

PLANT SCHEDULE

TREES	COMMON NAME	SIZE	CONTAINER	WATER USE	PLANT LANDSCAPE USE	MATURE HEIGHT	MATURE WIDTH	
CERCIS OCCIDENTALIS	WESTERN REDBUD MULTI-TRUNK	24"		VERY LOW - MEDIUM	UTILITY FRIENDLY TREE, PATIO TREE	15 - 25' HT.	10 - 15' W.	
CERCIS OCCIDENTALIS	WESTERN REDBUD MULTI-TRUNK	24"	MULTI-STEM	VERY LOW - MEDIUM	UTILITY FRIENDLY TREE, PATIO TREE	15 - 25' HT.	10 - 15' W.	
SUITABLE FOR STORM WATER PLANTERS								
EUCALYPTUS CITRIODORA	LEMON SCENTED GUM	36"		LOW		25 - 65' HT.	40 - 0' W.	
GEUERA PARVIFLORA	AUSTRALIAN WILLOW	24"		MEDIUM	SCREENING PLANT, STREET TREE	25 - 40' HT.	25 - 40' W.	
HIBISCUS SYRIACUS	ROSE OF SHARON	24"	MULTI-STEM	LOW - MEDIUM	ACCENT PLANT	10 - 15' HT.	10 - 15' W.	
JACARANDA MIMOSIFOLIA	JACARANDA	36"		MEDIUM	SPECIMEN PLANT, STREET TREE	25 - 65' HT.	25 - 40' W.	
REQUIRED CITY STREET TREE. NO SUBSTITUTIONS								
LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA'	TUSCARORA GRAPE MYRTLE	24"	MULTI-STEM	LOW - MEDIUM	UTILITY FRIENDLY TREE, PATIO TREE, STREET TREE	10 - 15' HT.	10 - 15' W.	
LOPHOSTEMON CONFERTUS 'VARIEGATA'	VARIEGATED BRISBANE BOX	36"		MEDIUM		25 - 40' HT.	15 - 25' W.	
PARKINSONIA X 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	24"		VERY LOW - LOW	SPECIMEN PLANT, SHADE TREE	15 - 25' HT.	15 - 25' W.	
RHAPHIOLEPIS INDICA 'MAJESTIC BEAUTY' TM	MAJESTIC BEAUTY INDIAN HAWTHORNE STANDARD	24"		MEDIUM		15 - 25' HT.		
SHRUBS	COMMON NAME	SIZE	CONTAINER	WATER USE	PLANT LANDSCAPE USE	MATURE HEIGHT	MATURE WIDTH	
BERBERIS THUNBERGII 'CRIMSON PYGMY'	CRIMSON PYGMY JAPANESE BARBERRY	5 GAL		LOW - MEDIUM	ACCENT PLANT, BORDER PLANT	10 - 36" HT.	1 - 3' W.	
CHAMAEROPS HUMILIS	MEDITERRANEAN FAN PALM	24" BOX	MULTI-STEM	LOW - MEDIUM	CONTAINER PLANT, UTILITY FRIENDLY TREE	6 - 10' HT.	6 - 10' W.	
DODONAEA VISCOSA 'PURPUREA'	PURPLE HOPSEED BUSH	15 GAL		LOW - MEDIUM	SCREENING PLANT, HEDGING PLANT, UTILITY FRIENDLY TREE	6 - 10' HT.	3 - 6' W.	
NANDINA DOMESTICA 'GULF STREAM' TM	GULF STREAM HEAVENLY BAMBOO	5 GAL		LOW - MEDIUM	ACCENT PLANT, BORDER PLANT, MASS PLANTING	3 - 6' HT.	1 - 3' W.	
PRUNUS CAROLINIANA 'COMPACTA'	COMPACT CAROLINA LAUREL CHERRY	15 GAL		LOW - MEDIUM	SCREENING PLANT, HEDGING PLANT	6 - 10' HT.	3 - 6' W.	
RHAPHIOLEPIS INDICA 'BALLERINA'	BALLERINA INDIAN HAWTHORN	5 GAL		LOW - MEDIUM	ACCENT PLANT, MASS PLANTING, SCREENING PLANT, HEDGING PLANT	3 - 6' HT.	3 - 6' W.	
PERENNIALS	COMMON NAME	SIZE	CONTAINER	WATER USE	PLANT LANDSCAPE USE	MATURE HEIGHT	MATURE WIDTH	
CLIVIA MINIATA	BUSH LILLY	1 GAL		LOW - MEDIUM	BORDER PLANT	6" - 36" HT.	1 - 3' W.	
DIETES VEGETA	AFRICAN IRIS	1 GAL		LOW - MEDIUM	BORDER PLANT, MASS PLANTING	18" - 6' HT.	1 - 3' W.	
HEMEROCALLIS X 'STELLA DE ORO'	STELLA DE ORO DAYLILY	1 GAL		LOW - MEDIUM	CONTAINER PLANT, BORDER PLANT, MASS PLANTING	6 - 18" HT.	1 - 3' W.	
LIMONIUM LATIFOLIUM	SEA LAVENDER	1 GAL		LOW		10 - 36" HT.	1 - 3' W.	
STORM WATER MANAGEMENT PLANTINGS	COMMON NAME	SIZE	CONTAINER	WATER USE	PLANT LANDSCAPE USE	MATURE HEIGHT	MATURE WIDTH	
ACHILLEA MILLEFOLIUM	COMMON YARROW	1 GAL		LOW	ACCENT PLANT	6 - 18" HT.	1 - 3' W.	
CAREX BARBERAE	SANTA BARBARA SEDGE	1 GAL		MEDIUM		10 - 36" HT.	1 - 3' W.	
POLYSTICHUM MUNTUM	WESTERN SWORD FERN	1 GAL		MEDIUM - HIGH	BORDER PLANT	10 - 36" HT.	1 - 3' W.	
ZAUSCHNERIA CALIFORNICA	CALIFORNIA FUCHSIA	5 GAL		VERY LOW - MEDIUM	BORDER PLANT	6" - 36" HT.	1 - 3' W.	
SUCCULENTS	COMMON NAME	SIZE	CONTAINER	WATER USE	PLANT LANDSCAPE USE	MATURE HEIGHT	MATURE WIDTH	
AGAVE PARRYI	PARRY'S AGAVE	1 GAL		LOW		6 - 18" HT.	1 - 3' W.	
ECHEVERIA X 'SUNBURST'	SUNBURST ECHEVERIA	1 GAL		LOW	SPECIMEN PLANT, CONTAINER PLANT, BORDER PLANT	6 - 18" HT.	1 - 3' W.	
SEDUM X 'ROSY GLOW'	STONECROP	1 GAL		LOW		6 - 18" HT.	1 - 3' W.	
VINES	COMMON NAME	SIZE	CONTAINER	WATER USE	PLANT LANDSCAPE USE	MATURE HEIGHT	MATURE WIDTH	
FICUS FUMILA	CREEPING FIG	5 GAL	STAKED	MEDIUM		6 - 18" HT.	10 - 15' W.	
PARTHENOCISSUS TRICUSPIDATA 'VEITCHII'	BOSTON IVY	5 GAL		LOW - MEDIUM		15 - 25' HT.	10 - 15' W.	
GROUND COVERS	COMMON NAME	SIZE	CONTAINER	SPACING	WATER USE	PLANT LANDSCAPE USE	MATURE HEIGHT	MATURE WIDTH
FALL ZONE MATERIAL ARTIFICIAL TURF TYPE WITH UP TO 5 1/2" OF FALL ZONE MATERIAL PER DEFERRED SUBMITTAL OF PLAY EQUIPMENT	FALL ZONE	---						
LAMFRANTHUS SPECTABILIS	TRAILING ICE PLANT	1 GAL		24" O.C.	VERY LOW - LOW	< 6" HT.	6 - 10' W.	
LANTANA MONTEVIDENSIS	TRAILING LANTANA	1 GAL		36" O.C.	LOW - MEDIUM	6 - 18" HT.	1 - 3' W.	
LANTANA MONTEVIDENSIS 'PURPLE'	TRAILING LANTANA	1 GAL		36" O.C.	LOW	6 - 18" HT.	3 - 6' W.	
MIXED SUCCULENTS	SUCCULENTS	6"		24" O.C.	LOW			
TURF ARTIFICIAL SYNLAWN 'CLASSIC PITCH'	DROUGHT TOLERANT FESCUE BLEND	---						
VEGETABLE GARDEN		4"		12" O.C.	HIGH	6 - 18" HT.	1 - 3' W.	
TURF GRASS	COMMON NAME	SIZE	CONTAINER	SPACING	WATER USE	PLANT LANDSCAPE USE	MATURE HEIGHT	MATURE WIDTH
TURF ARTIFICIAL SYNLAWN 'CLASSIC PITCH'	DROUGHT TOLERANT FESCUE BLEND	---						










CONCEPT PLANT SCHEDULE

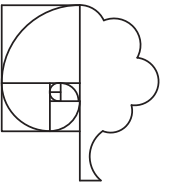
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	<b>STREET TREE</b> REQUIRED CITY STREET TREE. NO SUBSTITUTIONS ALLOWED JACARANDA MIMOSIFOLIA / JACARANDA	11		36", STANDARD
	<b>ACCENT TREE</b> CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA' / TUSCARORA GRAPE MYRTLE PARKINSONIA X 'DESERT MUSEUM' / DESERT MUSEUM PALO VERDE	6		24" 24", MULTI-STEM 24"
	<b>EVERGREEN TREE</b> EUCALYPTUS CITRIODORA / LEMON SCENTED GUM GEUERA PARVIFLORA / AUSTRALIAN WILLOW	19		36" 24"
	<b>ACCENT TREE - SMALL</b> SMALL EVERGREEN ACCENT TREE, PRIMARILY ON THE UPPER LEVEL HIBISCUS SYRIACUS / ROSE OF SHARON RHAPHIOLEPIS INDICA 'MAJESTIC BEAUTY' TM / MAJESTIC BEAUTY INDIAN HAWTHORNE STANDARD	4		24", MULTI-STEM 24"
	<b>EVERGREEN SHRUBS - LARGE</b> LARGE EVERGREEN SHRUBS FOR SCREENING DODONAEA VISCOSA 'PURPUREA' / PURPLE HOPSEED BUSH PRUNUS CAROLINIANA 'COMPACTA' / COMPACT CAROLINA LAUREL CHERRY	19		15 GAL 15 GAL
	<b>MEDIUM SHRUBS</b> BERBERIS THUNBERGII 'CRIMSON PYGMY' / CRIMSON PYGMY JAPANESE BARBERRY NANDINA DOMESTICA 'GULF STREAM' TM / GULF STREAM HEAVENLY BAMBOO RHAPHIOLEPIS INDICA 'BALLERINA' / BALLERINA INDIAN HAWTHORN	93		5 GAL 5 GAL 5 GAL
	<b>PERENNIALS - SHADE</b> CLIVIA MINIATA / BUSH LILY DIETES IRIDIODES / FORTNIGHT LILY HEMEROCALLIS X 'STELLA DE ORO' / STELLA DE ORO DAYLILY POLYSTICHUM MUNTUM / WESTERN SWORD FERN	260		1 GAL 1 GAL 1 GAL 1 GAL
	<b>ORNAMENTAL GRASSES</b> FESTUCA IDAHOENSIS / IDAHO FESCUE MULLENBERGIA CAPILLARIS 'PINK CLOUD' / PINK CLOUD PINK MUHLY GRASS PENNISETUM ORIENTALE / ORIENTAL FOUNTAIN GRASS	290		1 GAL 5 GAL 5 GAL

CONCEPT PLANT SCHEDULE

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	<b>PERENNIALS - SUN</b> ACHILLEA MILLEFOLIUM / COMMON YARROW LIMONIUM LATIFOLIUM / SEA LAVENDER ZAUSCHNERIA CALIFORNICA / CALIFORNIA FUCHSIA	88	1 GAL 1 GAL 5 GAL
	<b>SHRUBS - TROPICAL</b> ACCENT SHRUBS USED FOR THE FOLIAGE AND A TROPICAL EFFECT CHAMAEROPS HUMILIS / MEDITERRANEAN FAN PALM PHOENIX ROEBELII / FIGMY DATE PALM MULTI-TRUNK	6	24" BOX, MULTI-STEM 24", MULTI-STEM
	<b>VINES</b> FICUS FUMILA / CREEPING FIG PARTHENOCISSUS TRICUSPIDATA 'VEITCHII' / BOSTON IVY	45	5 GAL, STAKED 5 GAL
	<b>STORM WATER MANAGEMENT</b> CAREX BARBARAE / SANTA BARBARA SEDGE JUNCUS PATENS 'CARMAN'S GREY' / SPREADING RUSH STIPA PULCHRA / PURPLE NEEDLE GRASS	2,252 SF 506	1 GAL @ 24" OC 1 GAL @ 24" OC 1 GAL @ 24" OC
	<b>SUCCULENTS</b> COLORFUL, LOW GROWING, DROUGHT TOLERANT PLANTINGS AGAVE PARRYI / PARRY'S AGAVE ECHEVERIA X 'GOLDEN GLOW' / GOLDEN GLOW ECHEVERIA SEDUM X 'ROSY GLOW' / ROSY GLOW STONECROP	169 SF	
	<b>GROUND COVERS</b> LAMFRANTHUS SPECTABILIS 'PINK' / PINK TRAILING ICE PLANT LANTANA MONTEVIDENSIS / TRAILING LANTANA	161 SF 89	1 GAL @ 24" OC 1 GAL @ 36" OC
	<b>ARTIFICIAL TURF</b> WITH BACKING TURF ARTIFICIAL SYNLAWN 'CLASSIC PITCH' / DROUGHT TOLERANT FESCUE BLEND	4,379 SF	---
	<b>FALL ZONE MATERIAL</b>	620 SF	
	<b>UPLAND LANDSCAPE BUFFER</b> BACCHARIS PILULARIS 'TWIN PEAKS#2' / TWIN PEAKS #2 COYOTE BRUSH ERIOGONUM FASCICULATUM 'BRUCE DICKINSON' / PROSTRATE CALIFORNIA BUCKWHEAT SALVIA X 'BEE'S BLISS' / BEE'S BLISS SAGE	3,885 SF 449	1 GAL @ 36" OC 1 GAL @ 36" OC 1 GAL @ 36" OC



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ALVARADO CREEK APARTMENTS  
PACIFIC WEST COMMUNITIES  
MISSION GORGE ROAD  
SAN DIEGO, CALIFORNIA

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Sheet Title

PLANT SCHEDULE

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ALVARADO CREEK APARTMENTS  
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LANDSCAPE PLAN

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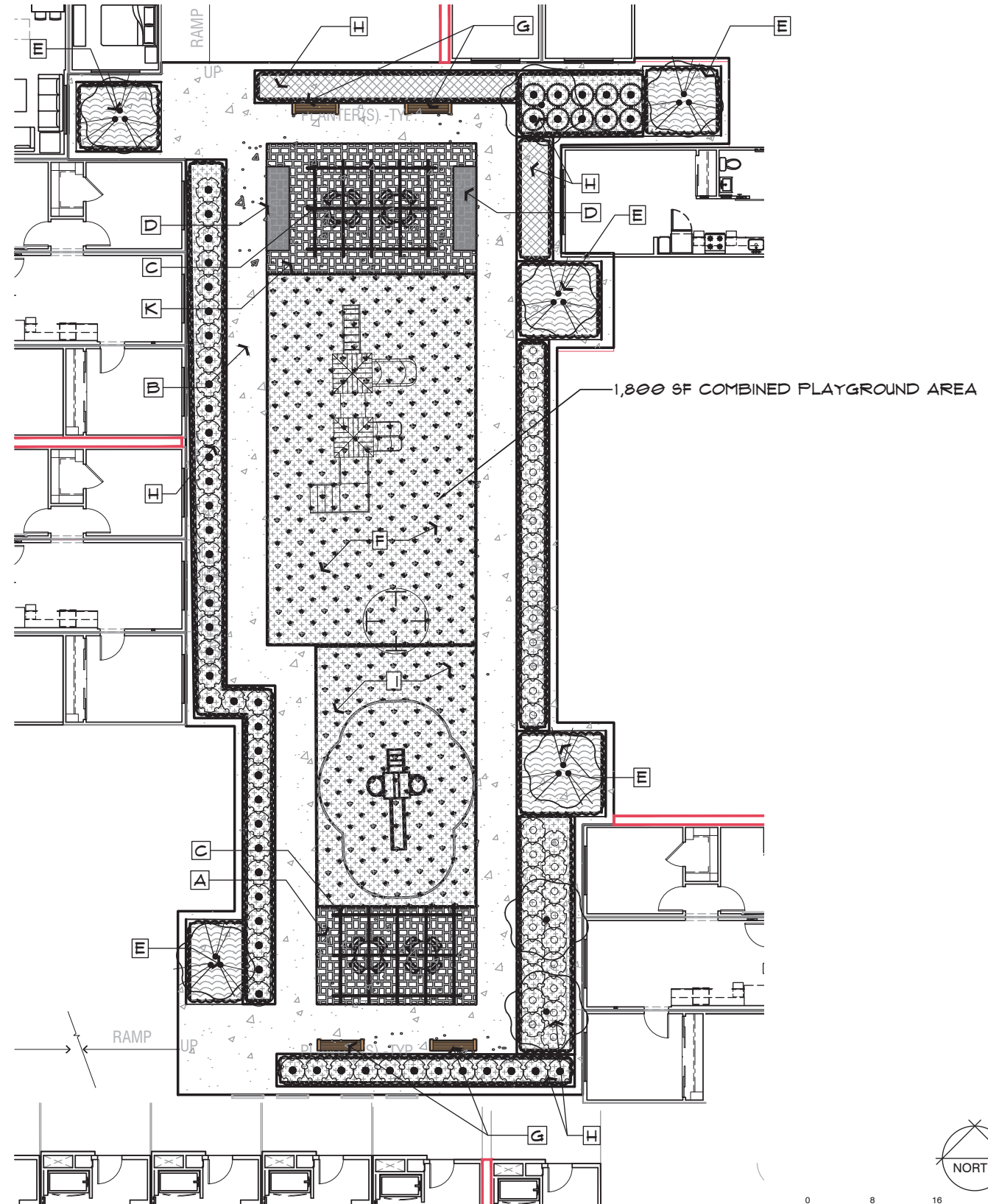
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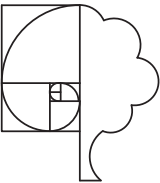
LANDSCAPE PLAN



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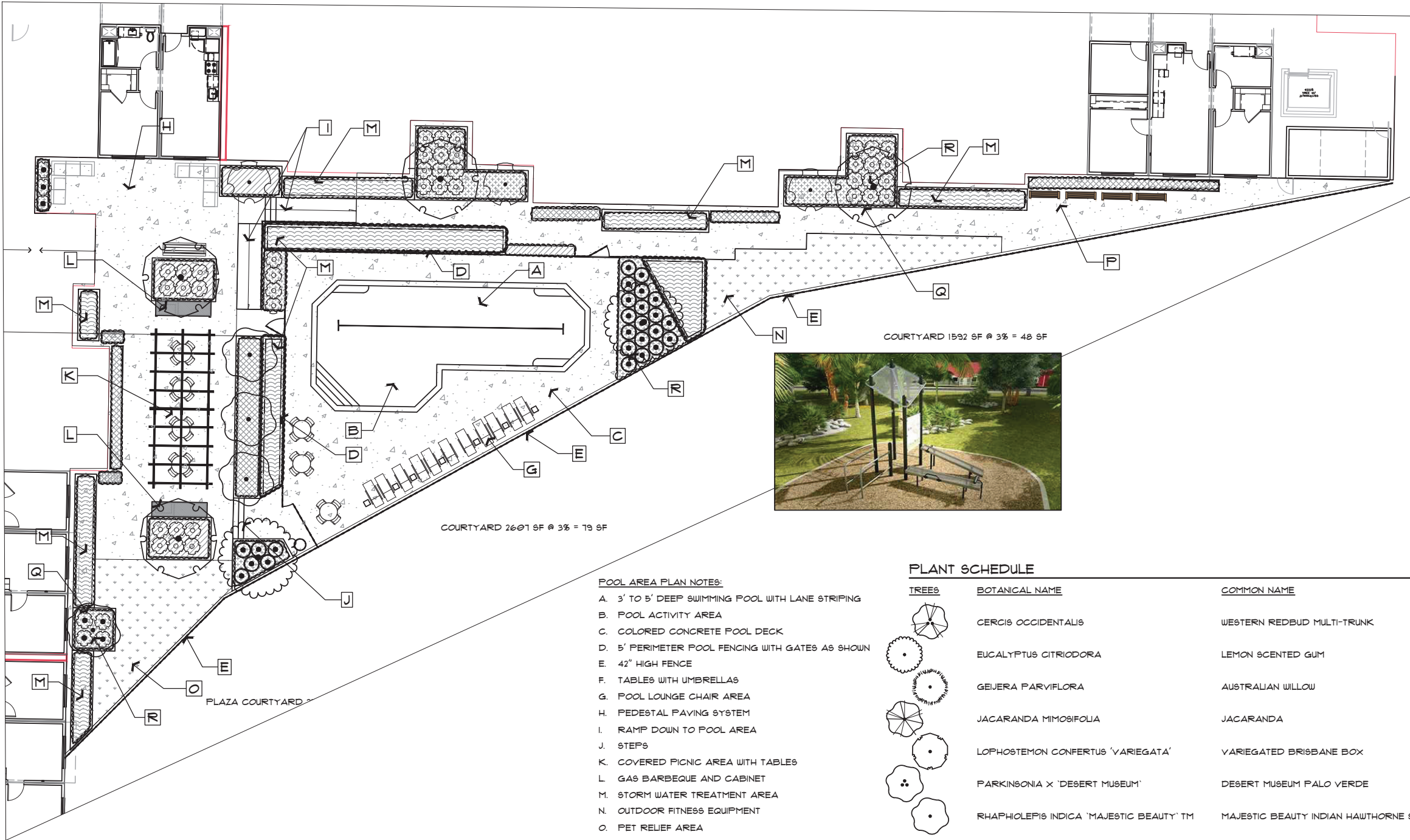




