

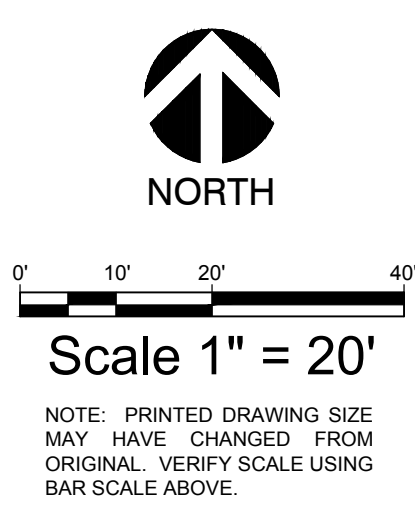
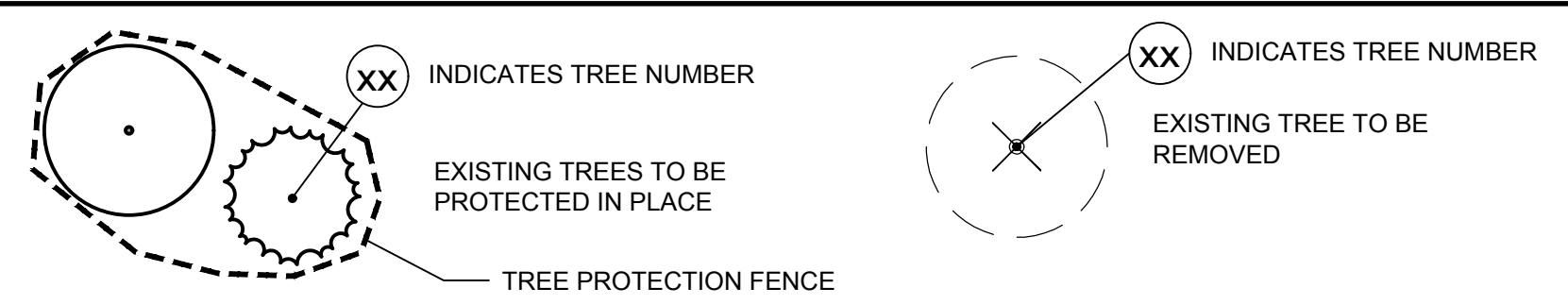
TREE INVENTORY

Tree Number	Common Name	Scientific Name	DBH (in.)	Condition	Protected	Disposition	Mitigation	Notes
1	Sabal palm	Sabal palmetto	21	Good	No <10' c.t.	Remove	-	
2	Sabal palm	Sabal palmetto	20	Good	No <10' c.t.	Remove	-	
3	Sabal palm	Sabal palmetto	26	Good	No <10' c.t.	Preserve	-	
4	Sabal palm	Sabal palmetto	24	Good	No <10' c.t.	Preserve	-	
5	Sabal palm	Sabal palmetto	19	Good	No <10' c.t.	Preserve	-	
6	Sabal palm	Sabal palmetto	17	Good	No <10' c.t.	Preserve	-	
7	Sabal palm	Sabal palmetto	21	Good	No <10' c.t.	Remove	-	
8	Sabal palm	Sabal palmetto	22	Good	No <10' c.t.	Remove	-	
9	Live oak	Quercus virginiana	15	Fair	Yes	Preserve	-	
10	Sabal palm	Sabal palmetto	17.4	Good	No <10' c.t.	Preserve	-	
11	Live oak	Quercus virginiana	19.5	Good	Yes	Preserve	-	
12	Live oak	Quercus virginiana	24	Fair	Yes	Remove	24	Conflicts w/ ex. Utility
13	Live oak	Quercus virginiana	18.1	Good	Yes	Preserve	-	
14	Sabal palm	Sabal palmetto	20	Good	No <10' c.t.	Preserve	-	
15	Live oak	Quercus virginiana	21	Fair	Yes	Preserve	-	
16	Live oak	Quercus virginiana	23.5	Good	Yes	Preserve	-	
17	Laurel oak	Quercus laurifolia	18.4	Good	Yes	Remove	18.4	
18	Live oak	Quercus virginiana	20	Fair	Yes	Preserve	-	
19	Live oak	Quercus virginiana	22	Good	Yes	Preserve	-	
20	Live oak	Quercus virginiana	20.5	Good	Yes	Preserve	-	
21	Sabal palm	Sabal palmetto	16	Good	No <10' c.t.	Preserve	-	
22	Live oak	Quercus virginiana	22	Fair	Yes	Preserve	-	
23	Lemon-scented gum	Corymbia citriodora	20	Fair	Yes	Preserve/Off-Site	-	codominant trunk
24	Sabal palm	Sabal palmetto	24	Good	Yes	Preserve	-	
25	Sabal palm	Sabal palmetto	23	Good	Yes	Preserve	-	
26	Sabal palm	Sabal palmetto	21	Good	Yes	Preserve	-	
27	Laurel oak	Quercus laurifolia	7	Good	No	Preserve/Off-Site	-	
28	Sabal palm	Sabal palmetto	21	Good	No <10' c.t.	Preserve	-	
29	Crimson bottlebrush	Callistemon citrinus	10	Good	No	Preserve/Off-Site	-	Multi trunk
30	Queen palm	Syagrus romanzoffiana	5	Poor	No	Preserve/Off-Site	-	
31	Sabal palm	Sabal palmetto	22	Good	No <10' c.t.	Remove	-	
32	Sabal palm	Sabal palmetto	23	Good	No <10' c.t.	Remove	-	
33	Carrotwood	Cupaniopsis anacardioides	10	Good	No	Remove	-	
34	Laurel oak	Quercus laurifolia	16	Good	Yes	Preserve/Off-Site	-	Multi trunk
35	Crimson bottlebrush	Callistemon citrinus	11	Fair	No	Preserve/Off-Site	-	Multi trunk
36	Carrotwood	Cupaniopsis anacardioides	29	Good	No	Preserve/Off-Site	-	Multi trunk
37	Crimson bottlebrush	Callistemon citrinus	7	Fair	No	Preserve/Off-Site	-	Multi trunk
38	Queen palm	Syagrus romanzoffiana	6	Good	No	Preserve/Off-Site	-	
39	Queen palm	Syagrus romanzoffiana	8.5	Good	No	Remove	-	

40	Queen palm	Syagrus romanzoffiana	9	Good	No	Remove	-	Leaning
41	Queen palm	Syagrus romanzoffiana	11	Poor	No	Remove	-	Leaning
42	Queen palm	Syagrus romanzoffiana	9	Good	No	Remove	-	Leaning
43	Queen palm	Syagrus romanzoffiana	9	Good	No	Remove	-	Leaning
44	Queen palm	Syagrus romanzoffiana	8.5	Good	No	Remove	-	Leaning
45	Queen palm	Syagrus romanzoffiana	10	Good	No	Remove	-	Leaning
46	Sabal palm	Sabal palmetto	25	Good	No <10' c.t.	Preserve	-	Leaning
47	Sabal palm	Sabal palmetto	24	Good	No <10' c.t.	Preserve	-	Leaning
48	Sabal palm	Sabal palmetto	15	Good	No <10' c.t.	Preserve	-	Leaning
49	Queen palm	Syagrus romanzoffiana	13	Excellent	No	Remove	-	Leaning
50	Queen palm	Syagrus romanzoffiana	8	Good	No	Remove	-	Leaning
51	Queen palm	Syagrus romanzoffiana	11	Good	No	Remove	-	Leaning
52	Queen palm	Syagrus romanzoffiana	9	Fair	No	Remove	-	Leaning
53	Christmas palm	Veitchia merrillii	5	Excellent	No	Remove	-	Leaning
54	Christmas palm	Veitchia merrillii	4	Good	No	Remove	-	Leaning
55	Laurel oak	Quercus laurifolia	13	Poor	Yes	Remove	13	Leaning
56	Laurel oak	Quercus laurifolia	11.5	Fair	No	Remove	-	Leaning
57	Laurel oak	Quercus laurifolia	13.5	Good	Yes	Remove	13.5	Leaning
58	Laurel oak	Quercus laurifolia	11.5	Poor	No	Remove	-	Leaning
59	Laurel oak	Quercus laurifolia	16	Fair	Yes	Remove	16	Leaning
60	Laurel oak	Quercus laurifolia	12.5	Fair	Yes	Remove	12.5	Leaning
61	Sabal palm	Sabal palmetto	22	Good	Yes	Preserve/Off-Site	-	Leaning
62	Sabal palm	Sabal palmetto	22	Good	Yes	Preserve/Off-Site	-	Leaning
63	Live oak	Quercus virginiana	16.5	Good	Yes	Preserve/Off-Site	-	Leaning
64	Lemon-scented gum	Corymbia citriodora	22	Fair	Yes	Preserve/Off-Site	-	Leaning
65	Live oak	Quercus virginiana	9.5	Good	No	Preserve/Off-Site	-	Leaning
66	Live oak	Quercus virginiana	18.2	Good	Yes	Preserve/Off-Site	-	Leaning

TOTAL PROTECTED TYPE A DBH PRESERVED: 181.6
TOTAL PROTECTED TYPE B DBH PRESERVED: 292.4
TOTAL NON-TYPE DBH PRESERVED: 0
TOTAL PROTECTED TYPE A DBH REMOVED: 97.4
TOTAL PROTECTED TYPE B DBH REMOVED: 0
TOTAL NON-TYPE DBH REMOVED: 0
TREE INCHES PRESERVED ON-SITE EXCEED PROTECTED TREE INCHES REMOVED -> NO MITIGATION REQUIRED.

LEGEND



TREE MITIGATION FEE TO BE PAID TO THE TREE PRESERVATION FUND SHALL BE FINALIZED BY THE CITY AS PART OF THE APPROVAL OF THE TREE REMOVAL PERMIT.

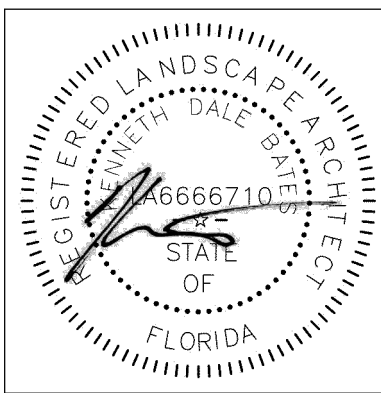
ALL EXISTING INVASIVE EXOTIC PLANTS, AS LISTED ON THE FLORIDA EXOTIC PEST PLANT COUNCIL'S INVASIVE PLANT SPECIES LIST, SHALL BE REMOVED

SITE PLAN PROJECT NO. P24-230
PSLUSD PROJECT NO. 11-056-00

NO.	DATE:	ISSUE	DESCRIPTION
1	04/04/25	RESPONSE TO PSLUSD AND PSL P&Z REVIEW COMMENTS	
2	07/03/25	RESPONSE TO PSLUSD REVIEW COMMENTS	
3			
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10180 S.U. HWY 1
PORT ST. LUCIE,
FLORIDA 34952
PIN # 3414-501-3810-100-1
LOT 10, BLOCK 4, PLAT NO. 1,
ST. LUCIE COUNTY
ZONED: CG - GENERAL
COMMERCIAL

MCD STATE SITE CODE:
09-2788

IEDS PROJECT NUMBER:
MCD-24129

SHEET TITLE:
TREE DISPOSITION
PLAN

SHEET
NUMBER TD-1

TREE PROTECTION SPECIFICATIONS

MATERIALS

1. FABRIC: 4 FOOT HIGH ORANGE PLASTIC FENCING AS SHOWN ON THE PLANS AND SHALL BE WOVEN WITH 2 INCH MESH OPENINGS SUCH THAT IN A VERTICAL DIMENSION OF 23 INCHES ALONG THE DIAGONALS OF THE OPENINGS THERE SHALL BE AT LEAST 7 MESHES.
2. POSTS: POSTS SHALL BE A MINIMUM OF 72 INCHES LONG AND STEEL "T" SHAPED WITH A MINIMUM WEIGHT OF 1.3 POUNDS PER LINEAR FOOT.
3. TIE WIRE: WIRE FOR ATTACHING THE FABRIC TO THE T-POSTS SHALL BE NOT LESS THAN NO. 12 GAUGE GALVANIZED WIRE.
4. USED MATERIALS: PREVIOUSLY-USED MATERIALS, MEETING THE ABOVE REQUIREMENTS AND WHEN APPROVED BY THE OWNER, MAY BE USED.

CONSTRUCTION METHODS

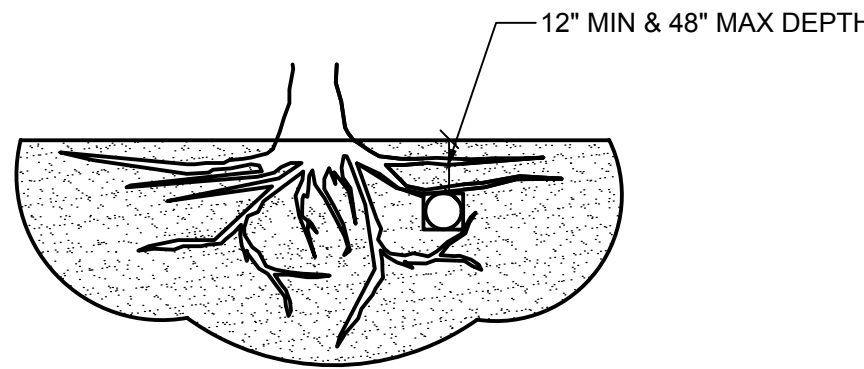
1. ALL TREES AND SHRUBS SHOWN TO REMAIN WITHIN THE PROXIMITY OF THE CONSTRUCTION SITE SHALL BE PROTECTED PRIOR TO BEGINNING ANY DEVELOPMENT ACTIVITY.
2. EMPLOY THE SERVICES OF AN ISA (INTERNATIONAL SOCIETY OF ARBORICULTURE) CERTIFIED ARBORIST AND OBTAIN ALL REQUIRED PERMITS TO PRUNE THE EXISTING TREES FOR CLEANING, RAISING AND THINNING, AS MAY BE REQUIRED.
3. PROTECTIVE FENCING SHALL BE ERECTED OUTSIDE THE CRITICAL ROOT ZONE (CRZ, EQUAL TO 1' FROM THE TRUNK FOR EVERY 1" OF DBH) AT LOCATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE LANDSCAPE CONSULTANT AND/OR CITY ARBORIST, AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS. FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. TREES IN CLOSE PROXIMITY SHALL BE FENCED TOGETHER, RATHER THAN INDIVIDUALLY.
4. PROTECTIVE FENCE LOCATIONS IN CLOSE PROXIMITY TO STREET INTERSECTIONS OR DRIVES SHALL ADHERE TO THE APPLICABLE JURISDICTION'S SIGHT DISTANCE CRITERIA.
5. THE PROTECTIVE FENCING SHALL BE ERECTED BEFORE SITE WORK COMMENCES AND SHALL REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PHASE.
6. THE INSTALLATION POSTS SHALL BE PLACED EVERY 6 FEET ON CENTER AND EMBEDDED TO 18 INCHES DEEP. MESH FABRIC SHALL BE ATTACHED TO THE INSTALLATION POSTS BY THE USE OF SUFFICIENT WIRE TIES TO SECURELY FASTEN THE FABRIC TO THE T-POSTS TO HOLD THE FABRIC IN A STABLE AND UPRIGHT POSITION.
7. WITHIN THE CRZ:
 - a. DO NOT CLEAR, FILL OR GRADE IN THE CRZ OF ANY TREE.
 - b. DO NOT STORE, STOCKPILE OR DUMP ANY JOB MATERIAL, SOIL OR RUBBISH UNDER THE SPREAD OF THE TREE BRANCHES.
 - c. DO NOT PARK OR STORE ANY EQUIPMENT OR SUPPLIES UNDER THE TREE CANOPY.
 - d. DO NOT SET UP ANY CONSTRUCTION OPERATIONS UNDER THE TREE CANOPY (SUCH AS PIPE CUTTING AND THREADING, MORTAR MIXING, PAINTING OR LUMBER CUTTING).
 - e. DO NOT NAIL OR ATTACH TEMPORARY SIGNS, METERS, SWITCHES, WIRES, BRACING OR ANY OTHER ITEM TO THE TREES.
 - f. DO NOT PERMIT RUNOFF FROM WASTE MATERIALS INCLUDING SOLVENTS, CONCRETE WASHOUTS, ASPHALT TACK COATS

(MC-30 OIL), ETC. TO ENTER THE CRZ. BARRIERS ARE TO BE PROVIDED TO PREVENT SUCH RUNOFF SUBSTANCES FROM ENTERING THE CRZ WHENEVER POSSIBLE, INCLUDING IN AN AREA WHERE RAIN OR SURFACE WATER COULD CARRY SUCH MATERIALS TO THE ROOT SYSTEM OF THE TREE.

8. ROUTE UNDERGROUND UTILITIES TO AVOID THE CRZ. IF DIGGING IS UNAVOIDABLE, BORE UNDER THE ROOTS, OR HAND DIG TO AVOID SEVERING THEM.
9. WHERE EXCAVATION IN THE VICINITY OF TREES MUST OCCUR, SUCH AS FOR IRRIGATION INSTALLATION, PROCEED WITH CAUTION, AND USING HAND TOOLS ONLY.
10. THE CONTRACTOR SHALL NOT CUT ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATION OCCURS NEAR EXISTING TREES. ALL ROOTS LARGER THAN ONE INCH IN DIAMETER ARE TO BE CUT CLEANLY. FOR OAKS ONLY, ALL WOUNDS SHALL BE PAINTED WITH WOUND SEALER WITHIN 30 MINUTES.
11. REMOVE ALL TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS BY HAND.
12. TREES DAMAGED OR KILLED DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED AT THE CONTRACTOR'S EXPENSE AND TO THE PROJECT OWNER'S AND LOCAL JURISDICTION'S SATISFACTION.
13. ANY TREE REMOVAL SHALL BE APPROVED BY THE OWNER AND LOCAL JURISDICTION PRIOR TO ITS REMOVAL, AND THE CONTRACTOR SHALL HAVE ALL REQUIRED PERMITS FOR SUCH ACTIVITIES.
14. COVER EXPOSED ROOTS AT THE END OF EACH DAY WITH SOIL, MULCH OR WET BURLAP.
15. IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DURING CONSTRUCTION AND WHERE HEAVY TRAFFIC IS ANTICIPATED, COVER THE SOIL WITH EIGHT INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. THIS EIGHT INCH DEPTH OF MULCH SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
16. WATER ALL TREES IMPACTED BY CONSTRUCTION ACTIVITIES, DEEPLY ONCE A WEEK DURING PERIODS OF HOT DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
17. WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.
18. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TREE PROTECTION FENCING WHEN ALL THREATS TO THE EXISTING TREES FROM CONSTRUCTION-RELATED ACTIVITIES HAVE BEEN REMOVED.

TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE TUNNELING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO TUNNEL WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE ENGINEER.

TUNNELS SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE.



