a Use Permit					

b. <u>Parking Requirements</u>

Per Section 6117 of the Zoning Regulations, a restaurant requires one 9-foot by 19-foot, on-site parking space per every three (3) seats. The proposal has seating for 56 patrons which requires a minimum of 19 parking spaces. The applicant is proposing 21 off-street parking spaces, which exceeds the minimum required parking.

Parking Area Design and Maintenance (Section 6121 of the Zoning Regulations) requires a planter or landscaped area of at least (4) feet wide, and that any area within the street right-of-way shall be developed as a

planter or landscaped area. The project includes landscaping along the borders of the parking lot.

c. <u>Compliance with the Design Review Standards</u>

The project was reviewed by the Bayside Design Review Committee (Committee) on August 7, 2019. At the hearing, the Committee recommended that the applicant revisit some aspects of the project for compliance with the design review standards and functionality. A modified project was presented at the October 2, 2019 hearing, and the Committee recommended that the project be approved.

North Fair Oaks Design Review standards can be found in Section 6565.18 of the San Mateo County Zoning Regulations. Key design standards for this project include:

- 1) Site Planning (Section 6565.18 A) requires recessed front property lines, pedestrian plazas, prominent building entrances and architecturally interesting buildings;
- 2) Building facades (Section 6565.18 E) requires that doors, windows, walls, and/or other elements that proportionately fit together and are humanly scaled;
- 3) Materials and Colors (Section 6565.18 F) requires use of exterior building materials that are in harmony with the surrounding neighborhood and enhance the building style, e.g., painted or stained wood, or textured painted stucco surfacing materials; and
- 4) Landscaping (Section 6565.18.I) requires use of vines on walls and trellises; and flowers and ornamental trees in planter boxes or pots, to enhance the appearance of blank walls when visible from a public street.

The Committee found the project, as designed and conditioned, would provide an asset to the community. The Committee stated that the two buildings have been well-integrated with the outdoor eating area so that it is clear that there is a single use, and that building materials, a mix of redwood, painted cement, and metal for balconies, would create visual interest. The Committee found that door and window placement is proportional and there is appropriate use of canopies and awnings. The Committee found that the proposed landscaping offers a visual separation between outdoor dining and public and private parking areas.

3. Compliance with the Use Permit findings

Two aspects of the project require a Use Permit and that the Planning Commission make required findings for approval. To grant the Use Permit, the Planning Commission must find in each instance that: The establishment, maintenance and/or conducting of the use will not, under the circumstances of the particular case, result in a significant adverse impact to coastal resources, or be detrimental to the public welfare or injurious to property or improvements in said neighborhood.

A Use Permit is required for outdoor seating on the proposed patio between two buildings and on the roof. No permit is required for the restaurant use, as the use is allowed without a Use Permit in the C-2/NFO Zoning District, which is the applicable District for the project.

The proposed seating is located between two buildings, the existing and the proposed, on the three parcels to be merged, and not in the public right-of-way. The proposed parking for the seating meets the County's Parking Regulations with regard to number, size and screening. The exterior changes and new construction would improve aesthetics in the area. The surrounding uses are commercial and light industrial and do not include residences. The operational hours are compatible with adjacent uses. The property is not located in the Coastal Zone. Based on the foregoing, there are no anticipated detrimental impacts to public welfare or injury to property or improvements in the North Fair Oaks neighborhood. Staff finds that the Use Permit findings for outdoor dining can be made.

A second Use Permit is required to allow the existing building at 2655 Middlefield Road to maintain a zero-foot rear yard setback. The merger of the three parcels will create a parcel and new designation of yards. MacArthur Avenue would become the new front yard, Middlefield Road the right side yard, and the designation of the remaining sides would also change. As a result, the existing building at 2655 Middlefield Road, would be located in the rear yard on the merged parcel, and maintain a zero-foot rear yard where the C-2/NFO Zoning District requires a 20-foot minimum rear yard setback.²

The existing building at 2655 Middlefield Road was at one time a warehouse. County records do not indicate the date of construction, however building permits show that in 2013 the building was converted to a commercial kitchen use. As the structure has existed in this location for nearly a decade, staff anticipates that there would be no impact to the public from the non-conforming rear yard setback as there would be no physical change to the setback. Development opportunities for the parcel at 2659 Middlefield would not be impacted. Based on the foregoing,

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² The CMU-3 Zoning District has a minimum 10-foot rear yard setback.

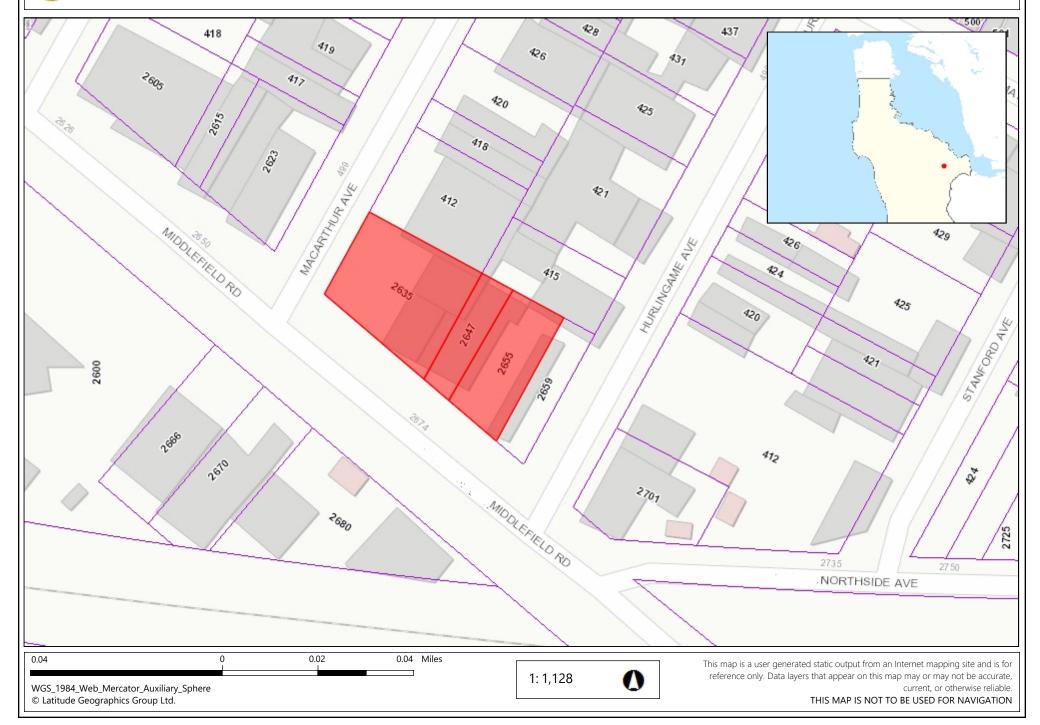
staff finds that the Use Permit findings for the allowance of a non-conforming setback on an existing building can be made.

ATTACHMENTS

- Vicinity Map Project Plans A.
- B.
- C. Photos



2635-2655 Middlefield Road



PROPOSED NEW RESTAURANT/ BAR CAPELO'S BBQ 2635-2655 MIDDLEFIELD ROAD REDWOOD CITY, CA 94063

MAP	PROJECT DIRECTORY	PROJECT DATA	DRAWINGS INDEX
	OWNER/APPLICANT: JOHN CAPELO, CAPELO COMPANIES LLC 2655 MIDDLEFIELD ROAD REDWOOD CITY, CA 94063 (650) 743-4524 ARCHITECT: REID LERNER ARCHITECTS 7680 MONTEREY STREET, SUITE 105 GILROY, CA 95020 (408) 842-9942 LANDSCAPE ARCHITECT: AITKEN ASSOCIATES LANDSCAPE ARCHITECTS 8262 RANCHO REAL GILROY, CA 95020 (408) 842-0245 CIVIL ENGINEER: LEA & BRAZE ENGINEERING INC. 2495 INDUSTRIAL PARKWAY WEST HAYWARD, CA, 94545 (510) 887-4086	APN: 054-233-350 LOT AREA: 4,892± SF (0.11± ACRES) APN: 054-233-330 LOT AREA: 10,218± SF (0.23± ACRES) LOT COVERAGE: EXISTING: 35% PROPOSED: 39% BUILDING HEIGHT: EXISTING: 16'-0" PROPOSED: 23'-0" OCCUPANCY GROUP: EXISTING: 'F-1' (CATERING KITCHEN) PROPOSED: 'A-2' (RESTAURANT/BAR) TYPE OF CONSTRUCTION: TYPE VB-FULLY SPRINKLERED FIRE SPRINKLERS: PROPOSED NEW No. OF STORIES: 1 (ONE) + ROOF DECK ZONING: C-2/NFO (GENERAL COMMERCIAL/NORTH FAIR OAKS) GENERAL PLAN LAND USE: COMMERCIAL MIXED USE/URBAN	ARCHITECTURAL AO COVER SHEET A1 EXISTING SITE PLAN A2 PROPOSED SITE PLAN A3 EXISTING FLOOR PLAN A4 PROPOSED FLOOR PLAN A5 PROPOSED ROOF PLAN A6 PROPOSED ELEVATIONS A7 PROPOSED ELEVATIONS A8 BUILDING SECTIONS LANDSCAPE L1 IRRIGATION PLAN L2 PLANTING & LIGHTING PLAN CIVIL SU1 TOPOGRAPHIC SURVEY C-1.0 TITLE SHEET C-2.0 PRELIMINARY GRADING AND DRAINAGE PLAN C-3.0 PRELIMINARY UTILITY PLAN C-4.0 GRADING SPECIFICATIONS ER-1 EROSION CONTROL PLAN
DEFERRED SUBMITTAL	GENERAL REQUIREMENTS	SCOPE OF WORK	ER-1 EROSION CONTROL PLAN ER-2 EROSION CONTROL DETAILS SCP-1 SITE DEVELOPMENT EXHIBIT SCP-2 STORM WATER CONTROL PLAN SCP-3 STORM WATER CONTROL DETAILS BMPs CONSTRUCTION BEST MANAGEMENT PRACTICES
1) FIRE SPRINKLER & FIRE ALARM PLANS	ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND STANDARDS INCLUDING: 2016 CALIFORNIA BUILDING CODE 2016 CALIFORNIA MECHANICAL CODE 2016 CALIFORNIA PLUMBING CODE 2016 CALIFORNIA ELECTRICAL CODE 2016 CALIFORNIA ENERGY CODE	1) CONVERT EXISTING 1,725 SF (25'X69') AUTO SERVICE BUILDING TO RESTAURANT TO INCLUDE NEW BAR, WALK—IN COOLER, INDOOR DINING AREA, 2 HANDICAP ACCESSIBLE RESTROOMS, AND 700 SF ROOF DECK. 2) CREATE UNCOVERED OUTDOOR DINING AREA BETWEEN THE TWO BUILDINGS 3) DEMOLISH EXISTING BUILDING TO CREATE NEW PARKING AREA INCLUDING 21 PARKING STALLS (2 HANDICAP—ACCESSIBLE STALLS INCLUDING 1 VAN—ACCESSIBLE) AND LANDSCAPE AREA. 4) BUILD NEW TRASH ENCLOSURE BEHIND EXISTING BUILDING	
PARKING SUMMARY	2016 CALIFORNIA FIRE CODE, WITH CITY & COUNTY AMENDMENTS	AREA CALCULATION	
A) PROPOSED SEATING SPACES: 63 B) REQUIRED PARKING STALLS: 21 (1 STALL PER 3 SEATS) C) PROPOSED PARKING SPACES: 21 STANDARD STALL: 19 (9'x18') ACCESSIBLE STALLS: 2 (9'x18' WITH 8' WIDE AISLE) (REQUIRED MINIMUM: 1 PER CBC TABLE 11B-208.2) VAN ACCESSIBLE STALL: 1 (REQUIRED MINIMUM: 1 PER CBC 11B-208.2.4)	SAN MATEO COUNTY CODE OBTAIN PERMITS AND INSPECTION AS REQUIRED	A) EXISTING BUILDING: 2,540 SF 1ST FLOOR: (KITCHEN & FOOD PREP): 2,105 SF 2ND FLOOR: (OFFICE): 435 SF B) NEW RESTAURANT: 1,725 SF C) NEW ROOF DECK: 1,590 SF TOTAL: 5,855 SF	



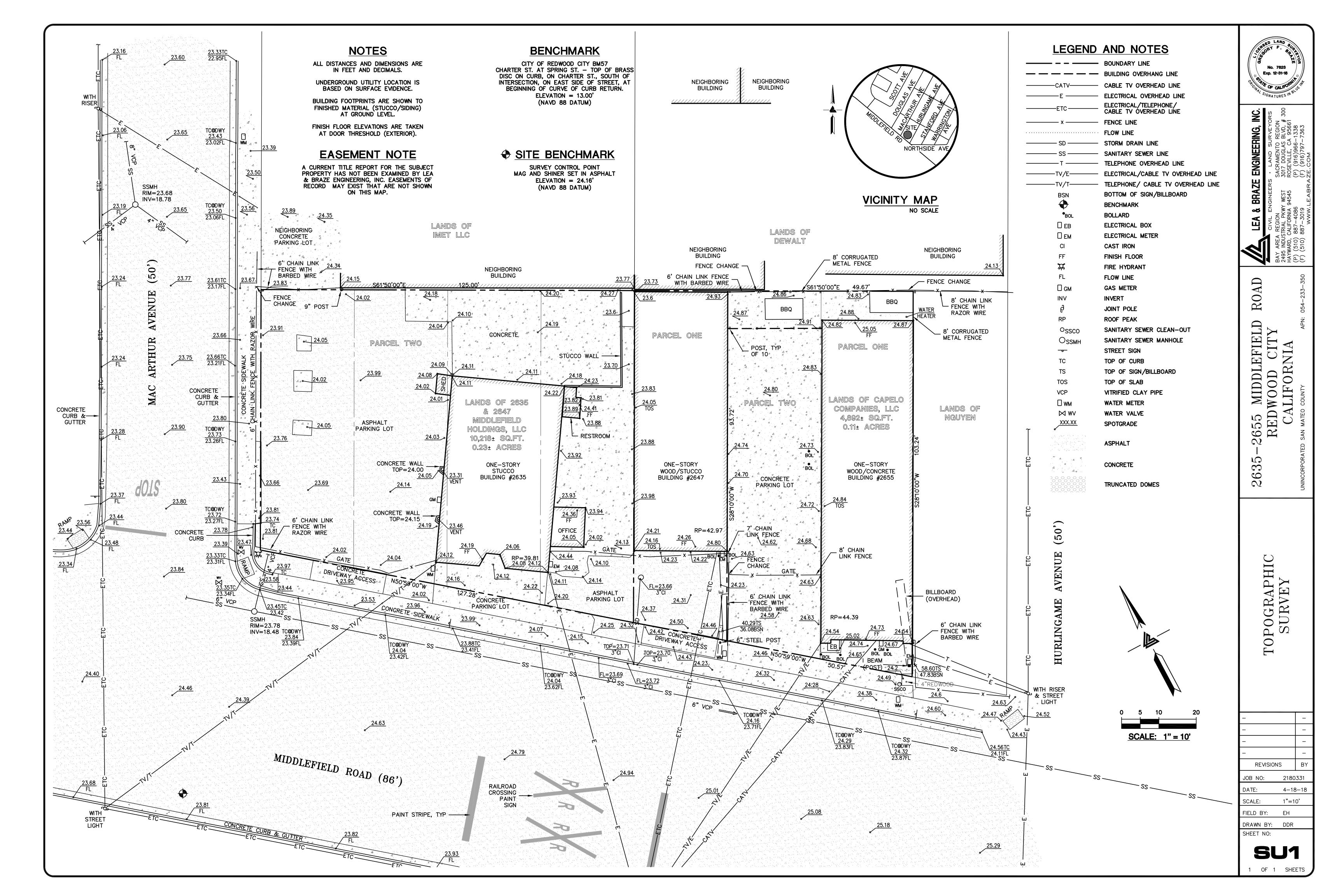
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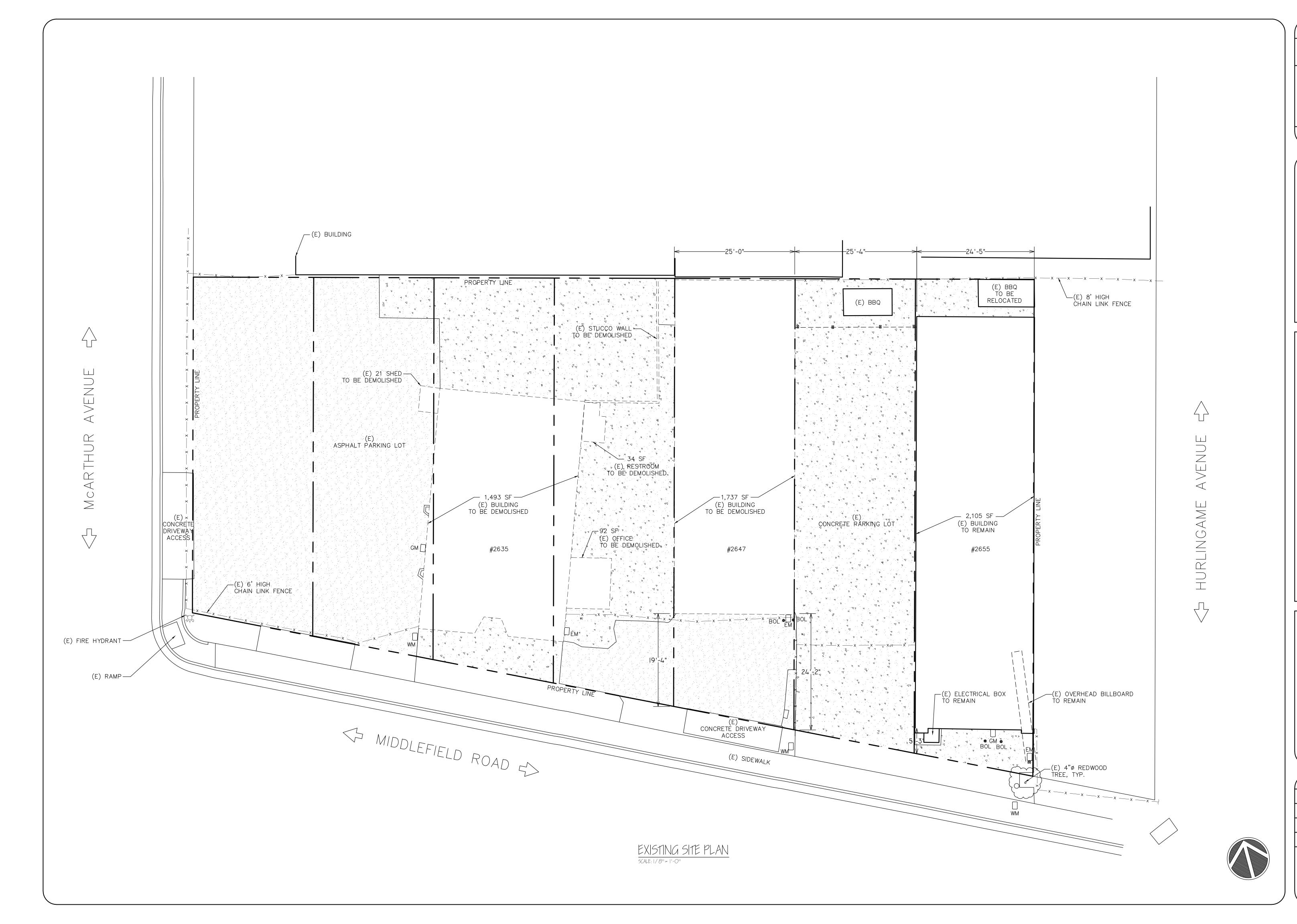
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CAPELO'S BBQ
2635-2655 MIDDLEFIELD ROAD
REDWOOD CITY, CA 94063