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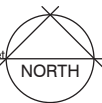
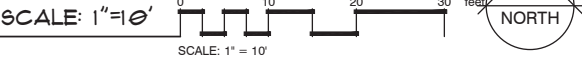
POOL AREA PLAN NOTES:

- A. 3' TO 5' DEEP SWIMMING POOL WITH LANE STRIPING
- B. POOL ACTIVITY AREA
- C. COLORED CONCRETE POOL DECK
- D. 5' PERIMETER POOL FENCING WITH GATES AS SHOWN
- E. 42" HIGH FENCE
- F. TABLES WITH UMBRELLAS
- G. POOL LOUNGE CHAIR AREA
- H. PEDESTAL PAVING SYSTEM
- I. RAMP DOWN TO POOL AREA
- J. STEPS
- K. COVERED PICNIC AREA WITH TABLES
- L. GAS BARBEQUE AND CABINET
- M. STORM WATER TREATMENT AREA
- N. OUTDOOR FITNESS EQUIPMENT
- O. PET RELIEF AREA
- P. BENCHES
- Q. CMU PLANTER
- R. ACCENT TREES

PLANT SCHEDULE

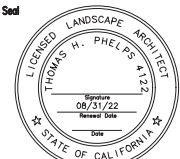
TREES	BOTANICAL NAME	COMMON NAME	2021-05-04 15:08 SIZE
	CERCIS OCCIDENTALIS	WESTERN REDBUD MULTI-TRUNK	24"
	EUCALYPTUS CITRIODORA	LEMON SCENTED GUM	36"
	GEIJERA PARVIFLORA	AUSTRALIAN WILLOW	24"
	JACARANDA MIMOSIFOLIA	JACARANDA	36"
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	PARKINSONIA X 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	24"
	RHAPHIOLEPIS INDICA 'MAJESTIC BEAUTY' TM	MAJESTIC BEAUTY INDIAN HAWTHORNE STANDARD	24"

LANDSCAPE PLAN - PODIUM LEVEL



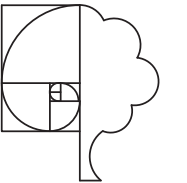
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Sheet Title  
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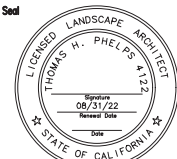
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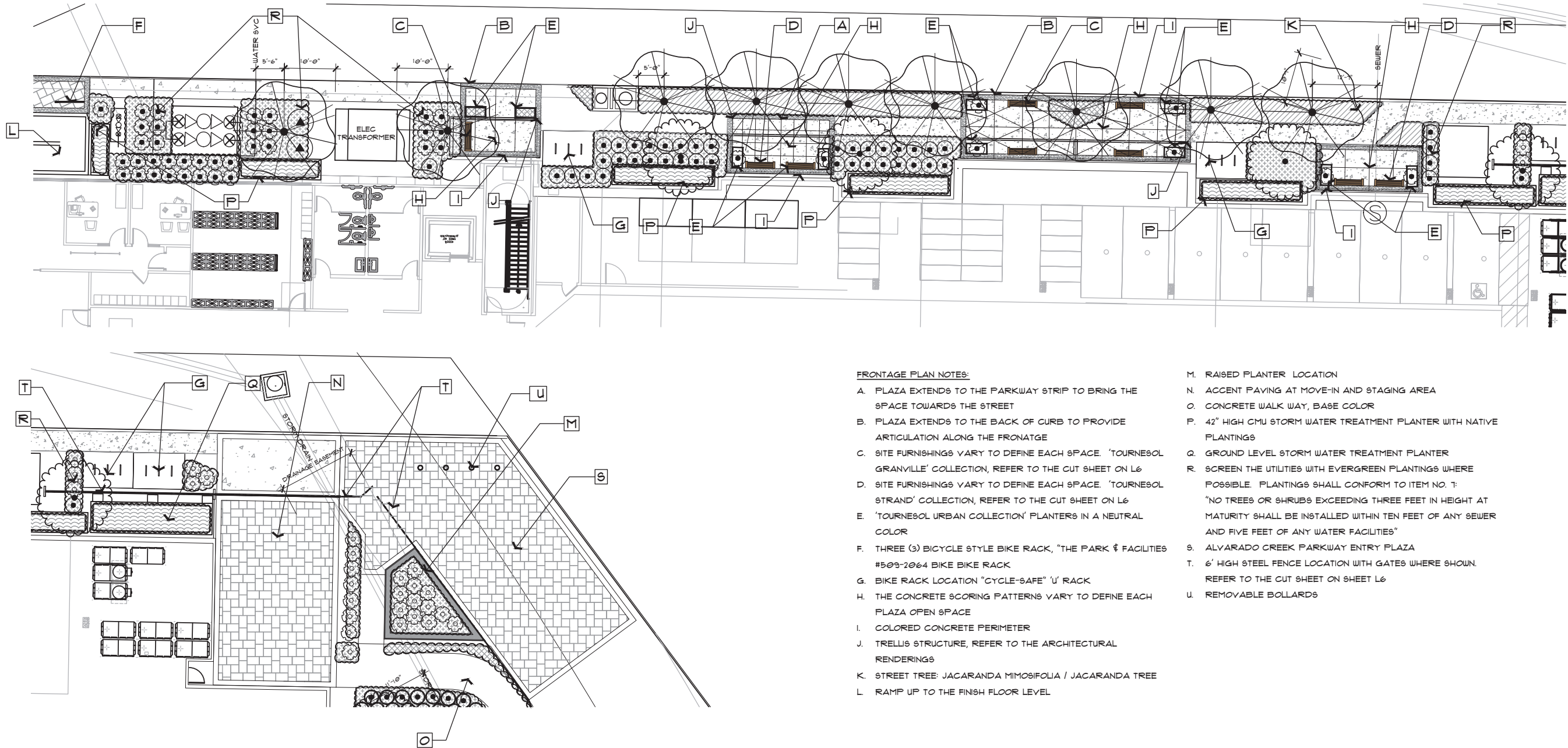
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FRONTAGE PLAN NOTES:

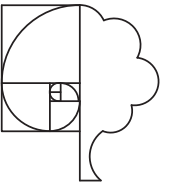
- A. PLAZA EXTENDS TO THE PARKWAY STRIP TO BRING THE SPACE TOWARDS THE STREET
- B. PLAZA EXTENDS TO THE BACK OF CURB TO PROVIDE ARTICULATION ALONG THE FRONATGE
- C. SITE FURNISHINGS VARY TO DEFINE EACH SPACE. 'TOURNESOL GRANVILLE' COLLECTION, REFER TO THE CUT SHEET ON L6
- D. SITE FURNISHINGS VARY TO DEFINE EACH SPACE. 'TOURNESOL STRAND' COLLECTION, REFER TO THE CUT SHEET ON L6
- E. 'TOURNESOL URBAN COLLECTION' PLANTERS IN A NEUTRAL COLOR
- F. THREE (3) BICYCLE STYLE BIKE RACK, "THE PARK & FACILITIES #503-2064 BIKE BIKE RACK
- G. BIKE RACK LOCATION "CYCLE-SAFE" 'U' RACK
- H. THE CONCRETE SCORING PATTERNS VARY TO DEFINE EACH PLAZA OPEN SPACE
- I. COLORED CONCRETE PERIMETER
- J. TRELLIS STRUCTURE, REFER TO THE ARCHITECTURAL RENDERINGS
- K. STREET TREE: JACARANDA MIMOSIFOLIA / JACARANDA TREE
- L. RAMP UP TO THE FINISH FLOOR LEVEL
- M. RAISED PLANTER LOCATION
- N. ACCENT PAVING AT MOVE-IN AND STAGING AREA
- O. CONCRETE WALK WAY, BASE COLOR
- P. 42" HIGH CMU STORM WATER TREATMENT PLANTER WITH NATIVE PLANTINGS
- Q. GROUND LEVEL STORM WATER TREATMENT PLANTER
- R. SCREEN THE UTILITIES WITH EVERGREEN PLANTINGS WHERE POSSIBLE. PLANTINGS SHALL CONFORM TO ITEM NO. 1: "NO TREES OR SHRUBS EXCEEDING THREE FEET IN HEIGHT AT MATURITY SHALL BE INSTALLED WITHIN TEN FEET OF ANY SEWER AND FIVE FEET OF ANY WATER FACILITIES"
- S. ALVARADO CREEK PARKWAY ENTRY PLAZA
- T. 6' HIGH STEEL FENCE LOCATION WITH GATES WHERE SHOWN. REFER TO THE CUT SHEET ON SHEET L6
- U. REMOVABLE BOLLARDS

NORTH FRONTAGE STREETSCAPE PLAN

SCALE: 1"=10'







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thp@idlainc.net

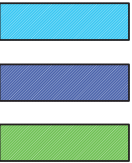
WATER USE CALCULATIONS (PRELIMINARY)

Job Name: Alvarado Creek Apartments

Date: 2/2/21

California Water Efficient Landscape Worksheet										
Reference Evapotranspiration (ET <sub>a</sub> )		46.5		Project Type		Residential		0.55		
Rain Fall (Inches)				Usable Rain Fall (Inches)		0				
Hydrozone # / Planting Description <sup>1</sup>		Plant Factor (PF)	Irrigation Method <sup>2</sup>	Irrigation Efficiency (IE) <sup>3</sup>	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU) <sup>4</sup>	Gallons Per Minute (GPM)	% Landscape Area
<b>Zone# Regular Landscape Areas</b>										
1	HZ LOW	0.3	Drip	0.81	0.37	10583	3920	113003	14.67	53.37%
2	HZ MED	0.5	Drip	0.81	0.62	3,308	1857	53531	15.20	15.17%
3	HZ TREES	0.5	Bubbler	0.75	0.67	4,303	2669	76938	9.35	20.19%
4	HZ STORM WATER	0.5	Drip	0.81	0.62	2,256	1380	39793	9.91	11.28%
					Totals	19830	9825	283264	474.66	100.00%
<b>Special Landscape Areas</b>										
					Totals	0	0	0		
					ETWU Total	283264			GALLONS	
					Maximum Allowed Water Allowance (MAWA) <sup>5</sup>	314434			GALLONS	
<b>ETAF Calculations</b>										
<b>Regular Landscape Areas</b>					Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.	ETWU ACRE FEET		0.869306		
Total ETAF x Area					9825	MAWA ACRE FEET		0.964964		
Total Area					19830					
Average ETAF					0.42	% ETWU OF MAWA		0.90		
<b>All Landscape Areas</b>						PASS:		YES		
Total ETAF x Area					9825					
Total Area					19830					
Average ETAF					0.42					
<b>SUMMARY HYDROZONE</b>										
HYDROZONE		AREA SQ FEET								
HIGH WATER USE		0								
MODERATE WATER USE		1,257								
LOW WATER USE		6,175								
VERY LOW WATER USE		2,139								

HYDRO ZONE KEY (LANDSCAPE WATER USE AREAS)



LOW WATER USE (WUCOLS PLANT FACTOR .3 OR LESS)

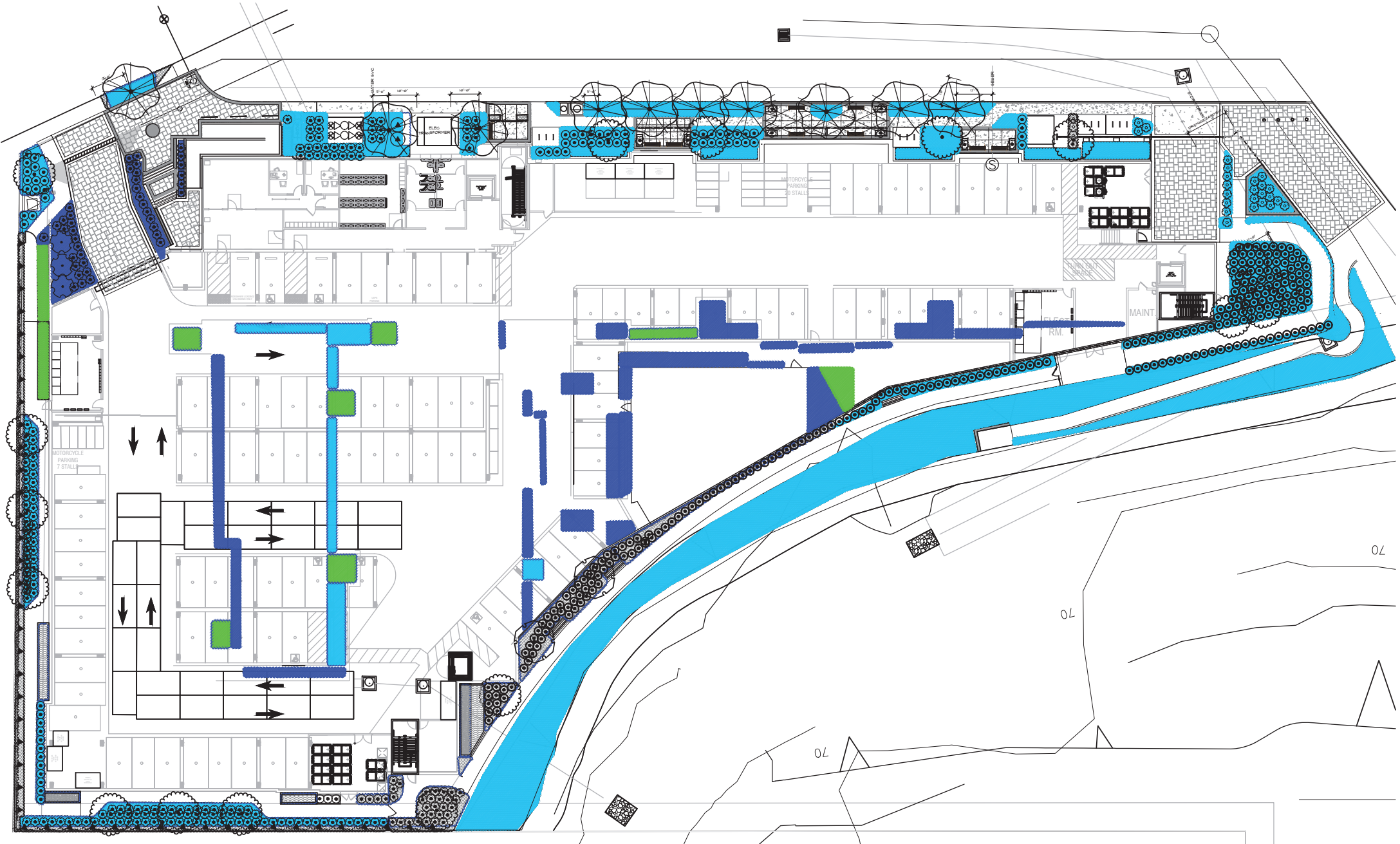
MEDIUM WATER USE (WUCOLS PLANT FACTOR .3 TO .7)

STORM WATER TREATMENT AREA (WUCOLS PLANT FACTOR .3 OR LESS)

TREES ARE MEDIUM OR LESS (<.5)

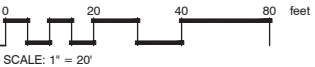
GENERAL NOTES:

- ALL LANDSCAPE AND IRRIGATION SHALL CONFORM TO THE STANDARDS OF THE CITY-WIDE LANDSCAPE REGULATIONS AND THE CITY OF SAN DIEGO LAND DEVELOPMENT MANUAL LANDSCAPE STANDARDS AND ALL OTHER LANDSCAPE RELATED CITY AND REGIONAL STANDARDS.
- ALL REQUIRED LANDSCAPE AREAS SHALL BE MAINTAINED BY THE PROJECT OWNER. LANDSCAPE AND IRRIGATION AREAS IN THE PUBLIC RIGHT-OF-WAY SHALL BE MAINTAINED BY THE PROJECT OWNER.



HYDRO ZONE WATER USE SCHEMATIC PLAN

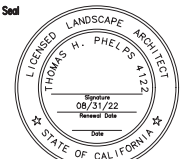
SCALE: 1"=20'



ALVARADO CREEK APARTMENTS  
PACIFIC WEST COMMUNITIES  
MISSION GORGE ROAD  
SAN DIEGO, CALIFORNIA

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Sheet Title  
HYDRO ZONE PLAN



No.	Date	Revision
1	10.21.21	
2	10.21.21	
3	10.21.21	
4	10.21.21	
5	10.21.21	
6	10.21.21	
7	10.21.21	
8	10.21.21	
9	10.21.21	
10	10.21.21	

Project Mgr.: THP  
Drawn By: THP  
Scale: 1" = 20'  
Date: 10.21.21  
File Name: 19-045 of 1 sheets





City of San Diego  
Development Services  
1222 First Ave., MS-501  
San Diego, CA 92101

LANDSCAPE CALCULATIONS  
Worksheet

Multiple Dwelling Unit Residential &  
Residential Components of Mixed-Use Development

FORM  
DS-6

August 2020

Provide the following information on the Landscape Plans. The Landscape Calculations determine the planting area and plant points required by the Landscape Regulations, Chapter 14, Article 2, Division 4 of the Land Development Code. Refer to §142.0403 Table 142-04B for proposed and existing plant point schedule.

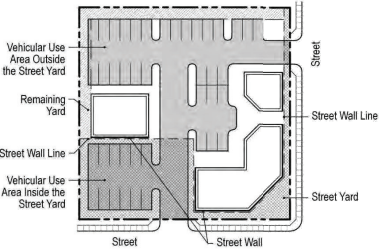
- At least one-half of the required planting points shall be achieved with trees.
- If any of the requirements of Landscape Regulations, Section 142.0405(a) 1, 2, and 3 apply to your project, provide a written summary explaining how requirements are being met.

**STREET YARD [§142.0404 - §142.0405] - All Multiple Dwelling Unit Residential Development**

- Planting area in the *public right-of-way* is not counted towards fulfillment of the required *street yard* planting area.

Planting Area Required	Planting Area Provided	Excess Area Provided
Total Area $_{(a)} 2450$ sq. ft. x 50% = $_{(b)} 1225$ sq. ft.	$_{(c)} 2450$ sq. ft.	$_{(d-e)} 1225$ sq. ft.
Plant Points Required	Plant Points Provided	Excess Points Provided
Total Area $_{(a)} 2450$ sq. ft. x 0.05 = $_{(b)} 122.5$ points	$_{(c)} 643$ points	$_{(d-e)} 520.5$ points
Plant Points Achieved with Trees (50%)		$_{(f)} 450$ points

ADDITIONAL YARD PLANTING AND PLANT POINT REQUIREMENTS - IF APPLICABLE		
Planting Area Reduction [§142.0405(a)(3)]	Minimum Planting Area with Allowed Reduction	Excess Points Required
Planting Area Required $_{(a)} \dots$ sq. ft. x 25% = $_{(b)} \dots$ sq. ft.	$_{(c-d)} \dots$ sq. ft.	$_{(e)} \dots$ points
Planting Area allowable as Hardscape [§142.0405(b)(1)(A)]		Hardscape Provided
Planting Area Required $_{(a)} \dots$ sq. ft. x 10% = $_{(b)} \dots$ sq. ft.	$_{(c)} \dots$ sq. ft.	



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DS-6 (08-20)

**REMAINING YARD [§142.0404 - §142.0405] - 4 Dwelling Units or Less**  
A minimum of 60 points per residential *structure*. Planting shall be distributed within a 10-foot offset from the *structural envelope* or within the *remaining yard*.

Plant Points Required	Plant Points Provided	Excess Points Provided
60 points x $_{(a)} \dots$ # of residential <i>structures</i>	$_{(b)} \dots$ sq. ft.	$_{(c)} \dots$ sq. ft.
Plant Points Achieved with Trees (50%)		$_{(d)} \dots$ points

**REMAINING YARD [§142.0404 - §142.0405] - 5 Dwelling Units or More**

Option 1:  
A minimum of 30 percent of the total area within a 10-foot offset from the *structural envelope* of each residential *structure* shall be planting area and shall be planted at a rate of 0.05 points per square foot of total area within the offset.

