





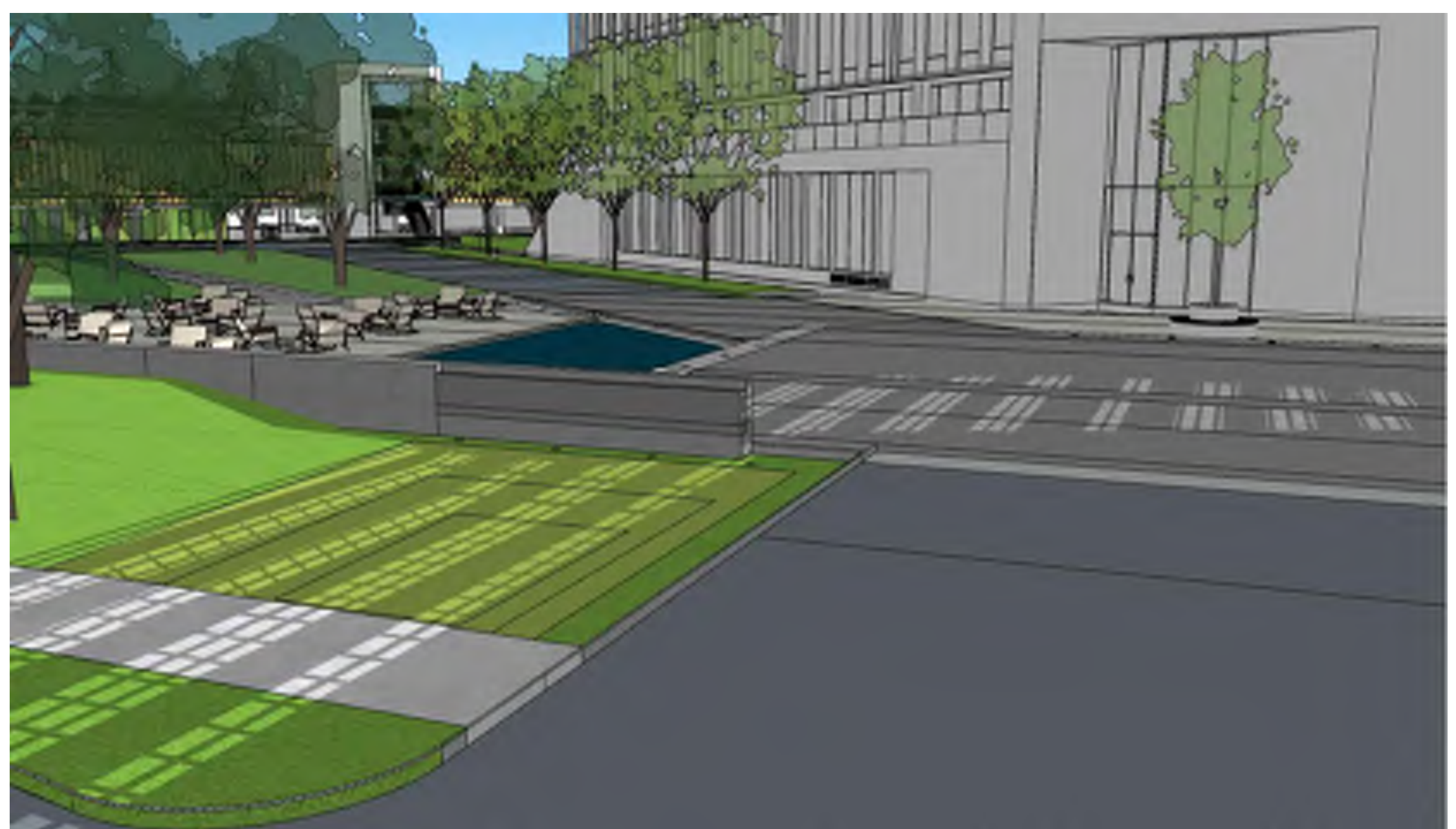
1 OVERALL PERSPECTIVE 1
SCALE: NTS



2 OVERALL PERSPECTIVE 2
SCALE: NTS



3 EYE LEVEL PERSPECTIVE 1
SCALE: NTS



4 EYE LEVEL PERSPECTIVE 2
SCALE: NTS



5 EYE LEVEL PERSPECTIVE 3
SCALE: NTS



6 EYE LEVEL PERSPECTIVE 4
SCALE: NTS



1 OVERALL PERSPECTIVE 1
SCALE: NTS



2 EYE LEVEL PERSPECTIVE 1
SCALE: NTS



3 EYE LEVEL PERSPECTIVE 2
SCALE: NTS



4 EYE LEVEL PERSPECTIVE 3
SCALE: NTS



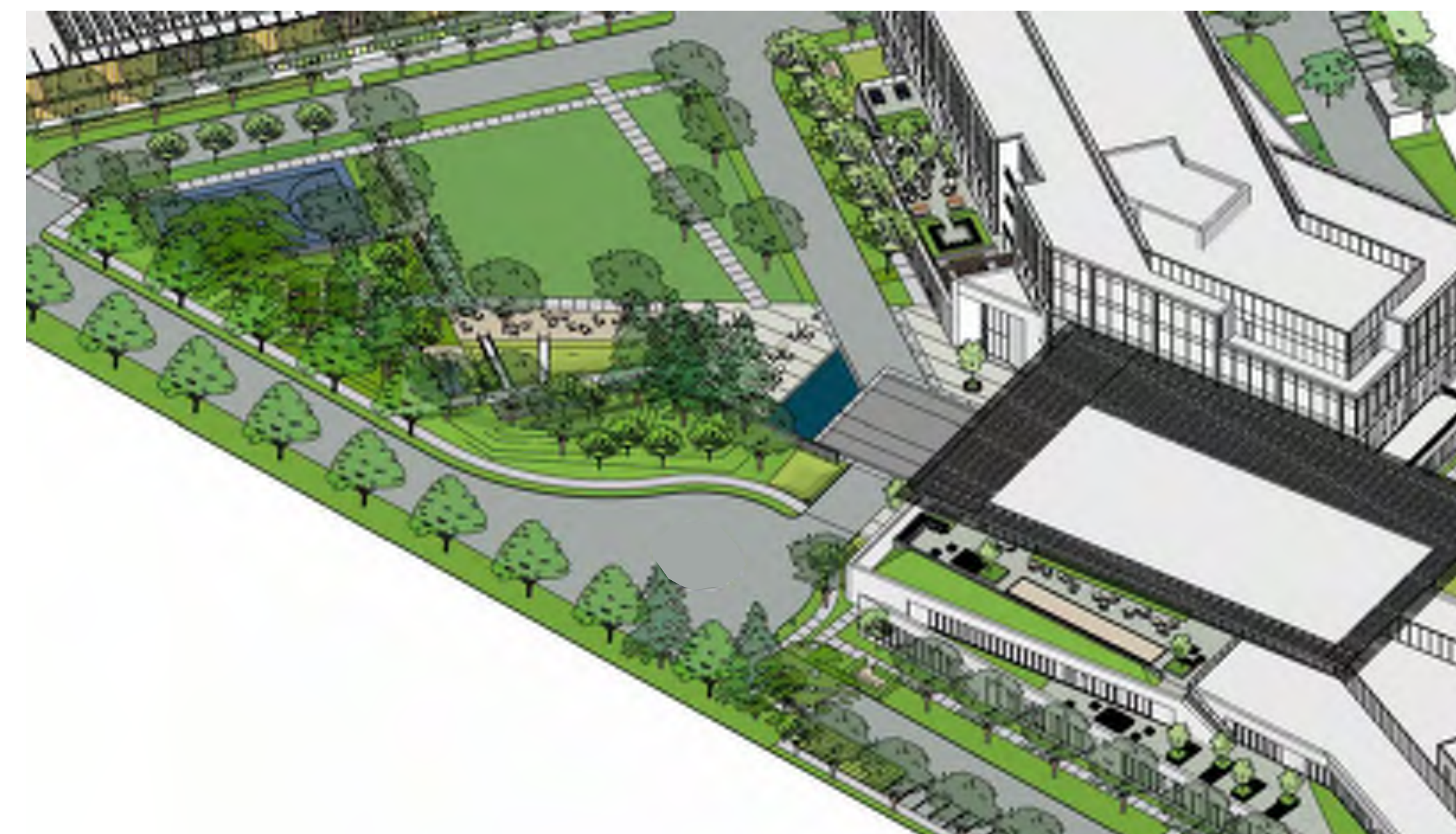
5 EYE LEVEL PERSPECTIVE 4
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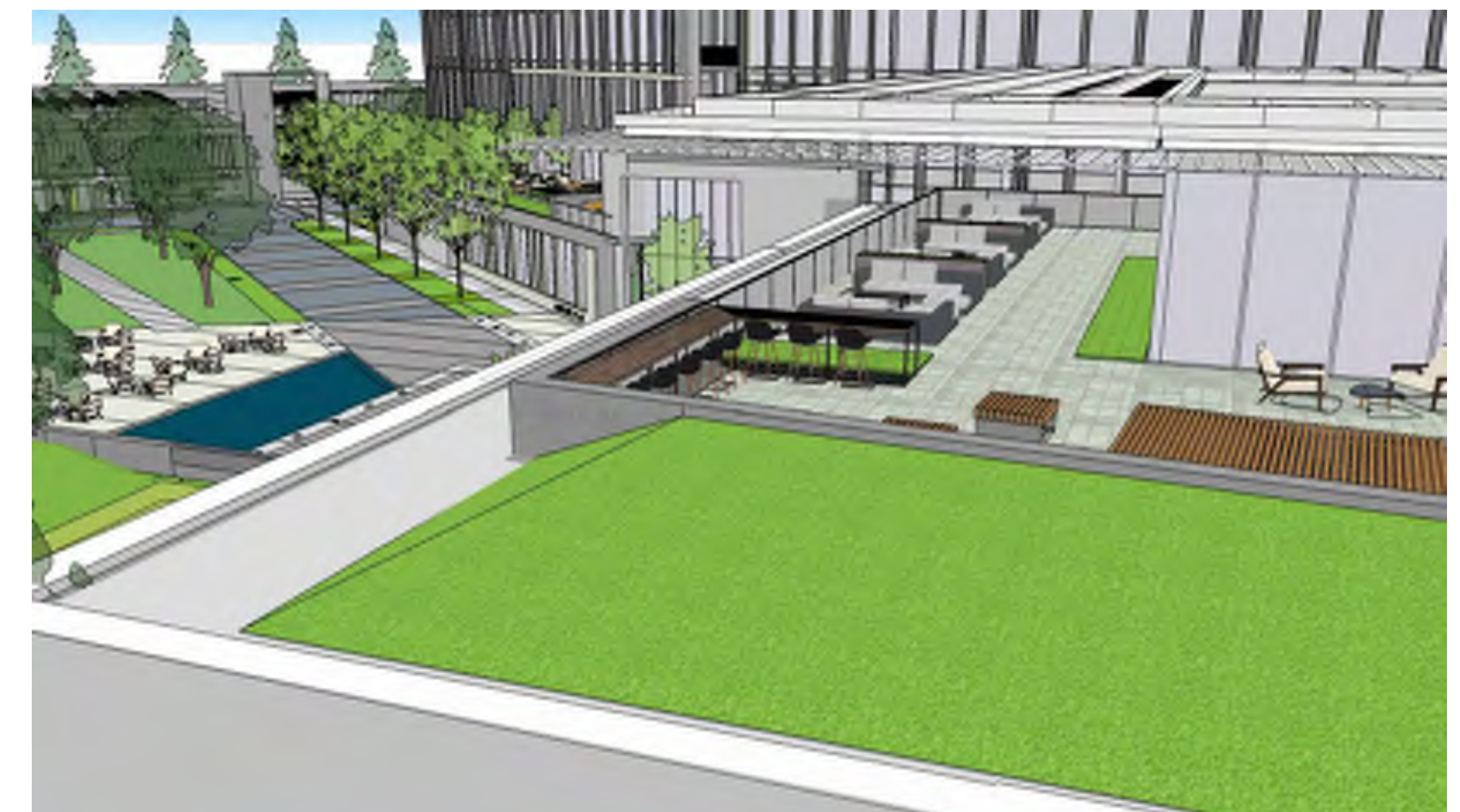
6 EYE LEVEL PERSPECTIVE 5
SCALE: NTS



7 LEVEL 2 OVERALL PERSPECTIVE
SCALE: NTS



8 LEVEL 2 & 3 OVERALL PERSPECTIVE
SCALE: NTS



9 LEVEL 3 PERSPECTIVE
SCALE: NTS



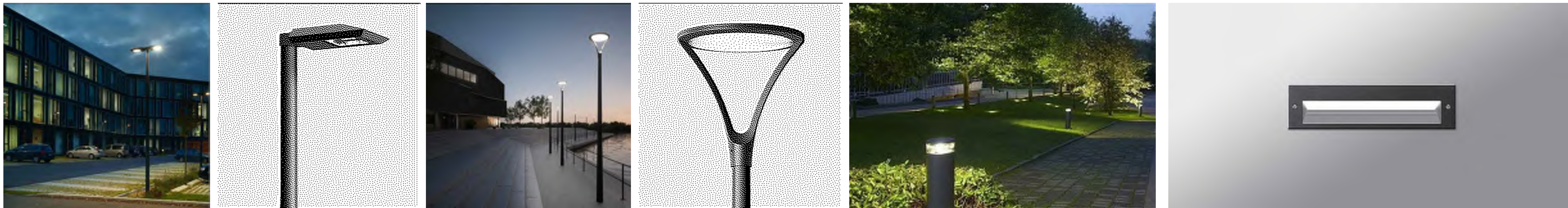
INSPIRATIONAL IMAGES — TIDAL MARSH/ COASTAL PLAIN



SITE FURNISHING/SITE ELEMENTS



MATERIALS — PAVING PATTERNS



LIGHTING — PARKING AND PEDESTRIAN FIXTURES



MONTEREY CYPRESS



FRINGE TREE



ARBUTUS



MAYTEN TREE



BAMBOO



DOGWOOD 'MOUNTAIN MOON'



HONEY LOCUST



JAPANESE MAPLE



ALEPPO PINE



COAST LIVE OAK



PINEAPPLE GUAVA



SOUTHERN LIVE OAK



COYOTE BRUSH



AUTUMN MOOR GRASS



LAGUNITA WILD RYE



SLENDER VELDT GRASS



LAVATERA



GAURA WHIRLING BUTTERFLIES



ALOE



YUCCA — SPANISH BAYONET



DWARF STRAWBERRY TREE



CONEFLOWER WITH GRASSES



DWARF OLIVE SHRUB






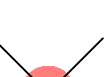



CEANOTHUS

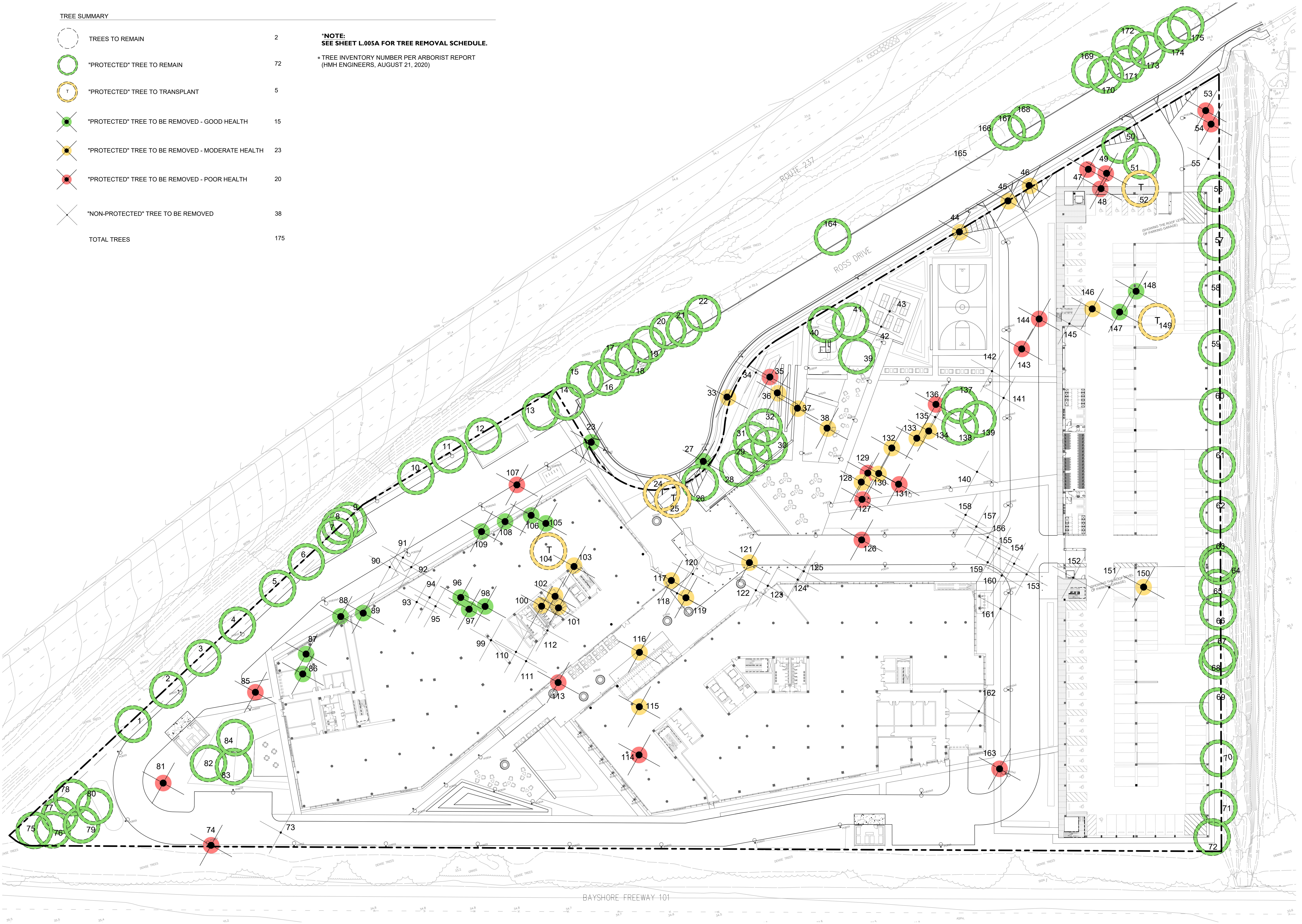


DWARF KARO

TREE SUMMARY

	TREES TO REMAIN	2
	"PROTECTED" TREE TO REMAIN	72
	"PROTECTED" TREE TO TRANSPLANT	5
	"PROTECTED" TREE TO BE REMOVED - GOOD HEALTH	15
	"PROTECTED" TREE TO BE REMOVED - MODERATE HEALTH	23
	"PROTECTED" TREE TO BE REMOVED - POOR HEALTH	20
	"NON-PROTECTED" TREE TO BE REMOVED	38
	TOTAL TREES	175

***NOTE:**
SEE SHEET L.005A FOR TREE REMOVAL SCHEDULE.
• TREE INVENTORY NUMBER PER ARBORIST REPORT
(HMH ENGINEERS, AUGUST 21, 2020)



TREE PROTECTION NOTES

1. TREE PRESERVATION AND PROTECTION: IN PROVIDING RECOMMENDATIONS FOR TREE PRESERVATION, WE RECOGNIZE THAT INJURY TO TREES AS A RESULT OF CONSTRUCTION INCLUDE MECHANICAL INJURIES TO TRUNKS, ROOTS AND BRANCHES, AND INJURY AS A RESULT OF CHANGES THAT OCCUR IN THE GROWING ENVIRONMENT. TO MINIMIZE THESE INJURIES, WE RECOMMEND GRADING OPERATIONS ENCR OACH NO CLOSER THAN FIVE TIMES THE TRUNK DIAMETER, (I.E. 30" DIAMETER TREE X 5=150" DISTANCE). AT THIS DISTANCE, BUTTRESS/ANCHORING ROOTS WOULD BE PRESERVED AND MINIMAL INJURY TO THE FUNCTIONAL ROOT AREA WOULD BE ANTICIPATED. SHOULD ENCR OACHMENT WITHIN THE AREA BECOME NECESSARY, HAND DIGGING IS MANDATORY.