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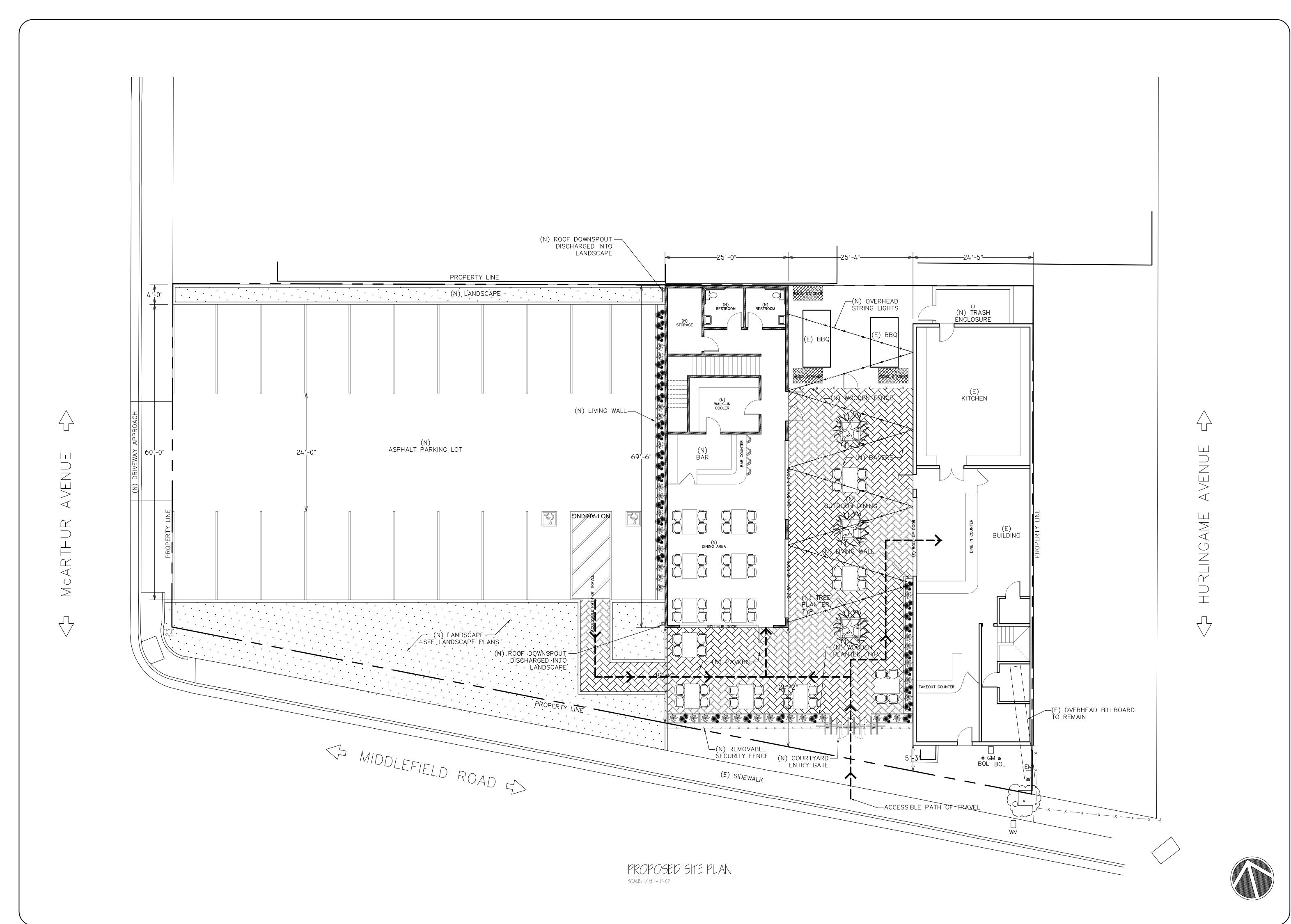


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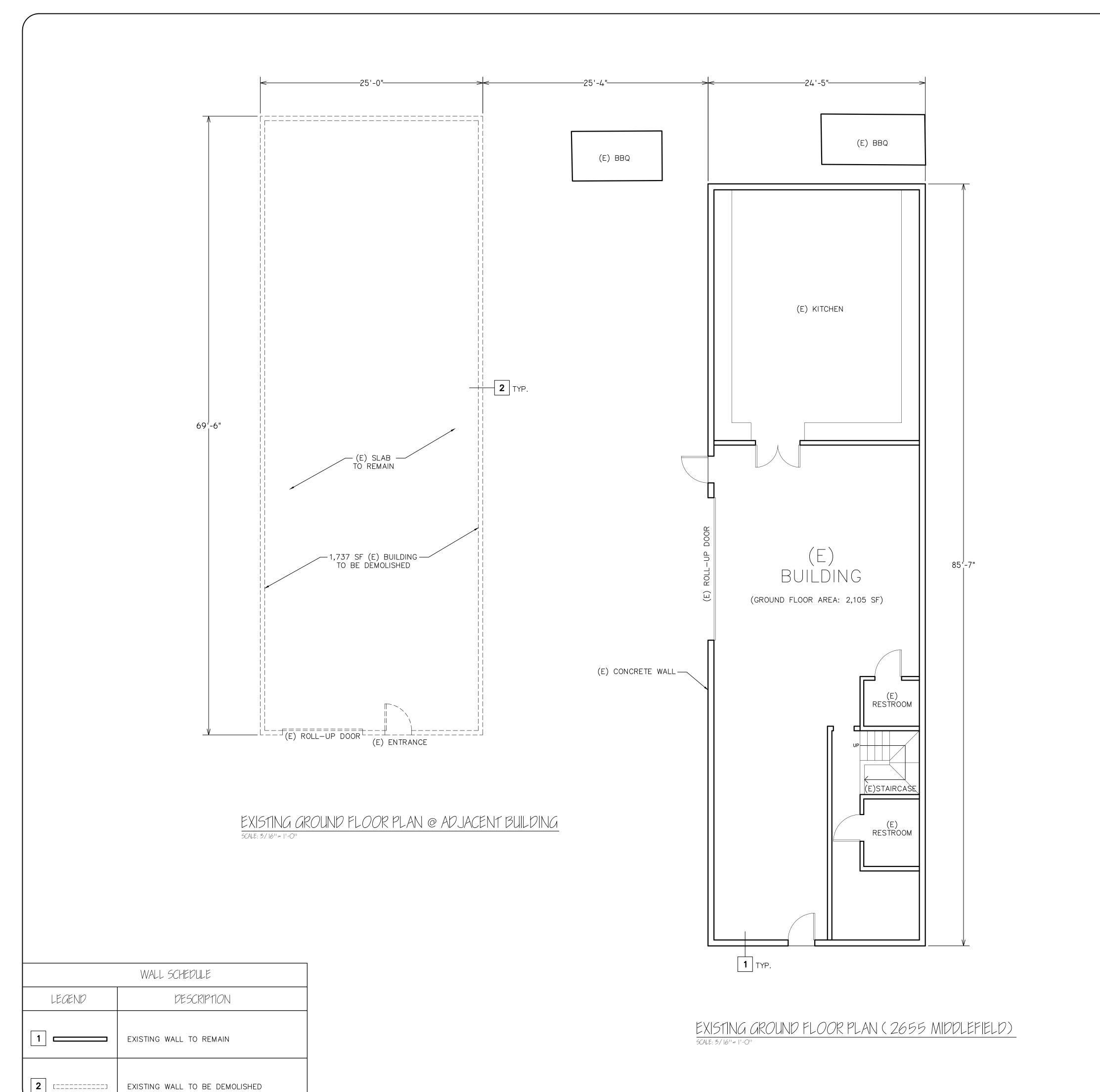


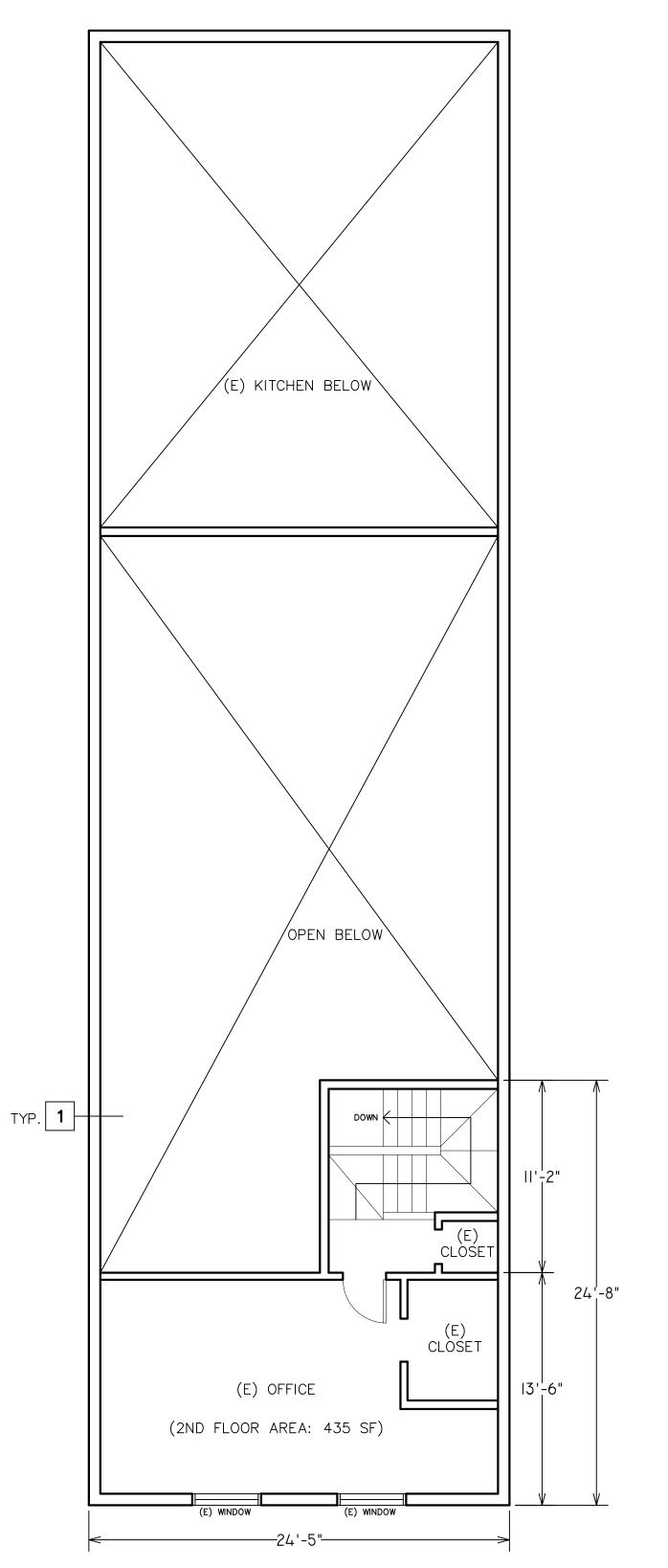
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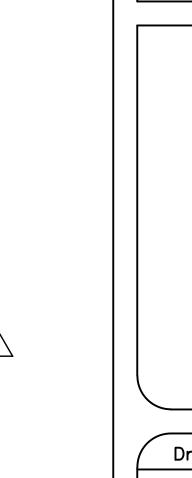
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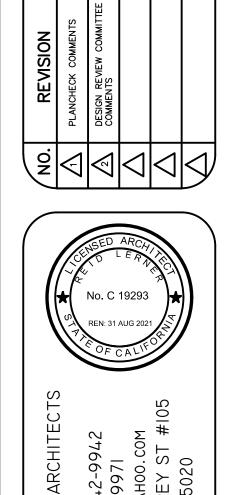




EXISTING 2ND FLOOR PLAN (2655 MIDDLEFIELD)

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

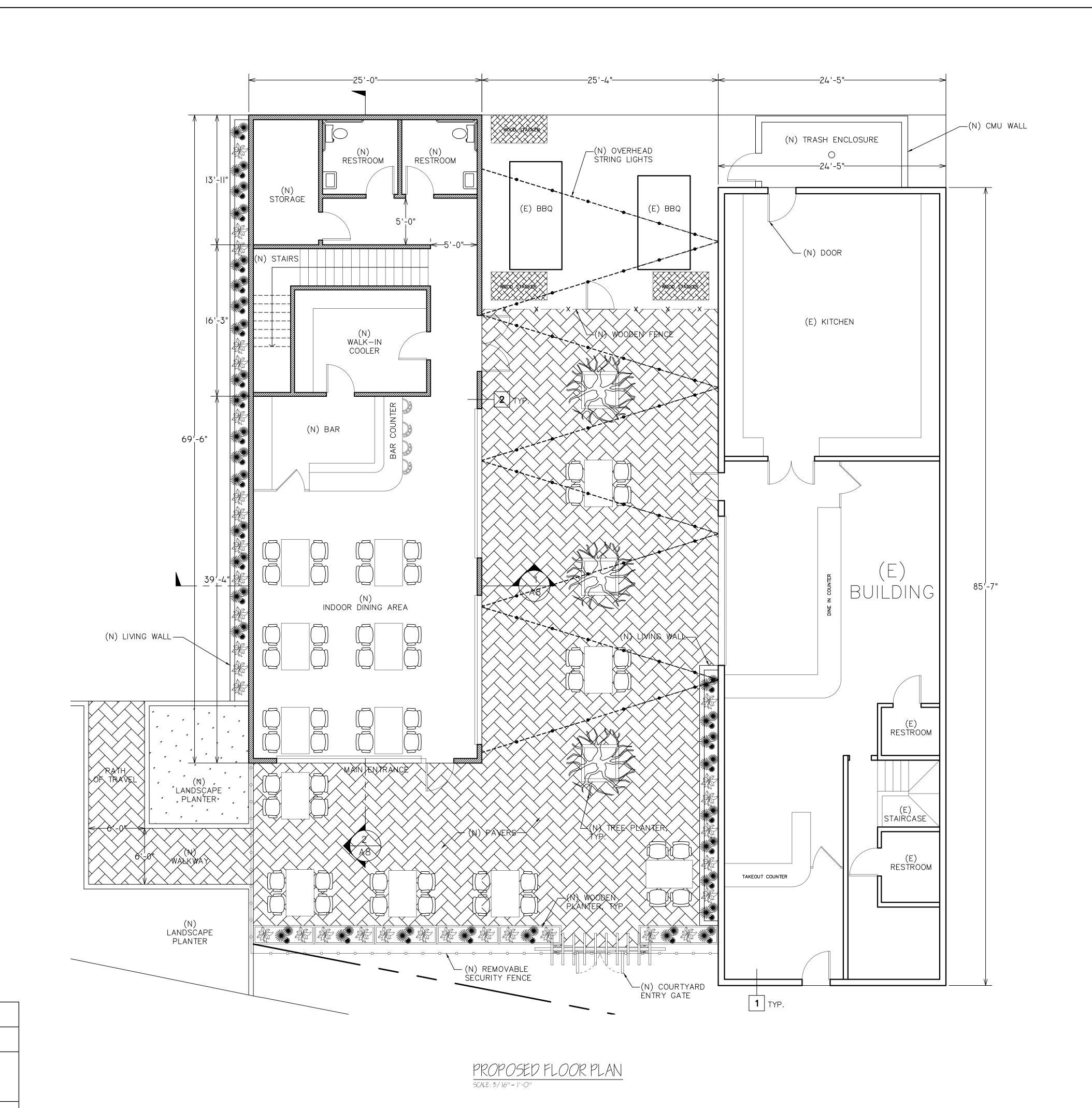




PROPOSED NEW RESTAURANT/BAR CAPELO'S BBQ
2635-2655 MIDDLEFIELD ROAD REDWOOD CITY, CA 94063

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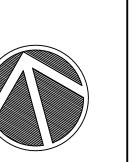
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NEW WALL