Planting Area Required	Planting Area Provided	Excess Area Provided
Total Area $_{(a)} 9,656$ sq. ft. x 30% = $_{(b)} 2,897$ sq. ft.	$_{(c)} 13,632$ sq. ft.	$_{(d-e)} 6,735$ sq. ft.
Plant Points Required	Plant Points Provided	Excess Points Provided
Total Area $_{(a)} 9,656$ sq. ft. x 0.05 = $_{(b)} 483$ sq. ft.	$_{(c)} 1,160$ points	$_{(d-e)} 677$ points
Plant Points Achieved with Trees (50%)		$_{(f)} 650$ points

Option 2: **COURTYARD ONE & COURTYARD TWO COMBINED**

Where common open space areas are provided in the form of plazas, paseos, or courtyard (including decks), 20 percent of the total common open space area shall be planting area and shall be planted at a rate of 0.05 points per square foot of the total area. The required 20 percent of each open space area is to be calculated individually.

Planting Area Required	Planting Area Provided	Excess Area Provided
Total Area $_{(a)} 13,632$ sq. ft. x 20% = $_{(b)} 2,727$ sq. ft.	$_{(c)} 13,632$ sq. ft.	$_{(d-e)} 10,905$ sq. ft.
Plant Points Required	Plant Points Provided	Excess Points Provided
Total Area $_{(a)} 13,632$ sq. ft. x 0.05 = $_{(b)} 682$ sq. ft.	$_{(c)} 1,016$ points	$_{(d-e)} 384$ points
Plant Points Achieved with Trees (50%)		$_{(f)} 350$ points

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DS-6 (08-20)

PLANT TYPE	PLANT SIZE	PLANT POINTS ACHIEVED		
		PER PLANT	QUANTITY	TOTAL
PROPOSED SHRUB	1-GALLON	1.0	1251	1251
	5-GALLON	2.0	66	132
PROPOSED TREE	15-GALLON	10.0	20	200
	5- GALLON	5.0	0	0
	15-GALLON	10.0	0	0
	24-INCH BOX	20.0	29	580
	36-INCH BOX	50.0	22	1100
	48-INCH BOX	100.0	0	0
				3263

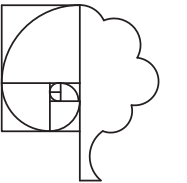
COURTYARD ONE, OPTION 2		6,387 SF		
		<u>PLANT POINTS ACHIEVED</u>		
<u>PLANT TYPE</u>	<u>PLANT SIZE</u>	<u>PER PLANT</u>	<u>QUANTITY</u>	<u>TOTAL</u>
PROPOSED SHRUB	1-GALLON	1.0	224	224
	5-GALLON	2.0	0	0
	15-GALLON	10.0	0	0
PROPOSED TREE	5- GALLON	5.0	0	0
	15-GALLON	10.0	0	0
	24-INCH BOX	20.0	8	160
	36-INCH BOX	50.0	0	0
	48-INCH BOX	100.0	0	0
				384

COURTYARD TWO, OPTION 2		6,975 SF		
		<u>PLANT POINTS ACHIEVED</u>		
<u>PLANT TYPE</u>	<u>PLANT SIZE</u>	<u>PER PLANT</u>	<u>QUANTITY</u>	<u>TOTAL</u>
<b>PROPOSED SHRUB</b>	1-GALLON	1.0	332	332
	5-GALLON	2.0	0	0
	15-GALLON	10.0	0	0
<b>PROPOSED TREE</b>	5- GALLON	5.0	0	0
	15-GALLON	10.0	0	0
	24-INCH BOX	20.0	10	200
	36-INCH BOX	50.0	2	100
	48-INCH BOX	100.0	0	0

STREET YARD		1,016 SF		
		<u>PLANT POINTS ACHIEVED</u>		
<u>PLANT TYPE</u>	<u>PLANT SIZE</u>	<u>PER PLANT</u>	<u>QUANTITY</u>	<u>TOTAL</u>
PROPOSED SHRUB	1-GALLON	1.0	111	111
	5-GALLON	2.0	26	52
	15-GALLON	10.0	3	30
PROPOSED TREE	5- GALLON	5.0	0	0
	15-GALLON	10.0	0	0
	24-INCH BOX	20.0	0	0
	36-INCH BOX	50.0	9	450
	48-INCH BOX	100.0	0	0

REMAINING YARD		9,656 SF		
		PLANT POINTS ACHIEVED		
PLANT TYPE	PLANT SIZE	PER PLANT	QUANTITY	TOTAL
PROPOSED SHRUB	1-GALLON	1.0	406	406
	5-GALLON	2.0	52	104
	15-GALLON	10.0	0	0
PROPOSED TREE	5- GALLON	5.0	0	0
	15-GALLON	10.0	0	0
	24-INCH BOX	20.0	0	0
	36-INCH BOX	50.0	13	650
	48-INCH BOX	100.0	0	0
				1160

TOTAL LANDSCAPE AREA 10672 SF



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ALVARADO CREEK APARTMENTS  
PACIFIC WEST COMMUNITIES  
MISSION GORGE ROAD  
SAN DIEGO, CALIFORNIA

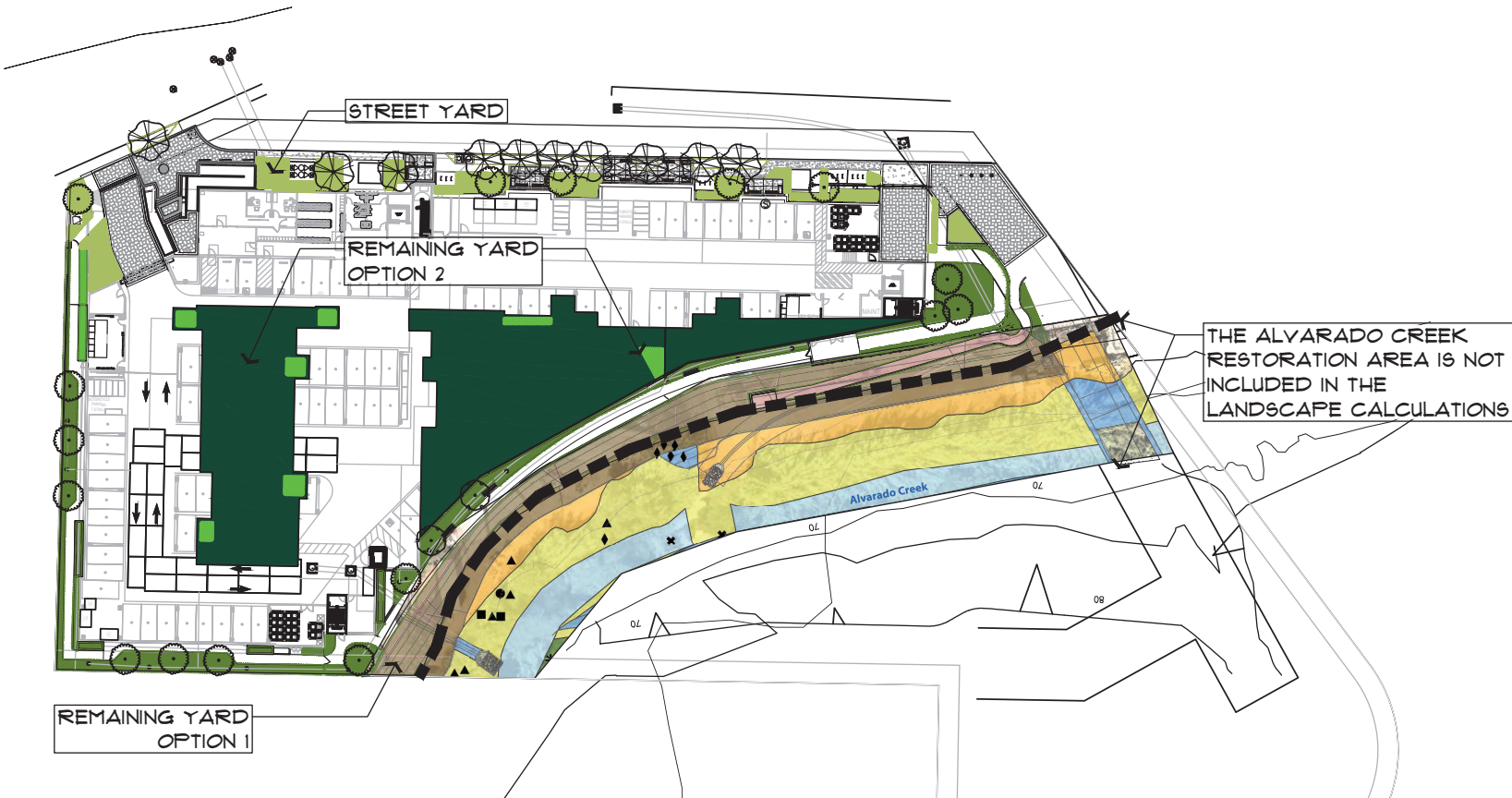
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Sheet Title  
LANDSCAPE PLAN

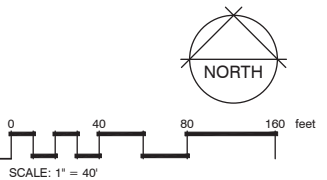


No.	Date	Revision
1		

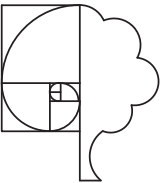
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Drawn By: THP  
Scale: 1"=20'  
Date: 04.24.2021  
File Name: 19-045 of sheets



LANDSCAPE CALCULATIONS PLAN







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ALVARADO CREEK APARTMENTS  
PACIFIC WEST COMMUNITIES  
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SAN DIEGO, CALIFORNIA



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FAX: (616) 954-0290  
www.cycle-safe.com

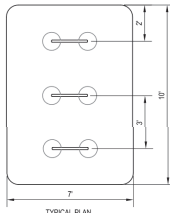
- ☐ SELECT DESIRED INSTALLATION METHOD/MODEL  
☐ U2 IN-GROUND 12750-S  
☐ U2 IN-GROUND W/ CROSS BAR 12750-S  
☐ U2 SURFACE MOUNT 12755-S  
☐ U2 SURFACE MOUNT W/ CROSS BAR 12755-S  
☐ U2 RAIL MOUNT 12756-R

- ☐ SELECT DESIRED PIPE  
☐ ROUND (SHOWN)  
☐ SQUARE

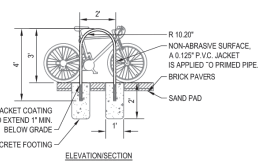
- ☐ SELECT DESIRED COLOR  
☐ BLACK (STANDARD)  
☐ CUSTOM (CONTACT MANUFACTURER)



U RACK



TYPICAL PLAN



ELEVATION/SECTION

- NOTES:  
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.  
2. DO NOT SCALE DRAWINGS.  
3. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT [www.CADdetails.com/info](http://www.CADdetails.com/info)  
REFERENCE NUMBER 655-005



TYPICAL INSTALLATION

655-005

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www.CADdetails.com



## BIKE RACK

## Granville Collection

Modern Urban Wood Benches with Curved End Frames

Materials: Mild Steel and Wood

Developed for the 2010 Winter Olympics venue of Vancouver, this special collection includes multiple styles of a bench that seemingly floats a seat section off of a curved, perforated steel chair frame in both back and backless styles. Benches are available in straight or in an "L" configuration. A matching steel chair incorporates challenging curves and defying bends that are both inviting and comfortable. The coordinating bike rack dares the user to figure out how the flat steel was manipulated to cross-over to the offset base.



Granville Bench - LSK-0100-88

- Strong 1/4" steel framework, fully welded end frame holds up to intense traffic.
- With durable Boulevard™ Thermally-Modified wood or lpe hardwood seat slats.
- Configurations to fit many locations, including standard, L benches and a chair.
- Fascinating curved end frame with distinctive style.



Successful sites start here™

## Strand Collection

Modern Urban Wood Benches with Angled End Frames

Materials: Mild Steel and Wood

With acute angles against parallel lines, this blend of steel and wood seems to float. The compelling but simple design of the Strand Bench is available with matching site furnishings, including the inviting Strand Leaning Post—a regular hang-out stop for taking a quick break while sipping your morning brew—and a modern but eclectic multifaceted Strand Bollard to complete the collection.



Strand Bench - ST-0200-72

- Strong 1/2" x 1-1/2" fully welded steel tube frame
- 1/4" and 11 gauge steel support straps with 2" x 6" steel tube support post
- Available in Boulevard™ Thermally-Modified wood. Other wood options include lpe, Douglas Fir and Red Cedar lumber
- Configurations fit many locations, with simple, angled design



Successful sites start here™



Urban Collection square, round and rectangle planters are available in sizes from 18" to 60" in many FRP fiberglass and GFRc, colors, textures and finishes. Check with your salesperson for alternative shapes or sizes.

### Rectangles

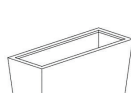
Part. No.	Material	Exterior (top)	(bottom)	(Ht)	Interior (top)	(bottom)	(Ht)	Weight (lbs.)	Soil Volume (cu.ft.)	Matching Irrigation
UR-241824	FRP	24" x 18"	20.5" x 13.5"	24"	20" x 14"	18.5" x 11.5"	23"	17	4.75	CWM-R1114-M5
UR-361824	FRP	36" x 18"	32.5" x 13.5"	24"	32" x 14"	30.5" x 11.5"	23"	33	7.3	CWM-R1114-26
UR-481824	FRP	48" x 18"	44.5" x 13.5"	24"	44" x 14"	42.5" x 11.5"	23"	49	10	CWM-R1614-26
UR-601824	FRP	60" x 18"	56.5" x 13.5"	24"	56" x 14"	54.5" x 11.5"	23"	59	12.5	CWM-R2014-26
UR-362424	FRP	36" x 24"	32" x 20"	24"	32" x 20"	32" x 20"	23.5"	35	9.9	CWM-R1614-26
UR-482424	FRP	48" x 24"	44" x 20"	24"	44" x 20"	44" x 20"	23.5"	45	13	CWM-R1614-26
UR-602424	FRP	60" x 24"	56" x 20"	24"	56" x 20"	56" x 20"	23.5"	55	16	CWM-R2014-26
UR-363030	FRP	36" x 30"	32" x 25"	30"	32" x 25"	32" x 25"	28.5"	46	15	CWM-R1620-26
UR-483030	FRP	48" x 30"	44" x 25"	30"	44" x 25"	44" x 25"	28.5"	55	20	CWM-R1620-26
UR-603030	FRP	60" x 30"	56" x 25"	30"	56" x 25"	56" x 25"	28.5"	67	25.5	CWM-R2020-26
UR-241824	GFRc	24" x 18"	20.5" x 13.5"	24"	20" x 14"	18.5" x 11.5"	23"	190	4.2	CWM-R1114-M5
UR-361824	GFRc	36" x 18"	32.5" x 13.5"	24"	32" x 14"	30.5" x 11.5"	23"	250	6.6	CWM-R1114-26
UR-481824	GFRc	48" x 18"	44.5" x 13.5"	24"	44" x 14"	42.5" x 11.5"	23"	315	9	CWM-R1614-26
UR-601824	GFRc	60" x 18"	56.5" x 13.5"	24"	56" x 14"	54.5" x 11.5"	23"	375	11	CWM-R2014-26



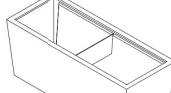
UR-2400



US-2400



UR-481824



UR-602424

4



Urban Collection Trash, Ash Bins & Recyclers complement the Urban square, round and rectangular planters and they are also available in many FRP fiberglass and GFRc, colors, textures and finishes. Check with your salesperson for alternative shapes or sizes.

### Urban Collection Trash and Ash Bins & Recyclers (For more options, see the Trash and Ash Bins & Recyclers detail sheet)

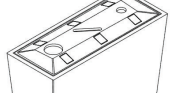
Part. No.	Material	Shape	Description
UR-TRASH-BASE	FRP	Square	22" Sq x 34.5" H FRP Trash Base unit w/LOPE Liner
UR-TRASH-BASE	GFRc	Square	22" Sq x 34.5" H GFRc Trash Base unit w/LOPE Liner
US-TRASH-BASE	FRP	Round	24" Dia x 30" H FRP Trash Base unit w/LOPE Liner
US-TRASH-BASE	GFRc	Round	24" Dia x 30" H GFRc Trash Base unit w/LOPE Liner

### Lid Options

Suffix	Material	Shape	Description
-AER	FRP	Square	FRP ash-trash lid with steel ash insert for square trash bases only
-TRF	FRP	Square	FRP trash lid for square trash bases only
-TR5	Aluminum	Round	Aluminum anodized trash lid, 9" opening for round or square trash bases
-ATR	Aluminum	Round	Aluminum anodized ash-trash lid, 9" trash opening with 2.5" concentric ash ring for round or square trash bases
-TRR	FRP	Round	FRP ash-trash lid, color to match container, 9" trash opening for round trash bases only
-AER	FRP	Round	FRP ash-trash lid with steel ash insert for round trash bases only

### Recycling Systems

Part. No.	Material	Shape	Description
UR-REC-01	FRP	Square	122" x 22" W x 33" H FRP Recycler with 1-Stream Lid
UR-REC-02	FRP	Rectangle	38" x 22" W x 33" H FRP Recycler with 2-Stream Lid
UR-REC-03	FRP	Rectangle	54" x 22" W x 33" H FRP Recycler with 3-Stream Lid



UR-REC-03



US-ATR



UR-REC-02



UR-TRF

5



2930 Faber Street, Union City, CA 94587 800-542-2282 [tournesol.com](http://tournesol.com)

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### Sheet Title

## LANDSCAPE PLAN

### Soil



### No.



### Date

### Revision

### Project Mgr.: THP

### Sheet No.:

### Drawn By: THP

### Scale:

### Date:

### 10.21.21

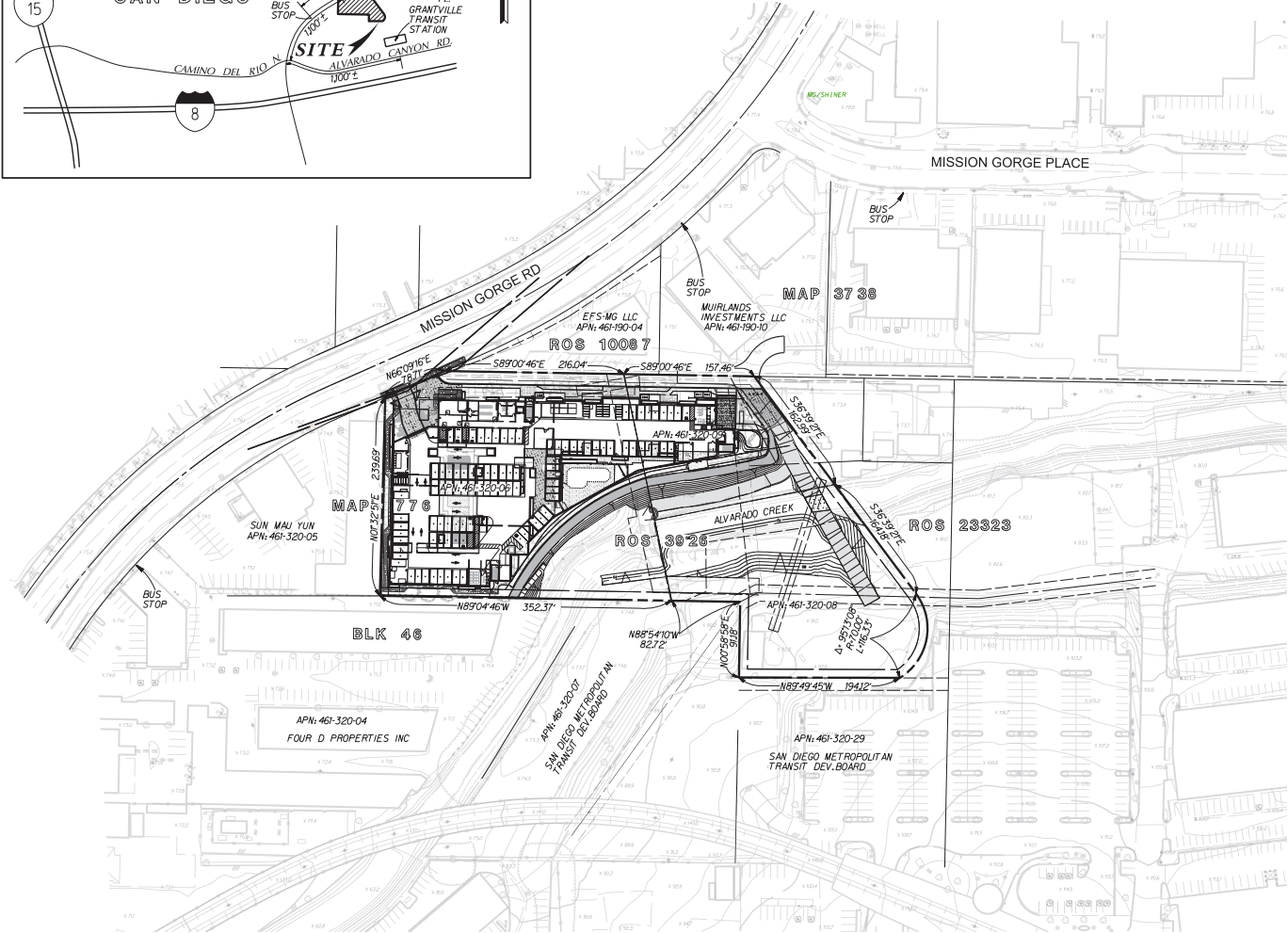
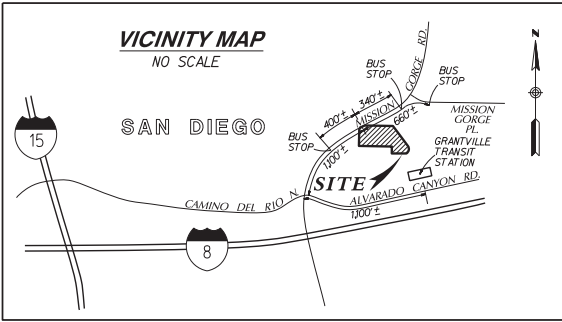
### File Name:

### 19-045

### of 1 sheets



NDP 2483075/SDP 2483073/EASEMENT VACATION 2483107  
ALVARADO CREEK APARTMENTS  
CITY OF SAN DIEGO, CALIFORNIA



KEY MAP  
NOT TO SCALE

PROJECT TEAM

OWNER/DEVELOPER/AGENT  
PACIFIC WEST COMMUNITIES  
430 E. STATE STREET, STE. 100  
EAGLE, ID. 83616  
PHONE: (208) 461-0022

CALEB ROOPE  
PRESIDENT  
PACIFIC WEST COMMUNITIES

PLANNING/CIVIL ENGINEER/LANDSCAPE ARCHITECT

RICK ENGINEERING COMPANY  
5620 FRIARS ROAD  
SAN DIEGO, CALIFORNIA, 92110  
PHONE: (619) 291-0707

ENVIRONMENTAL CONSULTANT

ASCENT ENVIRONMENTAL, INC.  
1230 COLUMBIA STREET, STE. 440  
SAN DIEGO, CA 92101

PHONE: (619) 219-8000

GEOTECHNICAL ENGINEER

KRAZAN & ASSOCIATES, INC.  
1100 OLYMPIC DRIVE, STE. 103  
CORONA, CA 92881

PHONE: (951) 273-1011

SHEET INDEX

1. LAND USE PLAN/TITLE SHEET
2. DETAILS AND SECTIONS
3. TOPOGRAPHIC AND MAPPING CONSTRAINTS MAP
4. SLOPE ANALYSIS EXHIBIT
5. SITE PLAN/EASEMENT VACATIONS
6. GRADING & DRAINAGE PLAN
7. SITE CROSS SECTIONS
8. ACCESSIBILITY PLAN
9. FIRE ACCESS PLAN
10. SITE PHOTO EXHIBIT
11. STORM TRAP DETAILS
12. TRAFFIC STRIPING EXHIBIT
13. DMA EXHIBIT
14. COVENANT OF EASEMENT BOUNDARY

ABBREVIATIONS

- |     |                                 |
|-----|---------------------------------|
| HT  | HEIGHT                          |
| FF  | FINISH FLOOR                    |
| FS  | FINISH SURFACE                  |
| FL  | FLOW LINE                       |
| IOD | IRREVOCABLE OFFER OF DEDICATION |
| IE  | INVERT ELEVATION                |
| PE  | PAD ELEVATION                   |
| PI  | POINT OF INTERSECTION           |
| PVT | PRIVATE                         |
| TG  | TOP OF GRADE                    |
| TP  | TOP OF PIPE                     |

LEGAL DESCRIPTION

THAT PORTION OF LOTS 1 AND 2 IN BLOCK 46, OF THE AMENDED MAP NO. 1 OF GRANTVILLE AND OUT LOTS, IN THE CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF NO. 776, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, FEBRUARY 16, 1894 AND BLOCK 51 OF THE AMENDED MAP NO. 1 OF GRANTVILLE AND OUT LOTS, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 776, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, FEBRUARY 16, 1984.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM ZONE 6, EPOCH 1991.35 AND IS DETERMINED BY RTK G.P.S. MEASUREMENTS TAKEN ON JULY 14, 2018 AT POINT #217 AND POINT #816, PER RECORD OF SURVEY MAP NO. 14492.

BEARING AND DISTANCE #217 TO #816: S36°12'04"W 2178.58' GRID

QUOTED BEARINGS FROM REFERENCE MAPS/DEEDS MAY OR MAY NOT BE IN TERMS OF SAID SYSTEM.

BASIS OF ELEVATIONS

THE BENCHMARK FOR THIS SURVEY IS THE BRASS PLUG ON TOP OF CONCRETE CURB AT THE SOUTHEAST CORNER OF MISSION GORGE ROAD AND MISSION GORGE PLACE, PER CITY OF SAN DIEGO VERTICAL CONTROL BOOK DATED AUGUST 1989. ELEVATION = 78.03, NGVD 29 MSL

ASSESSORS PARCEL NUMBER

461-320-06  
461-320-08  
461-320-09

TYPE OF CONSTRUCTION

S-2 PARKING STRUCTURE  
A. CLUBHOUSE/FITNESS  
B. LEASING OFFICE  
R-2 RESIDENTIAL

OCCUPANCY CLASSIFICATION

RESIDENTIAL OCCUPANCY

PROJECT SITE AREA

GROSS LOT AREA: 2.03 AC. (EXCLUDES MISSION GORGE ROAD DEDICATION)

COMMUNITY PLAN AREA

NAVAJO - GRANTVILLE

ZONING DESIGNATION

EXISTING ZONING: CC-3-9

SETBACK REQUIREMENTS

FRONT: 10'  
SIDE: 10'  
STREET SIDE: 10'  
REAR: 10'

PROPOSED USE

A 227 UNIT MULTI-FAMILY APARTMENT PROJECT CONSISTING OF 5-STORY TYPE III-A RESIDENTIAL BUILDING OVER 1-LEVEL TYPE I-A ABOVE GROUND PODIUM STRUCTURE.

EXISTING USE:

ALL EXISTING COMMERCIAL STRUCTURES LOCATED ON SITE HAVE BEEN BUILT BETWEEN THE LATE 1950S TO EARLY 1970S AND ARE TO BE DEMOLISHED IN ADVANCE OF PROPOSED DEVELOPMENT.

DEVELOPMENT SUMMARY/GENERAL NOTES

BULLET POINT NARRATIVE

A. THE PROJECT SITE IS CURRENTLY LOCATED IN THE PLANNING AREA OF THE NAVAJO-GRANTVILLE COMMUNITY PLAN. THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF A 5-STORY, 227 UNIT RESIDENTIAL APARTMENT BUILDING WITH THE FOLLOWING TABULATED INFORMATION FOR DEVELOPMENT:

UNITS	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	%	TOTAL
STUDIOS								
S1	0	10	11	11	11	11	24%	54
TOTAL	0	10	11	11	11	11	24%	54
1 BEDROOMS								
A1	0	8	8	8	8	8	18%	40
A2	0	2	3	3	3	3	6%	14
TOTAL	0	10	11	11	11	11	24%	54
2 BEDROOMS								
B1	0	11	12	12	12	12	26%	59
TOTAL	0	11	12	12	12	12	26%	59
3 BEDROOMS								
C1	0	4	4	4	4	4	9%	20
C2	0	8	8	8	8	8	18%	40
TOTAL	0	12	12	12	12	12	26%	60
GRAND TOTALS:	0 DU	43 DU	46 DU	46 DU	46 DU	46 DU	100%	227 DU

B. THE PROJECT PROPOSES A DENSITY OF APPROXIMATELY 80 DWELLINGS PER NET ACRE. THE SITE WILL INCLUDE A 5 STORY TYPE III-A 227 UNIT RESIDENTIAL APARTMENT BUILDING OVER ONE LEVEL TYPE I-A ABOVE GROUND PODIUM STRUCTURE.

C. THIS PROJECT WILL REQUIRE THE FOLLOWING PERMITS/APPROVALS:  
NEIGHBORHOOD DEVELOPMENT PERMIT; GRADING PERMIT, PUBLIC IMPROVEMENT PERMIT, PARCEL MAP, AND BUILDING DEPARTMENT PERMIT.

D. ALL PROPOSED UTILITIES WILL BE UNDERGROUNDED IN THE AREAS FOR PROPOSED GRADING, IMPROVEMENTS AND DEVELOPMENT PER SAN DIEGO MUNICIPAL CODE.

E. THE GEOLOGIC HAZARD CATEGORIES FOUND ON THIS SITE ARE FLAT AND LEVEL TERRAIN, AND IS LOCATED IN AN AREA DESIGNATED AS A LIQUEFACTION HAZARD ZONE BY THE SAN DIEGO SEISMIC HAZARD MAP. SEE GEOTECHNICAL REPORT TITLED "GEOTECHNICAL ENGINEERING INVESTIGATION, PROPOSED GRANTVILLE DEVELOPMENT" DATED NOVEMBER 27, 2019.

F. PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMIT, THE OWNER/PERMITEE SHALL INCORPORATE ANY CONSTRUCTION BEST MANAGEMENT PRACTICES NECESSARY TO COMPLY WITH CHAPTER 14, ARTICLE 2, DIVISION 1 (GRADING REGULATIONS) OF THE SAN DIEGO MUNICIPAL CODE, INTO THE CONSTRUCTION PLANS OR SPECIFICATIONS.

G. SPECIAL FLOOD HAZARD AREA ZONE AE DESIGNATION

H. THE PROJECT IS REQUESTING A DEVIATION FROM STANDARDS AS THE PROJECT IS NOT PROVIDING 45 LF OF FULL HEIGHT CURB BETWEEN DRIVEWAYS SERVING THE SAME PROPERTY AS REQUIRED PER SDMC SECTION 142.0560(I)(6).

GRADING TABULATIONS:

TOTAL AMOUNT OF SITE TO BE GRADED: 2,315 AC

% OF TOTAL SITE: 60%

AMOUNT OF CUT: 3,000 CY

MAXIMUM OF CUT: 16.9'

AMOUNT OF FILL: 16,700 CY

MAXIMUM DEPTH OF FILL: 10.3'

MAXIMUM HT. OF FILL SLOPE: 8.0'

SLOPE RATIO: 2:1

MAXIMUM HT. OF CUT SLOPES: 16.9'

SLOPE RATIO: 2:1

AMOUNT OF IMPORT SOIL: 12,700 CY

RETAINING WALLS:

\*LENGTH: 608'

\*MAXIMUM HEIGHT: 7.5'

IMPERVIOUS TABLE

A. TOTAL DISTURBANCE AREA: 2.03 AC.

B. EXISTING AMOUNT OF IMPERVIOUS AREA: 101,800 SF

C. PROPOSED AMOUNT OF IMPERVIOUS AREA: 88,800 SF

D. AMOUNT OF REPLACED IMPERVIOUS AREA: 88,800 SF

E. TOTAL IMPERVIOUS AREA: 88,800 SF

F. IMPERVIOUS % DECREASE: 13%

NOTE

IMPERVIOUS AREA SHALL INCLUDE:  
ROOF, SIDEWALK, PARKING AREA,  
WALKWAYS, POOLS, POOL DECKS, ETC.

LEGEND

ITEM	SYMBOL
PROPOSED IMPROVEMENTS *	
PROJECT BOUNDARY	---
PROPERTY LINE	---
LOT LINE/ROW	---
CENTERLINE	---
PROPOSED EASEMENT	---
CONCRETE CURB & GUTTER (PVT)	---
SIDEWALK	---
ASHPALT PAVING	---
CONCRETE	---
PAD ELEVATION	PE=487.2
FINISH FLOOR ELEVATION	FF=492.5
DIRECTION OF FLOW	1.0%
DAYLIGHT LINE/GRADING LIMIT	II
PROPOSED MAJOR CONTOUR	420
PROPOSED MINOR CONTOUR	---
2:1 SLOPE (MAX)	---
BROW DITCH	---
SWALE	---
ADA PATH OF TRAVEL	---
RETAINING WALL	---
STORM DRAIN	SD
CATCH BASIN	---
TYPE A-4 CLEAN OUT	---
CURB INLET	---
STORM DRAIN HEADWALL	---
RIPRAP	---
SEWER MANHOLE	---
SEWER	---
WATER	---
WATER METER W/BACKFLOW (PUBLIC)	---
FIRE SERVICE	---
FIRE SERVICE W/BACKFLOW	---
FIRE HYDRANT	---
STREET LIGHT	---

EXISTING CONDITIONS

EXISTING MAJOR CONTOUR	420
EXISTING MINOR CONTOUR	---
EXISTING ROAD	---
EXISTING TREE OR BUSH	---
EXISTING BUILDING OR MANMADE STRUCTURE	---
EXISTING LIGHT FIXTURE	---
EXISTING SIGN	---
EXISTING FENCE	---
EXISTING PARKING SPACES	---

NOTE:

THE PROPOSED PROJECT WILL COMPLY WITH ALL THE REQUIREMENTS OF THE CURRENT CITY OF SAN DIEGO STORM WATER STANDARDS MANUAL BEFORE A GRADING OR BUILDING PERMIT IS ISSUED. IT IS THE RESPONSIBILITY OF THE OWNER/DESIGNER/APPLICANT TO ENSURE THAT THE CURRENT STORM WATER PERMANENT BMP DESIGN STANDARDS ARE INCORPORATED INTO THE PROJECT.



ENGINEER OF WORK

KAREN S. VAN ERT  
R.C.E. No. 56991  
EXP. DATE: 9-30-2021

DATE

J-19048A

5620 FRIARS ROAD  
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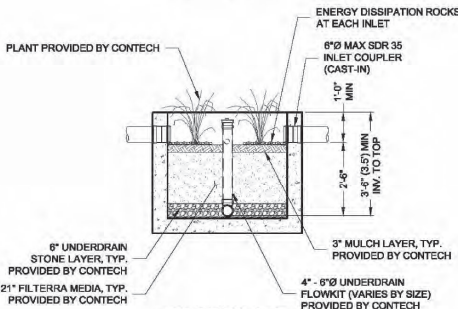
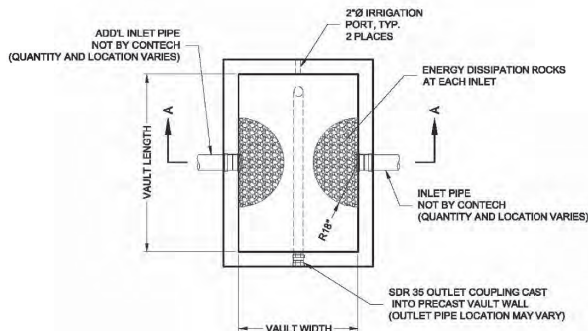
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LAMBERT COORDINATES: 222-1737 NAD83: 1862-6297	PTS: 671912 I.O.: xxxxxxxx
PREPARED BY: RICK ENGINEERING COMPANY	REVISION 1: 2/01/2021 REVISION 2: 4/29/2021 REVISION 3: 8/05/2021 REVISION 4: 9/27/2021 REVISION 5: 11/09/2021 REVISION 6: 6/01/2022 REVISION 7:
ADDRESS: 5620 FRIARS ROAD SAN DIEGO, CA 92110 (619) 291-0707	ORIGINAL DATE: 08/24/2020
PROJECT NAME: ALVARADO CREEK APTS NDP/SDP SHEET TITLE: TITLE SHEET	SHEET 1 OF 14
JOB NUMBER: 19048	





FTBSV-P CONFIGURATION					
DESIGNATION	AVAILABILITY	MEDIA BAY SIZE	VAULT SIZE (L x W)	OUTLET PIPE	MIN NO. OF INLET PIPES
FTBSV0404-P	ALL	4 x 4	4 x 4	4" SDR 35	1
FTBSV0604-P	N/A CA	6 x 4	6 x 4	4" SDR 35	1
FTBSV0606-P	ALL	6 x 6	6 x 6	4" SDR 35	1
FTBSV0604-P	CA ONLY	6.5 x 4	6.5 x 4	4" SDR 35	1
FTBSV078045-P	MID-ATL ONLY	7.83 x 4.5	7.83 x 4.5	4" SDR 35	1
FTBSV0804-P	N/A MID-ATL	8 x 4	8 x 4	4" SDR 35	1
FTBSV0806-P	ALL	8 x 6	8 x 6	4" SDR 35	1
FTBSV1006-P	ALL	10 x 6	10 x 6	6" SDR 35	2
FTBSV1206-P	ALL	12 x 6	12 x 6	6" SDR 35	2
FTBSV1307-P	ALL	13 x 7	13 x 7	6" SDR 35	2
FTBSV1408-P	CALL CONTECH	14 x 8	14 x 8	6" SDR 35	3
FTBSV1608-P	CALL CONTECH	16 x 8	16 x 8	6" SDR 35	3
FTBSV1808-P	CALL CONTECH	18 x 8	18 x 8	6" SDR 35	3
FTBSV2008-P	CALL CONTECH	20 x 8	20 x 8	6" SDR 35	4
FTBSV2208-P	CALL CONTECH	22 x 8	22 x 8	6" SDR 35	4

N/A = NOT AVAILABLE

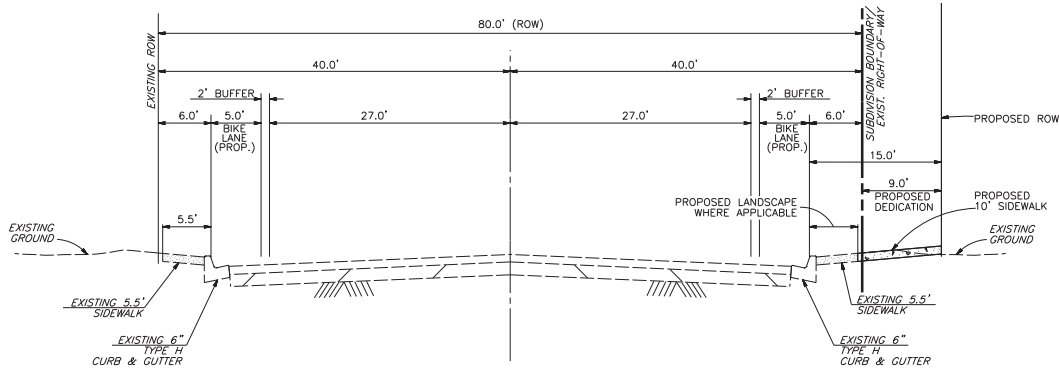
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BMP-5A THRU BMP-10C  
BMP-12A THRU BMP-13  
BMP-15  
BMP-17



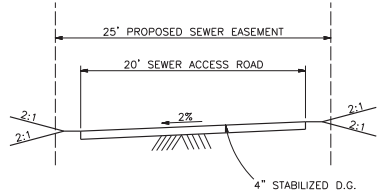
**CONTECH**  
ENGINEERED SOLUTIONS LLC  
www.contechES.com  
8025 Centre Pointe Dr., Suite 400, West Chester, OH 45069  
800-338-1122 613-645-7000 613-645-7993 FAX

**FILTRERA BIOSCAPE VAULT OFFLINE WITH PIPE INLET (FTBSV-P) CONFIGURATION DETAIL**

INTERNAL PIPE CONFIGURATION MAY VARY  
DEPENDING UPON OUTLET LOCATION.



