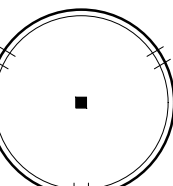
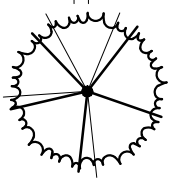
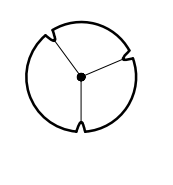
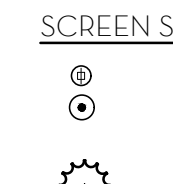
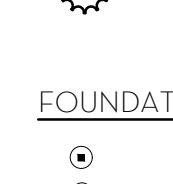


DATE 10/27/21 PROJECT: NATOMA SENIOR APARTMENTS

TREE SHADE CALCS		TOTALS			
COVERAGE	FULL	3/4	1/2	1/4	
30'-35' (SF)	962	722	481	240	
Qty	11	8	15	-	
SUBTOTAL	10,582	5,776	7,215	-	23,573
25'-30' (SF)	707	530	354	177	
Qty	-	-	9	-	
SUBTOTAL	-	-	3,186	-	3,186
20'-25' (SF)	491	368	246	123	
Qty	-	-	-	-	
SUBTOTAL	-	-	-	-	-
PROVIDED SF:					26,759

TOTAL PARKING AREA (SF): 52,525.4 (EXCLUDES CARPORT AREAS)
REQUIRED 50% AREA: 26,262.7
PROVIDED SF: 26,759 50.9%

ADDITIONAL TREES, INCLUDING SEVERAL EVERGREEN SPECIES, HAVE BEEN ADDED IN THIS AREA IN RESPONSE TO COMMENTS AND CONCERNS FROM THE ADJACENT NEIGHBORS. THE PROPOSED TREES SUPPLEMENT THE EXISTING TREES IN THE NEIGHBORING YARDS, THUS CREATING A MORE OPAQUE SCREEN. TREES IN THIS AREA WILL BE INSTALLED AT 24" BOX SIZE