2. BARRICADES: PRIOR TO INITIATION OF CONSTRUCTION ACTIVITY, TEMPORARY BARRICADES SHOULD BE INSTALLED AROUND ALL TREES IN THE CONSTRUCTION AREA. SIX-FOOT HIGH, CHAIN LINK FENCES ARE TO BE MOUNTED ON STEEL POSTS, DRIVEN 2 FEET INTO THE GROUND, AT NO MORE THAN 10-FOOT SPACING. THE FENCES SHALL ENCLOSE THE ENTIRE AREA UNDER THE DRIP LINE OF THE TREES OR AS CLOSE TO THE DRIP LINE AREA AS PRACTICAL. THESE BARRICADES WILL BE PLACED AROUND INDIVIDUAL TREES AND/OR GROUPS OF TREES AS THE EXISTING ENVIRONMENT DICTATES. THE TEMPORARY BARRICADES WILL SERVE TO PROTECT TRUNKS, ROOTS AND BRANCHES FROM MECHANICAL INJURIES, WILL INHIBIT STOCKPILING OF CONSTRUCTION MATERIALS OR DEBRIS WITHIN THE SENSITIVE 'DRIP LINE' AREAS AND WILL PREVENT SOIL COMPACTION FROM INCREASED VEHICULAR/PEDESTRIAN TRAFFIC. NO STORAGE OF MATERIAL, TOPSOIL, VEHICLES OR EQUIPMENT SHALL BE PERMITTED WITHIN THE TREE ENCLOSURE AREA. THE GROUND AROUND THE TREE CANOPY SHALL NOT BE ALTERED. THESE BARRICADES SHOULD REMAIN IN PLACE UNTIL FINAL INSPECTION OF THE BUILDING PERMIT, EXCEPT FOR WORK SPECIFICALLY REQUIRED IN THE APPROVED PLANS TO BE DONE UNDER THE TREES TO BE PROTECTED. DESIGNATED AREAS BEYOND THE DRIP LINES OF ANY TREES SHOULD BE PROVIDED FOR CONSTRUCTION MATERIALS AND ONSITE PARKING. REFER TO TREE PROTECTION DETAIL THIS SHEET.

3. ROOT PRUNING (IF NECESSARY): DURING AND UPON COMPLETION OF ANY TRENCHING/GRADING OPERATION WITHIN A TREE'S DRIP LINE, SHOULD ANY ROOTS GREATER THAN ONE INCH (1") IN DIAMETER BE DAMAGED, BROKEN OR SEVERED, ROOT PRUNING TO INCLUDE FLUSH CUTTING AND SEALING OF EXPOSED ROOTS SHOULD BE ACCOMPLISHED UNDER THE SUPERVISION OF THE PROJECT ARBORIST TO MINIMIZE ROOT DETEIORATION BEYOND THE SOIL LINE WITHIN TWENTY-FOUR (24) HOURS.

4. PRUNING: PRUNING OF THE FOLIAR CANOPIES TO INCLUDE REMOVAL OF DEADWOOD IS RECOMMENDED AND SHOULD BE INITIATED PRIOR TO CONSTRUCTION OPERATIONS. SUCH PRUNING WILL PROVIDE ANY NECESSARY CONSTRUCTION CLEARANCE, WILL LESSEN THE LIKELIHOOD OR POTENTIAL FOR LIMB BREAKAGE, REDUCE 'WINDSAIL' EFFECT AND PROVIDE AN ENVIRONMENT SUITABLE FOR HEALTHY AND VIGOROUS GROWTH.

5. FERTILIZATION: A PROGRAM OF FERTILIZATION BY MEANS OF DEEP ROOT SOIL INJECTION IS RECOMMENDED WITH APPLICATIONS IN SPRING AND SUMMER FOR THOSE TREES TO BE IMPACTED BY CONSTRUCTION. SUCH FERTILIZATION WILL SERVE TO STIMULATE FEEDER ROOT DEVELOPMENT, OFFSET SHOCK/STRESS AS RELATED TO CONSTRUCTION AND/OR ENVIRONMENTAL FACTORS, ENCOURAGE VIGOR, ALLEVIATE SOIL COMPACTION AND COMPENSATE FOR ANY ENCR OACHMENT OF NATURAL FEEDING ROOT AREAS. INCEPTION OF THIS FERTILIZING PROGRAM IS RECOMMENDED PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITY. DOCUMENTATION REQUIRED.

6. IRRIGATION: A SUPPLEMENTAL IRRIGATION PROGRAM IS RECOMMENDED FOR THE ALL TREES (EXCLUDING OAK SPECIES) AND SHOULD BE ACCOMPLISHED AT REGULAR THREE TO FOUR WEEK INTERVALS DURING THE PERIOD OF MAY 1ST THROUGH OCTOBER 31ST, OR COMPLY WITH THE CURRENT ARBORIST REPORT, WHICHEVER IS MORE STRINGENT. IRRIGATION IS TO BE APPLIED AT OR ABOUT THE 'DRIP LINE' IN AN AMOUNT SUFFICIENT TO SUPPLY APPROXIMATELY FIFTEEN (15) GALLONS OF WATER FOR EACH INCH IN TRUNK DIAMETER. IRRIGATION CAN BE PROVIDED BY MEANS OF A SOIL NEEDLE, 'SOAKER' OR PERMEABLE HOSE. WHEN USING 'SOAKER' OR PERMEABLE HOSES, WATER IS TO BE RUN AT LOW PRESSURE, AVOIDING RUNOFF/PUDDLING, ALLOWING THE NEEDED MOISTURE TO PENETRATE THE SOIL TO FEEDER ROOT DEPTHS. DOCUMENTATION REQUIRED.

7. MULCH: MULCHING WITH WOOD CHIPS (MINIMUM DEPTH 2"-MAXIMUM DEPTH 3") WITHIN TREE ENVIRONMENTS (OUTER FOLIAR PERIMETER) WILL LESSEN MOISTURE EVAPORATION FROM SOIL, PROTECT AND ENCOURAGE ADVENTITIOUS ROOTS AND MINIMIZE POSSIBLE SOIL COMPACTION.

8. INSPECTION: CONTRACTOR SHALL OBTAIN COPY OF THE PROJECT ARBORIST REPORT FROM MONARCH CONSULTING ARBORISTS, DATED SEPT. 10, 2018, AND BE FAMILIAR AND CONFORM TO ALL REQUIREMENTS THEREIN. PERIODIC INSPECTIONS BY THE PROJECT ARBORIST ARE RECOMMENDED DURING CONSTRUCTION ACTIVITIES, PARTICULARLY AS TREES ARE IMPACTED BY TRENCHING/GRADING OPERATIONS. INSPECTIONS AT APPROXIMATE FOUR (4) WEEK INTERVALS WOULD BE SUFFICIENT TO ASSESS AND MONITOR THE EFFECTIVENESS OF THE TREE PRESERVATION PLAN AND TO PROVIDE RECOMMENDATIONS FOR ANY ADDITIONAL CARE OR TREATMENT. DOCUMENTATION REQUIRED.

9. CONTRACTOR SHALL REVIEW DETAILS 1,2 AND 3 OF THIS SHEET PRIOR TO ACCOMPLISHING ANY WORK OR REMOVING ANY TREES.

10. THE MATURE TREES SHALL BE IRRIGATED WITH EXISTING TREE IRRIGATION SYSTEM ON SITE THOROUGHLY ONE TIME EVERY 5 - 6 WEEKS ONCE THE WINTER RAINS STOP. ALL PARTS OF THE TREE TRUNK SHALL STAY DRY OR AS PROJECT ARBORIST DECIDES.

11. TREES/ LARGE PLANTS TO BE REMOVED OR RELOCATED SHALL BE TAGGED IN THE FIELD BY THE LANDSCAPE ARCHITECT AND/OR THE PROJECT ARBORIST.

12. REMOVE HEAVY VEGETATIVE GROWTH PRIOR TO SOIL STRIPPING. LEAVE SOIL IN PLACE WITHIN DRIP LINES OF TREES. STOCKPILE TOPSOIL IN AREAS DIRECTED BY LANDSCAPE ARCHITECT. COVER STOCKPILES TO PREVENT CONTAMINATION, WIND AND WATER EROSION IMMEDIATELY.

CON'T TREE PROTECTION NOTES

13. CONTRACTOR SHALL OBTAIN COPY OF PROJECT ARBORIST REPORT BY MONARCH CONSULTING ARBORISTS, DATED SEPT. 10, 2018, THE TREE SURVEY/TREE DISPOSITION PLAN PREPARED BY STUDIO FIVE DESIGN AND THE TREE PROTECTION/DISPOSTION DETAILS PREPARED BY STUDIO FIVE DESIGN AND BE FAMILIAR AND CONFORM TO ALL REQUIREMENTS THEREIN.

14. FOR 'TREE NUMBER' INFORMATION, SEE ARBORIST'S REPORT, DATED SETP. 10, 2018 AND TREE DISPOSITION PLANS BY STUDIO FIVE DESIGN.

15. DO NOT LIME WITHIN 50' OF ANY TREE. LIME IS TOXIC TO TREE ROOTS.

16. PRIOR TO GRADING, PAD PREPARATION, EXCAVATION FOR FOUNDATIONS/FOOTINGS/WALLS, TRENCHING, TREES MAY REQUIRE ROOT PRUNING OUTSIDE THE TREE PROTECTION ZONE BY CUTTING ALL ROOTS CLEANLY TO THE DEPTH OF THE EXCAVATION. ROOTS SHALL BE CUT BY MANUALLY DIGGING A TRENCH AND CUTTING EXPOSED ROOTS WITH A SAW, VIBRATING KNIFE, ROCK SAW, OR OTHER APPROVED ROOT PRUNING EQUIPMENT. THE PROJECT ARBORIST WILL IDENTIFY WHERE ROOT PRUNING IS REQUIRED AND MONITOR ALL ROOT PRUNING.

17. ALL UNDERGROUND UTILITIES, DRAIN LINES OR IRRIGATION LINES SHALL BE ROUTED OUTSIDE THE TREE PROTECTION ZONE. IF LINES MUST TRAVERSE THROUGH THE PROTECTION AREA, THEY SHALL BE TUNNELED OR BORED UNDER THE TREE AS DIRECTED BY THE PROJECT ARBORIST.

18. SOME TREE WERE NOT IDENTIFIED IN ARBORIST REPORT BECAUSE OF TREE CALIPER SIZE WAS LESS THAN 6"

19. TREE PROTECTION FENCING GRAPHIC IS DIAGRAMMATIC AND CONTRACTOR SHOULD REFER TO TREE PROTECTION DETAIL FOR SPECIFIC METHOD PER PRESERVED TREE.

20. TREES TO BE REMOVED SHALL BE CUT ONE FOOT ABOVE FINISHED GRADE AND THEN TREE STUMP SHALL BE GRIND 12" MIN. (OR DEEPER IF A PROPOSED TREE IS IN THE SAME LOCATION AND IS DEPENDENT ON PROPOSED BOX SIZE) BELOW FINISHED GRADE TO MINIMIZE IMPACT ON THE UNDER GROUND UTILITIES.

21. NEED TO RUN A CAMERA THROUGH THE SANITARY SEWER MAIN TO VERIFY INTRUSION OF TREE ROOTS. ALL DAMAGED SANITARY SEWER LINES AND WATER MAINS SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO CONSTRUCTING FINISHED GRADE.

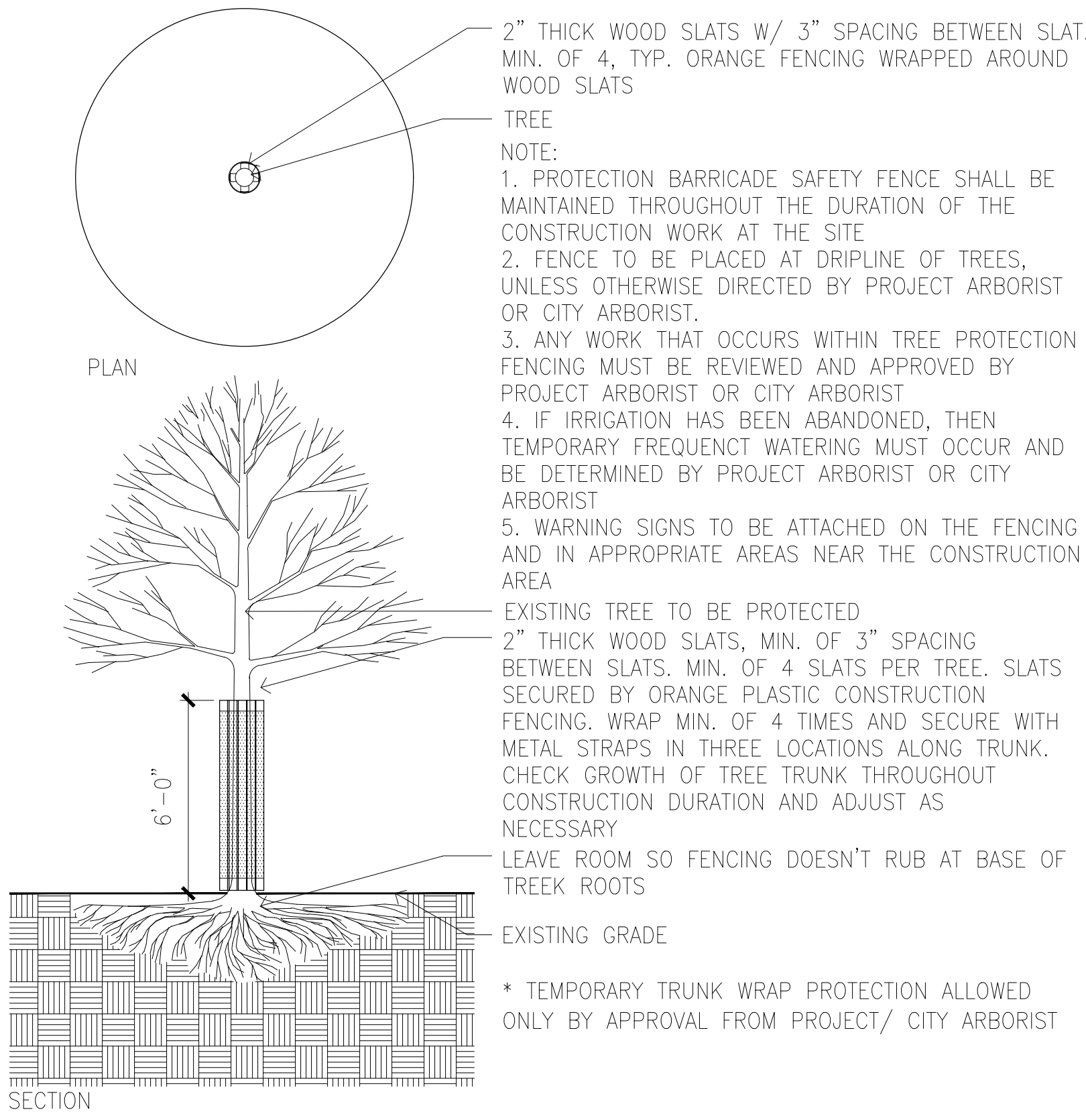
22. NO EXISTING TREE(S) MAY BE TRIMMED OR PRUNED WITHOUT PRIOR APPROVAL BY THE PROJECT ARBORIST OR CITY ARBORIST.

23. NO EQUIPMENT MAY BE STORED WITHIN OR BENEATH THE DRIP LINES OF THE EXISTING TREES TO BE SAVED.

24. NO OIL, GASOLINE, CHEMICALS OR OTHER HARMFUL MATERIALS SHALL BE DEPOSITED OR DISPOSED WITHIN THE DRIP LINE OF THE TREES OR IN DRAINAGE CHANNELS, SWALES OR AREAS THAT MAY LEAD TO THE DRIP LINE.

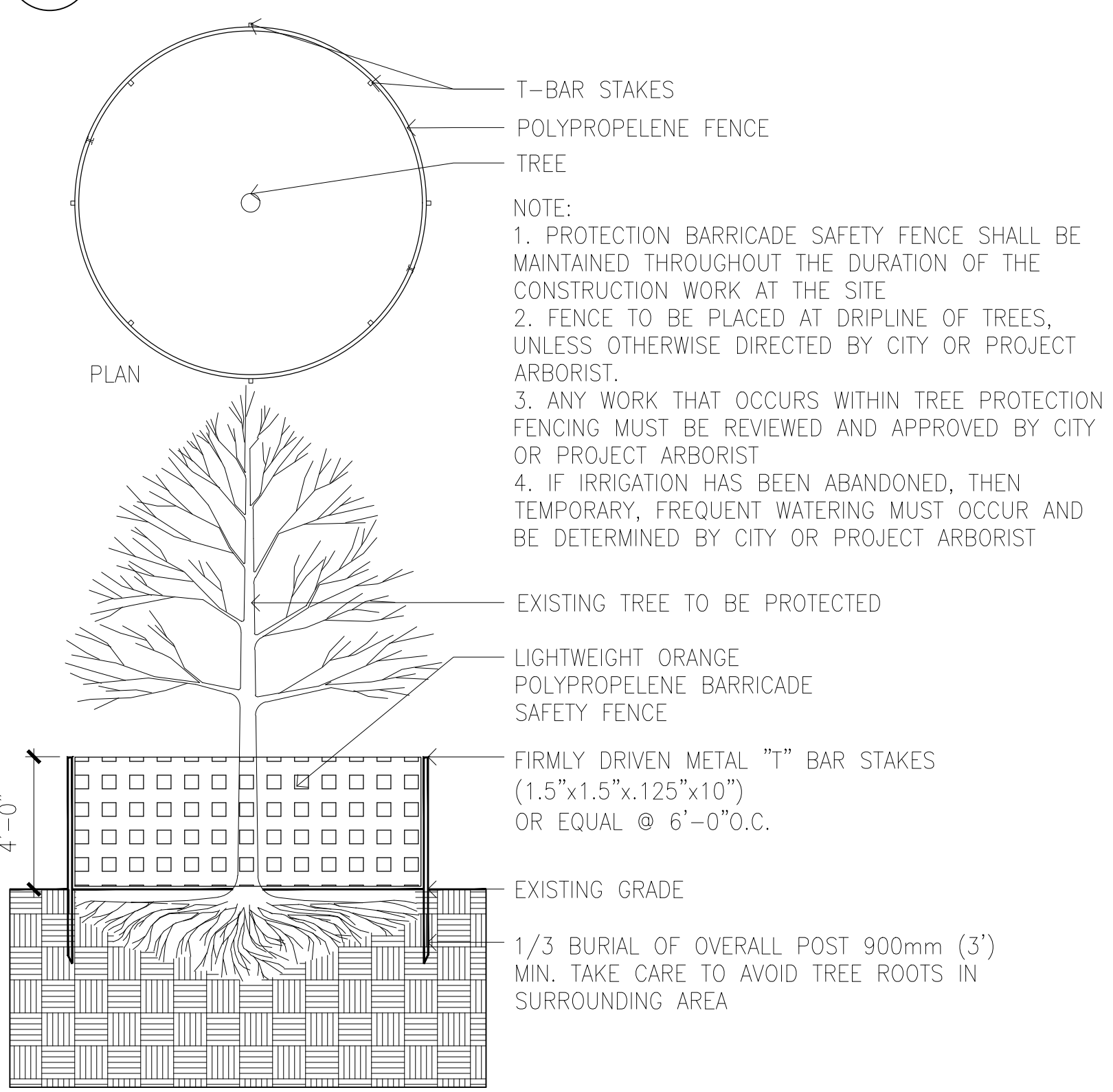
25.NO STOCKPILING/STORAGE OF FILL, ETC., SHALL TAKE PLACE UNDERNEATH OR WITHIN FIVE FEET OF THE DRIP LINE OF ALL EXISTING TREES.

26 THE PROJECT DEVELOPER SHALL COMPLY WITH THE RECOMMENDATIONS OF THE TREE REPORTS PREPARED BY MONARCH CONSULTING ARBORISTS, DATED SEPT. 10, 2018. A FINAL LIST OF THE TREE PRESERVATION MEASURES BY THE ARBORIST SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIRECTOR OF COMMUNITY DEVELOPMENT PRIOR TO BUILDING PERMIT ISSUANCE. NO TREE TRIMMING OR PRUNING OTHER THAN THAT SPECIFIED IN THE TREE REPORT SHALL OCCUR. THE PROJECT DEVELOPER SHALL ARRANGE FOR THE HORTICULTURAL CONSULTANT TO CONDUCT A FIELD INSPECTION PRIOR TO ISSUANCE OF CITY PERMITS TO ENSURE THAT ALL RECOMMENDATIONS HAVE BEEN PROPERLY IMPLEMENTED. THE CONSULTANT SHALL CERTIFY IN WRITING THAT SUCH RECOMMENDATIONS HAVE BEEN FOLLOWED.