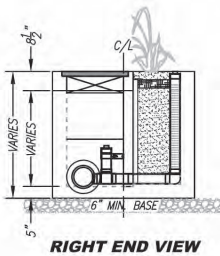
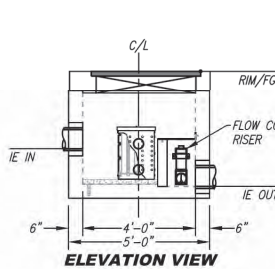
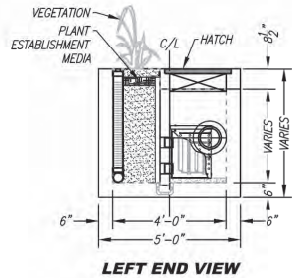
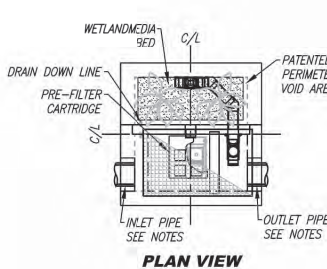
PUBLIC STREET - MISSION GORGE ROAD  
STREET CLASSIFICATION: 4-LANE MAJOR  
NOT TO SCALE



SEWER ACCESS ROAD  
NOT TO SCALE

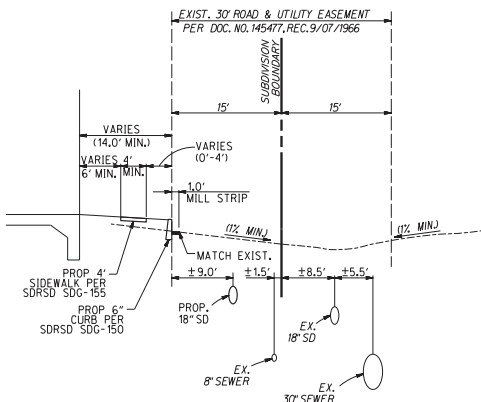
SITE SPECIFIC DATA			
PROJECT NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
N/A		0.052	
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE		OFFLINE	
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PEDESTRIAN		
FRAME & COVER	24" X 42"	OPEN PLANTER	N/A
NOTES:			

\* PRELIMINARY NOT FOR CONSTRUCTION



BMP-1	
TREATMENT FLOW (CFS)	0.052
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	1.0
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

**MWS-L-4-4-V**  
STORMWATER BIOFILTRATION SYSTEM  
STANDARD DETAIL



PRIVATE ROAD & ACCESS EASEMENT  
NOT TO SCALE



LAMBERT COORDINATES: 222-1737 NAD83: 1862-6297	PTS: 671912 I.O.: xxxxxxxx
PREPARED BY: RICK ENGINEERING COMPANY	REVISION 1: 2/01/2021 REVISION 2: 4/29/2021 REVISION 3: 8/05/2021 REVISION 4: 9/27/2021 REVISION 5: 11/09/2021 REVISION 6: 6/01/2022 REVISION 7:
ADDRESS: 5620 FRIARS ROAD SAN DIEGO, CA 92110 (619) 291-0707	ORIGINAL DATE: 08/24/2020
PROJECT NAME: ALVARADO CREEK APTS NDP/SDP SHEET TITLE: DETAILS AND SECTIONS	SHEET 2 OF 14 JOB NUMBER: 19048



ENGINEER OF WORK

KAREN S. VAN ERT  
R.C.E. No. 56991  
EXP. DATE: 9-30-2021

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GENERAL NOTES

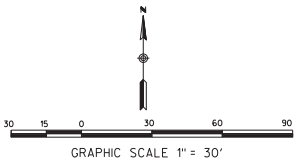
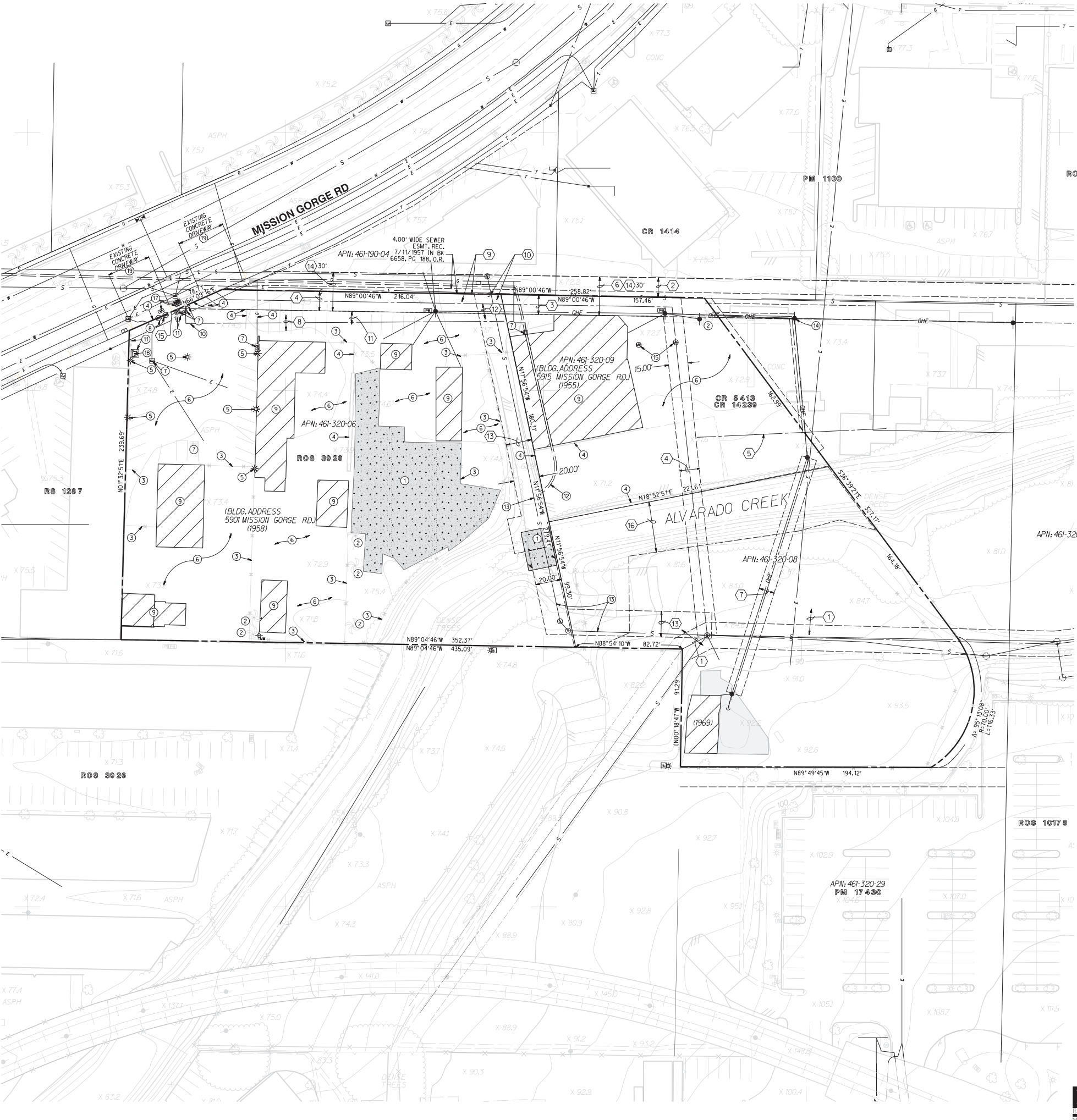
1. TOPOGRAPHIC SOURCE: RICK ENGINEERING COMPANY DATED: 07-14-2016  
2. EXISTING CONTOURS ARE SHOWN AT 2' INTERVALS

EXISTING EASEMENTS

1	04-11-1950	BK 3575, PG 213	CITY OF SAN DIEGO SEWER ESMT.
2	06-05-1950	DOC. 62001	ROAD & PUBLIC UTILITY ESMT SOUTHERN TITLE & TRUST CO.
3	06-05-1950	BK 3646, PG 81	ROAD & PUBLIC UTILITY ESMT SOUTHERN TITLE & TRUST CO.
4	06-04-1951	BK 4122, PG 18	PRIVATE SEWER EASEMENT
5	06-20-1952	BK 4501, PG 575	SDG&E EASEMENT
6	01-07-1954	BK 5104, PG 550	ROAD & PUBLIC UTILITIES ESMT.
7	07-13-1955	BK 5713, PG 534	SDG&E EASEMENT
8	06-19-1956	BK 6146, PG 137	SDG&E EASEMENT
9	02-20-1957	BK 6464, PG 517	SDG&E EASEMENT
10	07-11-1957	BK 6658, PG 188	CITY OF SAN DIEGO SEWER ESMT.
11	04-14-1958	BK 7036, PG 200	WATER LINE EASEMENT
12	06-25-1958	BK 7138, PG 442	SDG&E EASEMENT
13	09-18-1962	1962-160879	CITY OF SAN DIEGO SEWER AND STORM DRAIN EASEMENT
14	09-07-1966	NO. 145477	ROAD & PUBLIC UTILITIES ESMT.
15	09-30-1981	81-311098	PACIFIC TELEPHONE & TELEGRAPH EASEMENT
16	10-02-1990	1990-537872	CITY OF SAN DIEGO NATURAL FLOWAGE OF WATERS

CONSTRUCTION NOTES

- 1 EXISTING CONCRETE TO BE REMOVED  
2 EXISTING TREES TO BE REMOVED  
3 EXISTING FENCE TO BE REMOVED  
4 EXISTING RETAINING WALL TO BE REMOVED  
5 EXISTING LIGHTING TO BE REMOVED  
6 EXISTING ASPHALT TO BE REMOVED  
7 EXISTING DRY UTILITIES TO BE REMOVED  
8 EXISTING BACKFLOW PREVENTORS TO BE REMOVED  
9 EXISTING BUILDING TO BE REMOVED  
10 EXISTING STORE FRONT SIGNAGE TO BE REMOVED  
11 EXISTING BOLLARDS TO BE REMOVED  
12 EXISTING 18" STORM DRAIN TO BE RE-ROUTED, PROTECT IN PLACE UNTIL REALIGNMENT IS COMPLETE. EXIST. STORM DRAIN TO BE ABANDONED IN PLACE OR REMOVED IN ACCORDANCE WITH CITY STANDARDS.  
13 EXISTING 30" SEWER TO BE ABANDONED IN PLACE IN ACCORDANCE WITH CITY STANDARDS. PROTECT IN PLACE UNTIL REALIGNMENT IS COMPLETE. SEE SHEET 5 FOR PROPOSED SEWER.  
14 EXISTING POWER POLE TO BE PROTECTED IN PLACE  
15 UNKNOWN UNDERGROUND UTILITY. CONTRACTOR TO VERIFY USAGE PRIOR TO REMOVAL  
16 EXISTING OVERHEAD POWER LINES TO BE PROTECTED IN PLACE  
17 EXISTING WATER METERS TO BE REMOVED. LATERALS TO BE KILLED AT MAIN DURING FINAL CONSTRUCTION IN ACCORDANCE WITH CITY STANDARDS.  
18 EXISTING TRANSFORMER TO REMAIN, PROTECT IN PLACE  
19 EXISTING CONCRETE DRIVEWAY TO BE REMOVED AND REPLACED. SEE SHEET 6 FOR PROPOSED DRIVEWAY.



ENGINEER OF WORK

KAREN S. VAN ERT  
R.C.E. No. 55891  
EXP. DATE: 9-30-2021

DATE  
J-19048A

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LEGEND:

SUBDIVISION BOUNDARY  
0.00% - 25% SLOPE AREAS  
25% AND GREATER SLOPE AREAS

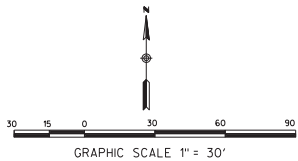
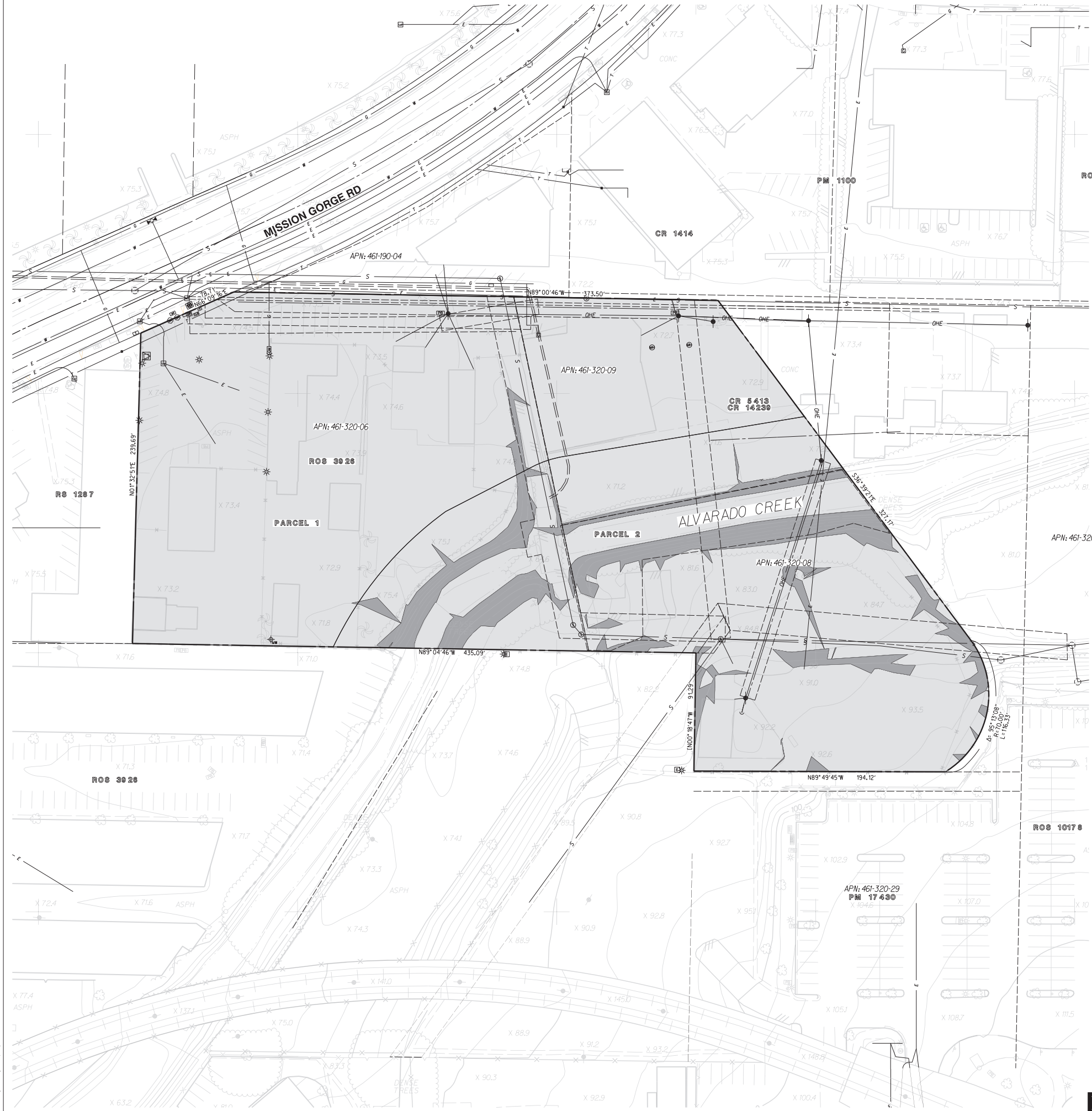


PARCEL 1 (SEE SHT. 5)

SLOPES 0-25%: 2.01 AC. (99.5%)  
SLOPES 25% AND GREATER: 0.009 AC. (0.05%)  
TOTAL: 2.02 AC.

PARCEL 2 (SEE SHT. 5)

SUBDIVISION BOUNDARY  
SLOPES 0 - 25%: 1.54 AC. (83.0%)  
SLOPES 25% AND GREATER: 0.31AC. (17.0%)  
TOTAL: 1.85 AC.



ENGINEER OF WORK

KAREN S. VAN ERT  
R.C.E. No. 56991  
EXP. DATE: 9-30-2021

J-19048A

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LAMBERT COORDINATES: 222-1737 NAD83: 1862-6297	PTS: 671912 I.O.: xxxxxxxx
PREPARED BY: RICK ENGINEERING COMPANY	REVISION 1: 2/01/2021 REVISION 2: 4/29/2021 REVISION 3: 8/05/2021 REVISION 4: 9/27/2021 REVISION 5: 11/09/2021 REVISION 6: 6/01/2022 REVISION 7:
ADDRESS: 5620 FRIARS ROAD SAN DIEGO, CA 92110 (619) 291-0707	ORIGINAL DATE: 08/24/2020
PROJECT NAME: ALVARADO CREEK APTS NDP/SDP SHEET TITLE: SLOPE ANALYSIS EXHIBIT SHEET	SHEET 4 OF 14



CONSTRUCTION NOTES

- 1) PROPOSED 6" CURB & GUTTER PER SDRS SDG-150
- 2) PROPOSED SIGHT VISIBILITY TRIANGLES
- 3) PROPOSED SIDEWALK PER SDRS SDG-155
- 4) PROPOSED CONCRETE DRIVEWAY PER SDRS SDG-159
- 5) PROPOSED RETAINING WALL PER SDRS C-03
- 6) PROPOSED RETAINING WALL PER SDRS C-02
- 7) PROPOSED FENCING, SEE LANDSCAPE PLANS
- 8) PROPOSED LANDSCAPING, SEE LANDSCAPE PLANS
- 9) PROPOSED FILTERRA BIOSCAPE W/O PLANTER, SEE DETAIL, SHEET 2
- 10) PROPOSED SEWER MANHOLE PER SDRS SDS-106
- 11) PROPOSED STORM TRAP DETENTION VAULT, SEE SHT. 10 FOR DETAILS
- 12) PROVIDE BUILDING ADDRESS NUMBERS, VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY PER FHPS POLICY P-00-6 (IUC 901.4.4)
- 13) PROPOSED 15' PUBLIC STORM DRAIN EASEMENT
- 14) PROPOSED 35' PUBLIC SEWER EASEMENT
- 15) EXISTING ROAD & PUBLIC UTILITY EASEMENT
- 16) PROPOSED 15' RIGHT-OF-WAY
- 17) PROPOSED FIRE HYDRANT PER SDRS SDW-104
- 18) PROPOSED MODULAR WETLAND SYSTEM (MWS-L-4-4)
- 19) EXISTING TRANSFORMER TO REMAIN, PROTECT IN PLACE
- 20) PROPOSED 10' MULTI-USE TRAIL
- 21) PROPOSED TRANSFORMER
- 22) PROPOSED DUAL 4" METER ASSEMBLY PER SDRS SDW-157
- 23) PROPOSED 30" CONCRETE DRIVEWAY PER SDRS SDG-162
- 24) PROPOSED LOCATION OF ROOF DRAINAGE DISCHARGE POINT
- 25) PROPOSED PRIVATE BACKFLOW DEVICE
- 26) PROPOSED PRIVATE SEWER LATERAL (EMRA REQUIRED)
- 27) PROPOSED PUBLIC ACCESS PATH TO TRAIL
- 28) PROPOSED MOVE-IN TRASH STAGING AREA, DIMENSIONS (L/W/H) 36'/24'/17'
- 29) PROPOSED TEE CUT-IN & ISOLATION VALVES TO BE INSTALLED AT TIME OF CONNECTION, SEE WATER CONNECTION DETAIL, THIS SHEET
- 30) PROPOSED PVT. ROLLING GATE IS TO ALLOW ACCESS TO MOVE-IN TRUCKS, GARBAGE TRUCKS, AND CITY OF SAN DIEGO MAINTENANCE VEHICLE ACCESS TO THE PROPOSED STORM DRAIN EASEMENT.
- 31) PROPOSED CONCRETE AT CREEK CROSSING WITH CUT-OFF WALLS SEE SECTION B-B, SHT. 7
- 32) 15' DG ACCESS PATH FOR PUBLIC STORM DRAIN MAINTENANCE (CITY FORCES)

LEGEND

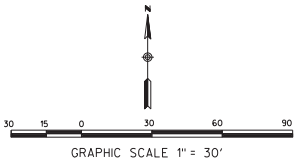
ITEM	SYMBOL
SIDEWALK	-----
4' STABILIZED D.G./SEWER ACCESS ROAD (PVT.)	-----
CONCRETE	-----

EASEMENT VACATION NOTES

- 1) EXIST. STORM DRAIN & SEWER EASEMENT TO CITY OF SAN DIEGO TO BE VACATED
- 2) EXIST. SEWER EASEMENT TO CITY OF SAN DIEGO TO BE VACATED
- 3) EXIST. SDG&E EASEMENT TO BE VACATED
- 4) EXIST. PVT. SEWER EASEMENT TO BE OBTAINED

NOTES

1. NO OBSTRUCTION INCLUDING SOLID WALLS IN THE VISIBILITY AREA SHALL EXCEED 3 FEET IN HEIGHT, PLANT MATERIAL, OTHER THAN TREES, WITHIN THE PUBLIC RIGHT-OF-WAY THAT IS LOCATED WITHIN VISIBILITY AREA SHALL NOT EXCEED 24 INCHES, MEASURED FROM THE TOP OF ADJACENT CURB.
2. THOSE PORTIONS OF EXISTING IMPROVEMENTS, I.E. CURB, GUTTER AND SIDEWALK PANELS, THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND WITH CURRENT CITY STANDARDS.
3. NON-UTILIZED PORTIONS OF EXISTING DRIVEWAYS SHALL BE REPLACED WITH CURB, GUTTER & SIDEWALK PER CURRENT CITY STANDARDS.
4. NO EXISTING OR PROPOSED PERMANENT STRUCTURES ARE ALLOWED WITHIN CITY EASEMENTS. ANY SUCH ENCROACHMENTS WOULD NEED CITY APPROVAL AND WOULD NEED TO BE SHOWN ON A RECORDED ENCROACHMENT MAINTENANCE AND REMOVAL AGREEMENT (EMRA) WITH THE CITY.
5. EXISTING WATER SERVICES NO LONGER SERVING PROJECT SITE ARE TO BE KILLED AT THE MAIN.
6. EXISTING SEWER SERVICES NO LONGER SERVING PROJECT SITE ARE TO BE ABANDONED AT THE PROPERTY LINE.
7. IF A 3" OR LARGER WATER METER IS REQUIRED FOR THIS PROJECT, THE OWNER/PERMITEE SHALL CONSTRUCT THE NEW METER AND PRIVATE BACKFLOW DEVICE ON SITE ABOVE GROUND, WITHIN AN ADEQUATELY SIZED WATER EASEMENT, AND IN A MANNER SATISFACTORY TO THE PUBLIC UTILITIES DIRECTOR AND THE CITY ENGINEER.
8. PROPOSED LATERALS CROSSING SEWER MAINS WILL MAINTAIN A MINIMUM OF 12" VERTICAL CLEARANCE SEPARATION
9. ENCROACHMENT MAINTENANCE AND REMOVAL AGREEMENT (EMRA) REQUIRED WHEREVER PRIVATE IMPROVEMENTS ARE PLACED WITHIN PUBLIC EASEMENTS AND/OR RIGHT-OF-WAY