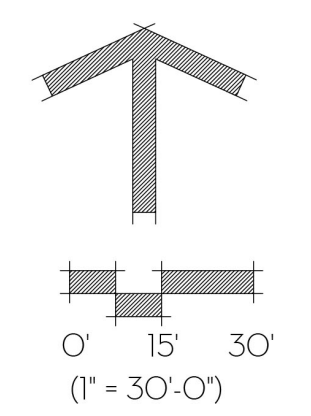
TYPE	BOTANICAL NAME	COMMON NAME	SIZE	WATER USE	HEIGHT/WIDTH	EVERGREEN/DECIDUOUS
30'-35' DIA. SHADE TREES						
	PISTACIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	15 GAL./24" BOX	L	30'X30'	D
	QUERCUS DOUGLASII	BLUE OAK	15 GAL./24" BOX	VL	35'X35'	D
	QUERCUS LOBATA	VALLEY OAK	15 GAL./24" BOX	L	50'X50'	D
	ULMUS WILSONIANA 'PROSPECTOR'	ELM	15 GAL./24" BOX	M	40'X30'	D
	UMBELLULARIA CALIFORNICA	BAY LAUREL	15 GAL./24" BOX	LOW	60' X30'	E
	PINUS SABINIANA	GHOST PINE	15 GAL./24" BOX	LOW	60' X40'	E
25' DIA. CANOPY TREES						
	AESCULUS CALIFORNICA	CALIFORNIA BUCKEYE	15 GAL./24" BOX	VL	20'X30'	D
	LAURUS NOBILIS	SWEET BAY	15 GAL./24" BOX	L	25'X25'	E
	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM DWARF MAGNOLIA	15 GAL./24" BOX	M	22'X12'	E
	OLEA EUROPAEA 'WILSONII'	WILSON OLIVE	15 GAL./24" BOX	VL	25'X25'	E
ACCENT TREES						
	CERCIS OCCIDENTALIS	WESTERN REDBUD	15 GAL./24" BOX	VL	15'X15'	D
	LAGERSTROEMIA INDICA X FAURIEI 'NATCHEZ'	NATCHEZ CRAPE MYRTLE	15 GAL./24" BOX	L	20'X20'	D
	PARKINSONIA X 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	15 GAL./24" BOX	VL	20'X20'	D
SCREEN SHRUBS (5'+ HIGH)						
	ARBUTUS UNEDO 'COMPACTA'	DWARF STRAWBERRY TREE	5 GAL.	L	8'X8'	E
	COTINUS COGGYGRIA 'ANCOT'	GOLDEN SPIRIT SMOKE TREE	5 GAL.	L	8'X10'	D
	DODONAEA VISCOSA 'PURPUREA'	PURPLE HOPSEED BUSH	15 GAL.	L	10'X8'	E
	FRANGULA CALIFORNICA	CALIFORNIA BUCKTHORN	1 GAL.	L	6'X6'	E
	HETEROMELES ARBUTIFOLIA	TOYON	1 GAL.	VL	15'X10'	E
	CUPRESSUS SEMPERVIRENS	ITALIAN CYPRESS	15 GAL.	L	50' X10'	E
FOUNDATION SHRUBS						
	DIETES Iridioides	FORTNIGHT LILY	5 GAL.	L	3.5'X3.5'	E
	HESPERALOE PARVIFLORA	RED YUCCA	5 GAL.	L	3.5'X3.5'	E
	LOMANDRA LONGIFOLIA 'BREEZE'™	BREEZE MAT RUSH	1 GAL.	M	2'X2'	E
	MUHLENBERGIA RIGENS	DEER GRASS	5 GAL.	L	4'X4'	E
	RHAPHIOLEPIS UMBELLATA 'MINOR'	DWARF YEDDA HAWTHORNE	5 GAL.	L	3.5'X3.5'	E
	WESTRINGIA FRUTICOSA	MORNING LIGHT ROSEMARY	5 GAL.	L	3'X3'	E
	'MORNING LIGHT'					
ACCENT SHRUBS						
	ERIOGONUM GRANDE VAR. RUBESCENS	SAN MIGUEL ISLAND BUCKWHEAT	1 GAL.	L	1'X3'	E
	PENINSETUM ALOPECUROIDES 'LITTLE BUNNY'	LITTLE BUNNY FOUNTAIN GRASS	1 GAL.	L	1.5'X1.5'	E
	PEROVSKIA ATROPICIFOLIA	RUSSIAN SAGE	1 GAL.	L	3.5'X3.5'	D
	PHLOMIS FRUTICOSA	JERUSALEM SAGE	5 GAL.	L	3.5'X3.5'	E
	SALVIA CLEVELANDII 'WINIFRED GILLMAN'	CLEVELAND SAGE	5 GAL.	L	3'X3'	E
GROUNDCOVERS						
	ARCTOSTAPHYLOS X 'EMERALD CARPET'	EMERALD CARPET MANZANITA	1 GAL.	L	1'X3', 24" O.C.	E
	LANTANA MONTEVIDENSIS 'SPREADING WHITE'	TRAILING WHITE LANTANA	1 GAL.	L	2'X6', 18" O.C.	E
	MYOPORUM PARVIFOLIUM	CREeping MYOPROUM	1 GAL.	L	.5'X9', 60" O.C.	E
BIOFILTRATION AREAS						
	BIOFILTRATION PLANTINGS	VARIOUS SPECIES	SOD	M		