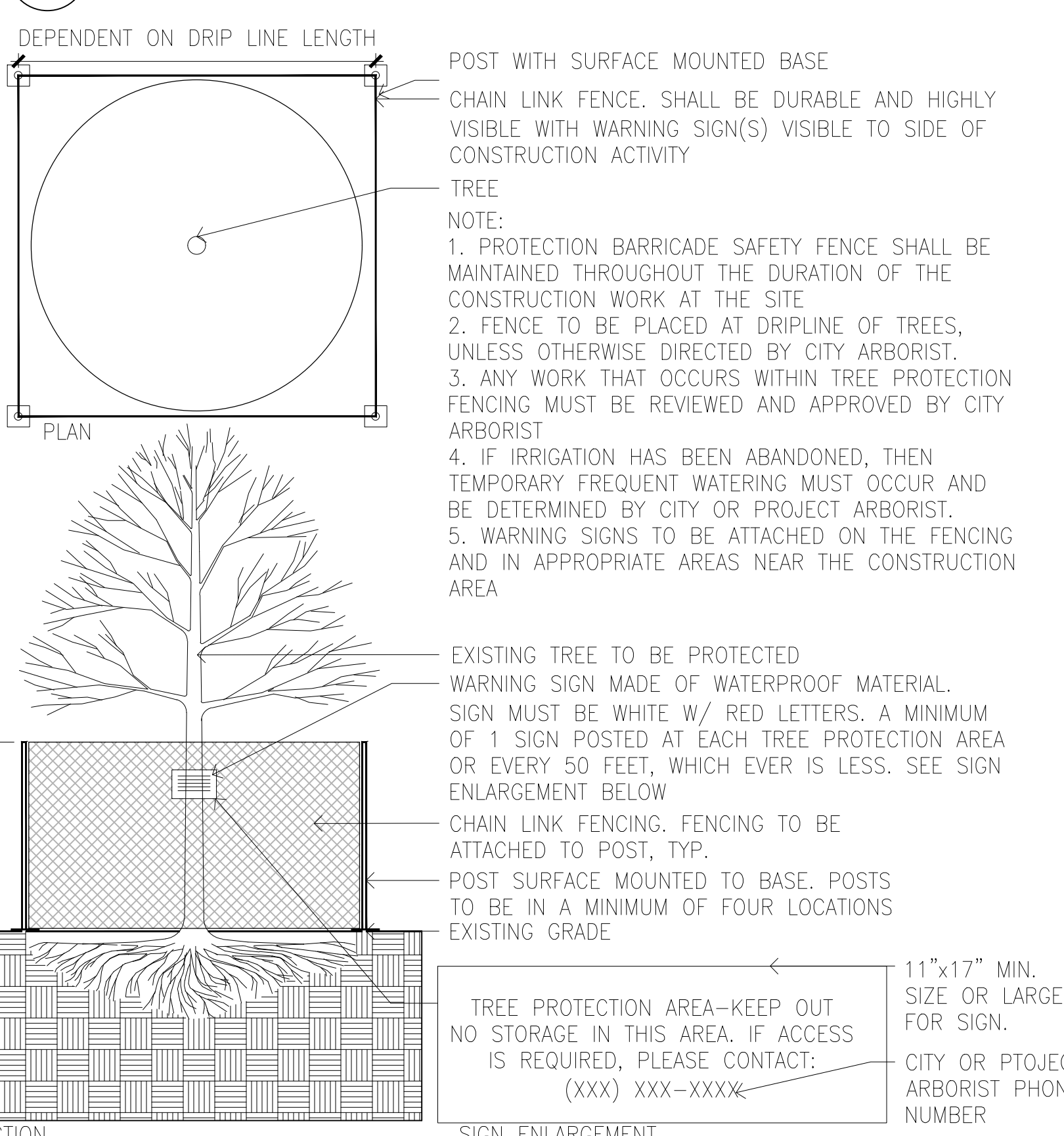
2 TREE PROTECTION – TEMPORARY TRUNK WRAP

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



3 TREE PROTECTION – ORANGE BARRIER FENCING

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



1 TREE PROTECTION – CHAIN LINK FENCING

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

TREES TO BE REMOVED

TREE NO.	TREE SPECIES	TRUNCH DIAMETER	24" BOX REPLACEMENT	36" BOX REPLACEMENT
2	Pinus canariensis	15.0	1	—
3	Pinus canariensis	30.0	—	2
4	Pinus canariensis	20.0	2	—
5	Pinus canariensis	24.0	2	—
6	Pinus canariensis	19.0	2	—
7	Pinus canariensis	15.5	1	—
10	Pinus canariensis	25.5	2	—
11	Pinus canariensis	15.0	1	—
12	Pinus canariensis	24.5	—	2
14	Sequoia sempervirens	19.3	2	—
16	Fraxinus uhdei	19.0	2	—
18	Fraxinus uhdei	20.3	2	—
17	Sequoia sempervirens	15.3	1	—
19	Sequoia sempervirens	16	1	—
20	Sequoia sempervirens	14.8	1	—
21	Sequoia sempervirens	15.8	1	—
22	Sequoia sempervirens	16.8	1	—
23	Fraxinus uhdei	24.0	2	—
27	Fraxinus uhdei	31.8	—	2
33	Fraxinus uhdei	28.0	—	2
34	Liquidambar styraciflua	11.8	—	—
35	Liquidambar styraciflua	16.5	1	—
36	Liquidambar styraciflua	13.5	1	—
37	Liquidambar styraciflua	15.0	1	—
38	Alnus rhombifolia	18.0	2	—
42	Liquidambar styraciflua	5.5	—	—
43	Liquidambar styraciflua	6.0	—	—
44	Fraxinus uhdei	41.0	—	2
45	Fraxinus uhdei	26.5	—	2
46	Fraxinus uhdei	28.0	—	2
47	Liquidambar styraciflua	20.3	2	—
48	Liquidambar styraciflua	14.5	1	—
49	Liquidambar styraciflua	13.0	1	—
53	Alnus rhombifolia	17.0	1	—
54	Alnus rhombifolia	16.8	1	—
55	Agonis flexuosa	7.5	—	—
73	Sequoia sempervirens	11.5	—	—
74	Fraxinus uhdei	16.0	1	—
81	Alnus rhombifolia	18.8	2	—
85	Alnus rhombifolia	14.0	1	—
86	Sequoia sempervirens	20.5	2	—
87	Sequoia sempervirens	27.5	—	2
88	Sequoia sempervirens	31.0	—	2
89	Sequoia sempervirens	30.0	—	2
90	Liquidambar styraciflua	11.8	—	—
91	Liquidambar styraciflua	9.0	—	—
92	Liquidambar styraciflua	11.0	—	—
93	Betula Pendula	1.5	—	—
94	Betula Pendula	8.0	—	—
95	Betula Pendula	8.8	—	—
96	Sequoia sempervirens	24.5	—	2
97	Sequoia sempervirens	22.5	2	—
98	Sequoia sempervirens	19.5	2	—
99	Betula Pendula	8.0	—	—
100	Liquidambar styraciflua	15.0	1	—

TREE NO.	TREE SPECIES	TRUNCH DIAMETER	24" BOX REPLACEMENT	36" BOX REPLACEMENT
101	Liquidambar styraciflua	15.5	1	—
102	Liquidambar styraciflua	16.3	1	—
103	Alnus rhombifolia	34.0	—	2
105	Sequoia sempervirens	34.0	—	2
106	Sequoia sempervirens	30.5	—	2
107	Alnus rhombifolia	22.3	2	—
108	Sequoia sempervirens	22.0	2	—
109	Sequoia sempervirens	23.5	2	—
110	Betula Pendula	3.0	—	—
111	Betula Pendula	8.0	—	—
112	Liquidambar styraciflua	7.8	—	—
113	Alnus rhombifolia	22.0	2	—
114	Alnus rhombifolia	24.5	—	2
115	Alnus rhombifolia	25.0	—	2
116	Alnus rhombifolia	22.5	2	—
117	Liquidambar styraciflua	12.0	1	—
118	Liquidambar styraciflua	9.0	—	—
119	Liquidambar styraciflua	12.0	1	—
120	Liquidambar styraciflua	11.5	—	—
121	Liquidambar styraciflua	17.3	1	—
122	Betula Pendula	10.0	—	—
123	Betula Pendula	7.5	—	—
124	Betula Pendula	5.5	—	—
125	Betula Pendula	7.5	—	—
126	Liquidambar styraciflua	16.0	1	—
127	Alnus rhombifolia	23.3	2	—
128	Liquidambar styraciflua	16.5	1	—
129	Liquidambar styraciflua	12.3	1	—
130	Liquidambar styraciflua	14.0	1	—
131	Alnus rhombifolia	17.0	1	—
132	Fraxinus uhdei	26.5	—	2
133	Liquidambar styraciflua	16.0	1	—
134	Liquidambar styraciflua	12.5	1	—
135	Liquidambar styraciflua	9.5	—	—
136	Liquidambar styraciflua	14.5	1	—
140	Betula Pendula	11.5	—	—
141	Betula Pendula	9.5	—	—
142	Agonis flexuosa	11.0	—	—
143	Salix babylonica	18.0	2	—
144	Liquidambar styraciflua	12.5	1	—
145	Liquidambar styraciflua	11.8	—	—
146	Sequoia sempervirens	13.5	1	—
147	Sequoia sempervirens	17.0	1	—
148	Sequoia sempervirens	28.0	—	2
150	Liquidambar styraciflua	12.5	1	—
151	Liquidambar styraciflua	11.0	—	—
152	Liquidambar styraciflua	10.0	—	—
153	Liriodendron tulipifera	5.0	—	—
154	Liriodendron tulipifera	4.3	—	—
155	Liriodendron tulipifera	3.0	—	—
156	Liriodendron tulipifera	4.3	—	—
157	Liriodendron tulipifera	4.8	—	—
158	Liriodendron tulipifera	4.3	—	—
159	Liriodendron tulipifera	4.0	—	—
160	Liriodendron tulipifera	5.8	—	—
161	Liquidambar styraciflua	11.3	—	—
162	Liquidambar styraciflua	10.8	—	—
163	Liquidambar styraciflua	16.5	1	—
164	Pinus canariensis	12.0	1	—
165	Pinus canariensis	9.0	—	—
166	Pinus canariensis	9.0	—	—
167	Pinus canariensis	13.5	1	—
168	Schinus molle	15.0	1	—
169	Schinus molle	17.5	1	—
170	Sequoia sempervirens	21	2	—
171	Sequoia sempervirens	17	1	—
172	Schinus molle	22.5	2	—
173	Sequoia sempervirens	22	2	—
174	Sequoia sempervirens	16.5	1	—
175	Sequoia sempervirens	17	1	—
TOTAL REPLACEMENT REQUIRED			91	36

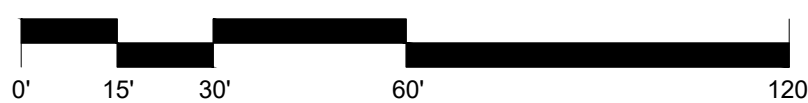
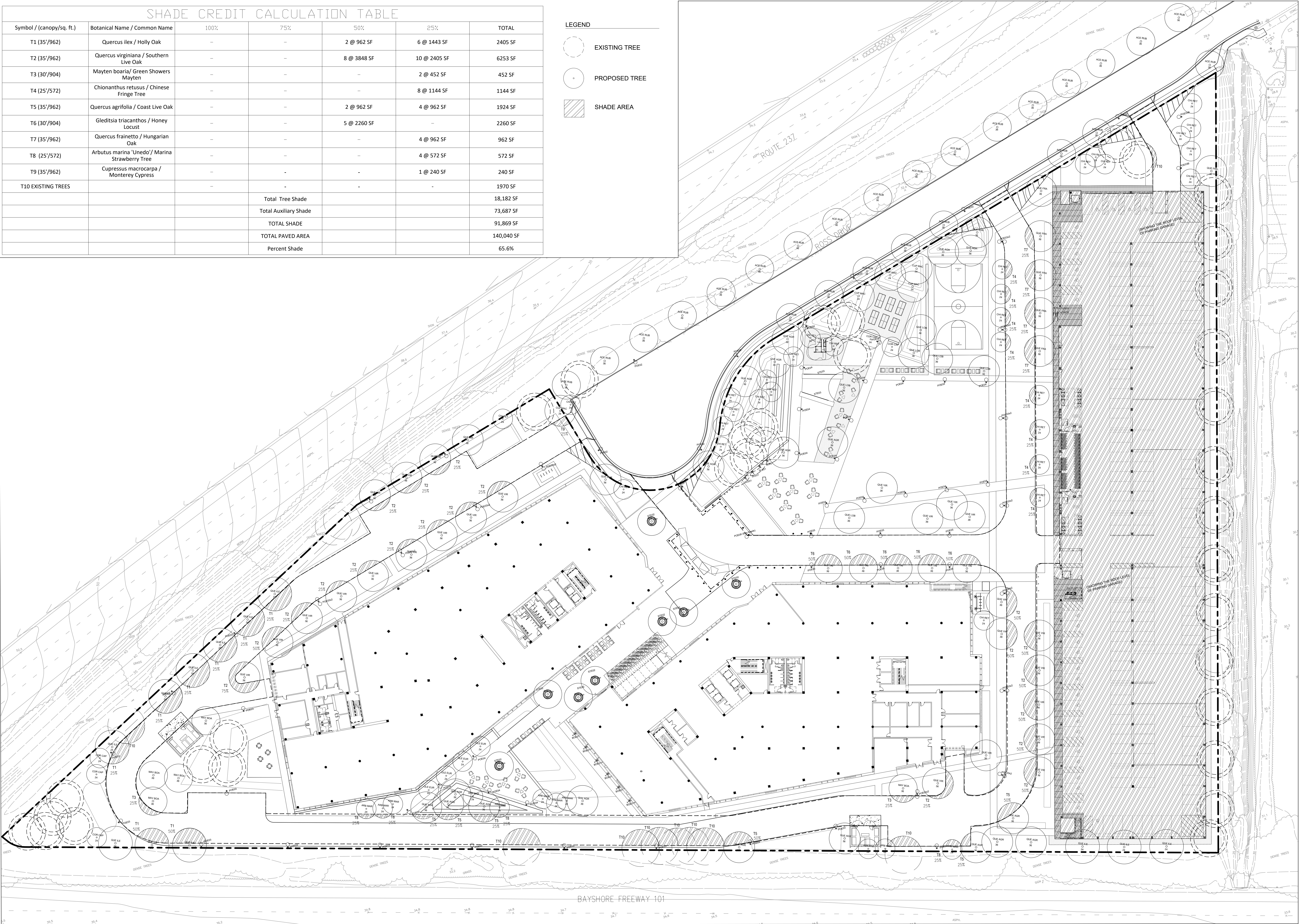
PROTECTED TREES FOR REMOVAL

TREE SPECIES	POOR HEALTH	CONFLICTS WITH SITE PLAN(MODERATE/GOOD HEALTH)
Alnus rhombifolia	9	4
Fraxinus uhdei	1	7
Liquidambar styraciflua	9	13
Salix babylonica	1	0
Sequoia sempervirens	0	14
TOTAL	20	38

TREE PROTECTION NOTES & GUIDELINES

SHADE CREDIT CALCULATION TABLE						
Symbol / (canopy/sq. ft.)	Botanical Name / Common Name	100%	75%	50%	25%	TOTAL
T1 (35'/962)	Quercus ilex / Holly Oak	-	-	2 @ 962 SF	6 @ 1443 SF	2405 SF
T2 (35'/962)	Quercus virginiana / Southern Live Oak	-	-	8 @ 3848 SF	10 @ 2405 SF	6253 SF
T3 (30'/904)	Mayten boaria/ Green Showers Mayten	-	-	-	2 @ 452 SF	452 SF
T4 (25'/572)	Chionanthus retusus / Chinese Fringe Tree	-	-	-	8 @ 1144 SF	1144 SF
T5 (35'/962)	Quercus agrifolia / Coast Live Oak	-	-	2 @ 962 SF	4 @ 962 SF	1924 SF
T6 (30'/904)	Gleditsia triacanthos / Honey Locust	-	-	5 @ 2260 SF	-	2260 SF
T7 (35'/962)	Quercus frainetto / Hungarian Oak	-	-	-	4 @ 962 SF	962 SF
T8 (25'/572)	Arbutus marina 'Unedo' / Marina Strawberry Tree	-	-	-	4 @ 572 SF	572 SF
T9 (35'/962)	Cupressus macrocarpa / Monterey Cypress	-	-	-	1 @ 240 SF	240 SF
T10 EXISTING TREES		-	-	-	-	1970 SF
			Total Tree Shade			18,182 SF
			Total Auxiliary Shade			73,687 SF
			TOTAL SHADE			91,869 SF
			TOTAL PAVED AREA			140,040 SF
			Percent Shade			65.6%

- LEGEND
- EXISTING TREE
 - PROPOSED TREE
 - SHADE AREA



06/03/20

PEERY PARK

MATERIALS SCHEDULE – PEERY PARK STP

SYMBOL	DESCRIPTION	PRODUCT/ITEM#	FINISH/COLOR	SOURCE/COMMENTS
PAVING & HEADERS				
[PV-1]	ASPHALT	S.C.D	S.C.D	S.C.D
[PV-2]	4" CONCRETE PAVING – PED (ON GRADE)	$\frac{3}{8}$ " MAX. FEATHER TROWEL SCORE JOINT, TYP.	COLOR: NATURAL GREY FINISH: CITY STANDARD	CITY STANDARDS
[PV-2a]	4" CONCRETE PAVING – PED (ON GRADE)	$\frac{3}{8}$ " MAX. FEATHER TROWEL SCORE JOINT, TYP.	COLOR: T.B.D, FINISH: MEDIUM SAND BLAST	DAVIS
[PV-3]	6" CONCRETE PAVING – VEH	$\frac{3}{8}$ " MAX. FEATHER TROWEL SCORE JOINT, TYP.	COLOR: SANDSTONE FINISH: CITY STANDARD	DAVIS
[PV-4]	CONCRETE UNIT PAVER – PED	24"x24"x2 $\frac{1}{2}$ ", RANDOM RUNNING BOND, LARGE SCALE CALARCH, SAND SET BUTT JOINT W/ POLYMERIC SAND, TYP.	FIELD COLOR: PORCELAIN, #1413 SANDBLAST	STEPSTONE, INC
[PV-5]	CONCRETE UNIT PAVER – PED	6"x24"x2 $\frac{1}{2}$ ", LARGE SCALE CALARCH W/ NARROW MOD ACCENT PAVERS, SAND SET BUTT JOINT W/ POLYMERIC SAND	FIELD COLOR: FRENCH GREY, #1404 SANDBLAST	STEPSTONE, INC
[PV-5a]	CONCRETE UNIT PAVER – VEH	3"x12"x4", CALARCH PAVER, SAND SET BUTT JOINT W/ POLYMERIC SAND	FIELD COLOR: FRENCH GREY, #1404 SANDBLAST	STEPSTONE, INC
[PV-6]	CONCRETE UNIT PAVER – PED. (ON PODIUM)	12"x48"x2 $\frac{1}{2}$ ", STACK BOND, ADJUSTABLE PEDESTAL	FIELD COLOR: PORCELAIN, ADJUSTABLE PEDESTAL	PAVER: STEPSTONE, INC, PEDESTAL: BISON
[PV-7]	CONCRETE PAVER – VEH	4"x4" HOLLAND II, STACKED BOND, SAND SET, BUTT JOINT W/ POLYMERIC SAND	FIELD COLOR: LIGHT GREY, FACEMIX, SHOT BLAST, GRIND W/ SLAG	ACKERSTONE, INC
[PV-8]	PAVER EDGE RESTRAINT – ON GRADE	$\frac{5}{8}$ "x2 $\frac{1}{2}$ " STRUCTURE EDGE (HEAVY DUTY)	MILL FINISH	PERMALOC
[PV-8a]	PAVER EDGE RESTRAINT – ON PODIUM	4.5"x4.5" GEOEDGE W/ CLEANLINE EXTENDER	MILL FINISH	PERMALOC
[PV-9]	LANDSCAPE HEADER	$\frac{3}{8}$ "x4" CLEANLINE	MILL FINISH	PERMALOC
[PV-11]	TRUNCATED DOME PAVER	12"x12"x6CM	TRUNCATED DOME PAVER STACKED BOND, CHARCOAL GREY	ACKERSTONE
[PV-13]	DECOMPOSED GRANITE W/ GRANITECRETE	$\frac{3}{4}$ " CLEAN DG, GOLD	MONTEREY GOLD	SBI MATERIALS, MICK WELLS
[PV-14]	SYNTHETIC TURF	4800 TEXTURIZED POLYETHYLENE, FIELD GREEN & BEIGE	–	PROGREEN
[PV-15]	BOARDWALK, LINEAR DECKS	STAINLESS STEEL	–	CUSTOM
[PV-16]	SLATE CHIP	SIZE: 3–7" DIA	COLOR: CHARCOAL GREY	LYNGSO
[PV-17]	BOARDWALK, LINEAR DECKS	–	FSE IPE WOOD BOARDS	CUSTOM
[PV-18]	FSC IPE WOOD TILE PAVER – PED. (ON PODIUM)	2"x4' IPE TILE W/ ADJUSTABLE PEDESTALS	FSE IPE WOOD BOARDS	BISON