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LAMBERT COORDINATES: 222-1737  
NAD83: 1862-6297

PREPARED BY:  
RICK ENGINEERING COMPANY  
ADDRESS:  
5620 FRIARS ROAD  
SAN DIEGO, CA 92110  
(619) 291-0707

PROJECT NAME:  
ALVARADO CREEK APTS  
NDP/SDP  
SHEET TITLE:  
SITE PLAN

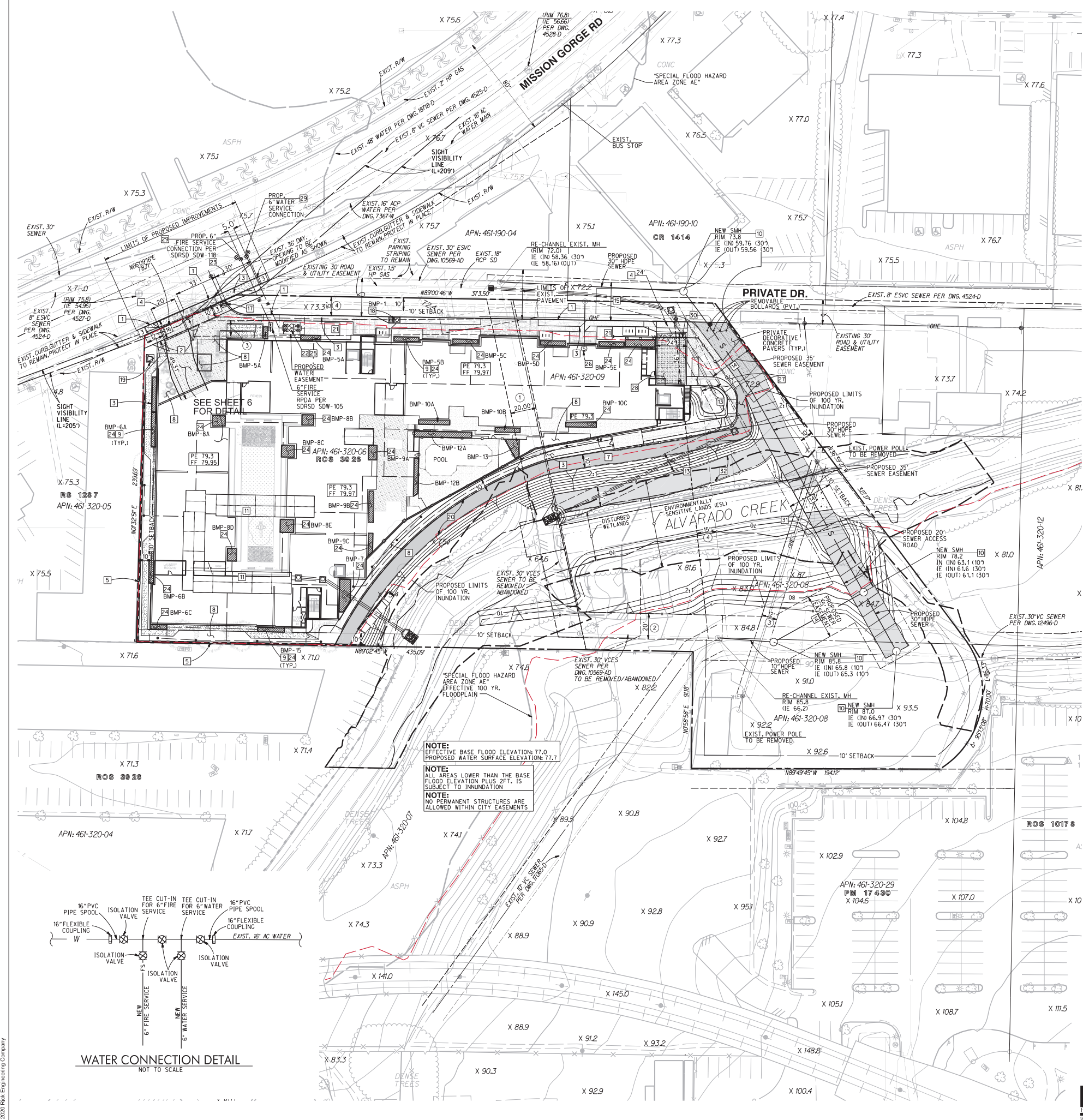
PTS: 671912  
I.O.: xxxxxxxx

REVISION 1: 2/01/2021  
REVISION 2: 4/29/2021  
REVISION 3: 8/05/2021  
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REVISION 5: 11/09/2021  
REVISION 6: 6/01/2022  
REVISION 7:

ORIGINAL DATE: 08/24/2020

SHEET 5 OF 14

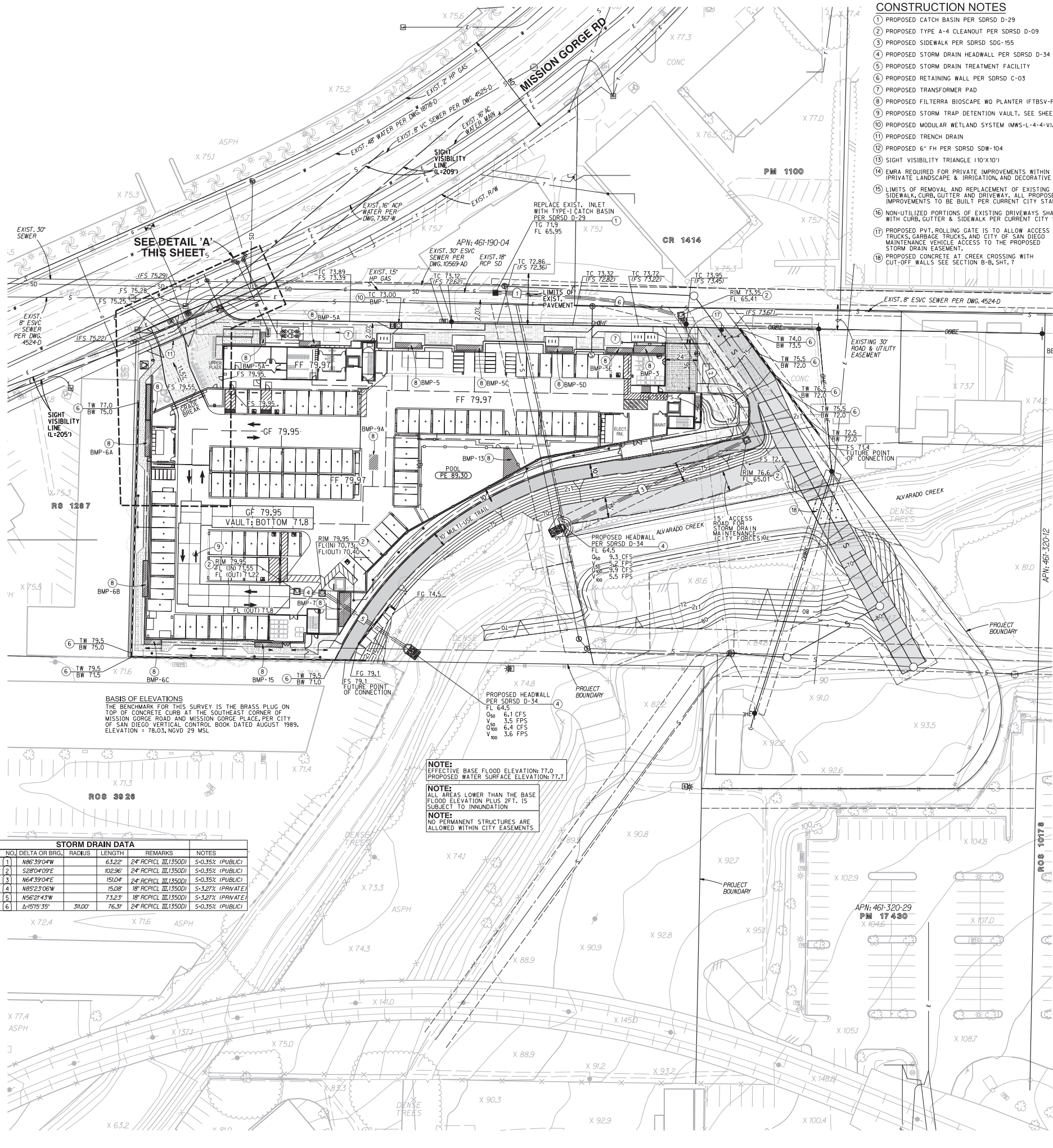
JOB NUMBER: 19048





CONSTRUCTION NOTES

- 1) PROPOSED CATCH BASIN PER SDRSD D-29
- 2) PROPOSED TYPE A-4 CLEANOUT PER SDRSD D-09
- 3) PROPOSED SIDEWALK PER SDRSD SDG-155
- 4) PROPOSED STORM DRAIN HEADWALL PER SDRSD D-34
- 5) PROPOSED STORM DRAIN TREATMENT FACILITY
- 6) PROPOSED RETAINING WALL PER SDRSD C-03
- 7) PROPOSED TRANSFORMER PAD
- 8) PROPOSED FILTERRA BIOSCAPE WO PLANTER (FTBSV-PI, SEE DETAIL, SHEET 2.
- 9) PROPOSED STORM TRAP DETENTION VAULT, SEE SHEET 11 FOR DETAILS.
- 10) PROPOSED MODULAR WETLAND SYSTEM (MWS-L-4-4-V), SEE SHEET 2 FOR DETAILS.
- 11) PROPOSED TRENCH DRAIN
- 12) PROPOSED 6" FH PER SDRSD SDW-104
- 13) SIGHT VISIBILITY TRIANGLE (10'X10')
- 14) EMRA REQUIRED FOR PRIVATE IMPROVEMENTS WITHIN PUBLIC R.O.W. PRIVATE LANDSCAPE & IRRIGATION, AND DECORATIVE PAVERS)
- 15) LIMITS OF REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK, CURB, GUTTER AND DRIVEWAY, ALL PROPOSED IMPROVEMENTS TO BE BUILT PER CURRENT CITY STANDARDS.
- 16) NON-UTILIZED PORTIONS OF EXISTING DRIVEWAYS SHALL BE REPLACED WITH CURB, GUTTER & SIDEWALK PER CURRENT CITY STANDARDS.
- 17) PROPOSED PVT. ROLLING GATE IS TO ALLOW ACCESS TO MOVE-IN TRUCKS, GARBAGE TRUCKS, AND CITY OF SAN DIEGO MAINTENANCE VEHICLE ACCESS TO THE PROPOSED STORM DRAIN EASEMENT.
- 18) PROPOSED CONCRETE AT CREEK CROSSING WITH CUT-OFF WALLS SEE SECTION B-B, SHT. 7



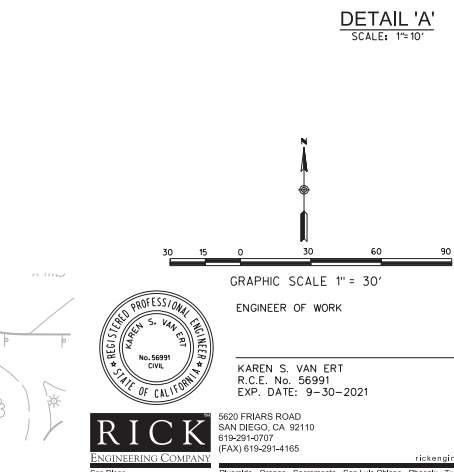
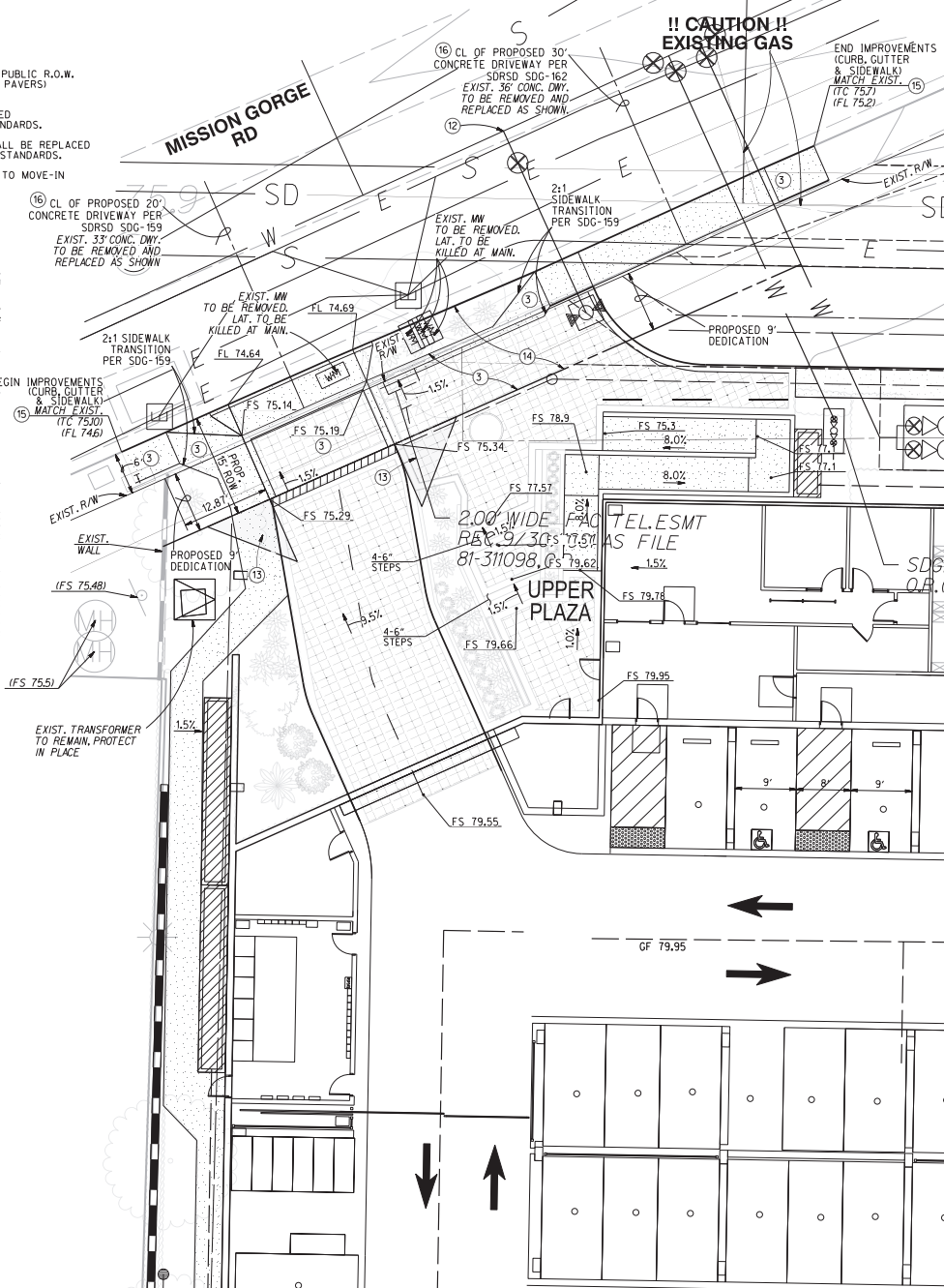
**BASIS OF ELEVATIONS**  
THE BENCHMARK FOR THIS SURVEY IS THE BRASS PLUG ON TOP OF CONCRETE CURB AT THE SOUTHEAST CORNER OF MISSION GORGE ROAD AND MISSION GORGE PLACE, PER CITY OF SAN DIEGO VERTICAL CONTROL BOOK DATED AUGUST 1989. ELEVATION = 78.03, NGVD 29 MSL

STORM DRAIN DATA				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N86°39'04"W	63.22'	24' RCPCIL III (1500)	S-0.35% (PUBLIC)
2	S28°04'09"E	102.96'	24' RCPCIL III (1500)	S-0.35% (PUBLIC)
3	N64°39'04"E	151.04'	24' RCPCIL III (1500)	S-0.35% (PUBLIC)
4	N85°23'06"W	15.08'	18' RCPCIL III (1500)	S-3.27% (PRIVATE)
5	N56°21'43"W	73.23'	18' RCPCIL III (1500)	S-3.27% (PRIVATE)
6	Δ157°35"	31.00'	24' RCPCIL III (1500)	S-0.35% (PUBLIC)