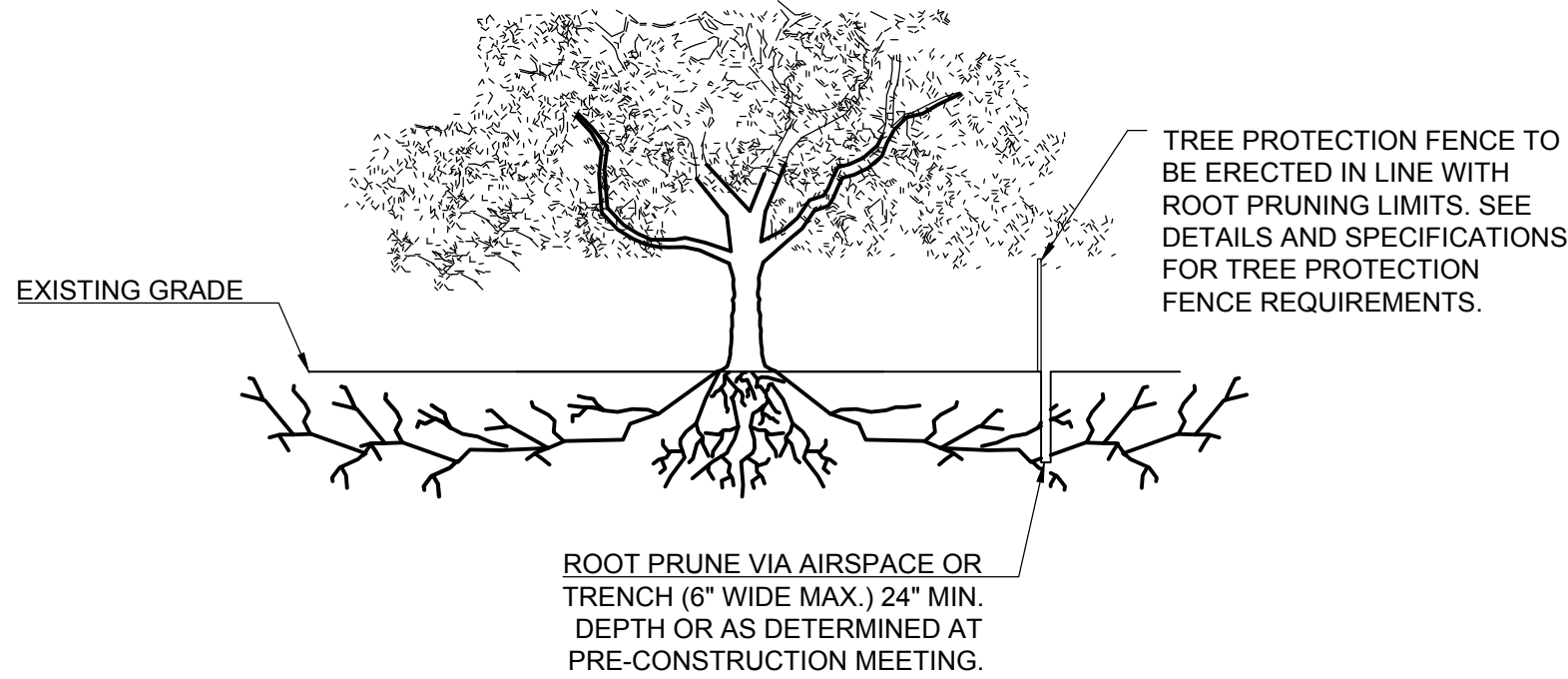
TUNNEL TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



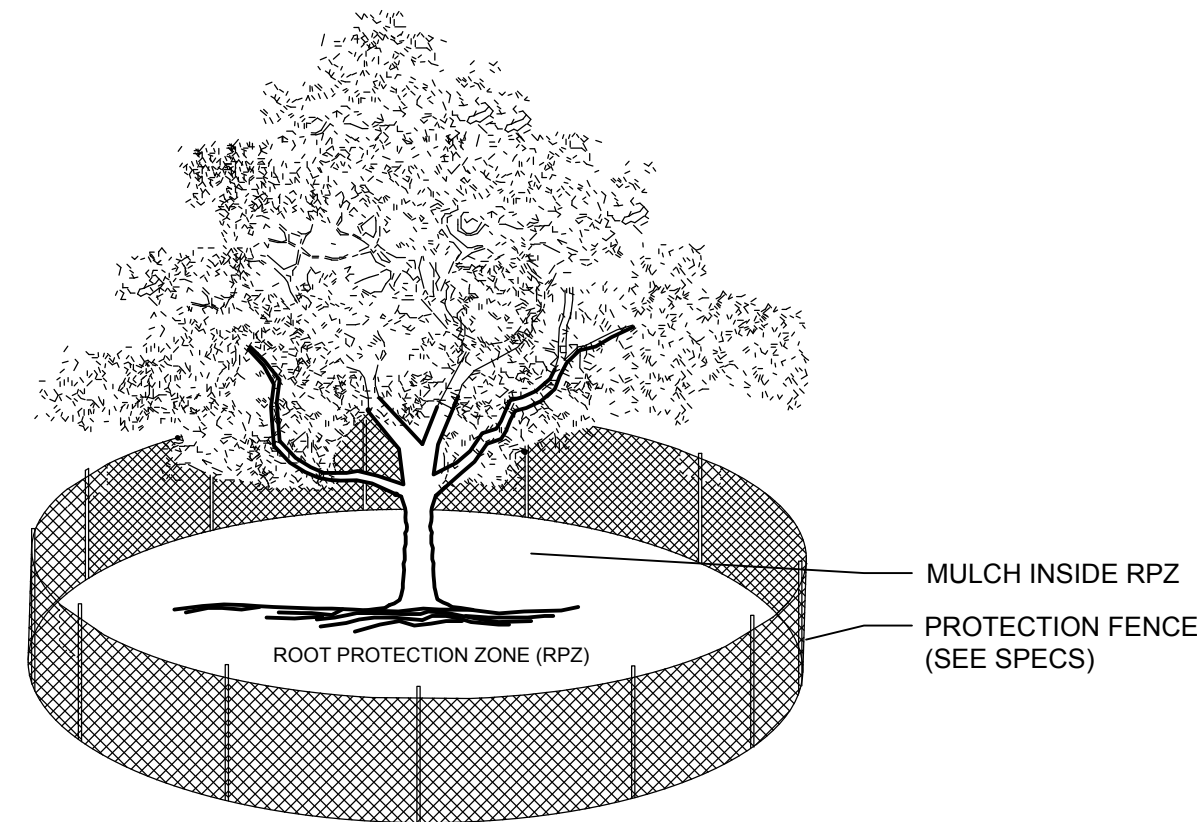
OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.

C BORING THROUGH ROOT PROTECTION ZONE
SCALE: NOT TO SCALE

- NOTES
1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRE-CONSTRUCTION MEETING.
 2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRE-CONSTRUCTION MEETING AND FLAGGED PRIOR TO ROOT PRUNING.
 3. EXACT LOCATION OF ROOT PRUNING SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FORESTRY INSPECTOR.
 4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FORESTRY INSPECTOR.
 5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT. ROT PRUNING METHODS AND MEANS MUST BE IN ACCORDANCE WITH ANSI STANDARD A3000.
 6. ALL PRUNING MUST BE EXECUTED AT LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FORESTRY INSPECTOR.
 7. SUPPLEMENTAL WATERING MAY BE REQUIRED FOR ROOT PRUNED TREES THROUGHOUT THE GROWING SEASON DURING CONSTRUCTION AND SUBSEQUENT WARRANTY AND MAINTENANCE PERIOD.

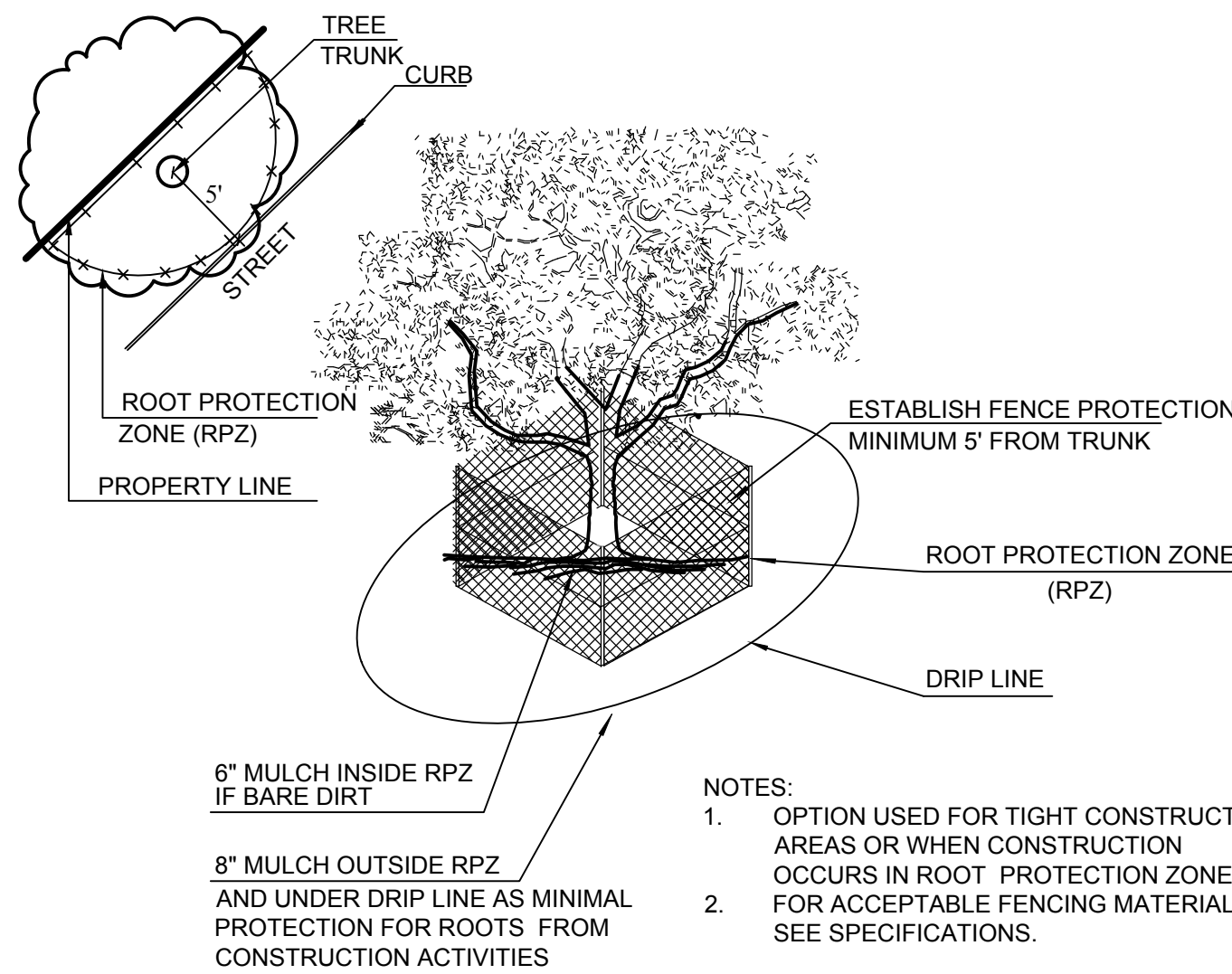


D ROOT PRUNING DETAIL
SCALE: NOT TO SCALE



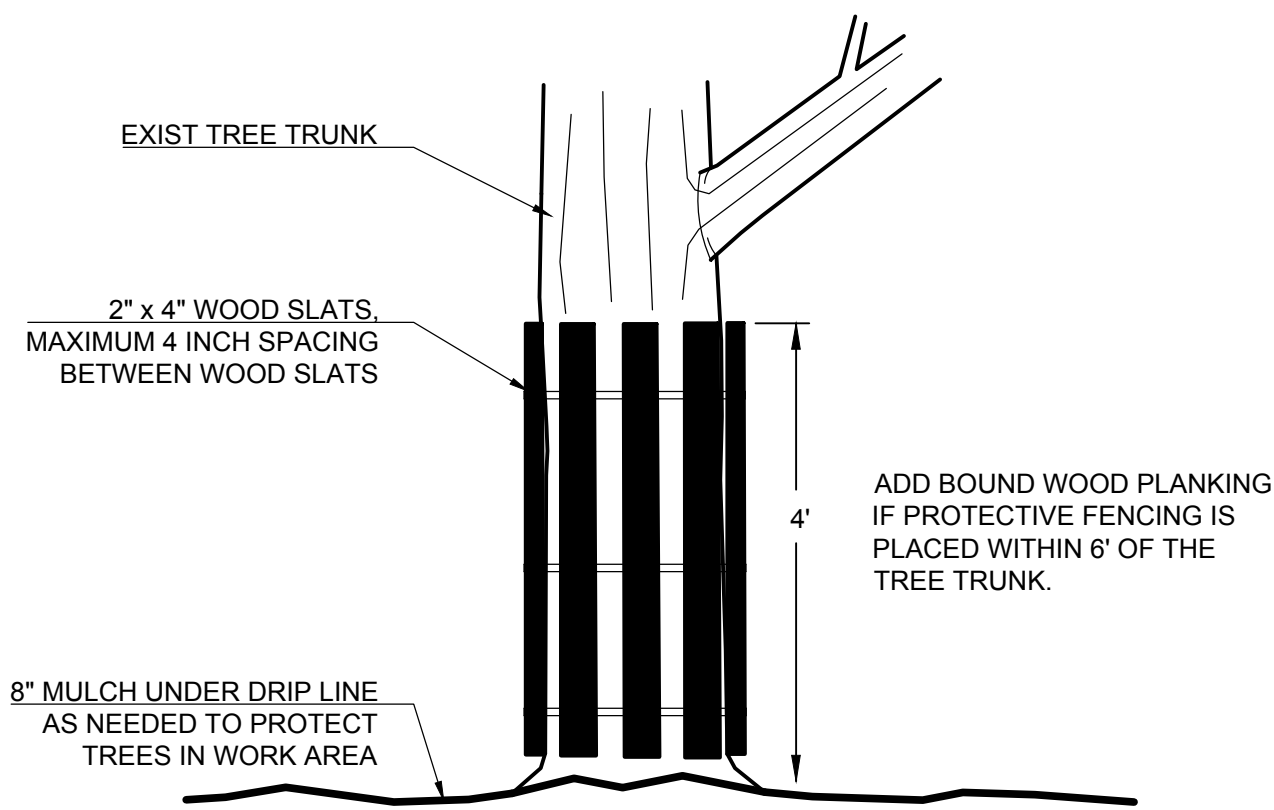
- NOTES:
1. THE FENCING LOCATION SHOWN ABOVE IS DIAGRAMATIC ONLY AND WILL CONFORM TO THE DRIP LINE AND BE LIMITED TO PROJECT BOUNDARY. WHERE MULTIPLE ADJACENT TREES WILL BE ENCLOSED BY FENCING, THE FENCING SHALL BE CONTINUOUS AROUND ALL TREES.
 2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

A TREE PROTECTION FENCE
SCALE: NOT TO SCALE



- NOTES:
1. OPTION USED FOR TIGHT CONSTRUCTION AREAS OR WHEN CONSTRUCTION OCCURS IN ROOT PROTECTION ZONE.
 2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

B TREE PROTECTION FENCE - TIGHT CONSTRUCTION
SCALE: NOT TO SCALE



NOTE
IN SITUATIONS WHERE A PRESERVED TREE REMAINS IN IMMEDIATE AREA OF INTENDED CONSTRUCTION AND THE CITY FORESTER DETERMINES THE TREE BARK TO BE IN DANGER OF DAMAGE BY DEVELOPMENT ACTIVITIES, THE CONTRACTOR OR SUBCONTRACTOR SHALL PROTECT THE TREE BY WRAPPING TREE TRUNK WITH 2" x 4" STUDS AND ROPE OR BAND IN PLACE AS NEEDED TO PROTECT TREE BARK IN WORK AREAS.

E TREE BARK PROTECTION
SCALE: NOT TO SCALE



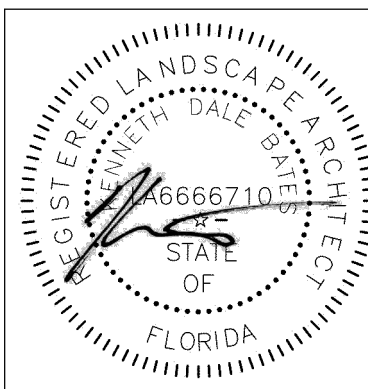
SITE PLAN PROJECT NO. P24-230

PSLUSD PROJECT NO. 11-056-00

ISSUE		DESCRIPTION
NO.	DATE:	RESPONSE TO PSLUSD AND PSL P&Z REVIEW COMMENTS
1	04/04/25	RESPONSE TO PSLUSD REVIEW COMMENTS
2	07/03/25	RESPONSE TO PSLUSD REVIEW COMMENTS
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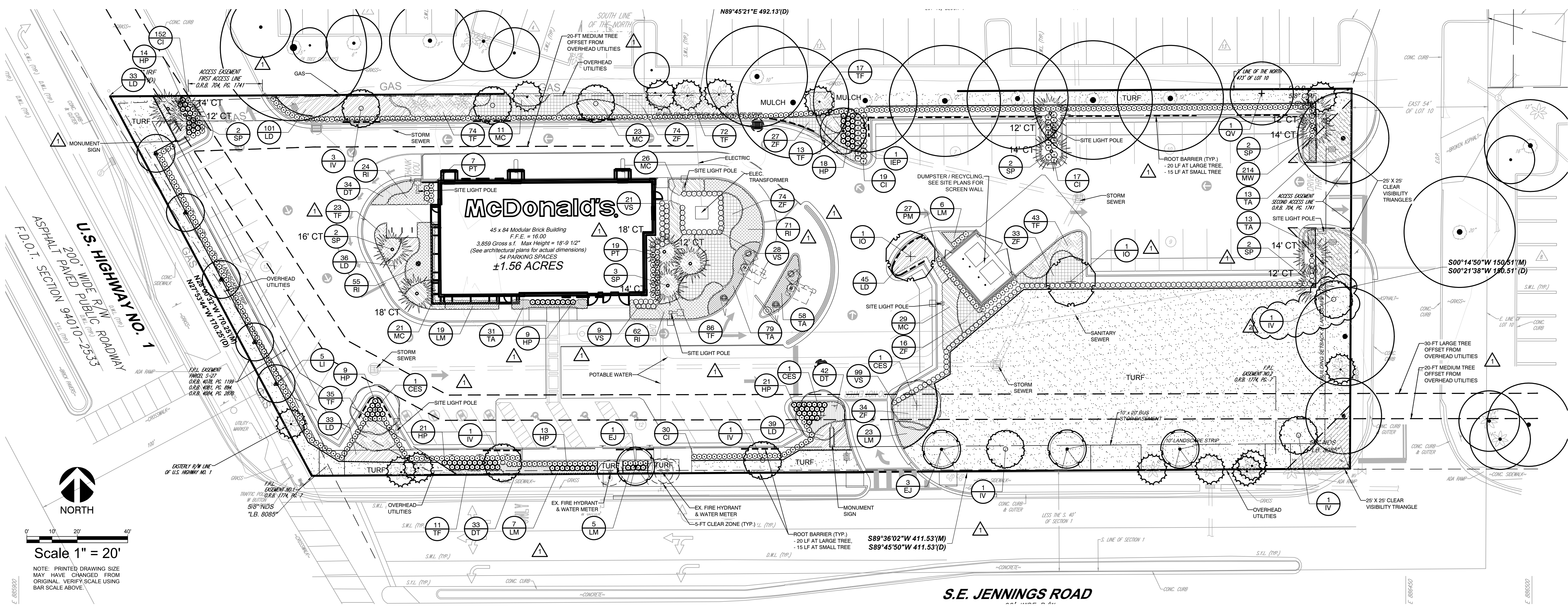
McDonald's
10180 S.U. HWY 1
PORT ST. LUCIE,
FLORIDA 34952
PIN # 3414-501-3810-100-1
LOT 10, BLOCK 4, PLAT NO. 1,
ST. LUCIE COUNTY
ZONED: GC - GENERAL
COMMERCIAL

MCD STATE SITE CODE:
09-2788

IEDS PROJECT NUMBER:
MCD-24129

SHEET TITLE:
LANDSCAPE PLAN

SHEET
NUMBER **LP-1**



IRRIGATION CONCEPT

1. AN AUTOMATIC IRRIGATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL BY THE TIME OF FINAL INSPECTION. THE ENTIRE IRRIGATION SYSTEM SHALL BE INSTALLED BY A LICENSED AND QUALIFIED IRRIGATION CONTRACTOR.
2. THE IRRIGATION SYSTEM WILL OPERATE ON THE LOWEST QUALITY WATER AVAILABLE, AND THE SYSTEM WILL HAVE APPROPRIATE BACKFLOW PREVENTION DEVICES INSTALLED TO PREVENT CONTAMINATION OF ANY POTABLE SOURCE, IF APPLICABLE.
3. ALL NON-TURF PLANTED AREAS SHALL BE DRIP IRRIGATED. SODDED AND SEEDDED AREAS SHALL BE IRRIGATED WITH SPRAY OR ROTOR HEADS AT 100% HEAD-TO-HEAD COVERAGE.
4. ALL PLANTS SHARING SIMILAR HYDROZONE CHARACTERISTICS SHALL BE PLACED ON A VALVE DEDICATED TO PROVIDE THE NECESSARY WATER REQUIREMENTS SPECIFIC TO THAT HYDROZONE.
5. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED, TO THE MAXIMUM EXTENT POSSIBLE, TO CONSERVE WATER BY USING THE FOLLOWING DEVICES AND SYSTEMS: MATCHED PRECIPITATION RATE TECHNOLOGY ON ROTOR AND SPRAY HEADS (WHEREVER POSSIBLE), RAIN SENSORS, AND MULTI-PROGRAM COMPUTERIZED IRRIGATION CONTROLLERS FEATURING SENSORY INPUT CAPABILITIES.

PSLUSD LANDSCAPING NOTES

1. NO LANDSCAPING SHALL BE PLANTED IN A MANNER THAT WOULD ADVERSELY AFFECT UTILITY EASEMENTS. LANDSCAPING SHALL BE IN COMPLIANCE WITH CHAPTER 154 OF THE CITY OF PORT ST. LUCIE CODE OF ORDINANCES, PSLUSD TECHNICAL SPECIFICATIONS AND POLICIES.
2. ALL LANDSCAPING WITHIN CITY UTILITY EASEMENTS SHALL COMPLY WITH PSLUSD TECHNICAL SPECIFICATIONS, POLICIES, AND CODES.
3. TREES SHALL NOT BE PLANTED WITHIN TEN (10) FEET OF ANY PSLUSD UNDERGROUND INFRASTRUCTURE.
4. NO LANDSCAPING OTHER THAN SOD GRASSES SHALL BE LOCATED WITHIN 5' OF A PSLUSD APPURTENANCE SUCH AS A WATER METER ASSEMBLY, BACKFLOW DEVICE, FIRE HYDRANT OR SEWER CLEANOUT, ETC.