LEGEND

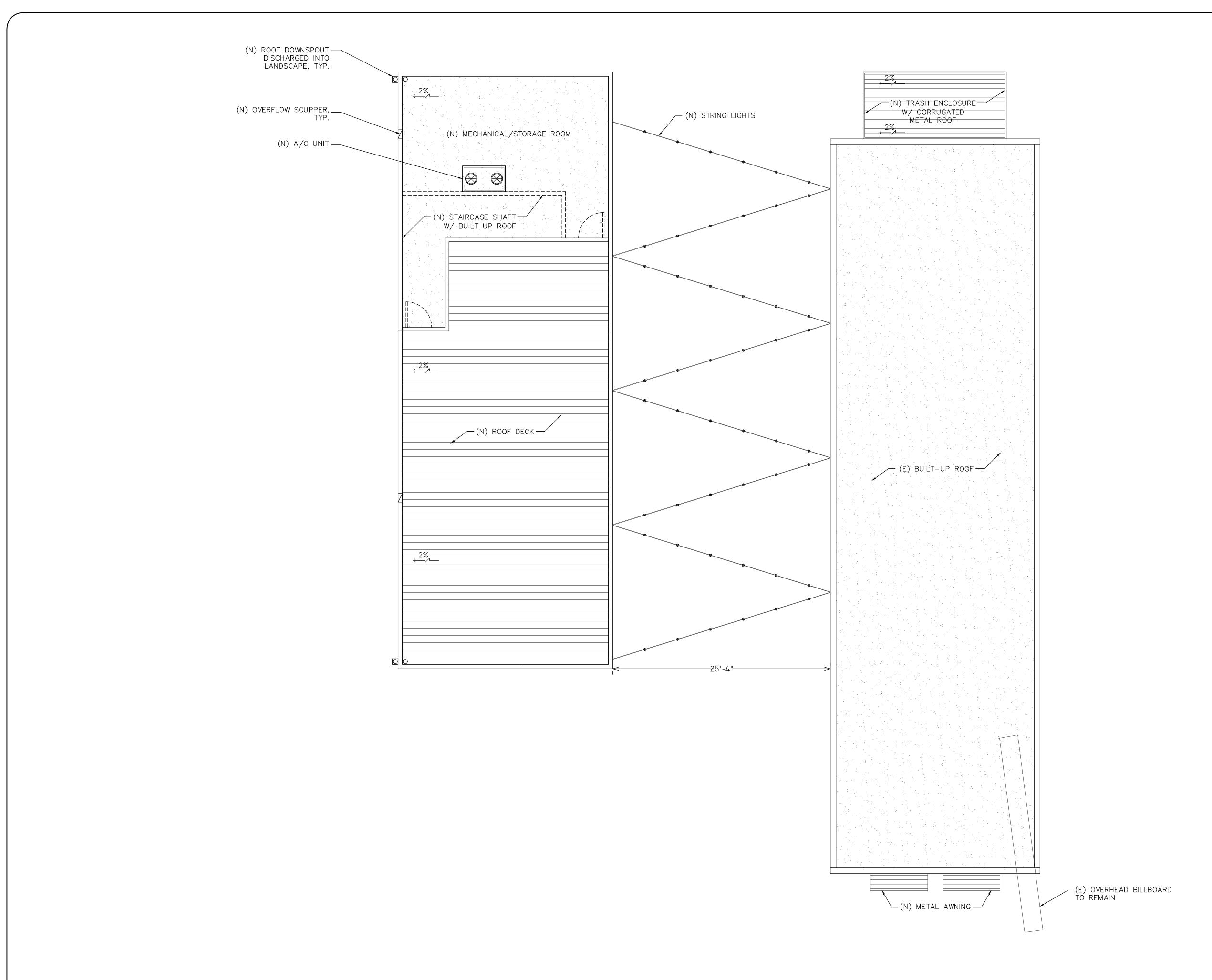
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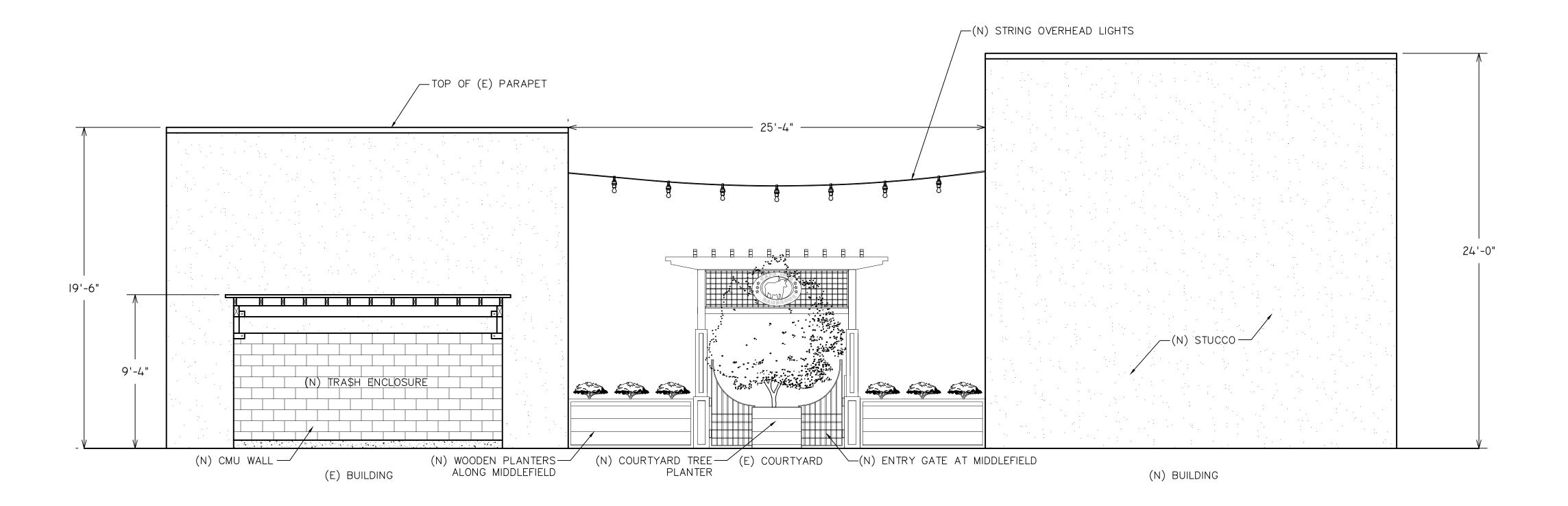
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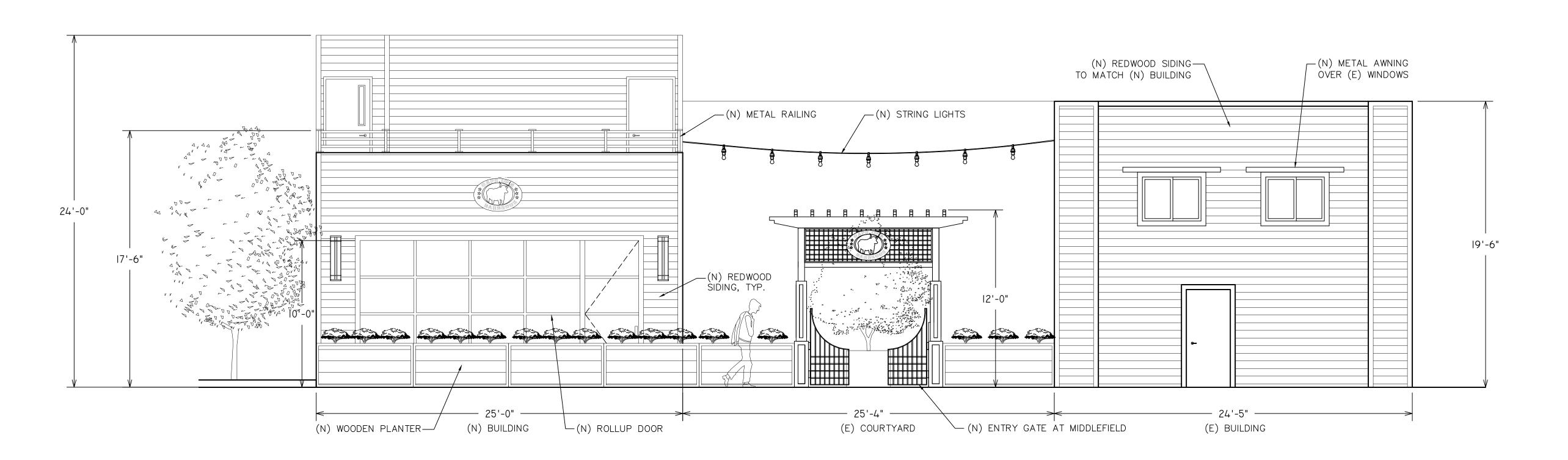
PROPOSED ROOF PLAN

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

PROPOSED REAR/NORTH ELEVATION



PROPOSED FRONT/SOUTH ELEVATION SCALE: 1/4"=1'-0"



55 MIDDLE CITY, CA BBQ CAPELO'S BBC 2635-2655 REDWOOD CIT PROPOSED

ELEVATIONS

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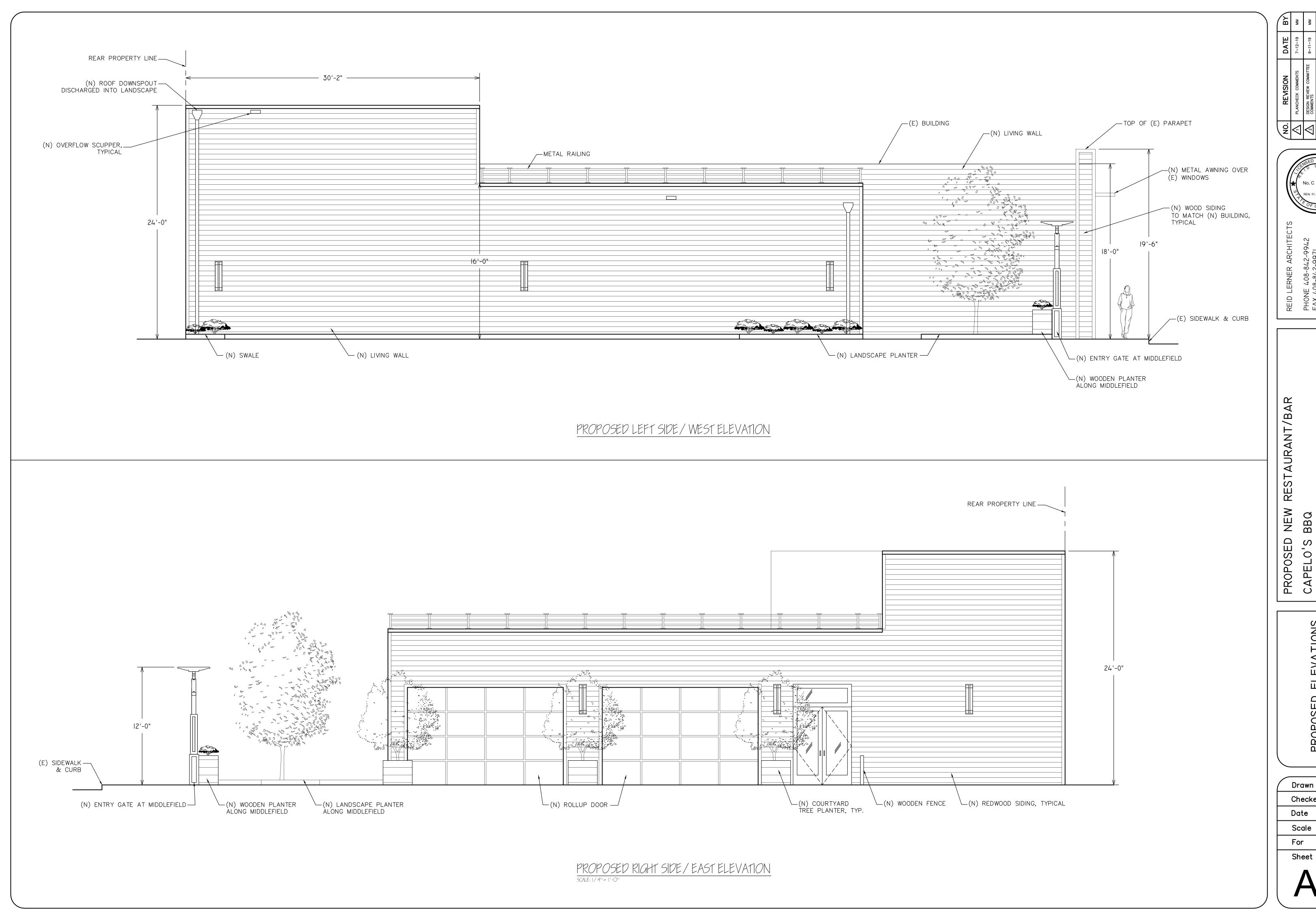
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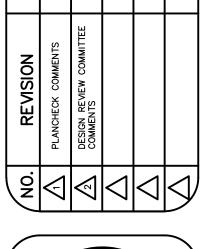
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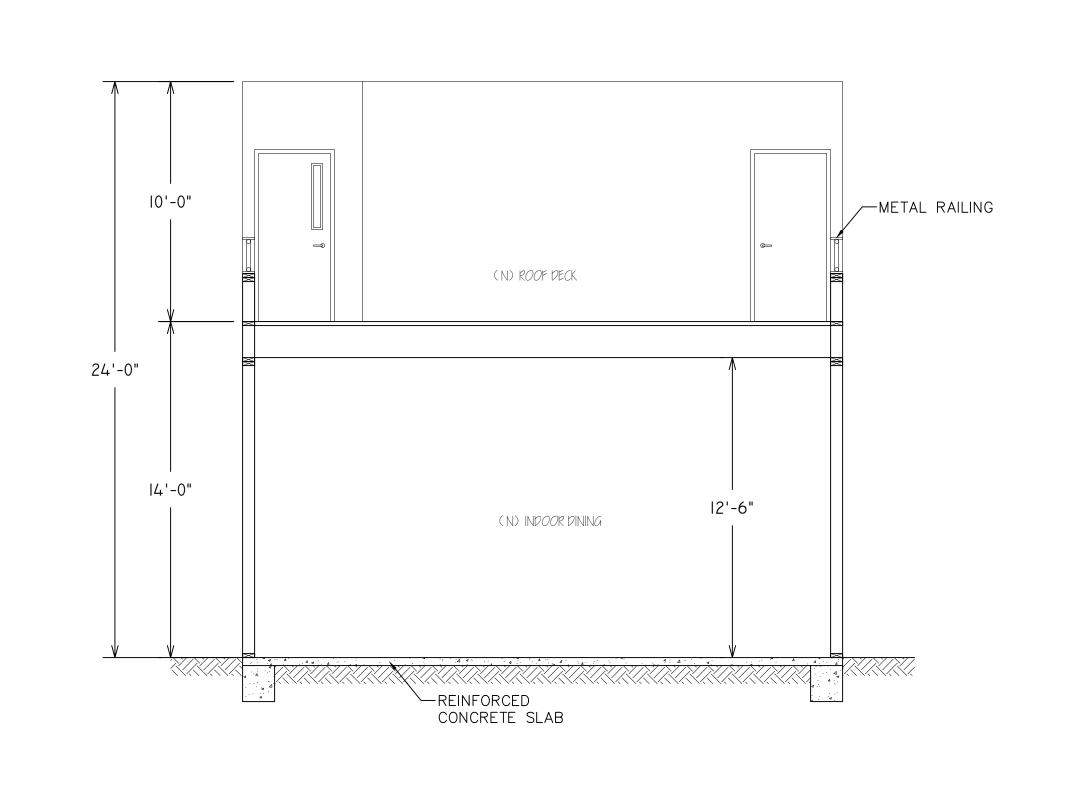
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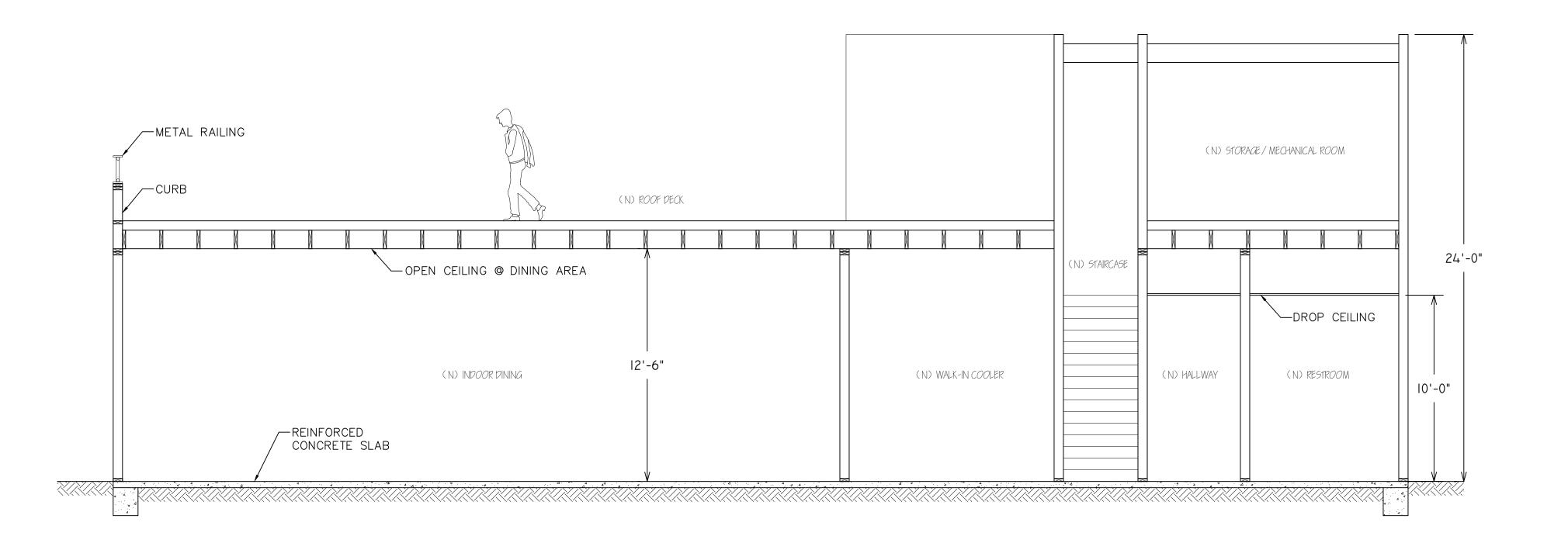
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ELEVATIONS PROPOSED