**NOTE:** EFFECTIVE BASE FLOOD ELEVATION: 77.0  
PROPOSED WATER SURFACE ELEVATION: 77.7

**NOTE:** ALL AREAS LOWER THAN THE BASE FLOOD ELEVATION PLUS 2 FT. IS SUBJECT TO INUNDATION

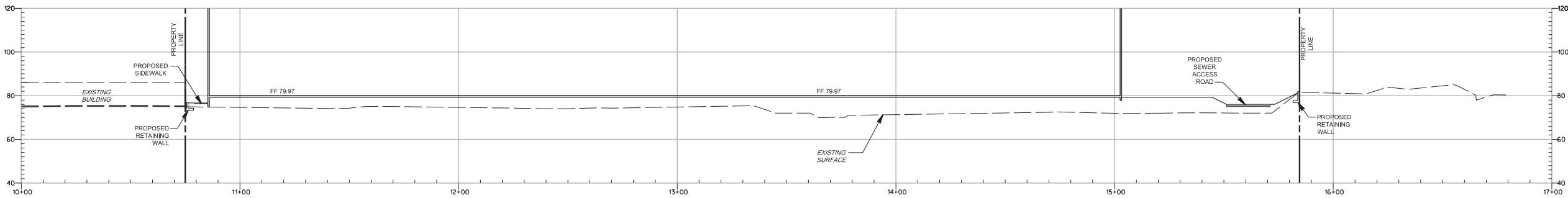
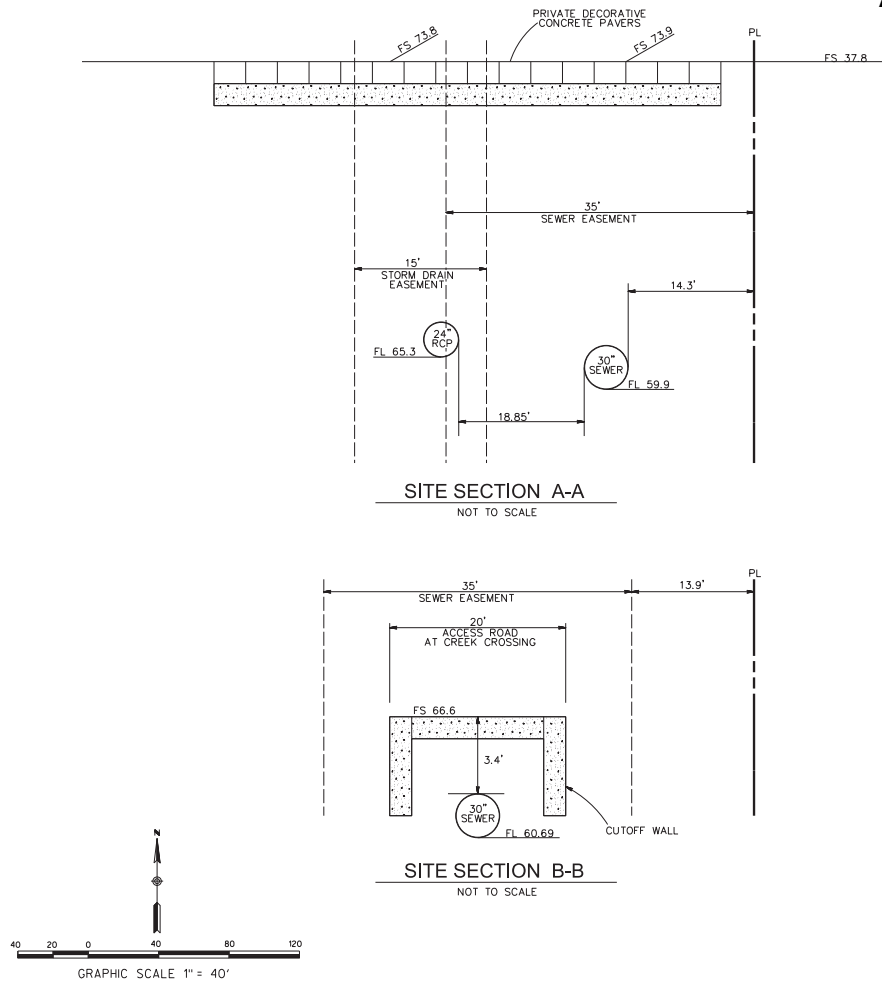
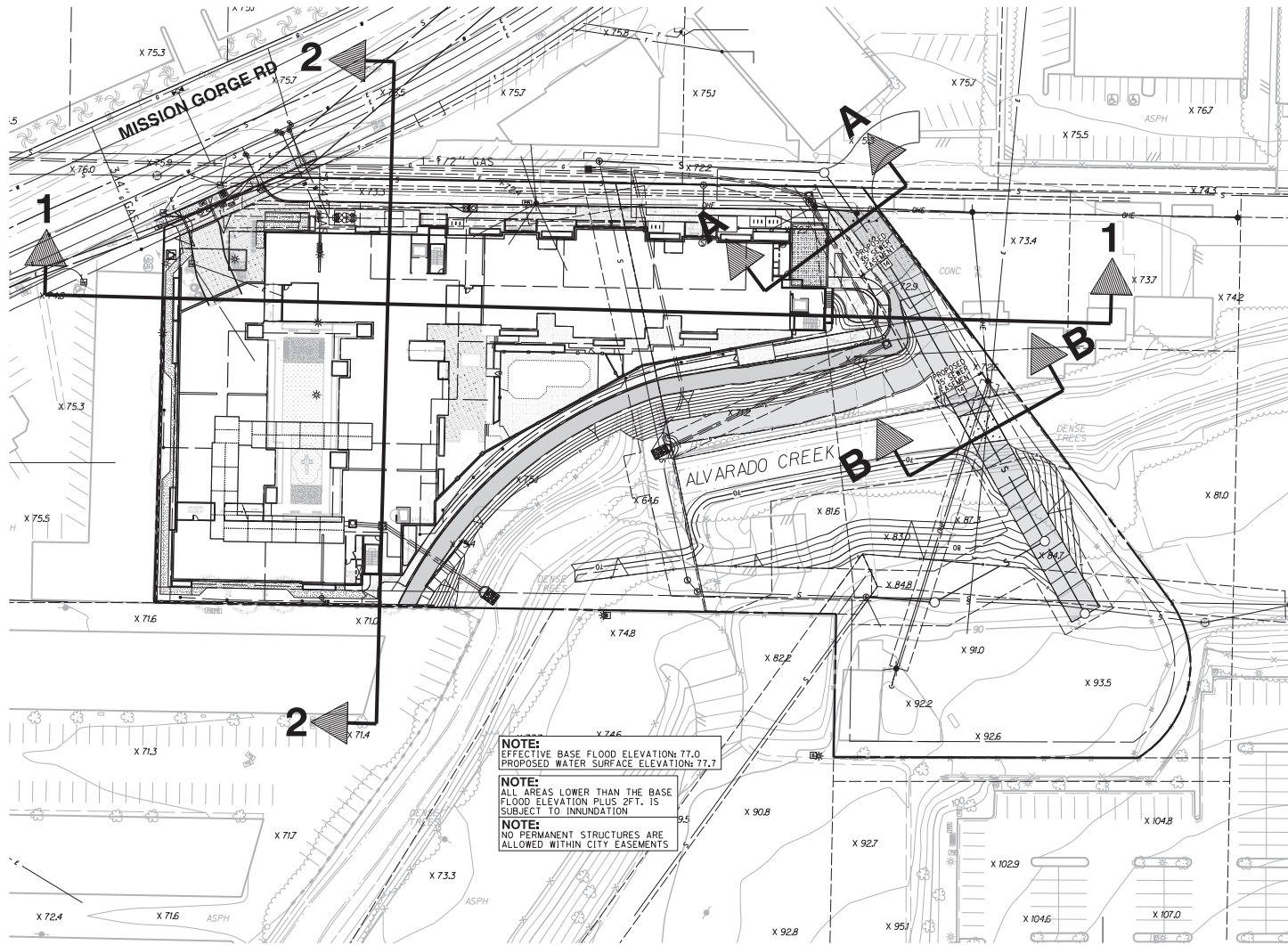
**NOTE:** NO PERMANENT STRUCTURES ARE ALLOWED WITHIN CITY EASEMENTS



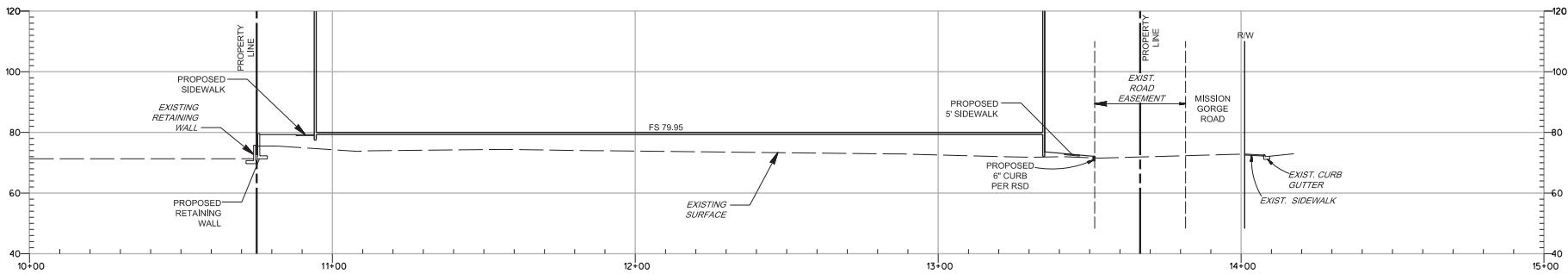
**DIGALERT**  
811

LAMBERT COORDINATES: NAD83: 1862-6297	PTS: I.O.: 671912
PREPARED BY: RICK ENGINEERING COMPANY	REVISION 1: 2/01/2021
ADDRESS: 5620 FRIARS ROAD SAN DIEGO, CA 92110 (619) 291-0707	REVISION 2: 4/29/2021
PROJECT NAME: ALVARADO CREEK APTS NDP/SDP	REVISION 3: 8/05/2021
SHEET TITLE: GRADING AND DRAINAGE PLANS	REVISION 4: 9/27/2021
	REVISION 5: 11/09/2021
	REVISION 6: 6/01/2022
	REVISION 7:
ORIGINAL DATE: 08/24/2020	
SHEET 6 OF 14	
JOB NUMBER: 19048	





SITE SECTION 1-1  
SCALE: 1"=20'  
HORIZ./VERT.



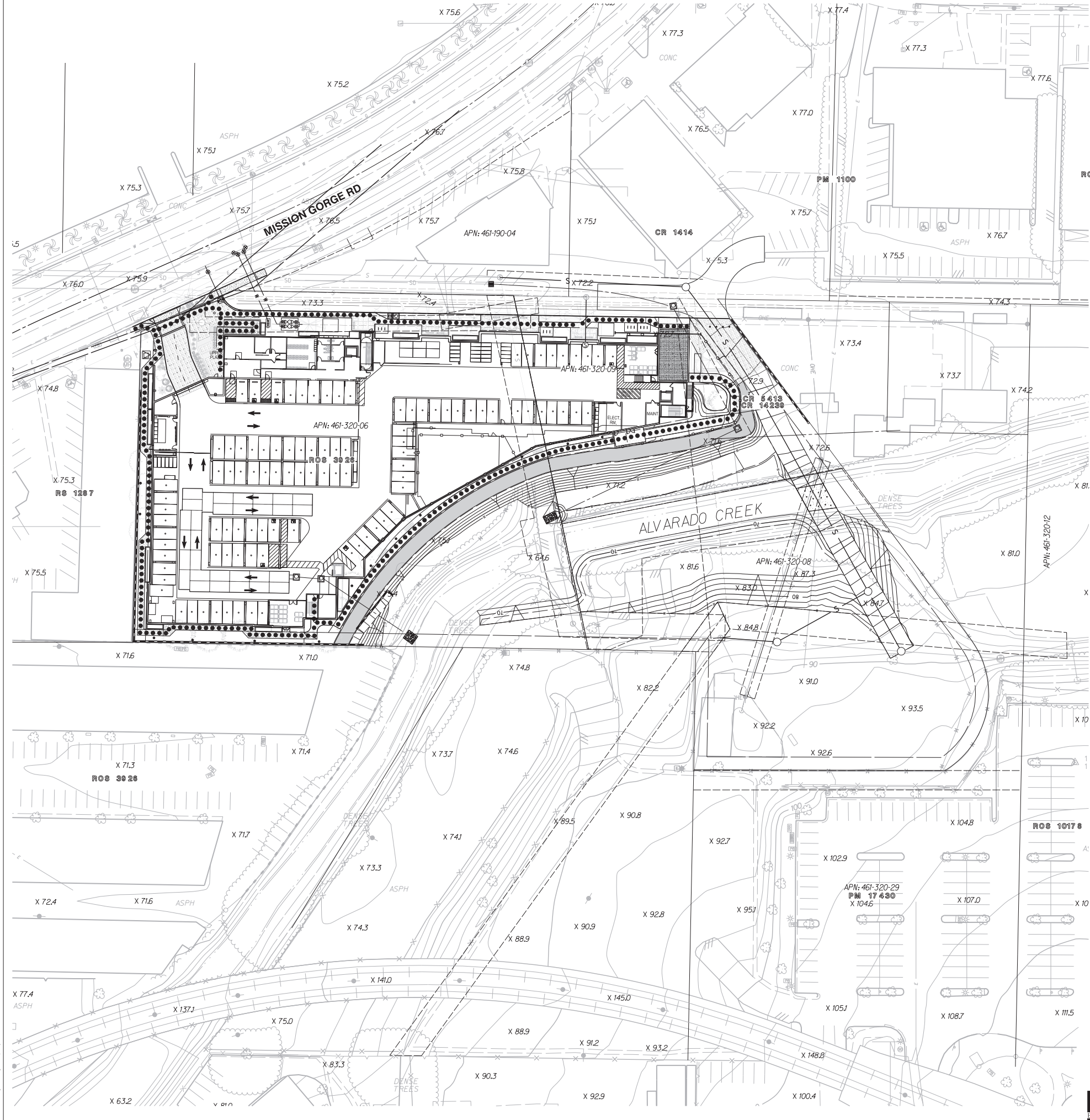
SITE SECTION 2-2  
SCALE: 1"=20'  
HORIZ./VERT.



ENGINEER OF WORK  
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LAMBERT COORDINATES: 222-1737 NAD83: 1862-6297	PTS: 671912 I.O.: xxxxxxxx
PREPARED BY: RICK ENGINEERING COMPANY	REVISION 1: 2/01/2021
ADDRESS: 5620 FRIARS ROAD SAN DIEGO, CA 92110 (619) 291-0707	REVISION 2: 4/29/2021
PROJECT NAME: ALVARADO CREEK APTS NDP/SDP	REVISION 3: 8/05/2021
SHEET TITLE: SITE SECTIONS	REVISION 4: 9/27/2021
	REVISION 5: 11/09/2021
	REVISION 6: 6/01/2022
	REVISION 7:
	ORIGINAL DATE: 08/24/2020
	SHEET 7 OF 14
	JOB NUMBER: 19048





PARKING CALCULATIONS

RESIDENTIAL PAKING SPACES REQUIRED  
TOTAL NO. UNITS, 227 X SPACE/UNIT RATIO, 0.00 = REQUIRED TOTAL NO. SPACES, 0.0  
LEASING PARKING SPACES REQUIRED  
• 3  
ACCESSIBLE PARKING REQUIRED  
• 4  
ELECTRIC VEHICLE PARKING REQUIRED  
• 100 COMMON SPACES X 0.1 = 10 EV PARKING SPACES (RESIDENTIAL)  
• 3 COMMON SPACES X 0.1 = 1 EV PARKING SPACES (GUEST/LEASING)  
TOTAL ON SITE VEHICLE PARKING  
• TOTAL ONSITE VEHICLE PARKING REQUIRED: 0  
• TOTAL ONSITE VEHICLE PARKING PROVIDED: 100

MOTORCYCLE PARKING REQUIRED PER UNIT  
(PER TABLE 142-05C, SAN DIEGO MUNICIPAL CODE)  
TOTAL NO. UNITS, 227 X SPACES/UNIT RATIO, 0.1 = REQUIRED TOTAL NO. SPACES, 27  
MINIMUM MOTORCYCLE PARKING REQUIRED: 27 STALLS TOTAL MOTORCYCLE PARKING PROVIDED: 27 STALLS

BICYCLE PARKING REQUIRED PER UNIT  
(PER TABLE 142-05C, SAN DIEGO MUNICIPAL CODE)  
TOTAL NO. STUDIO UNITS, 54 X SPACES/UNIT RATIO, 0.3 = REQUIRED TOTAL NO. SPACES, 16  
TOTAL NO. 1 BDRM UNITS, 54 X SPACES/UNIT RATIO, 0.3 = REQUIRED TOTAL NO. SPACES, 16  
TOTAL NO. 2 BDRM UNITS, 54 X SPACES/UNIT RATIO, 0.4 = REQUIRED TOTAL NO. SPACES, 21  
TOTAL NO. 3 BDRM UNITS, 54 X SPACES/UNIT RATIO, 0.5 = REQUIRED TOTAL NO. SPACES, 27  
TOTAL NO. 4 BDRM UNITS, 54 X SPACES/UNIT RATIO, 0.6 = REQUIRED TOTAL NO. SPACES, 32  
MINIMUM BICYCLE PARKING REQUIRED: 103 STALLS TOTAL BICYCLE PARKING PROVIDED: 103 STALLS

LEGEND

ADA ACCESS ROUTE



ENGINEER OF WORK

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PREPARED BY: RICK ENGINEERING COMPANY ADDRESS: 5620 FRIARS ROAD SAN DIEGO, CA 92110 (619) 291-0707	REVISION 1: 2/01/2021 REVISION 2: 4/29/2021 REVISION 3: 8/05/2021 REVISION 4: 9/27/2021 REVISION 5: 11/09/2021 REVISION 6: 6/01/2022 REVISION 7:
PROJECT NAME: ALVARADO CREEK APTS NDP/SDP SHEET TITLE: ADA PLAN	ORIGINAL DATE: 08/24/2020
SHEET 8 OF 14	

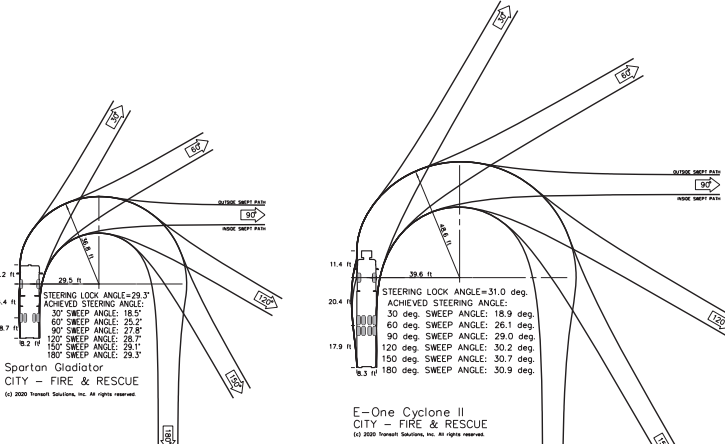


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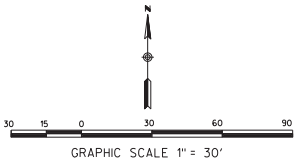
NOTES

1. FPD POLICY A-14-1 - FIRE ACCESS ROADWAY SIGNS OR RED CURBS SHALL BE PROVIDED ALONG ALL PRIVATE DRIVEWAYS LESS THAN 28' AND ARE DESIGNATED A VEHICULAR FIRE ACCESS PATH PER THIS PLAN.
2. SAN DIEGO MUNICIPAL CODE SECTION 55.0507 - POST INDICATOR VALVES, FIRE DEPARTMENT CONNECTIONS, AND ALARM BELL ARE TO BE LOCATED ON THE ADDRESS/ACCESS SIDE OF THE STRUCTURE.
3. FHPS POLICY 1-00-6 - AN ILLUMINATED DIRECTORY SHALL BE PROVIDED.
4. ALL STREETS LESS THAN 28' SHALL HAVE PARKING PROHIBITED ON BOTH SIDES.
5. SAN DIEGO MUNICIPAL CODE SECTION 92.0209 - PROVIDE BUILDING ADDRESS NUMBERS, VISIBLE AND LEGIBLE FROM THE STREET, OR ROAD FRONTING THE PROPERTY.
6. CFC SECTION 506 - AN APPROVED VEHICLE STROBE DETECTOR SYSTEM, WITH KNOX KEYSWITCH OVERRIDE, SATISFACTORY TO THE FIRE MARSHAL, SHALL BE PROVIDED ON ALL VEHICLE MAIN ENTRY AND EMERGENCY ENTRY POINTS TO THIS PROJECT.
7. ALL FIRE ACCESS ROADS SHALL COMPLY PER CITY OF SAN DIEGO FIRE DEPARTMENT BFLS POLICY A-96-9.
8. CFC 505.2 - TEMPORARY STREET SIGNS DURING CONSTRUCTION ARE REQUIRED.
9. CFC 503.2.3 - FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS, AND SHALL BE SURFACED SO AS TO PROVIDE ALL WEATHER DRIVING CAPABILITIES.
10. CFC 501.4 - FIRE APPARATUS ACCESS ROADS AND WATER SUPPLIES FOR FIRE PROTECTION SHALL BE INSTALLED, AND MADE SERVICEABLE PRIOR TO AND DURING TIME OF CONSTRUCTION.
11. SAN DIEGO MUNICIPAL CODE SECTION 55.0507 - ITEM (c) HYDRANT LOCATIONS SHALL BE IDENTIFIED BY THE INSTALLATION OF REFLECTIVE BLUE COLORED MARKERS, SUCH MARKERS SHALL BE AFFIXED TO THE ROADWAY SURFACE, APPROXIMATELY CENTERED BETWEEN CURBS, AND AT A RIGHT ANGLE TO THE HYDRANT.
12. CFC 507.5.5 - CLEAR SPACE AROUND HYDRANTS - A 3 FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS, EXCEPT AS OTHERWISE REQUIRED OR APPROVED.
13. CFC 507.5.6 - PHYSICAL PROTECTION - IF ADDITIONAL HYDRANTS ARE REQUIRED, AND WHERE FIRE HYDRANTS ARE SUBJECT TO IMPACT BY A MOTOR VEHICLE, GUARD POSTS OR OTHER APPROVED MEANS SHALL COMPLY WITH SECTION CFC 312.
14. STRUCTURES UNDER CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE PROVIDED WITH NOT LESS THAN ONE APPROVED FIRE EXTINGUISHER IN ACCORDANCE WITH SECTION 906, AND SIZED FOR NOT LESS THAN ORDINARY HAZARD (2A10BC) AS FOLLOWS:
  1. AT EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED.
  2. IN EVERY STORAGE AND CONSTRUCTION SHED.
  3. CFC 5315 - ADDITIONAL PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED WHERE SPECIAL HAZARDS EXIST INCLUDING, BUT NOT LIMITED TO, THE STORAGE AND USE OF FLAMMABLE AND COMBUSTIBLE LIQUIDS.
15. CFC 504 - EXTERIOR DOORS AND OPENINGS REQUIRED BY THIS CODE OR THE CBC SHALL BE MAINTAINED READILY ACCESSIBLE FOR EMERGENCY ACCESS BY THE FIRE DEPARTMENT. AN APPROVED ACCESS WALKWAY LEADING FROM FIRE APPARATUS ACCESS ROADS TO EXTERIOR OPENINGS SHALL BE PROVIDED WHEN REQUIRED BY THE FIRE CODE OFFICIAL.
16. ALL BUILDINGS AND SITES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 33 OF THE CFC.
17. CFC 105.4.4 - CONSTRUCTION DOCUMENTS APPROVED BY THE FIRE CODE OFFICIAL ARE APPROVED WITH THE INTENT THAT SUCH CONSTRUCTION DOCUMENTS COMPLY IN ALL RESPECTS WITH THE CFC. REVIEW AND APPROVAL BY THE FIRE CODE OFFICIAL SHALL NOT RELIEVE THE APPLICANT OF THE RESPONSIBILITY OF COMPLIANCE WITH THIS CODE.
18. POST INDICATOR VALVES, FIRE DEPARTMENT CONNECTIONS, AND ALARM BELL ARE TO BE LOCATED ON THE ADDRESS/ACCESS SIDE OF THE STRUCTURE.



