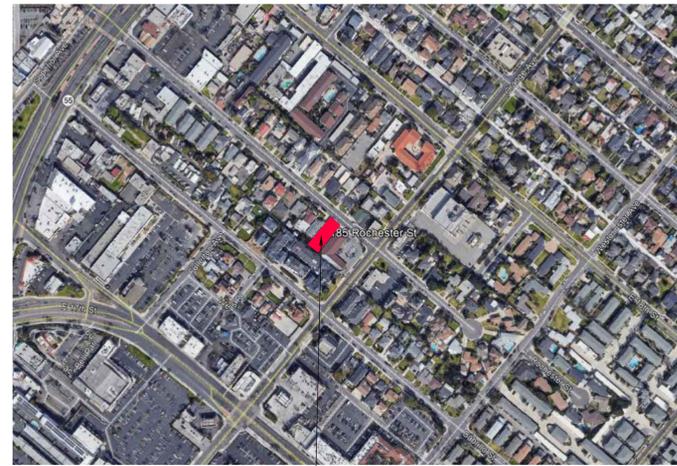




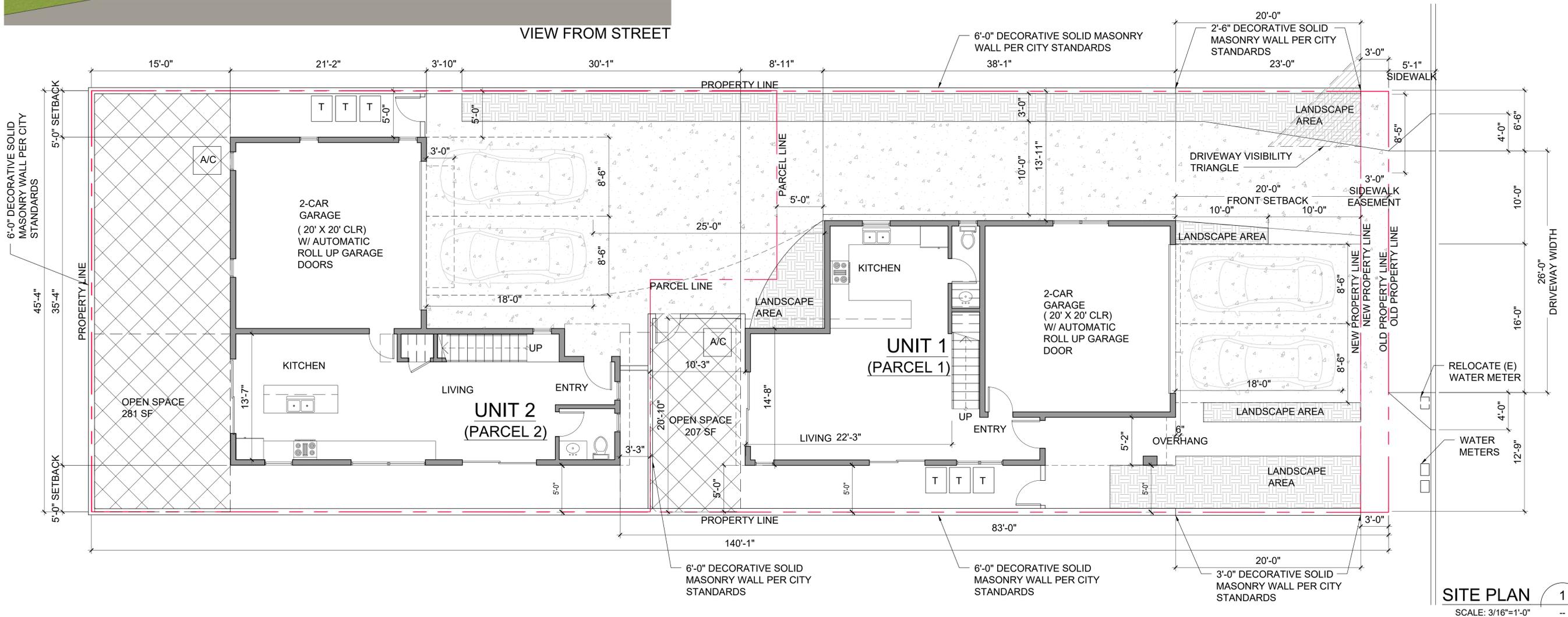
VIEW FROM STREET



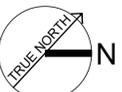
PROJECT SITE

VICINITY MAP

PROJECT ADDRESS:	185 ROCHESTER STREET, COSTA MESA, CA
APN:	425-414-12
PROPERTY OWNER:	185 ROCHESTER COSTA MESA LLC WILLIAM YANG 16800 ASTON STREET, SUITE 275 IRVINE, CA 92606
ARCHITECT:	TAG DESIGN WORKS 411 E. HUNTINGTON DRIVE, SUITE 308 ARCADIA, CA 91006
PROJECT SUMMARY DESCRIPTION:	PROPOSE 2 SINGLE FAMILY DWELLINGS (WITH SMALL LOT DIVISION ORD.) 6,207 SF (6,343 SF BEFORE STREET DEDICATION)
LOT SIZE:	PARCEL 1(GROSS) : 3,334 SF PARCEL 1(NET) : 3,198 SF PARCEL 2 : 3,009 SF
ZONING SUMMARY	R2-HD HIGH DENSITY RESIDENTIAL
ZONING:	2 (2 ALLOWED)
PROPOSED DENSITY:	24'-6" (27'-0" ALLOWED)
PROPOSED BUILDING HEIGHT:	13'-6" (6'-0" ALLOWED)
PROPOSED BUILDING SEPARATION:	20'-0" (20'-0" REQUIRED)
PROPOSED SETBACK:	FRONT YARD 5'-0" (5'-0" REQUIRED) SIDE YARD 15'-0" (15'-0" REQUIRED) REAR YARD 2,088 SF (33.6%)
PROPOSED BUILDING COVERAGE:	2,198 SF (35.4%) > 35% (MIN. REQUIRE)
PROPOSED OPEN SPACE:	1,921 SF (31%)
PAVING & DRIVEWAY :	
PROPOSED PARKING:	8



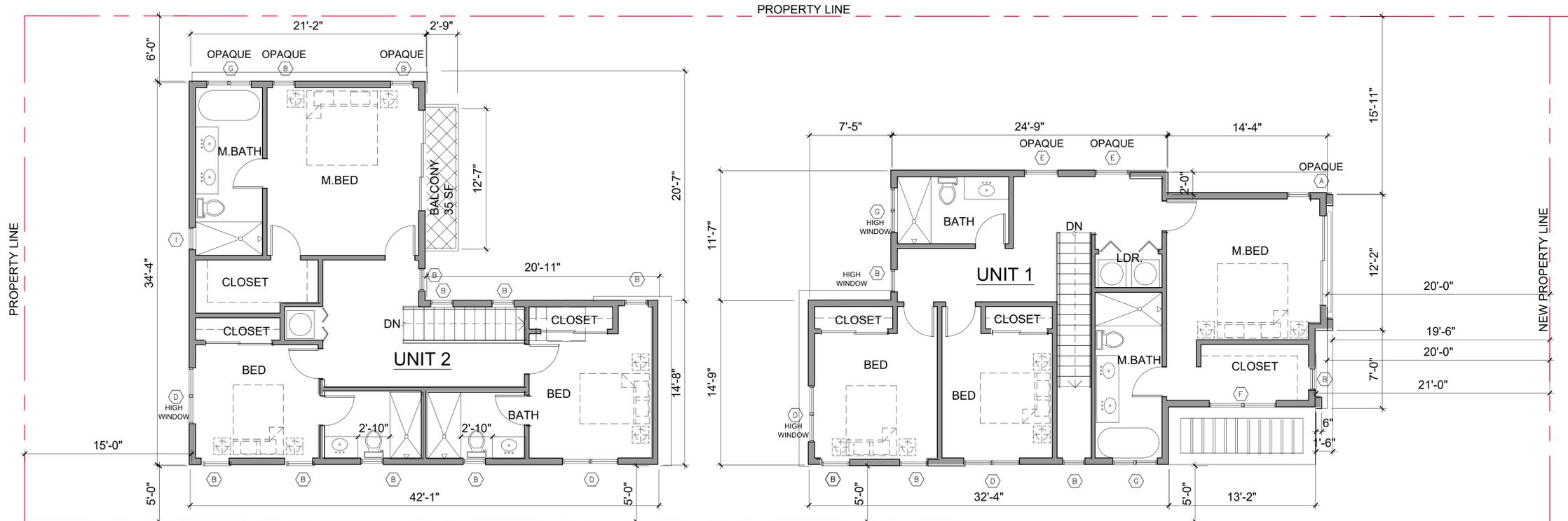
SITE PLAN 1  
SCALE: 3/16"=1'-0"



411 E. HUNTINGTON DR.  
SUITE 308  
ARCADIA, CA 91006  
PHN: (626) 446-5300

# ROCHESTER HOUSES

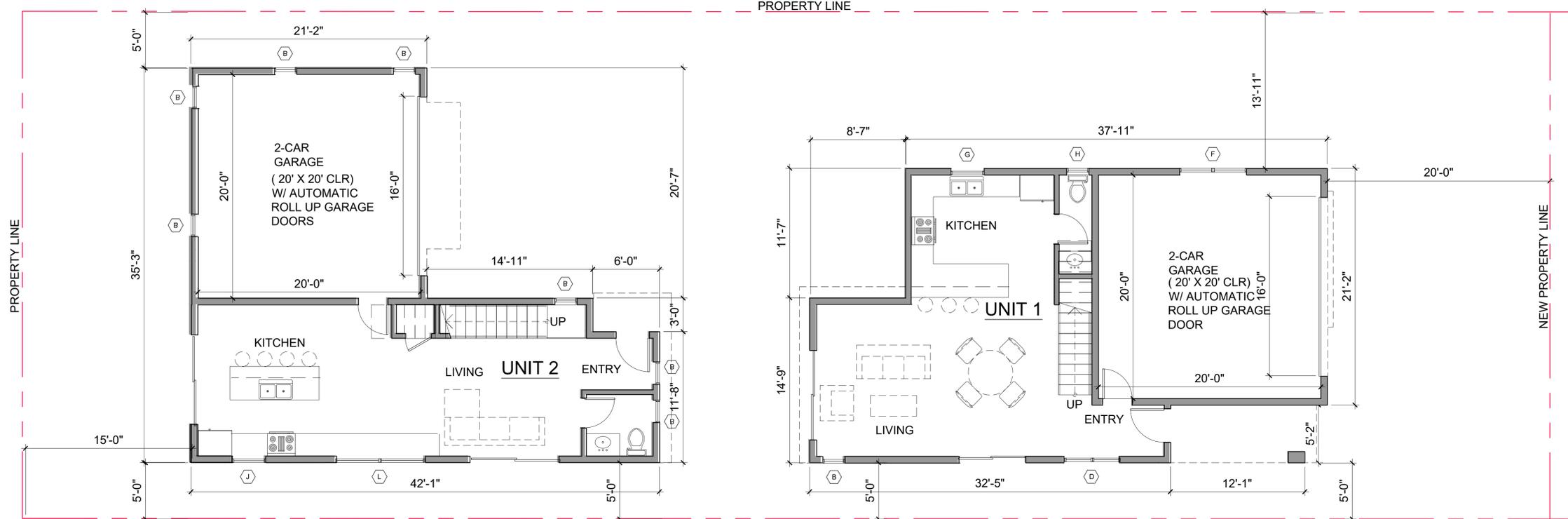
COSTA MESA



**SECOND FLOOR**

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

2



**FIRST FLOOR**

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

1

**UNIT SIZE: UNIT 1**

PARCEL SIZE:	3,198 S.F.
FIRST FLOOR:	1,052 S.F.
(GARAGE: 448 S.F.)	
SECOND FLOOR:	1,029 S.F.
TOTAL LIVABLE:	1,633 S.F.
TOTAL BUILDING:	2,081 S.F.

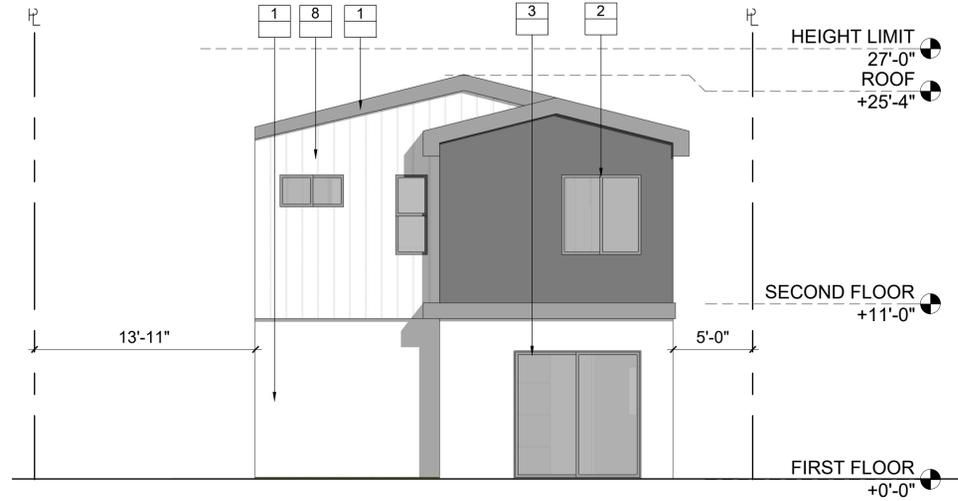
2ND FLOOR 1,029 S.F. : 1ST FLOOR 1,052 S.F.  
= 0.98 : 1 < 1:1 ALLOWED

**UNIT SIZE: UNIT 2**

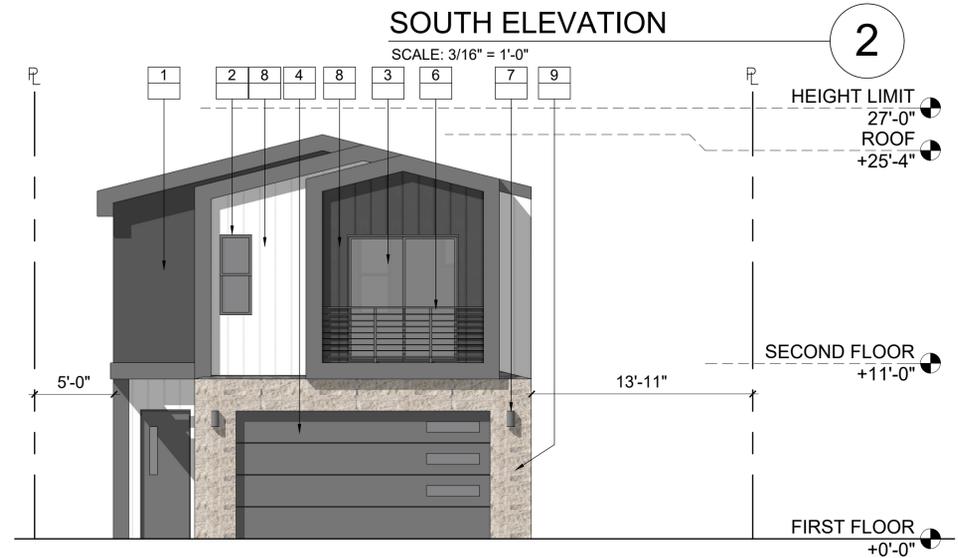
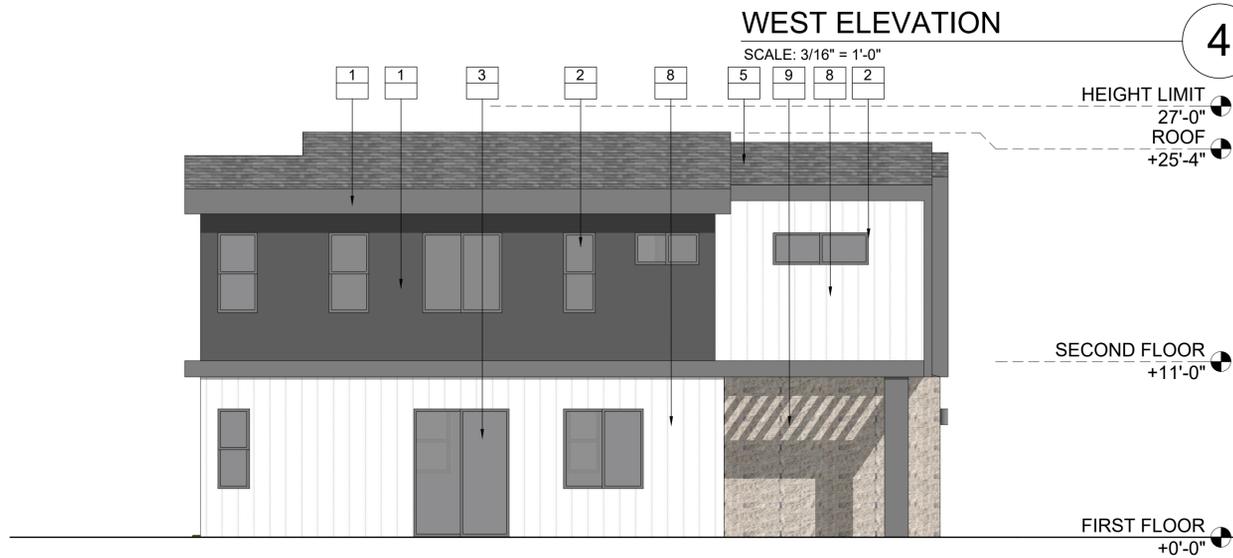
PARCEL SIZE:	3,009 S.F.
FIRST FLOOR:	1,036 S.F.
(GARAGE: 448 S.F.)	
SECOND FLOOR:	1,033 S.F.
(BALCONY: 35 S.F.)	
TOTAL LIVABLE:	1,621 S.F.
TOTAL BUILDING:	2,069 S.F.