SYMBOL	DESCRIPTION	PRODUCT/ITEM#	FINISH/COLOR	SOURCE/COMMENTS
STAIR, WALL, FENCE & CURB				
[W-1]	6" CONCRETE CURB	S.C.D.	S.C.D.	CITY STANDARDS
[W-2]	12" WIDE CONCRETE BAND–VEH.	P.I.P. CONCRETE, BEVELED	MEDIUM SAND BLAST	NATURAL GREY
[W-3]	FREESTANDING SITE WALL–TYPE 1	P.I.P. REINFORCED CONCRETE, RECESSED LIGHTING,	COLOR: CHARCOAL GREY, FINISH: LIGHT SAND BLAST	DAVIS COLORS
[W-4]	RETAINING SITE WALL–TYPE 1	P.I.P. REINFORCED CONCRETE, RECESSED LIGHTING	COLOR: CHARCOAL GREY, FINISH: LIGHT SAND BLAST	DAVIS COLORS
[W-5]	SEAT WALL	P.I.P. REINFORCED CONCRETE, RECESSED LIGHTING, WOOD INLAYS	COLOR: CHARCOAL GREY, FINISH: LIGHT SAND BLAST	DAVIS COLORS
[W-6]	VEHICULAR SPEED TABLE	P.I.P. REINFORCED CONCRETE, VEHICLE RATED	COLOR: CHARCOAL GREY, FINISH: LIGHT SAND BLAST	DAVIS COLORS
[W-7]	AMPHITHEATER STAIR– 1 ROW W/ RECESSED LIGHT FIXTURES	P.I.P. REINFORCED CONCRETE, RECESSED LIGHTING, WOOD INLAYS	COLOR: CHARCOAL GREY, FINISH: LIGHT SAND BLAST	DAVIS COLORS
[W-8]	GREEN WALL	FRAMEWORK: TOURNESOL, PLANT SELECTION T.B.D	TBD	TOURNESOL
[W-9]	EXTERIOR FIREPLACE	P.I.P INTEGRAL COLORED CONCRETE W/ GAS INSERT	COLOR: DARK GREY, FINISH: BOARD FORM, 2" WIDE	CUSTOM FABRICATION
[W-10]	RETAINING WALL (ON PODIUM)	P.I.P. REINFORCED CONCRETE, RECESSED LIGHTING	COLOR: DARK GREY, FINISH: BOARD FORM, 2" WIDE	DAVIS COLORS

SYMBOL	DESCRIPTION	PRODUCT/ITEM#	FINISH/COLOR	SOURCE/COMMENTS
SITE FURNISHINGS				
[SF-1]	BENCH	ESCOFET LEVIT BENCH	TBD	LANDSCAPE FORMS
[SF-2]	LOUNGE SIDE TABLE–TYPE 1	KAAT COFFEE TABLE MEDIUM–MG2902	TBD	MAMAGREEN
[SF-2a]	LOUNGE CHAIR–TYPE 1	KAAT 1–SEATER	TBD	MAMAGREEN
[SF-3]	DINING TABLE	TBD	TBD	TBD
[SF-3a]	DINING CHAIR	TBD	TBD	TBD
[SF-4]	SECTIONAL/COFFEE TABLE	TBD	TBD	TBD
[SF-4a]	SECTIONAL SEATING	TBD	TBD	TBD
[SF-5]	BISTRO TABLE & CHAIR	PARC CENTRE, 30" ROUND TABLE, PARC CENTRE CHAIR	METALLIC SILVER	LANDSCAPE FORMS
[SF-6]	LITTER + RECYCLE RECEPTACLE	TBD	TBD	TBD
[SF-7]	PUBLIC ART SCULPTURE	TBD	TBD	TBD
[SF-8]	MULTI–SPORTS COURT	TBD	TBD	TBD
[SF-9]	BOLLARD – FIXED	36"H X 6" DIA. #SSF06080 FIXED	6" DIA. 316 STAINLESS STEEL. POLISHED STAINLESS STEEL #4 FINISH, FLAT CAP	CALPIPE SECURITY BOLLARD
[SF-10]	POTAGER	CEDAR STRUCTURE, GOPHER WIRE BASE	TBD	CUSTOM
[SF-11]	BIKE RACKS	BOLA	STAINLESS STEEL	LANDSCAPE FORMS
[SF-12]	SHUFFLE BOARD	TBD	TBD	TBD
[SF-13]	CIRCULAR IPE PLANTER	TBD		STREET LIFE
[SF-14]	LOUNGE SIDE TABLE–TYPE 2	TBD		–

[SF-15]	LOUNGE CHAIR–TYPE 2	TBD		–
[SF-16]	OUTDOOR SPORTS EQUIPMENT	TBD		LAPPSET
[SF-17]	BARSTOOLS & BAR TABLE–TYPE 1	TBD		–
[SF-17a]	BARSTOOLS & BAR TABLE–TYPE 2	TBD		–
[SF-18]	FARMSTYLE TABLE	TBD		–
[SF-19]	RECTANGULAR PLANTER–TYPE 1	TBD		ORE CONTAINER
[SF-20]	RECTANGULAR PLANTER–TYPE 2	TBD		STREET LIFE
[SF-21]	MODULAR IPE SEATING	TBD		STREET LIFE
[SF-22]	BOCCO COURT	IPE WOOD BUMPERS AND FRAMEWORK W/ RECESSED ATTACHMENTS & WOOD PLUGS	IPE WOOD	CUSTOM

SYMBOL	DESCRIPTION	PRODUCT/ITEM#	FINISH/COLOR	SOURCE/COMMENTS
FOUNTAIN				
[F-1]	FOUNTAIN BASIN	P.I.P. INTEGRAL COLORED CONCRETE W/ XIPEX & LYNGSO SLATE CHIP	SEE PLAN	–
[F-2]	FOUNTAIN SCUPPERS	STAINLESS STEEL SCUPPES	SEE PLAN	–

SYMBOL	DESCRIPTION	PRODUCT/ITEM#	FINISH/COLOR	SOURCE/COMMENTS
DRAINAGE				
[D-1]	BIOFILTRATION	S.C.D. FOR DRAINAGE PLANS	–	–

SYMBOL	DESCRIPTION	PRODUCT/ITEM#	FINISH/COLOR	SOURCE/COMMENTS
LIGHTING				
[L-1]	POLE LIGHT – PEDESTRIAN	S.E.D., REFER TO POE04	–	–
[L-2]	POLE LIGHT – VEHICULAR (SYMMETRICAL)	S.E.D., REFER TO POE03X2	–	–
[L-2a]	POLE LIGHT – VEHICULAR (ASYMMETRICAL)	S.E.D., REFER TO POE03	–	–
[L-2b]	POLE LIGHT – VEHICULAR (ASYMMETRICAL)	S.E.D., REFER TO POE02	–	–
[L-2c]	POLE LIGHT – VEHICULAR (ASYMMETRICAL)	S.E.D., REFER TO POE03B	–	–
[L-2d]	POLE LIGHT – VEHICULAR (ASYMMETRICAL)	S.E.D., REFER TO POE05	–	–
[L-2e]	POLE LIGHT – VEHICULAR (6–HEADS)	S.E.D., REFER TO POE06	–	–
[L-3]	RECESSED WALL LIGHT	S.E.D., REFER TO SLE01	–	–
[L-4]	STRIP LIGHT	S.E.D., REFER TO STE02	–	–
[L-5]	BOLLARD – LIGHTED	S.E.D., REFER TO BOE01	–	–
[L-6]	STRIP LIGHT	S.E.D., REFER TO STE03	–	–

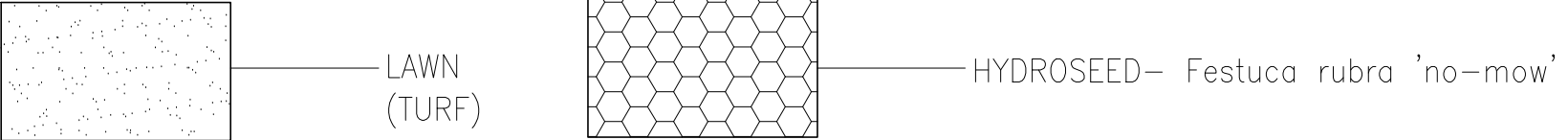
SYMBOL	DESCRIPTION	PRODUCT/ITEM#	FINISH/COLOR	SOURCE/COMMENTS
MISC.				

PLANT LIST – PEERY PARK STP

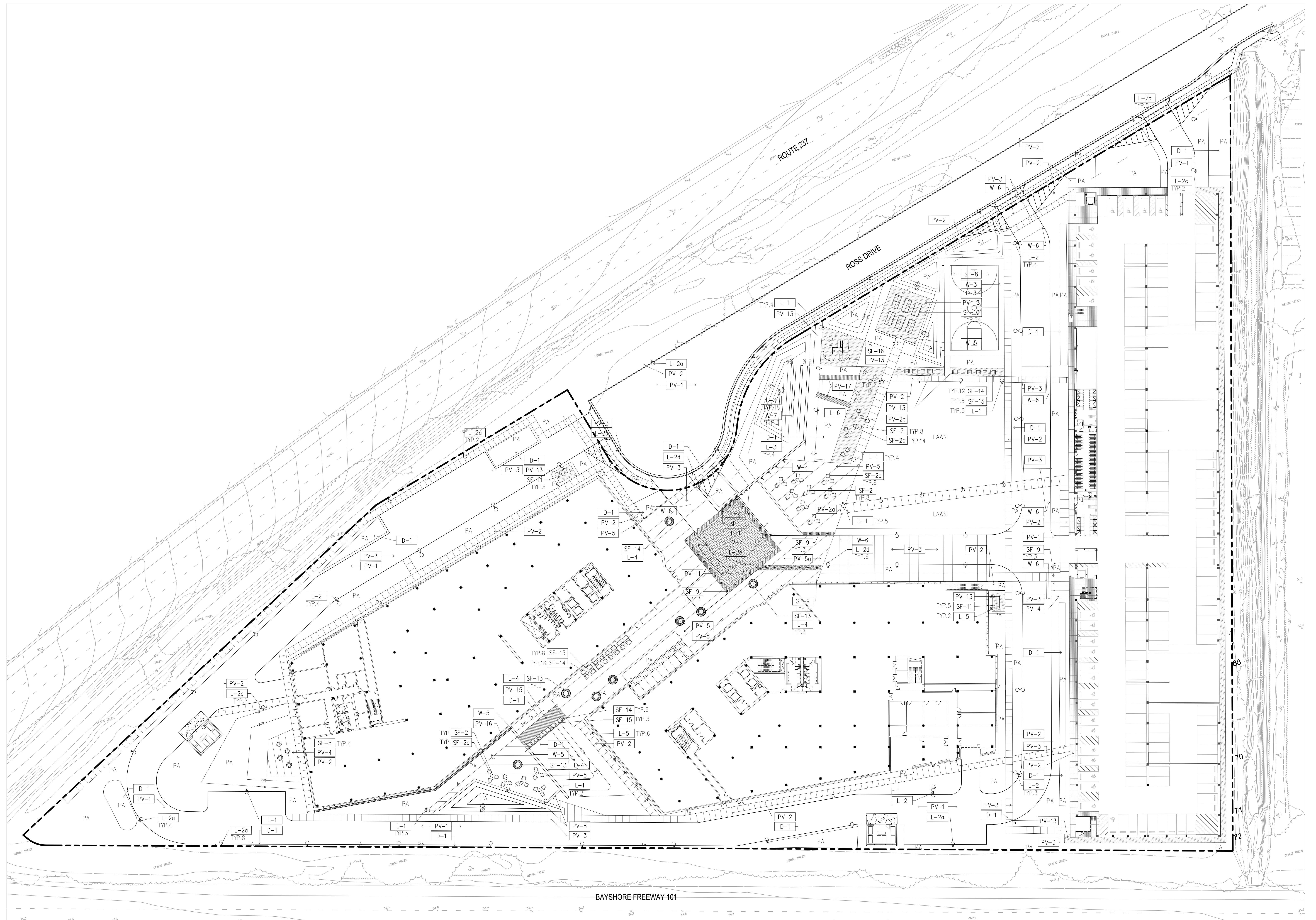
SIZE	ID	BOTANICAL NAME	COMMON NAME	COMMENT	SPACIN G	WUCOL
TREES						
24" Box	QOR CAP	Cornus capitata 'Mountain Moon'	Evergreen Dogwood		As shown	M
24" Box	CHI RET	Chionanthus retusus	Chinese Fringe Tree		As shown	M
24" Box	CUP MAC	Cupressus macrocarpa	Monterey Cypress		As shown	M
24" Box	ARB MAR	Arbutus 'Marina'	Marina Strawberry Tree		As shown	L
36" Box	ACE JAP	Acer palmatum	Japanese Maple Tree		As shown	M
36" Box	ACE RUB	Acer rubrum	Red Maple		As shown	M
36" Box	GLE TRI	Gleditsia triacanthos	Honey Locust		As shown	L
24" Box	OLE EUR	Olea europaea	Olive Tree		As shown	VL
36" Box	MAY BOA	Mayten boaria 'Green Showers'	Green Showers Mayten		As shown	M
48" Box	QUE AGR	Quercus agrifolia	Coast Live Oak		As shown	L
36" Box	QUE FRA	Quercus frainetto	Hungarian Oak		As shown	L
36" Box	QUE LOB	Quercus lobata	Valley Oak		As shown	L
24" Box	QUE VIR	Quercus virginiana 'standard'	Southern Live Oak		As shown	M
36" Box	QUE ILE	Quercus ilex	Holly Oak		As shown	L

SIZE	ID	BOTANICAL NAME	COMMON NAME	COMMENT	SPACIN G	WUCOL
SHRUBS, PERENNIALS, & SUCCULANTS						
1 Gal	AEO	Aeonium spp.	Aeonium		As shown	
15 Gal	ARB MAR	Arbutus unedo compacta	Dwarf Strawberry Tree		As shown	L
5 Gal	ARS	Arctostaphylos 'Sunset'	Manzanita		As shown	VL
5 Gal	AM	Achillea millefolium	Yarrow – White		As shown	L
5 Gal	ALO	Aloe arborescens	Aloe		As shown	L
5 Gal	AUC	Arbutus unedo 'Compacta'	Dwarf strawberry tree		As shown	L
1 Gal	BF	Bulbine frutiscens	Bulbine		As shown	L
5 Gal	CJC	Ceanothus 'Joyce Coulter'	Joyce Coulter Ceanothus		As shown	L
5 Gal	CSF	Cistus 'Snowfire'	Snowfire Rockrose		As shown	L
5 Gal	CTH	Ceanothus thyrsiflorus 'Snow Flurry'	Snow Flurry Ceanothus		As shown	L
5 Gal	ECH	Echinacea spp.	Coneflower		As shown	M
1 Gal	GL	Gaura lindheimeri	Gaura		As shown	L
5 Gal	HM	Heuchera maxima	Island Alum Root		As shown	M
5 Gal	HQP	Hydrangea quercifolia 'Pee Wee'	Pee Wee Oak Leaf Hydrangea		As shown	M
1 Gal	LEV	Leucanthemum vulgare	Oxeye Daisy		As shown	L
5 Gal	LS	Liatris spicata	Gayfeather		As shown	M
5 Gal	OEL	Olea europaea 'Little Ollie'	Dwarf Olive Shrub		As shown	VL
5 Gal	OST	Osteospermum spp.	African Daisy		As shown	L
1 Gal	PMB	Penstemon heterophylus 'Margarite'	Penstemon		As shown	M
5 Gal	PCN	Pittosporum crassifolium 'Nana'	Dwarf Karo		As shown	M
5 Gal	PIB	Podocarpus elongatus 'Monma'	Icee Blue Podocarpus		As shown	M
5 Gal	PL	Prunus laurocerausus	English Laurel		As shown	M
5 Gal	PCB	Prunus caroliniana 'Bright & Tight'	Cherry Laurel		As shown	M
5 Gal	RO	Rosemary officinalis 'Tuscan Blue'	Upright Rosemary		As shown	L
5 Gal	RUH	Rudbeckia hirta	Blackeyed Susan		As shown	M
5 Gal	SGA	Salvia greggii 'Alba'	Texas White Sage		As shown	L
5 Gal	VB	Verbena bonariensis	Purple Top Verbena		As shown	L
5 Gal	VL	Verbena lilacina 'De Le Mina'	Purple Cedros Island Verbena		As shown	L
5 Gal	YG	Yucca gloriosa 'multi'	Spanish bayonet		As shown	L
5 Gal	MCC	Myrtus communis 'compacta'	Myrtle		As shown	M

SIZE	ID	BOTANICAL NAME	COMMON NAME	COMMENT	SPACIN G	WUCOL
ORNAMENTAL GRASSES, RUSHES, GROUNDCOVER, VINES						
1 Gal	BPP	Baccharis pilularis 'Pigeon Point'	Coyote Brush		30" O.C.	L
5 Gal	CAS	Calandrinia spectabilis	Rock Purslane		30" O.C.	VL
1 Gal	CHT	Chondropetalum tectorum	Cope Reed		18" O.C.	L
4" Pot	CP	Carex pansa	Dune Sedge		18" O.C.	M
4" Pot	CT	Carex tumulicola	Berkeley Sedge		30" O.C.	M
1 Gal	CGH	Ceanothus griseus var. horizontalis 'Yankee Point'	Yankee Point California Lilac		36" O.C.	VL
1 Gal	DV	Dietes vegeta	Fortnight Lily		30" O.C.	L
1 Gal	DR	Dianella revoluta	Flax lily		24" O.C.	L
1 Gal	EK	Erigeron karvinskianus	Fleabane		36" O.C.	L
1 Gal	FP	Ficus pumila	Fig vine		as shown	
1 Gal	LMW	Liriope muscari 'Monrow White'	Liriope		36" O.C.	M
1 Gal	HS	Helictotrichon sempervirens	Blue Oat Grass		18" O.C.	L
1 Gal	LCC	Leymus condensatus 'Canyon Prince'	Giant Wild Rye		24" O.C.	VL
1 Gal	LLB	Lomandra longifolia 'Breeze	Dwarf Mat Rush		24" O.C.	L
4" Pot	LTL	Leymus triticoides 'Lagunita'	Lagunita Wild Rye		18" O.C.	L
5 Gal	NF	Nephrolepis cordifolia	Southern Sword Fern		36" O.C.	M
1 Gal	PS	Pennisetum spathiolatum	Slender Veldt Grass		24" O.C.	M
1 Gal	PJ	Pandorea jasminoides 'Alba'	Bower Vine		as shown	M
1 Gal	PFT	Pennisetum s. 'Fairy Tales'	Fairy Tales pennisetum		24" O.C.	M
4" Pot	SA	Seslaria autumnalis	Autumn Moor Grass		18" O.C.	M
1 Gal	SBB	Salvia 'Bee Bliss'	Creeping Salvia		24" O.C.	L
1 Gal	SM	Senecio mandraliscae	Blue Finger		24" O.C.	L



Note: Plant hatch symbol is for clarity of planting area. Plant ID indicated determines plant type at each hatch location.