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BUILDING SECTION-I SCALE: 1/4"= 1'-0"



PROPOSED NEW RESTAURANT/BAR
CAPELO'S BBQ
2635-2655 MIDDLEFIELD ROAD
REDWOOD CITY, CA 94063

SECTIONS BUILDING

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PROPOSED

EXISTING

2635-2655 MIDDLEFIELD ROAD

DESCRIPTION BOUNDARY

PROPERTY LINE RETAINING WALL

LANDSCAPE RETAINING WALL

RAINWATER TIGHTLINE SUBDRAIN LINE

TIGHTLINE STORM DRAIN LINE

SANITARY SEWER LINE

WATER LINE GAS LINE

PRESSURE LINE JOINT TRENCH

SET BACK LINE CONCRETE VALLEY GUTTER

EARTHEN SWALE

CATCH BASIN JUNCTION BOX

AREA DRAIN

CURB INLET

STORM DRAIN MANHOLE

FIRE HYDRANT SANITARY SEWER MANHOLE

STREET SIGN SPOT ELEVATION

FLOW DIRECTION

DEMOLISH/REMOVE

BENCHMARK

TREE TO BE REMOVED

WATER METER

WELDED WIRE FABRIC

MIDDLEFIELD ROAD (86')

REDWOOD CITY, CALIFORNIA

KEY MAP 1" = 20'

ABBREVIATIONS

AB	AGGREGATE BASE	LF	LINEAR FEET
AC	AGGREGATE BASE ASPHALT CONCRETE	MAX	MAXIMUM
ACC	ACCESSIBLE	MH	MANHOLE
AD	AREA DRAIN	MIN	MINIMUM
BC	BEGINNING OF CURVE	MON.	MONUMENT
B & D	BEGINNING OF CURVE BEARING & DISTANCE	MRO	METERED RELEASE OUTLET
BM	BENCHMARK	(N)	NEW
BUB	BUBBLER BOX	NO.	NUMBER
BW/FG	BOTTOM OF WALL/FINISH	NTS	NOT TO SCALE
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СВ	GRADE CATCH BASIN	0/	OVER
C & G	CURB AND GUTTER	(PA)	PLANTING AREA
Ę .	CENTER LINE	PED	PEDESTRIAN
CPP	CORRUGATER DI ACTIO DIDE		POST INDICATOR VALVE
	(SMOOTH INTERIOR)	PIV PSS	PUBLIC SERVICES EASEMENT
СО	(SMOOTH INTERIOR) CLEANOUT	rss B	PROPERTY LINE
COTG	CLEANOUT TO GRADE	ī_ DD	POWER POLE
CONC	CONCRETE	FF DHE	PUBLIC UTILITY EASEMENT
CONST	CONSTRUCT or —TION	PVC	POLYVINYL CHLORIDE
CONC COR	CONCRETE CORNER	PVC	RADIUS
CY	CONCRETE CORNER CUBIC YARD DIAMETER	PIV PSS PP PUE PVC R RCP	REINFORCED CONCRETE PIPE
Ď	DIAMETER	RIM	RIM ELEVATION
DI	DROP INLET	RW	RAINWATER
DIP	DUCTILE IRON PIPE	R/W	RIGHT OF WAY
EA	EACH	K/W S	SLOPE
EC	FND OF CURVE	S.A.D.	SEE ARCHITECTURAL DRAWINGS
EG	EXISTING GRADE	SAN	SANITARY
EL	ELEVATIONS	SD	STORM DRAIN
EP	EDGE OF PAVEMENT	SDMH	STORM DRAIN MANHOLE
EQ	EQUIPMENT	SHT	SHEET
EW	EACH WAY	S.L.D.	SEE LANDSCAPE DRAWINGS
(E)	EXISTING	SPEC	SPECIFICATION
È Ć	FACE OF CURB	SS	SANITARY SEWER
FF		SSCO	
FG	FINISHED GRADE	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	ST.	STREET
FL	FLOW LINE	STA	STATION
FS	FINISHED SURFACE	STD	STANDARD
G	GAS	STRUCT	STRUCTURAL
GA	GAGE OR GAUGE	T	TELEPHONE
GB	GRADE BREAK	TC	TOP OF CURB
HDPE	HIGH DENSITY CORRUGATED	TOW	TOP OF WALL
	POLYETHYLENE PIPE	TEMP	TEMPORARY
HORIZ	HORIZONTAL	TP	TOP OF PAVEMENT
HI PT	HIGH POINT	TW/FG	TOP OF WALL/FINISH GRADE
H&T	HUB & TACK	TYP	TYPICAL
ID.	INSIDE DIAMETER	VC	VERTICAL CURVE
INV	INVERT ELEVATION	VCP	VITRIFIED CLAY PIPE
JB	JUNCTION BOX	VERT	VERTICAL
J <u>T</u>	JOINT TRENCH	W/	WITH
JP	JOINT UTILITY POLE	W, WL	WATER LINE
	I L 81/ *TLI	₹	

LANDING

ESTIMATED	EARTHWO	ORK QUAN	ITITIES	
CUBIC YARDS	WITHIN BUILDING FOOTPRINT	OUTSIDE BUILDING FOOTPRINT	TOTAL CUBIC YARDS	
CUT	0	65	65	
FILL	35	105	140	
IMPORT			75	

GRADING QUANTITIES REPRESENT BANK YARDAGE. IT DOES NOT INCLUDE ANY SWELLING OR SHRINKAGE FACTORS AND IS INTENDED TO REPRESENT IN-SITU CONDITIONS, QUANTITIES DO NOT INCLUDE OVER-EXCAVATION. TRENCHING, STRUCTURAL FOUNDATIONS OR PIERS, OR POOL EXCAVATION (IF ANY). NOTE ADDITIONAL EARTHWORKS, SUCH AS KEYWAYS OR BENCHING MAY BE REQUIRED BY THE GEOTECHNICAL ENGINEER IN THE FIELD AT TIME OF CONSTRUCTION. CONTRACTOR TO VERIFY QUANTITIES.

VICINITY MAP

OWNER'S INFORMATION

2635-2655 MIDDLE FIELD ROAD REDWOOD CITY, CA

APN: 054-233-310, -330, -350

REFERENCES

- THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO: 1. TOPOGRAPHIC SURVEY BY LEA AND BRAZE ENGINEERING INC., ENTITLED: "TOPOGRAPHIC SURVEY" 2635-2655 MIDDLEFIELD ROAD REDWOOD CITY, CA DATED: 04-18-18 JOB# 2180331
- 2. SITE PLAN BY REID LERNER ARCHITECTS ENTITLED: "PROPOSED NEW RESTAURANT/BAR" 2635-2655 MIDDLEFIELD ROAD REDWOOD CITY, CA
- 3. LANDSCAPE PLAN BY AITKEN ASSOCIATES LANDSCAPE ARCHITECTS ENTITLED: "CAPELO'S BBQ" 2635-2655 MIDDLEFIELD ROAD

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

* BUILDING PAD NOTE: ADJUST PAD LEVEL AS REQUIRED. REFER TO STRUCTURAL PLANS FOR SLAB SECTION OR CRAWL SPACE DEPTH TO ESTABLISH PAD LEVEL.

FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com



SHEET INDEX C - 2.0

TITLE SHEET GRADING & DRAINAGE PLAN C - 3.0UTILITY PLAN GRADING SPECIFICATIONS **EROSION CONTROL EROSION CONTROL DETAILS** SITE DEVELOPMENT EXHIBIT STORMWATER CONTROL PLAN STORMWATER CONTROL DETAILS BEST MANAGEMENT PRACTICE



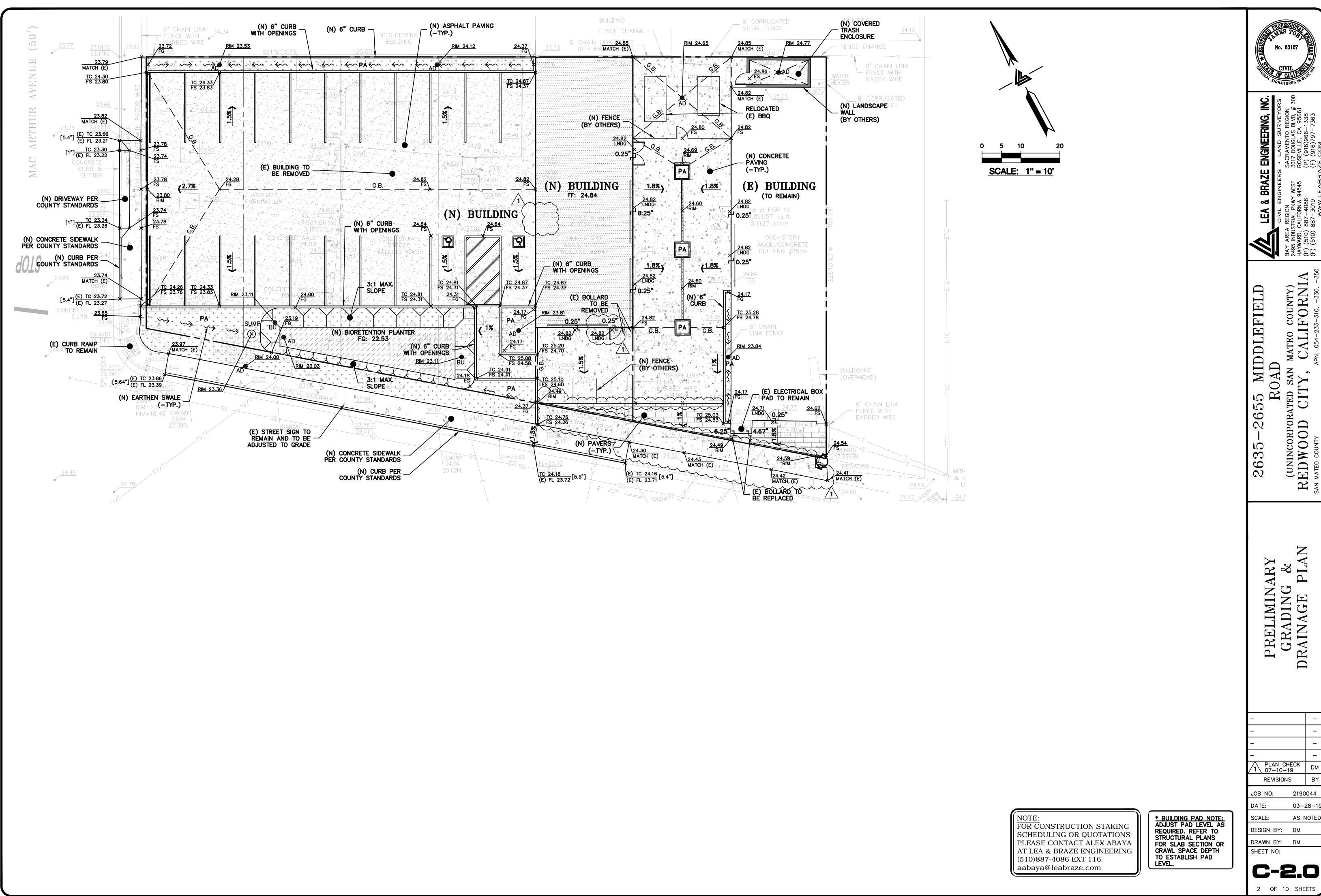
MIDDLEFIELD AD

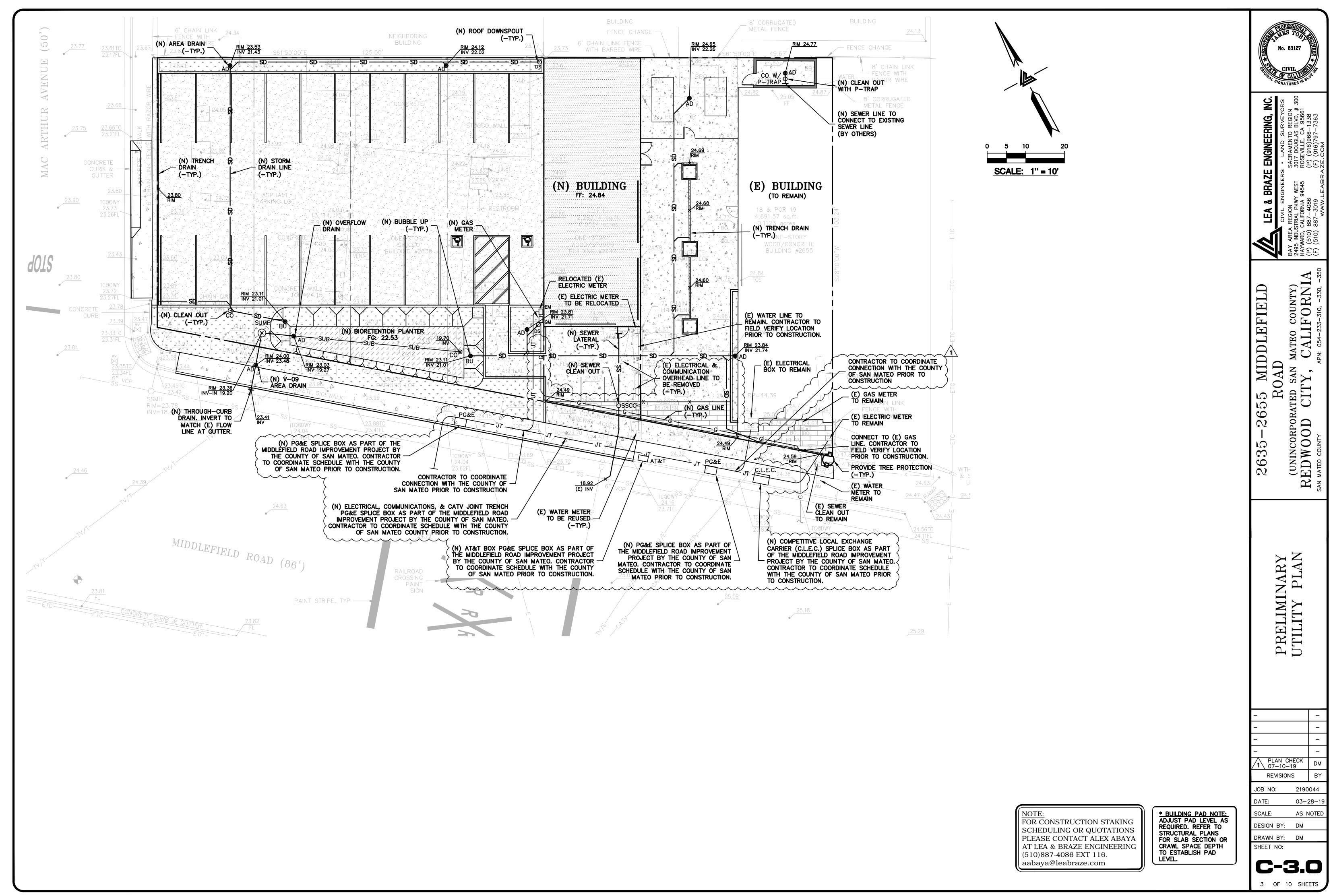
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PLAN CHECK 07-10-19 REVISIONS JOB NO: 2190044 03-28-19 AS NOTED

SCALE: DESIGN BY: DM DRAWN BY: DM SHEET NO:

1 OF 10 SHEETS





THESE DRAWINGS AND THEIR CONTENT ARE AND SHALL REMAIN THE PROPERTY OF LEA AND BRAZE ENGINEERING, INC. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY ANY PERSONS ON OTHER PROJECTS OR EXTENSIONS OF THE PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ENGINEER.

ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND TRADE STANDARDS WHICH GOVERN EACH PHASE OF WORK INCLUDING, BUT NOT LIMITED TO, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA FIRE CODE, CALTRANS STANDARDS AND SPECIFICATIONS, AND ALL APPLICABLE STATE AND/OR LOCAL CODES AND/OR LEGISLATION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND ALL SUBCONTRACTORS TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, LINES AND LEVELS INDICATED. PROPER FIT AND ATTACHMENT OF ALL PARTS IS REQUIRED. SHOULD THERE BE ANY DISCREPANCIES, IMMEDIATELY NOTIFY THE ENGINEER FOR CORRECTION OR ADJUSTMENT THE EVENT OF FAILURE TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERROR.

ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE JOB BY EACH SUBCONTRACTOR BEFORE HE/SHE BEGINS HIS/HER WORK. ANY ERRORS, OMISSION, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/CONTRACTOR BEFORE CONSTRUCTION BEGINS.

COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS, OR EXISTING ON SITE, WHICH COULD AFFECT THEIR WORK.

WORK SEQUENCE

IN THE EVENT ANY SPECIAL SEQUENCING OF THE WORK IS REQUIRED BY THE OWNER OR THE CONTRACTOR, THE CONTRACTOR SHALL ARRANGE A CONFERENCE BEFORE ANY SUCH WORK IS BEGUN.

SITE EXAMINATION: THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL THOROUGHLY EXAMINE THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY AT THE SITE ALL MEASUREMENTS AFFECTING HIS/HER WORK AND SHALL BE RESPONSIBLE FOR THE CORRECTIONS OF THE SAME. NO EXTRA COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR EXPENSES DUE TO HIS/HER NEGLECT TO EXAMINE, OR FAILURE TO DISCOVER, CONDITIONS WHICH AFFECT HIS/HER WORK.

LEA AND BRAZE ENGINEERING, INC. EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT FIRST OBTAINING THE WRITTEN PERMISSION AND CONSENT OF LEA AND BRAZE ENGINEERING, INC. IN THE EVENT OF UNAUTHORIZED REUSE OF THESE PLANS BY A THIRD PARTY, THE THIRD PARTY SHALL HOLD HARMLESS LEA AND BRAZE ENGINEERING, INC.

CONSTRUCTION IS ALWAYS LESS THAN PERFECT SINCE PROJECTS REQUIRE THE COORDINATION AND INSTALLATION OF MANY INDIVIDUAL COMPONENTS BY VARIOUS CONSTRUCTION INDUSTRY TRADES. THESE DOCUMENTS CANNOT PORTRAY ALL COMPONENTS OR ASSEMBLIES EXACTLY. IT IS THE INTENTION OF THESE ENGINEERING DOCUMENTS THAT THEY REPRESENT A REASONABLE STANDARD OF CARE IN THEIR CONTENT. IT IS ALSO PRESUMED BY THESE DOCUMENTS THAT CONSTRUCTION REVIEW SERVICES WILL BE PROVIDED BY THE ENGINEER. SHOULD THE OWNER NOT RETAIN THE ENGINEER TO PROVIDE SUCH SERVICES, OR SHOULD HE/SHE RETAIN THE ENGINEER TO PROVIDE ONLY PARTIAL OR LIMITED SERVICES, THEN IT SHALL BE THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO FULLY RECOGNIZE AND PROVIDE THAT STANDARD OF CARE.

IF THE OWNER OR CONTRACTOR OBSERVES OR OTHERWISE BECOMES AWARE OF ANY FAULT OR DEFECT IN THE PROJECT OR NONCONFORMANCE WITH THE CONTRACT DOCUMENTS. PROMPT WRITTEN NOTICE THEREOF SHALL BE GIVEN BY THE OWNER AND/OR CONTRACTOR TO THE ENGINEER.

THE ENGINEER SHALL NOT HAVE CONTROL OF OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

SITE PROTECTION

PROTECT ALL LANDSCAPING THAT IS TO REMAIN. ANY DAMAGE OR LOSS RESULTING FROM EXCAVATION. GRADING, OR CONSTRUCTION WORK SHALL BE CORRECTED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING SITE UTILITIES AND SHALL COORDINATE THEIR REMOVAL OR MODIFICATIONS (IF ANY) TO AVOID ANY INTERRUPTION OF SERVICE TO ADJACENT AREAS. THE GENERAL CONTRACTOR SHALL INFORM HIM/HERSELF OF MUNICIPAL REGULATIONS AND CARRY OUT HIS/HER WORK IN COMPLIANCE WITH ALL FEDERAL AND STATE REQUIREMENTS TO REDUCE FIRE HAZARDS AND INJURIES TO THE PUBLIC.

STORMWATER POLLUTION PREVENTION NOTES

- 1) STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
- 2) CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING SOLID WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENT, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATER COURSES.
- 3) USE SEDIMENT CONTROL OR FILTRATION TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- 4) AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON SITE, EXCEPT IN A DESIGNATED AREA IN WHICH RUNOFF IS CONTAINED AND TREATED.
- 5) DELINEATE CLEARING LIMITS, EASEMENTS, SETBACKS, SENSITIVE OR CRITICAL AREAS, BUFFER ZONES, TREES AND DISCHARGE COURSE WITH FIELD MARKERS.
- 6) PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE
- BUFFER STRIPS, SEDIMENT BARRIERS OF FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE. 7) PERFORM CLEARING AND EARTH MOVING ACTIVITIES DURING DRY WEATHER TO THE MAXIMUM EXTENT
- PRACTICAL
- 8) LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF. 9) LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
- 10) AVOID TRACKING DIRT OR MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS TO THE MAXIMUM EXTENT PRACTICAL.

SUPPLEMENTAL MEASURES

- A. THE PHRASE "NO DUMPING DRAINS TO BAY" OR EQUALLY EFFECTIVE PHRASE MUST BE LABELED ON STORM DRAIN INLETS (BY STENCILING, BRANDING, OR PLAQUES) TO ALERT THE PUBLIC TO THE DESTINATION OF STORM WATER AND TO PREVENT DIRECT DISCHARGE OF POLLUTANTS INTO THE STORM DRAIN.
- B. USING FILTRATION MATERIALS ON STORM DRAIN COVERS TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- C. STABILIZING ALL DENUDED AREAS AND MAINTAINING EROSION CONTROL MEASURES CONTINUOUSLY FROM OCTOBER 15 AND APRIL 15.
- D. REMOVING SPOILS PROMPTLY, AND AVOID STOCKPILING OF FILL MATERIALS, WHEN RAIN IS FORECAST. IF RAIN THREATENS, STOCKPILED SOILS AND OTHER MATERIALS SHALL BE COVERED WITH A TARP OR OTHER WATERPROOF MATERIAL.
- E. STORING. HANDLING. AND DISPOSING OF CONSTRUCTION MATERIALS AND WASTES SO AS TO AVOID THEIR ENTRY TO THE STORM DRAIN SYSTEMS OR WATER BODY.
- F. AVOIDING CLEANING, FUELING, OR MAINTAINING VEHICLES ON—SITE, EXCEPT IN AN AREA DESIGNATED TO CONTAIN AND TREAT RUNOFF.

GRADING & DRAINAGE NOTES:

1. SCOPE OF WORK

these specifications and applicable plans pertain to and include all site grading and EARTHWORK ASSOCIATED WITH THE PROJECT INCLUDING, BUT NOT LIMITED TO THE FURNISHING OF ALL LABOR, TOOLS AND EQUIPMENT NECESSARY FOR SITE CLEARING AND GRUBBING, SITE PREPARATION, DISPOSAL OF EXCESS OR UNSUITABLE MATERIAL STRIPPING, KEYING, EXCAVATION, OVER EXCAVATION, RECOMPACTION PREPARATION FOR SOIL RECEIVING FILL, PAVEMENT, FOUNDATION OF SLABS, EXCAVATION, IMPORTATION OF ANY REQUIRED FILL MATERIAL, PROCESSING, PLACEMENT AND COMPACTION OF FILL AND SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING TO CONFORM TO THE LINES, GRADING AND SLOPE SHOWN ON THE PROJECT GRADING PLANS.

2. GENERAL

- A. ALL SITE GRADING AND EARTHWORK SHALL CONFORM TO THE RECOMMENDATIONS OF THESE SPECIFICATIONS AND THE COUNTY OF SAN MATEO.
- B. ALL FILL MATERIALS SHALL BE DENSIFIED SO AS TO PRODUCE A DENSITY NOT LESS THAN 90% RELATIVE COMPACTION BASED UPON ASTM TEST DESIGNATION D1557. FIELD DENSITY TEST WILL BE PERFORMED IN ACCORDANCE WITH ASTM TEST DESIGNATION 2922 AND 3017. THE LOCATION AND FREQUENCY OF THE FIELD DENSITY TEST WILL BE AS DETERMINED BY THE SOIL ENGINEER. THE RESULTS OF THESE TEST AND COMPLIANCE WITH THE SPECIFICATIONS WILL BE THE BASIS UPON WHICH SATISFACTORY COMPLETION OF THE WORK WILL BE JUDGED BY THE SOIL ENGINEER. ALL CUT AND FILL SLOPES SHALL BE CONSTRUCTED AS SHOWN ON PLANS, BUT NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SATISFACTORY COMPLETION OF ALL THE EARTHWORK IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. NO DEVIATION FROM THESE SPECIFICATIONS SHALL BE MADE EXCEPT UPON WRITTEN APPROVAL BY THE SOILS ENGINEER. BOTH CUT AND FILL AREAS SHALL BE SURFACE COMPLETED TO THE SATISFACTION OF THE SOILS ENGINEER AT THE CONCLUSION OF ALL GRADING OPERATIONS AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL NOTIFY THE SOILS ENGINEER AT LEAST TWO (2) WORKING DAYS PRIOR TO DOING ANY SITE GRADING AND EARTHWORK INCLUDING CLEARING.

CLEARING AND GRUBBING

- A. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION. ALL EXISTING PUBLIC IMPROVEMENTS SHALL BE PROTECTED. ANY IMPROVEMENTS DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE LOCAL JURISDICTION WITH NO EXTRA COMPENSATION.
- B. ALL ABANDONED BUILDINGS AND FOUNDATIONS, TREE (EXCEPT THOSE SPECIFIED TO REMAIN FOR LANDSCAPING PURPOSES), FENCES, VEGETATION AND ANY SURFACE DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF THE SITE BY THE CONTRACTOR.
- C. ALL ABANDONED SEPTIC TANKS AND ANY OTHER SUBSURFACE STRUCTURES EXISTING IN PROPOSED DEVELOPMENT AREAS SHALL BE REMOVED PRIOR TO ANY GRADING OR FILL OPERATION. ALL APPURTENANT DRAIN FIELDS AND OTHER CONNECTING LINES MUST ALSO BE TOTALLY REMOVED.
- D. ALL ABANDONED UNDERGROUND IRRIGATION OR UTILITY LINES SHALL BE REMOVED OR DEMOLISHED. THE APPROPRIATE FINAL DISPOSITION OF SUCH LINES DEPEND UPON THEIR DEPTH AND LOCATION AND THE METHOD OF REMOVAL OR DEMOLITION SHALL BE DETERMINED BY THE SOILS ENGINEER. ONE OF THE FOLLOWING METHODS WILL BE USED:
 - (1) EXCAVATE AND TOTALLY REMOVE THE UTILITY LINE FROM THE TRENCH.
- (2) EXCAVATE AND CRUSH THE UTILITY LINE IN THE TRENCH.
- (3) CAP THE ENDS OF THE UTILITY LINE WITH CONCRETE TO PREVENT THE ENTRANCE OF WATER. THE LOCATIONS AT WHICH THE UTILITY LINE WILL BE CAPPED WILL BE DETERMINED BY THE UTILITY DISTRICT ENGINEER. THE LENGTH OF THE CAP SHALL NOT BE LESS THAN FIVE FEET, AND THE CONCRETED MIX EMPLOYED SHALL HAVE MINIMUM SHRINKAGE.

SITE PREPARATION AND STRIPPING

- A. ALL SURFACE ORGANICS SHALL BE STRIPPED AND REMOVED FROM BUILDING PADS, AREAS TO RECEIVE COMPACTED FILL AND PAVEMENT AREAS.
- B. UPON THE COMPLETION OF THE ORGANIC STRIPPING OPERATION, THE GROUND SURFACE (NATIVE SOIL SUBGRADE) OVER THE ENTIRE AREA OF ALL BUILDING PADS, STREET AND PAVEMENT AREAS AND ALL AREAS TO RECEIVE COMPACTED FILL SHALL BE PLOWED OR SCARIFIED UNTIL THE SURFACE IS FREE OF HUMMOCKS OR OTHER UNEVEN FEATURES WHICH MAY INHIBIT GROUND SURFACE SHALL THEN BE DISCED OR BLADED TO A DEPTH OF AT LEAST 6 INCHES. UPON ENGINEER'S SATISFACTION, THE NEW SURFACE SHALL BE WATER CONDITIONED AND RECOMPACTED PER REQUIREMENTS FOR COMPACTING FILL MATERIAL.

EXCAVATION

- A. UPON COMPLETION OF THE CLEARING AND GRUBBING, SITE PREPARATION AND STRIPPING, THE CONTRACTOR SHALL MAKE EXCAVATIONS TO LINES AND GRADES NOTED ON THE PLAN. WHERE REQUIRED BY THE SOILS ENGINEER. UNACCEPTABLE NATIVE SOILS OR UNENGINEERED FILL SHALL BE OVER EXCAVATED BELOW THE DESIGN GRADE. SEE PROJECT SOILS REPORT FOR DISCUSSION OF OVER EXCAVATION OF THE UNACCEPTABLE MATERIAL. RESULTING GROUND LINE SHALL BE SCARIFIED, MOISTURE-CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE.
- B. EXCAVATED MATERIALS SUITABLE FOR COMPACTED FILL MATERIAL SHALL BE UTILIZED IN MAKING THE REQUIRED COMPACTED FILLS. THOSE NATIVE MATERIALS CONSIDERED UNSUITABLE BY THE SOILS ENGINEER SHALL BE DISPOSED OF OFF THE SITE BY THE CONTRACTOR.

PLACING. SPREADING AND COMPACTING FILL MATERIAL

the materials proposed for use as compacted fill shall be approved by the soils engineer BEFORE COMMENCEMENT OF GRADING OPERATIONS. THE NATIVE MATERIAL IS CONSIDERED SUITABLE FOR FILL; HOWEVER, ANY NATIVE MATERIAL DESIGNATED UNSUITABLE BY THE SOILS ENGINEER SHALL BE removed from the site by the contractor. Any imported material shall be approved for USE BY THE SOILS ENGINEER, IN WRITING, BEFORE BEING IMPORTED TO THE SITE AND SHALL POSSESS sufficient fines to provide a competent soil matrix and shall be free of vegetative and ORGANIC MATTER AND OTHER DELETERIOUS MATERIALS. ALL FILL VOIDS SHALL BE FILLED AND PROPERLY COMPACTED. NO ROCKS LARGER THAN THREE INCHES IN DIAMETER SHALL BE PERMITTED.

B. FILL CONSTRUCTION

THE SOILS ENGINEER SHALL APPROVE THE NATIVE SOIL SUBGRADE BEFORE PLACEMENT OF ANY COMPACTED FILL MATERIAL. UNACCEPTABLE NATIVE SOIL SHALL BE REMOVED AS DIRECTED BY THE SOILS ENGINEER. THE RESULTING GROUND LINE SHALL BE SCARIFIED MOISTURE CONDITIONED AND recompacted as specified in section 4 of these specifications. Compacted fill material SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE. GROUND PREPARATION SHALL BE FOLLOWED CLOSELY BY FILL PLACEMENT TO PREVENT DRYING OUT OF THE SUBSOIL BEFORE PLACEMENT of the fill.

the approved fill materials shall be placed in uniform horizontal layers no thicker than 8" IN LOOSE THICKNESS. LAYERS SHALL BE SPREAD EVENLY AND SHALL BE THOROUGHLY BLADE MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. THE SCARIFIED SUBGRADE AND FILL MATERIAL SHALL BE MOISTURE CONDITIONED TO AT LEAST OPTIMUM MOISTURE. when the moisture content of the fill is below that specified, water shall be added until THE MOISTURE DURING THE COMPACTION PROCESS. WHEN THE MOISTURE CONTENT OF THE FILL IS above that specified, the fill material shall be aerated by blading or other satisfactory METHODS UNTIL THE MOISTURE CONTENT IS AS SPECIFIED.