2ND FLOOR 1,033 S.F. : 1ST FLOOR 1,036 S.F.  
= 0.99 : 1 < 1:1 ALLOWED





- MATERIALS:**
1. LIGHT SAND FINISH STUCCO
  2. VINYL WINDOW
  3. VINYL DOOR
  4. METAL GARAGE DOOR
  5. ASPHALT SHINGLE ROOF
  6. METAL RAILING
  7. EXTERIOR LIGHT
  8. VERTICAL SIDING
  9. STONE VENEER



**WEST ELEVATION** 4  
SCALE: 3/16" = 1'-0"

**EAST ELEVATION** 3  
SCALE: 3/16" = 1'-0"

**SOUTH ELEVATION** 2

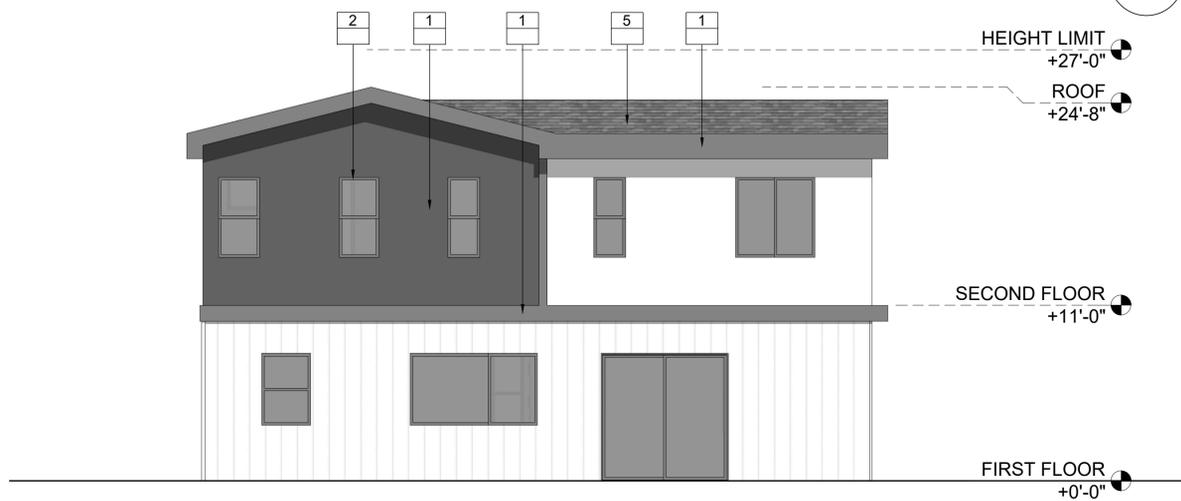
**NORTH ELEVATION** 1  
SCALE: 3/16" = 1'-0"



**WEST ELEVATION**

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

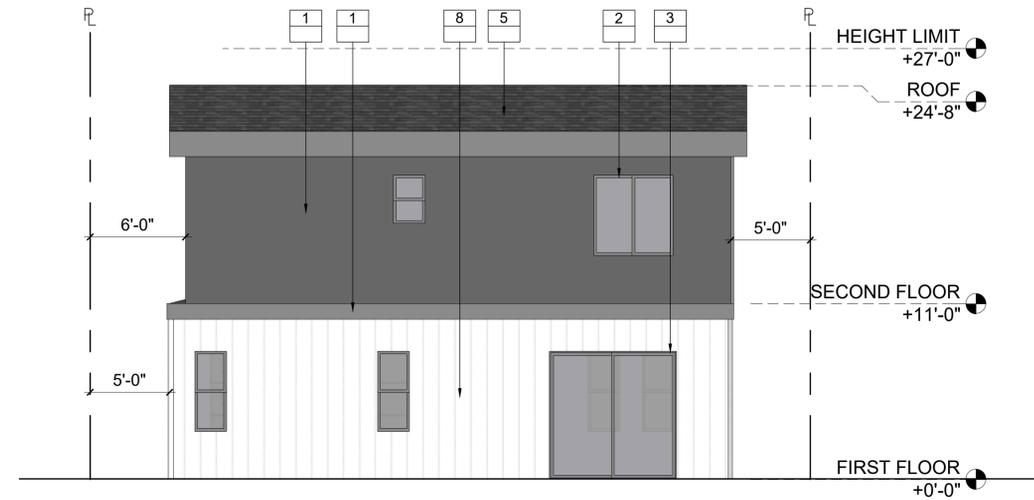
4



**EAST ELEVATION**

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

3



**SOUTH ELEVATION**

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

2



**NORTH ELEVATION**

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

1

- MATERIALS:**
1. LIGHT SAND FINISH STUCCO
  2. VINYL WINDOW
  3. VINYL DOOR
  4. METAL GARAGE DOOR
  5. ASPHALT SHINGLE ROOF
  6. METAL RAILING
  7. EXTERIOR LIGHT
  8. VERTICAL SIDING
  9. STONE VENEER

DOOR SCHEDULE				
NUMBER	TYPE	SIZE		
		WIDTH	HEIGHT	THICKNESS
1	1	3'-2"	8'-0"	1-3/4"
2	2	8'-0"	8'-0"	1-3/4"
3	3	9'-0"	8'-0"	1-3/4"
4	4	16'-0"	8'-0"	1-3/4"
5	4	6'-0"	8'-0"	1-3/4"

**DOOR SCHEDULE**  
SCALE: NTS

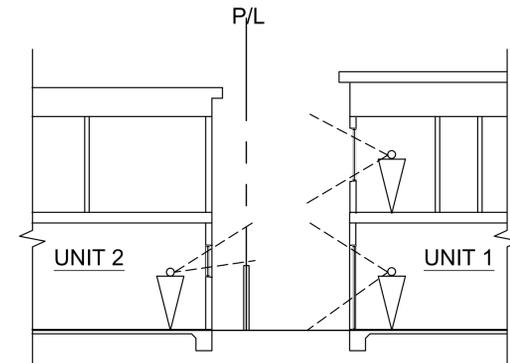
6

WINDOW SCHEDULE				
SYMBOL NUMBER	TYPE	SIZE		
		WIDTH	HEIGHT	HEAD HEIGHT
J	J	8'-0"	4'-6"	8'-0"
L	L	3'-0"	4'-6"	8'-0"

**WINDOW SCHEDULE**  
SCALE: NTS

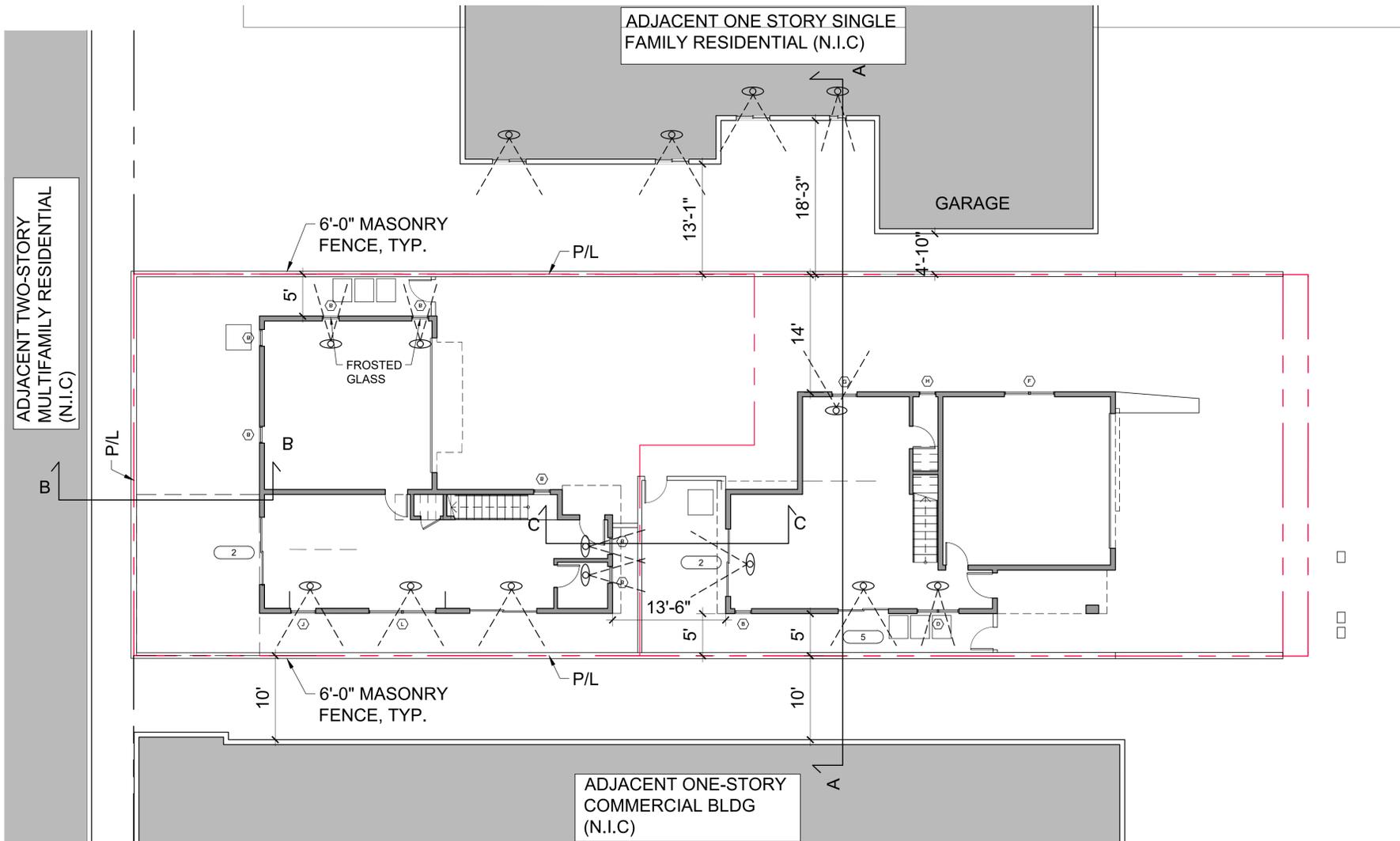
5

WINDOW SCHEDULE				
SYMBOL NUMBER	TYPE	SIZE		
		WIDTH	HEIGHT	HEAD HEIGHT
A	A	2'-0"	6'-0"	8'-0"
B	B	2'-0"	5'-0"	8'-0"
C	C	6'-0"	6'-0"	8'-0"
D	D	5'-0"	5'-0"	8'-0"
E	E	3'-0"	5'-0"	8'-0"
F	F	6'-0"	2'-0"	8'-0"
G	G	4'-0"	2'-0"	8'-0"
H	H	2'-0"	4'-0"	8'-0"
I	I	2'-0"	3'-0"	8'-0"



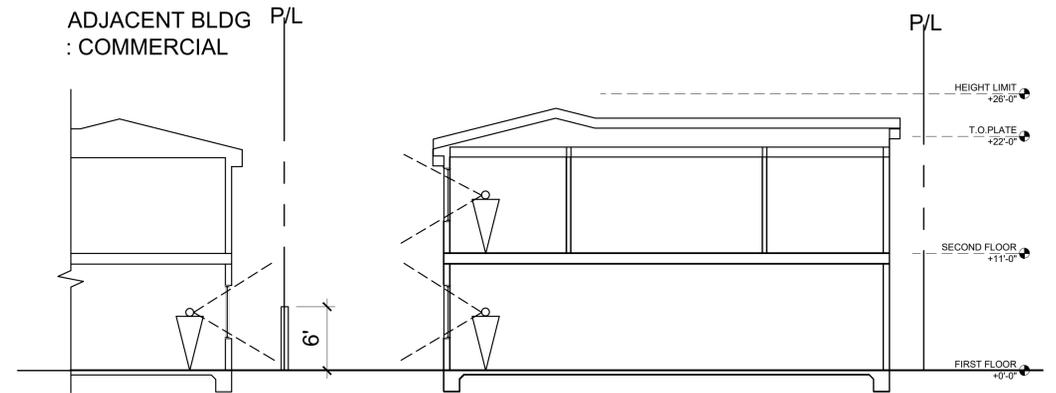
**SIGHT DIAGRAM: SECTION C-C**  
SCALE: 1/8" = 1'-0"

3



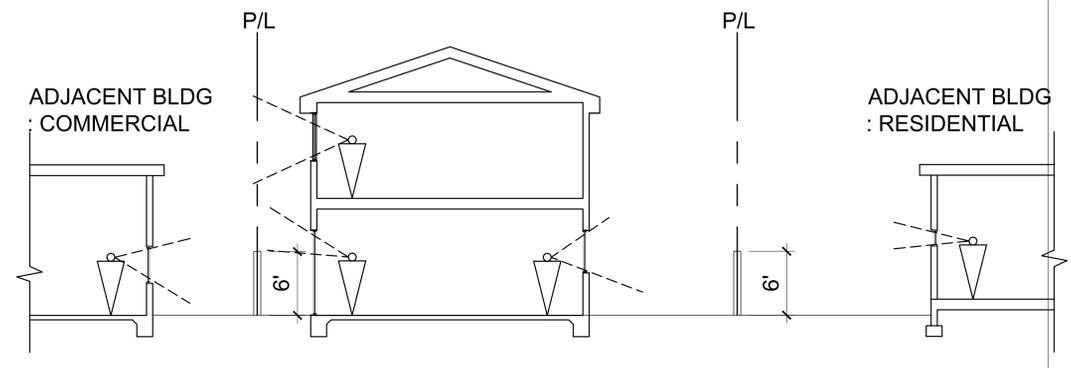
**SIGHT DIAGRAM: FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

4



**SIGHT DIAGRAM: SECTION B-B**  
SCALE: 1/8" = 1'-0"

2



**SIGHT DIAGRAM: SECTION A-A**  
SCALE: 1/8" = 1'-0"

1

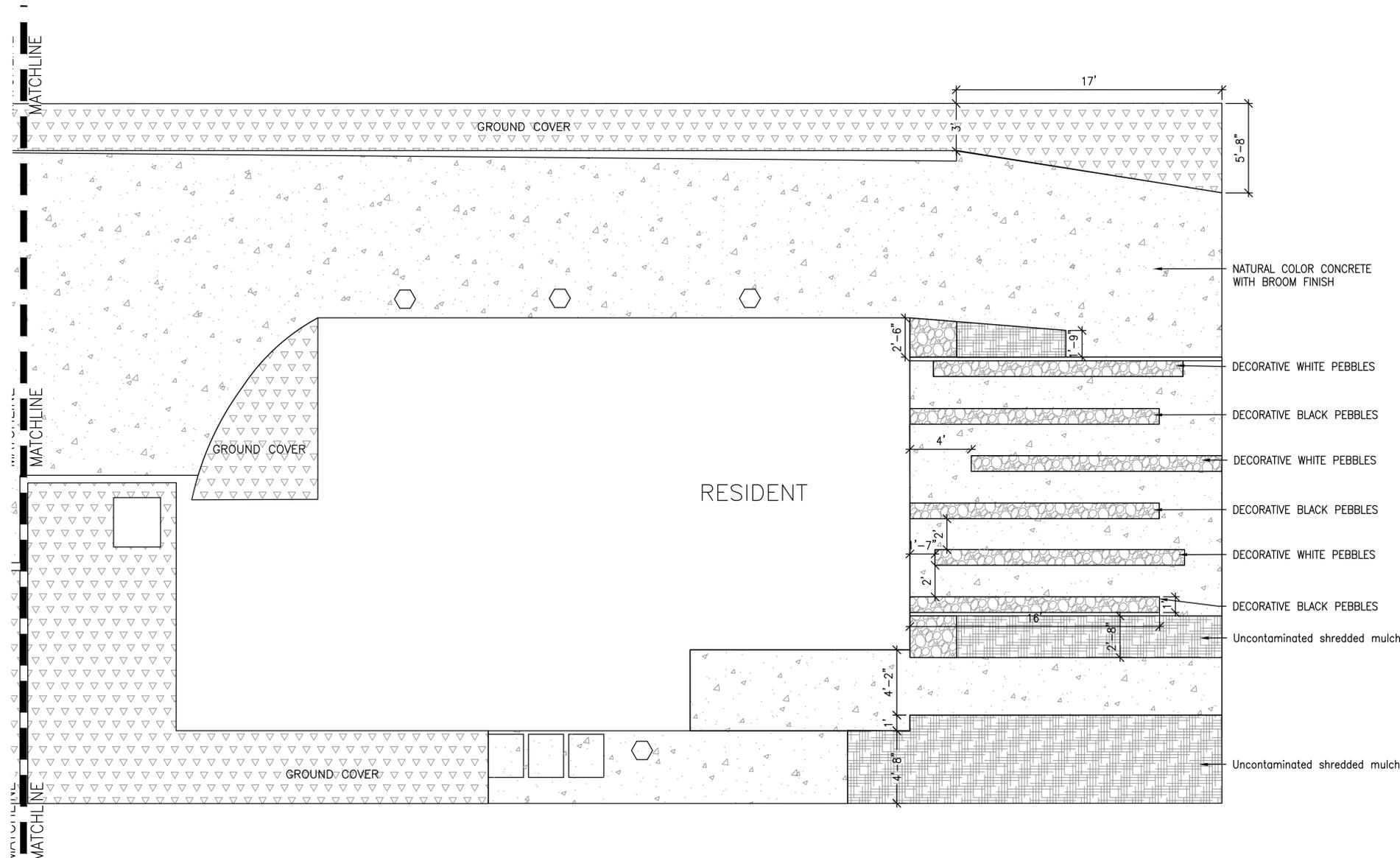


**L.I.U. Landscape Inc.**  
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 Temple City, CA 91780  
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 www.liulandscape.com  
 626-888-9915

Project:

**Alfa Made LLC**  
 185 Rochester St.  
 Costa Mesa CA 92627

SITE PLAN FRONT



**ABBREVIATION LEGEND**

ARCH	ARCHITECT	INV	INVERT
CLR	CLEAR LINE	HP	HIGH POINT
CL	CLEAR	LP	LOW POINT
D	DOOR	MFG	MANUFACTURER
DS	DOWNSPOUT	OC	ON CENTER
DWG	DRAWINGS	PA	PLANTING AREA
EQ	EQUAL	QTY	QUANTITY
EX	EXISTING	SJ	SCORE JOINT
FF	FINISH FLOOR	SYM	SYMBOL
FG	FINISH GRADE	TYP	TYPICAL
GC	GROUNDCOVER	W	WINDOW
HB	HOSE BIB		

**SYMBOL LEGEND**

●	EXISTING DOWNSPOUT
■	EXISTING ELECTRICAL OUTLET
⊙	EXISTING HOSE BIB
EX SLOPE	EXISTING SLOPE
+41.17	EXISTING SPOT ELEVATION
✕	EXISTING TREE TO BE REMOVED
⊕	EXISTING IRRIGATION VALVE
DS ⊙	PROPOSED DOWNSPOUT
■	PROPOSED ELECTRICAL OUTLET
HB ⊙	PROPOSED HOSE BIB
PD ⊙	PROPOSED PLANTER DRAIN
-2%	PROPOSED SLOPE
PU ⊙	3" POP UP DRAIN AT SWALE
⊛	NEW SOD
⊛	PLANTING AREA
DN ⊙	STEP DOWN ARROW
UP ⊙	STEP UP ARROW
~	ABOVE-GROUND CONVEYANCE
- - -	BELOW-GROUND CONVEYANCE