ROOT BARRIERS

THE CONTRACTOR SHALL INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED WITHIN FIVE (5) FEET OF PAVING OR CURBS. ROOT BARRIERS SHALL BE "CENTURY" OR "DEEP-ROOT" 24" DEEP PANELS (OR EQUAL). BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE. INSTALL PANELS PER MANUFACTURER'S RECOMMENDATIONS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENCIRCLE THE ROOTBALL.

GENERAL GRADING AND PLANTING NOTES

1. ALL PLANT MATERIAL SHALL BE FLORIDA NO. 1 OR BETTER ACCORDING TO GRADES AND STANDARDS FOR NURSERY PLANTS, CURRENT EDITION AT TIME OF INSTALLATION.
2. BY SUBMITTING A PROPOSAL, THE LANDSCAPE PLANTING SCOPE OF WORK, THE CONTRACTOR CONFIRMS THAT HE HAS READ AND WILL COMPLY WITH, THE ASSOCIATED NOTES, SPECIFICATIONS, AND DETAILS WITH THIS PROJECT.
3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING VEGETATION (EXCEPT WHERE NOTED TO REMAIN).
4. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS.
 - a. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +0.1' OF FINISH GRADE. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION.
 - b. CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADDED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL.
 - c. THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (BASED ON A SOIL TEST, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED.
 - d. ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 3" BELOW THE ADJACENT FINISH SURFACE, IN ORDER TO ALLOW FOR PROPER MULCH DEPTH. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
 - e. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
 - f. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
5. ALL PLANT LOCATIONS ARE DIAGRAMMATIC. ACTUAL LOCATIONS SHALL BE VERIFIED WITH THE LANDSCAPE ARCHITECT OR DESIGNER PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT ALL REQUIREMENTS OF THE PERMITTING AUTHORITY ARE MET (I.E., MINIMUM PLANT QUANTITIES, PLANTING METHODS, TREE PROTECTION METHODS, ETC.).
6. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR DETERMINING PLANT QUANTITIES; PLANT QUANTITIES SHOWN ON LEGENDS AND CALLOUTS ARE FOR GENERAL INFORMATION ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND THE PLANT LEGEND, THE PLANT QUANTITY AS SHOWN ON THE PLAN (FOR INDIVIDUAL SYMBOLS) OR CALLOUT (FOR GROUNDCOVER, PATTERNS) SHALL TAKE PRECEDENCE. NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT. IF SOME OF THE PLANTS ARE NOT AVAILABLE, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING (VIA PROPER CHANNELS).
7. THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE REPRESENTATIVE PHOTOS OF ALL PLANTS PROPOSED FOR THE PROJECT. THE CONTRACTOR SHALL ALLOW THE LANDSCAPE ARCHITECT AND THE OWNER/OWNER'S REPRESENTATIVE TO INSPECT, AND APPROVE OR REJECT, ALL PLANTS DELIVERED TO THE JOBSITE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR SUBMITTALS.
8. THE CONTRACTOR SHALL MAINTAIN THE LANDSCAPE IN A HEALTHY CONDITION FOR 90 DAYS AFTER ACCEPTANCE BY THE OWNER. REFER TO SPECIFICATIONS FOR CONDITIONS OF ACCEPTANCE FOR THE START OF THE MAINTENANCE PERIOD, AND FOR FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD.
9. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.

ALL EXISTING INVASIVE EXOTIC PLANTS, AS LISTED ON THE FLORIDA EXOTIC PEST PLANT COUNCIL'S INVASIVE PLANT SPECIES LIST, SHALL BE REMOVED

LANDSCAPE CALCULATIONS

JURISDICTION:	CITY OF PORT ST. LUCIE, FL
GROSS SITE AREA:	68,076 SF / 1.56 AC
SUBJECT PARCEL ZONING:	GC - GENERAL COMMERCIAL
TREES REQUIRED & PROVIDED:	57 TREES, INCLUDING: 42 SITE PERIMETER TREES (17 NEW + 25 EXISTING) 1 10 PARKING ISLAND TREES 5 FOUNDATION TREES 100% PROVIDED (50% REQUIRED) 75% PROVIDED (50% REQUIRED) NATIVE SHRUB SPECIES: 22% PROVIDED (25% REQUIRED) 22% PROVIDED (20% REQUIRED) FLOWERING TREES: 100% PROVIDED (75% REQUIRED): 6 TREES + 8 PALMS 14.8% OF NEW TREES (4 TREE REQUIREMENTS OF 27) PALM TREE SUBSTITUTIONS: 7 TREE + 1 PALM SPECIES PROVIDED (5 REQUIRED)
DROUGHT TOLERANT PLANT MATERIAL:	27,225 SF 13,613 SF (50% OF LSA) 1 13,566 SF 1,467 SF
TOTAL LANDSCAPE AREA:	27,225 SF
MAXIMUM TURF AREA ALLOWED:	13,613 SF (50% OF LSA) 1
LANDSCAPE TURF AREA PROVIDED:	13,566 SF
F.P.L. EASEMENT AREA TURF PROVIDED:	1,467 SF
SITE PERIMETER LANDSCAPING	
NORTH:	492.13 LF
TREES REQUIRED:	17 TREES (1 TREE / 30 LF)
TREES PROVIDED:	17 = 4 NEW TREES + 6 EX. TREES + 7 EX. PALMS 1
CONTINUOUS HEDGE:	PROVIDED; 2-FT HEIGHT AT PLANTING
EAST:	150.51 LF
TREES REQUIRED:	5 TREES (1 TREE / 30 LF)
TREES PROVIDED:	5 = 3 EXISTING TREES + 1 EXISTING PALM + 1 NEW TREE
CONTINUOUS HEDGE:	PROVIDED; 2-FT HEIGHT AT PLANTING
SOUTH:	411.53 LF - EXCLUDES INGRESS/EGRESS ACCESS DRIVES
TREES REQUIRED:	14 TREES (1 TREE / 30 LF)
TREES PROVIDED:	14 = 8 NEW TREES + 6 EXISTING PALMS 1
CONTINUOUS HEDGE:	PROVIDED; 2-FT HEIGHT AT PLANTING
WEST:	170.25 LF - EXCLUDES INGRESS/EGRESS ACCESS DRIVES
TREES REQUIRED:	6 TREES (1 TREE / 30 LF)
TREES PROVIDED:	6 = 5 NEW SMALL TREES* + 1 EXISTING PALM
CONTINUOUS HEDGE:	PROVIDED; 2-FT HEIGHT AT PLANTING
PARKING AREA INTERIOR LANDSCAPING	
TREES REQUIRED:	10 TREES (1 TREE / ISLAND)
TREES PROVIDED:	6 TREES + 8 PALMS (2-1 CREDIT FOR TREE)
SHRUBS & GROUNDCOVERS:	100% COVERAGE PROVIDED
BUILDING FACADE LANDSCAPING	
BUILDING PERIMETER:	145 LF (EXCLUDES ENTRY/EXIT POINTS)
TREES/PALMS REQUIRED:	5 TREES (1 TREE/PALM PER 30 LF)
TREES PROVIDED:	5 TREES (5 PALMS)
SHRUBS REQUIRED:	73 SHRUBS (1 SHRUB PER 2 LF)
SHRUBS PROVIDED:	>73 SHRUBS

S.E. JENNINGS ROAD

PLANTING LEGEND

SYMBOL	BOTANIC NAME	COMMON NAME	MIN. SIZE	SPACING	QUANTITY	NATIVE	DROUGHT TOLERANCE
TREES							
CES	Conocarpus erectus var. sericea	Silver Buttonwood	12'-14' ht., 5'-6' sprd., 2.5" cal. min.	per plan	3	YES	HIGH
EJ	Eriobotrya japonica	Loquat	12'-14' ht., 5'-6' sprd., 2.5" cal. min.	per plan	4	NO	HIGH
IEP	Ilex x attenuata 'East Palatka'	East Palatka Holly	12'-14' ht., 5'-6' sprd., 2.5" cal. min.	per plan	1	YES	MEDIUM
IO	Ilex opaca	American Holly	12'-14' ht., 5'-6' sprd., 2.5" cal. min.	per plan	2	YES	HIGH
IV	Ilex vomitoria	Yaupon Holly	12' ht., 5' sprd., 3 trunks, 3"agg. cal.	per plan	8	YES	HIGH
LI	Lagerstroemia indica 'Tuskegee'	Dark Pink Crape Myrtle	12' ht., 5' sprd., 3 trunks, 3"agg. cal.	per plan	5	NO	HIGH
QV	Quercus virginiana 'Qvita'	Highrise Oak	12'-14' ht., 5'-6' sprd., 2.5" cal. min.	per plan	1	YES	HIGH
NOTE: ALL TREES SHALL BE CONTAINER-GROWN, CONTAINER SIZE AS APPROPRIATE FOR THE CALIPER SPECIFIED. SEE SPECIFICATIONS FOR PROPER ROOT QUALITY.							
PALMS							
SP	Sabal palmetto	Cabbage Palm	see plan for c.t. heights	per plan	13	YES	HIGH
SHRUB HEDGES							
CI	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	24" ht. min., Full	24" o.c.	218	YES	MEDIUM
HP	Hamelia patens	Firebush	24" ht. min., Full	24" o.c.	105	YES	MEDIUM
MW	Myrica cerifera	Wax Myrtle	24" ht. min., Full	24" o.c.	214	YES	MEDIUM
PM	Podocarpus macrophyllus	Japanese Yew	24" ht. min., Full	24" o.c.	27	NO	MEDIUM
PT	Pittosporum tobira	Pittosporum	24" ht. min., Full	24" o.c.	26	NO	MEDIUM
VS	Viburnum suspensum	Sandankwa Viburnum	24" ht. min., Full	24" o.c.	157	NO	MEDIUM
SHRUBS / GROUNDCOVERS / ORNAMENTAL GRASSES							
DT	Dianella tasmanica	Variegated Flax Lily	1 gal., 12" ht. min.	18" o.c.	109	NO	MEDIUM
LM	Liriope muscari 'Evergreen Giant'	Lilyturf	1 gal., 12" ht. min., 8-10 pips/pot	24" o.c.	60	NO	MEDIUM
LD	Lantana depressa var. depressa	Gold Lantana	1 gal., 12" ht. min., Full	24" o.c.	287	YES	HIGH
MC	Muhlenbergia capillaris	Muhly Grass	1 gal., 12" ht. min.	30" o.c.	110	YES	HIGH
RI	Rhaphiolepis indica	Indian Hawthorn	3 gal., 12" ht. min.	24" o.c.	212	NO	MEDIUM
TA	Trachelospermum asiaticum	Asiatic Jasmine	1 gal.	18" o.c.	194	NO	MEDIUM
TF	Tripsacum floridana	Dwarf Fakahatchee Grass	1 gal., 12" ht. min.	24" o.c.	374	YES	MEDIUM
ZF	Zamia floridana	Coontie	1 gal., 12" ht. min.	30" o.c.	258	YES	HIGH
TURF							
	Paspalum notatum	Argentine Bahiagrass	Sod	---	---	NO	MEDIUM

MULCHES

AFTER ALL PLANTING IS COMPLETE, CONTRACTOR SHALL INSTALL 2" THICK LAYER OF 1-1/2" SHREDDED WOOD MULCH, NATURAL (UNDYED) IN ALL PLANTING AREAS (EXCEPT FOR TURF AND SEEDDED AREAS). CONTRACTOR SHALL SUBMIT SAMPLES OF ALL MULCHES TO LANDSCAPE ARCHITECT AND OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.

CYPRESS MULCH SHALL NOT BE USED.

GENERAL

- A. QUALIFICATIONS OF LANDSCAPE CONTRACTOR
- ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANNING AND DESIGN.
2. A LIST OF SUCCESSFULLY COMPLETED PROJECTS OF THIS TYPE, SIZE AND NATURE MAY BE REQUESTED BY THE OWNER FOR FURTHER QUALIFICATION MEASURES.
3. THE LANDSCAPE CONTRACTOR SHALL HOLD A VALID CONTRACTORS LICENSE ISSUED BY THE APPROPRIATE LOCAL JURISDICTION.
- B. SCOPE OF WORK
- WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS, LABOR, SERVICES, EQUIPMENT, LICENSES, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK SPECIFIED HEREIN AND /OR SHOWN ON THE LANDSCAPE PLANS, NOTES, AND DETAILS.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND ORDINANCES REQUIRED BY ANY AUTHORITY WITH JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS.
- THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK.

PRODUCTS

- A. ALL MANUFACTURED PRODUCTS SHALL BE PLANTS.
- B. CONTAINER AND BALLED-AND-BURLAPPED PLANTS:
1. ALL NURSERY NURSING-GROWN PLANTS SHALL COMPLY WITH ANSI Z60-1.2014. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SNUG SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. ALL PLANTS WITHIN A 10' CIRCUMFERENCE SHALL HAVE A MINIMUM OF 100% BRANCHES. ALL PLANTS WITHIN ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR CLIMATIC CONDITIONS.
2. ALL SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED ROOT SYSTEMS, NON-PUT, BOD, FREE FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS J-SHAPED ROOTS).
3. PLANTS MAY BE PLANTED FROM CONTAINERS OR BALLED-AND-BURLAPPED (B&B), UNLESS SPECIFIED ON THE PLANTING LEGEND. BARE-ROOT TREES ARE NOT ACCEPTABLE.
4. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE IMMEDIATELY REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT AND OWNER SHALL HAVE THE FINAL SAY AS TO THE ACCEPTANCE OF ANY PLANT MATERIAL.
5. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AND BRANCHES.
6. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING TWO INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES OVER TWO INCHES IN CALIPER. TWO INCHES ABOVE THE ROOT-TRUNK TREES SHALL BE MEASURED BY THE OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL, WHERE CALIPER MEASUREMENTS ARE USED. THE CALIPER SHALL BE CALCULATED AS ONE-HALF OF THE SUM OF THE CALIPER OF THE THREE LARGEST TRUNKS. IF THE PLANT MATERIAL OR THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.
7. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM SEASONED, MATURE TURF WITH SOIL THICKNESS OF 10 INCHES. SOD SHALL BE CUT FROM SOD PROVIDED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.
8. TOPSOIL: SANDY TO CLAY LOAM TOPSOIL, FREE OF STONES LARGER THAN 3/4 INCH, FOREIGN MATERIAL, AND COMPOST. WELL-COMPOSTED, STABLE, AND WEEF-FREE ORGANIC MATERIAL, pH RANGE OF 5.5 TO 8.5. MOISTURE CONTENT 30 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4-INCH SIEVE. SODS AND CONTAINERS SHALL BE FREE OF DISEASE, INSESTS, EGGS, LARVAE, AND NUTRIENT CONTAMINANTS AND FREE OF SUBSTANCES TOXIC TO PLANTINGS. NO MANURE OR ANIMAL-BASED PRODUCTS SHALL BE USED.
9. FERTILIZER: GRANULAR FERTILIZER CONSISTING OF NITROGEN, PHOSPHORUS, POTASSIUM, AND OTHER NUTRIENTS IN PROPORTIONS, AMOUNTS, AND RELEASE RATES RECOMMENDED IN A SOIL REPORT FROM A QUALIFIED SOIL-TESTING AGENCY (SEE BELOW).
10. MULCH: ORGANIC MULCH SHALL BE PROVIDED BY THE LUTZ CORP. (800) 203-7740, OR APPROVED EQUAL. MULCH: SIZE AND TYPE AS INDICATED ON PLANS, FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS TOP DRESSING OF TREES AND SHRUBS.
- H. PLANTING AND GUARDING:
1. STAKES: 6" LONG GREEN NETAL T-POSTS.
2. GUY AND TIE: WIRE ASTM A-641, CLASS 1, GALVANIZED-STEEL, 1/2 INCH, 2-STRAND, TWISTED, 0.106 INCH DIAMETER.
3. STRAP SHAFING GUARD: REINFORCED NYLON OR CANVAS AT LEAST 1-2 INCH WIDE, WITH GROMMETS TO PROTECT TREE TRUNKS FROM DAMAGE.
- J. STEEL: ALL STEEL SHALL BE GALVANNEAL, RELIEF COATED, 1/4 INCH THICK X 4 INCHES WIDE. FACTORY PAINTED DARK GREEN. ACCEPTABLE MANUFACTURERS INCLUDE COL-MET OR APPROVED EQUAL.
- K. PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR USE ON TURF GRASS SHALL BE ACCEPTED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

METHODS

- SOIL PREPARATION**
- BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN +0.01 OF FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST.
2. **SOIL TESTING**
- a. AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES FROM THE PROJECT'S LANDSCAPE AREAS TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY. EACH SAMPLE SUBMITTED TO THE LAB SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL TAKEN FROM THE TOP 12" OF FINISH GRADE AND 6" DEPTH. IF NO SOIL LOCATIONS ARE INDICATED ON THE PLANS, THE CONTRACTOR SHALL TAKE A MINIMUM OF THREE SAMPLES FROM VARIOUS REPRESENTATIVE LOCATIONS FOR TESTING.
- b. THE CONTRACTOR SHALL SUBMIT THE LABORATORY TEST RESULTS FOR THE FOLLOWING: SOIL TEXTURAL CLASS, GENERAL SOIL FERTILITY, PH, ORGANIC MATTER CONTENT, SALT (CEC), LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT.
- c. THE CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES.
- d. THE SOIL REPORT PROVIDED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING AS APPROPRIATE: SOIL AMENDMENTS, SOIL LOCKDOWN, AND RECOMMENDATIONS FOR GENERAL ORNAMENTAL PLANTS, XERIC PLANTS, TURF, AND NATIVE SEED, AS WELL AS PRE-PLANT FERTILIZER APPLICATIONS AND RECOMMENDATIONS FOR ANY OTHER SOIL RELATED ISSUES. THE CONTRACTOR SHALL FOLLOW THE FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD AND FOR LONG-TERM MAINTENANCE.
- e. THE CONTRACTOR SHALL INSTALL SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT RECOMMENDATIONS. SOIL AMENDMENTS AND FERTILIZERS SHALL BE APPLIED TO THE SOILS, EITHER INCREASE OR DECREASE, SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT.
- f. FOR BIDDING PURPOSES ONLY, THE SOIL PREPARATION SHALL CONSIST OF THE FOLLOWING:
- a. 1.5" OF INCORPORATE OF THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLAGE AFTER CROSS-RIPPING:
- i. NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS. PER 1,000 S.F.
- ii. PREPLANT TURF FERTILIZER (10-20-10 OR SIMILAR, SLOW RELEASE, ORGANIC) - 15 LBS PER 1,000 S.F.
- iii. "CLAY BUSTER" OR EQUIV. - USE MANUFACTURER'S RECOMMENDED RATE.
- b. TREES, SHRUBS, AND PERENNIALS, INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLAGE:
- i. NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS. PER 1,000 S.F.
- ii. 12-12-12 FERTILIZER (OR SIMILAR, ORGANIC, SLOW RELEASE) - 10 LBS PER CWT.
- c. "CLAY BUSTER" OR EQUIV. - USE MANUFACTURER'S RECOMMENDED RATE.
- d. IRON SULPHATE - 2 LBS. PER CU. YD.
3. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE FINISH SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS.
4. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +0.01 OF FINISH GRADE. SEE SPECIFICATION 01.05 FOR MORE DETAILED INSTRUCTIONS.
5. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE SPECIFIED FINISH GRADES. THE CONTRACTOR SHALL SPECIFY ALL FINISH GRADES IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL.
6. THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE INCORPORATED BASED ON A SOIL TEST PER SPECIFICATIONS, AND THE FINISH GRADES TO BE ESTABLISHED.
7. ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AS SPECIFIED ON THE GRADING PLANS, IS 1' BELOW THE FINISH GRADE OF THE WALKS. TAPE THE FINISH GRADE TO THE FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
8. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH GRADE OF THE WALKS. TAPE THE FINISH GRADE TO THE FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
9. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THE FINISH GRADES, AND THE FINISH GRADES SPECIFIED IN THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
10. ONCE ALL PREPARATION AND SOIL AMENDMENTS HAVE BEEN COMPLETED, THE CONTRACTOR SHALL ENSURE THAT THERE ARE NO DEBRIS, TRASH, OR STONES LARGER THAN 1" REMAINING IN THE TOP 6" OF SOIL.