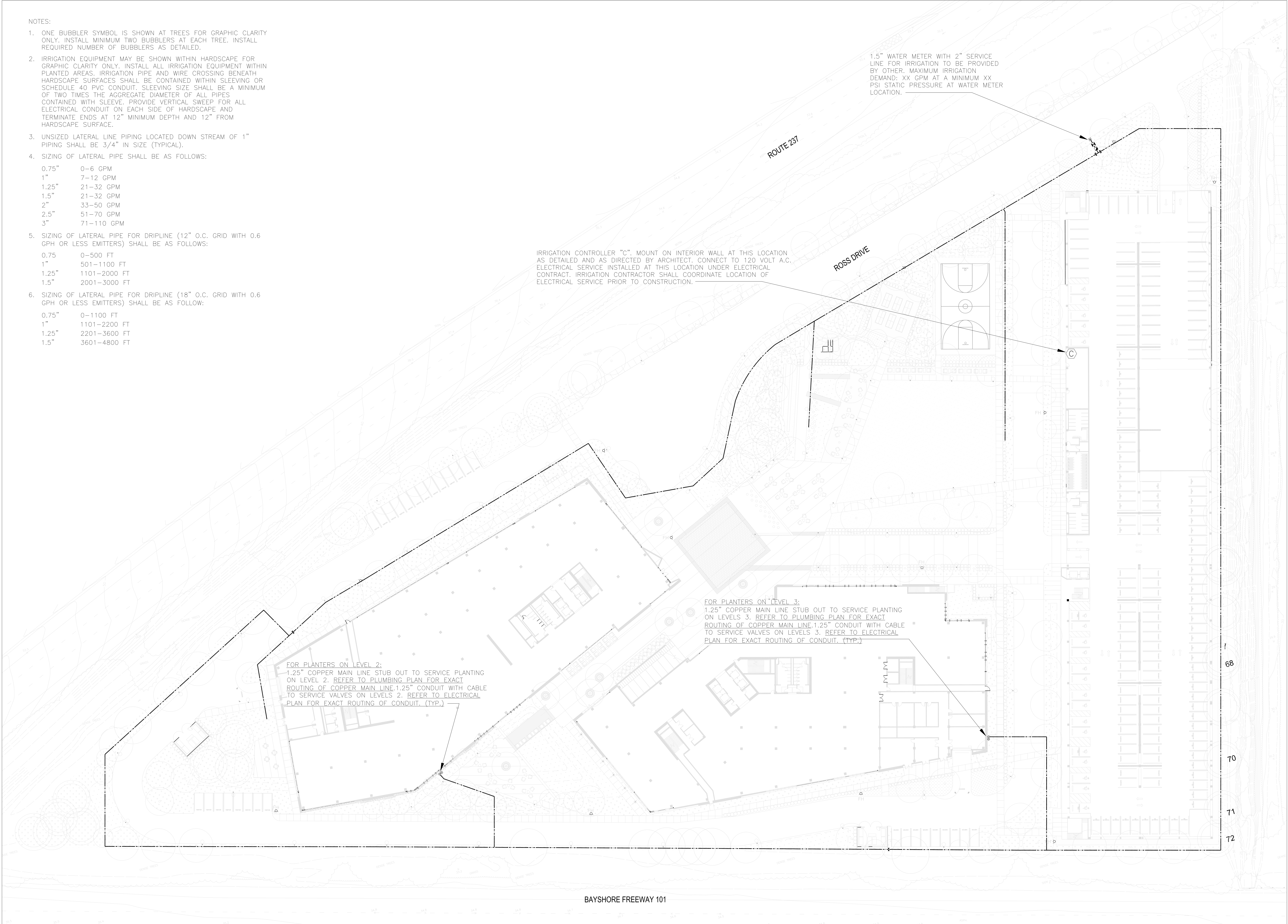


- NOTES:
- ONE BUBBLER SYMBOL IS SHOWN AT TREES FOR GRAPHIC CLARITY ONLY. INSTALL MINIMUM TWO BUBBLERS AT EACH TREE. INSTALL REQUIRED NUMBER OF BUBBLERS AS DETAILED.
 - IRRIGATION EQUIPMENT MAY BE SHOWN WITHIN HARDSCAPE FOR GRAPHIC CLARITY ONLY. INSTALL ALL IRRIGATION EQUIPMENT WITHIN PLANTED AREAS. IRRIGATION PIPE AND WIRE CROSSING BENEATH HARDSCAPE SURFACES SHALL BE CONTAINED WITHIN SLEEVING OR SCHEDULE 40 PVC CONDUIT. SLEEVING SIZE SHALL BE A MINIMUM OF TWO TIMES THE AGGREGATE DIAMETER OF ALL PIPES CONTAINED WITH SLEEVE. PROVIDE VERTICAL SWEEP FOR ALL ELECTRICAL CONDUIT ON EACH SIDE OF HARDSCAPE AND TERMINATE ENDS AT 12" MINIMUM DEPTH AND 12" FROM HARDSCAPE SURFACE.
 - UNSIZED LATERAL LINE PIPING LOCATED DOWN STREAM OF 1" PIPING SHALL BE 3/4" IN SIZE (TYPICAL).
 - SIZING OF LATERAL PIPE SHALL BE AS FOLLOWS:

0.75"	0-6 GPM
1"	7-12 GPM
1.25"	21-32 GPM
1.5"	21-32 GPM
2"	33-50 GPM
2.5"	51-70 GPM
3"	71-110 GPM
 - SIZING OF LATERAL PIPE FOR DRIPLINE (12" O.C. GRID WITH 0.6 GPH OR LESS EMITTERS) SHALL BE AS FOLLOWS:

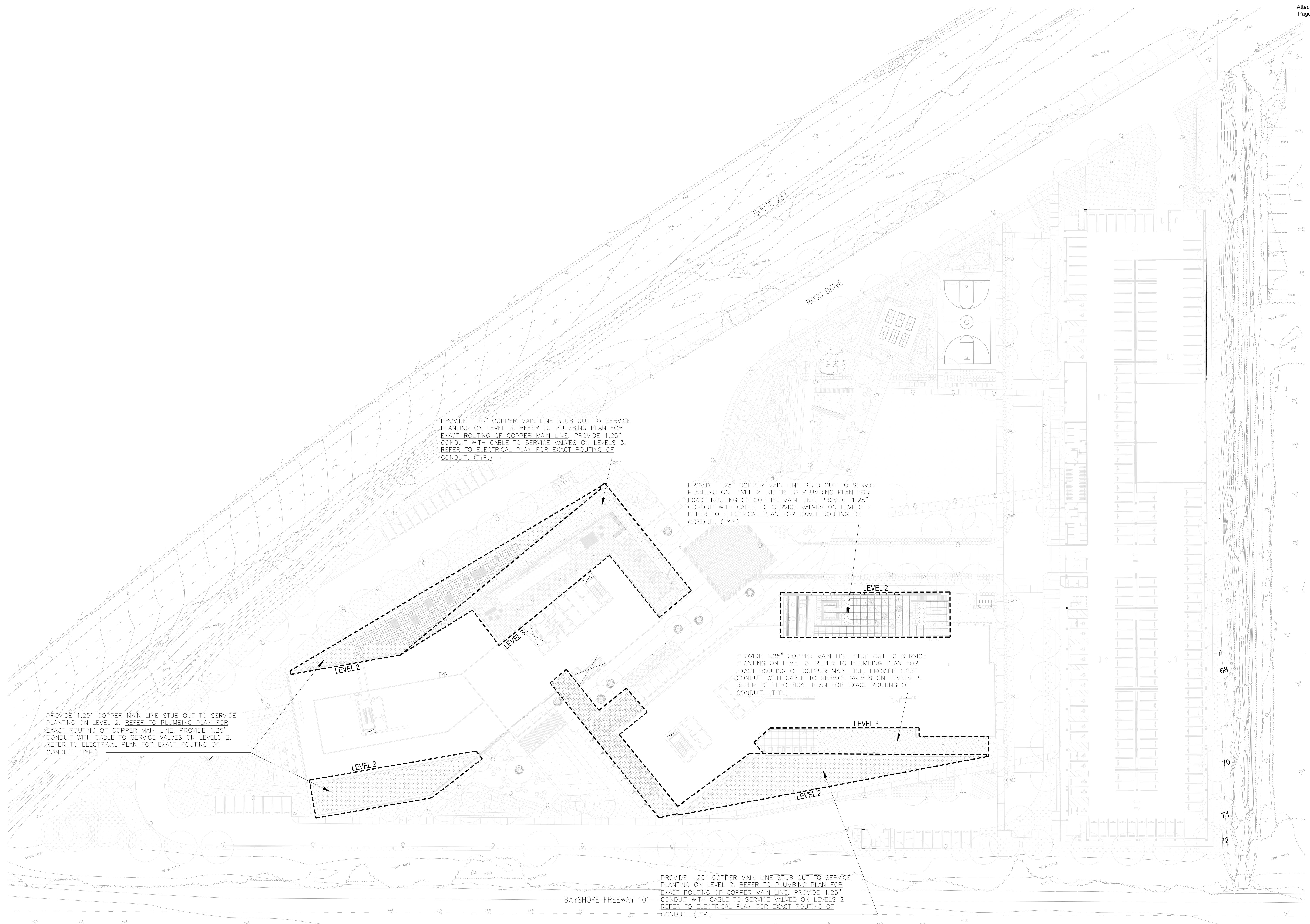
0.75"	0-500 FT
1"	501-1100 FT
1.25"	1101-2000 FT
1.5"	2001-3000 FT
 - SIZING OF LATERAL PIPE FOR DRIPLINE (18" O.C. GRID WITH 0.6 GPH OR LESS EMITTERS) SHALL BE AS FOLLOW:

0.75"	0-1100 FT
1"	1101-2200 FT
1.25"	2201-3600 FT
1.5"	3601-4800 FT



06/03/20

PEERY PARK



PROVIDE 1.25" COPPER MAIN LINE STUB OUT TO SERVICE PLANTING ON LEVEL 2. REFER TO PLUMBING PLAN FOR EXACT ROUTING OF COPPER MAIN LINE. PROVIDE 1.25" CONDUIT WITH CABLE TO SERVICE VALVES ON LEVELS 2. REFER TO ELECTRICAL PLAN FOR EXACT ROUTING OF CONDUIT. (TYP.)

PROVIDE 1.25" COPPER MAIN LINE STUB OUT TO SERVICE PLANTING ON LEVEL 3. REFER TO PLUMBING PLAN FOR EXACT ROUTING OF COPPER MAIN LINE. PROVIDE 1.25" CONDUIT WITH CABLE TO SERVICE VALVES ON LEVELS 3. REFER TO ELECTRICAL PLAN FOR EXACT ROUTING OF CONDUIT. (TYP.)

PROVIDE 1.25" COPPER MAIN LINE STUB OUT TO SERVICE PLANTING ON LEVEL 2. REFER TO PLUMBING PLAN FOR EXACT ROUTING OF COPPER MAIN LINE. PROVIDE 1.25" CONDUIT WITH CABLE TO SERVICE VALVES ON LEVELS 2. REFER TO ELECTRICAL PLAN FOR EXACT ROUTING OF CONDUIT. (TYP.)

PROVIDE 1.25" COPPER MAIN LINE STUB OUT TO SERVICE PLANTING ON LEVEL 3. REFER TO PLUMBING PLAN FOR EXACT ROUTING OF COPPER MAIN LINE. PROVIDE 1.25" CONDUIT WITH CABLE TO SERVICE VALVES ON LEVELS 3. REFER TO ELECTRICAL PLAN FOR EXACT ROUTING OF CONDUIT. (TYP.)

PROVIDE 1.25" COPPER MAIN LINE STUB OUT TO SERVICE PLANTING ON LEVEL 2. REFER TO PLUMBING PLAN FOR EXACT ROUTING OF COPPER MAIN LINE. PROVIDE 1.25" CONDUIT WITH CABLE TO SERVICE VALVES ON LEVELS 2. REFER TO ELECTRICAL PLAN FOR EXACT ROUTING OF CONDUIT. (TYP.)



IRRIGATION NOTES

- THESE IRRIGATION DRAWINGS ARE DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. ALL PIPING, VALVES, AND OTHER IRRIGATION COMPONENTS MAY BE SHOWN WITHIN PAVED AREAS FOR GRAPHIC CLARITY ONLY AND ARE TO BE INSTALLED WITHIN PLANTING AREAS, DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, CONDUIT, AND OTHER ITEMS WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISHED CONDITION AFFECTING THE CONTRACT WORK INCLUDING OBSTRUCTIONS, GRADE DIFFERENCES OR AREA DIMENSIONAL DIFFERENCES. IN THE EVENT OF FIELD DISCREPANCY WITH CONTRACT DOCUMENTS, PLAN THE INSTALLATION WORK ACCORDINGLY BY NOTIFICATION AND APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND ACCORDING TO THE CONTRACT SPECIFICATIONS. NOTIFY AND COORDINATE IRRIGATION CONTRACT WORK WITH APPLICABLE CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE, CONDUIT OR SLEEVES THROUGH OR UNDER WALLS, ROADWAYS, PAVING AND STRUCTURES BEFORE CONSTRUCTION. IN THE EVENT THESE NOTIFICATIONS ARE NOT PERFORMED, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR REQUIRED REVISIONS.
- THE INTENT OF THIS IRRIGATION SYSTEM IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH.
- IT IS THE RESPONSIBILITY OF THE MAINTENANCE CONTRACTOR AND/OR OWNER TO PROGRAM THE IRRIGATION CONTROLLER(S) TO PROVIDE THE MINIMUM AMOUNT OF WATER NEEDED TO SUSTAIN GOOD PLANT HEALTH. THIS INCLUDES MAKING ADJUSTMENTS TO THE PROGRAM FOR SEASONAL WEATHER CHANGES, PLANT MATERIAL, WATER REQUIREMENTS, MOUNDS, SLOPES, SUN, SHADE AND WIND EXPOSURE.
- IT IS THE RESPONSIBILITY OF A LICENSED ELECTRICAL CONTRACTOR TO PROVIDE 120 VOLT A.C. (2.5 AMP DEMAND PER CONTROLLER) ELECTRICAL SERVICE TO THE CONTROLLER LOCATION(S). IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO COORDINATE THE ELECTRICAL SERVICE STUB-OUT TO THE CONTROLLER(S). PROVIDE PROPER GROUNDING PER CONTROLLER MANUFACTURER'S INSTRUCTIONS AND IN ACCORDANCE WITH LOCAL CODES.
- PROVIDE EACH CONTROLLER WITH ITS OWN GROUND ROD. SEPARATE THE GROUND RODS BY A MINIMUM OF EIGHT FEET. THE GROUND ROD SHALL BE AN EIGHT FOOT LONG BY 5/8" DIAMETER U.L. APPROVED COPPER CLAD ROD. INSTALL NO MORE THAN 6" OF THE GROUND ROD ABOVE FINISH GRADE. CONNECT #6 GAUGE WIRE WITH A U.L. APPROVED GROUND ROD CLAMP TO ROD AND BACK TO GROUND SCREW AT BASE OF CONTROLLER WITH APPROPRIATE CONNECTOR. MAKE THIS WIRE AS SHORT AS POSSIBLE, AVOIDING KINKS OR BENDING.
- SCHEDULE A MEETING WHICH INCLUDES REPRESENTATIVES OF THE IRRIGATION CONTROLLER MANUFACTURER, THE MAINTENANCE CONTRACTOR, THE OWNER AND THE IRRIGATION CONTRACTOR AT THE SITE FOR INSTRUCTION ON THE PROPER PROGRAMMING AND OPERATION OF THE IRRIGATION CONTROLLER.
- THIS IRRIGATION SYSTEM IS DESIGNED TO ALLOW UP TO 8 VALVES TO OPERATE AT THE SAME TIME. DO NOT UNDER ANY CIRCUMSTANCE EXCEED 180 GPM AT THE SAME TIME.
- INSTALL 2-WIRE CABLE ALONG THE MAIN LINE. CONTACT CONTROLLER REPRESENTATIVE FOR A PRE-CONSTRUCTION MEETING.
- IRRIGATION CONTROL WIRES: SOLID COPPER WITH U.L. APPROVAL FOR DIRECT BURIAL IN GROUND. SIZE #14AWG WIRE WITH A JACKETED 2-CONDUCTOR. PREFERRED WIRE MAKE AND MODEL IS THE PAIGE IRRIGATION WIRE, SPEC P7350D. ALL SPLICING SHALL BE MADE WITH 3-M DBR/Y-6 WATERPROOF SPLICE KIT.
- DECODER GROUNDING SHALL BE PROVIDED EVERY 600 FEET AND ANY SPUR OVER 50 FEET AND AT THE ENDS OF COMMUNICATION WIRE PATHS). GROUND WITH A 8' GROUNDING ROD. INCLUDE A SURGE ARRESTOR AT EACH GROUNDING LOCATION. A SPLIT BOLT CONNECTION TO BE USED TO CONNECT THE SURGE DEVICE TO THE GROUND WIRE WITH A DBR/Y-6 WATERPROOF CONNECTOR.
- SPLICING OF JACKETED 2-WIRE IS PERMITTED IN VALVE BOXES ONLY. LEAVE A 36" LONG COIL OF WIRE AT EACH SPLICE AND A 36" LONG EXPANSION LOOP EVERY 100 FEET ALONG WIRE RUN.
- INSTALL REMOTE CONTROL VALVE BOXES 12" FROM WALK, CURB, BUILDING OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, INSTALL EACH BOX AN EQUAL DISTANCE FROM THE WALK, CURB, BUILDING OR LANDSCAPE FEATURE AND PROVIDE 12" BETWEEN BOX TOPS. ALIGN THE SHORT SIDE OF RECTANGULAR VALVE BOXES PARALLEL TO WALK, CURB, BUILDING OR LANDSCAPE FEATURE.
- VALVE LOCATIONS SHOWN ARE DIAGRAMMATIC. INSTALL

- IN GROUND COVER/SHRUB AREAS (NOT IN LAWN AREA).
- THE REMOTE CONTROL VALVES SPECIFIED ON THE DRAWINGS IS A PRESSURE REDUCING TYPE. SET THE DISCHARGE PRESSURE AS FOLLOWS:

A. SPRAY HEADS=40 PSI
B. ROTARY HEADS=60 PSI
C. DRIP EMITTERS=35 PSI
D. BUBBLERS= 30 PSI
 - FLUSH AND ADJUST IRRIGATION OUTLETS AND NOZZLES FOR OPTIMUM PERFORMANCE AND TO PREVENT OVER SPRAY ONTO WALKS, ROADWAYS, AND/OR BUILDINGS. SELECT THE BEST DEGREE OF THE ARC AND RADIUS TO FIT THE EXISTING SITE CONDITIONS AND THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH CONTROL ZONE.
 - SET SPRINKLER HEADS PERPENDICULAR TO FINISH GRADE.
 - LOCATE EMITTER OUTLETS ON UPHILL SIDE OF PLANT OR TREE.
 - LOCATE BUBBLERS ON UPHILL SIDE OF PLANT OR TREE.
 - INSTALL A HUNTER HCV SERIES, KBI CV SERIES, OR APPROVED EQUAL SPRING LOADED CHECK VALVE IN SPRINKLER RISER ASSEMBLIES WHERE LOW OUTLET DRAINAGE WILL CAUSE EROSION AND/OR EXCESS WATER.
 - WHERE IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES, USE CAUTION TO AVOID INJURY TO TREES AND TREE ROOTS. EXCAVATE BY HAND IN AREAS WHERE TWO (2) INCH AND LARGER ROOTS OCCUR. BACK FILL TRENCHES ADJACENT TO TREE WITHIN TWENTY-FOUR (24) HOURS. WHERE THIS IS NOT POSSIBLE, SHADE THE SIDE OF THE TRENCH ADJACENT TO THE TREE WITH WET BURLAP OR CANVAS.
 - NOTIFY LOCAL JURISDICTIONS FOR INSPECTION AND TESTING OF INSTALLED BACKFLOW PREVENTION DEVICE.
 - THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE SHOWN ON THE IRRIGATION DRAWINGS. VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE.
 - IRRIGATION DEMAND: REFER TO PLANS.
 - PIPE SIZING SHOWN ON THE DRAWINGS IS TYPICAL. AS CHANGES IN LAYOUT OCCUR DURING STAKING AND CONSTRUCTION THE SIZE MAY NEED TO BE ADJUSTED ACCORDINGLY.
 - PIPE THREAD SEALANT COMPOUND SHALL BE RECTOR SEAL #5.
 - THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MINOR CHANGES IN THE IRRIGATION LAYOUT DUE TO OBSTRUCTIONS NOT SHOWN ON THE IRRIGATION DRAWINGS SUCH AS LIGHTS, FIRE HYDRANTS, SIGNS, ELECTRICAL ENCLOSURES, ETC.
 - WHEN WORK OF THIS SECTION HAS BEEN COMPLETED AND SUCH OTHER TIMES AS MAY BE DIRECTED, REMOVE ALL TRASH, DEBRIS, SURPLUS MATERIALS AND EQUIPMENT FROM SITE.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLEMENTAL HAND WATERING OF ALL PLANT MATERIAL WITHIN DRIPLINE AREAS UNTIL THE PLANTS ARE SUFFICIENTLY ESTABLISHED.
 - VERIFY LOCATIONS OF ALL IRRIGATION COMPONENTS INSTALLED WITHIN A VALVE BOX WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. DO NOT INSTALL UNTIL LANDSCAPE ARCHITECT PROVIDES ACCEPTABLE LOCATIONS.