**BOULDER & STONE LEGEND**

SYMBOL	DESCRIPTION	QUANTITY
LRG	LARGE BOULDER (24"-36")	X
MED	MEDIUM BOULDER (18"-24")	X
SM	SMALL BOULDER (12"-18")	X
⊛	DECORATIVE GRAVEL	SF

- NOTES:**
- BOULDERS TO BE MALIBU BOULDERS OR AS CLOSE A MATCH AS POSSIBLE (ROUNDED, WARM COLOR BOULDERS AS OPPOSED TO SHARP EDGES & GRAY)
  - DECORATIVE GRAVEL: USE 3/8" AND 1/2" MIXED DEL RIO, UNLESS OTHERWISE SPECIFIED

Revisions:

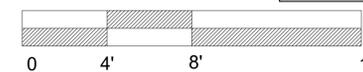
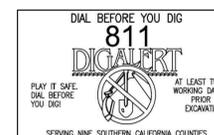
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Submittal Date:

February 4, 2022

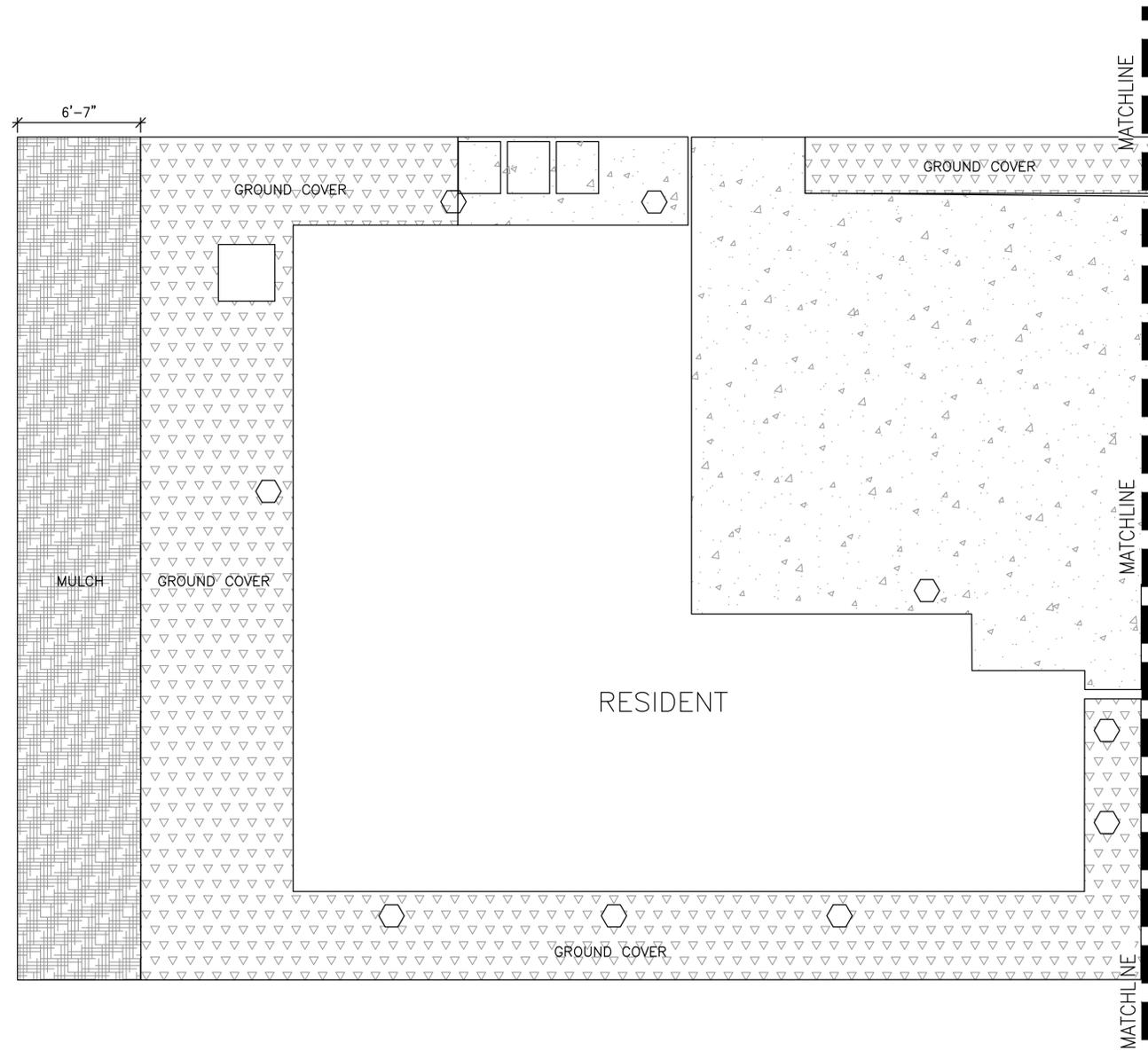
Sheet Number:

L1.1



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





UNCONTAMINATED SHREDDED MULCH



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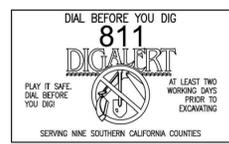
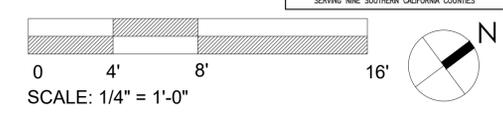
Project:  
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 185 Rochester St.  
 Costa Mesa CA 92627

SITE PLAN BACK

Revisions:  
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Submittal Date:  
 February 4, 2022

Sheet Number:  
 L1.2

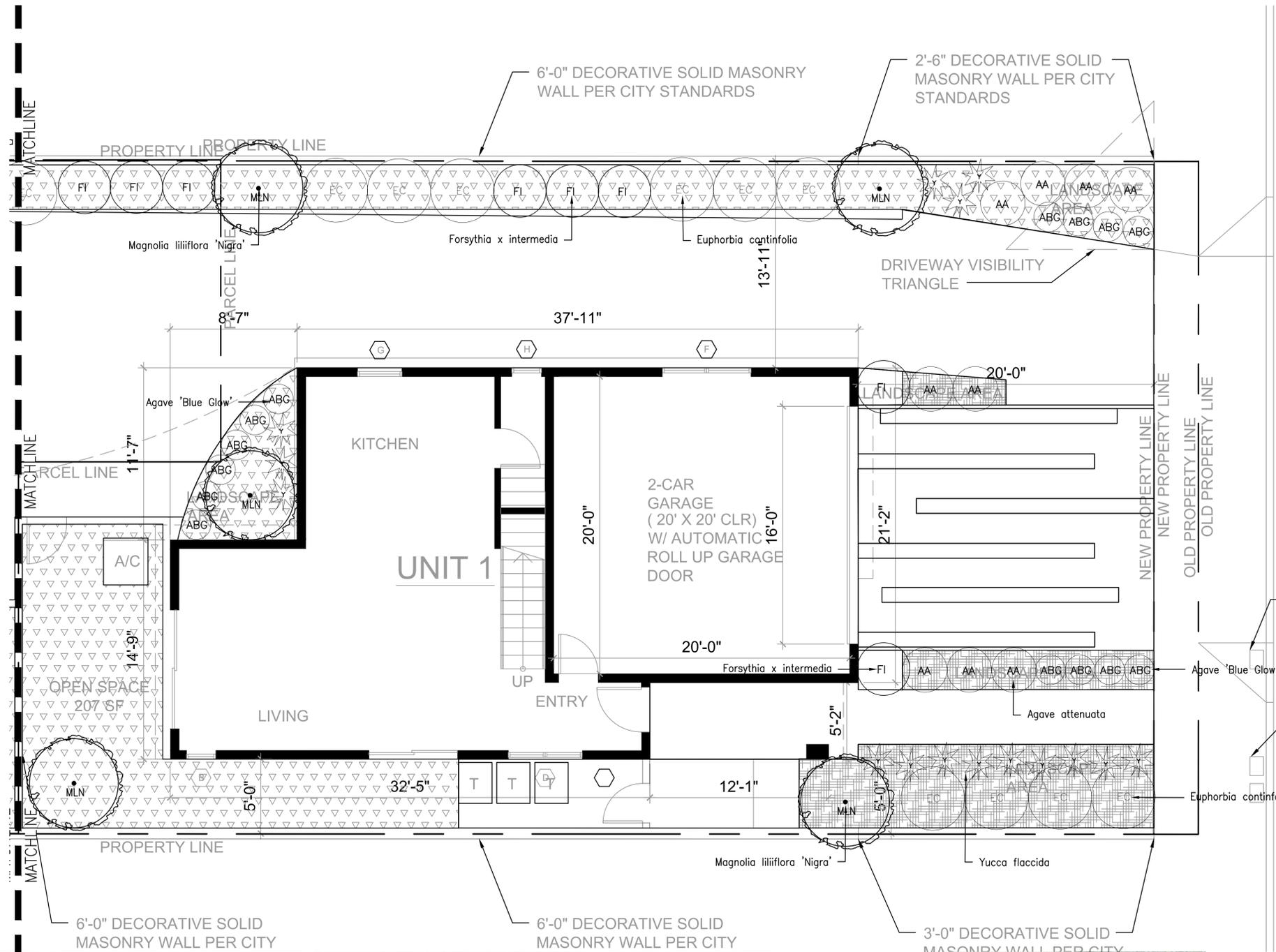




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 185 Rochester St.  
 Costa Mesa CA 92627

PLANTING PLAN FRONT



TREE				
Symbol	Scientific Name	Common Name	Size	Qty
MLN	Magnolia liliiflora 'Nigra'	Purple Lily Magnolia	24B	8
PG	Podocarpus Gracilior	African Fern Pine	24B	14
SHRUB				
Symbol	Scientific Name	Common Name	Size	Qty
AA	Agave attenuata	Foxtail agave	5G	9
ABG	Agave 'Blue Glow'		1G	14
Y	Yucca flaccida	Adam's Needle	1G	15
FI	Forsythia x intermedia	Forsythia	5G	21
EC	Euphorbia cotinifolia	Caribbean Copper Plant	5G	13
GRASS			Square Footage	
Symbol	Name	Common Name	Square Footage	
▽▽▽	Dymondia margaretae	Silver Carpet	1187 sq.ft	



Magnolia liliiflora 'Nigra'



Agave attenuata



Agave 'Blue Glow'



Podocarpus Gracilior



Dymondia margaretae



Euphorbia cotinifolia



Forsythia x intermedia



Yucca flaccida

Revisions:

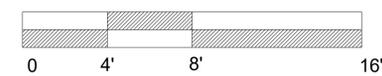
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Submittal Date:

February 4, 2022

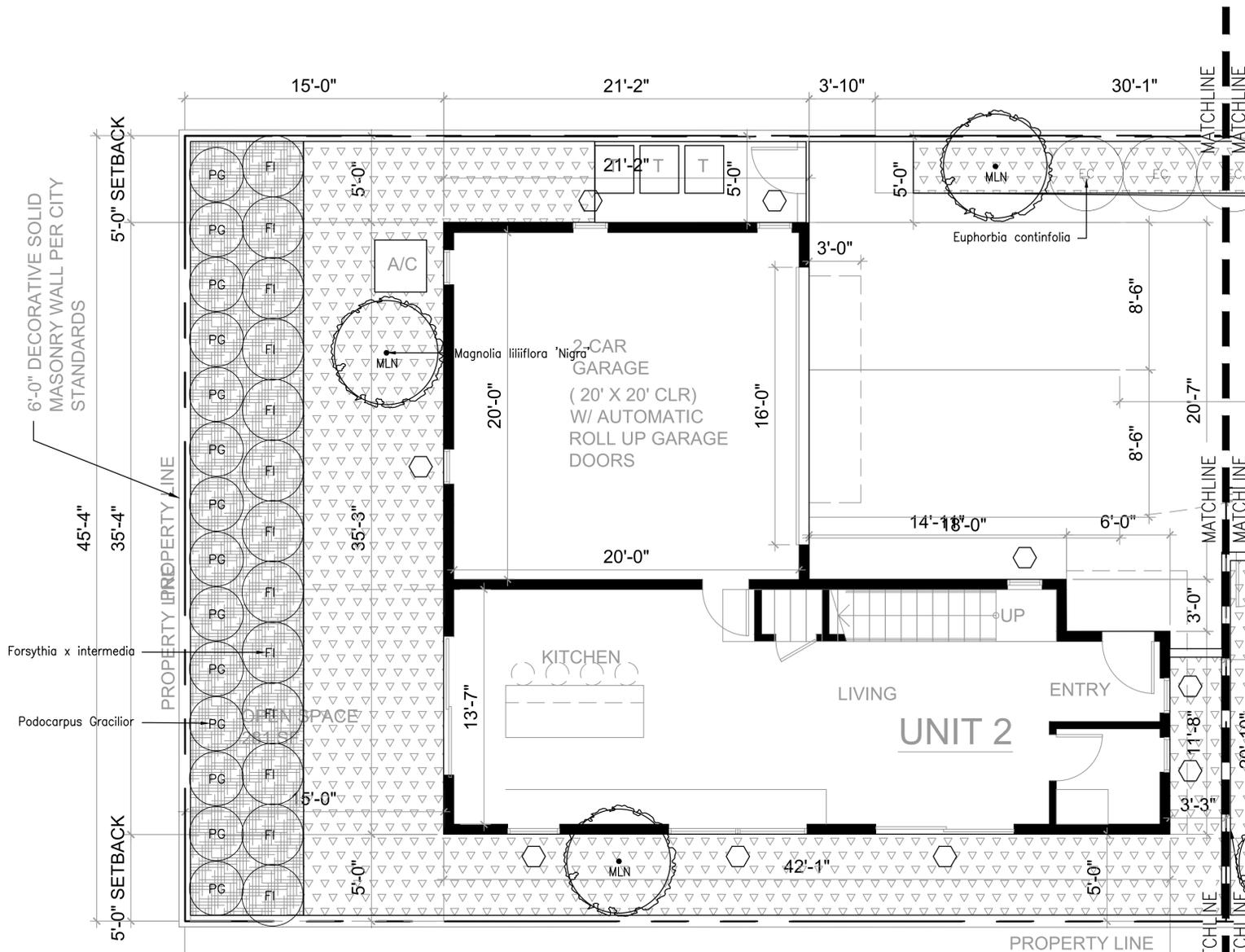
Sheet Number:

L3.1



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





TREE			
Scientific Name	Common Name	Size	Qty
Magnolia liliiflora 'Nigra'	Purple Lily Magnolia	24B	8
Podocarpus Gracilior	African Fern Pine	24B	14

SHRUB			
Scientific Name	Common Name	Size	Qty
Agave attenuata	Foxtail agave	5G	9
Agave 'Blue Glow'		1G	14
Yucca flaccida	Adam's Needle	1G	15
Forsythia x intermedia	Forsythia	5G	21
Euphorbia cotinifolia	Caribbean Copper Plant	5G	13

GRASS		
Name		Square Footage
Dymondia margaretae	Silver Carpet	1277 sq.ft



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PLANTING PLAN BACK

**CITY REQUIREMENTS**

Total Landscape Area: 1781 sq.ft.  
 8 trees are required

One (1) tree (fifteen (15) gallon or larger) shall be provided for every two hundred (200) square feet of landscaped area. Fifty (50) percent of all trees shall be evergreen.

At least two (2) different tree species shall be identified on plans and installed as part of the project landscaping

At least seventy (70) percent of all landscaped areas containing trees and shrubs shall be underplanted with groundcover, with the remaining areas to incorporate a layer of uncontaminated compost or mulch as required per water efficient landscape guidelines

Uncontaminated mulch, shredded bark, and/or compost used as a groundcover shall maintain a consistent two (2) inch minimum layer and provide complete coverage under shrubs and trees.

**PROPOSED DESIGN**

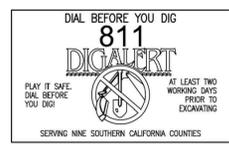
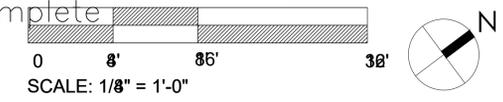
Trees: 22 Shrubs: 72 Mulch: 483 sq.ft. Mulch percentage: 27%  
 Ground cover: 1274 sq.ft. Ground cover percentage: 72%

One (1) tree (24 box) was provided for every two hundred (200) square feet of landscaped area. Fifty (50) percent of all trees area evergreen.

Two (2) different tree species were identified on plans and installed as part of the project landscaping

At least seventy (70) percent of all landscaped areas containing trees and shrubs were underplanted with groundcover, with the remaining areas to incorporate a layer of uncontaminated compost or mulch as required per water efficient landscape guidelines

Uncontaminated mulch, used as a groundcover shall maintain a consistent two (2) inch minimum layer and provide complete coverage under shrubs and trees.



**Revisions:**

- 
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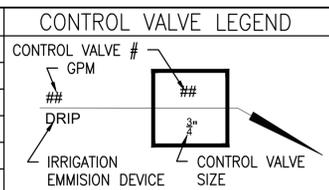
**Submittal Date:**

February 4, 2022

**Sheet Number:**

L3.2

PLANT SIZE	EMITTER QTY	EMITTER FLOW RATE	TOTAL GPH
24" BOX	4	0.50 GPH (BLUE)	2
15 GALLON	3	0.50 GPH (BLUE)	1.50
5 GALLON	2	0.50 GPH (BLUE)	1.00
1 GALLON	1	0.50 GPH (BLUE)	0.50

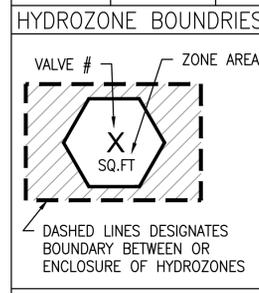


HYDROZONE DESCRIPTION AND LEGEND					
CONTROL VALVE # (HYDROZONE ZONE)	LANDSCAPE AREA (SQ.FT)	W.U.C.O.L.S. PLANT WATER USE RATING	PLANT SIZE	HYDROZONE DESCRIPTION	HYDROZONE EXPOSURE
1	204	LOW/MED	1G,5G,15G	TREES,SHRUBS	P SHADE
2	302	LOW/MED	1G,5G,15G	TREES,SHRUBS	P SHADE
3	293	MED	15G	TREES	P SHADE
4	64	LOW/MED	1G,15G	TREES,SHRUBS	P SHADE
5	274	LOW	FLATS	GROUND COVER	P SHADE
6	631	LOW	FLATS	GROUND COVER	P SHADE

**GENERAL IRRIGATION NOTES**

CONTRACTOR SHALL BE LICENSED; IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO READ, UNDERSTAND, AND ADHERE TO PROJECT NOTES AND SPECIFICATION, PERTAINING TO ALL PLANS, INCLUDING THE FOLLOWING GENERAL AND SITE SPECIFIC NOTES.