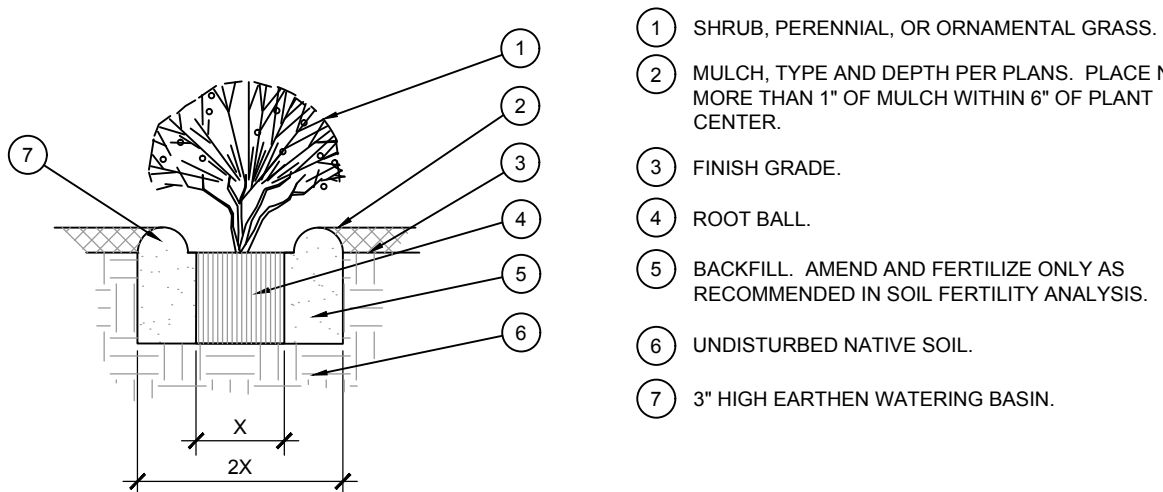
- B. SUBMITTALS**
1. THE CONTRACTOR SHALL PROVIDE SUBMITTALS AND SAMPLES, IF REQUIRED, TO THE LANDSCAPE ARCHITECT AND RECEIVE APPROVAL IN WRITING FOR SUCH SUBMITTALS BEFORE WORK COMMENCES.
 2. SUBMITTALS SHALL INCLUDE PHOTOS OF PLANTS WITH A RULER OR MEASURING STICK FOR SCALE, PHOTOS OR SAMPLES OF ANY REQUIRED MULCHES, AND SOIL TEST RESULTS AND PREPARATION RECOMMENDATIONS FOR THE TESTS. TESTS SHALL INCLUDE COMPOST AND MULCHES RATES AND TYPES, AND OTHER AMENDMENTS FOR TREE/SHRUB, TURF, AND SEED AREAS AS MAY BE APPROPRIATE).
 3. SUBMITTALS SHALL ALSO INCLUDE MANUFACTURER CUT SHEETS FOR PLANTING ACCESSORIES SUCH AS POST STAKES AND TIES, EDGING, AND LANDSCAPE FABRICS (IF ANY).
 4. WHERE MULTIPLE ITEMS ARE SHOWN ON A PAGE, THE CONTRACTOR SHALL CLEARLY INDICATE THE ITEM BEING CONSIDERED.
- C. GENERAL PLANTING**
1. REMOVE ALL NURSERY TAGS AND STAKES FROM PLANTS.
 2. EXCEPT IN AREAS TO BE PLANTED WITH ORNAMENTAL GRASSES, APPLY PRE-EMERGENT HERBICIDES TO THE MANUFACTURER'S RECOMMENDED RATE.
 3. TRENCING NAR EXISTING TREES:

- ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS, TRUNKS, AND BRANCHES. THE CRZ IS DEFINED AS A CIRCULAR AREA WITH A RADIUS EQUAL TO THE TRUNK DIAMETER. THE CRZ SHALL BE EQUAL TO 1" FOR EVERY 1" OF TRUNK DIAMETER AT-BREAST-HEIGHT (4' ABOVE THE AVERAGE GRADE FOR THE TREE).
2. c. EXCAVATION WITHIN THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE CRZ.
3. c. ALIGNMENT OF PIPE TO AVOID TREE ROOTS 1-1/2" AND LARGER IN DIAMETER. WHERE SMALLER ROOTS 1-1/2" AND LARGER ARE ENCOUNTERED IN THE FIELD, TUNNEL UNDER SUCH ROOTS. WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP MOIST. CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS.
4. c. SEVERED ROOTS SHALL BE PROPERLY STORED IN SHED TOOLS AND ALLOWED TO AIR DRY. DO NOT USE ANY SORT OF SEALERS OR WOUND PANTS.
- C. TREE PLANTING
1. a. TREE PLANTING HOLES SHALL BE EXCAVATED TO MINIMUM WIDTH OF TWO TIMES THE WIDTH OF THE ROOTBALL, AND TO A DEPTH EQUAL TO THE DEPTH OF THE ROOTBALL LESS TWO TO FOUR INCHES. SCARIFY THE SIDES AND BOTTOM OF THE PLANTING HOLE PRIOR TO THE PLACEMENT OF THE TREE.
2. a. IF ANY GLAZING OR CRACKING OF THE ROOTBALL IS OBSERVED, THE CONTRACTOR SHALL
3. a. FOR CONTAINER AND BOX TREES, TO REMOVE ANY POTENTIALLY GIRDLING ROOTS AND OTHER ROOT DEFECTS, THE CONTRACTOR SHALL SHAVE A 1" LAYER OFF OF THE SIDES AND BOTTOM OF THE ROOTBALL. IF ALL TRENCHES STOP BEFORE PLACING INTO THE PLANTING PIT, DO NOT "TEASE" ROOTS OUT FROM THE ROOTBALL.
4. a. INSTALL THE TREE ON UNDISTURBED SUBGRADE SO THAT THE TOP OF THE ROOTBALL IS TWO TO THREE INCHES ABOVE THE SUBGRADE.
5. a. BACKFILL THE TREE HOLE UTILIZING THE EXISTING TOPSOIL FROM ON-SITE. ROCKS LARGER THAN 1" DIA. AND ALL OTHER DEBRIS SHALL BE REMOVED FROM THE SOIL PRIOR TO THE BACKFILL. SHOULD ANY REMAINING SOIL BE OF A DIFFERENT TEXTURE OR COMPOSITION, THE CONTRACTOR SHALL IMPORT ADDITIONAL TOPSOIL FROM OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IMPORTED TOPSOIL SHALL BE OF SIMILAR TEXTURAL CLASS AND COMPOSITION IN THE ON-SITE SOIL.
6. a. THE CONTRACTOR SHALL NOT REMOVE ANY EXISTING TOPSOIL FROM THE SLOPE OF THE SLOPE. REQUIRE STAKES TO KEEP TREES UPRIGHT. SHOULD STAKING BE REQUIRED, THE TOTAL NUMBER OF TREE STAKES (BEYOND THE MINIMUMS LISTED BELOW) WILL BE LEFT TO THE LANDSCAPE CONTRACTOR'S DISCRETION. SHOULD THE CONTRACTOR DETERMINE THAT THE CONTRACTOR SHALL STRAIGHTEN THE TREE, OR REPLACE IT SHOULD IT BECOME DAMAGED, TREE STAKING SHALL ADHERE TO THE FOLLOWING GUIDELINES:
- | | |
|--------------------------|---|
| 1. TWO TREES | 2. TWO STAKES PER TREE |
| 2. 2-1/2" x 4" TREES | 3. THREE STAKES PER TREE |
| 3. TREES OVER 4" CALIPER | 4. GUY AS NEEDED |
| 4. MULTI-TRUNK TREES | 5. TWO TREES PER TREE MINIMUM, QUANTITY AND POSITIONS AS NEEDED TO STABILIZE THE TREE |
7. a. UPON COMPLETION OF PLANTING, CONSTRUCT AN EARTH WATERING BASS AROUND THE TREE. COVER THE INTERIOR OF THE BASS WITH MULCH (TYPE AND DEPTH PER PLANS).

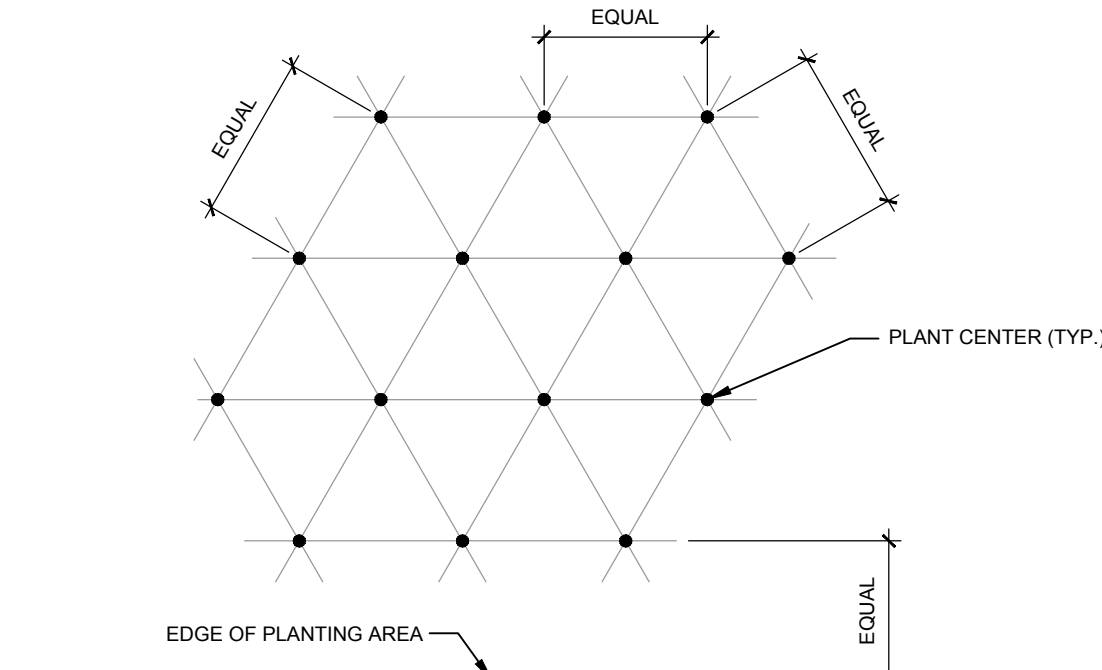
- | | |
|----|---|
| D. | <p>PALM PLANTING</p> <p>PALM PLANTING HOLES SHALL BE EXCAVATED TO MINIMUM WIDTH OF TWO TIMES THE WIDTH OF THE PALM TRUNK, AND TO A DEPTH EQUAL TO THE DEPTH OF THE ROOTBALL.</p> <p>SCAREY THE SIDES AND BOTTOM OF THE PLANTING HOLE PRIOR TO THE PLACEMENT OF THE PALM. REMOVE ANY GLAZING THAT MAY HAVE BEEN CAUSED DURING THE EXCAVATION OF THE HOLE.</p> <p>USE BANK SAND MIXED WITH THE EXISTING SOIL (75% BANK SAND AND 25% EXISTING SOIL) AS BACKFILL. ROCKS LARGER THAN 10 CM DIAMETER SHALL BE REMOVED FROM THE SOIL PRIOR TO THE BACKFILL. SHOULD ADDITIONAL SOIL BE REQUIRED TO ACCOMPLISH THIS TASK, IMPORT ADDITIONAL TOPSOIL FROM OFF-SITE AT NO ADDITIONAL COST TO THE OWNER.</p> <p>BRACE THE PALMS AROUND THE ROOTBALL. BRACE THE PALMS TO THE DEPTH OF THE DEPTH OF THE ROOTBALL AND APPLY THE PALM MAINTENANCE SPIKES PER MANUFACTURER'S DIRECTIONS. BACKFILL THE REST OF THE PLANTING HOLE. TAMPING FIRMLY TO REMOVE AIR POCKETS.</p> <p>BRACE THE PALMS USING PALM BRACES (PER PLANTING DETAILS). DO NOT SECURE BRACES TO THE PALM ITSELF.</p> <p>UPON COMPLETION OF PLANTING, CONSTRUCT AN EARTH WATERING BASIN AROUND THE TREE. TOPDRESS WITH MULCH (1" TYPE AND DEPTH PER PLANS).</p> <p>SHRUB, PERENNIAL, AND GROUNDCOVER</p> <p>DIG THE PLANTING HOLES TWICE AS WIDE AND 2" LESS DEEP THAN EACH PLANT'S ROOTBALL. INSTALL THE PLANT IN THE HOLE. BACKFILL AROUND THE PLANT WITH SOIL AMENDED PER SOIL TEST RECOMMENDATIONS.</p> <p>WHEN PLANTING IS COMPLETE, INSTALL MULCH (1" TYPE AND DEPTH PER PLANS) OVER ALL PLANTING BEDS, COVERING THE ENTIRE PLANTING AREA.</p> |
| E. | |

- F. SOD VARIETY TO AS SPECIFIED ON THE LANDSCAPE PLAN.
7. LAY SOD WITHIN 24 HOURS FROM THE TIME OF STRIPPING. DO NOT LAY IF THE GROUND IS FROZEN.
8. LAY THE SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SODS TO MEET AT JOINTS. DO NOT INTERLOCK.
9. ROLL THE SOD TO ENSURE GOOD CONTACT OF THE SOD'S ROOT SYSTEM WITH THE SOIL UNDERNEATH.
10. WATER THE SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING TO OBTAIN AT LEAST SIX INCHES OF PENETRATION INTO THE SOIL BELOW THE SOD.
- G. MULCH
1. INSTALL MULCH TOPDRESSING, TYPE AND DEPTH PER MULCH NOTE, IN ALL PLANTING AREAS AND TREE TRINGS.
2. DO NOT INSTALL MULCH WITHIN 6" OF TREE ROOT FLARE. EXCEPT AS MAY BE NOTED ON THESE PLANS, MULCH COVER WITHIN 6" OF CONCRETE WALKS AND CURBS SHALL NOT PROTRUDE ABOVE THE FINISH SURFACE OF THE WALKS AND CURBS. MULCH COVER WITHIN 12" OF WALLS SHALL BE AT LEAST 3" LOWER THAN THE TOP OF WALL.
- H. CLEAN UP
1. DURING LANDSCAPE PREPARATION AND PLANTING, KEEP ALL PAVEMENT CLEAN AND ALL WORK AREAS FREE OF DEBRIS AND TRASH.
2. LEGALLY DISPOSE ALL EXCAVATED MATERIALS OFF THE PROJECT SITE.
- INSPECTION AND ACCEPTANCE
1. UPON COMPLETION OF WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.
2. IF THE INSPECTION REVEALS DEFECTS, CORRECT WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S SATISFACTION WITHIN 48 HOURS.
3. LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE.

- LANDSCAPE MAINTENANCE**
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS FOR 90 DAYS BEYOND FINAL ACCEPTANCE OF ALL LANDSCAPE WORK BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING (AS APPROPRIATE): PRUNING, WEEDING, FERTILIZING, WATERING, AND OTHER MAINTENANCE THAT HAS SETTLED, MOVING AND AERATION OF LAWNS, WEEDING, TREATING FOR INSECTS AND DISEASES, REPLACEMENT OF MULCH, REMOVAL OF LITTER, REPAIRS TO THE IRRIGATION SYSTEM DUE TO PARTIAL OR TOTAL WORKMANSHIP DEFECTS, AND REPLACEMENT OF PLANTS THAT DO NOT MEET THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER, WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WEEDING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF PLANTS AT NO ADDITIONAL COST TO THE OWNER.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE A HEALTHY GROWTH PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
- THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY), ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.
 - ALL HARDSCAPE SHALL BE CLEAN AND FREE OF WEEDS.
 - SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE REJECTED PRIOR TO FINAL ACCEPTANCE.
- WARRANTY PERIOD, PLANT GUARANTEE AND REPLACEMENTS**
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS, PERENNIALS, SOD, AND PLANT MATERIAL FOR A PERIOD OF 90 DAYS FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE (90 DAYS FOR ANNUAL PLANTS). THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER, ANY PLANTS WHICH DIE IN THAT TIME, OR ANY PLANTS FOR ANY PORTION OF THE IRRIGATION SYSTEM WHICH DOES NOT FUNCTION PROPERLY AFTER THE INITIAL MAINTENANCE PERIOD AND DURING THE GUARANTEE PERIOD. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PLANTS FROM WEATHER DAMAGE THAT CANNOT BE ATTRIBUTED DIRECTLY TO OVERWATERING OR OTHER DAMAGE BY A HUMAN ACTION.
- PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A RECORD DRAWING IS A COPY OF THE ORIGINAL DRAWING, WITH ANY CHANGES TO THE ORIGINAL DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.



SCALE: NTS



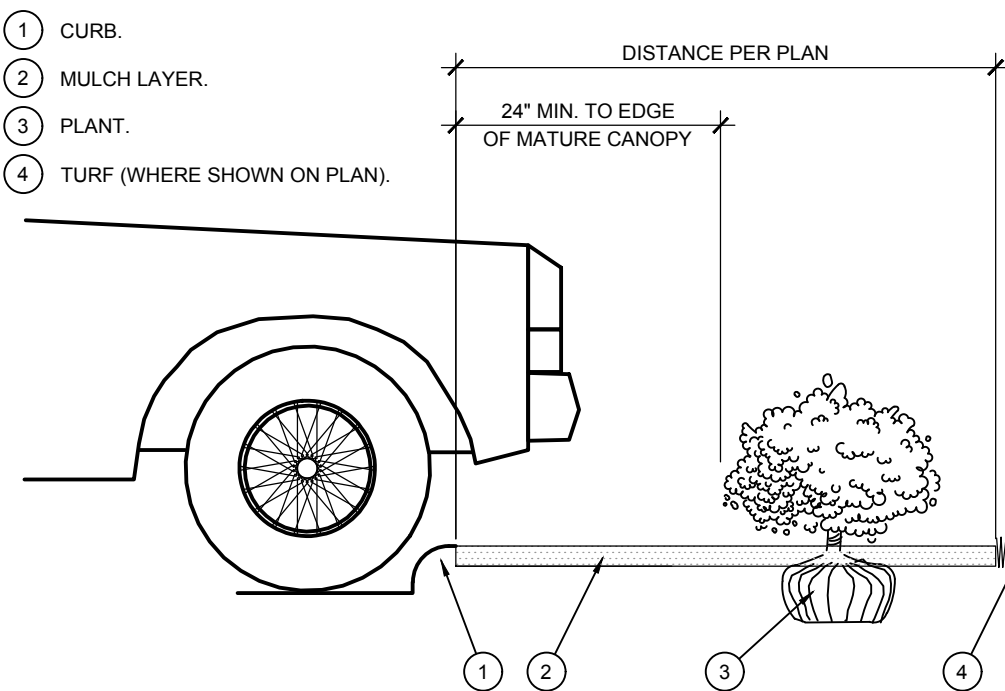
NOTE: ALL PLANTS SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING (EXCEPT WHERE SHOWN ON PLANS AS INFORMAL GROUPINGS). REFER TO PLANT LEGEND FOR SPACING DISTANCE BETWEEN PLANTS.