NOTE

ANY HAMMERHEAD/TURNAROUND/CUL-DE-SAC SHALL BE PROVIDED IN ACCORDANCE WITH APPENDIX D103.1. ALL DIMENSIONS HAVE BEEN SHOWN ON THE FIRE ACCESS PLAN. TURN RADIUS 30' INSIDE/50' OUTSIDE, SDFD DPB POLICY A-14-1.



ENGINEER OF WORK

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ADDRESS: 5620 FRIARS ROAD SAN DIEGO, CA 92110 (619) 291-0707	REVISION 2: 4/29/2021
PROJECT NAME: ALVARADO CREEK APTS NDP/SDP SHEET TITLE: FIRE ACCESS PLAN	REVISION 3: 8/05/2021
	REVISION 4: 9/27/2021
	REVISION 5: 11/09/2021
	REVISION 6: 6/01/2022
	REVISION 7:
	ORIGINAL DATE: 08/24/2020
	SHEET 9 OF 14
	JOB NUMBER: 19048







PHOTO ④



PHOTO ③



PHOTO ②



PHOTO ⑤



PHOTO ①



PHOTO ⑥

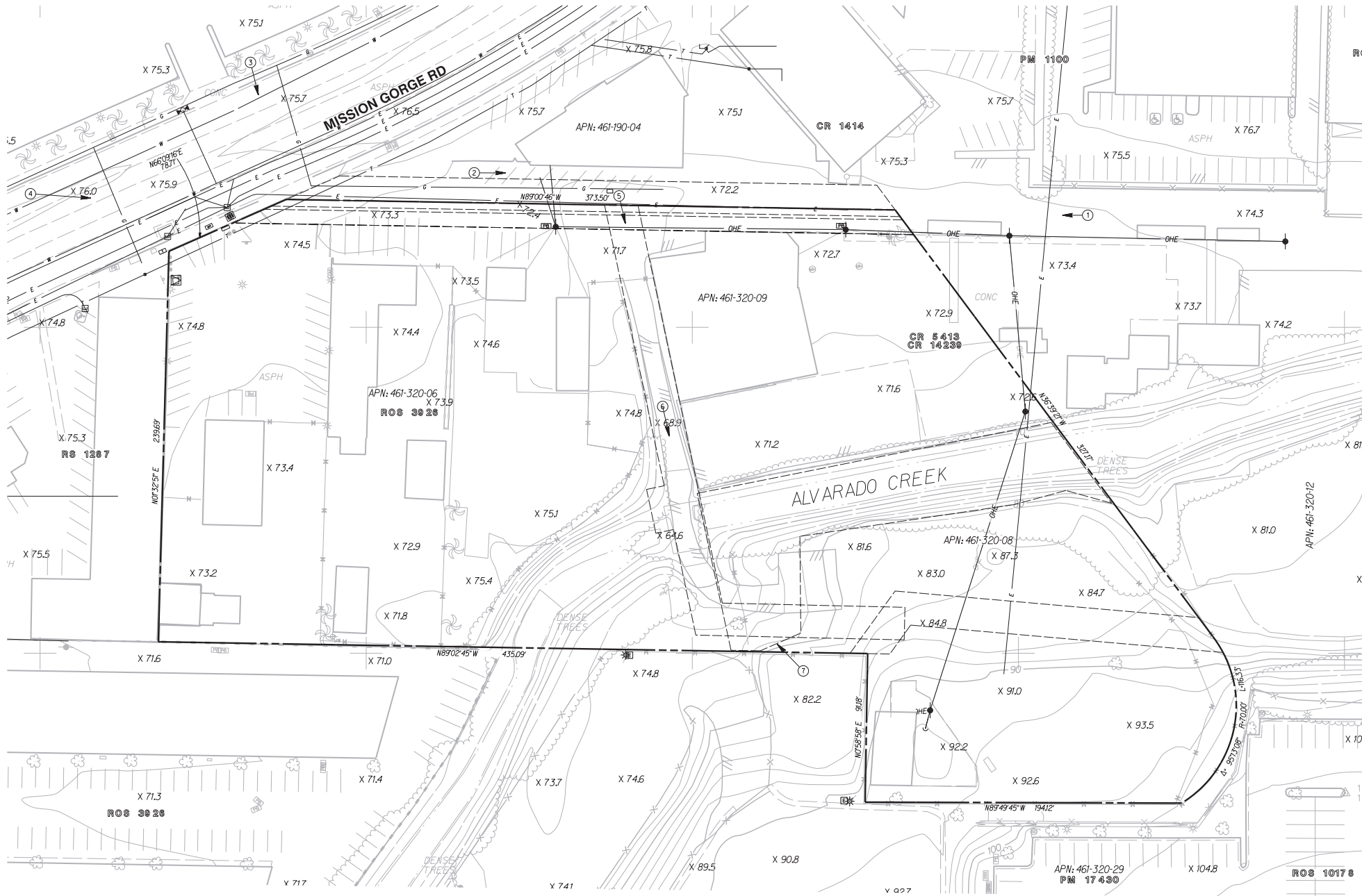
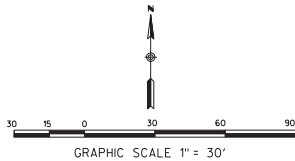


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PROJECT NAME: ALVARADO CREEK APTS NDP/SDP SHEET TITLE: SITE PHOTO EXHIBIT	SHEET 10 OF 14 JOB NUMBER: 19048



STORMTRAP SYSTEM INFORMATION			
WATER STORAGE REQ'D	20000	CUBIC FEET	
WATER STORAGE PROV.	21379.17	CUBIC FEET	
UNIT HEADROOM:	5' 0"	SINGLETRAP	
UNIT QUANTITY:	42	TOTAL PIECES	

STORMTRAP STRUCTURAL DESIGN CRITERIA

- STORMTRAP MODULES SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/ OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
- COVER RANGE: MIN. 1.08' MAX. 10.00'(CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS).
- ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.



**StormTrap®**  
MODULAR CONCRETE  
STORMWATER MANAGEMENT

CONTACT STORMTRAP TO REQUEST A DESIGN AND BUDGET FOR YOUR SPECIFIC PROJECT NEEDS.

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2.1	SINGLETRAP FOUNDATION LAYOUT
3.0	SINGLETRAP INSTALLATION SPECIFICATIONS
3.1	SINGLETRAP INSTALLATION SPECIFICATIONS
4.0	SINGLETRAP BACKFILL SPECIFICATIONS
5.0	RECOMMENDED PIPE / ACCESS OPENING SPECIFICATIONS
6.0	SINGLETRAP MODULE TYPES

STORMTRAP CONTACT INFORMATION	
STORM TRAP SUPPLIER:	STORMTRAP
CONTACT NAME:	STORMTRAP
CELL PHONE:	STORMTRAP
SALES EMAIL:	STORMTRAP



PATENTS LISTED AT: <http://stormtrap.com/patents>

1-877-867-6872

ENGINEER INFORMATION:

PROJECT INFORMATION:

SINGLETRAP

DETENTION

CURRENT ISSUE DATE:

ISSUED FOR:

SAMPLE PROJECT

REV.	DATE:	ISSUED FOR:	DWN BY:

SCALE:

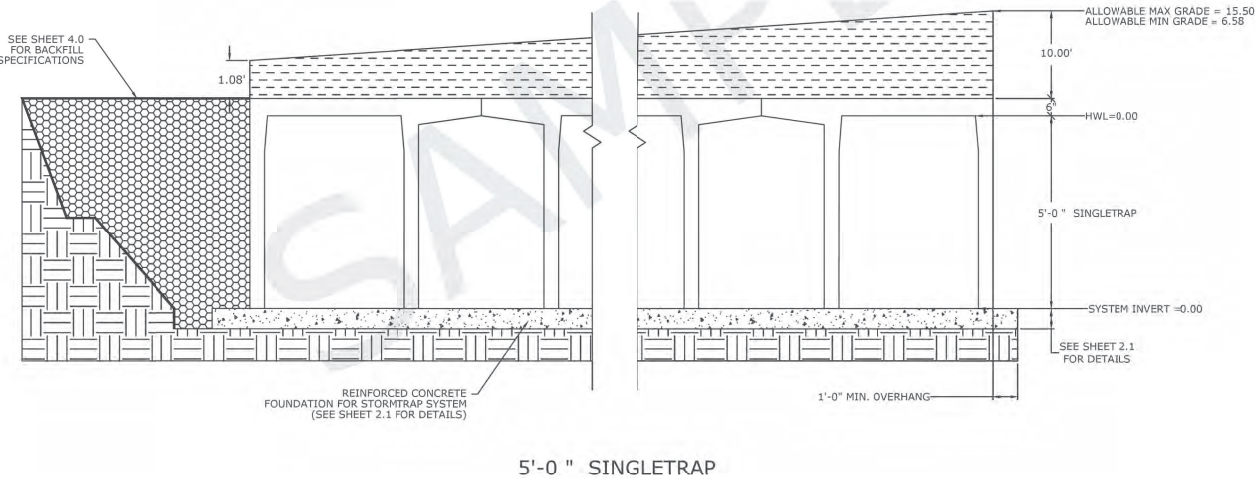
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SHEET TITLE:

COVER SHEET

SHEET NUMBER:

0.0



RECOMMENDED  
ACCESS OPENING SPECIFICATION

- A TYPICAL ACCESS OPENING FOR THE STORMTRAP SYSTEM ARE 2'-0" IN DIAMETER. ACCESS OPENINGS LARGER THAN 3'-0" IN DIAMETER NEED TO BE APPROVED BY STORMTRAP. ALL OPENINGS MUST RETAIN AT LEAST 1'-0" OF CLEARANCE FROM THE END OF THE STORMTRAP MODULE UNLESS NOTED OTHERWISE. ALL ACCESS OPENINGS TO BE LOCATED ON INSIDE LEG UNLESS OTHERWISE SPECIFIED.
- PLASTIC COATED STEEL STEPS PRODUCED BY M.A. INDUSTRIES PART #PS3-PFC OR APPROVED EQUAL (SEE STEP DETAIL) ARE PROVIDED INSIDE ANY MODULE WHERE DEEMED NECESSARY. THE HIGHEST STEP IN THE MODULE IS TO BE PLACED A DISTANCE OF 1'-0" FROM THE INSIDE EDGE OF THE STORMTRAP MODULES. ALL ENSUING STEPS SHALL BE PLACED WITH A MAXIMUM DISTANCE OF 1'-4" BETWEEN THEM. STEPS MAY BE MOVED OR ALTERED TO AVOID OPENINGS OR OTHER IRREGULARITIES IN THE MODULE.
- STORMTRAP LIFTING INSERTS MAY BE RELOCATED TO AVOID INTERFERENCE WITH ACCESS OPENINGS OR THE CENTER OF GRAVITY OF THE MODULE AS NEEDED.
- STORMTRAP ACCESS OPENINGS MAY BE RELOCATED TO AVOID INTERFERENCE WITH INLET AND/OR OUTLET PIPE OPENINGS SO PLACEMENT OF STEPS IS ATTAINABLE.
- ACCESS OPENINGS SHOULD BE LOCATED IN ORDER TO MEET THE APPROPRIATE MUNICIPAL REQUIREMENTS. STORMTRAP RECOMMENDS AT LEAST TWO ACCESS OPENINGS PER SYSTEM FOR ACCESS AND INSPECTION.
- USE PRECAST ADJUSTING RINGS AS NEEDED TO MEET GRADE. STORMTRAP RECOMMENDS FOR COVER OVER 2' TO USE PRECAST BARREL OR CONE INSPECTIONS. (PROVIDED BY OTHERS)

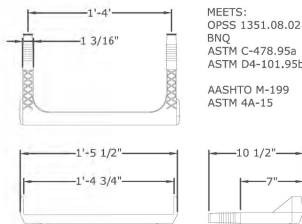
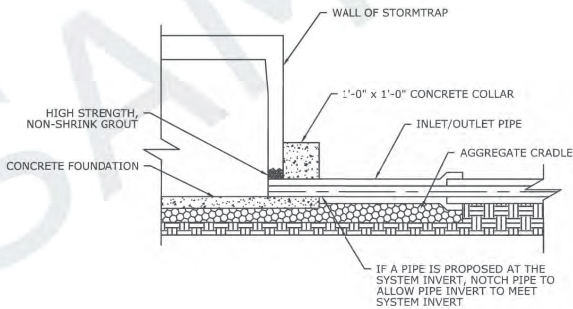
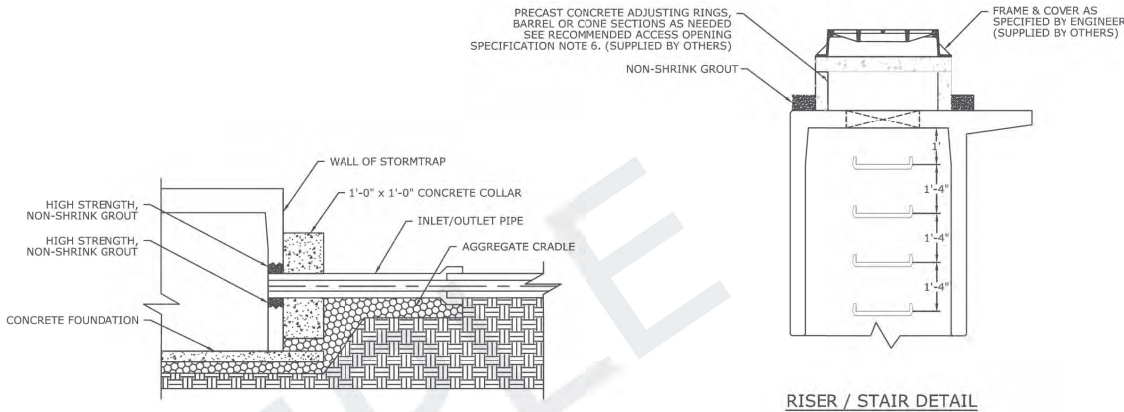
RECOMMENDED  
PIPE OPENING SPECIFICATION

- MINIMUM EDGE DISTANCE FOR AN OPENING ON THE OUTSIDE WALL SHALL BE NO LESS THAN 1'-0".
- MAXIMUM OPENING SIZE TO BE DETERMINED BY THE MODULE HEIGHT. PREFERRED OPENING SIZE 0 36" OR LESS. ANY OPENING NEEDED THAT DOES NOT FIT THIS CRITERIA SHALL BE BROUGHT TO THE ATTENTION OF STORMTRAP FOR REVIEW.
- CONNECTING PIPES SHALL BE INSTALLED WITH A 1'-0" CONCRETE COLLAR, AND AN AGGREGATE CRADLE FOR AT LEAST ONE PIPE LENGTH (SEE PIPE CONNECTION DETAIL). A STRUCTURAL GRADE CONCRETE OR HIGH STRENGTH, NON-SHRINK GROUT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI SHALL BE USED.
- THE ANNULAR SPACE BETWEEN THE PIPE AND THE HOLE SHALL BE FILLED WITH HIGH STRENGTH NON-SHRINK GROUT.

RECOMMENDED PIPE  
INSTALLATION INSTRUCTIONS

- CLEAN AND LIGHTLY LUBRICATE ALL OF THE PIPE TO BE INSERTED INTO STORMTRAP.
- IF PIPE IS CUT, CARE SHOULD BE TAKEN TO ALLOW NO SHARP EDGES. BEVEL AND LUBRICATE LEAD END OF PIPE.
- ALIGN CENTER OF PIPE TO CORRECT ELEVATION AND INSERT INTO OPENING.

NOTE: ALL ANCILLARY PRODUCTS RECOMMENDED AND SHOWN ON THIS SHEET ARE RECOMMENDATIONS ONLY AND SUBJECT TO CHANGE PER THE INSTALLING CONTRACTOR.



PIPE CONNECTION DETAIL

STEP DETAIL

SINGLETRAP® - DETENTION  
SAMPLE DRAWING

NOTE:  
BMP DETAILS SHOWN ARE FOR REFERENCE ONLY.  
SIZE WILL BE DETERMINED DURING FINAL DESIGN



- NOTES:
- OPENING LOCATIONS AND SHAPES MAY VARY.
  - SP - INDICATES A MODULE WITH MODIFICATIONS.
  - P - INDICATES A MODULE WITH A PANEL ATTACHMENT.
  - POCKET WINDOW OPENINGS ARE OPTIONAL.

ENGINEER OF WORK

KAREN S. VAN ERT  
R.C.E. No. 56991  
EXP. DATE: 9-30-2021

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PROJECT NAME:  
ALVARADO CREEK APTS  
NDP/SDP  
SHEET TITLE:  
STORM TRAP DETAILS

PTS: 671912  
I.O.: xxxxxxxx

REVISION 1: 2/01/2021  
REVISION 2: 4/29/2021  
REVISION 3: 8/05/2021  
REVISION 4: 9/27/2021  
REVISION 5: 11/09/2021  
REVISION 6: 6/01/2022  
REVISION 7:

ORIGINAL DATE: 08/24/2020

SHEET 11 OF 14

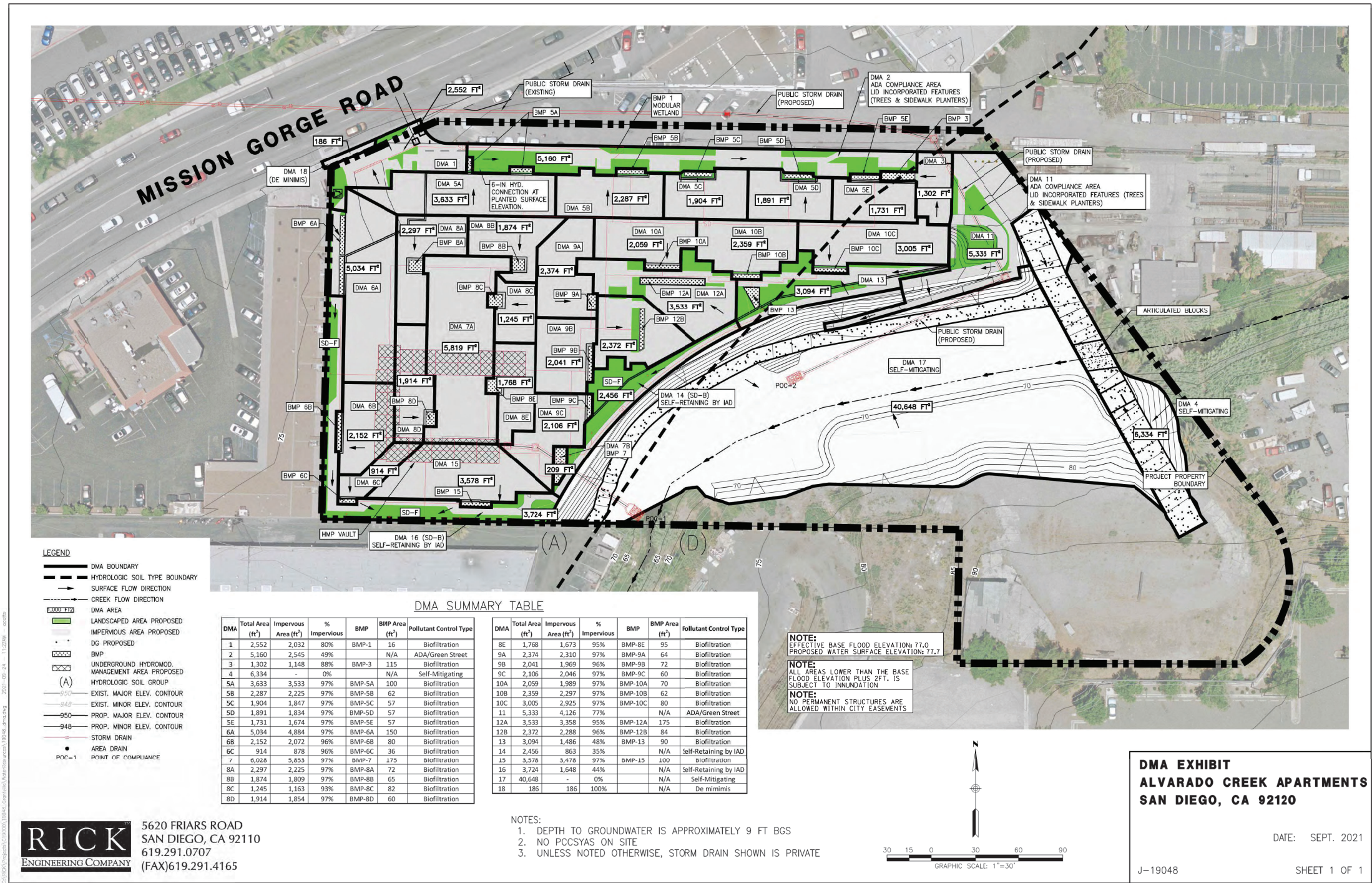
JOB NUMBER: 19048





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PROJECT NAME: ALVARADO CREEK APTS NDP/SDP SHEET TITLE:	REVISION 3: 8/05/2021
	REVISION 4: 9/27/2021
	REVISION 5: 11/09/2021
	REVISION 6: 6/01/2022
	REVISION 7:
ORIGINAL DATE: 08/24/2020	
SHEET 13 OF 14	
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