- THIS DESIGN IS DIAGRAMMATIC. ALL VALVES, ETC., SHOW WITHIN PAVED AREAS FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN THE PLANTING AREAS WHERE POSSIBLE, AVOID ANY CONFLICTS BETWEEN THE IRRIGATION SYSTEM AND EXISTING STRUCTURES, UTILITIES AND PLANTING.
- ALL MAINLINE PIPING UNDER PAVING SHALL BE INSTALLED IN SEPARATE SLEEVES, MAIN LINE SLEEVE, CONTROL WIRE SLEEVES SHALL BE OF SUFFICIENT SIZE FOR THE REQUIRED NUMBER OF WIRES UNDER PAVING, OR SIZE AS INDICATED ON PLANS.
- ALL EXTERIOR LOW VOLTAGE WIRE CONNECTIONS SHALL BE FULLY ENCLOSED USING WATERPROOF CONNECTORS.
- EXTEND ALL SLEEVES A MINIMUM OF SIX (6) INCHES BEYOND PAVING EDGES.
- PROVIDE A MINIMUM OF 18" COVER OVER ALL PRESSURE MAINLINE PIPE AND 12" MINIMUM COVER OVER ALL NON-PRESSURE LATERAL LINES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PULLING VALVE WIRING THROUGH SLEEVING WHEN NECESSARY.
- ALL LATERAL LINE PIPING UNDER PAVING SHALL BE PVC SCHEDULE 40 PIPE AND SHALL BE INSTALLED PRIOR TO PAVING.
- EXERCISE EXTREME CARE WHEN EXCAVATING FOR IRRIGATION SYSTEM DUE TO EXISTING UTILITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES, AND UNDERGROUND UTILITIES. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH AND ALL OTHER TRADES ON SITE.
- DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTION, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF L.I.U. LANDSCAPE INC.. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
- ALL THREADED PIPE CONNECTIONS MADE TO SLIP-JOINT PVC PIPE SHALL BE MADE WITH A PVC THREADED COUPLING. ALL THREADED ADAPTERS AND COUPLINGS ARE TO BE 'DURA' DEEP SOCKET TYPE.
- ALL VALVES SHALL BE LOCATED IN GROUND COVER AREAS WHENEVER POSSIBLE. REMOTE CONTROL VALVES SHALL BE INSTALLED IN BELOW GRADE BOXES. USE BROWN COLORED BOXES UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE FINAL CONNECTION OF CONTROL WIRES BETWEEN EXISTING WIRES AND NEW CONTROL VALVES.
- CONTRACTOR SHALL PROVIDE SEPARATE SLEEVE FOR PRESSURIZED MAINLINE AND LATERALS ROUTED UNDER EXISTING WALKWAYS AS NEEDED.
- CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS FOR INSTALLATION AND COORDINATION OF THE IRRIGATION SYSTEM TO INSURE A COMPLETE SYSTEM.
- COVER ALL DRIP LINES WITH MINIMUM 3" THICK LAYER OF APPROVED BARK MULCH
- PRESSURE REGULATION DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES.
- MANUAL SHUT-OFF VALVES SHALL BE REQUIRED, AS CLOSE AS POSSIBLE TO THE POINT OF CONNECTION OF THE WATER SUPPLY, TO MINIMIZE WATER LOSS IN CASE OF AN EMERGENCY OR ROUTINE REPAIR.
- CHECK VALVES OR ANTI-DRAIN VALVES AREA REQUIRED ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD OCCUR.



**GENERAL DRIP NOTES**

- ONLINE DRIP RECOMMENDED FOR SHRUB AND TREE PLANTING. EMITTER QUANTITY PER LEGEND ABOVE.
- INLINE DRIP PIPE RECOMMENDED FOR GROUND COVER AND PLUG PLANTING (ie, SWALES & PARKWAY).

**STATIC WATER PRESSURE**

- EXISTING STATIC WATER PRESSURE IS 136-170 PSI. THIS IS BASED ON A CALCULATION FROM THE CITY OF LOS ANGELES. CONTRACTOR SHALL VERIFY EXISTING STATIC WATER PRESSURE ONSITE
- SET STATIC WATER PRESSURE AT NEW REGULATOR FOR IRRIGATION SYSTEM @ 150 PSI
- EXISTING WATER METER IS 1"

W.U.C.O.L.S. PLANTS WATER NEEDS RATINGS: MED=MEDIUM, L = LOW, M/L = MEDIUM LOW, L/VL = LOW TO VERY LOW

IRRIGATION EQUIPMENT LEGEND		
SYMBOL	DESCRIPTION	SHEET & DETAIL CALL-OUT
	IRRIGATION SYSTEM CONTROLLER: WEATHERMATIC SL1600 SMARTLINE 8 ZONE MODULAR	SEE 1/L7.0
	WEATHER MONITOR: WEATHERMATIC SLW1	SEE 2/L7.0
	1" RP BACKFLOW PREVENTOR W/STRAINER AND PRESSURE REGULATOR FEBCO MODEL 825 YA, ANGLE PATTERN REDUCED PRESSURE ASSEMBLY WITH MODULAR RELIEF VALVE AND CHECK VALVE INTERNAL COMPONENTS: INTEGRAL FLANGED UNION CONNECTIONS AND BALL VALVE	SEE 3/L7.0
	1" BALL VALVE: CONTRACTOR TO SUPPLY AND INSTALL NIBCO, PVC Tru-Bloc TRUE UNION, MODEL 'D' BALL VALVE WITH DUEL THREADED UNIONS OR APPROVED EQUIVALENT. • INSTALL USING NDS PRO-SERIES 14"x19" CORRUGATED VALVE BOX, WITH OVERLAPPING BOLT DOWN LID, SAND COLOR BOX AND COVER PART #314BCB-SAND OR APPROVED EQUIVALENT.	SEE 4/L7.0
	3/4" QUICK COUPLING VALVE ASSEMBLY: RAINBIRD MODEL # 33DLRC, WITH LOCKING COVER	SEE 5/L7.0
	LOW FLOW REMOTE CONTROL VALVES W/PRESSURE REGULATOR & RBY FILTER ASSEMBLY: CONTRACTOR TO SUPPLY AND INSTALL, NEW RAINBIRD CONTROL ZONE KITS WITH PLASTIC GLOBE VALVE AND COMBINED PRESSURE REGULATOR AND FILTER, OR APPROVED EQUIVALENT AS FOLLOWS: • AT CONTROL VALVE 'A1'-USE RAINBIRD MODEL XCZ-100-PRF 1" CONTROL ZONE KITS WITH PLASTIC GLOBE VALVE COMBINED PRESSURE REGULATOR AND FILTER • INSTALL NEW CONTROL VALVES IN NDS PRO-SERIES 14"x19" CORRUGATED VALVE BOX, OR APPROVED EQUIVALENT, WITH OVERLAPPING BOLT DOWN LID, SAND COLOR, BOX AND COVER PART # 314BCB-SAND, OR APPROVED EQUIVALENT.	SEE 6/L7.0
	IRRIGATION MAIN LINE: CONTRACTOR TO SUPPLY AND INSTALL 1" SCH 40 PVC PIPE AND ALL REQUIRED FITTINGS AND MATERIAL, FROM NEW 1" POINT OF CONNECTION AND BALL VALVE. IRRIGATION CONTRACTOR TO CONFIRM LOCATION OF POINT OF CONNECTION WITH CITY REPRESENTATIVE, SEE SITE SPECIFIC NOTES.	SEE 7/L7.0
	UNDERGROUND SLEEVES: 4" DIAMETER SCHEDULE 40 PVC TYP., UNLESS OTHERWISE NOTED. EXTEND 6" BEYOND EDGE OF ALL PAVING AREA	SEE 7/L7.0
	IRRIGATION LATERAL SCHEDULE: 3/4" PVC PLASTIC PIPE AND ALL REQUIRED FITTINGS & MATERIALS FROM DRIP REMOTE CONTROL VALVES	SEE 2/L7.1
	POC IN-LINE DRIP PIPE: SOLID DIAMOND DENOTES CONNECTION TO INLINE DRIP PIPE AT GRADE	--
	POLYLINE POC: SOLID CIRCLE DENOTES CONNECTION BETWEEN SCHEDULE 40 PVC LATERAL STUB UP AND DRIP POLY LINE	--
	BLANK POLY LINE: NETAFIM TECHLINE RW 17MM BLANK POLYETHYLENE, IRRIGATION TUBING (BROWN WITH PURPLE STRIPE) UV RESISTANT OR APPROVED EQUAL. SEE PLAN & NOTES FOR LOCATIONS. POINT SOURCE, ONLINE DRIP EMITTERS: NETAFIM COLOR CODED SPECS SERIES SELF PIERCING EMITTERS W/INTERNAL CHECK VALVE, ANTI-SIPHON, PRESSURE COMPENSATING AND SELF CLEANING. SEE EMITTER FLOW RATE & COUNT LEGEND, THIS SHEET > 0.5 GPH EMITTERS MODEL # SPCV-05, BLUE ON GRADE IN-LINE DRIP IRRIGATION PIPE: NETAFIM TECH LINE CV 17MM BROWN UV RESISTANT POLYETHYLENE DRIPLINE MODEL #TLCV-4-12 WITH 0.4 GPH FLOW. 12" O.C. INSTALL PER DRIP DETAILS, DRIPLINE ROW SPACING 16" O.C.	SEE 8/L7.0 & 1/L7.1
	12" POP-UP TATTAL-TAIL ASSEMBLY: (TWO PER IRRIGATION CIRCUIT), CONTRACTOR TO SUPPLY AND INSTALL, RAINBIRD 1812 12" POP-UP BODY WITH RAINBIRD PA-80 ADAPTER, 1/2" SCH 40 PVC THREADED CAP, RAINBIRD SA-12-5050 SWING JOINT ASSEMBLY, FITTING WITH 1/2" FPT OUTLET, OR APPROVED EQUIVALENT, SEE DETAIL. PLACE VISIBLE LOCATIONS PER L.I.U. LANDSCAPE INC. REPRESENTATIVES APPROVAL. INSTALL PER MFG. NOTE AND SPECIFICATION.	SEE 3/L7.1
	MANUAL LINE FLUSH VALVE: CONTRACTOR TO SUPPLY AND INSTALL, NETAFIM MANUAL SHUT OFF VALVE MODEL# TL5OV, OR APPROVED EQUIVALENT. MOUNTED AT END OF POLYETHYLENE (BLANK) IRRIGATION TUBING RUN. SEE PLAN FOR REFERENCE LOCATIONS, FINAL LOCATION TO BE DETERMINED ON SITE DURING INSTALLATION OF IRRIGATION SYSTEM. INSTALL USING NDS PRO SERIES, 10" DIAMETER X 12"H ROUND SAND COLORED VAVLE BOX WITH LID, PART #111 BC SAND, OR APPROVED EQUIVALENT.	SEE 4/L7.1

**ADDITIONAL NOTES:**

- A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.
- AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, AND A IRRIGATION SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE.
- AN IRRIGATION AUDIT REPORT SHALL BE COMPLETED AT THE TIME OF FINAL INSPECTION.

**RECOMMENDED WATERING SCHEDULE**

**WATER DURING INTIAL PLANTING PERIOD:**  
SHRUB AND GROUNDCOVERS SYSTEMS: 30 MINUTES 1X PER DAY FOR FIRST 10 DAYS

**SPRING WATERING DURING PLANT ESTABLISHMENT**  
TREE, SHRUB AND GROUNDCOVER SYSTEMS: 30 - 35 MINUTES 2X PER WEEK

**SUMMER WATERING AFTER PLANT ESTABLISHMENT**  
TREE, SHRUB AND GROUNDCOVER SYSTEMS: 45 MINUTES 1X PER WEEK (FOR NATIVE OR DROUGHT TOLERANT PLANTS)

**FALL WATERING AFTER PLANT ESTABLISHMENT**  
TREE, SHRUB AND GROUNDCOVER SYSTEMS: 35-45 MINUTES 2X PER WEEK (FOR NATIVE OR DROUGHT TOLERANT PLANTS)

**WINTER WATERING AFTER PLANT ESTABLISHMENT**  
TREE, SHRUB AND GROUNDCOVER SYSTEMS: 40 MINUTES 1X PER WEEK  
(SUPPLEMENTAL WATER ONLY REQUIRED IN DROUGHT CONDITIONS)

**NOTE:**

- WATERING SCHEDULE IS PROVIDED AS A GENERAL GUIDELINE. TIME AND DAYS PER WEEK SHALL BE ADJUSTED BASED ON WEATHER CONDITIONS, PLANT TYPE, SOIL, ETC.
- ESTABLISHMENT IS TYPICALLY FIRST 3-6 MONTHS
- I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

**L.I.U. Landscape Inc.**  
9422 East Las Tunas Drive  
Temple City, CA 91780  
License # LA1043216  
www.liulandscape.com  
626-888-9915

**Project:**  
**Alfa Made LLC**  
185 Rochester St.  
Costa Mesa CA 92627

IRRIGATION LEGEND

**Revisions:**

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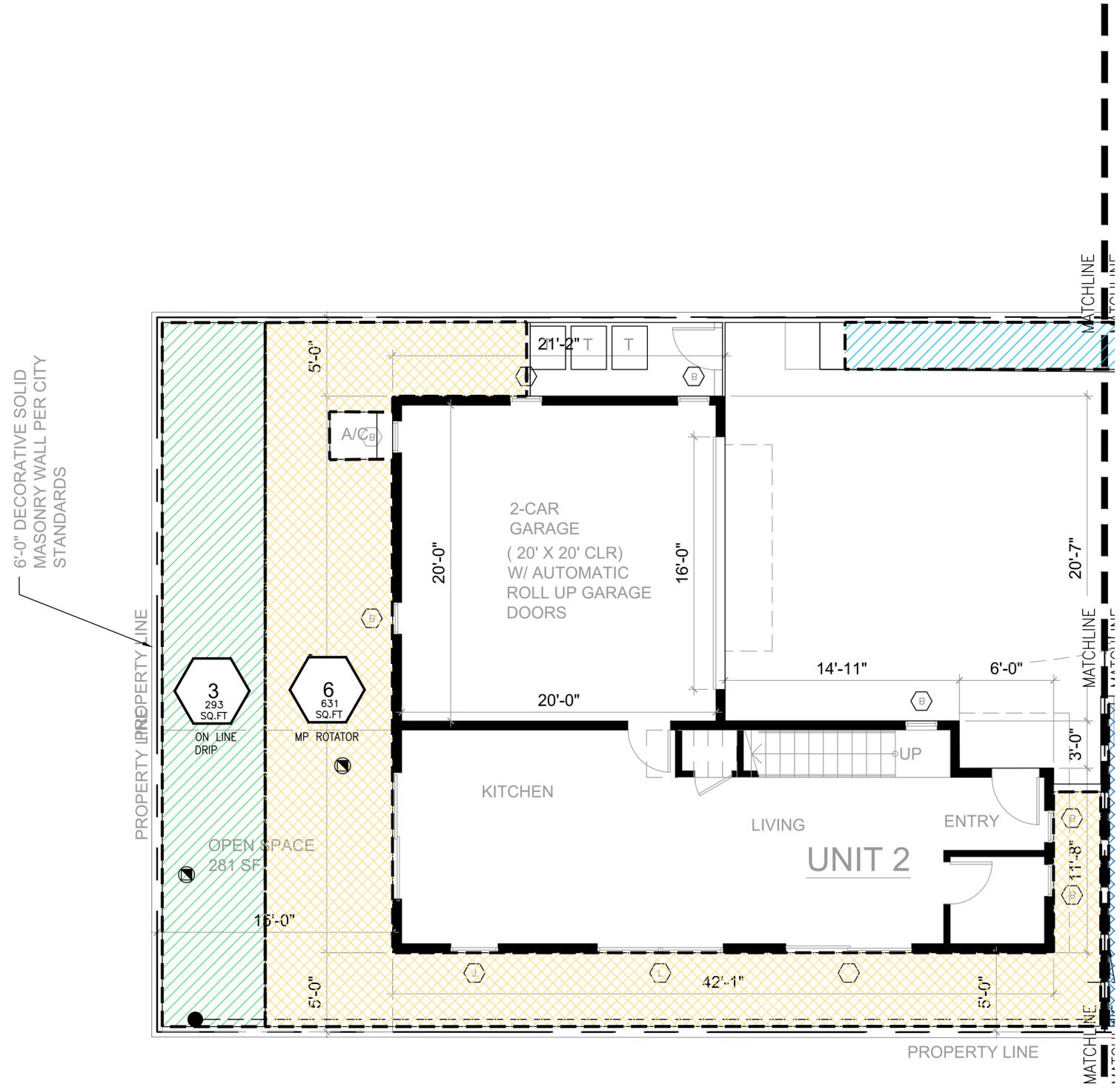
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**Sheet Number:**  
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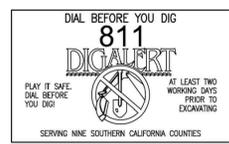
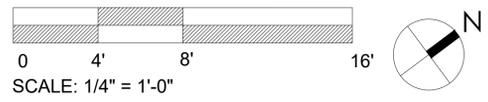
Project:  
**Alfa Made LLC**  
 185 Rochester St.  
 Costa Mesa CA 92627

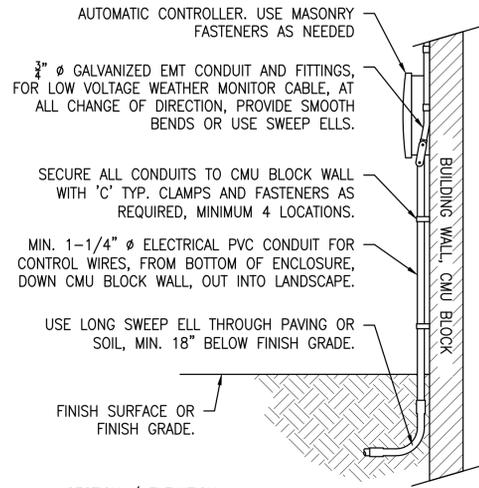
IRRIGATION HYDROZONE PLAN BACK

Revisions:  
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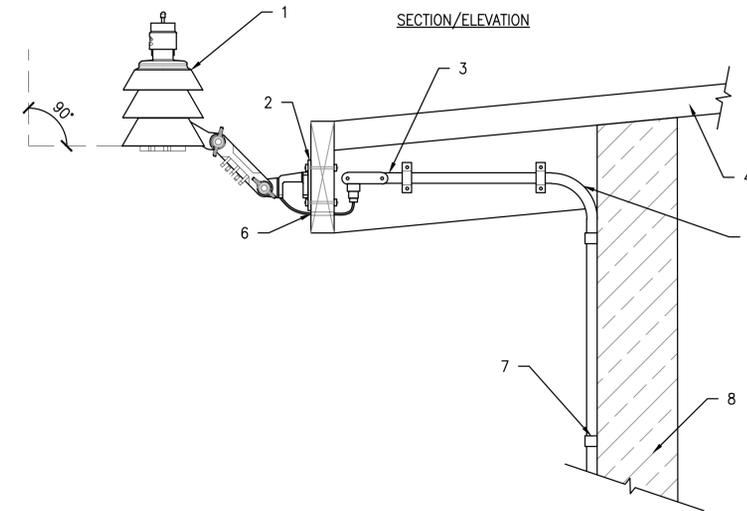
Submittal Date:  
 February 4, 2022