- 1) STEP 1: DETERMINE TOTAL PLANTS FOR THE AREA WITH THE FOLLOWING FORMULA
TOTAL AREA / AREA DIVIDER = TOTAL PLANTS

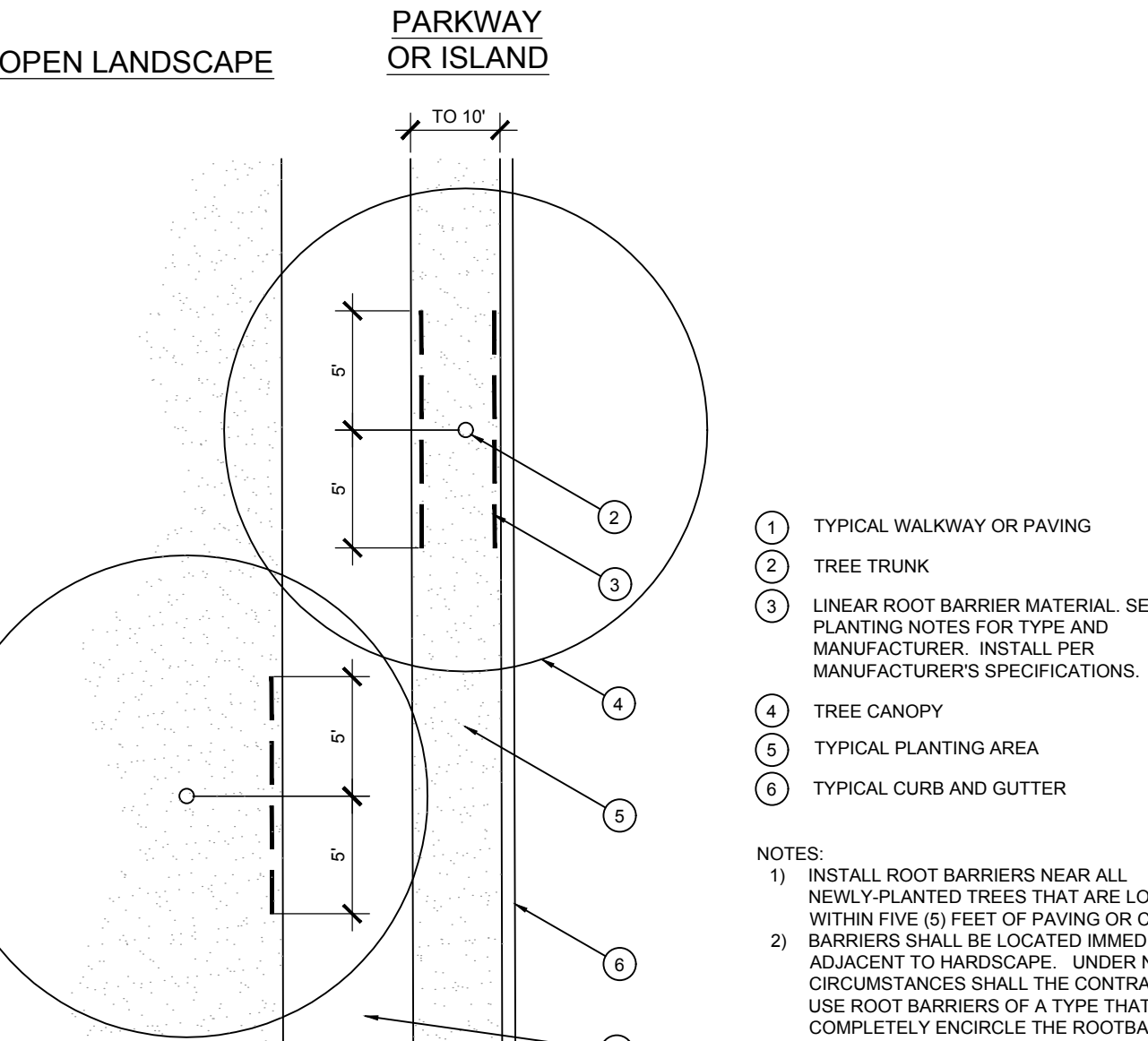
<u>PLANT SPACING</u>	<u>AREA DIVIDER</u>	<u>PLANT SPACING</u>	<u>AREA DIVIDER</u>
6"	0.22	18"	1.95
8"	0.39	24"	3.46
10"	0.60	30"	5.41
12"	0.87	36"	7.79
15"	1.35		

- 2) STEP 2: SUBTRACT THE ROW (S) OF PLANTS THAT WOULD OCCUR AT THE EDGE OF THE PLANTED AREA WITH THE FOLLOWING FORMULA: TOTAL PERIMETER LENGTH / PLANT SPACING = TOTAL PLANT SUBTRACTION
- EXAMPLE:** PLANTS AT 18" O.C. IN 100 SF PLANTING AREA, 40 LF PERIMETER
- STEP 1: $100 \text{ SF} / 1.95 = 51 \text{ PLANTS}$
- STEP 2: $51 \text{ PLANTS} - (40 \text{ LF} / 1.95 = 21 \text{ PLANTS}) = 30 \text{ PLANTS TOTAL}$

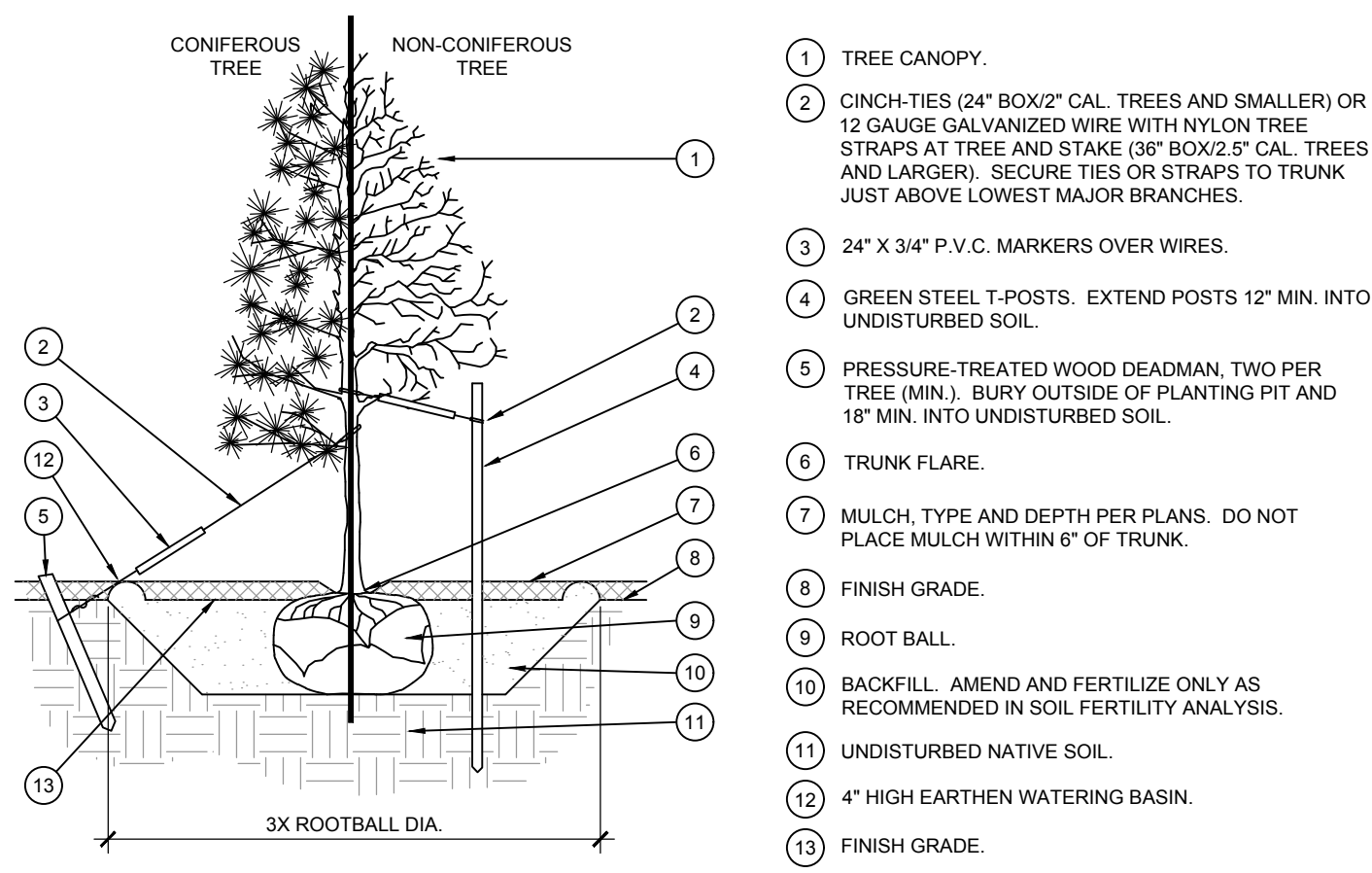
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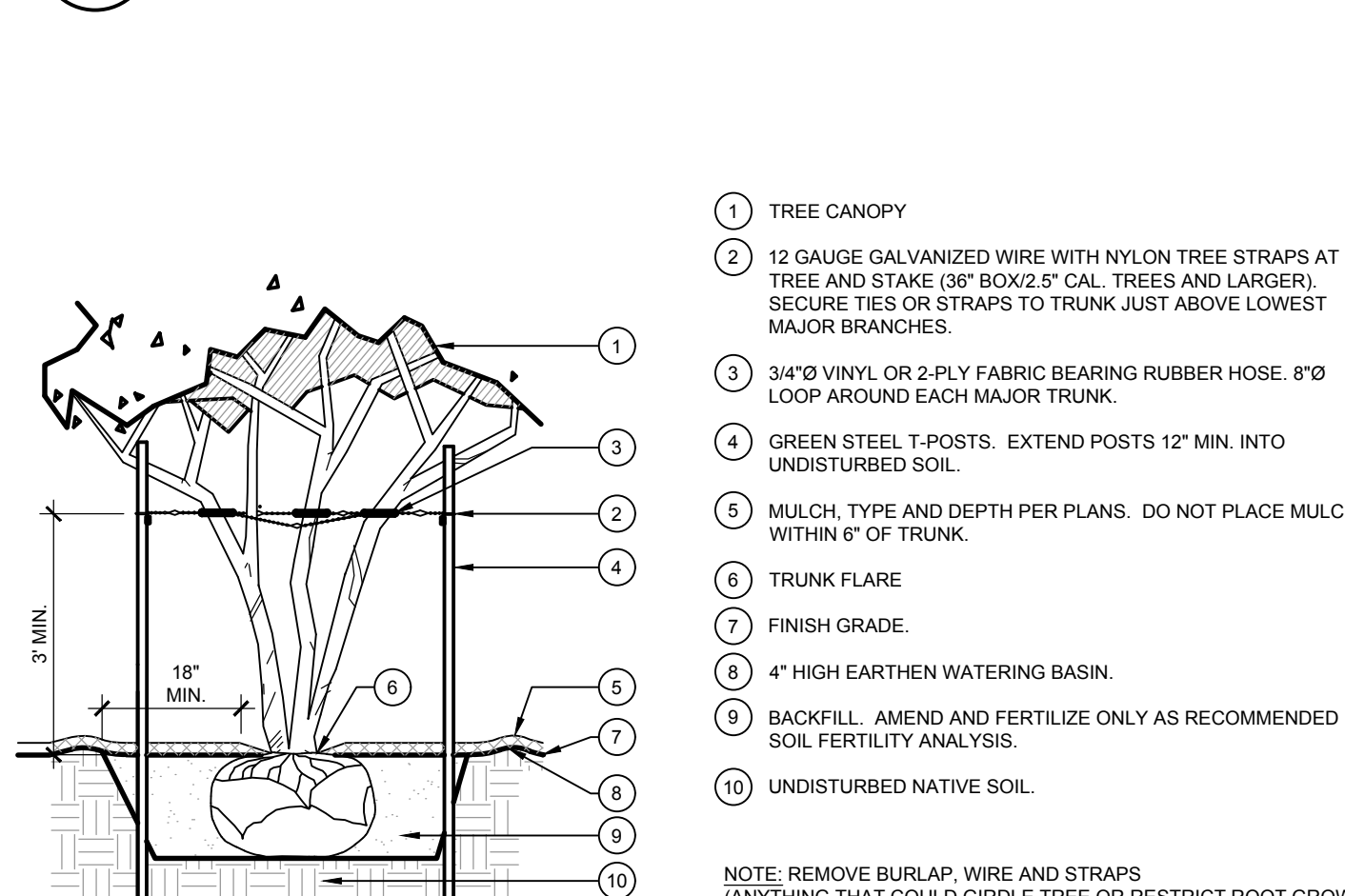


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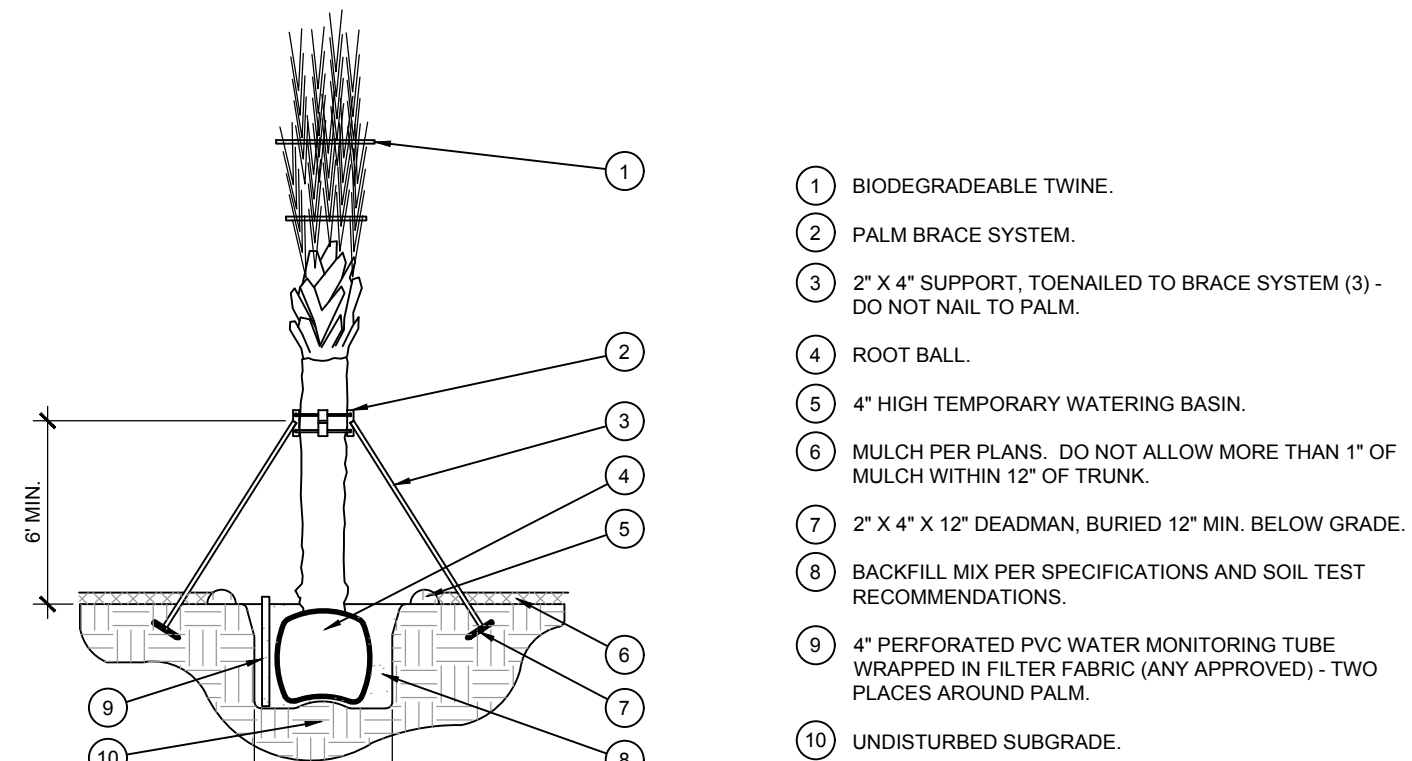
1. SCARIFY SIDES OF PLANTING PIT PRIOR TO SETTING TREE.
2. REMOVE EXCESS SOIL APPLIED ON TOP OF THE ROOTBALL THAT COVERS THE ROOT FLARE. THE PLANTING HOLE DEPTH SHALL BE 1/3 OF THE ROOT BALL DEPTH. THE ROOT BALL SHALL BE UNDISTURBED SOIL, AND THE ROOT FLARE IS 12" - 4" ABOVE FINISH GRADE.
3. FOR 8/8B TREES, CUT OFF BOTTOM 1/3 OF WIRE BASKET BEFORE PLACING TREE IN HOLE. CUT OFF AND REMOVE REMAINDER OF BASKET. FOR TREES 10/10B AND LARGER, REMOVE REMAINDER OF TWINE, ROPE, AND OTHER PACKING MATERIAL. REMOVE AS MUCH BURLAP FROM AROUND ROOTBALL AS IS PRACTICAL.
4. REMOVE NURSERY TAGS AND LABELS.
5. FOR TREES 3" BOX/2.5" CAL. AND LARGER, USE THREE STRAKES OF DEADEN (AS APPROPRIATE), SPACED EVENLY AROUND TREE. STAKING SHALL BE TIGHT ENOUGH TO PREVENT TRUNK FROM BENDING, BUT LOOSE ENOUGH TO ALLOW SOME TRUNK MOVEMENT IN WIND.

SCALE: NOT TO SCALE



**NOTE: REMOVE BURLAP, WIRE AND STRAPS
(ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH)**

SCALE: NOT TO SCALE



NOTE

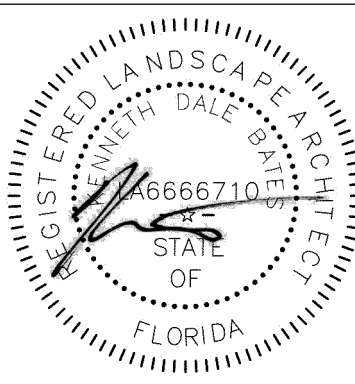
1. SCARIFY SIDES OF PLANTING PIT PRIOR TO SETTING PALM.
2. THE PLANTING HOLE DEPTH SHALL BE SUCH THAT THE ROOTBALL RESTS ON UNDISTURBED SOIL, AND THE ZONE OF ROOT INITIATION IS 3"-5" BELOW FINISH GRADE.
3. DO NOT REMOVE ANY LIVE FRONDS PRIOR TO DIGGING AT THE NURSERY.
4. AFTER PLANTING, LOOSEN THE TWINE SO THAT THE FRONDS MAY MOVE, BUT THE TERMINAL BUD IS PROTECTED.

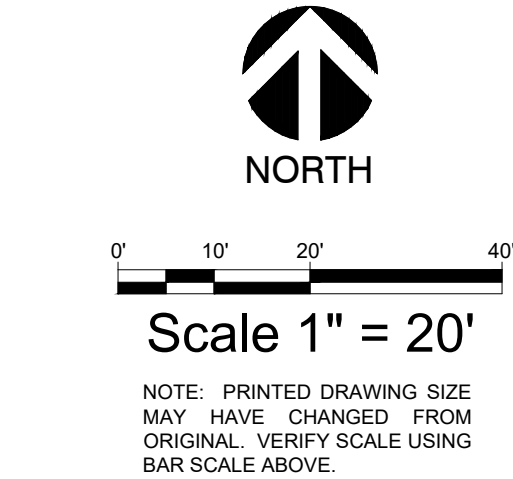
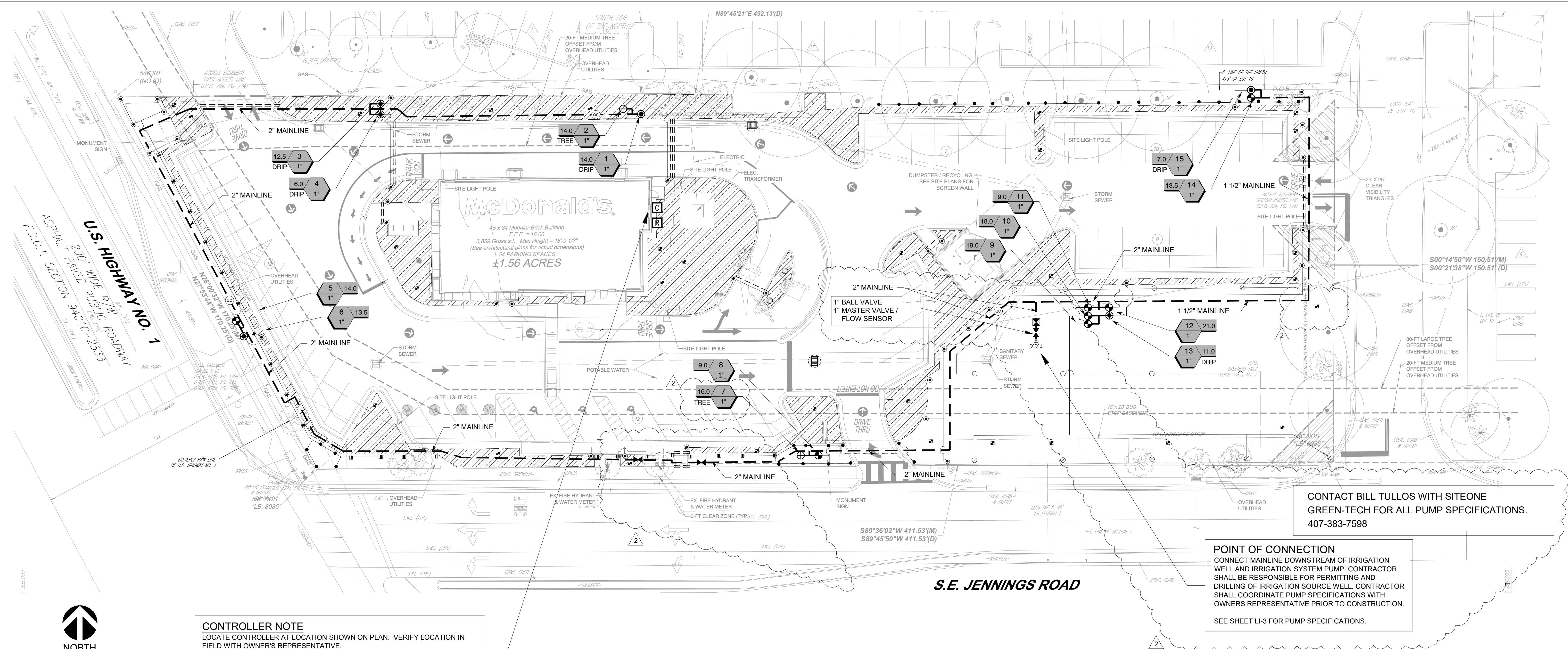


SITE PLAN PROJECT NO. P24-230

PSLUSD PROJECT NO. 11-056-00

NO.	DATE:	ISSUE DESCRIPTION
1	04/04/25	RESPONSE TO PSLUSD AND PSL PAZD REVIEW COMMENTS
2	07/03/25	RESPONSE TO PSLUSD REVIEW COMMENTS
3		
4		





CONTROLLER NOTE
LOCATE CONTROLLER AT LOCATION SHOWN ON PLAN. VERIFY LOCATION IN FIELD WITH OWNER'S REPRESENTATIVE.