EXISTING TREES

ON-SITE TREE TO REMAIN



TYPE	BOTANICAL NAME	COMMON NAME	SIZE	WATER USE	HEIGHT/WIDTH	EVERGREEN/DECIDUOUS
<u>30-35' DIA. SHADE TREES</u>						
	PISTACIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	15 GAL./24" BOX	L	30'X30'	D
	QUERCUS DOUGLASII	BLUE OAK	15 GAL./24" BOX	VL	35'X35'	D
	QUERCUS LOBATA	VALLEY OAK	15 GAL./24" BOX	L	50'X50'	D
	ULMUS WILSONIANA 'PROSPECTOR'	ELM	15 GAL./24" BOX	M	40'X30'	D
	UMBELLULARIA CALIFORNICA	BAY LAUREL	15 GAL./24" BOX	LOW	60' X30'	E
	PINUS SABINIANA	GHOST PINE	15 GAL./24" BOX	LOW	60' X40'	E
<u>25' DIA. CANOPY TREES</u>						
	AESCULUS CALIFORNICA	CALIFORNIA BUCKEYE	15 GAL./24" BOX	VL	20'X30'	D
	LAURUS NOBILIS	SWEET BAY	15 GAL./24" BOX	L	25'X25'	E
	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM DWARF MAGNOLIA	15 GAL./24" BOX	M	22'X12'	E
	OLEA EUROPAEA 'WILSONII'	WILSON OLIVE	15 GAL./24" BOX	VL	25'X25'	E
<u>ACCENT TREES</u>						
	CERCIS OCCIDENTALIS	WESTERN REDBUD	15 GAL./24" BOX	VL	15'X15'	D
	LAGERSTROEMIA INDICA X FAURIEI 'NATCHEZ'	NATCHEZ CRAPE MYRTLE	15 GAL./24" BOX	L	20'X20'	D
	PARKINSONIA X 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	15 GAL./24" BOX	VL	20'X20'	D
<u>SCREEN SHRUBS (5'+ HIGH)</u>						
	ARBUTUS UNEDO 'COMPACTA'	DWARF STRAWBERRY TREE	5 GAL.	L	8'X8'	E
	COTINUS COGCOGYRIA 'ANCOT'	GOLDEN SPIRIT SMOKE TREE	5 GAL.	L	8'X10'	D
	DODONAEA VISCOSA 'PURPUREA'	PURPLE HORSEDEE BUSH	15 GAL.	L	10'X8'	E
	FRANGULA CALIFORNICA	CALIFORNIA BUCKTHORN	1 GAL.	L	6'X6'	E
	HETEROMELES ARBUTIFOLIA	TOYON	1 GAL.	VL	15'X10'	E
	CUPRESSUS SEMPERVIRENS	ITALIAN CYPRESS	15 GAL.	L	50' X10'	E
<u>FOUNDATION SHRUBS</u>						
	DIETES IRIDIODES	FORTNIGHT LILY	5 GAL.	L	3.5'X3.5'	E
	HESPERALOE PARVIFLORA	RED YUCCA	5 GAL.	L	3.5'X3.5'	E
	LOMANDRA LONGIFOLIA 'BREEZE'™	BREEZE MAT RUSH	1 GAL.	M	2'X2'	E
	MUHLENBERGIA RIGENS	DEER GRASS	5 GAL.	L	4'X4'	E
	RHAPHIOLEPIS UMBELLATA 'MINOR'	DWARF YEDDA HAWTHORNE	5 GAL.	L	3.5'X3.5'	E
	WESTRINGIA FRUTICOSA 'MORNING LIGHT'	MORNING LIGHT ROSEMARY	5 GAL.	L	3'X3'	E
<u>ACCENT SHRUBS</u>						
	ERIOGONUM GRANDE VAR. RUBESCENS	SAN MIGUEL ISLAND BUCKWHEAT	1 GAL.	L	1'X3'	E
	PENNISETUM ALOPECUROIDES 'LITTLE BUNNY'	LITTLE BUNNY FOUNTAIN GRASS	1 GAL.	L	1.5'X1.5'	E
	PEROVSKIA ATROPICIFOLIA	RUSSIAN SAGE	1 GAL.	L	3.5'X3.5'	D
	PHLOMIS FRUTICOSA	JERUSALEM SAGE	5 GAL.	L	3.5'X3.5'	E
	SALVIA CLEVELANDII 'WINIFRED GILLMAN'	CLEVELAND SAGE	5 GAL.	L	3'X3'	E
<u>GROUNDCOVERS</u>						
	ARCTOSTAPHYLOS X 'EMERALD CARPET'	EMERALD CARPET MANZANITA	1 GAL.	L	1'X3', 24" O.C.	E
	LANTANA MONTEVIDENSIS 'SPREADING WHITE'	TRAILING WHITE LANTANA	1 GAL.	L	2'X6', 18" O.C.	E
	MYOPORUM PARVIFOLIUM	CREeping MYOPROUM	1 GAL.	L	5'X9', 60" O.C.	E
<u>BIOFILTRATION AREAS</u>						
	BIOFILTRATION PLANTINGS	VARIOUS SPECIES	SOD	M		