Sheet Number:  
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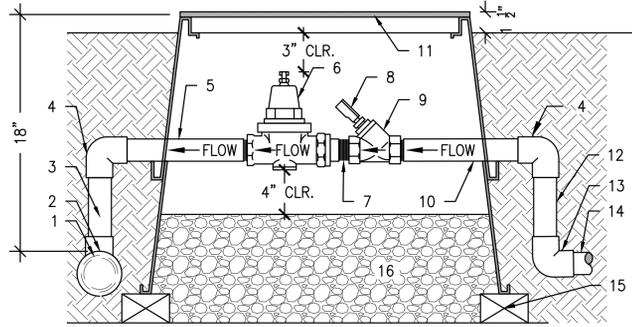
1. WALL MOUNT CONTROLLER
2. CONDUIT 115 A.C.
3. POWER SUPPLY WIRES
4. GROUND WIRE
5. MASTER VALVE WIRE (OPTIONAL)
6. COMMON NEUTRAL WIRE
7. PUMP CIRCUIT WIRES (OPTIONS)
8. CONDUIT 24V A.C.
9. RAIN STAT WIRES (OPTIONAL)
10. VALVE CONTROL WIRES—ONE PER VALVE



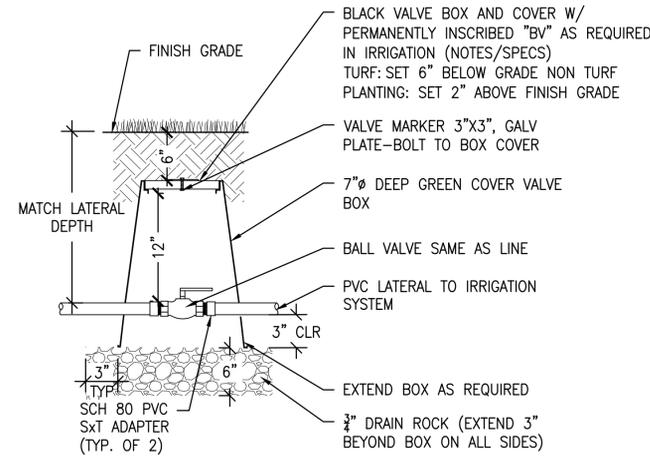
1. NEW WEATHER MONITOR, SEE IRRIGATION LEGENDS AND NOTES FOR MODEL AND MFG.
2. MOUNT WEATHER MONITOR ON BUILDING EAVE AS SHOWN, WITH BRACKET PROVIDED BY MFG. PER DETAILS, NOTES AND MFG. DIRECTIONS. SET MONITOR PLUMB AND LEVEL.
3. 'L' TYPE CONDUIT OUTLET BODY WITH WEATHER TIGHT RUBBER COMPRESSION FITTING AT END OF 3/4" Ø GALVANIZED EMT CONDUIT WITH FITTINGS REQUIRED.
4. BUILDING ROOF.
5. AT ALL CHANGE OF DIRECTIONS IN CONDUIT, PROVIDE SMOOTH BEND OR USE SWEEP ELLS, SIZE TO MATCH.
6. DRILL CLEARANCE HOLE THROUGH WOOD EAVE TO EASILY FEED CABLE FROM WEATHER MONITOR TO NEW CONDUIT.
7. SECURE ALL CONDUITS TO SIDE OF WOOD ROOF RAFTER AND CMU BUILDING WALL WITH TYP. CLAMPS AND FASTENERS AS REQUIRED, CLAMPS, MIN. 4 LOCATIONS.
8. BUILDING WALL, CMU BLOCK.

1 IRRIGATION SYSTEM CONTROLLER  
SCALE: 1/2" = 1'

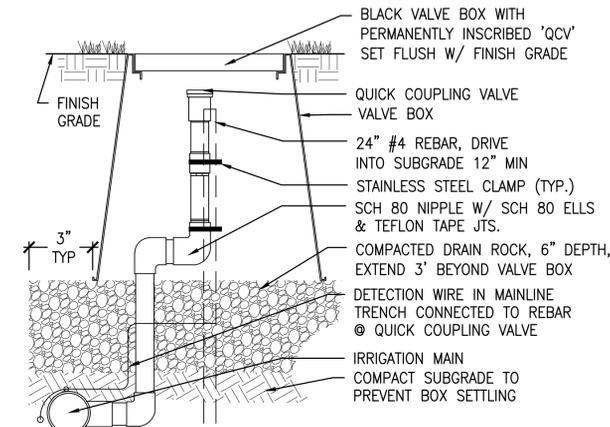
2 WEATHER MONITOR ON BUILDING EVE  
SCALE: 1" = 1'



1. SCH 40 PVC LATERAL LINE, SIZE PER PLAN.
2. SCH 80 PVC SLIP X SLIP TEE OR ELL, (WITH REDUCER IF NEEDED), SIZE PER PLAN.
3. SCH 80 PVC SLIP X SLIP NIPPLE, SIZE AND LENGTH AS NEEDED (2 REQUIRED)
4. SCH 80 PVC SLIP X SLIP ELL, SIZE PER PLAN (2 REQUIRED).
5. SCH 80 PVC SLIP X THREAD NIPPLE, SIZE AND LENGTH AS NEEDED (2 REQUIRED).
6. PRESSURE REGULATOR—MFG. AND SIZE PER IRRIG. LEGEND.
7. THREADED BASS NIPPLE, SIZE AND LENGTH AS REQUIRED.
8. PRESSURE GAUGE, MFG. AND MODEL, SEE IRRIG. LEGEND, SET DIAL FACING UP.
9. BRASS WYE STRAINER, MFG., SIZE AND SCREEN IRRIG. LEGEND.
10. SCH 80 PVC SLIP X THREAD NIPPLE, SIZE AND LENGTH REQUIRED.
11. RECTANGULAR PLASTIC VALVE BOX. SIZE AND COLOR PER IRR. LEGEND, HEAT "PR" ON LID IN 2" HIGH BLOCK LETTERS.
12. SCH 80 PVC SLIP X SLIP NIPPLE, SIZE, LENGTH AS REQUIRED.
13. SCH 80 PVC SLIP X SLIP ELL, SIZE PER PLAN.
14. SUPPLY LINE OR FROM EX. P.O.C. — SEE NOTES ON PLAN.
15. BRICK SUPPORTS (1 OF 4).
16. 4" THICK BASE OF 3/4" WASHED GRAVEL.



1. BLACK VALVE BOX AND COVER W/ PERMANENTLY INSCRIBED "BV" AS REQUIRED IN IRRIGATION (NOTES/SPECS) TURF: SET 6" BELOW GRADE NON TURF PLANTING: SET 2" ABOVE FINISH GRADE
2. VALVE MARKER 3"x3", GALV PLATE—BOLT TO BOX COVER
3. 7"Ø DEEP GREEN COVER VALVE BOX
4. BALL VALVE SAME AS LINE
5. PVC LATERAL TO IRRIGATION SYSTEM
6. EXTEND BOX AS REQUIRED
7. 3/4" DRAIN ROCK (EXTEND 3" BEYOND BOX ON ALL SIDES)



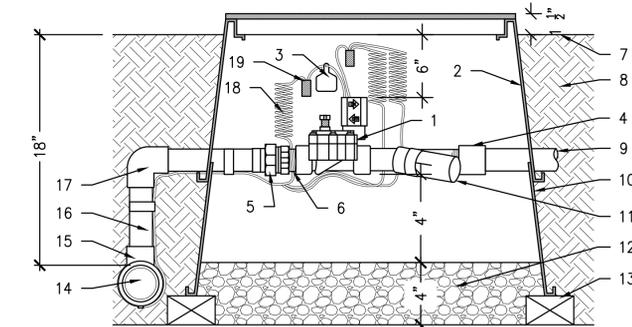
1. BLACK VALVE BOX WITH PERMANENTLY INSCRIBED "QCV" SET FLUSH W/ FINISH GRADE
2. QUICK COUPLING VALVE VALVE BOX
3. 24" #4 REBAR, DRIVE INTO SUBGRADE 12" MIN
4. STAINLESS STEEL CLAMP (TYP.) SCH 80 NIPPLE W/ SCH 80 ELLS & TEFLON TAPE JTS.
5. COMPACTED DRAIN ROCK, 6" DEPTH, EXTEND 3" BEYOND VALVE BOX
6. DETECTION WIRE IN MAINLINE TRENCH CONNECTED TO REBAR @ QUICK COUPLING VALVE
7. IRRIGATION MAIN COMPACT SUBGRADE TO PREVENT BOX SETTLING

- NOTES:
1. INSTALL TO PREVENT SETTLING.
  2. CENTER QCV IN BOX.
  3. POSITION QCV TO ALLOW CONVENIENT, ACCESSIBLE ACCESS TO QCV KEY & HOSE SWIVEL.

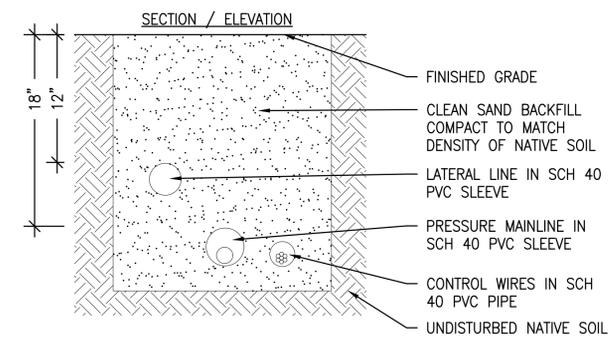
3 PRESSURE REGULATOR WYE STRAINER ASSEMBLY  
SCALE: 1 1/2" = 1'

4 BALL VALVE  
SCALE: 1 1/2" = 1'

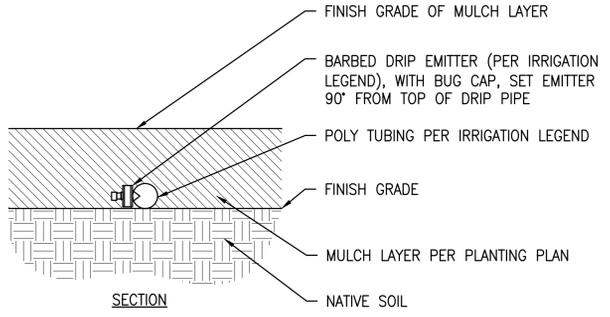
5 QUICK COUPLER VALVE  
SCALE: 3" = 1'



1. REMOTE CONTROL VALVE PER LEGEND.
2. RECTANGULAR PLASTIC VALVE BOX SIZE AND COLOR PER IRRIG. LEGEND, HEAT BRAND, STATION NUMBER AND "DZ" ON LID IN 2" HIGH BLOCK LETTERS.
3. (2) I.D. TAGS REQUIRED, 1 PURPLE 'RECYCLED/RECLAIMED WATER TAG AND SECOND TAG, WITH PRINTED STATION NUMBER, SEE SPECIFICATIONS.
4. SCH 40 PVC MALE ADAPTER.
5. SCH 80 PVC UNION (LINE SIZE).
6. SCH 80 PVC CLOSE NIPPLE.
7. FINISH GRADE.
8. NATIVE SOIL.
9. PVC PIPING TO SYSTEM (CONNECT AND ADAPT AS NECESSARY).
10. RECTANGULAR PLASTIC VALVE BOX USED AS EXTENSION (NDS #318B OR APPROVED EQUAL).
11. COMBINED PRESSURE REGULATOR AND Y-FILTER PER LEGEND.
12. FILL BASE OF BOX WITH PEA GRAVEL.
13. COMMON BRICK SUPPORTS (4 REQUIRED).
14. MAINLINE PIPING PER IRRIGATION LEGEND (PLAN SIZE). 14.1. SCH 40 PVC MAINLINE FITTING (OUTLET TO BE VALVE SIZE).
15. SCH 80 PVC ELL (VALVE SIZE).
16. SCH 80 PVC PIPING (VALVE SIZE) LENGTH AS REQUIRED.
17. SCH 80 PVC ELL (VALVE SIZE).
18. #14 UF CONTROL WIRE WITH 30" LENGTH COILED, TAPE TO PIPES PER DET. 'H', RUN TO CONTROLLER (COLOR CODED).
19. WATERPROOF WIRE CONNECTOR (2 REQUIRED).



- NOTES:
1. SIZE ALL SLEEVES PER THE IRRIGATION PLANS. EXTENDED SLEEVES 6" MINIMUM BEYOND EDGE OF HARDSCAPE (AT EACH END) INTO THE PLANTING AREAS.
  2. \*SLEEVING UNDER ALL VEHICULAR ACCESS WAYS TO HAVE 36" MINIMUM COVER FROM TOP OF SLEEVE TO BOTTOM OF AGGREGATE BASE.



- INSERT DRIP EMITTER DIRECTLY INTO POLY TUBING. LOCATE EMITTERS JUST INSIDE THE EDGE OF ROOT BALL UNLESS INSTRUCTED OTHERWISE BY THE L.I.U. LANDSCAPE INC. REPRESENTATIVE. REFER TO PLANTING PLAN FOR DEPTH OF MULCH. WHEN ON A SLOPE, INSTALL ON UP-HILL SIDE OF PLANT WHERE DEVICE IS USED ON AN INDIVIDUAL PLANT BASIS.
- NOTES:
1. ON-LINE POINT SOURCE DRIPPER, SEE IRRIGATION PLAN

6 DRIP ZONE CONTROL VALVE  
SCALE: 1 1/2" = 1'

7 UNDERGROUND SLEEVING  
SCALE: 1 1/2" = 1'

8 DRIP EMITTER ON POLY TUBING  
SCALE: 3/4" = 1'

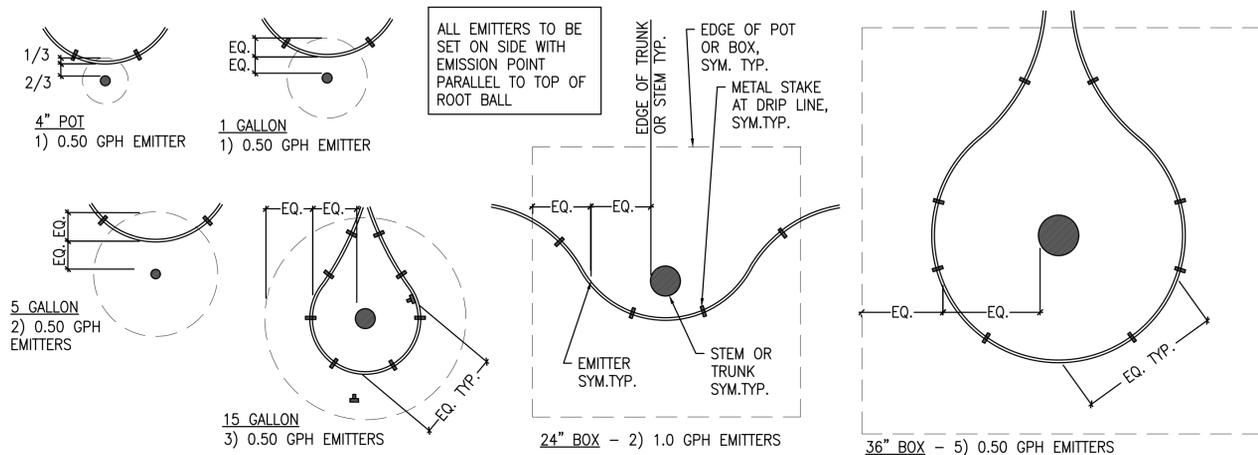
IRRIGATION DETAILS



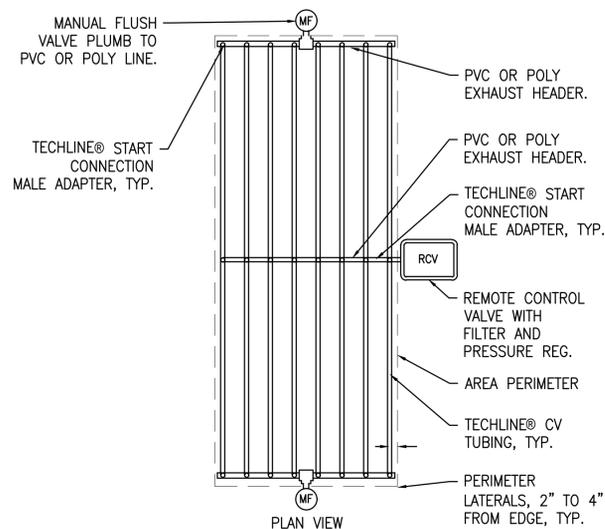
**L.I.U. Landscape Inc.**  
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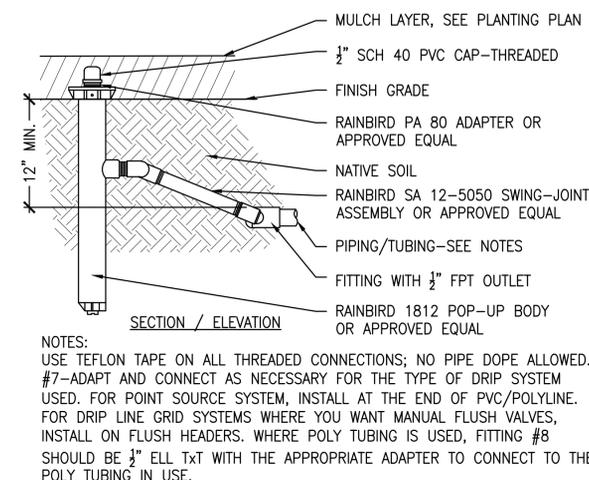
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Submittal Date:	February 4, 2022
Sheet Number:	L7.0