120 VAC POWER TO CONTROLLER LOCATION IS NOT WITHIN THE IRRIGATION CONTRACTOR'S SCOPE OF WORK, AND SHALL BE PROVIDED BY OTHERS. HOOK-UP OF CONTROLLER TO 120 VAC SHALL BE PERFORMED BY THE IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR SHALL COORDINATE LOCATION OF WIRE SLEEVE PENETRATIONS THROUGH BUILDING WITH OWNER AND GENERAL CONTRACTOR. STATION RUN ORDER SHALL MATCH PLANS.

IRRIGATION DISCLAIMER

THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS INDICATED ON PLAN. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE IRRIGATION EQUIPMENT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION, OR IRRIGATION CONTRACTOR MAY BE REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.

IRRIGATION CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL FINAL QUANTITIES PER DRAWINGS AND SPECIFICATIONS. ANY QUANTITIES PROVIDED ARE PROVIDED AS A CONVENIENCE TO THE CONTRACTOR ONLY AND SHALL NOT BE CONSIDERED ABSOLUTE.

AUTOMATIC DRAIN VALVES AND AIR RELIEF VALVES

INSTALL AUTOMATIC DRAIN VALVES AT THE LOW POINTS OF EACH LATERAL LINE (MIN. 2 PER VALVE) AS PER DETAIL ON SHEET LI-2. INSTALL AIR RELIEF VALVES ON DRIP SYSTEMS AT THE LOCATIONS SHOWN ON THE PLANS, AS PER DETAILS.

SLEEVING / WIRING NOTES:

IN ADDITION TO PROVIDING SLEEVES FOR ALL PIPING UNDER ROADWAYS AND WALKWAYS, THE IRRIGATION CONTRACTOR SHALL PROVIDE AND INSTALL SCH. 40 PVC SLEEVES FOR ALL CONTROLLER WIRES OCCURRING UNDER ALL ROADWAYS AND WALKWAYS. SLEEVES FOR CONTROLLER WIRES SHALL BE 2" DIA. AND CONTAIN NO MORE THAN 25 WIRES. **FOR PLAN CLARITY, ONLY SOME REPRESENTATIVE SLEEVES ARE SHOWN; SOME SLEEVES MAY NOT BE SHOWN.**

COORDINATION WITH EXISTING TREES

NO MACHINE TRENCHING SHALL BE PERMITTED WITHIN THE ROOT ZONE OF EXISTING TREES. HAND-DIG ONLY, WITHIN THE ROOT ZONES OF EXISTING TREES. NO ROOTS OVER 1" DIAMETER SHALL BE CUT. STAKE ALL PROPOSED TRENCH ROUTES NEAR EXISTING TREES FOR APPROVAL BY THE LANDSCAPE ARCHITECT BEFORE DIGGING BEGINS.

PSLUSD NOTES:

THE MINIMUM SEPARATION BETWEEN PSLUSD MAINS AND OTHER UTILITIES, AS MEASURED FROM THE OUTSIDE OF EACH PIPE, SHALL BE AS FOLLOWS: WATER MAINS SHALL BE LOCATED A MINIMUM OF 10' FROM A GRAVITY SEWER, FORCE MAIN AND RECLAIMED WATER MAIN. THE VERTICAL SEPARATION SHALL BE AT LEAST 18" WITH THE WATER MAIN CROSSING OVER THE OTHER PIPES. ALL PSLUSD PIPES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 5' FROM ALL OTHER UNDERGROUND UTILITIES AND A VERTICAL SEPARATION OF AT LEAST 18". (USM PAGE 15, LINE 45)

IRRIGATION LEGEND

SYMBOL	MANUFACTURER/MODEL
	RAIN BIRD R-VAN-STRIP 1806-SAM-P45, TURF ROTARY, 5'X15' (LCS and RCS), 5'X30' (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/ 1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.
	RAIN BIRD R-VAN14 1806-SAM-P45, TURF ROTARY, 8'-14' 45"-270" AND 360" HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.
	RAIN BIRD R-VAN18 1806-SAM-P45, TURF ROTARY, 13'-18' 45"-270" AND 360" HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.
	RAINBIRD 1806-SAM-PRS SERIES POP UP SPRAY HEADS WITH ADAPTER AND RAINBIRD #1402 SERIES BUBBLER NOZZLES. (TWO PER TREE) SEE INSTALLATION NOTE #N-5 REGARDING TREE BUBBLER LATERAL PIPE
	RAINBIRD 5004PCSAMR, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, PART CIRCLE, #4.0 NOZZLE UNLESS NOTED OTHERWISE RAINBIRD 5004FCSAMR, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, FULL CIRCLE, #8.0 NOZZLE UNLESS NOTED OTHERWISE
	RAINBIRD XCZ-100-PRB-COM / 150-PRB-COM SERIES AUTOMATIC DRIP VALVE ASSEMBLY WITH 40 PSI PRESSURE REGULATOR XCZ-100-PRB-COM - 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 0.3GPM TO 20GPM.
	RAINBIRD PEB SERIES ELECTRIC REMOTE CONTROL, "TREE BUBBLER ZONE" VALVE SEE INSTALLATION NOTE #N-5 REGARDING TREE BUBBLER LATERAL PIPE
	RAINBIRD PEB SERIES 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.
	AREA TO RECEIVE DRIPLINE RAINBIRD XFS-CV-06-12 SERIES DRIP TUBE IN SHRUB BED INSTALLED AT 2" DEPTH PIPE TRANSITION POINT ABOVE GRADE PIPE TRANSITION POINT FROM PVC LATERAL TO DRIP TUBING WITH RISER TO ABOVE GRADE INSTALLATION.
	LASCO "V"-SERIES SCH. 80 PVC TRUE UNION BALL VALVE, MAINLINE SIZE
	RAINBIRD 33DLRC QUICK COUPLING VALVE AND 3/4" PVC BALL VALVE
	RAINBIRD ESP12XMEF2P SERIES AUTOMATIC WALL MOUNT CONTROLLER WITH ONE ESPLXMS12 STATION MODULE
	RAINBIRD WR2-RFC RAIN / FREEZE SENSOR - CONFIRM SENSOR LOCATION WITH OWNERS REPRESENTATIVE
	1" MASTER VALVE MODEL # 100-EFB-CP WITH RAINBIRD FLOW SENSOR MODEL #FS100P SERIES

- IRRIGATION LATERAL LINE: CLASS 200 PVC
- IRRIGATION MAINLINE: SCHEDULE 40 PVC
- IRRIGATION SLEEVES, SCH. 40 PVC, MIN. TWICE SIZE OF PIPE TO BE INSERTED

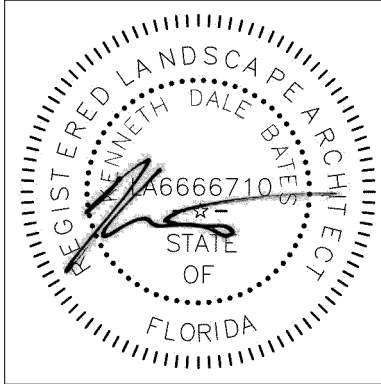
SITE PLAN PROJECT NO. P24-230

PSLUSD PROJECT NO. 11-056-00

NO.	DATE:	DESCRIPTION
1	04/04/25	RESPONSE TO PSLUSD AND PSL P&ZD REVIEW COMMENTS
2	07/03/25	RESPONSE TO PSLUSD REVIEW COMMENTS
3		
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McDonald's
10180 S.U.S. HWY 1
PORT ST. LUCIE,
FLORIDA 34982
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LOT 10, BLOCK 4, PLAT NO. 1,
ST. LUCIE COUNTY
ZONED: CG - GENERAL
COMMERCIAL

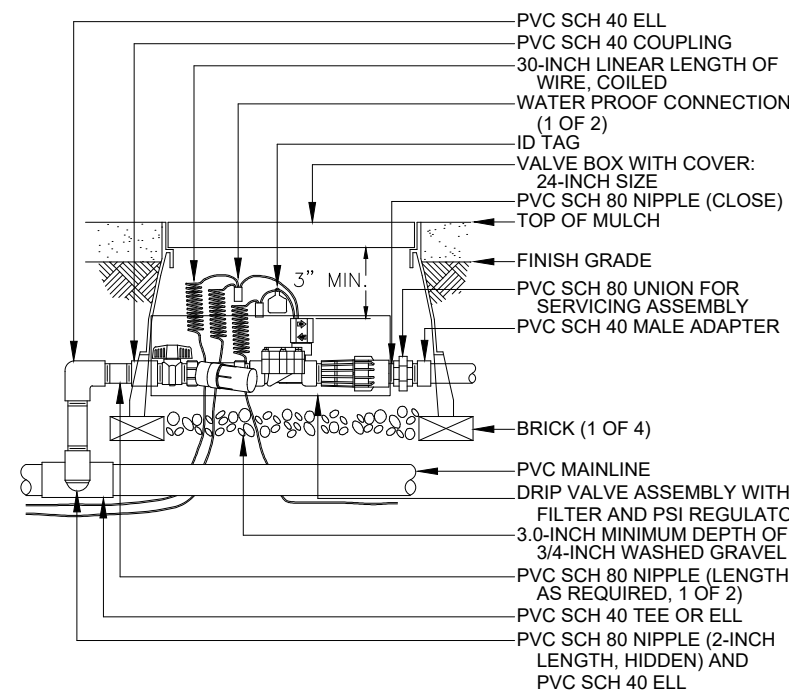
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09-2788

IEDS PROJECT NUMBER:
MCD-24129

SHEET TITLE:
**IRRIGATION
PLAN**

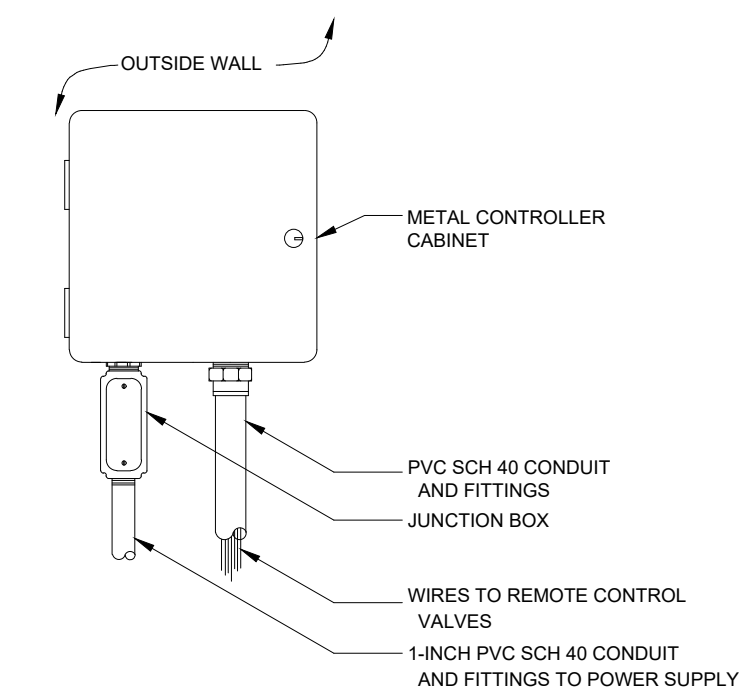
SHEET
NUMBER **LI-1**

NOTE:
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN DRAWINGS, RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE DESIGNER DOES NOT GUARANTEE THAT LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. AS SUCH, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED IMPROVEMENTS AND UTILITY CONNECTION POINTS PRIOR TO THE START OF CONSTRUCTION TO ASCERTAIN EXACT MATERIALS, LOCATIONS, ELEVATIONS, ETC. AND THEIR POTENTIAL CONFLICT WITH PROPOSED IMPROVEMENTS. GC SHALL CONSULT WITH CONSTRUCTION MANAGER AND ENGINEER AS APPROPRIATE BEFORE PROCEEDING WITH WORK.



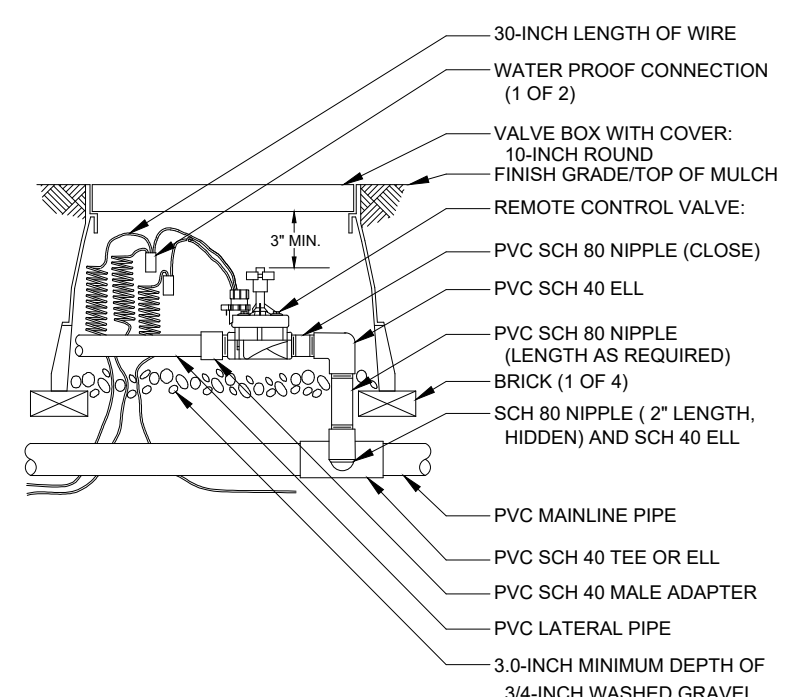
CONTROL ZONE KIT

N.T.S.



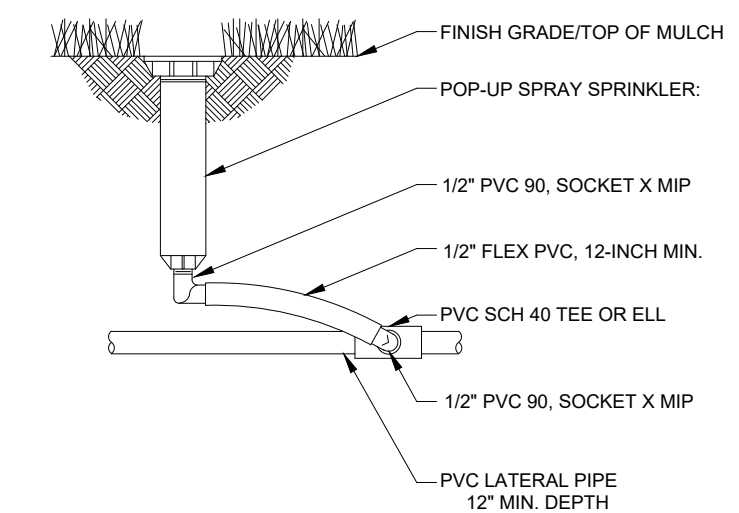
WALL MOUNT CONTROLLER

N.T.S.



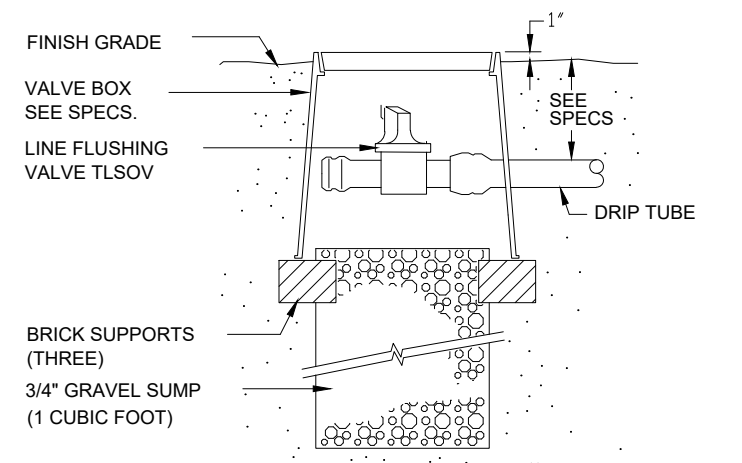
REMOTE CONTROL VALVE

N.T.S.



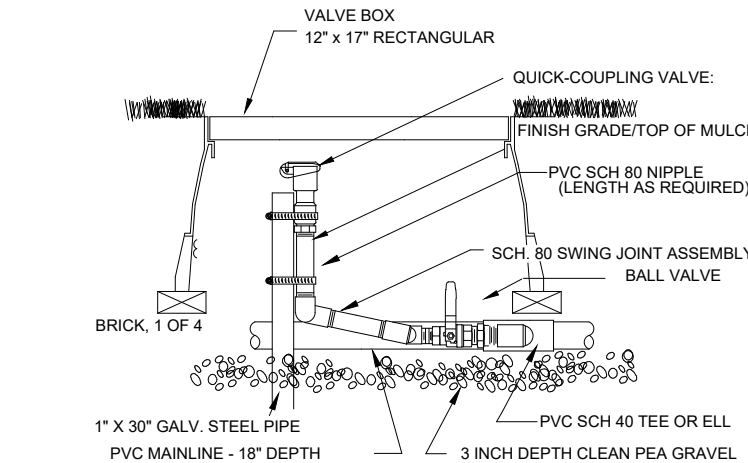
POP-UP SPRAY HEAD

N.T.S.



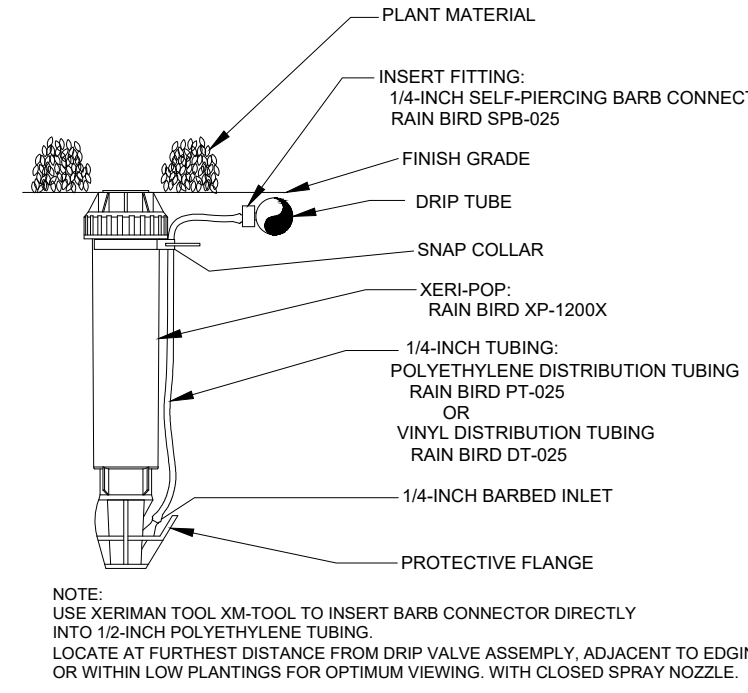
MANUAL LINE FLUSH VALVE

N.T.S.