DSH of removed or impacted Trees:	571.3
DSH of preserved protected trees (50% value):	-182.15
Mitigation plantings on-site:	-73
DSH Balance:	316.15
In-Lieu fee: to be determined	

New Plantings	DSH	Quantity	Mitigated DSH
15 gal trees	1	10	10
24" box trees	2	0	0
36" box trees	3	21	63
On-site mitigation Total: 73			

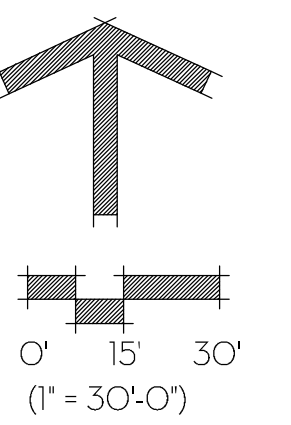
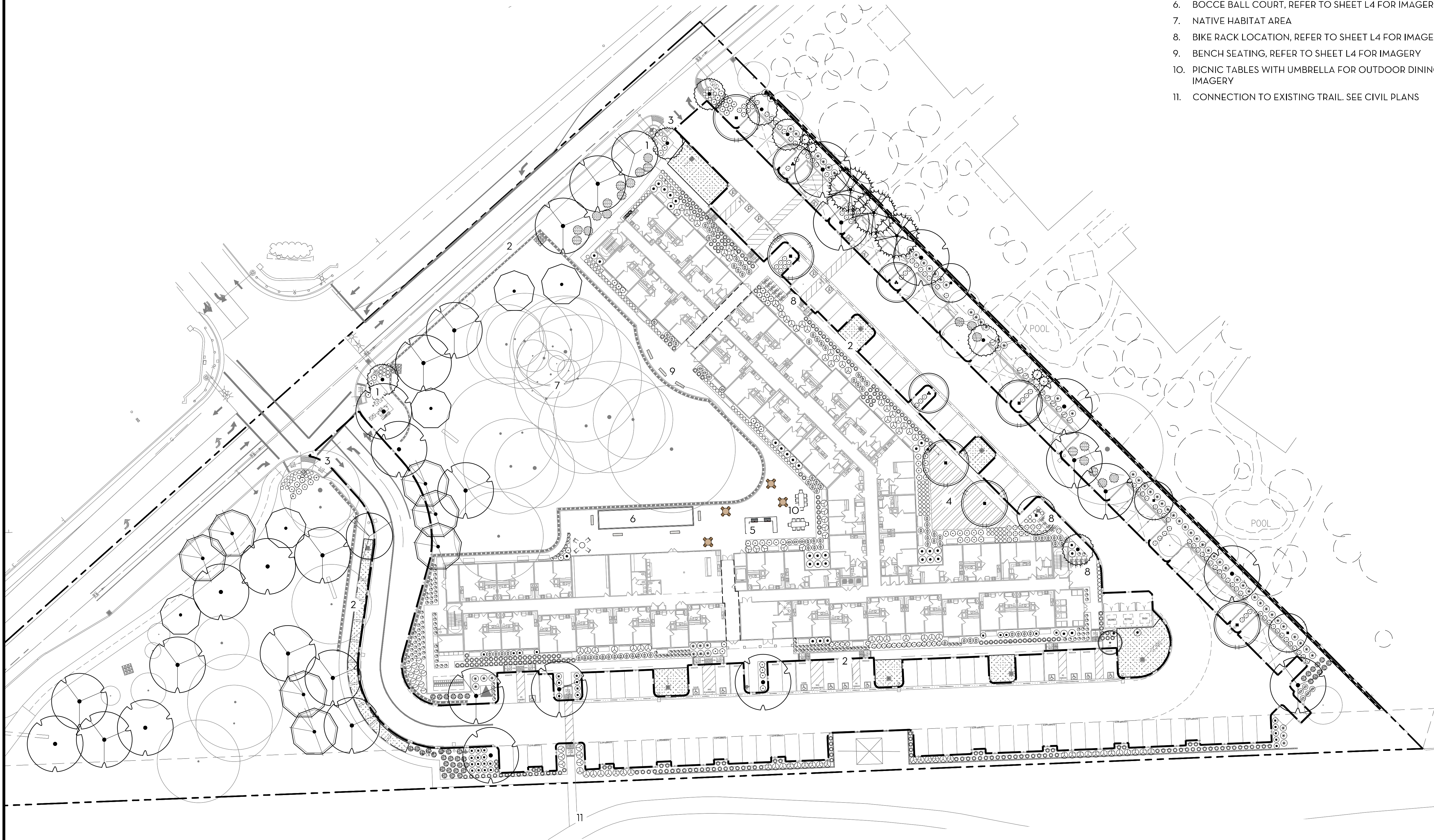
- NOTE:
- TREES INCLUDED IN THE CALCULATION OF SHADE FOR THE PARKING AREAS ARE NOT INCLUDED IN THE MITIGATION CALCULATIONS.
 - SEE CIVIL PLANS FOR LOCATION OF TREES TO BE REMOVED.