WATER USE CALCULATIONS

WATER USE ESTIMATION

WATER TYPE		POTABLE	
SITE ETO=		45.3	

REGULAR LANDSCAPE AREAS												
HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/E)	AREA (SQ. FT) (A)	ETAF X AREA (HA)	ETWU (GAL/YR)	ACRE FEET/ YEAR	HCF/ YEAR	PERCENTAGE OF LANDSCAPE
1	BIORETENTION	MCD	0.6	GRP	0.91	0.67	12,543	8,360	234,795	0.72	313.90	11%
2	SHRUBS	LOW	0.3	DRP	0.81	0.370	76,958	28,583	800,534	2.48	1,070.23	65%
3	SHRUBS	MCD	0.6	DRP	0.81	0.87	13,382	8,260	232,004	0.71	310.17	11%
4	LAWN	HCH	0.8	SPRAY	0.75	1.067	14,546	15,516	435,775	1.34	582.69	15%
TOTALS							118,429	60,639	1,703,109	5.23	2,276.98	100%

SPECIAL LANDSCAPE AREAS												
HYDROZONE #	HYDROZONE NAME											
1	LAWN											
				f				14,546				
				TOTALS				14,546				12%
												12%

GALLONS/YR		1,721,485
ACRE FEET/YR		5.28
HCF/YR		2,301.45

GALLONS/YR		1,703,109
ACRE FEET/YR		5.23
HCF/YR		2,276.88

SITE IRRIGATION EFFICIENCY	SITE PLANT FACTOR	MAWA COMPLIANT
80.3%	0.41	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	60,639
TOTAL AREA	118,429