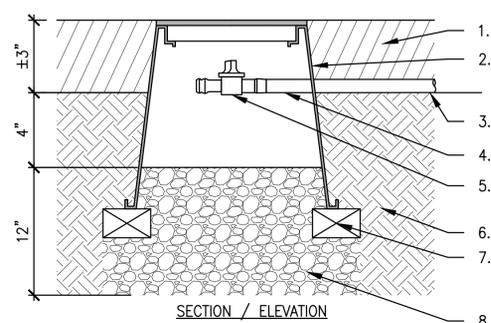
1 ONLINE DRIP EMITTER LAYOUT  
SCALE: 3/4" = 1'



2 INLINE DRIP CENTER FEED  
SCALE: 3/4" = 1'



3 POP-UP TATTLETALE ASSEMBLY  
SCALE: 1" = 1'



4 MANUAL FLUSH VALVE  
SCALE: 1 1/2" = 1'



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IRRIGATION DETAILS

Revisions:

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Submittal Date:

February 4, 2022

Sheet Number:

L7.1



# CITY OF COSTA MESA PRECISE GRADING PLAN FOR PROPOSED RESIDENCE

## 185 ROCHESTER STREET COSTA MESA, CA 92627

### GRADING NOTES

- All work shall be in accordance with the Grading Code of the County of Orange and any amendments by the City of Costa Mesa or any special requirements of the permit. A copy of the City Code and City Manual shall be retained on the job site while work is in progress. When referenced on the grading plans, a copy of OC Public Works Standard Plans shall also be retained on the site.
- Grading shall not be started without first notifying the assigned City Inspector. A pregrading meeting on the site is required before start of grading with the following people present: Owner, Grading Contractor, Design Civil Engineer, Soil Engineer, Engineering Geologist, OC Grading Inspector, and when required, the Archaeologist, Paleontologist, and Surveyor. The required inspections for grading will be explained at the meeting.
- Issuance of a grading permit does not eliminate the need for permits from other agencies with regulatory responsibilities for construction activities associated with the work authorized on this plan.
- The Grading Permit and an approved copy of the approved Grading Plan shall be on the permitted site while grading work is in progress.
- Preliminary soil and geology reports, and all subsequent reports as approved by the Building Division are considered a part of the approved grading plan.
- The Soil Engineer and Engineering Geologist shall perform sufficient inspections and be available during grading and construction to verify compliance with the plans, specifications and the Code within their purview.
- The Civil Engineer shall be available during grading to verify compliance with the plans, specifications, City Code, and any special conditions of the permit within their purview.
- The Soil Engineer and Engineering Geologist shall, after clearing and prior to placement of fill in canyons, inspect each canyon for areas of adverse stability, and to determine the presence or absence of subsurface water or spring flow. If needed, subdrains will be designed and constructed prior to the placement of fill in each respective canyon.
- Subdrain outlets shall be completed at the beginning of the subdrain construction.
- The exact location of the subdrains shall be surveyed in the field for line/grade and shown on as graded or revised plans.
- Areas to receive fill shall be properly prepared and approved in writing by the Soil Engineer and the Building Official prior to placing fill.
- Fills shall be benched into competent material per OC Public Works Standard Plan No 1322.
- All existing fills shall be approved by the Building Official or removed prior to placing additional fills.
- Fills shall be compacted throughout to a minimum of 90% relative compaction. Aggregate base for asphaltic areas shall be compacted to a minimum of 95% relative compaction. Maximum density shall be determined by ASTM D1557 or approved equivalent and filed density by ASTM D1556 (Sand-Cone) and ASTM D6938 (Nuclear Gauge Method) or an approved equivalent.
- Cut and fill slopes shall be no steeper than 2-feet horizontal to 1-foot vertical (2:1) except where specifically approved by the Building Official.
- All cut slopes shall be investigated both during and after grading by the Engineering Geologist to determine if any slope stability problems exist. Should excavation disclose any geological hazards or potential geological hazards, the Engineering Geologist shall submit recommended treatment to the Building Official for approval.
- Where support or buttressing of cut and natural slopes is determined necessary by the Engineering Geologist and Soil Engineer, the Soil Engineer shall submit design, locations and calculations to the Building Official prior to construction. The Engineering Geologist and Soil Engineer shall inspect and control the construction of the buttressing and certify to the stability of the slope and adjacent structures upon completion.
- When cut pads are brought to near grade, the Engineering Geologist shall determine if the bedrock is extensively fractured or faulted, and will readily transmit water. If considered necessary by the Engineering Geologist and Soil Engineer, a compacted fill blanket will be placed.
- All trench backfill shall be tested and approved by the Soil Engineer per the City Code.
- Any existing irrigation lines and cisterns shall be removed or crushed in place and approved by the Building Official and the Soil Engineer.
- Any existing water wells shall be abandoned in compliance with the specifications approved by Orange County Health Care Agency and Division of Environmental Health.
- Any existing cesspools and septic tanks shall be abandoned in compliance with the California Plumbing Code to the approval of Building Official.

### EARTHWORK QUANTITIES

RAW CUT	0	CUBIC YARDS
RAW FILL	340	CUBIC YARDS
OVER-EX	280	CUBIC YARDS
SHRINKAGE (±5%)	15	CUBIC YARDS
NET	355	CUBIC YARDS (IMPORT)

### SOILS ENGINEER

REFER TO GEOTECHNICAL INVESTIGATION FOR ADDITIONAL INFORMATION:

EGA CONSULTANTS, INC.  
DAVID A. WOTHINGTON, C.E.G.  
375-C MONTE VISTA AVENUE  
COSTA MESA, CA 92627  
949.642.9309

### GRADING NOTES (CONTINUED)

- The stockpiling of excess material shall be approved by the Building Official prior to excavation.
- Export soil must be transported to a legal dump or to a permitted site approved by the Building Division.
- The permittee is responsible for dust control measures.
- The permittee shall give reasonable notice to the owner of adjoining lands and building prior to beginning excavations which may affect the lateral and subjacent support of the adjoining property. The notice shall state the intended depth of the excavation and when the excavation will commence. The adjoining owner shall be allowed at least 30 days and reasonable access on the permitted property to protect his structure, if he so desires, unless otherwise protected by law.
- All concrete structures that are exposed to the on-site soils shall be constructed with Type V cement, unless deemed unnecessary by soluble sulfate-content tests conducted by the Soil Engineer.
- Slopes exceeding 5 feet in height shall be planted with an approved plant material. In addition, slopes exceeding 15 feet in height shall be provided with an approved irrigation system, unless otherwise approved by the Building Official.
- All existing drainage courses through this site shall remain open until facilities to handle storm water are approved and functional, however, in any case, the permittee shall be held liable for any damage due to obstructing natural drainage patterns.
- Sanitary facilities shall be maintained on site.
- The location and protection of all utilities is the responsibility of the permittee.
- Approved protective measures and temporary drainage provisions shall be used to protect adjoining properties during grading.
- Grading operations including maintenance of equipment within one-mile of a human occupancy shall be conducted between the hours of 7:00 a.m. and 7:00 p.m. Monday thru Friday. Saturdays 9:00 a.m. thru 6:00 p.m. Prohibited all hours Sundays and the following Federal holidays: Christmas Day, New Years Day, Memorial Day, Independence Day, Labor Day, and Thanksgiving Day. CMMC sec 13-279
- All construction vehicles or equipment, fixed or mobile, operated within 1000 feet of a dwelling shall be equipped with properly operational and maintained mufflers.
- Stockpiling and/or vehicle staging areas shall be located as far as practical from dwellings and within the limits of the grading permit.
- Grading and excavation shall be halted during periods of high winds. According to AQMD Rule 403, high wind conditions means instantaneous wind speeds exceed 25 MPH. This level occurs only under extreme conditions such as Santa Ana Wind conditions.
- Asphalt sections must be per City Code: Parking stall – 3" A/C over 6" A/B, Drives 3" A/C over 10" (Commercial), and 12" (Industrial). Or: Prior to rough grade release for Building Permits by the City Inspector, the Soil Engineer shall submit for approval pavement section recommendations, based on "R" value analysis of the sub-grade soils, and expected traffic indices.
- Roof gutters shall be installed to prevent roof drainage from falling on manufactured slopes, with appropriate down spouts and outlets.
- The Civil Engineer, as a condition of rough grade approval, shall provide a blue top with accompanying witness stake, set at the center of each pad reflecting the pad elevation for precise permits, and a blue top with witness stake set at the drainage swale high-point reflecting the high point elevation for Preliminary Permits.
- Prior to final approval, the Civil Engineer shall certify to the Building Official the amount of earth moved during the grading operation.
- The Engineering Geologist shall perform periodic inspections and submit a complete report and map upon completion of the rough grading.
- The Grading Contractor shall submit a statement of compliance to the assigned Grading Inspector that the grading is in accordance with the approved Grading Plan prior to final approval.
- The compaction report and approval from the Soil Engineer shall indicate the type of field testing performed. The method of obtaining the in-place density shall be identified whether sand cone, drive ring or nuclear, and shall be noted for each test. Sufficient maximum density determinations shall be performed to verify accuracy of the maximum density curves used by the Field Technician.
- In the event that soil contamination is discovered during excavation and removal of an existing tank, work shall be stopped until a site assessment and mitigation plan has been prepared, submitted and approved by the OC Health Care Agency/Environmental Health and the Building Division.

### EROSION CONTROL

- In the case of emergency (24-Hour/Day), call Will Rolph at Work Telephone 949.464.8115.
- Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available on site and stockpiled at convenient locations to facilitate rapid construction of temporary devices when rain is imminent.
- Erosion, sediment and chemical control devices shall not be moved or modified without the approval of the Building Official.
- All removable erosion protective devices shall be in place at the end of each working day when the 5-Day Rain Probability Forecast exceeds 40%.
- After a rainstorm, all silt and debris shall be removed from streets, check berms and basins.
- Graded areas of the permitted area perimeter must drain away from the face of slopes at the conclusion of each working day. Drainage is to be directed towards desilting facilities.
- The permittee and contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a hazardous condition.
- The permittee and contractor shall inspect the erosion control work and insure that the work is in accordance with the approved plan.

### ENVIRONMENTAL NOTES

- The permittee shall notify all general contractors, subcontractors, material suppliers, lessees and property owners that dumping of chemicals into the storm drain system or the watershed is prohibited.
- Permittee shall maintain construction site in a condition that an anticipated storm does not carry wastes or pollutants off the site. Potential pollutants include but are not limited to: solid or liquid chemical spills, wastes from paint, stains, sealants, glues, limes, pesticides herbicides, wood preservatives and solvents; asbestos fibers, paint flakes or stucco fragments; fuels, oils, lubricants, and hydraulic, radiator or battery fluids; fertilizers, vehicle/equipment wash water and concrete wash water; concrete, detergent or floatable wastes; wastes from any engine/equipment steam cleaning or chemical degreasing and super chlorinated potable water line flushing. During construction, permittee shall dispose of such materials in a specified and controlled temporary area on-site, physically separated from potential storm water runoff, with ultimate disposal in accordance with local, state and federal requirements.
- Permittee may discharge material other than storm water only when necessary for performance and completion of construction practices and where they do not: cause or contribute to a violation of any water quality standard; cause or threaten to cause pollution, contamination or nuisance; or contain a hazardous substance in a quantity reportable under Federal Regulation 40 CFR, Parts 117 and 302.
- Dewatering of contaminated groundwater or discharging contaminated soils via surface erosion is prohibited. Dewatering of non-contaminated groundwater requires a National Pollutant Discharge Elimination System Permit from the respective State Regional Water Quality Control Board.
- SPECIAL NOTE: "Survey monuments shall be preserved and referenced before construction and replaced after construction pursuant to Section 8771 of the Business and Professional Code."

### SPECIAL NOTE

ALL GRADING SHALL COMPLY PER SOILS REPORT'S RECOMMENDATIONS.

### SCOPE OF WORK

THE PROJECT PROPOSES DEMOLITION OF AN EXISTING SINGLE-FAMILY RESIDENCE AND CONSTRUCTION OF A NEW SINGLE-FAMILY RESIDENCE WITH YARD IMPROVEMENTS.

### SURVEY NOTE

SURVEYOR OR ENGINEER LICENSE BELOW 33966) SHALL MONUMENT PROPERTY CORNERS BEFORE STARTING GRADING.

### PERMITS REQUIRED

SEPARATE PLAN CHECKS AND PERMITS SHALL BE REQUIRED FOR RETAINING WALLS AND BLOCK WALLS.

AN ENCROACHMENT PERMIT IS REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY FROM THE PUBLIC SERVICES DEPARTMENT

### SHEET INDEX

- C1 TITLE SHEET
- C2 GRADING & DRAINAGE PLAN
- C3 EROSION CONTROL PLAN
- C4 GEOTECHNICAL NOTES

### LEGAL DESCRIPTION

LOT 3 OF TRACT NO. 442, IN THE CITY OF COSTA MESA, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 16, PAGE 43 OF MISCELLANEOUS MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 425-414-12

### LEGEND

TS	TOP OF STEM WALL
TOP	TOP OF SLOPE
TRW	TOP OF RETAINING WALL
FF	FINISHED FLOOR ELEVATION
TG	TOP OF GRATE
TC	TOP OF COPING OR TOP OF CURB
PA	PLANTER AREA
TW	TOP OF WALL
LS	LANDSCAPE
FS	FINISHED SURFACE
FL	FLOW LINE
FG	FINISHED GRADE
GB	GRADE BREAK
HP	HIGH POINT
INV	INVERT
GFF	GARAGE FINISHED FLOOR
EG	EXISTING GRADE
( )	EXISTING SPOT ELEVATION
---	PROPERTY LINE AND LIMIT-OF-WORK
---	PROPOSED WALL
(102.6) OR 102.6	EXISTING ELEVATION; CONTRACTOR SHALL FIELD VERIFY ELEVATIONS PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO CIVILSCAPES ENGINEERING
---	FLOWLINE
-R-	RIDGE LINE
---	STORM DRAIN PIPE



### VICINITY MAP

NO SCALE

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 949.464.8115 info@civilscales.com

**PRECISE GRADING PLAN  
FOR PROPOSED RESIDENCE  
TITLE SHEET**  
 185 ROCHESTER STREET  
 COSTA MESA, CA 92627

REVISIONS		
NO.	REVISION	DATE

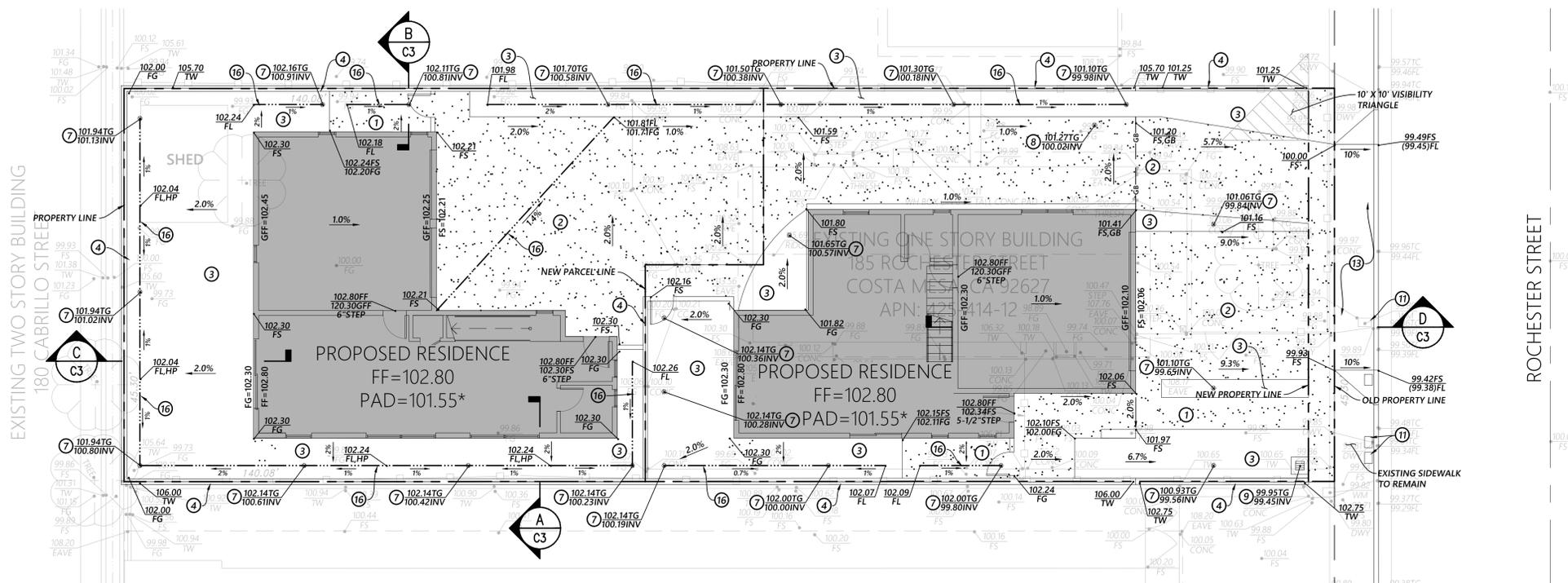


JOB NO.	20059
DATE	5/25/2022
SHEET NO.	

# C1

SHEET NO. 1 OF 4





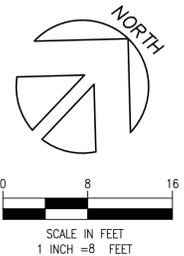
**PUBLIC SERVICES GENERAL NOTES**

- PUBLIC SERVICES INSPECTION IS REQUIRED PRIOR TO ISSUANCE OF BUILDING FINAL. AT THE TIME OF INSPECTION, IF ANY EXISTING PUBLIC IMPROVEMENTS SURROUNDING THE SITE IS DAMAGED, NEW CURB & GUTTER AND STREET PAVEMENT WILL BE REQUIRED.
- PLEASE OBTAIN WRITTEN APPROVAL FROM SEWER AND WATER AGENCIES
- LANDSCAPE WITHIN THE PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH SECTION 3.0 OF COSTA MESA STREETSCAPE AND MEDIAN DEVELOPMENT

**GRADING PLAN**

SCALE: 1" = 8'

\* PAD ELEVATIONS ARE SHOWN HEREON FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY SLAB THICKNESS AND SECTION PRIOR TO CONSTRUCTION W/FOUNDATION PLANS, AND SOILS REPORT PRIOR TO CONSTRUCTION.