TREES TO BE REMOVED		DSH (in)	Health	Protected	Mitigation	Replace (in)	Notes
Tree Number	Species						
535	Blue Oak - Quercus douglasii	20.4	5	YES	YES	FULL	20.4
536	Blue Oak - Quercus douglasii	15	2	YES	YES	HALF	7.5
537	Blue Oak - Quercus douglasii	16.5	3	YES	YES	FULL	16.5
538	Blue Oak - Quercus douglasii	18.4	2	YES	YES	HALF	9.2
539	Blue Oak - Quercus douglasii	16.9	2	YES	YES	HALF	8.5
540	Blue Oak - Quercus douglasii	16.7	2	YES	YES	HALF	8.3
541	Blue Oak - Quercus douglasii	11.5	1	YES	NO	--	--
542	Blue Oak - Quercus douglasii	12.6	1	YES	NO	--	--
543	Blue Oak - Quercus douglasii	21.5	2	YES	YES	HALF	10.7
544	Blue Oak - Quercus douglasii	17.7	0	NO	NO	--	--
545	Mulberry - Morus alba	53, 3, 3, 3, 2	4	NO	NO	--	--
546	Blue Oak - Quercus douglasii	13.2	1	YES	NO	--	--
547	Blue Oak - Quercus douglasii	16.1	2	YES	YES	HALF	8.0
549	Blue Oak - Quercus douglasii	17.8	1	YES	NO	--	--
550	Blue Oak - Quercus douglasii	22	1	YES	NO	--	--
551	Blue Oak - Quercus douglasii	14.5	2	YES	YES	HALF	7.2
552	Blue Oak - Quercus douglasii	25.2	2	YES	YES	HALF	12.6
553	Blue Oak - Quercus douglasii	26.5	4	YES	YES	FULL	26.5
557	Blue Oak - Quercus douglasii	14.4	0	NO	NO	--	--
558	Blue Oak - Quercus douglasii	16.3	0	NO	NO	--	--
563	Blue Oak - Quercus douglasii	33.5	3	YES	YES	HALF	16.75
564	Blue Oak - Quercus douglasii	32.1	5	YES	YES	FULL	32.1
565	Blue Oak - Quercus douglasii	30	2	YES	YES	HALF	15.0
566	Blue Oak - Quercus douglasii	27.3	2	YES	YES	HALF	13.65
567	Blue Oak - Quercus douglasii	26.6	4	YES	YES	FULL	26.6
568	Blue Oak - Quercus douglasii	35.5	5	YES	YES	FULL	35.5
569	Blue Oak - Quercus douglasii	41	4	YES	YES	FULL	41.0
570	Blue Oak - Quercus douglasii	5.6, 5.7	4	NO	NO	--	--
574	Blue Oak - Quercus douglasii	6.1	5	YES	YES	FULL	6.1
583	Blue Oak - Quercus douglasii	6.5	4	YES	YES	FULL	6.5
584	Blue Oak - Quercus douglasii	6.2	4	YES	YES	FULL	6.2
585	Blue Oak - Quercus douglasii	4.5	5	NO	NO	--	--
586	Blue Oak - Quercus douglasii	4.2, 2.8, 3.5	4	NO	NO	--	--
587	Blue Oak - Quercus douglasii	6.5, 6	4	YES	YES	FULL	8.8