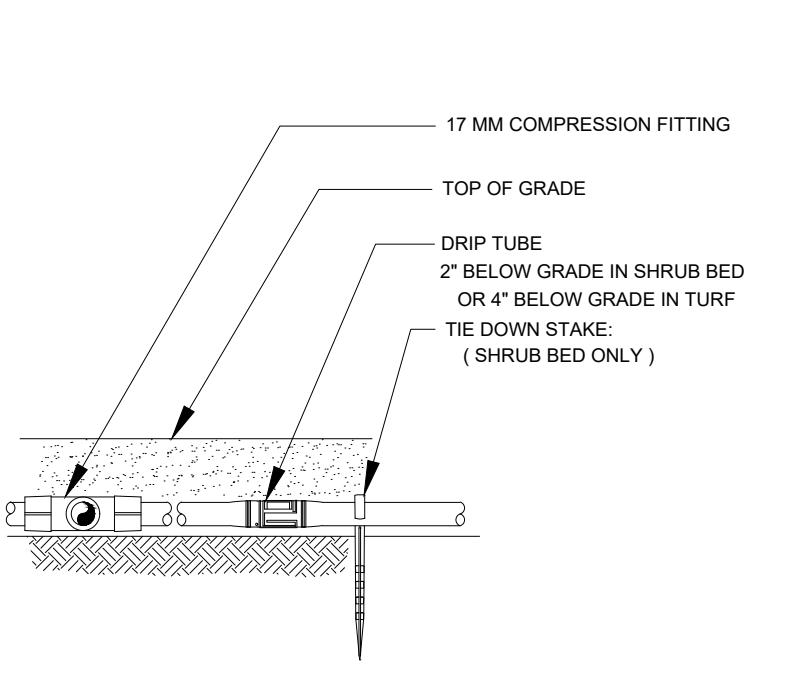
QUICK COUPLER VALVE WITH PVC BALL VALVE

N.T.S.



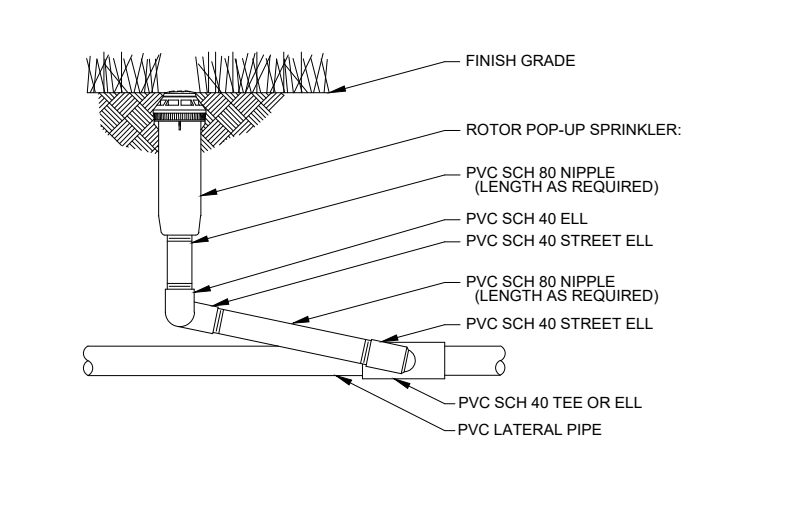
TREE BUBBLER

N.T.S.



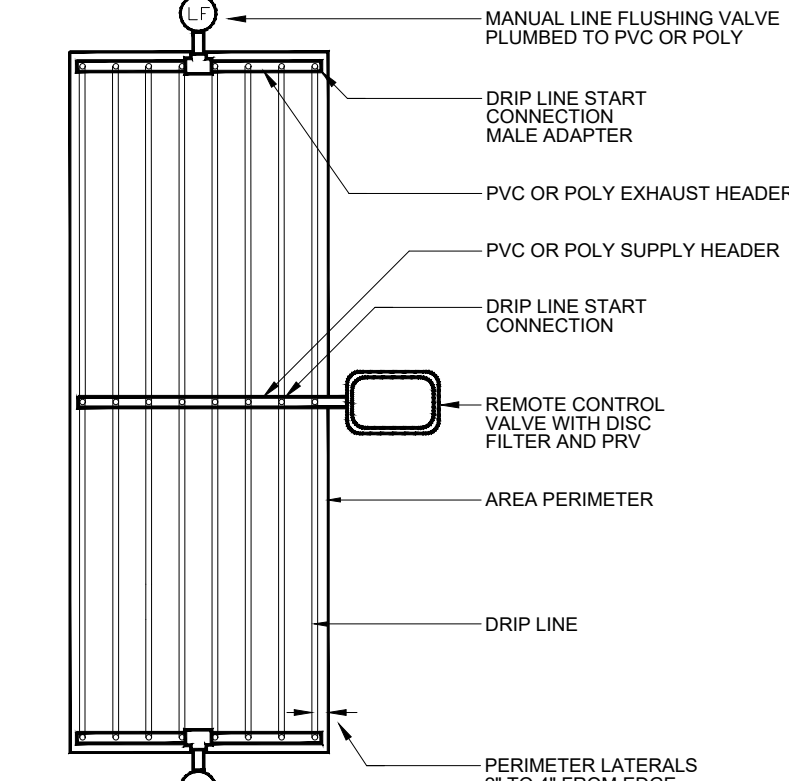
DRIP TUBE

N.T.S.



ROTOR POP-UP SPRINKLER

N.T.S.

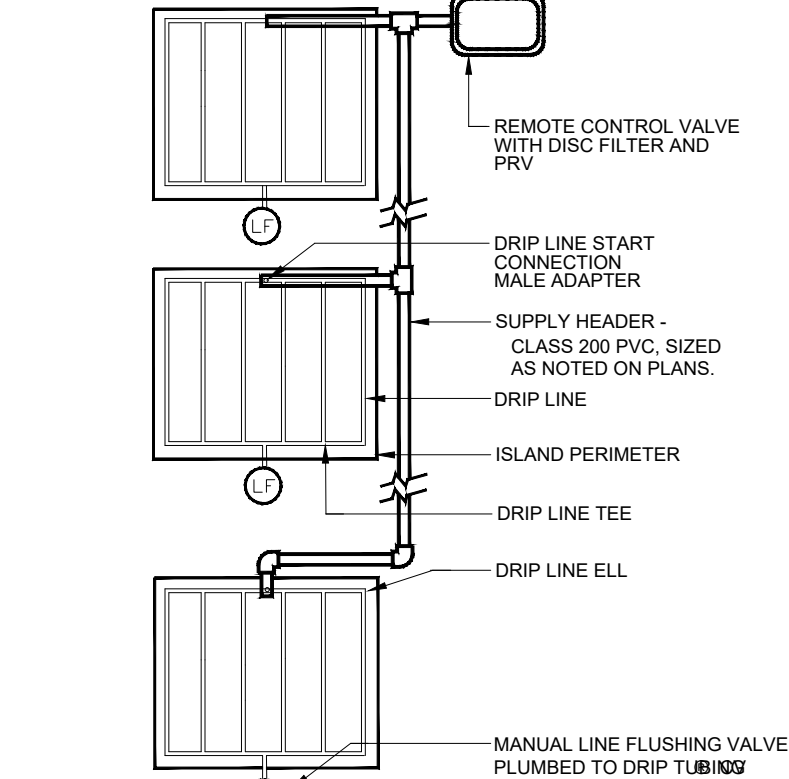


SUPPLY AND EXHAUST HEADERS SHALL BE CLASS 200 PVC PIPE, OF THE SAME DIAMETER AS THE ZONE VALVE SIZE.

USE D RIP TUBE FOR SUPPLY AND EXHAUST HEADERS ON GRIDS WITH FLOW SMALLER THAN 5 GPM ONLY.

DRIP CENTER FEED LAYOUT

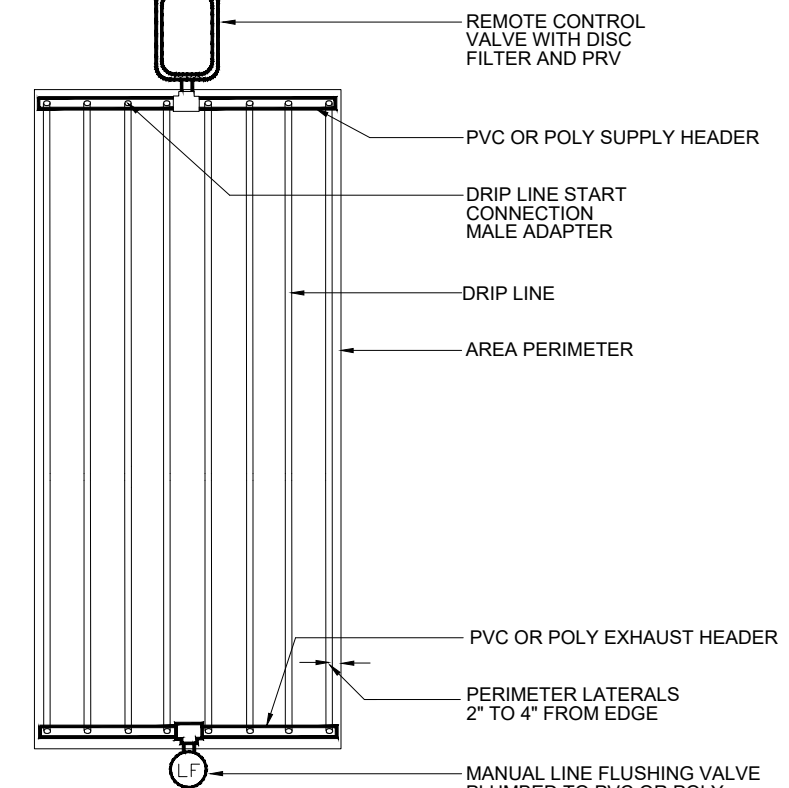
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USE D RIP TUBE FOR SUPPLY AND EXHAUST HEADERS ON GRIDS WITH FLOW SMALLER THAN 5 GPM ONLY.

DRIP ISLAND LAYOUT

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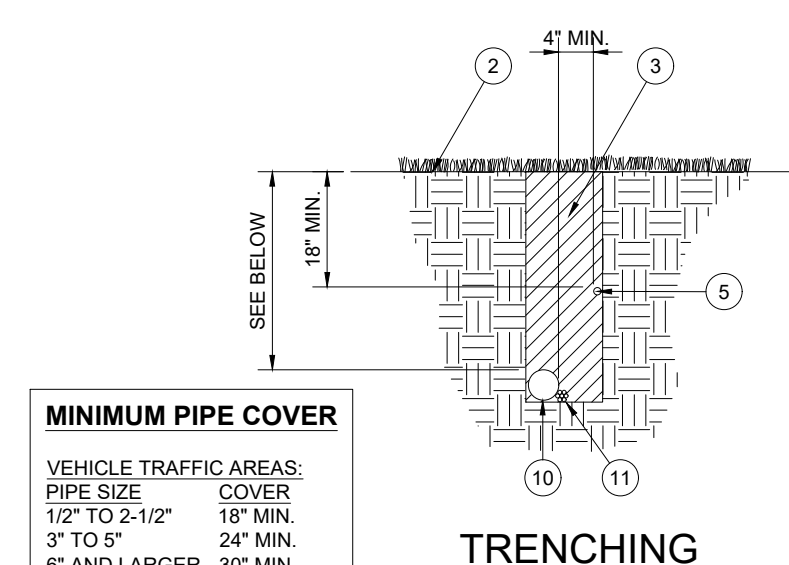


SUPPLY AND EXHAUST HEADERS SHALL BE CLASS 200 PVC PIPE, OF THE SAME DIAMETER AS THE ZONE VALVE SIZE.

USE D RIP TUBE FOR SUPPLY AND EXHAUST HEADERS ON GRIDS WITH FLOW SMALLER THAN 5 GPM ONLY.

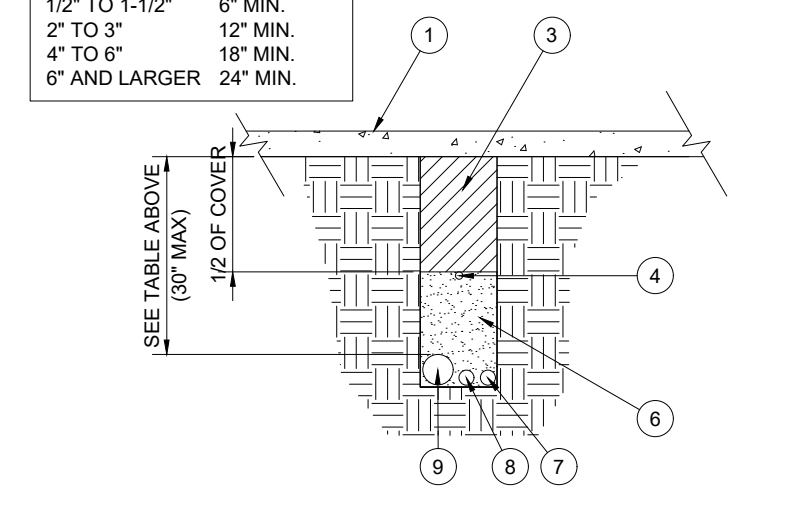
DRIP END FEED LAYOUT

N.T.S.



MINIMUM PIPE COVER

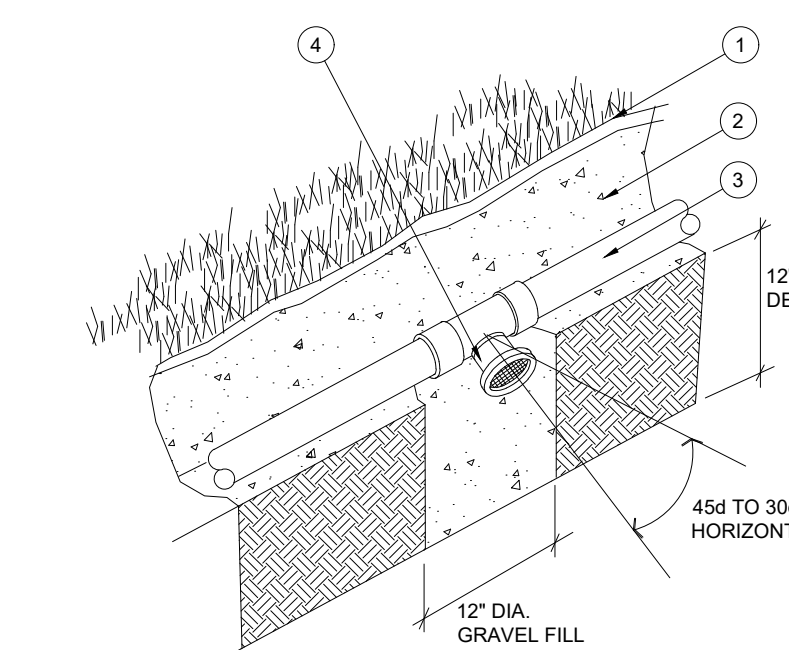
VEHICLE TRAFFIC AREAS:
PIPE SIZE COVER
1/2" TO 2-1/2" 18" MIN.
3" TO 5" 24" MIN.
6" AND LARGER 30" MIN.
PEDESTRIAN TRAFFIC AREAS:
PIPE SIZE COVER
1/2" TO 1-1/2" 6" MIN.
2" TO 3" 12" MIN.
4" TO 6" 18" MIN.
6" AND LARGER 24" MIN.



SLEEVING

PIPE AND SLEEVE INSTALLATION

N.T.S.

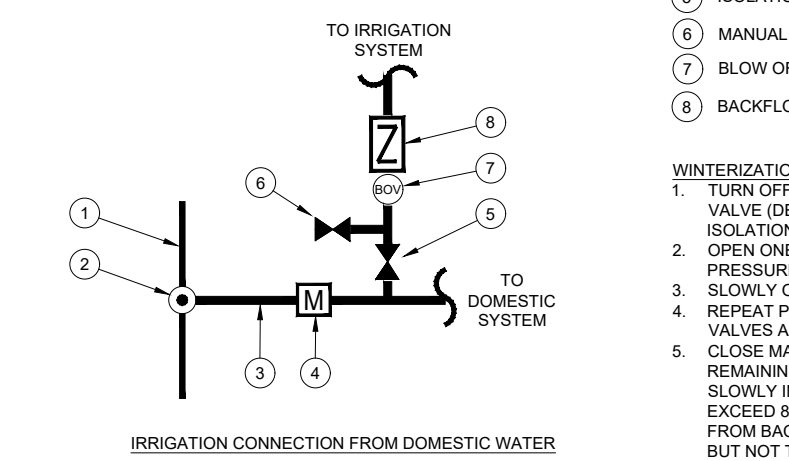
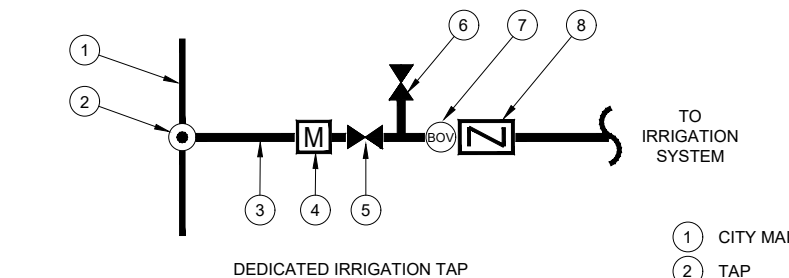


NOTE: AUTOMATIC VALVES ARE TO BE LOCATED AT LOW POINTS OF LATERAL LINES. LOCATE END DRAIN VALVE 12" UPSTREAM FROM LAST HEAD.

AUTOMATIC DRAIN VALVE

RAIN SENSOR, ROOF MOUNT

N.T.S.



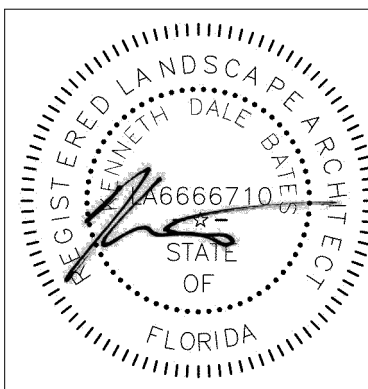
WATER TAP DIAGRAM

N.T.S.

SITE PLAN PROJECT NO. P24-230

PSLUSD PROJECT NO. 11-056-00

NO.	DATE:	DESCRIPTION	RESPONSE TO PSLUSD AND PSL P&Z REVIEW COMMENTS	RESPONSE TO PSLUSD REVIEW COMMENTS
1	04/04/25			
2	07/03/25			
3				
4				



GENERAL

3. QUALIFICATIONS OF IRRIGATION CONTRACTOR
 A. THE IRRIGATION CONTRACTOR SHALL BE PERFORMED BY A SINGLE IRRIGATION CONTRACTING FIRM SPECIALIZING IN IRRIGATION SYSTEMS. SEE THE IRRIGATION PLAN FOR SPECIFIC EQUIPMENT AND SYSTEM LAYOUT.
 B. THE IRRIGATION CONTRACTOR SHALL, ON ITS STAFF A LICENSED IRRIGATION INSTALLER, AS REGULATED BY THE APPROPRIATE LOCAL JURISDICTION. A LICENSED IRRIGATION INSTALLER SHALL BE PRESENT AT THE PROJECT SITE AT ALL TIMES AS WORK PROGRESSES. THE OWNER'S DESIGN TEAM SHALL PROVIDE A LETTER OF RECOMMENDATION PROVIDES FOR A LICENSED IRRIGATION INSTALLER TO BE PRESENT AT THE PROJECT SITE AND SUPERVISING ALL IRRIGATION CONSTRUCTION.
 C. A LIST OF SUCCESSFULLY COMPLETED PROJECTS OF THIS TYPE, SIZE AND NATURE MAY BE REQUESTED BY THE OWNER FOR FURTHER QUALIFICATION MEASURES.
4. SCOPE OF WORK
 A. THE SCOPE OF WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS, LABOR, AND EQUIPMENT, INCLUDING ANY OTHER WORK, INCLUDING THE WORK THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK SPECIFIED HEREIN AND/OR SHOWN ON THE IRRIGATION PLANS, NOTES, AND DETAILS.
 B. THE SCOPE SHALL BE LIMITED TO THE IRRIGATION SYSTEMS, INCLUDING THE DEVICES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLYING THE IRRIGATION SYSTEMS. THE SCOPE OF WORK IN CASE OF CONFLICT BETWEEN THESE PLANS AND LOCAL AND/OR STATE CODES, CODES SHALL PREVAIL.
5. INTENT OF THE IRRIGATION SYSTEM IS TO PROVIDE 100% COVERAGE OF ALL LANDSCAPE AREAS. THE IRRIGATION PLAN IS GENERALLY DIAGRAMMATIC. COORDINATE IRRIGATION SYSTEMATION WITH UTILITIES AND EXISTING LANDSCAPE. THE IRRIGATION SYSTEM SHALL FOLLOW BACKFLOW DEVICE, PIPING, VALVES, SPRAY HEADS, DRIP IRRIGATION AND RELATED EQUIPMENT MAY NEED TO BE ADJUSTED BASED ON ACTUAL SITE CONDITIONS.
 A. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE 100% COVERAGE OF ALL LANDSCAPE AREAS WITHOUT ACCESS SLEEVES; THESE LINES SHALL BE INSTALLED IN A TRENCH OR AT THE SURFACE OF THE GROUND. THE IRRIGATION SYSTEM SHALL BE FIELD ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.