**CONSTRUCTION NOTES**

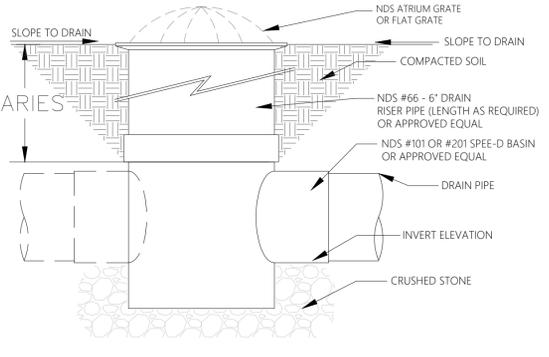
- HARDSCAPE PER LANDSCAPE ARCHITECT'S PLAN.
- DRIVEWAY PER LANDSCAPE ARCHITECT'S PLAN.
- PLANTER AREA PER LANDSCAPE ARCHITECT'S PLAN.
- WALL OR FENCE PER ARCHITECT'S PLAN.
- CONNECT DOWNSPOUT TO ONSITE STORM DRAIN SYSTEM PER DETAIL ON SHEET C3; OTHERWISE OUTLET TO HARDSCAPE, DIRECT FLOW TOWARDS NEAREST FLOWLINE.
- FURNISH & INSTALL 4-INCH SDR-35 PVC STORM DRAIN (OR APPROVED EQUAL) PER CPC. INCLUDE REQUIRED JOINTS AND FITTINGS PER CPC. CONSTRUCT TRENCH, BEDDING, AND BACKFILL PER ASTM D 2321 AND SOILS REPORT.
- FURNISH & INSTALL 6" NDS SPEE-D BASIN W/6" GREEN ATRIUM GRATE PER DETAIL HEREON.
- FURNISH & INSTALL 6" NDS SPEE-D BASIN W/6" BRASS SQUARE GRATE PER DETAIL HEREON.
- FURNISH & INSTALL 12"X12" DROP INLET W/REMOVABLE ALHAMBRA FOUNDRY A-2010 CAST IRON GRATE OR EQUIV. PER CITY OF COSTA MESA STD 418.
- CONSTRUCT PARKWAY DRAIN AND INLET PER CITY OF COSTA MESA STD NO. 418 CASE I CIRCULAR 3" DIA. PIPE.
- DISCONNECT AND REMOVE 5/8-INCH WATER METER; RETURN TO MESA WATER DISTRICT. REMOVE #4-METER BOX AND PREPARE SITE FOR NEW #5-METER BOX TO BE PROVIDED BY MESA WATER DISTRICT. MESA WATER DISTRICT TO INSTALL NEW #5-METER BOX AND NEW 1-INCH METER PER MESA WATER DISTRICT STD DWG NO. 3. OWNER WILL MAKE DOWNSTREAM CONNECTION TO 1-INCH METER FROM METER TO RESIDENCE. OWNER WILL BE REQUIRED TO MAKE ALL CONCRETE SIDEWALK REPAIRS PER CITY OF COSTA MESA STANDARDS. POINT OF CONNECTION TO THE IRRIGATION SYSTEM WITH REQUIRED BACKFLOW PROTECTION. (I.E. ANTI-SIPHON VALVES)
- FIELD VERIFY LOCATION AND CONDITION OF EXISTING SEWER LATERAL TO SATISFACTION OF CITY AND WATER DISTRICT. REMOVE EXISTING CLEANOUT AND PROVIDE NEW SEWER CLEANOUT WITH TRAFFIC RATED BOX PER DISTRICT STANDARDS.
- REMOVE AND RECONSTRUCT TYPE I DRIVEWAY APPROACH PER CITY OF COSTA MESA STD NO. 513 OVER 6" CMB, W=26", X=4".
- REMOVE EXISTING PER CITY OF COSTA MESA STD 811 AND CONSTRUCT TYPE (C-6) CURB & GUTTER PER CITY OF COSTA MESA STD 312 OVER 6" CMB. CONTRACTOR SHALL RECONSTRUCT MINIMUM OF 3-FT OF AC ADJACENT TO NEW GUTTER. EXTEND CURB & GUTTER REMOVAL TO NEXT JOINT OF LESS THAN 8-FT AWAY. (LIMITS PER CITY OF COSTA MESA PUBLIC SERVICES INSPECTOR)
- REMOVE EXISTING SIDEWALK PER CITY OF COSTA MESA STD 811, AND RECONSTRUCT SIDEWALK PER CITY OF COSTA MESA STD 411 & 413 OVER 4" CMB.
- CONSTRUCT FLOWLINE PER DETAIL HEREON.

\*\*\* ALL WORK RELATED TO WASTEWATER IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED BY A C-42 LICENSED SANITATION SEWER CONTRACTOR OR AN A LICENSED GENERAL ENGINEERING CONTRACTOR.

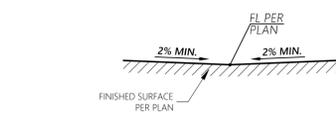
\*\*\*\* ALL WORK RELATED TO WATER IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED BY A C-34 LICENSED PIPELINE CONTRACTOR OR AN A LICENSED GENERAL ENGINEERING CONTRACTOR.

**LEGEND**

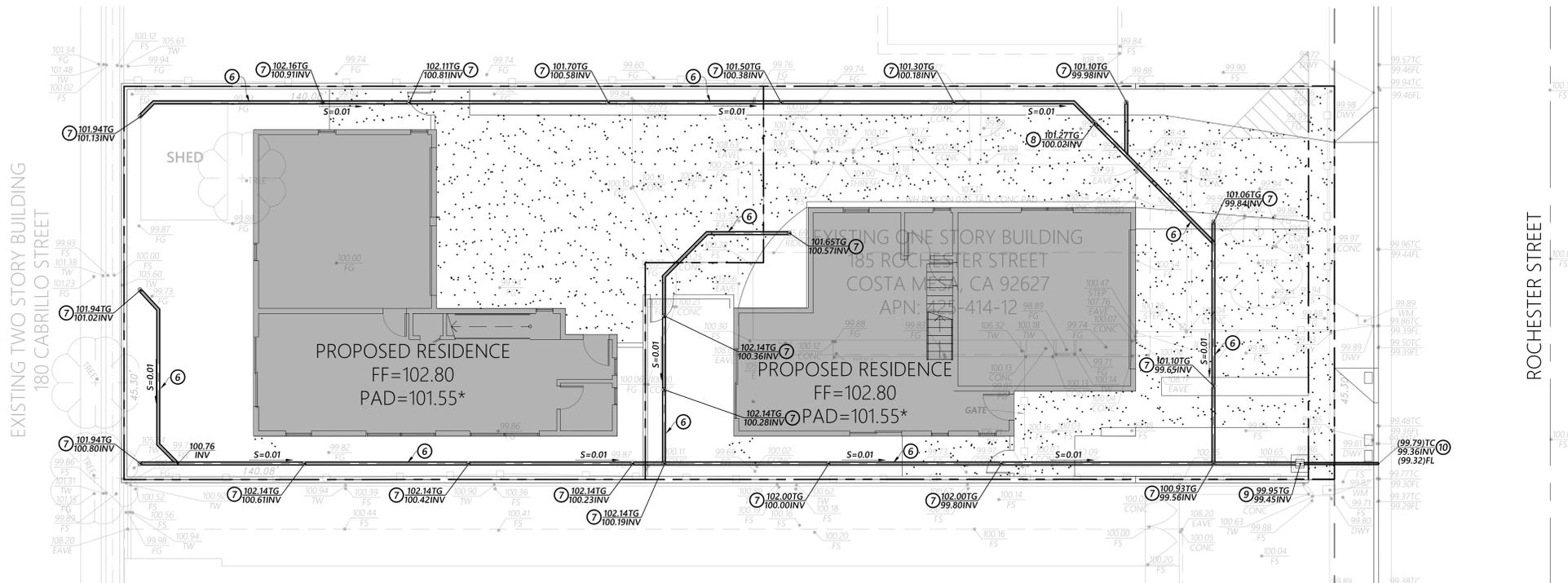
- TS TOP OF STEM WALL
- TOP TOP OF SLOPE
- TRW TOP OF RETAINING WALL
- FF FINISHED FLOOR ELEVATION
- TG TOP OF GRATE
- TC TOP OF COPING OR TOP OF CURB
- TF TOP OF FENCE
- PA PLANTER AREA
- TW TOP OF WALL
- LS LANDSCAPE
- FS FINISHED SURFACE
- FL FLOW LINE
- FG FINISHED GRADE
- GB GRADE BREAK
- HP HIGH POINT
- INV INVERT
- GFF GARAGE FINISHED FLOOR
- EG EXISTING GRADE
- ( ) EXISTING SPOT ELEVATION



7 8 NDS SPEE-D BASIN DETAIL  
NO SCALE



16 FLOWLINE DETAIL  
NO SCALE



**STORM DRAIN PLAN**

SCALE: 1" = 8'

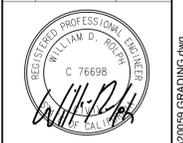


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**PRECISE GRADING PLAN  
FOR PROPOSED RESIDENCE  
GRADING & DRAINAGE PLAN**  
185 ROCHESTER STREET  
COSTA MESA, CA 92627

REVISIONS

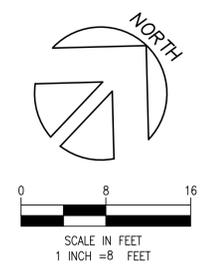
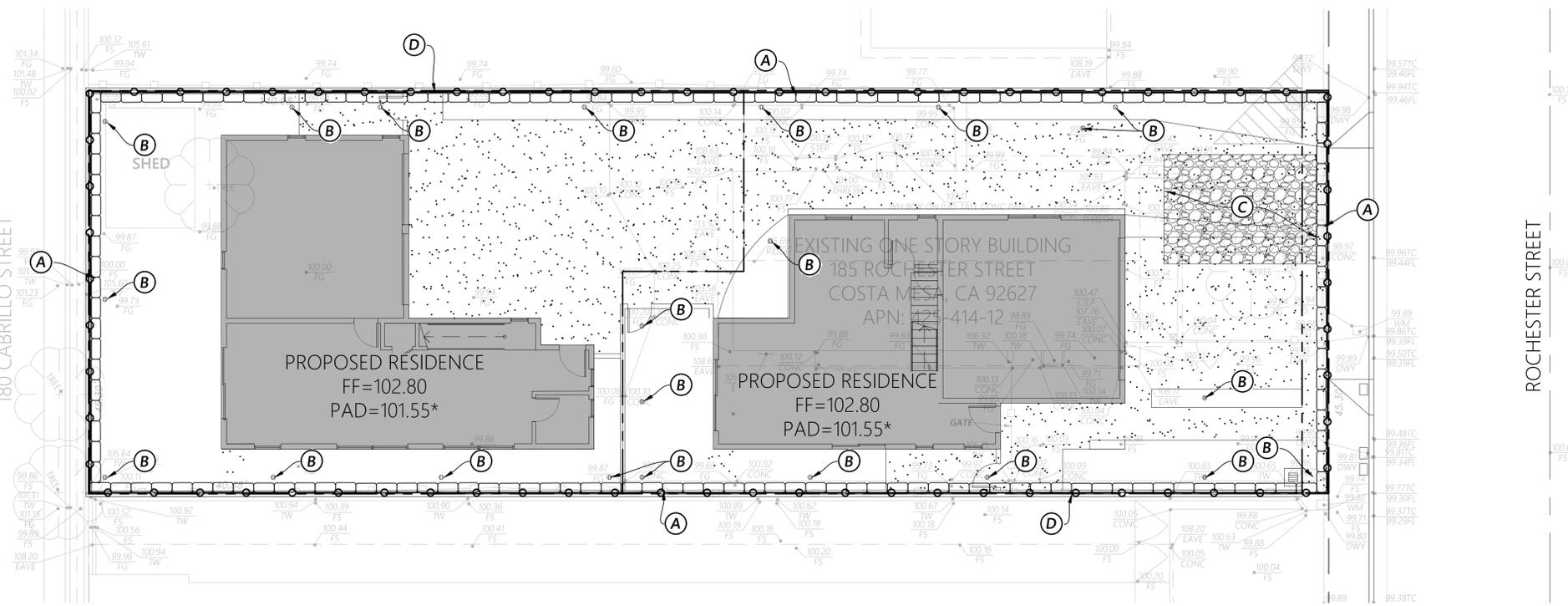
NO.	REVISION	DATE



JOB NO. 20059  
DATE 5/25/2022  
SHEET NO.

**C2**

EXISTING TWO STORY BUILDING  
180 CABRILLO STREET

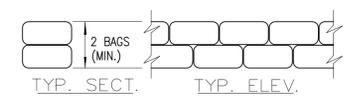


**EROSION CONTROL CONSTRUCTION NOTES**

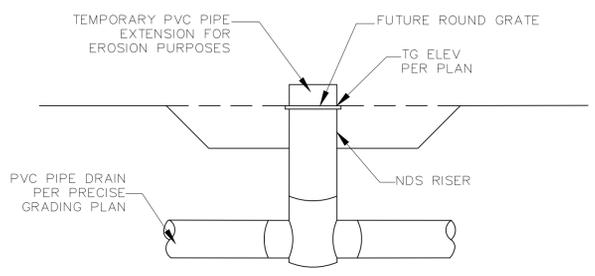
- (A) INSTALL GRAVEL BAG BARRIER PER CASQA SE-8 AND SE-6
- (B) INLET PROTECTION PER DETAIL HEREON
- (C) STABILIZED CONSTRUCTION ENTRANCE USING CRUSHED ROCK PER CASQA TC-1
- (D) 6' TALL CHAIN-LINK FENCE WITH DUST CONTROL COVER AROUND PERIMETER OF PROPERTY.

**NOTES:**

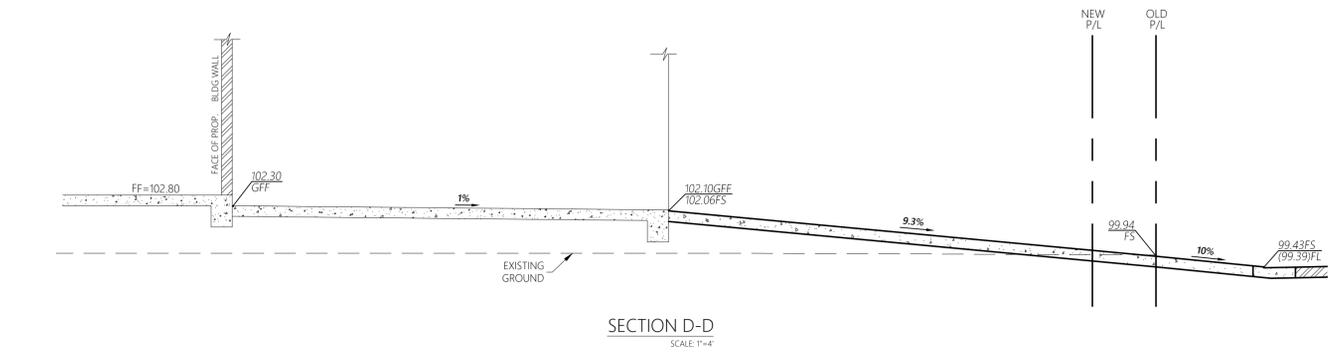
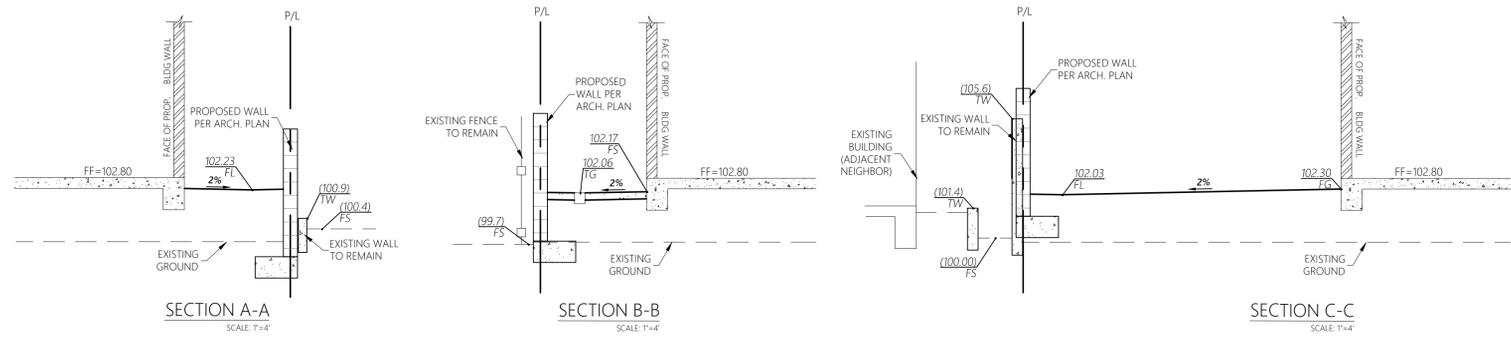
1. CONTRACTOR SHALL PROVIDE ONSITE CONCRETE WASHOUT FACILITY AND COMPLY WITH CASQA BMP WM-8.
2. ALL REMOVABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.
3. SEDIMENTS FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE, AND STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OF ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
3. APPROPRIATE BMPs FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED AND RETAINED ON SITE TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTY BY WIND OR RUNOFF.



**(A) GRAVEL BAG DETAIL**  
NO SCALE



**(B) AREA DRAIN INLET PROJECTION**  
NO SCALE



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**PRECISE GRADING PLAN  
FOR PROPOSED RESIDENCE  
EROSION CONTROL PLAN**  
185 ROCHESTER STREET  
COSTA MESA, CA 92627

NO.	REVISION	DATE

JOB NO. 20059  
DATE 5/25/2022  
SHEET NO. **C3**



Based on the laboratory results, the project soil maximum density shall be 124.0 pcf with an optimum moisture content of 9.5%. The material is determined to possess a low potential for expansion (EI = 0).

**Native - Terrace Deposits (Qop)**

Underlying the fill materials are Quaternary-age old paralic deposits as encountered in each of the test borings (B-1 through B-3) to the maximum depths explored (15 ft b.g.). The native soils consist generally of medium reddish brown, moist, medium dense to dense (firm to stiff), fine silty sand and sandy silt.

**SOIL EXPANSIVITY**

Based on the laboratory results and field logging, the expansion potential of the soils in the upper three feet was analyzed to be very low when exposed to an increase in moisture content (EI = 0). Beyond the specifications stated in this report, additional mitigative measures for highly expansive clays or plasticity are *not* warranted.

**CONCLUSIONS**

Based on our geotechnical study of the site, our review of available reports and literature and our experience, it is our opinion that the proposed improvements at the site are feasible from a geotechnical standpoint. There appear to be no significant geotechnical constraints on-site that cannot be mitigated by proper planning, design, and utilization of sound construction practices. The engineering properties of the soil and native materials, and the surface drainage offer favorable conditions for site re-development.