588	Blue Oak - Quercus douglasii	8.6, 6.7	5	YES	YES	FULL	10.9
589	Interior Live Oak - Quercus wislizeni	5.5, 5, 2.3	4	NO	NO	--	--
590	Blue Oak - Quercus douglasii	6	5	YES	YES	FULL	6.0
591	Blue Oak - Quercus douglasii	6.5	4	YES	YES	FULL	6.5
592	Blue Oak - Quercus douglasii	4.5	4	NO	NO	--	--
593	Blue Oak - Quercus douglasii	4	5	NO	NO	--	--
594	Blue Oak - Quercus douglasii	6.2	5	YES	YES	FULL	6.2
595	Blue Oak - Quercus douglasii	5	4	NO	NO	--	--
596	Fremont's cottonwood - Populus fremontii	6.9, 6.7, 5.7	4	NO	NO	--	--
597	Fremont's cottonwood - Populus fremontii	4.3	5	NO	NO	--	--
598	Fremont's cottonwood - Populus fremontii	5.7, 6.2, 2.5	5	NO	NO	--	--
599	Blue Oak - Quercus douglasii	5.9	4	NO	NO	--	--
600	Fremont's cottonwood - Populus fremontii	8.6	5	NO	NO	--	--
807	Blue Oak - Quercus douglasii	6.7	4	YES	YES	FULL	6.7
809	Interior Live Oak - Quercus wislizeni	15.7	2	YES	YES	HALF	7.8
811	Blue Oak - Quercus douglasii	14.4	5	YES	YES	FULL	14.4
812	Blue Oak - Quercus douglasii	15.3	3	YES	YES	FULL	15.3
813	Blue Oak - Quercus douglasii	12	4	YES	YES	FULL	12.0
814	Blue Oak - Quercus douglasii	11.8	4	YES	YES	FULL	11.8
815	Blue Oak - Quercus douglasii	13	4	YES	YES	FULL	13.0
816	Blue Oak - Quercus douglasii	22	5	YES	YES	FULL	22.0
817	Blue Oak - Quercus douglasii	14.4	1	YES	NO	--	--
818	Blue Oak - Quercus douglasii	28	4	YES	YES	FULL	28.0
819	Blue Oak - Quercus douglasii	20	4	YES	YES	FULL	20.0
820	Blue Oak - Quercus douglasii	5.2	5	NO	NO	--	--
835	Interior Live Oak - Quercus wislizeni	6.4, 4.6	5	YES	YES	FULL	7.9
836	Interior Live Oak - Quercus wislizeni	7.7, 5.5	5	YES	YES	FULL	9.4
837	Blue Oak - Quercus douglasii	5.7, 2.7	5	NO	NO	--	--
838	Blue Oak - Quercus douglasii	12.5	4	YES	YES	FULL	12.5
841	Blue Oak - Quercus douglasii	9.5, 5.6	4	YES	YES	FULL	11.0
842	Fremont's cottonwood - Populus fremontii	5.2, 5	4	NO	NO	--	--
843	Blue Oak - Quercus douglasii	6.3	5	YES	YES	FULL	6.3
844	Fremont's cottonwood - Populus fremontii	6.8	5	NO	NO	--	--
845	Blue Oak - Quercus douglasii	5.9, 2.7	5	NO	NO	--	--
						MITIGATION TOTAL	571.3