AFTER EACH LAYER HAS BEEN PLACED, MIXED, SPREAD EVENLY AND MOISTURE CONDITIONED. IT SHALL BE COMPACTED TO AT LEAST THE SPECIFIED DENSITY.

THE FILL OPERATION SHALL BE CONTINUED IN COMPACTED LAYERS AS SPECIFIED ABOVE UNTIL THE FILL HAS BEEN BROUGHT TO THE FINISHED SLOPES AND GRADES AS SHOWN ON THE PLANS, NO LAYER SHALL BE ALLOWED TO DRY OUT BEFORE SUBSEQUENT LAYERS ARE PLACED.

COMPACTION EQUIPMENT SHALL BE OF SUCH DESIGN THAT IT WILL BE ABLE TO COMPACT THE FILL TO THE SPECIFIED MINIMUM COMPACTION WITHIN THE SPECIFIED MOISTURE CONTENT RANGE. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER ITS ENTIRE AREA UNTIL THE REQUIRED MINIMUM DENSITY HAS BEEN OBTAINED.

CUT OR FILL SLOPES

all constructed slopes, both cut and fill, shall be no steeper than 2 to 1 (horizontal TO VERTICAL). DURING THE GRADING OPERATION, COMPACTED FILL SLOPES SHALL BE OVERFILLED BY AT LEAST ONE FOOT HORIZONTALLY AT THE COMPLETION OF THE GRADING OPERATIONS, THE EXCESS fill existing on the slopes shall be bladed off to create the finished slope embankment. ALL CUT AND FILL SLOPES SHALL BE TRACK WALKED AFTER BEING BROUGHT TO FINISH GRADE AND THEN BE PLANTED WITH EROSION CONTROL SLOPE PLANTING. THE SOILS ENGINEER SHALL REVIEW ALL CUT SLOPES TO DETERMINE IF ANY ADVERSE GEOLOGIC CONDITIONS ARE EXPOSED. IF SUCH CONDITIONS DO OCCUR, THE SOILS ENGINEER SHALL RECOMMEND THE APPROPRIATE MITIGATION MEASURES AT THE TIME OF THEIR DETECTION.

8. SEASONAL LIMITS AND DRAINAGE CONTROL

FILL MATERIALS SHALL NOT BE PLACED, SPREAD OR COMPACTED WHILE IT IS AT AN UNSUITABLY HIGH MOISTURE CONTENT OR DURING OTHERWISE UNFAVORABLE CONDITIONS. WHEN THE WORK IS Interrupted for any reason the fill operations shall not be resumed until field test PERFORMED BY THE SOILS ENGINEER INDICATE THAT THE MOISTURE CONDITIONS IN AREAS TO BE FILLED ARE AS PREVIOUSLY SPECIFIED. ALL EARTH MOVING AND WORKING OPERATIONS SHALL BE CONTROLLED TO PREVENT WATER FROM RUNNING INTO EXCAVATED AREAS. ALL EXCESS WATER SHALL BE PROMPTLY REMOVED AND THE SITE KEPT DRY.

DUST CONTROL

THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY FOR THE ALLEVIATION OR PREVENTION OF ANY DUST NUISANCE ON OR ABOUT THE SITE CAUSED BY THE CONTRACTOR'S OPERATION EITHER DURING THE PERFORMANCE OF THE GRADING OR RESULTING FROM THE CONDITION IN WHICH THE CONTRACTOR LEAVES THE SITE. THE CONTRACTOR SHALL ASSUME ALL LIABILITY INCLUDING COURT COST OF CO-DEFENDANTS FOR ALL CLAIMS RELATED TO DUST OR WIND-BLOWN MATERIALS ATTRIBUTABLE TO HIS WORK. COST FOR THIS ITEM OF WORK IS TO BE INCLUDED IN THE EXCAVATION ITEM AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

10. INDEMNITY

THE CONTRACTOR WILL HOLD HARMLESS, INDEMNIFY AND DEFEND THE ENGINEER, THE OWNER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS, FROM ANY AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGE ARISING OR ALLEGED TO HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER. THE ARCHITECT, THE ENGINEER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS.

11. <u>SAFETY</u>

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF THE ENGINEERS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.

12. GUARANTEE

veither the final payment, nor the provisions in the contract, nor partial, nor entire use OR OCCUPANCY OF THE PREMISES BY THE OWNER SHALL CONSTITUTE AN ACCEPTANCE OF THE WORK NOT DONE IN ACCORDANCE WITH THE CONTRACT OR RELIEVES THE CONTRACTOR OF LIABILITY IN RESPECT TO ANY EXPRESS WARRANTIES OR RESPONSIBILITY FOR FAULTY MATERIAL OR WORKMANSHIP.

THE CONTRACTOR SHALL REMEDY ANY DEFECTS IN WORK AND PAY FOR ANY DAMAGE TO OTHER WORK resulting there from which shall appear within a period of one (1) calendar year from THE DATE OF FINAL ACCEPTANCE OF THE WORK.

TRENCH BACKFILL

either the on—site inorganic soil or approved imported soil may be used as trench BACKFILL. THE BACKFILL MATERIAL SHALL BE MOISTURE CONDITIONED PER THESE SPECIFICATIONS AND SHALL BE PLACED IN LIFTS OF NOT MORE THAN SIX INCHES IN HORIZONTAL UNCOMPACTED LAYERS and be compacted by Mechanical Means to a minimum of 90% relative compaction. Imported SAND MAY BE USED FOR TRENCH BACKFILL MATERIAL PROVIDED IT IS COMPACTED TO AT LEAST 90% relative compaction. Water jetting associated with compaction using vibratory equipment WILL BE PERMITTED ONLY WITH IMPORTED SAND BACKFILL WITH THE APPROVAL OF THE SOILS ENGINEER. ALL PIPES SHALL BE BEDDED WITH SAND EXTENDING FROM THE TRENCH BOTTOM TO TWELVE INCHES ABOVE THE PIPE. SAND BEDDING IS TO BE COMPACTED AS SPECIFIED ABOVE FOR SAND BACKFILL.

EROSION CONTROL

- A. ALL GRADING, EROSION AND SEDIMENT CONTROL AND RELATED WORK UNDERTAKEN ON THIS SITE IS SUBJECT TO ALL TERMS AND CONDITIONS OF THE COUNTY GRADING ORDINANCE AND MADE A PART HEREOF BY REFERENCE.
- B. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO ANY PUBLICLY OWNED AND MAINTAINED ROAD CAUSED BY THE AFORESAID CONTRACTOR'S GRADING ACTIVITIES, AND SHALL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE.
- C. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, GENERALLY FROM OCTOBER FIRST TO APRIL FIFTEENTH. EROSION CONTROL PLANTING IS TO BE COMPLETED BY OCTOBER FIRST. NO GRADING OR UTILITY TRENCHING SHALL OCCUR BETWEEN OCTOBER FIRST AND APRIL FIFTEENTH UNLESS AUTHORIZED BY THE LOCAL JURISDICTION.
- D. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD conditions only with the approval of or at the direction of the soils engineer.
- E. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.
- F. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.
- G. WHEN NO LONGER NECESSARY AND PRIOR TO FINAL ACCEPTANCE OF DEVELOPMENT, SEDIMENT BASINS SHALL BE REMOVED OR OTHERWISE DEACTIVATED AS REQUIRED BY THE LOCAL JURISDICTION.
- H. A CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT ANY POINT OF EGRESS FROM THE SITE TO ROADWAY. A CONSTRUCTION ENTRANCE SHOULD BE COMPOSED OF COARSE DRAIN ROCK (2" TO 3") MINIMUM DIAMETER) AT LEAST EIGHT INCHES THICK BY FIFTY (50) FEET LONG BY TWENTY (20) FEET WIDE UNLESS SHOWN OTHERWISE ON PLAN AND SHALL BE MAINTAINED UNTIL THE SITE IS PAVED.
- I. ALL AREAS SPECIFIED FOR HYDROSEEDING SHALL BE NOZZLE PLANTED WITH STABILIZATION MATERIAL CONSISTING OF FIBER, SEED, FERTILIZER AND WATER, MIXED AND APPLIED IN THE FOLLOWING

FIBER. 2000 LBS/ACRE SEED, 200 LBS/ACRE (SEE NOTE J, BELOW) FERTILIZER (11-8-4), 500 LBS/ACRE WATER, AS REQUIRED FOR APPLICATION

- J. SEED MIX SHALL BE PER CALTRANS STANDARDS.
- K. WATER UTILIZED IN THE STABILIZATION MATERIAL SHALL BE OF SUCH QUALITY THAT IT WILL PROMOTE GERMINATION AND STIMULATE GROWTH OF PLANTS. IT SHALL BE FREE OF POLLUTANT MATERIALS AND
- L. HYDROSEEDING SHALL CONFORM TO THE PROVISIONS OF SECTION 20, EROSION CONTROL AND HIGHWAY PLANTING", OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED.
- M. A DISPERSING AGENT MAY BE ADDED TO THE HYDROSEEDING MATERIAL. PROVIDED THAT THE CONTRACTOR FURNISHES SUITABLE EVIDENCE THAT THE ADDITIVE WILL NOT ADVERSELY AFFECT THE PERFORMANCE OF THE SEEDING MIXTURE.
- N. STABILIZATION MATERIALS SHALL BE APPLIED AS SOON AS PRACTICABLE AFTER COMPLETION OF GRADING OPERATIONS AND PRIOR TO THE ONSET OF WINTER RAINS, OR AT SUCH OTHER TIME AS DIRECTED BY THE COUNTY ENGINEER. THE MATERIAL SHALL BE APPLIED BEFORE INSTALLATION OF OTHER LANDSCAPING MATERIALS SUCH AS TREES, SHRUBS AND GROUND COVERS.
- O. THE STABILIZATION MATERIAL SHALL BE APPLIED WITHIN 4—HOURS AFTER MIXING. MIXED MATERIAL NOT USED WITHIN 4-HOURS SHALL BE REMOVED FROM THE SITE.
- P. THE CONTRACTOR SHALL MAINTAIN THE SOIL STABILIZATION MATERIAL AFTER PLACEMENT. THE COUNTY engineer may require spray application of water or other maintenance activities to assure THE EFFECTIVENESS OF THE STABILIZATION PROCESS. APPLICATION OF WATER SHALL BE ACCOMPLISHED USING NOZZLES THAT PRODUCE A SPRAY THAT DOES NOT CONCENTRATE OR WASH AWAY THE STABILIZATION MATERIALS.

15. <u>CLEANUP</u>

THE CONTRACTOR MUST MAINTAIN THE SITE CLEAN, SAFE AND IN USABLE CONDITION. ANY SPILLS OF SOIL, ROCK OR CONSTRUCTION MATERIAL MUST BE REMOVED FROM THE SITE BY THE CONTRACTOR DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. COST FOR THIS ITEM OF WORK SHALL BE INCLUDED IN THE EXCAVATION AND COMPACTION ITEM AND NO ADDITIONAL COMPENSATION SHALL

> NOTE:
> THESE NOTES ARE INTENDED TO BE USED AS A GENERAL GUIDELINE. THE REFERENCED SOILS REPORT FOR THE PROJECT AND GOVERNING AGENCY GRADING ORDINANCE SHALL SUPERSEDE THESE NOTES. THE SOILS ENGINEER MAY MAKE ON-SITE RECOMMENDATIONS DURING GRADING OPERATIONS.



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PLAN CHECK **1** \ 07−10−19 REVISIONS JOB NO: 2190044 DATE: 03 - 28 - 1SCALE: NO SCALE DESIGN BY: DM

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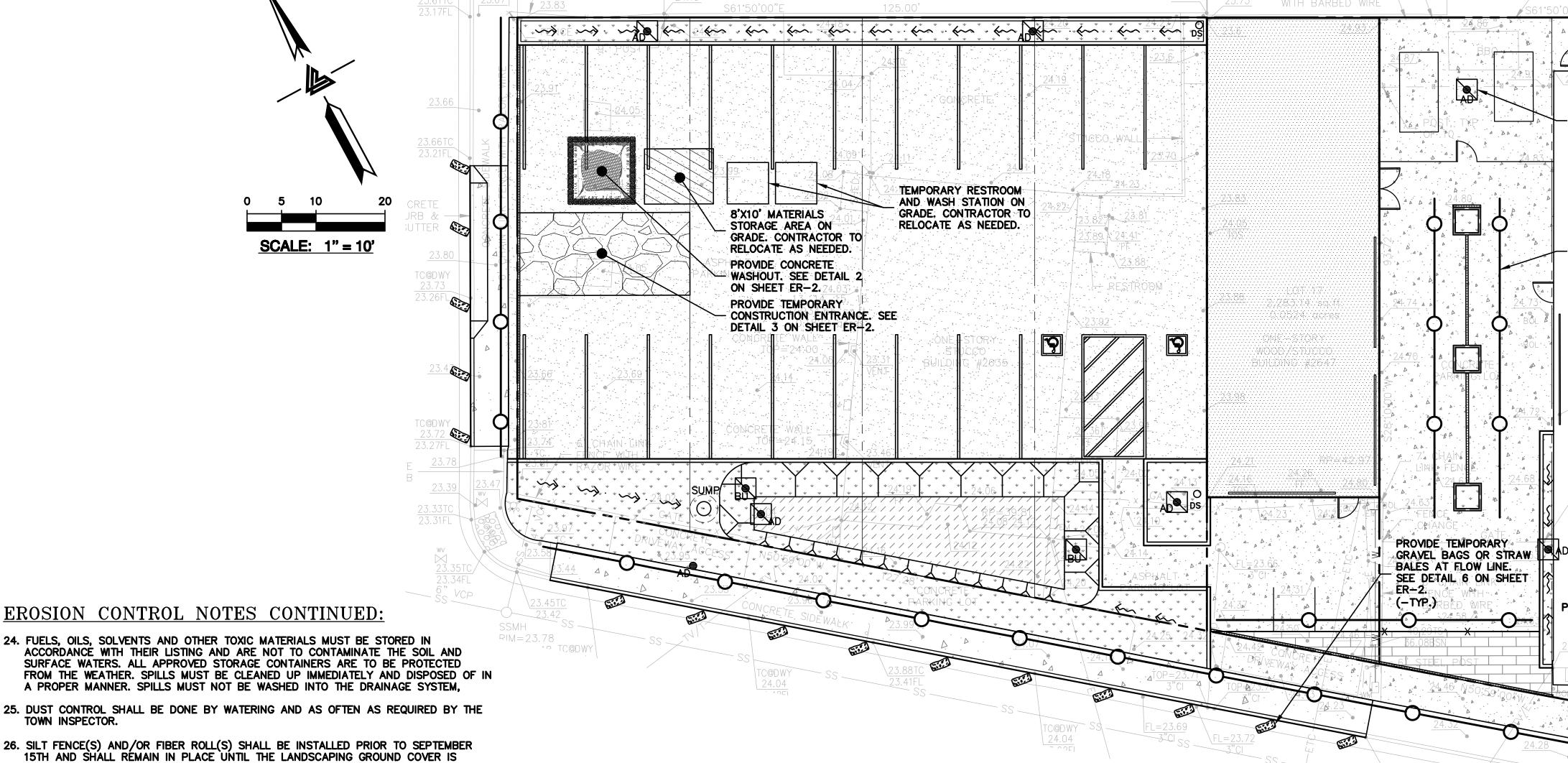
THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES. NATURAL AREAS. PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. LEA & BRAZE ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

EROSION CONTROL NOTES:

- IT SHALL BE THE OWNER'S/CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THIS EROSION CONTROL PLAN.
- 2. THE INTENTION OF THIS PLAN IS FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY. ALL EROSION CONTROL MEASURES SHALL CONFORM TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL, THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION, AND THE LOCAL GOVERNING AGENCY FOR THIS
- 3. OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SÉDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS. PERSON IN CHARGE OF MAINTAINING EROSION CONTROL MEASURES SHOULD WATCH LOCAL WEATHER REPORTS AND ACT APPROPRIATELY TO
- MAKE SURE ALL NECESSARY MEASURES ARE IN PLACE.
- 5. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.

4. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

- 6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS CONCERNING POLLUTION SHALL BE MAINTAINED AT ALL TIMES.
- 7. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.
- 8. ALL MATERIALS NECESSARY FOR THE APPROVED EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15TH.
- 9. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON, OR FROM OCTOBER 15TH THROUGH APRIL 15TH, WHICHEVER IS LONGER.
- 10. IN THE EVENT OF RAIN, ALL GRADING WORK IS TO CEASE IMMEDIATELY AND THE SITE IS TO BE SEALED IN ACCORDANCE WITH THE APPROVAL EROSION CONTROL MEASURES AND APPROVED EROSION CONTROL PLAN.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND REPAIRING EROSION CONTROL SYSTEMS AFTER EACH STORM.
- 12. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY LOCAL JURISDICTION'S ENGINEERING DEPARTMENT OR BUILDING OFFICIALS.
- 13. MEASURES SHALL BE TAKEN TO COLLECT OR CLEAN ANY ACCUMULATION OR DEPOSIT OF DIRT, MUD. SAND. ROCKS, GRAVEL OR DEBRIS ON THE SURFACE OF ANY STREET, ALLEY OR PUBLIC PLACE OR IN ANY PUBLIC STORM DRAIN SYSTEMS. THE REMOVAL OF AFORESAID SHALL BE DONE BY EROSION CONTROL MEASURES: STREET SWEEPING OR HAND SWEEPING. WATER SHALL NOT BE USED TO WASH SEDIMENTS INTO PUBLIC OR PRIVATE DRAINAGE FACILITIES.
- 14. EROSION CONTROL MEASURES SHALL BE ON-SITE FROM SEPTEMBER 15TH THRU APRIL 15TH.
- 15. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON OR FROM OCTOBER 15 THROUGH APRIL 15. WHICHEVER IS GREATER.
- 16. PLANS SHALL BE DESIGNED TO MEET C3 REQUIREMENTS OF THE MUNICIPAL STORMWATER REGIONAL PERMIT("MRP") NPDES PERMIT CAS 612008.
- 17. THE CONTRACTOR TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES (BMP) FOR SEDIMENTATION PREVENTION AND EROSION CONTROL TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE TOWN OR COUNTY STORM DRAIN
- 18. THE CONTRACTOR MUST INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN THE MEASURES UNTIL THE COMPLETION OF ALL LANDSCAPING.
- 19. THE CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE TOWN INSPECTOR. THE ADJACENT STREET SHALL AT ALL TIMES BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THE BY THEIR CONSTRUCTION, METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS. NO STOCKPILING OF BUILDING MATERIALS WITHIN THE TOWN RIGHT-OF-WAY.
- 20. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE PRIOR TO THE INSPECTION OF ANY WORK ONSITE AND MAINTAIN IT FOR THE DURATION OF THE CONSTRUCTION PROCESS SO AS TO NOT INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT-OF-WAY UNTIL THE COMPLETION OF ALL LANDSCAPING.
- 21. THE CONTRACTOR SHALL PROTECT DOWN SLOPE DRAINAGE COURSES, STREAMS AND STORM DRAINS WITH ROCK FILLED SAND BAGS, TEMPORARY SWALES, SILT FENCES, AND EARTH PERMS IN CONJUNCTION OF ALL LANDSCAPING.
- 22. STOCKPILED MATERIALS SHALL BE COVERED WITH VISQUEEN OR A TARPAULIN UNTIL THE MATERIAL IS REMOVED FROM THE SITE. ANY REMAINING BARE SOIL THAT EXISTS AFTER THE STOCKPILE HAS BEEN REMOVED SHALL BE COVERED UNTIL A NATURAL GROUND COVER IS ESTABLISHED OR IT IS SEEDED OR PLANTED TO PROVIDE GROUND COVER PRIOR TO THE FALL RAINY SEASON.
- 23. EXCESS OR WASTE CONCRETE MUST NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAYOR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
- 24. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND



EROSION CONTROL NOTES CONTINUED:

- 24. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MUST NOT BE WASHED INTO THE DRAINAGE SYSTEM,
- 25. DUST CONTROL SHALL BE DONE BY WATERING AND AS OFTEN AS REQUIRED BY THE TOWN INSPECTOR.
- 15TH AND SHALL REMAIN IN PLACE UNTIL THE LANDSCAPING GROUND COVER IS INSTALLED. CONTRACTOR SHALL CONTINUOUSLY MONITOR THESE MEASURES, FOLLOWING AND DURING ALL RAIN EVENTS, TO PUBLIC OWNED FACILITIES.

- 1. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 15TH TO APRIL 15. EROSION CONTROL FACILITIES SHALL BE IN PLACE PRIOR TO OCTOBER 15TH OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
- 2. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. APPROPRIATE ACTION INCLUDING TEMPORARY SWALES, INLETS, HYDROSEEDING, STRAW BALES, ROCK SACKS, ETC. SHALL BE TAKEN TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE. EROSION CONTROL MEASURES SHALL BE ADJUSTED AS THE CONDITIONS CHANGE AND THE NEED OF CONSTRUCTION SHIFT.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCES. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE GOVERNING AGENCY.
- ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 15, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE-STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 20" EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED. REFER TO THE EROSION CONTROL SECTION OF THE GRADING SPECIFICATIONS THAT ARE A PART OF THIS PLAN SET FOR FURTHER INFORMATION.
- INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT. MINIMUM INLET PROTECTION SHALL CONSIST OF A ROCK SACKS OR AS SHOWN ON THIS PLAN
- 6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. A REPRESENTATIVE OF LEA & BRAZE ENGINEERING SHALL PERFORM A FIELD REVIEW AND MAKE RECOMMENDATIONS AS NEEDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY LEA & BRAZE ENGINEERING AND THE GOVERNING AGENCY OF ANY CHANGES.
- THE EROSION CONTROL MEASURES SHALL CONFORM TO THE LOCAL JURISDICTION'S STANDARDS AND THE APPROVAL OF THE LOCAL JURISDICTION'S ENGINEERING DEPARTMENT.
- 8. STRAW ROLLS SHALL BE PLACED AT THE TOE OF SLOPES AND ALONG THE DOWN SLOPE PERIMETER OF THE PROJECT. THEY SHALL BE PLACED AT 25 FOOT INTERVALS ON GRADED SLOPES. PLACEMENT SHALL RUN WITH THE CONTOURS AND ROLLS SHALL BE TIGHTLY END BUTTED. CONTRACTOR SHALL REFER TO MANUFACTURES SPECIFICATIONS FOR PLACEMENT AND INSTALLATION INSTRUCTIONS.

REFERENCES:

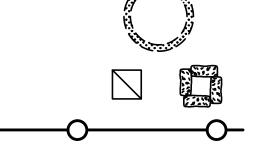
- 1. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL
- 2. CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION

PERIODIC MAINTENANCE:

- 1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
- A. DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
- B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
- C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
- D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1' FOOT.
- E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- F. RILLS AND GULLIES MUST BE REPAIRED.
- 2. GRAVEL BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE GRAVEL BAG.
- 3. STRAW ROLLS SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHED HALF THE HEIGHT OF THE ROLL.
- 4. SILT FENCE SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHES ONE FOOT IN HEIGHT.
- 5. CONSTRUCTION ENTRANCE SHALL BE REGRAVELED AS NECESSARY FOLLOWING SILT/SOIL BUILDUP.
- 6. ANY OTHER EROSION CONTROL MEASURES SHOULD BE CHECKED AT REGULAR INTERVALS TO ASSURE PROPER FUNCTION

EROSION CONTROL LEGEND

GRAVEL BAG



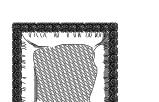
INLET PROTECTION

SEDIMENTATION

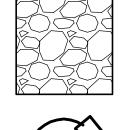
BASIN

STRAW ROLL

SILT FENCE



CONCRETE WASHOUT



CONSTRUCTION **ENTRANCE**

Provide inlet

(-TYP.)

(-TYP.)

1 ON SHEET ER-2.

PROTECTION. SEE DETAIL

PROVIDE STRAW ROLLS.

SEE DETAIL 4 ON SHEET

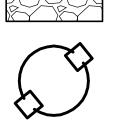
BUILDING #2655

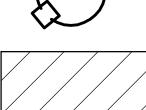
8' CHAIN

PROTECTION. SEE DETAIL

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(<u>-</u>TYP.)

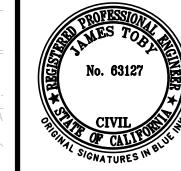




EROSION CONTROL BLANKET / MATTING

TREE PROTECTION

SEAL ALL OTHER INLETS NOT INTENDED TO ACCEPT STORM WATER AND DIRECT FLOWS TEMPORARILY TO FUNCTIONAL SEDIMENTATION BASIN INLETS. -TYP



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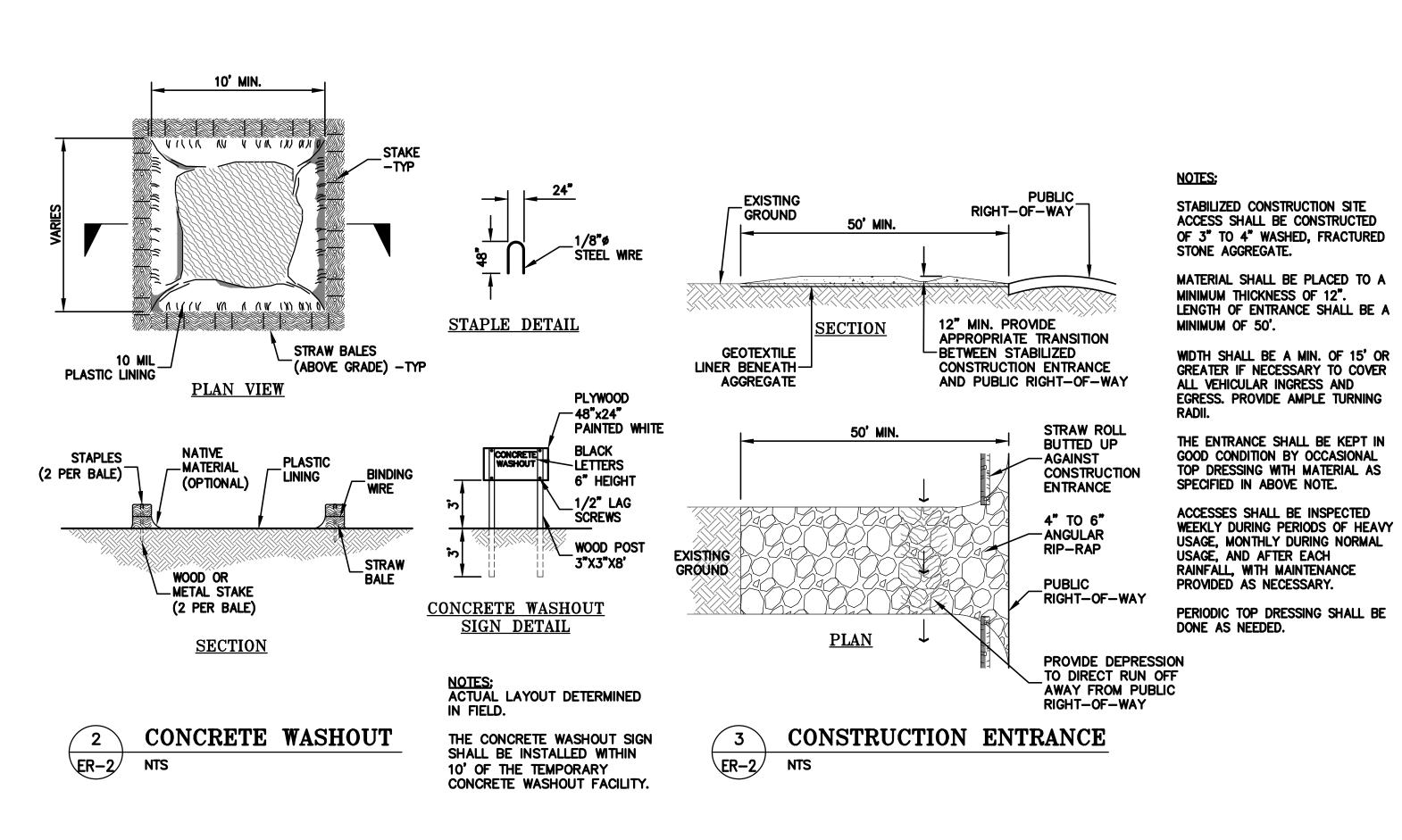
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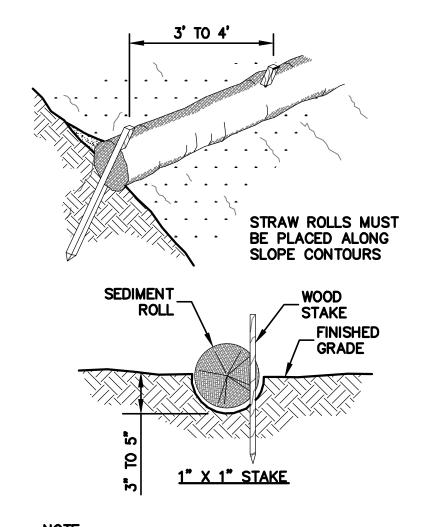
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SHEET NO: **ER-2**

6 OF 10 SHEETS

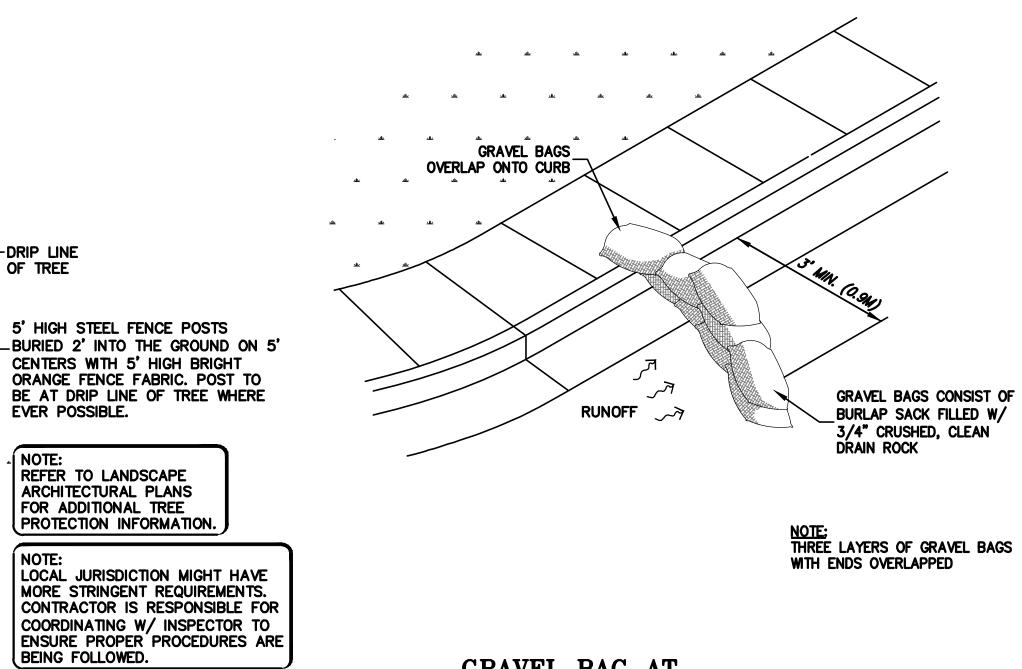




NOTE:

1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE PLACEMENT STAKING S ROLL IN A TRENCH, 3" TO 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL CONTRACTOR IS RESPONSIBLE FOR REGULAR MAINTENANCE AND INSPECTION. THE SILT SHALL BE CLEANED OUT WHEN IT REACHES HALF THE HEIGHT OF THE ROLL.





GRAVEL BAG AT STREET FLOW LINE ER-2

-(E) GRADE

6" COBBLE _ STONE MIN

ER-2

FILTER FABRIC _ TO COVER INLET

.

and and and and and and and

ER-2

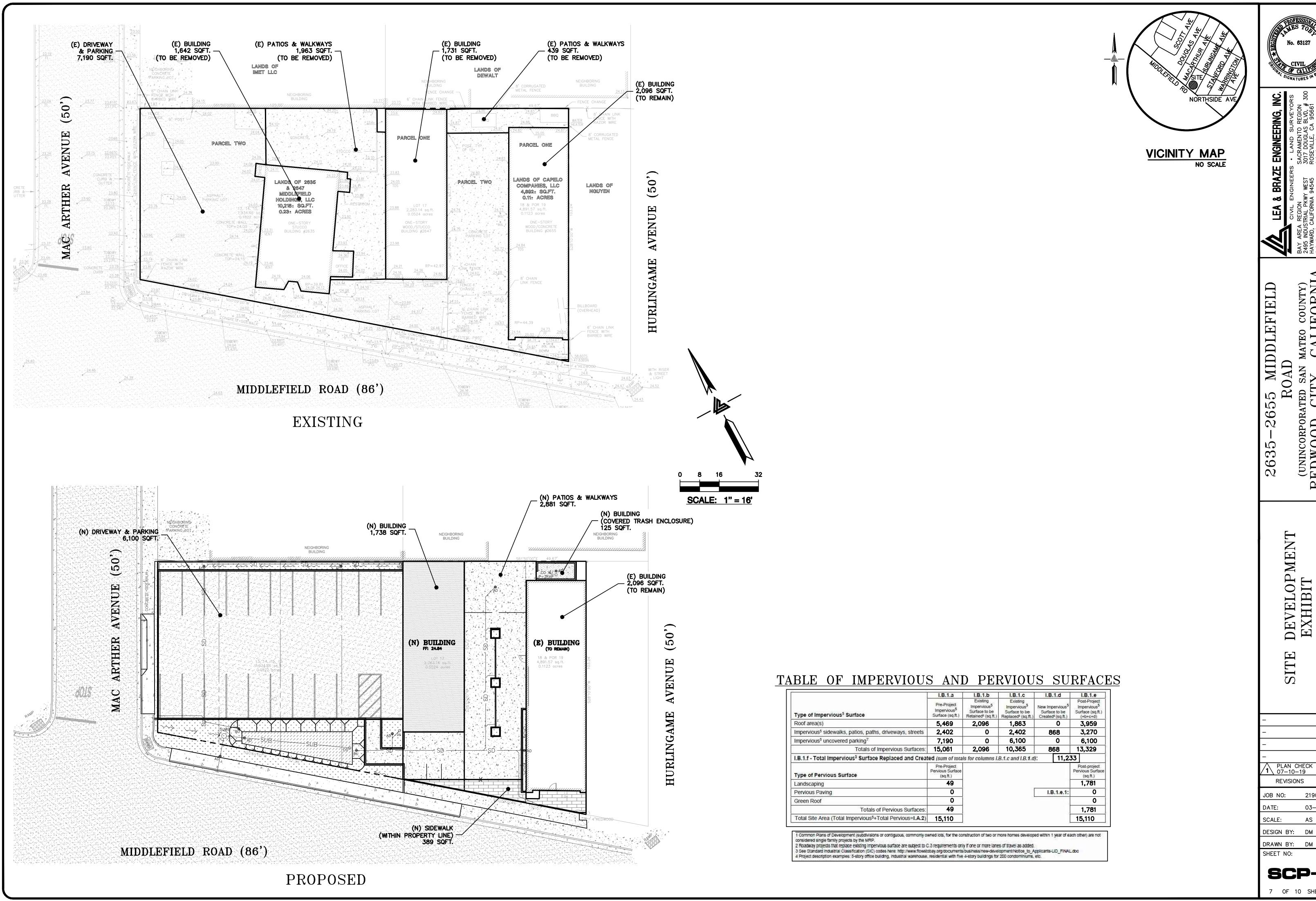
INLET PROTECTION

OF TREE

EXISTING TREE PROTECTION DETAIL

EVER POSSIBLE.