AVG. ETAF	51.20%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR

MAWA = (ETO)(0.62)((LA x 0.45) + (0.55 x SLA))

ETO = REFERENCE EVAPOTRANSPIRATION
0.55= ET ADJUSTMENT FACTOR
LA= LANDSCAPED AREA (SQUARE FEET)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT.YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR

ETWU= ((ETO)(E)(ETAF x LA))

ETO = REFERENCE EVAPOTRANSPIRATION
PF = PLANT FACTOR FOR HYDROZONES
HA = HYDROZONE AREA (SQ.FT)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT.YR)

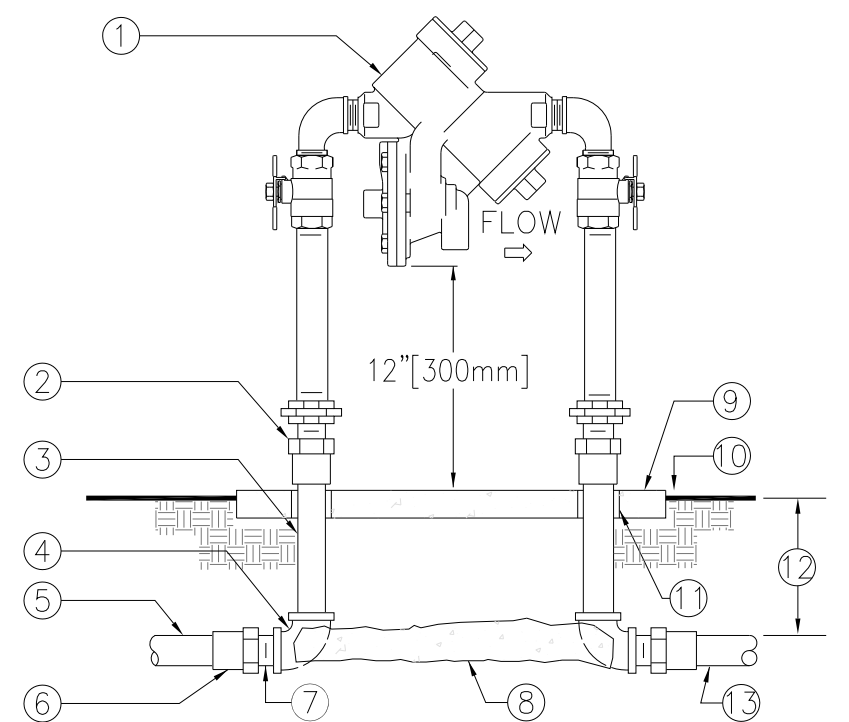
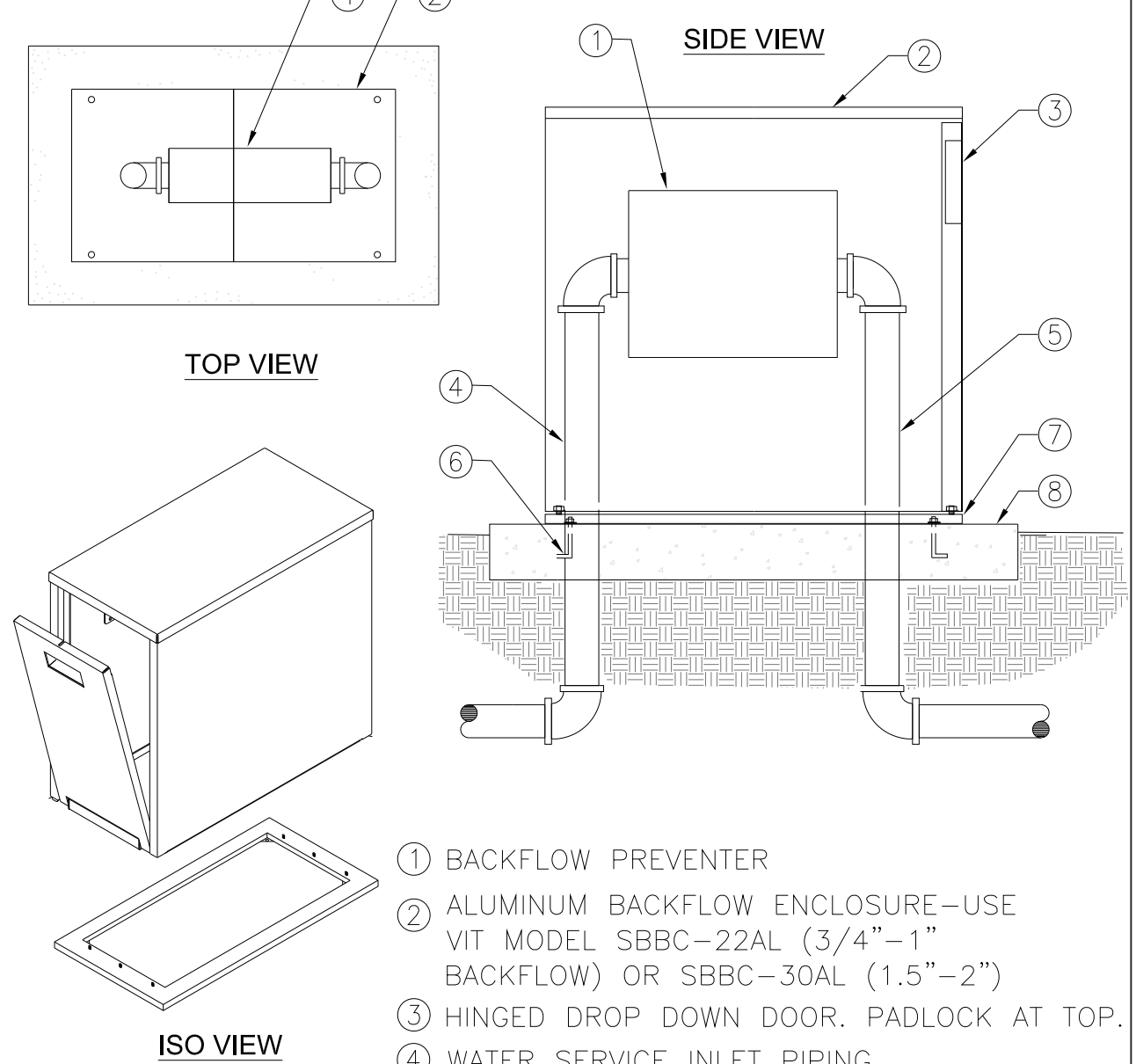
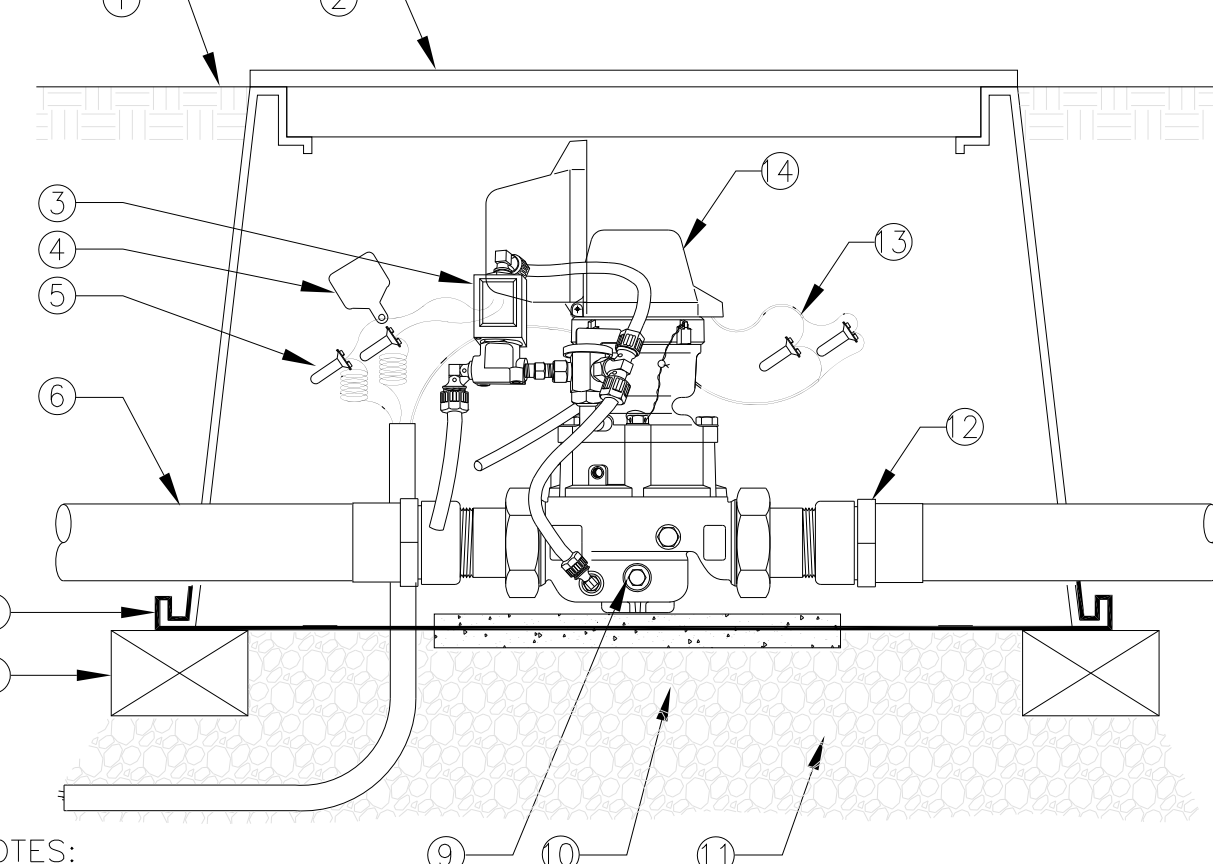
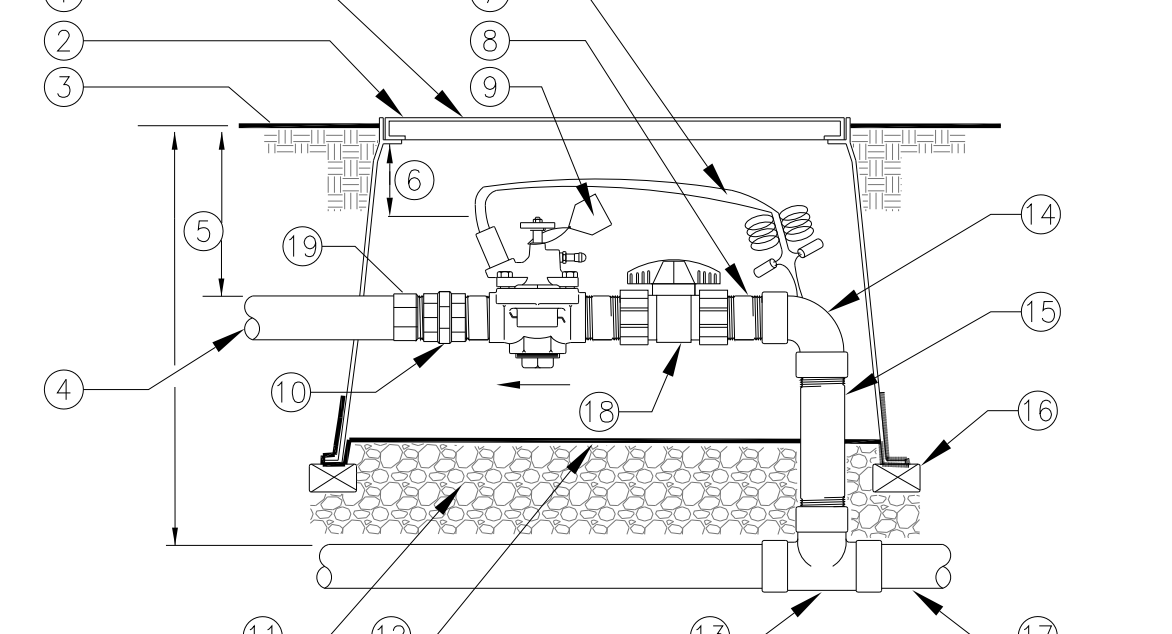
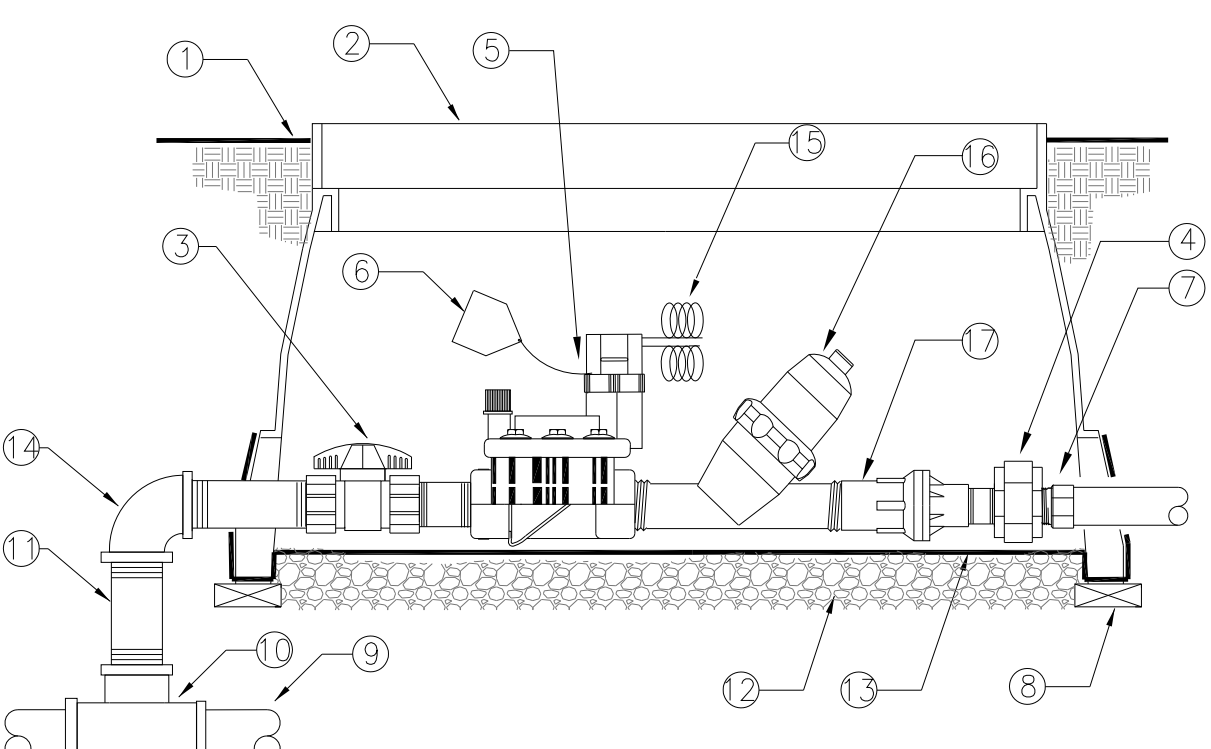
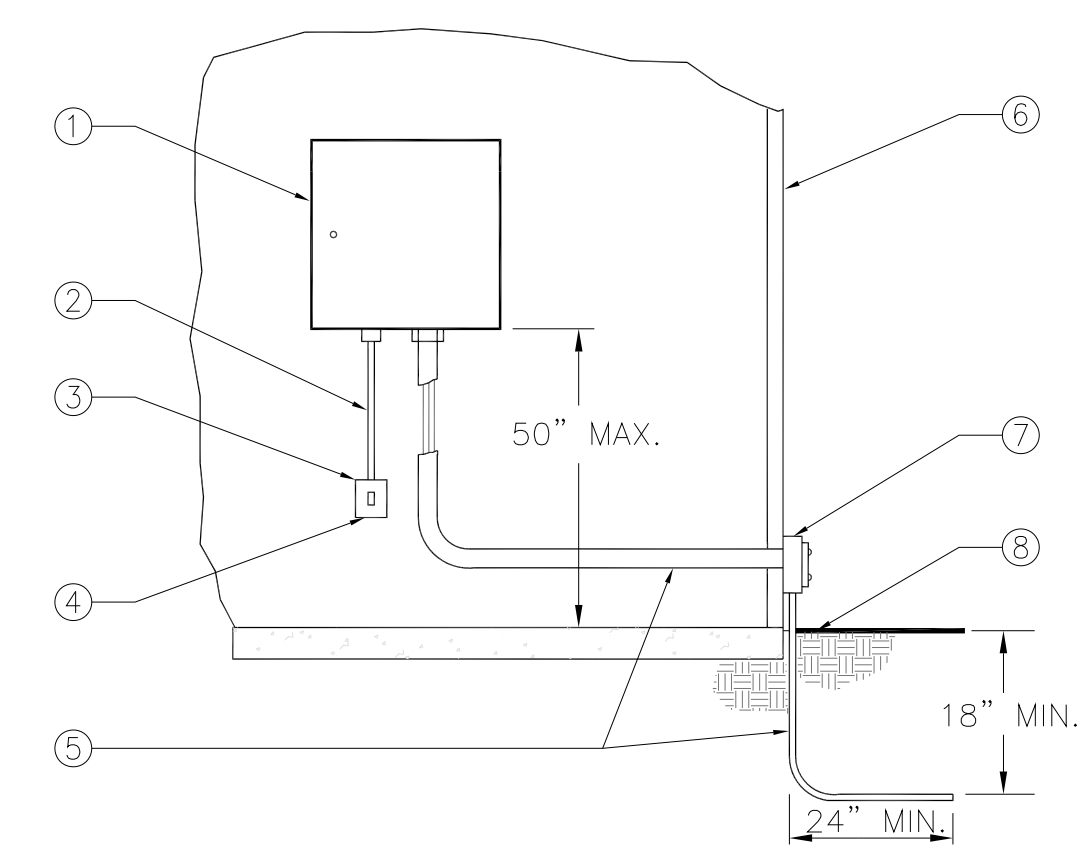
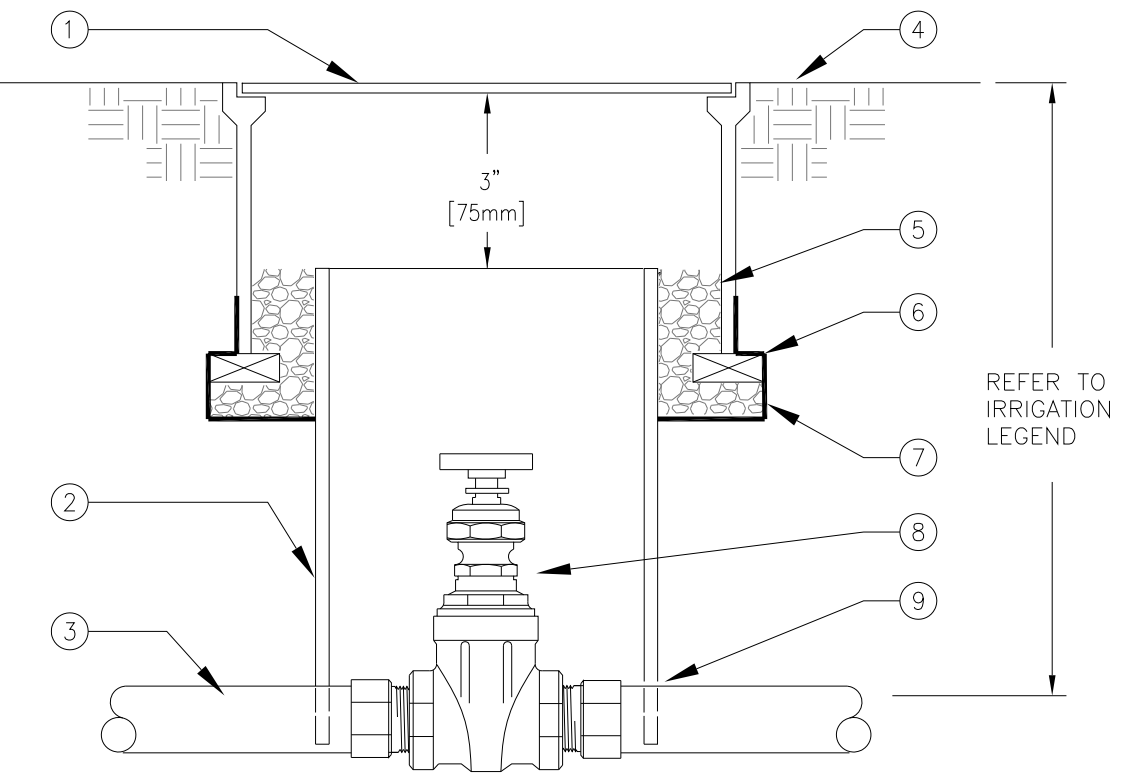
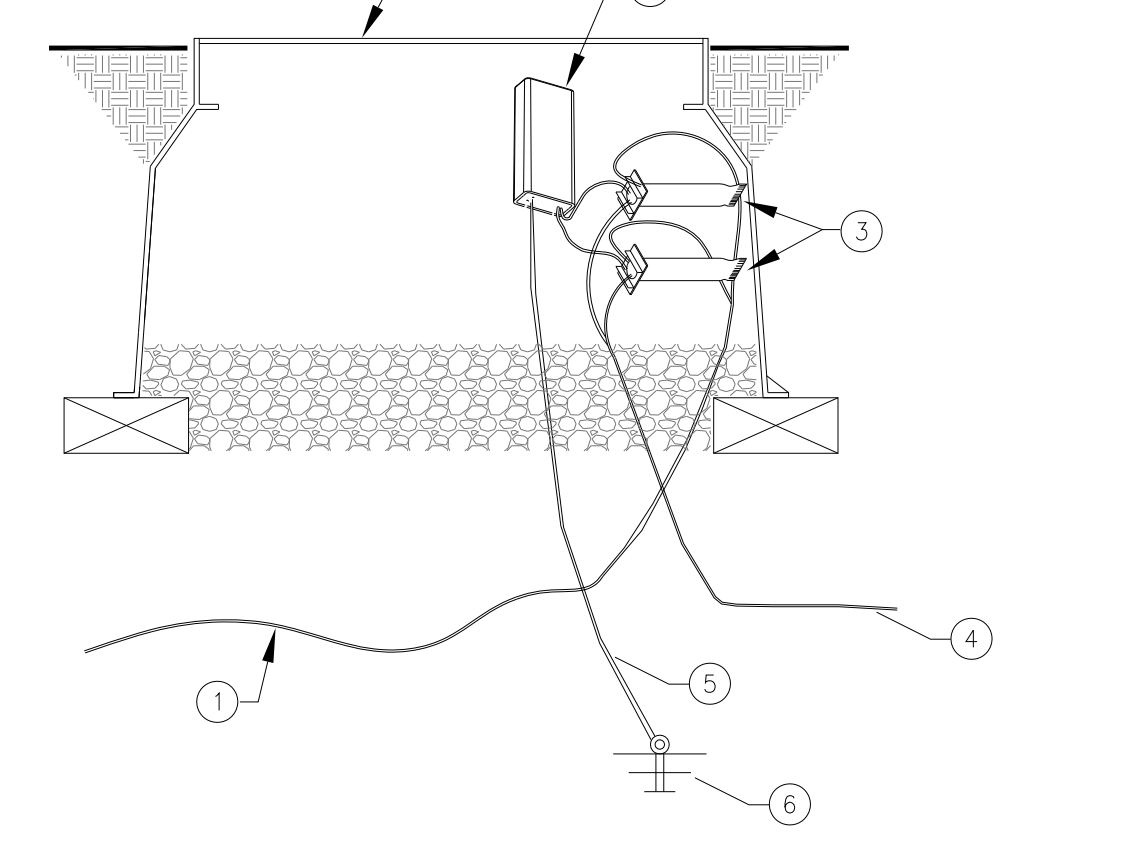
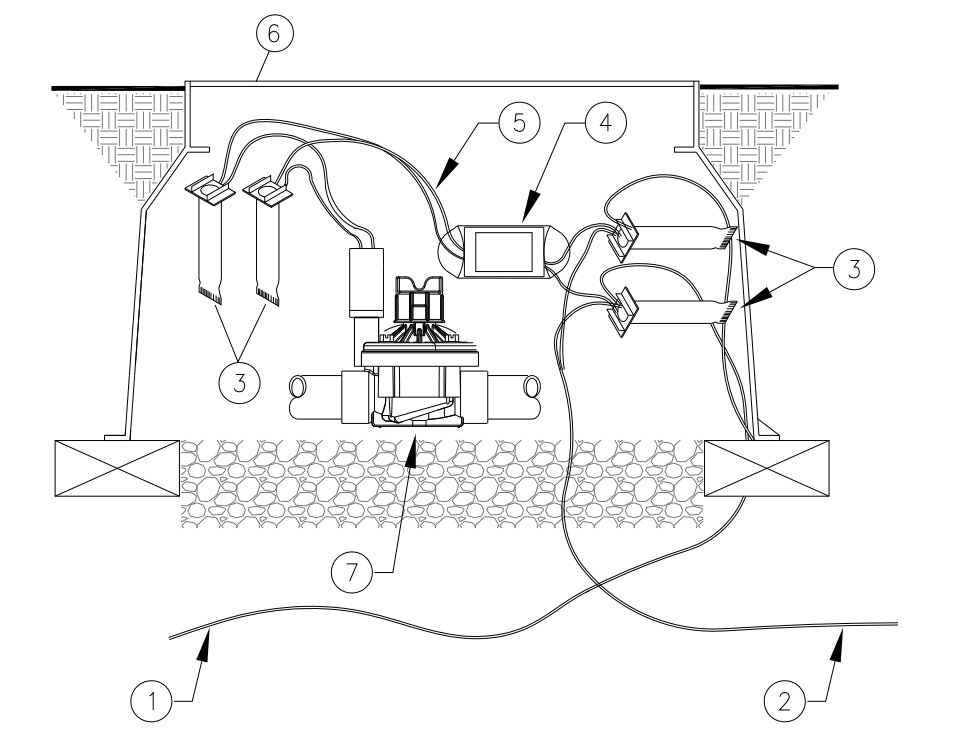
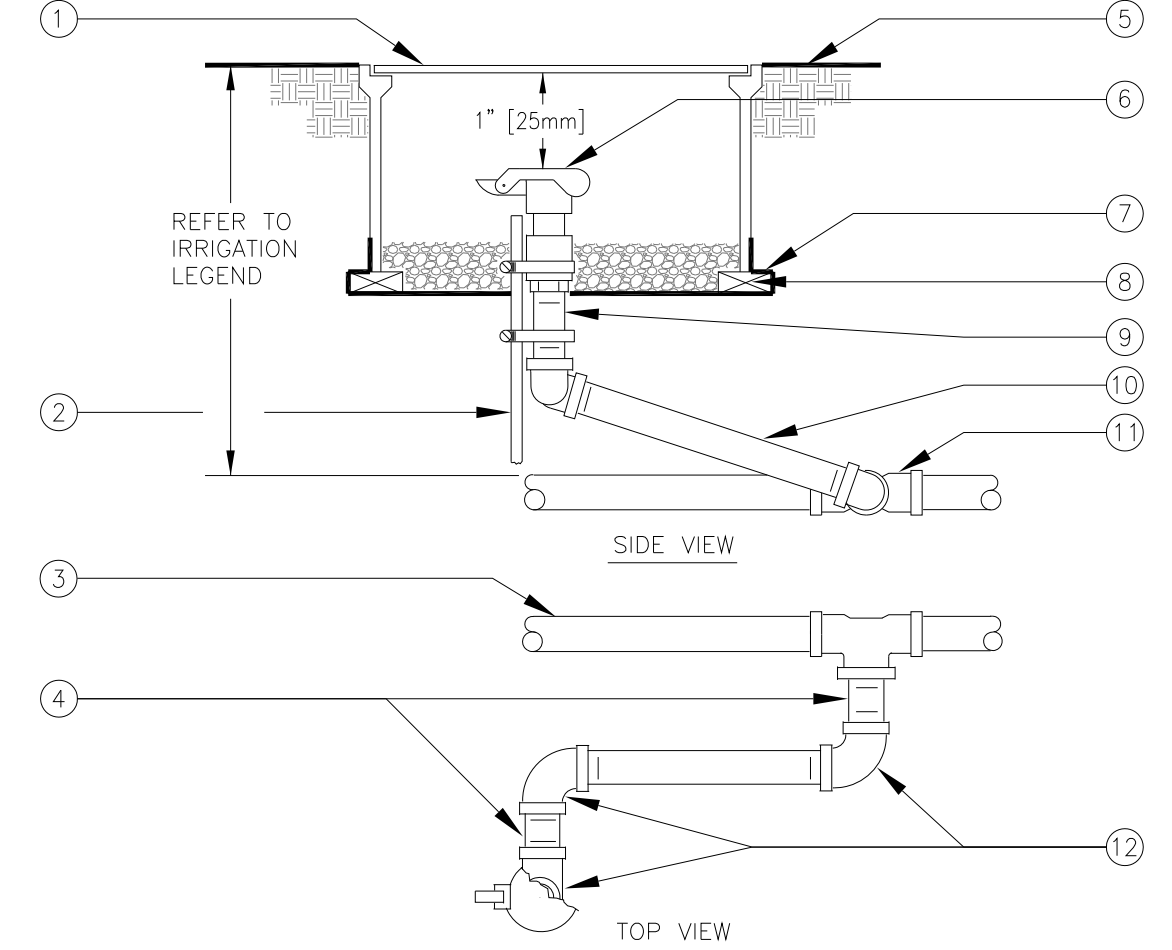
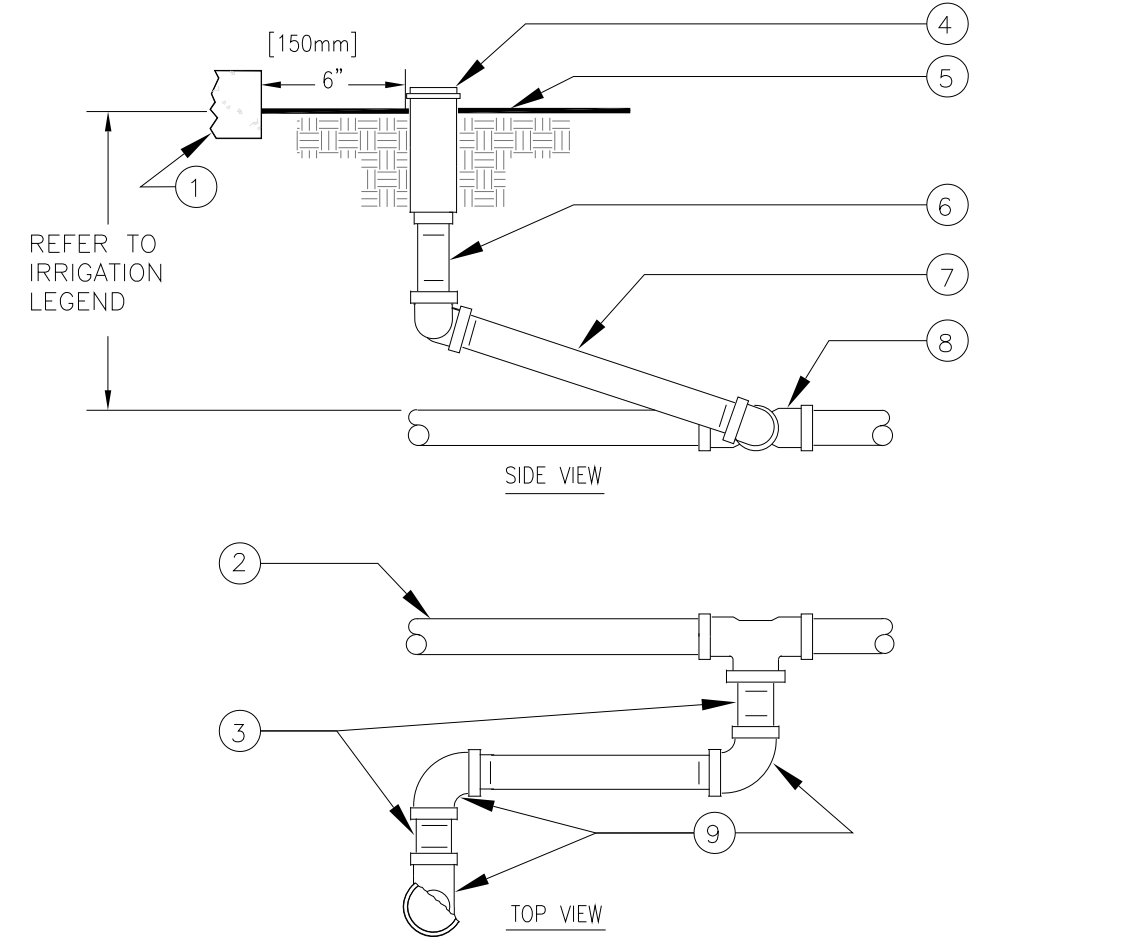
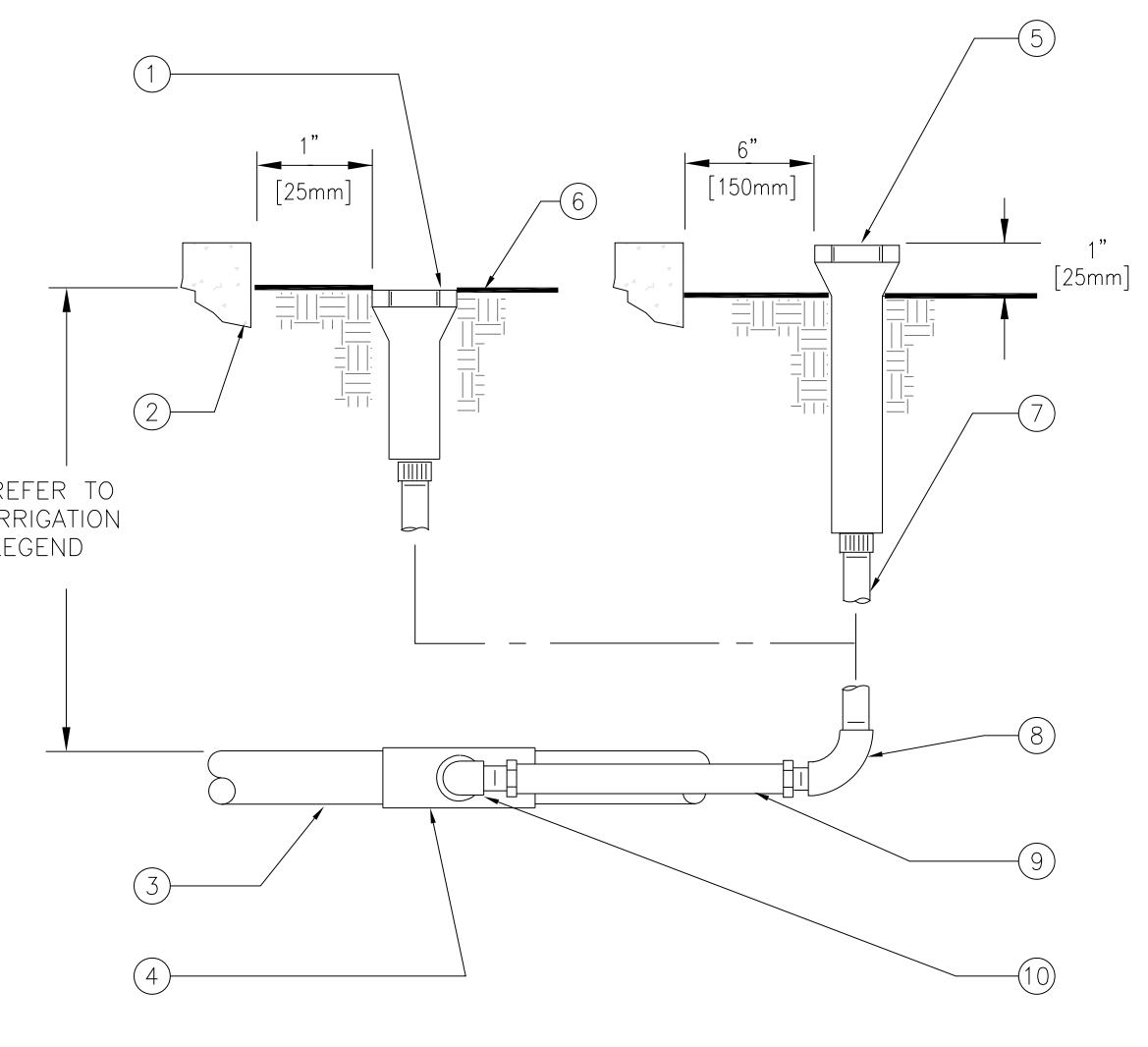
E = IRRIGATION EFFICIENCY (0.8)-BUBBLER/DRIP

E = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

IRRIGATION LEGEND

SYMBOL	NUMBER	DESCRIPTION	NOZZLE GPM	OPERATING PSI	OPERATING RADIUS (FEET)
●	T5-HP-CK-3.0LA	TORO POP-UP ROTARY SPRINKLER (SHRUB)	3.0	45	25-30
⊙	T5-HP-CK-3.0LA	TORO POP-UP ROTARY SPRINKLER (SHRUB)	3.0	45	25-30
⊙	T5-HP-CK-1.5LA	TORO POP-UP ROTARY SPRINKLER (SHRUB)	1.6	45	25-30
⊙	T5-P-CK-3.0LA	TORO POP-UP ROTARY SPRINKLER (LAWN)	3.0	45	25-30
⊙	T5-P-CK-3.0LA	TORO POP-UP ROTARY SPRINKLER (LAWN)	3.0	45	25-30
⊙	T5-P-CK-1.5LA	TORO POP-UP ROTARY SPRINKLER (LAWN)	1.6	45	25-30
▽ ▽	570Z-12P-HP-COM/ O-T-15HP,150P	TORO POP-UP SPRAY SPRINKLER (SHRUB)	1.2,0.6	30	12-15
▽ ▽ ▽	570Z-12P-HP-COM/ O-T-12FP,12HP,120P	TORO POP-UP SPRAY SPRINKLER (SHRUB)	1.5,0.75, 0.37	30	10-12
▽ ▽ ▽	570Z-6P-HP-COM/ O-T-10-F,H,Q	TORO POP-UP SPRAY SPRINKLER (SHRUB)	1.03,0.51, 0.23	30	8-10
▽ ▽	570Z-12P-PRX-COM/ O-T-8HP,80P	TORO POP-UP SPRAY SPRINKLER (SHRUB)	0.33,0.17	30	6-8
⊙	570S/FB-25-PC	TORO BUBBLER, 1 PER SHRUB	0.25	30	TRICKLE
■	570S/FB-50-PC	TORO BUBBLER (TWO PER TREE)	0.50	30	TRICKLE
⊙	570Z-PRX-4P/ SB-180-PC2	TORO POP-UP STREAM BUBBLER (TREES IN DG) 2 PER TREE	0.46	30	STREAM
➡	T-YD-500-34	TORO AIR RELIEF VALVE			
●+	FCH-H-FIPT	TORO FLUSH VALVE			
⊙	570Z-6P-SI-PRX/ O-T-5-OP	TORO POP-UP SPRINKLER WITH SIDE INLET AND A CLOSED 5' NOZZLE TO BE USED AS DRIPLINE INDICATOR			
⊙	P-220-26 SERIES	TORO REMOTE CONTROL VALVE			
■	DZK-700	TORO REMOTE CONTROL VALVE WITH A PRESSURE REGULATOR (40 PSI) AND A 1" FILTER			
•	—	APPROXIMATE CONNECTION POINT BETWEEN DRIPLINE TUBING AND PVC SUPPLY. REFER TO DRIPLINE TUBING CONNECTION DETAIL FOR MORE INFORMATION.			
⊕⊕	—	IRRIGATION POINT OF CONNECTION TO COPPER PIPE AND ELECTRICAL CONDUIT FOR COMMUNICATION WIRES ROUTED THROUGH THE BUILDING AND STUBBED OUT INTO PLANTERS WHERE SHOWN. WORK TO BE BY ELECTRICAL AND PLUMBING CONTRACTORS.			
—	BL-5201	BASELINE BICODER (1 PER SINGLE VALVE GROUP)			
—	BL-5202	BASELINE BICODER (1 PER 2 VALVE GROUPING)			
—	BL-5204	BASELINE BICODER (1 PER 3-4 VALVE GROUPING)			
—	BL-5315B	BASELINE SOIL MOISTURE SENSOR (8 SENSORS TO BE INSTALLED AROUND THE SITE			
⬇	T113-K	NIBCO GATE VALVE			
⬇	33 DNP	RAIN BIRD QUICK COUPLING VALVE			
■	BL-BHM-NO-1.5"	BASELINE HYDROMETER (NORMALLY OPEN)			
⬇	975XLSEU-2"/VIT	WILKINS REDUCED PRESSURE BACKFLOW ASSEMBLY WITH VIT			
⬇	SBBC-30AL/PBB-30	STRONGBOX ENCLOSURE AND FREEZE BLANKET.			
⬇	BL-1000P/ BL-CM3G-P/ BL-1000MXP-50/ BL-1000MXP-BM/ BL-BMW2-PLUS-1	BASELINE 1000 SERIES WITH STATION CAPACITY OF UP TO 100 STATIONS WITH TWO-WIRE DECODER DEVICES IN A STAINLESS STEEL PEDESTAL ENCLOSURE, 3G CELL MODEM, ANTENNA, AND EXPANSION MODULE FOR COMMUNICATING WITH BASEMANAGER AND 1 YEAR OF BASEMANAGER WEB ACCESS.			
—	—	TWO 2-WIRE PATHS ARE REQUIRED FOR THIS PROJECT. PRE-CONSTRUCTION MEETING WITH BASELINE IRRIGATION REPRESENTATIVE IS REQUIRED BEFORE INSTALLMENT OF 2-WIRE SYSTEM.			
⬇	—	CONTROLLER AND STATION NUMBER			
⬇	—	FLOW (GPM)			
⬇	—	REMOTE CONTROL VALVE SIZE (IN INCHES)			
⬇	—	ASSOCIATED REMOTE CONTROL VALVE			
⬇	—	CONTROLLER AND STATION NUMBER			
⬇	—	AREA (SQ. FT.)			
⬇	—	FLOW (GPM)			
⬇	—	REMOTE CONTROL VALVE SIZE (IN INCHES)			
⬇	—	ASSOCIATED REMOTE CONTROL VALVE			
⬇	—	DRIPLINE REMOTE CONTROL VALVE			
⬇	—	DRIP ZONE: TORO DL2000 SERIES DRIPLINE WITH TRI-LOC FITTINGS, PART #RGP-212. TUBING TO BE INSTALLED 4" BELOW GRADE IN A 12" O.C. GRID ACCORDING TO DETAILS. SIZE EXHAUST HEADERS AS FOLLOWS: 1": 0-10 GPM, 1.25": 11-20 GPM. ALL EXHAUST HEADERS SHALL BE 1" SCH 40 PVC OR 1" SCH 40 FLEXIBLE PVC. USE SCH. 40 PVC SOLVENT WELD FITTINGS. EXTEND PVC HEADERS TO THE ENDS OF ALL DRIP ZONES TO BALANCE FLOW IF REQUIRED. SEE DETAILS FOR FURTHER INFORMATION.			
⬇	—	MAIN LINE: 2.5" AND SMALLER: 1120-SCHEDULE 40 PVC PLASTIC PIPE WITH SCHEDULE 40 PVC SOLVENT WELD FITTINGS. 18" COVER.			
⬇	—	LATERAL LINE: 3/4" AND LARGER: 1120-SCHEDULE 40 PVC PLASTIC PIPE WITH SCHEDULE 40 PVC SOLVENT WELD FITTINGS. 12" COVER.			
⬇	—	SLEEVING: 1120-CL 200 PVC PLASTIC PIPE. COVER TO BE AS INDICATED IN SPECIFICATIONS OR AS INDICATED ABOVE FOR PIPE DEPTH OF COVER.			
⬇	—	MAIN LINE: 1.25" AND SMALLER: TYPE 'K' COPPER PIPE WITH WROUGHT FITTINGS. SHOWN FOR REFERENCE ONLY. SEE PLUMBING PLANS FOR ROUTING THROUGH STRUCTURE.			
⬇	—	ELECTRICAL CONDUIT: SHOWN FOR REFERENCE ONLY. SEE ELECTRICAL PLANS FOR ROUTING THROUGH STRUCTURE.			

Irrigation Consultant:
Russell D. Mitchell Associates, Inc.
2760 Camino Diablo
Walnut Creek, CA 94597
tel 925.939.3985 ♦ fax 925.932.5671
www.rdmirrigation.com

 <p>1 REDUCED PRESSURE BACKFLOW ASSEMBLY. 2 WROUGHT COPPER MALE ADAPTER-2 TOTAL (SOLDER x THREAD CONNECTION). 3 COPPER TYPE "K" PIPE (LENGTH AS REQUIRED). 4 WROUGHT COPPER 90° ELBOW-2 TOTAL (SOLDER x THREAD CONNECTION). 5 PVC MAIN LINE TO POINT OF CONNECTION. 6 BUSH AS NECESSARY FOR SIZE TRANSITION.</p> <p>7 SCHEDULE 40 PVC MALE ADAPTER-2 TOTAL. 8 CONCRETE SUPPORT BLOCK. 9 CONCRETE PAD-SEE ENCLOSURE DETAIL. 10 FINISH GRADE. 11 PVC SLEEVE BOTH SIDES. 12 REFER TO IRRIGATION LEGEND. 13 PVC MAIN LINE TO IRRIGATION SYSTEM.</p> <p>NOTES: 1. INSTALL A FREEZE PREVENTATIVE BLANKET AROUND BACKFLOW ASSEMBLY. BLANKET SHALL BE GREEN. 2. DO NOT SOLDER CONNECT FITTINGS WHILE THREADED INTO BACKFLOW ASSEMBLY. THIS MAY CAUSE DAMAGE TO DEVICE. 3. NIPPLES AND FITTINGS TO BE SAME IPT SIZE AS BACKFLOW ASSEMBLY. 4. PROVIDE A STAINLESS STEEL ENCLOSURE TO COMPLETELY ENCLOSE DEVICE. INSTALL ENCLOSURE TO CONCRETE BASE AS DIRECTED BY MANUFACTURER.</p>	 <p>1 BACKFLOW PREVENTER 2 ALUMINUM BACKFLOW ENCLOSURE-USE VIT MODEL SBBC-22AL (3/4"-1" BACKFLOW) OR SBBC-30AL (1.5"-2") 3 HINGED DROP DOWN DOOR. PADLOCK AT TOP. 4 WATER SERVICE INLET PIPING 5 WATER SERVICE OUTLET PIPING 6 3/8" "L" STYLE ANCHOR BOLTS SET IN CONCRETE BASE 7 SECURED ANCHOR PLATE MOUNTING BASE IN CONCRETE WITH 3/8" J BOLTS (4 PLACES). 8 POURED CONCRETE BASE - 6" MIN. THICKNESS - EXTEND 4" BEYOND OUTSIDE DIMENSIONS OF ENCLOSURE</p> <p>TOP VIEW SIDE VIEW ISO VIEW</p>	 <p>NOTES: 1) NO STRAIGHT PIPE UPSTREAM AND DOWNSTREAM OF THE HYDROMETER IS REQUIRED. 2) FINISH GRADE 3) CARSON 14"x19"-24" DEPTH BOX. HEAT BRAND "MV-FS" ON LID IN 2" HIGH BLOCK LETTERS. 4) MASTER VALVE WIRES FROM SOLENOID. 5) VALVE I.D. TAG WITH "MV" PRINTED ON IT. 6) MASTER VALVE CONTROL WIRE FROM CONTROLLER- PROVIDE 3M-DBY SEAL PACKS AT ALL SPLICES AND 36" OF EXCESS OF WIRE IN A 1" DIAMETER COIL. ROUTE FLOW SENSOR WIRE IN 1.25" CONDUIT TO CONTROLLER. 7) MAIN LINE FROM SOURCE. 8) 19 GAUGE 1/2" [12mm] SQUARE WIRE MESH. 9) BRICK SUPPORT. (4 TOTAL/ 1 @ EA CORNER). 10) DRAINAGE NUT FOR WINTERIZATION (INCLUDED). 11) 12" CONCRETE PAVER SUPPORT BLOCK. 12) PEA GRAVEL OR 3/4" DRAIN ROCK- 4" DEEP BELOW VALVE (NO SOIL IN VALVE BOX). 13) SPEARS SCH 80 PVC SPECIAL REINFORCED STAINLESS STEEL FEMALE ADAPTER. (Soc X S.S. Fip) MATCH SIZE OF HYDROMETER. (2 TOTAL) 14) HYDROMETER, REFER TO LEGEND FOR MODEL NUMBER. 15) SHIELDED FLOW SENSOR WIRES TO CONTROLLER. PAIGE 7171D.</p>	 <p>1 REMOTE CONTROL VALVE WITH FLOW CONTROL AND MANUAL BLEED (PRESSURE REGULATOR WHERE SHOWN ON PLANS). 2 USE A 14" x 19" RECTANGULAR PLASTIC VALVE BOX WITH BOLT DOWN LID FOR 1" VALVES. FOR 1.5" AND LARGER VALVES INSTALL BALL VALVE WITHIN A SEPARATE 10" ROUND BOX OR ONE BALL VALVE PER MANIFOLD OF VALVES. GATE VALVE SIZE SHALL BE SAME AS LARGEST VALVE WITHIN MANIFOLD. ONE VALVE PER BOX- NO EXCEPTIONS. INSTALL BOX AS SHOWN IN BOX INSTALLATION DETAIL. 3 FINISH GRADE. 4 PVC LATERAL LINE. 5 REFER TO IRRIGATION SPECS. 6 3" [75mm] MIN, 6" [150mm] MAX. 7 VALVE CONTROL WIRE- PROVIDE SEAL PACKS AT ALL SPLICES AND 3' [1m] OF EXCESS UF WIRE IN A 1" [25mm] DIAMETER COIL.</p> <p>8 SCHEDULE 80 PVC NIPPLE (3 TOTAL). 9 VALVE I.D. TAG (CONTROLLER AND STATION NUMBER). 10 SCHEDULE 80 PVC THREADED UNION. 11 PEA GRAVEL OR 3/4" DRAIN ROCK- 4" [100mm] DEEP BELOW VALVE (NO SOIL IN VALVE BOX). 12 19 GAUGE 1/2" [12mm] SQUARE WIRE MESH. 13 UPC APPROVED SCHEDULE 40 PVC TEE. 14 SCHEDULE 80 PVC 90° ELBOW (T&T). 15 SCHEDULE 80 PVC NIPPLE- LENGTH AS REQUIRED. 16 BRICK-1 EACH CORNER. 17 PVC MAIN LINE. 18 SCHEDULE 80 PVC UNION BALL VALVE (ONE PER VALVE). 19 SCHEDULE 40 MALE ADAPTER</p>	 <p>1 FINISH GRADE 2 RECTANGULAR JUMBO PLASTIC VALVE BOX WITH BOLT DOWN LID. ONE VALVE PER BOX- NO EXCEPTIONS. INSTALL BOX AS SHOWN IN BOX INSTALLATION DETAIL. 3 SCHEDULE 80 PVC UNION BALL VALVE (ONE PER VALVE) 4 SCHEDULE 80 PVC THREADED UNION 5 REMOTE CONTROL VALVE 6 VALVE I.D. TAG (CONTROLLER AND STATION NUMBER). 7 SCHEDULE 40 MALE ADAPTER 8 BRICK-1 EACH CORNER. 9 PVC MAIN LINE. 10 UPC APPROVED SCHEDULE 40 PVC TEE.</p> <p>11 SCHEDULE 80 PVC NIPPLE-(4-TOTAL) LENGTH AS REQUIRED. 12 PEA GRAVEL OR 3/4" [20mm] DRAIN ROCK - 4" [102mm] DEEP BELOW VALVE (NO SOIL IN VALVE BOX). 13 19 GAUGE 1/2" [13mm] SQUARE WIRE MESH. 14 SCHEDULE 80 PVC 90° ELBOW (T&T). 15 VALVE CONTROL WIRES- PROVIDE 3M-DBY SEAL PACKS AT ALL SPLICES AND 3' [1m] OF EXCESS UF WIRE IN A 1" [25mm] DIAMETER COIL. 16 DISC FILTER 17 PRESSURE REGULATOR (40 PSI)</p>	 <p>1 IRRIGATION CONTROLLER 2 120 VOLT SERVICE IN RIGID STEEL CONDUIT 3 120 VOLT LOCKABLE ON/OFF SWITCH PROVIDED UNDER IRRIGATION CONTRACT 4 120 VOLT SERVICE TO CONTROLLER LOCATION PROVIDED BY ELECTRICAL CONTRACTOR 5 SCHEDULE 40 GREY PVC ELECTRICAL CONDUIT FOR LOW VOLTAGE WIRE 6 EXTERIOR WALL 7 ELECTRICAL PULL BOX PER ELECTRICAL CODE 8 FINISH GRADE</p>
1 SCALE: NONE	2 SCALE: NONE	3 SCALE: NONE	4 SCALE: NONE	5 SCALE: NONE	6 SCALE: NONE DET: INT-C1
 <p>1 10" ROUND PLASTIC VALVE BOX WITH BOLT DOWN LID. 2 8" [200mm] CLASS 160 OR SCHEDULE 40 PVC PIPE (NOTCH TO FIT OVER MAIN LINE PIPE). 3 PVC MAIN LINE. 4 FINISH GRADE. 5 PEA GRAVEL OR 3/4" [20mm] DRAIN ROCK - 4" [100mm] DEEP (NO SOIL IN VALVE BOX). 6 BRICK-2 TOTAL. 7 19 GAUGE 1/2" [13mm] SQUARE WIRE MESH. 8 GATE VALVE. 9 MALE ADAPTER. REFER TO LEGEND FOR FITTING TYPE.</p> <p>REFER TO IRRIGATION LEGEND</p>	<p>NOTE: TWO WIRE DECODER SYSTEMS MUST BE PROPERLY GROUNDED IN ORDER TO PROTECT AGAINST LIGHTNING SURGES. THE COMMUNICATION CABLE MUST BE GROUNDED EVERY 600'. THE SURGE DEVICE MUST BE A BASELINE BL0A01. THE MINIMUM DISTANCE BETWEEN THE LIGHTNING ARRESTOR AND THE GROUND ROD SHOULD BE 3'. BASELINE RECOMMENDS A SCREW CLAMP OR CADWELD TYPE CONNECTOR TO BE USED TO CONNECT THE GROUND WIRE TO THE SURGE ARRESTOR. INSTALL EACH GROUND ROD 4 - 8' FROM 2-WIRE PATH. DO NOT INSTALL IN THE SAME TRENCH AS WIRE PATH. A SURGE ARRESTOR IS REQUIRED AT THE END OF THE TWO WIRE PATH THAT IS THE MAXIMUM DISTANCE FROM THE CONTROLLER. ANY BRANCH OF TWO-WIRE THAT EXCEEDS 50' MUST HAVE A SURGE ARRESTOR. ON AN UNINTERRUPTED WIRE RUN OF MORE THAT 600', IT IS ACCEPTABLE TO HAVE A SURGE ARRESTOR AT EACH END.</p>  <p>1 2-WIRE PATH JACKETED/ TWISTED FROM CONTROLLER. ALLOW 3 ft SLACK PER DECODER 2 BASELINE BL-LA01 LIGHTNING ARRESTOR. 1 EVERY 300' FROM STARTING FROM CONTROLLER. 3 DBR-6 4 2-WIRE PATH JACKETED/ TWISTED TO NEXT DECODER 5 #8 AWG SOLID BARE CU WIRE 6 INSTALL 5/8" DIAMETER COPPER GROUND ROD OF 8' LENGTH IN A 10" ROUND BOX. 7 10" ROUND VALVE BOX</p>	<p>NOTE: 1. ALL DECODER TO SOLENOID WIRES MUST BE CONNECTED WITH THE CORRECT POLARITY TO PROPERLY OPERATE SOLENOID. 2. INSTALL SURGE PROTECTOR AS PER DETAIL</p>  <p>1 2-WIRE PATH JACKETED/ TWISTED FROM CONTROLLER. ALLOW 3 ft SLACK PER DECODER 2 2-WIRE WIRE PATH JACKETED/ TWISTED TO NEXT DECODER 3 DBR-6 4 BL-5201 SINGLE STATION DECODER 5 RED TO RED/BLACK TO BLACK WIRES TO VALVE SOLENOID (MUST MATCH COLORS) 6 RECTANGULAR PLASTIC VALVE BOX WITH BOLT DOWN LID. REFER TO REMOTE CONTROL VALVE DETAIL FOR INSTALLATION INSTRUCTIONS. 7 REMOTE CONTROL VALVE. REFER TO REMOTE CONTROL VALVE DETAIL FOR INSTALLATION INSTRUCTIONS.</p>	 <p>1 10" ROUND PLASTIC VALVE BOX WITH BOLT DOWN LID. 2 1 1/4" x 1 1/4" x 3/16" [30mm x 30mm x 5mm] ANGLE IRON 30" [760mm] LONG W/2 STAINLESS STEEL STRAPS (ONE AROUND QCV). 3 PVC MAIN LINE. 4 3" [75mm] LONG SCHEDULE 80 PVC THREADED NIPPLE. 5 FINISH GRADE. 6 QUICK COUPLING VALVE.</p> <p>7 19 GAUGE 1/2" [13mm] SQUARE WIRE MESH. 8 BRICK - 2 TOTAL. 9 SCHEDULE 80 PVC THREADED NIPPLE. 10 10" [250mm] LONG SCHEDULE 80 PVC THREADED NIPPLE. 11 UPC APPROVED SCHEDULE 40 PVC TEE OR ELBOW. 12 SCHEDULE 80 PVC THREADED 90° ELL.</p> <p>REFER TO IRRIGATION LEGEND</p> <p>NOTE: NIPPLES AND FITTINGS TO BE SAME SIZE AS VALVE IPT INLET THREAD SIZE.</p>	 <p>1 SET SPRINKLER 2" [50mm] ABOVE FINISH GRADE 2 NIPPLES AND FITTINGS TO BE SAME SIZE AS ROTARY SPRINKLER IPT INLET THREAD SIZE.</p> <p>1 WALL, WALK, CURB OR HEADER. 2 PVC LATERAL LINE. 3 3" [75mm] LONG SCHEDULE 80 PVC THREADED NIPPLE. 4 POP-UP ROTARY SPRINKLER. 5 FINISH GRADE.</p> <p>6 SCHEDULE 80 PVC THREADED NIPPLE. 7 10" [250mm] LONG SCHEDULE 80 PVC THREADED NIPPLE. 8 UPC APPROVED SCHEDULE 40 PVC TEE OR ELBOW. 9 SCHEDULE 80 PVC THREADED 90° ELL.</p> <p>REFER TO IRRIGATION LEGEND</p>	 <p>1 POP-UP LAWN SPRAY SPRINKLER 2 WALL, WALK, CURB OR BUILDING 3 PVC LATERAL LINE 4 UPC APPROVED SCHEDULE 40 PVC TEE OR ELBOW 5 POP-UP SHRUB SPRAY SPRINKLER OR BUBBLER 6 FINISH GRADE 7 1/2" [13mm] SCHEDULE 80 PVC THREADED NIPPLE (LENGTH AS REQUIRED).</p> <p>8 1/2" [13mm] SCHEDULE 40 PVC THREADED 90° ELL. 9 1/2" [13mm] FLEXIBLE IPS HOSE 6" [150mm] LONG WITH MALE ADAPTERS OR 1/2" [13mm] FLEXIBLE SWING JOINT (1/2" x 6") [13mm x 150mm] WITH A MINIMUM PRESSURE RATING OF 100 PSI [690kPa]. 10 1/2" [13mm] SCHEDULE 40 PVC STREET ELL.</p> <p>REFER TO IRRIGATION LEGEND</p>
7 SCALE: NONE DET: SOVD	8 SCALE: NONE DET: BASELINE LT ARRESTOR	9 SCALE: NONE DET: BASELINE-BL5201	10 SCALE: NONE DET: QUICK-C2	11 SCALE: NONE DET: -----	12 SCALE: NONE DET: SH/LW-POPSP