LAYOUT KEYNOTES

1. MONUMENT SIGN AT VEHICLE ENTRY, REFER TO SHEET L4 FOR IMAGERY
2. LOOP / PERIMETER PEDESTRIAN WALKWAY
3. PEDESTRIAN ENTRY
4. DOG PARK, REFER TO SHEET L4 FOR IMAGERY
5. OUTDOOR BBQ/ KITCHEN AREA, REFER TO SHEET L4 FOR IMAGERY
6. BOCCE BALL COURT, REFER TO SHEET L4 FOR IMAGERY
7. NATIVE HABITAT AREA
8. BIKE RACK LOCATION, REFER TO SHEET L4 FOR IMAGERY
9. BENCH SEATING, REFER TO SHEET L4 FOR IMAGERY
10. PICNIC TABLES WITH UMBRELLA FOR OUTDOOR DINING & SEATING, REFER TO SHEET L4 FOR IMAGERY
11. CONNECTION TO EXISTING TRAIL. SEE CIVIL PLANS





MONUMENT SIGN



OUTDOOR SEATING & DINING AREA



DOG PARK



BOCCE BALL COURT



BIKE RACK



PICNIC TABLE WITH UMBRELLA



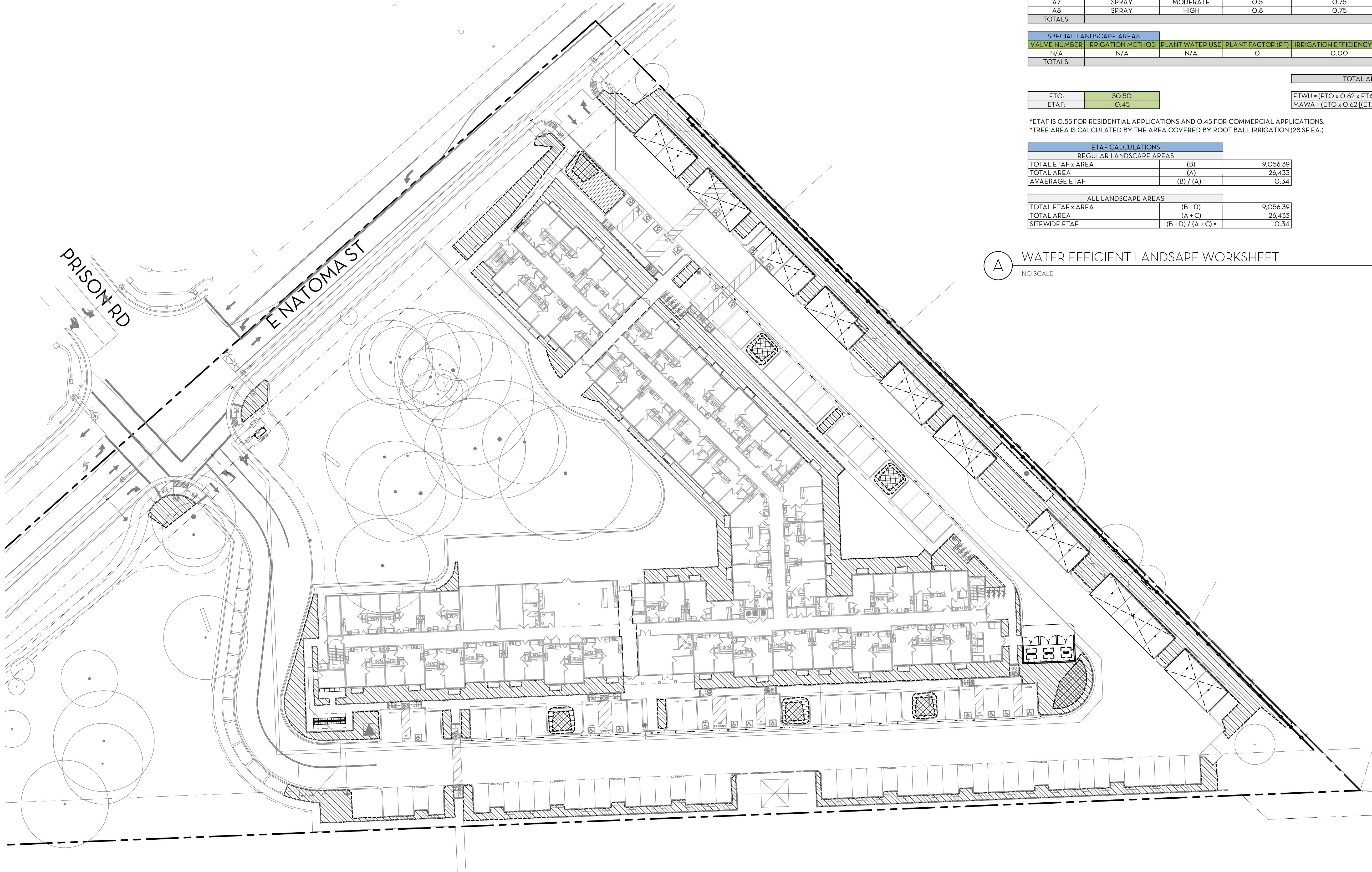
OUTDOOR BBQ/ KITCHEN



6 FT BENCH



NOTE:
IMAGES SHOWN ON THIS PAGE ARE MEANT TO
REPRESENT COMMUNITY AMENITIES AND DESIGN
INTENT ONLY. NOT THE ACTUAL MANUFACTURERS
AND/OR PRODUCTS THAT MAY BE USED IN THE FINAL
DESIGNS.



VINTAGE SENIOR HOUSING, FOLSOM, CA
WATER EFFICIENT LANDSCAPE WORKSHEET
(APN 071-0320-042)

REGULAR LANDSCAPE AREAS								
VALVE NUMBER	IRRIGATION METHOD	PLANT WATER USE	PLANT FACTOR (PF)	IRRIGATION EFFICIENCY (IE)	LANDSCAPE AREA (SF)	ETAF (PF/IE)	ETAF x AREA	ETWU
A1	DRIP	VERY LOW	0.1	0.81	1,126	0.12	139.01	4,352
A2	DRIP	LOW	0.2	0.81	18,720	0.25	4,622.22	144,722
A3	DRIP	MODERATE	0.5	0.81	1,126	0.62	695.06	21,762