NOTE:
REFER TO LANDSCAPE
ARCHITECTURAL PLANS
FOR ADDITIONAL TREE
PROTECTION INFORMATION.

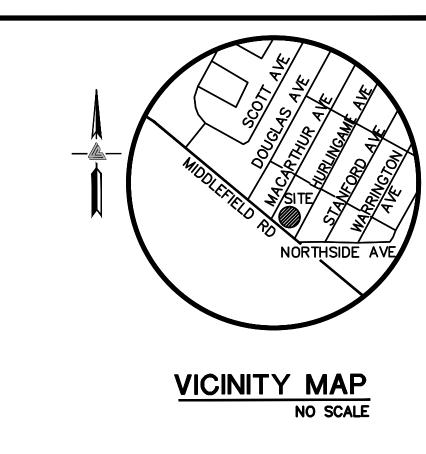


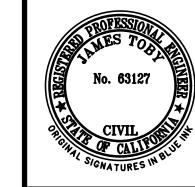


DEVELOP! EXHIBIT SITE

PLAN CHECK 07-10-19 REVISIONS JOB NO: 2190044 DATE: 03-28-19 SCALE: AS NOTED DESIGN BY: DM

SCP-1





TY)

2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545

S5 MIDDLEFIELD ROAD

ROL 2635-2655 (UNINCORPORATED

STORMWATER CONTROI

JOB NO: 2190044

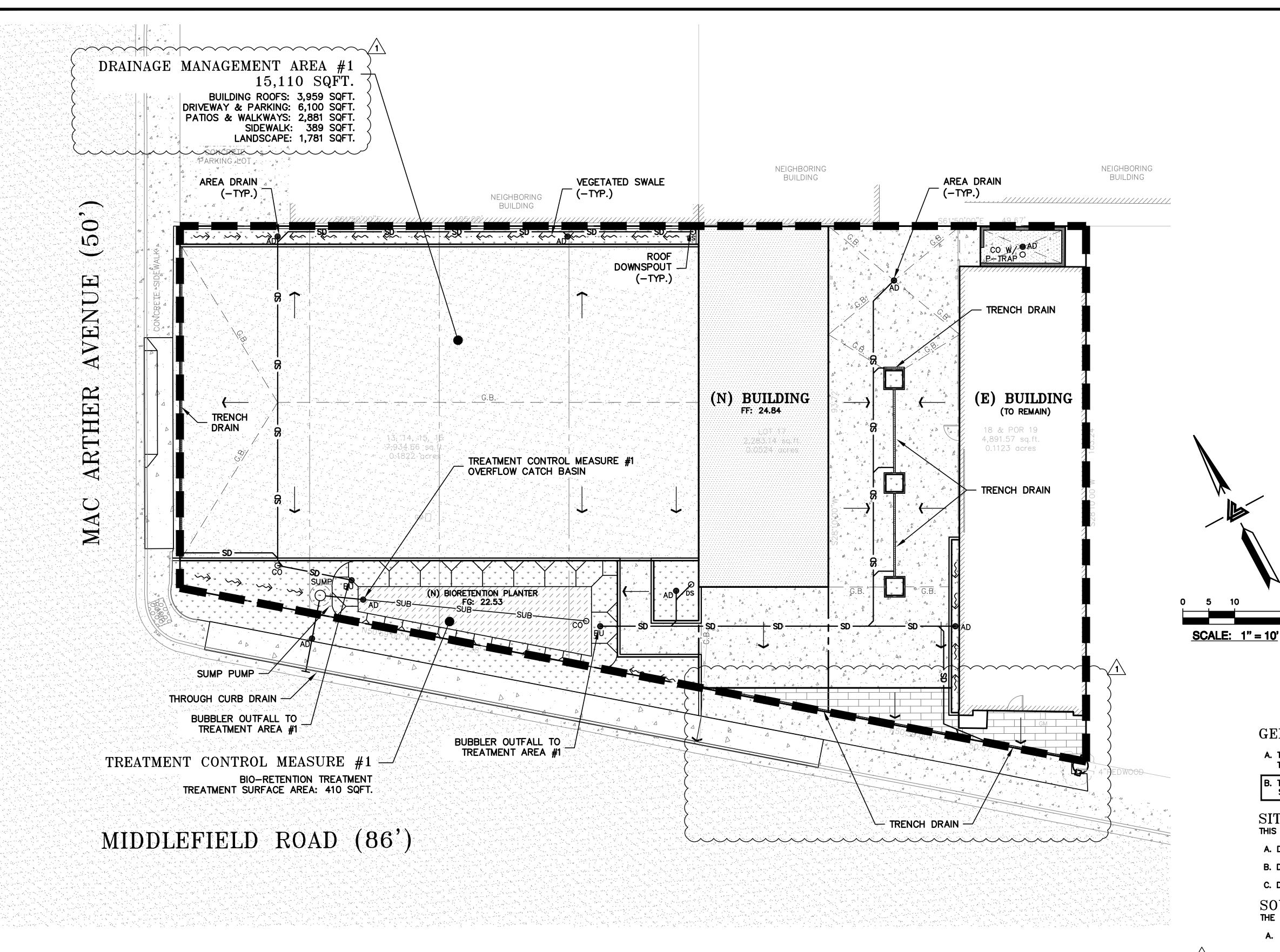
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SCP-28 OF 10 SHEETS



	TREATMENT CONTROL MEASURE (TCM) SUMMARY TABLE														
DRAINAGE MANAGEMENT AREA (DMA)	TREATMENT CONTROL MEASURE (TCM)	LOCATION	TREATMENT TYPE	LID OR NON-LID	SIZING METHOD	DRAINAGE AREA (SQ FT)	IMPERVIOUS AREA (SQ FT)	PERVIOUS AREA (PERMEABLE PAVEMENT) (SQ FT)	PERVIOUS AREA (OTHER) (SQ FT)	% ON-SITE AREA TREATED BY LID OR NON-LID TCM	I AREA	BIO-RETENTION AREA PROVIDED (SQ FT)	RISER	STORAGE DEPTH REQUIRED (FT)	DEPTH
1	1	ON-SITE	BIORETENTION LINED WITH UNDERDRAIN	LID	3. COMBINATION FLOW & VOLUME METHOD**	15,110	13,329	0	1,781	100%	394	405	6	0	0
					TOTALS:	15.110	13.329	0	1.781	100%	1				

*"LINED" REFERS TO AN IMPERMEABLE LINER PLACED ON THE BOTTOM OF A BIORETENTION BASIN OR A CONCRETE FLOW—THROUGH PLANTER, SUCH THAT NO INFILTRATION INTO NATIVE SOIL OCCURS.

**SIZING FOR BIO—RETENTION AREA REQUIRED CALCULATED USING THE COMBINATION FLOW AND VOLUME APPROACH PROVIDED IN THE C.3 HANDBOOK.

GENERAL PLAN NOTES:

A. THIS PROPOSED PROJECT IS A REGULATED PROJECT UNDER THE MUNICIPAL REGIONAL PERMIT (MRP) PROVISION C3.

B. THE PROJECT WILL CREATE AND REPLACE 11,233 SQUARE FEET OF IMPERVIOUS AREA.

SITE DESIGN MEASURES THIS PROPOSED SITE PLANS TO:

- A. DIRECT ROOF RUNOFF TO BIO-RETENTION FOR TREATMENT.
- B. DIRECT PARKING LOT RUNOFF TO BIO-RETENTION FOR TREATMENT.
- C. DIRECT PATIO AND WALKWAY RUNOFF TO BIO-RETENTION FOR TREATMENT.

SOURCE CONTROL MEASURES THE PROPOSED SITE PLANS TO:

- A. INCORPORATE SUSTAINABLE LANDSCAPING PRACTICES, SUCH AS MINIMIZING IRRIGATION AND RUNOFF, PROMOTING INFILTRATION, MINIMIZING THE USE OF PESTICIDES AND FERTILIZERS, AND OTHER PRACTICES OF BAY FRIENDLY LANDSCAPING.
- B. INSTALL STENCILING AT STORM DRAIN INLETS, SUCH AS "NO DUMPING DRAINS TO BAY."
- C. DESIGN FOR DISCHARGE OF FIRE SPRINKLER TEST WATER TO LANDSCAPE OR SANITARY SEWER.

STORMWATER TREATMENT MEASURES THE PROPOSED SITE PLANS TO:

- A. USE A BIO-RETENTION AREA TO PROVIDE LID TREATMENT TO IMPERVIOUS SURFACES.
- B. THE BIO-RETENTION AREA IS SIZED USING THE COMBINATION FLOW AND VOLUME APPROACH.

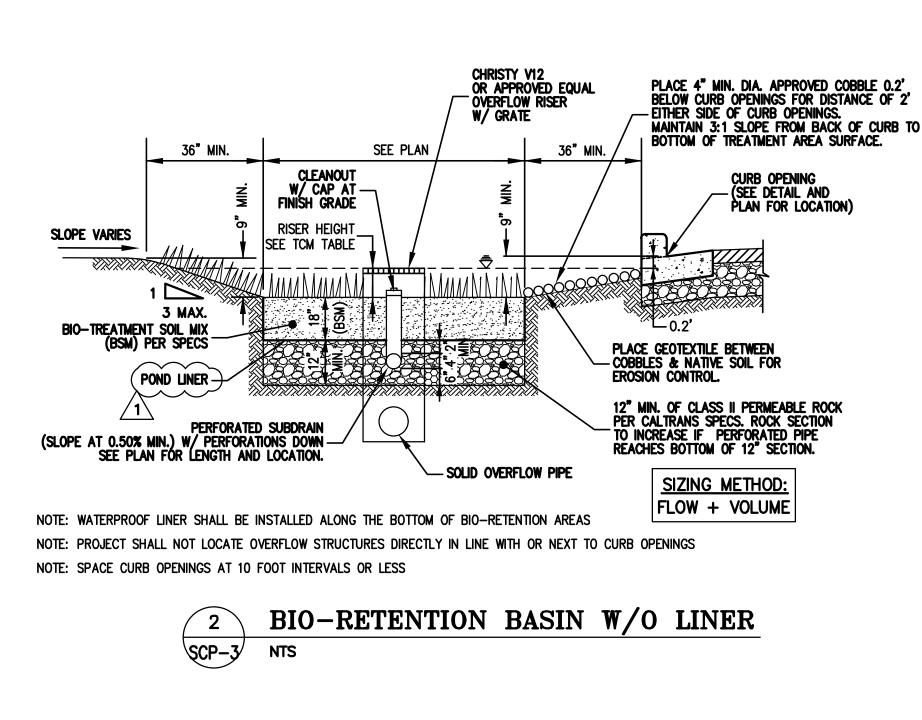
HYDROMODIFICATION NOTE:

POST-CONSTRUCTION RUNOFF IS REDUCED TO BELOW THE PRE-CONSTRUCTION RATE BY A REDUCTION IN IMPERVIOUS SURFACE. HYDROMODIFICATION IS NOT PROPOSED FOR THIS PROJECT.

SHEET NO: SCP-3

DRAWN BY: DM

DATE:



BIO-RETENTION SOIL CONSIDERATIONS

BIO-RETENTION SOIL SHALL HAVE A MINIMUM PERCOLATION RATE OF 5" PER HOUR AND MAXIMUM PERCOLATION RATE OF 10" PER HOUR. IF NATIVE SOILS DO NOT MEET THIS PERCOLATION REQUIREMENT, AN ADMIXTURE SHALL BE MIXED INTO PLANTING SOIL TO ALLOW FOR A 5" PER HOUR PERCOLATION RATE. IN-SITU TESTING SHALL BE CONDUCTED TO VERIFY THAT THE MATERIAL MEETS THE PERCOLATION REQUIREMENTS.

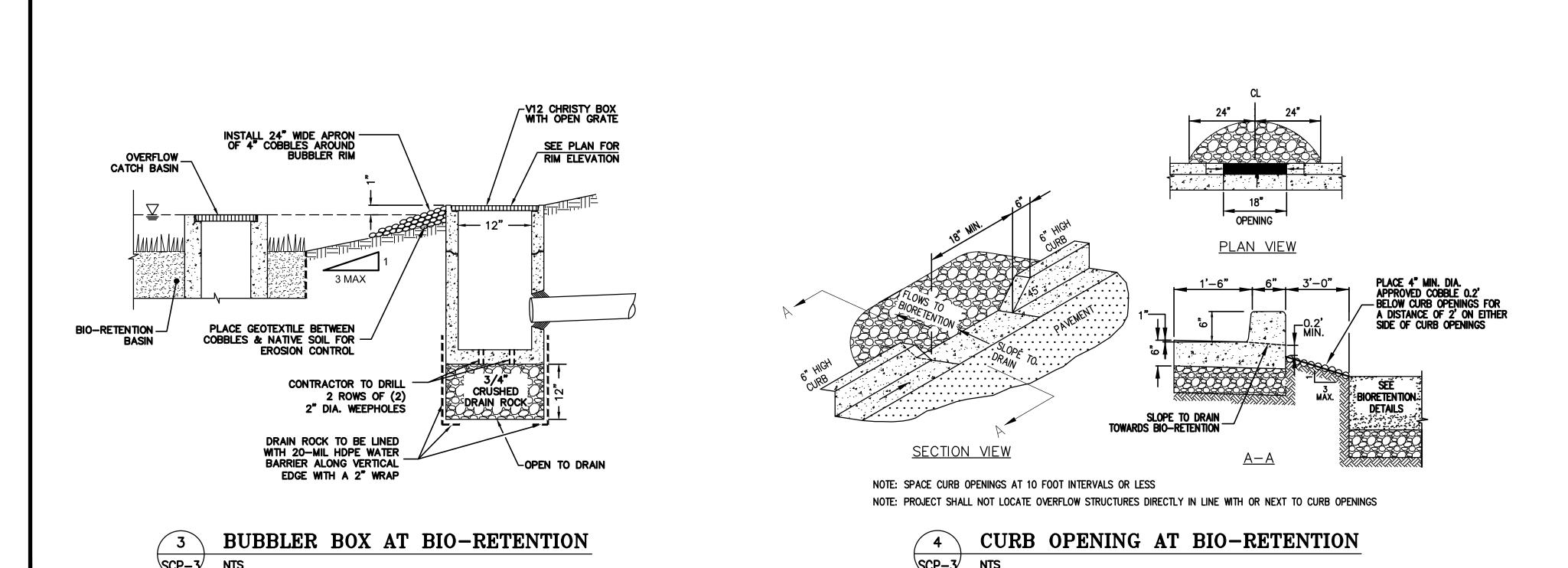
THE BIO-RETENTION PLANTING SOIL SHALL MEET THE REQUIREMENTS SET FORTH IN APPENDIX L OF

NO BARK MULCH SHALL BE PLACED IN THE VEGETATED AREA.

IF IMPORT SOIL IS USED, IT SHALL HAVE THE FOLLOWING PROPERTIES FOR SANDY LOAM. A TYPICAL SOIL MIX COMPRISES 50% CONSTRUCTION SAND, 20%-30% TOPSOIL WITH LESS THAN 5% MAXIMUM CLAY CONTENT AN 20%-30% ORGANIC LEAF COMPOST.

BUBBLER INLET RIM: 23.11

INV: 6 21.01



BIO-RETENTION TREATMENT AREA

OVERFLOW CATCH BASIN

RIM: √23.26 INV IN: 19.20 INV OUT: 21.16

> THROUGH CURB DRAIN

RIM: 23.03 SD INV: 19.27 **SUB INV: 19.27**

RIM: 23.11

INV: 21.01

BUBBLER INLET

TREATMENT SURFACE: 22.53'
TREATMENT SURFACE AREA: 410 SQFT.

CURB CUT INLET

(-TYP.)

SPACED • 10' O.C.