**RECOMMENDATIONS**

The following sections discuss the principle geotechnical concerns which should be considered for proper site re-development.

**Earthwork**

Grading and earthwork should be performed in accordance with the following recommendations and the General Earthwork and Grading Guidelines included in Appendix C. It is our understanding that the majority of grading will be limited to the re-grading of the building pad for the proposed construction. In general, it is anticipated that the removal of the upper 3 feet within the building footprint (slab-on-grade portion) will require removal and recompaction to prepare the site for construction. We recommend a 5 ft envelope be excavated for the building pad, where feasible. The removals should be accomplished so that all fill and backfill existing as part of the previous site use and demolition operations are removed.

Proposed Residential Duplex  
185 Rochester Street, Costa Mesa, CA - Soils Report  
Project No. JL301.1  
April 16, 2021

8

Care should be taken to protect the adjacent property improvements. A minimum one foot thick fill blanket should be placed throughout the exterior improvements (approaches, parking and planter areas). The fill blanket will be achieved by re-working (scarifying) the upper 12 inches of the existing grade.

**Site Preparation**

Prior to earthwork or construction operations, the site should be cleared of surface structures and subsurface obstructions and stripped of any vegetation in the areas proposed for development. Removed vegetation and debris should then be disposed of off-site. A minimum of 3 feet of the soils below existing grade will require removal and recompaction in the areas to receive building pad fill. Following removal, the excavated surface should be inspected by the soils engineer or his designated representative prior to the placement of any fill in footing trenches. Holes or pockets of undocumented fill resulting from removal of buried obstructions discovered during this inspection should be filled with suitable compacted fill.

**Fills**

The on-site soils are suitable for reuse as compacted fill, provided they are free of organic materials, debris, and materials larger than six (6) inches in diameter. After removal of any loose, compressible soils, all areas to receive fill and/or other surface improvements should be scarified to a minimum depth of 12 inches, brought to at least 2 percent over optimum moisture conditions and compacted to at least 90 percent relative compaction (based on ASTM: D 1557). If necessary, import soils for near-surface fills should be predominately granular, possess a low or very low expansion potential, and be approved by the geotechnical engineer.

Lift thicknesses will be dependent on the size and type of equipment used. In general, fill should be placed in uniform lifts not exceeding 8 inches. Placement and compaction of fill should be in accordance with local grading ordinances under the observation and testing of the geotechnical consultant. We recommend that fill soils be placed at moisture contents at least 2 percent over optimum (based on ASTM: D 1557).

We recommend that oversize materials (materials over 6 inches) should they be encountered, be stockpiled and removed from the site.

**Trench Excavations and Backfill**

Shallow excavations to 10 feet at the project site can be excavated with a moderate effort using conventional construction equipment in good operating condition. Based upon the weathered nature of the subsurface soils and to satisfy

Proposed Residential Duplex  
185 Rochester Street, Costa Mesa, CA - Soils Report  
Project No. JL301.1  
April 16, 2021

9

OSHA requirements for workmen's safety, it will be necessary to shore excavations deeper than 5 feet, or slope back the sides of the excavation at an inclination of 1:1 (horizontal to vertical) if workers are to enter such excavations. The geotechnical consultant should be present during the excavation phase of the project to observe the soil conditions and make additional recommendations if necessary.

The on-site soils may be used as trench backfill provided they are screened of rock sizes over 6 inches in dimension and organic matter. Trench backfill should be compacted in uniform lifts (not exceeding 8 inches in compacted thickness) by mechanical means to at least 90 percent relative compaction (ASTM: D 1557).

**Geotechnical Parameters**

The following Geotechnical parameters may be used in the design of the proposed structure:

**Foundation Design**

Structures on properly compacted fill may be supported by conventional, continuous or isolated spread footings. Footings should be a minimum of 24 inches deep by 15 inches wide. At this depth footings founded in fill materials may be designed for an allowable bearing value of 2,000 and 2,500 psf (for dead-plus-live load) for continuous wall and isolated spread footings, respectively. These values may be increased by one-third for loads of short duration, including wind or seismic forces. Continuous perimeter and interior footings should have a minimum width of 15 inches and be reinforced with No. 5 rebar (two at the top and two at the bottom). Reinforcement requirements may be increased if recommended by the project structural engineer. In no case should they be decreased from the previous recommendations.

**Slabs-on-grade**

Concrete slabs cast against properly compacted fill materials shall be a minimum of 5 inches thick (actual) and reinforced with No. 4 rebar at 18 inches on center in both directions. The slabs shall be doweled into the footings using No. 4 bars at 24 inches on center. The reinforcement shall be supported on chairs to insure positioning of the reinforcement at mid-center in the slab. Interior slabs shall be underlain by 2 inches of clean sand over a min. 10 mil visqueen moisture barrier, with all laps sealed, over 4 inches of low or non-expansive materials (site soils are considered low-expansive). If gravel is used for the 4-inch layer, then we recommend a min. 15 mil, puncture-resistant plastic sheeting (e.g. "Stego Wrap").

Some slab cracking due to shrinkage should be anticipated. The potential for the

Proposed Residential Duplex  
185 Rochester Street, Costa Mesa, CA - Soils Report  
Project No. JL301.1  
April 16, 2021

10

slab cracking may be reduced by careful control of water/cement ratios. The contractor should take appropriate curing precautions during the pouring of concrete in hot weather to minimize cracking of slabs. We recommend that a slipsheet (or equivalent) be utilized if crack-sensitive flooring is planned directly on concrete slabs. All slabs should be designed in accordance with structural considerations.

**Option: Mat Slab Foundation**

For the buildings, a mat slab foundation system is considered an alternative option. Mat slabs founded in fill materials may be designed for an allowable bearing value of 1,000 psf (for dead-plus-live load). These values may be increased by one-third for loads of short duration, including wind or seismic forces. The actual design of the foundation and slabs should be completed by the structural engineer.

Min. Design Item	Recommendations
Mat Foundations:	
Allowable Bearing Pressure:	1,000 psf
Passive Lateral Resistance:	250 psf per foot
Mat Slab Thickness:	min. 12 inches with thickened edges (+ 6 inches)
Steel Reinforcement:	No. 5 bars @ 12" o.c. each way, top and bottom
Coefficient of Friction:	0.30
Modulus of Subgrade Reaction:	$k_v = 100 \text{ lbs/in}^3$

Reinforcement requirements may be increased if recommended by the project structural engineer. In no case should they be decreased from the previous recommendations.

**New Garage Grade Beams**

The grade beams, reinforced continuously with the garage footings, should be constructed across the garage entrance, tying together the ends of the garage footings. The grade beams should be embedded at the same depth as the adjacent perimeter footings. A thickened slab should be provided at the entrance above the grade beam. Minimum dimensions should be six inches wide by six inches thick and need not be specifically reinforced. The garage slabs should have positive separations from the stem walls.

**Settlement**

Utilizing the design recommendations presented herein, we anticipate that the majority of any post-grading settlement will occur during construction activities. We estimate that the total settlement for the proposed structure will be on the order of 1 inch. Differential settlement is not expected to exceed 1/2 inch in 20 feet. These settlement values are expected to be within tolerable limits for properly designed

Proposed Residential Duplex  
185 Rochester Street, Costa Mesa, CA - Soils Report  
Project No. JL301.1  
April 16, 2021

11

and constructed foundations.

**Lateral Load Resistance**

Footings founded in fill materials may be designed for a passive lateral bearing pressure of 250 pounds per square foot per foot of depth. A coefficient of friction against sliding between concrete and soil of 0.30 may be assumed.

**Cement Type for Concrete in Contact with On-Site Earth Materials**

Concrete mix design should be based on sulfate testing with Section 1904.2 of the 2019 CBC. Preliminary laboratory testing indicates the site soils possess negligible sulfate exposure (10 ppm by volume). Test Results are presented in Appendix B.

ACI 318-14 BUILDING CODE (Table 19.3.1.1)

REQUIREMENTS FOR CONCRETE EXPOSED TO SULFATE-CONTAINING SOLUTIONS

Sulfate Exposure	Water soluble sulfate (SO <sub>4</sub> ) in soil percent by weight	Sulfate (SO <sub>4</sub> ) in water, ppm	Cement Type	Maximum water-cementitious material ratio, by weight, normal weight concrete	Minimum f <sub>c</sub> , normal-weight and light weight concrete, psi
Negligible [S0]	0.00 ≤ SO <sub>4</sub> < 0.10	0 ≤ SO <sub>4</sub> < 150	----	----	----
Moderate [S1]	0.10 ≤ SO <sub>4</sub> < 0.20	150 ≤ SO <sub>4</sub> < 1500	II (PM) (MS), (S) (MS), (PM) (MS), (SM) (MS)	0.50	4000
Severe [S2]	0.20 ≤ SO <sub>4</sub> < 2.00	1500 ≤ SO <sub>4</sub> < 10,000	V	0.45	4500
Very Severe [S3]	SO <sub>4</sub> > 2.00	SO <sub>4</sub> > 10,000	V plus pozzolan	0.45	4500

As a conservative approach, cement with a maximum water/cement ratio of 0.50 and a concrete strength f<sub>c</sub> of 3,000 psi should be used for concrete in contact with on-site earth materials.

**Exterior Slabs-on-grade (Hardscape)**

Concrete slabs cast against properly compacted fill materials shall be a minimum of 4 inches thick (actual) and reinforced with No. 3 rebar at 18 inches on center in both directions. The reinforcement shall be supported on chairs to insure positioning of the reinforcement at mid-center in the slab.

Control joints should be provided at a maximum spacing of 8 feet on center in two directions for slabs and at 6 feet on center for sidewalks. Control joints are intended to direct cracking.

Proposed Residential Duplex  
185 Rochester Street, Costa Mesa, CA - Soils Report  
Project No. JL301.1  
April 16, 2021

12

Expansion or felt joints should be used at the interface of exterior slabs on grade and any fixed structures to permit relative movement.

Some slab cracking due to shrinkage should be anticipated. The potential for the slab cracking may be reduced by careful control of water/cement ratios. The contractor should take appropriate curing precautions during the pouring of concrete in hot weather to minimize cracking of slabs.

**Surface Drainage**

Surface drainage shall be controlled at all times. Positive surface drainage should be provided to direct surface water away from structures and toward the street or suitable drainage facilities. Ponding of water should be avoided adjacent to the structures. Recommended minimum gradient is 2 percent for unpaved areas and one percent for concrete/paved areas. Roof gutter discharge should be directed away from the building areas through solid PVC pipes to suitable discharge points. Area drains should be provided for planter areas.

**Review of Plans**

The specifications and parameters outlined in this report shall be considered minimum requirements and incorporated into the Grading, Foundation, Landscape, Pool/Spa and Shoring plans if applicable. This office should review the Plans when available. If approved, the geotechnical consultant shall sign/stamp the applicable Plans from a geotechnical standpoint.

**Pre-construction Meeting**

It is recommended that no clearing of the site or any grading operation be performed without the presence of a representative of this office. An on site pre-grading meeting should be arranged between the soils engineer and the grading contractor prior to any construction.

**GEOTECHNICAL OBSERVATION AND TESTING DURING CONSTRUCTION**

We recommend that a qualified geotechnical consultant be retained to provide geotechnical engineering services, including geotechnical observation/testing, during the construction phase of the project. This is to verify the compliance with the design, specifications and or recommendations, and to allow design changes in the event that subsurface conditions differ from those anticipated.

Geotechnical observations/testing should be performed at the following stages:

Proposed Residential Duplex  
185 Rochester Street, Costa Mesa, CA - Soils Report  
Project No. JL301.1  
April 16, 2021

13

- During ANY grading operations, including excavation, removal, filling, compaction, and backfilling, etc.
- After excavations for footings and/or grade beams verify the adequacy of underlying materials.
- After pre-soaking of new slab sub-grade earth materials and placement of capillary break, plastic membrane, prior to pouring concrete.
- During backfill of drainage and utility line trenches, to verify proper compaction.
- When/if any unusual geotechnical conditions are encountered.
- Prior to slab pours to ensure proper subgrade compaction and moisture barriers.

*Please schedule an inspection with the geotechnical consultant prior to the pouring of ALL interior and exterior slabs.*

**LIMITATIONS**

The geotechnical services described herein have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the geotechnical engineering profession practicing contemporaneously under similar conditions in the subject locality. Under no circumstance is any warranty, expressed or implied, made in connection with the providing of services described herein. Data, interpretations, and recommendations presented herein are based solely on information available to this office at the time work was performed. EGA Consultants will not be responsible for other parties' interpretations or use of the information developed in this report.

The interpolated subsurface conditions should be checked in the field during construction by a representative of EGA Consultants. We recommend that all foundation excavations and grading operations be observed by a representative of this firm to ensure that construction is performed in accordance with the specifications outlined in this report.

We do not direct the contractor's operations, and we cannot be responsible for the safety of others. The contractor should notify the owner if he considers any of the recommended actions presented herein to be unsafe.

Proposed Residential Duplex  
185 Rochester Street, Costa Mesa, CA - Soils Report  
Project No. JL301.1  
April 16, 2021

14



REVISIONS		
NO.	REVISION	DATE



JOB NO. 20059  
DATE 5/25/2022  
SHEET NO.

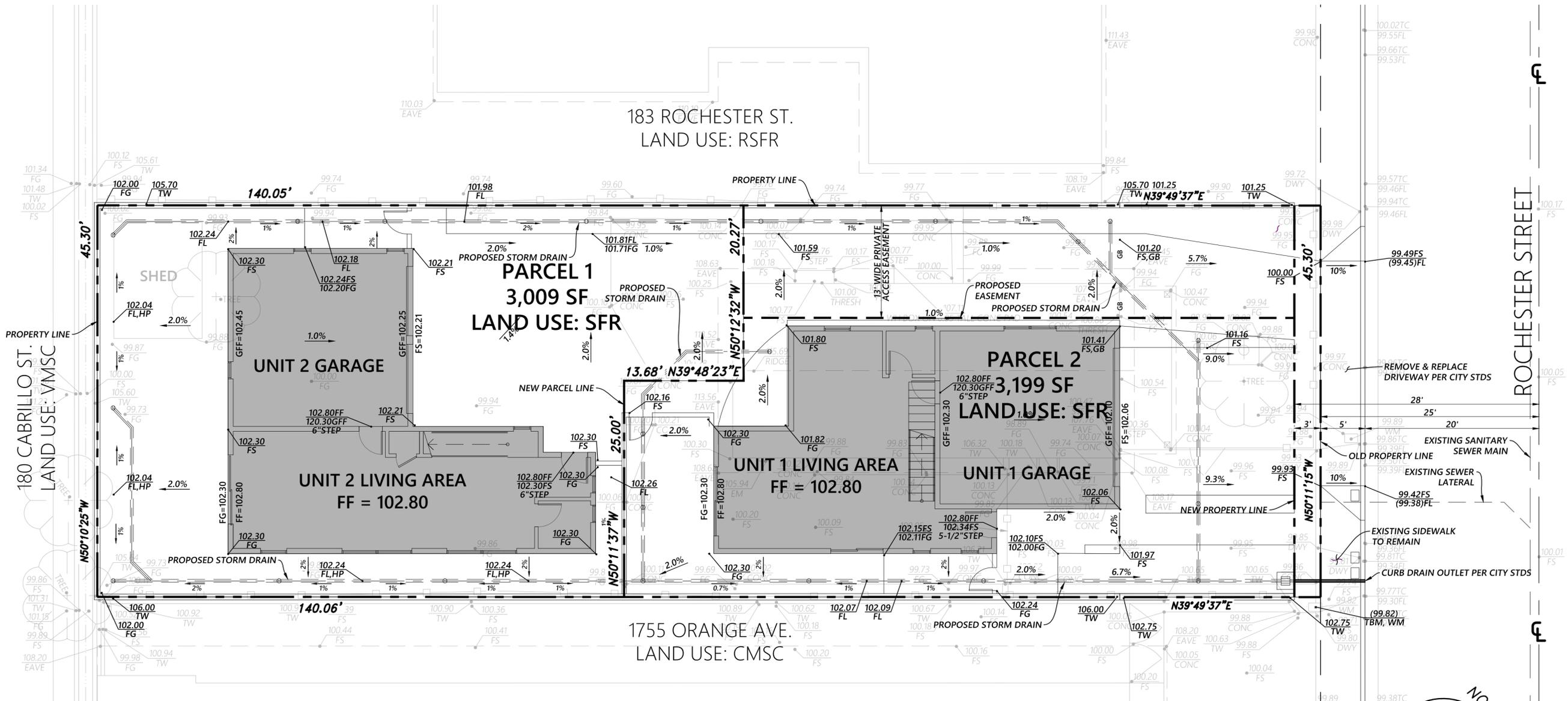
**C4**

# TENTATIVE PARCEL MAP 2022-139

IN THE CITY OF COSTA MESA, COUNTY OF ORANGE, STATE OF CALIFORNIA

BEING A SURVEY OF LOT 3, TRACT 442 AS PER MAP FILED IN BOOK 16, PAGE 43, OF MISCELLANEOUS MAPS IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY.

CIVILSCAPES ENGINEERING, INC. WILLIAM D. ROLPH, PLS 9381



### TITLE REPORT

CHICAGO TITLE COMPANY  
5 CORPORATE PARK, #100  
NEWPORT BEACH, CA 92660  
TITLE OFFICER: JOHN F. ALLEN  
ChicagoAllen@ctt.com  
949-263-0872  
TITLE NO. 58602013110-JFA

### UTILITIES NOTE:

NO EXISTING OR PROPOSED UNDERGROUND UTILITIES ARE LOCATED WITHIN THE PROJECT SITE.

### BASIS OF BEARINGS:

THE CENTERLINE OF ORCHID AVE.  
BEING N40°33'42"E PER PMB  
378/39-40 .

### TENTATIVE BENCHMARK

WATER METER SOUTHEAST OF SITE LABELED 'WM,TBM' HEREON.  
TBM ELEVATION = 99.82

### OWNER/ SUBDIVIDER:

185 ROCHESTER COSTA MESA LLC  
16800 ASTON STREET, SUITE 275  
IRVINE, CA 92606

### SURVEYOR:

CIVILSCAPES ENGINEERING, INC.  
28052 CAMINO CAPISTRANO, STE 213  
LAGUNA NIGUEL, CA 92677  
949.464.8115

### SITE ADDRESS:

185 ROCHESTER STREET  
COSTA MESA  
APN: 425-414-12

### ACERAGE:

PARCEL 1:	0.069 AC GROSS	0.069 AC NET
PARCEL 2:	0.073 AC GROSS	0.055 AC NET
TOTAL:	0.142 AC GROSS	0.124 AC NET