A4	TREE BUBBLER	VERY LOW	0.1	0.81	837	0.12	103.33	3,235
A5	TREE BUBBLER	LOW	0.2	0.81	656	0.25	161.98	5,071
A6	TREE BUBBLER	MODERATE	0.5	0.81	327	0.62	201.85	6,320
A7	SPRAY	MODERATE	0.5	0.75	1,877	0.67	1,251.33	39,179
A8	SPRAY	HIGH	0.8	0.75	1,764	1.07	1,881.60	58,915
TOTALS:					(A)	26,433	(B)	9,056.39

SPECIAL LANDSCAPE AREAS								
VALVE NUMBER	IRRIGATION METHOD	PLANT WATER USE	PLANT FACTOR (PF)	IRRIGATION EFFICIENCY (IE)	LANDSCAPE AREA (SF)	ETAF (PF/IE)	ETAF x AREA	ETWU
N/A	N/A	N/A	0	0.00	0	1.00	0.00	0
TOTALS:					(C)	0	(D)	0.00

TOTAL AREA: 26,433

ETO:	50.50
ETAF:	0.45

ETWU = (ETO x 0.62 x ETAF x AREA)
MAWA = (ETO x 0.62 [(ETAF x LA) + ((1 - ETAF) x SLA)])

ETWU TOTAL:	283,556
MAWA TOTAL:	372,428

ETWU < MAWA

*ETAF IS 0.55 FOR RESIDENTIAL APPLICATIONS AND 0.45 FOR COMMERCIAL APPLICATIONS.
*TREE AREA IS CALCULATED BY THE AREA COVERED BY ROOT BALL IRRIGATION (28 SF EA.)

ETAF CALCULATIONS		
REGULAR LANDSCAPE AREAS		
TOTAL ETAF x AREA	(B)	9,056.39
TOTAL AREA	(A)	26,433
AVERAGE ETAF	(B) / (A) =	0.34

ALL LANDSCAPE AREAS		
TOTAL ETAF x AREA	(B + D)	9,056.39
TOTAL AREA	(A + C)	26,433
SITEWIDE ETAF	(B + D) / (A + C) =	0.34

** ASSUME THAT 5% OF SHRUBS ARE VERY LOW, 90% ARE LOW, AND 5% ARE MODERATE. ASSUME 46% OF ALL TREES ARE VERY LOW, 36% ARE LOW, AND 18% ARE MODERATE. FULL IRRIGATION SYSTEM COVERAGE DELINEATION WILL BE SUBMITTED WITH PLANS FOR

A WATER EFFICIENT LANDSCAPE WORKSHEET
NO SCALE

P-PR-VIN-01