PRODUCTS

- A. ALL MATERIALS SHALL BE NEW AND WITHOUT FLAWS OR DEFECTS OF ANY TYPE AND SHALL BE THE BEST OF THEIR CLASS AND KIND. ALL MATERIALS SHALL HAVE A MINIMUM GUARANTEE OF FIVE YEARS AGAINST LEAKAGE. ALL MATERIALS SHALL BE MANUFACTURED BY AN ISO 9001 CERTIFIED COMPANY. THE BRANDS AND TYPES NOTED ON THE DRAWINGS OR AS SPECIFIED HEREIN, OR APPROVED EQUAL. THE CONTRACTOR MUST FIRST OBTAIN APPROVAL FROM THE IRRIGATION DESIGNER FOR ANY SUBSTITUTION OF EQUIPMENT OR MATERIALS IN THE FIELD. OR THE CONTRACTOR MAY BE REQUIRED TO REPLACE SUCH MATERIALS AT HIS OWN COST.
- B. BACKFLOW PREVENTION DEVICES SHALL BE OF THE SIZE AND TYPE INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE PROPER MAINTENANCE RECORDS TO THE CITY OF CONSTRUCTION DISTRICTS AND ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.
- C. PIPING
1. PRESSURE SUPPLY LINES, DOWNSTREAM OF THE POINT-OF CONNECTION:
- a. SCHEDULE 40 PVC FOR ALL PIPE 1-1/2" OR LESS
- b. CLASS 315 PVC FOR ALL PIPE 2" TO 2-1/2"
- c. CLASS 200 PVC, GASKETED END JOINTS, 3" AND 3-1/2" AND LARGER
2. CREEP AND NON-PRESSURE EXPOSED LINES (DOWNSTREAM FROM VALVES): CLASS 200 PVC
3. FITTINGS, SCH. 40 PVC, EXCEPT AS NOTED OTHERWISE.
- D. VALVES AND DRIP VOLUME ASSEMBLIES: TYPE AND SIZE AS NOTED ON PLANS. EACH VALVE SHALL BE BURNER-MANUFACTURED, NUMBERED WATERPROOF TAG BEARING A NUMBER CORRESPONDING TO ITS SEQUENCE OF OPERATION ON THE CONTROLLER. THE OPERATING SEQUENCE SHALL BE IDENTICAL TO THAT SHOWN ON THE PLANS.
- E. QUICK COUPLERS, BALL VALVES, AND GATE VALVES: TYPE AND SIZE PER PLANS.
- F. VALVE BOXES: TYPE AND SIZE AS NOTED ON DETAILS. ALL VALVE BOXES SHALL BE LOCKING AND SHALL BE ELEVATED ABOVE FINISHED GRADE. ALL VALVE BOXES SHALL HAVE TO CONTAIN THE ENTIRE VALVE AND/OR VALVE ASSEMBLY. THE VALVE BOX LID SHALL HAVE THE VALVE CONTROL NUMBER HEAT-BRANDED INTO THE LID WITH "2" HIGH LETTERS.
- G. REMOVABLE PLASTIC SPRAY NOZZLE: EXACT TYPE, MODEL, AND NOZZLE SHALL BE AS INDICATED ON PLANS. WITHOUT INTEGRAL EMITTER DRIE TUBING; USING MODEL AND FLOW RATE AS NOTED ON PLANS. WIT
- H. EACH END OF THE WELDED TO THE TUBING WALL. PROVIDE AN INTERNAL PART OF THE TUBING ASSEMBLY.
- I. AUTOMATIC CONTROLLER: TYPE, MODEL AND PER PLAN. PROVIDE VANDAL-PROOF ENCLOSURE WITH KEYSHIELD PROTECTIONS. PROVIDE LINE-VOLTAGE DISCONNECT SWITCH WITH GROUND FAULT PROTECTION.
- J. 24 VOLT VALVE WIRES SHALL BE A MINIMUM OF #14 GAUGE. U.F. APPROVED FOR DIRECT BURIAL, SINGLE CONDUCTOR IRRIGATION WIRE. EACH CONTROLLER SHALL HAVE A DIFFERENT COLOR IDENTIFICATION AND COMMON WIRE.
- K. 1. STATION WIRE - ANY COLOR EXCEPT WHITE OR BLUE
COMMON WIRE - WHITE
2. EXTRA COMMON WIRES - BLUE
WIRE SPICES SHALL BE ENCASED IN A WATERPROOF COMPOUND OR GEL. ALL FIELD SPLICES SHALL BE LOCATED IN 6" HOLES AND SHALL BE COVERED WITH A GEL CAP.
RAIN SENSOR: TYPE AND MODEL PER PLANS.

METHODS










- A THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN
PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL
NOT BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS. THE IRRIGATION CONTRACTOR SHALL
PLAN. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE
IRRIGATION EQUIPMENT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO
INSTALLATION OF ANY OR MORE OF THE IRRIGATION SYSTEM COMPONENTS AT THIS SITE.
C COME, ENSURE FIELD COORDINATION IS MADE EARLY ON IN THE CONSTRUCTION PHASE SO
PLACEMENT LOCATION IS CORRECT.
- D THE IRRIGATION CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE PRIOR TO
COMMENCEMENT OF WORK, AND SHALL OBTAIN ALL ENGINEERING, LANDSCAPE, AND OTHER
APPLICABLE PLANS & DOCUMENTS. THE CONTRACTOR SHALL THOROUGHLY REVIEW THE PLANS
AND SPECIFICATIONS FOR ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT AND OWNER'S
REPRESENTATIVE IMMEDIATELY.
- E THE IRRIGATION CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN
ON THESE PLANS UNLESS THE CONTRACTOR HAS FIRST DETERMINED THAT NO OBSTRUCTIONS
OR DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING,
THOSE OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE IRRIGATION
DESIGNER IMMEDIATELY. THE EVENT THAT THE CONTRACTOR HAS DETERMINED THAT AN
OBSTRUCTION EXISTS SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY FOR ANY REVISIONS AND NECESSARY COSTS.
D THE IRRIGATION CONTRACTOR SHALL PAY ANY AND ALL FEES AND PERMITS ASSOCIATED WITH
THE INSTALLATION OF THE IRRIGATION SYSTEM.
- F THE IRRIGATION CONTRACTOR SHALL CONFIRM THE STATIC WATER PRESSURE IS AT
AT LEAST 6 PSI. IF STATIC WATER PRESSURE IS OUTSIDE OF THE STATED RANGE, DO NOT PROCEED
WITHOUT FIRST NOTIFYING THE IRRIGATION DESIGNER AND OWNER IN WRITING, AND OBTAINING
AUBURN UNIVERSITY EXTENSION SERVICE APPROVAL. THE CONTRACTOR SHALL ADVISE THE
CONTRACTOR CHOOSE TO BEGIN THE INSTALLATION WITHOUT SUCH NOTIFICATION, THE
IRRIGATION CONTRACTOR WILL ASSUME THE RESPONSIBILITY FOR ALL WORKS INCURRED TO
CORRECT THE SYSTEM WHEN WORKING PROPERLY. NO CHANGE ORDERS WILL BE AUTHORIZED
FOR SUCH CIRCUMSTANCES.
- G THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES
BEFORE TRENCHING, ELECTRICITY, TELEPHONE, GAS, SEWER, ETC., PRIOR TO THE START
OF ANY WORK. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATIONS
OF WALLS, STRUCTURES AND UTILITIES.
- H THE CONTRACTOR SHALL, WITH THE OWNER'S PROPOSED LOCATIONS OF THE AUTOMATIC CONTROLLER
AND ANY REQUIRED SLEEVES THROUGH THE BUILDING FOR CONTROL Wires.
- I TRENCHING NEAR EXISTING TREES
- J THE CONTRACTOR SHALL NOT TRENCH ROOTS 1'-12" AND LARGER IN DIAMETER WITHIN THE
CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE
AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS, TRUNKS, AND BRANCHES. THE CRZ IS
DEFINED AS A CIRCLE WITH A RADIUS EQUAL TO THE DBH OF THE TREE PLUS ONE-FOURTH (1/4)
OF THE TRUNK DIAMETER AT-BREAST-HIGH (4' ABOVE THE AVERAGE GRADE AT THE TRUNK).
- K MAINTENANCE OF THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE
EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE CRZ.
- L ALTER ALIGNMENT OF PIPING TO AVOID TREE ROOTS 1'-12" AND LARGER IN DIAMETER, WHERE
BYPASSING 1'-12" AND LARGER IN DIAMETER TREE ROOTS IS NECESSARY, THE TRUNK SHALL REMAIN
UNDER SUCH ROOTS, WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP
MOIST. CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS.
- M COVERED ROOTS SHALL BE KEPT MOIST AND COVERED WITH MULCH AND ALLOWED TO
HEAL. AIR-DRY. DO NOT USE ANY SORT OF SEALERS OR WOUND PAINTS.

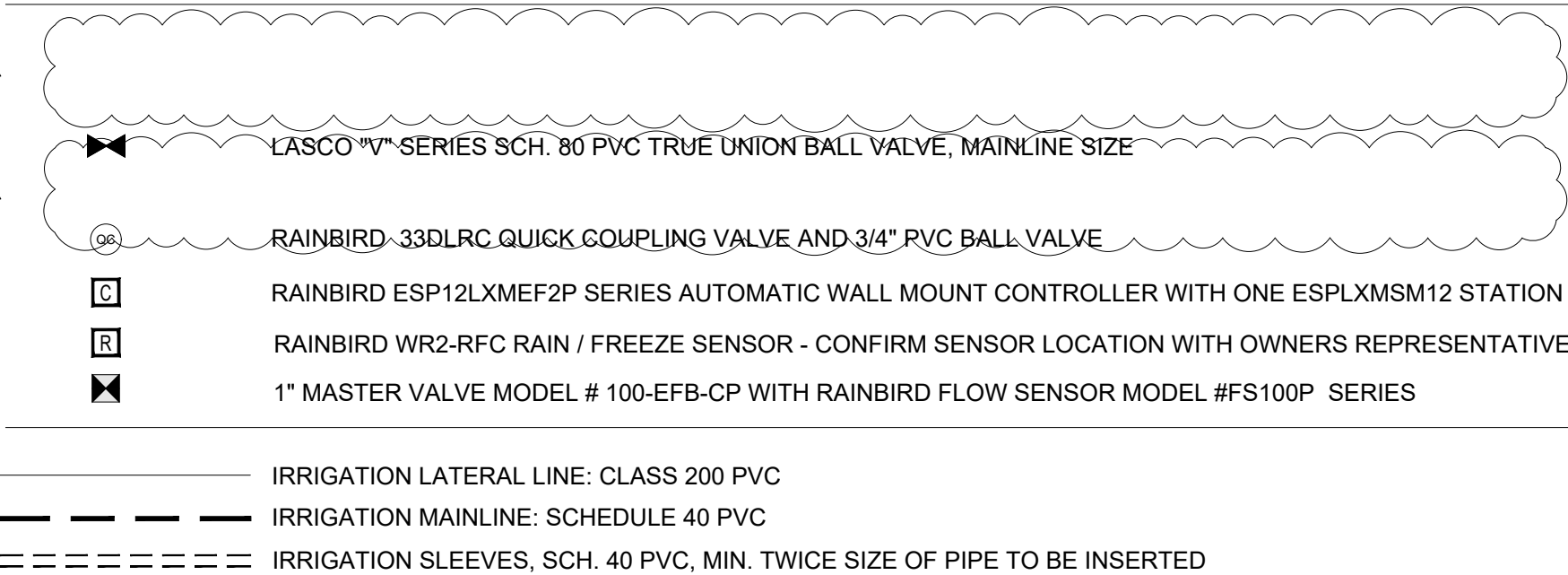
I. BACKFILL

- ALL BACKFILL MATERIAL SHALL BE SUBJECT TO APPROVAL BY THE OWNER. BACKFILL**
- MATERIALS SHALL BE FREE OF RUBBISH, ROCK LARGER THAN 1" LARGE STONES, BRUSH,**
- SOD, FROZEN MATERIAL OR OTHER UNSUITABLE SUBSTANCES THAT MAY DAMAGE PIPE**
- DURING THE BACKFILLING OPERATIONS. SEPARATE OUT ROCKS LARGER THAN 1 INCH IN**
- DIAMETER FROM EXCAVATION AND PLACE THEM IN A PILE FOR REMOVAL TO ANOTHER LOCATION.**
- LANDSCAPING. COVER FOR BOTH TOP AND SIDES OF PIPE SHALL BE A MINIMUM OF 2 INCHES**
- OF ROCK-FREE SOIL, SAND, OR OTHER APPROVED MATERIAL.**
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF TRENCHING IS PROPERLY**
- BE UNUSABLE FOR USE IN BACKFILL. IT SHALL BE REMOVED FROM THE SITE AND PROPERLY**
- AND LEGALLY DISPOSED OF BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE. THE**
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF TRENCHING IS PROPERLY**
- CONSISTING OF EARTH, LOAM, SANDY CLAY, SAND OR OTHER APPROVED MATERIALS FREE**
- OF DEBRIS.**
- BACKFILLING LOCATION INSTALLATION: CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING**
- WATER SOURCES AT LOCATION SHOWN ON PLANS AND AS APPROVED BY THE OWNER, AND SHALL**
- MAKE ANY MINOR CHANGES IN LOCATION AS MAY BE NECESSARY DUE TO ACTUAL SITE**
- CONDITIONS. BACKFLOW PREVENTION HEIGHT SHALL BE AS PER LOCAL CODES AND IRRIGATION**
- ENGINEER'S RECOMMENDATIONS. THE CONTRACTOR SHALL PROVIDE A BACKFLOW PREVENTIVE**
- TO SERVE AS AN ISOLATION VALVE. TO EVERY EXTENT POSSIBLE, INSTALL BACKFLOW PREVENTION**
- AT A LOCATION SCREENED FROM PUBLIC VIEW (SUCH AS BEHIND A SHRUB ROW).**
- K. 1. PIPE SIZE SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS OF**
- SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS FOR LARGER SIZES MAY BE**
- APPROVED BY THE ENGINEER.**
- 2. MAINLINE PIPE AND WIRES SHALL BE INSTALLED WITH A MINIMUM COVER OF 18-24 INCHES**
- (24" FOR MAINLINE 3"-5", AND 30" FOR MAINLINE 6" AND GREATER). LATERAL PIPE SHALL BE**
- INSTALLED WITH A MINIMUM COVER OF 12 INCHES. CONFIRM BURIED DEPTH WITH LOCAL CODE.**
- 3. ASSEMBLE ALL THREADED FITTINGS WITH TEFLON TAPE, WHICH SHALL BE APPLIED TO MALE**
- THREADS ONLY.**
- 4. ALL SOLVENT-WELD CONNECTIONS SHALL BE MADE WITH APPROVED SOLVENT-WELD PRIMER**
- AND GLUE.**
- L. 5. PIPES SHALL BE INSTALLED WITH A MINIMUM OF 4" HORIZONTAL CLEARANCE FROM ANY**
- OTHER PIPE AND 3" VERTICAL CLEARANCE FROM ANY PIPES THAT CROSS OVER OR UNDER**
- VALVES.**
- 6. VALVES SHALL BE INSTALLED PER MANUFACTURERS DIRECTIONS AND THE IRRIGATION**
- DETAILS.**
- 7. VALVE BOXES SHALL BE INSTALLED FLUSH WITH THE GROUND, WITH CLEAN PEA GRAVEL**
- UNDER THE BOX. THE BOX SHALL BE MARKED WITH TWO 12" X 12" X 1" ALUMINUM IDENTIFICATION**
- 24" SIDEWALKS OR LANDSCAPE EDGES, WITH TOPS OF BOXES 1" ABOVE FINISH GRADE IN**
- TURF; AND 3" ABOVE FINISH GRADE IN SHRUB AREAS (TO AVOID BEING COVERED BY MULCH).**
- 8. EACH VALVE BOX COVER SHALL BE HEAT-TREATED IN A JUNCTION BOX.**
- 9. DO NOT INSTALL MORE THAN TWO VALVES IN THE SAME BOX.**
- D. DRIP IRRIGATION EQUIPMENT SHALL BE INSTALLED PER MANUFACTURERS DIRECTIONS AND THE**
- IRRIGATION DETAILS.**
- N. 1. SURFACE DRIP LINES SHALL BE BURIED NO MORE THAN 2" BELOW FINISH GRADE.**
- 2. DRIP LINES POINTED DOWN ON GRADE SHALL BE LOCATED BENEATH LANDSCAPE FABRIC, AND**
- NOT IN PLANE WITH IT. SPRAYS AND BUBBLER HEADS SHALL BE SET PERPENDICULAR AND FLUSH TO**
- SPRAY, ROTOR, AND BUBBLER HEADS.**
- 3. ALL SPRAY AND ROTOR HEAD LOCATIONS SHALL BE STAKED, FLAGGED AND/OR OTHERWISE**
- MARKED ON THE GROUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF**
- STAKES SHALL BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE**
- INSTALLATION.**
- 4. ALL SPRAY HEADS SHALL BE CONNECTED WITH FLEXIBLE HOSE TO A MINIMUM LENGTH OF 1 INCH FLEX**
- PVC FLEX PVC SHALL BE SOLVENT WELDED TO SCHEDULE 40 PVC FITTINGS WITH**
- WELD-ON #79S SLOTTED AND #70 PRIMAR. ALL ROTORS SHALL BE CONNECTED TO**
- LATERAL LINES WITH PEX OR POLYETHYLENE GLASS BOWING JOINTS. THE CONTRACTOR SHALL**
- BE RESPONSIBLE FOR THE PROTECTION OF BUBBLER HEADS. BUBBLER HEADS SHALL BE SET**
- PERPENDICULAR AND FLUSH TO SPRAY, ROTOR, AND BUBBLER HEADS AND WITH A CLEARANCE OF FOUR INCHES (MINIMUM) FROM THE EDGE OF ANY**
- BUILDINGS, WALLS, BOULDERS, AND HARDSCAPE, WITH A CLEARANCE OF TWELVE INCHES**
- MINIMUM FROM BURNING PLANTS. SPRAYS AND BUBBLER HEADS SHALL BE FLUSHED AND ADJUSTED**
- FOR OPTIMUM COVERAGE WITH MINIMUM OVSERLAY ON WALKS, STREETS, WALLS, ETC.**
- 5. LAID PIPE TO TREE STREAM BURIED BURIED HEADS IS QUITTED FOR GRAPHIC CLARITY.**
- CONNECT TREE BUBBLER HEADS TO VALVES AS SHOWN WITH CLASS 200 PVC PIPE SIZED TO**
- ALLOW A MAXIMUM FLOW VELOCITY OF 5 FEET PER SECOND.**
- AUTOMATIC CONTROLLER**
- 1. INSTALL THE CONTROLLER AT THE LOCATION INDICATED BY THE OWNER. INSTALL**
- CONTROLLER WITH A BACKUP BATTERY AS RECOMMENDED BY THE MANUFACTURER.**
- 2. PROGRAMMATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE CONTROLLER**
- AND DEDICATE ONE (1) 20-AMP BREAKER FOR EACH CONTROLLER. IT SHALL BE**
- THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM**
- ELECTRICAL SOURCE TO THE CONTROLLER.**
- 3. ALL VALVE CONTROL WIRES SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL. NO**
- SPLICES SHALL BE ALLOWED EXCEPT AT VALVES AND CONTROLLER, WHERE SPLICES MAY**
- BE USED FOR NECESSARY DUE TO SPACE LIMITATIONS. THE CONTRACTOR SHALL MAKE ALL**
- SPLICES IN 6" ROUND VALVE BOXES WITH 3MS "DBY-DIRECT BURIAL SPULICE KIT".**
- THE CONTRACTOR SHALL LABEL ALL WIRES WITH WATERPROOF TAGS AND MARKERS AT ALL**
- CONNECTIONS. VALVE MANIFOLDS, AND SHALL LEAVE A 2' COIL OF EXCESS WIRE AT EACH**
- CONNECTION.**
- 4. PROVIDE #10 COMMON WIRE, DIRECT BURIAL, TO ALL REMOTE CONTROL VALVES.**
- 5. PROVIDE ALL BURIED BURIALS TO VALVES USING 3MS "DBY-DIRECT BURIAL SPULICE KIT"**
- (UNLESS OTHERWISE SPECIFIED).**
- 6. PROVIDE THREE ADDITIONAL IRRIGATION CONTROL WIRES ALONG EACH BRANCH OF**
- MAINLINE FOR FUTURE EXPANSION. STUB ADDITIONAL CONTROL WIRES INTO BACK OF**
- IRRIGATION CONTROLLERS.**
- 7. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL CONTROL WIRE**
- SLEEVES AND PIPE SLEEVES UNDER PAVED AREAS PRIOR TO PAVING - SEE SLEEPING NOTES**
- INSTALL THE MAIN LINE CONTROL WIRE UNDER THE DRIVEWAY AND COORDINATE LOCATION**
- WITH THE OWNER. PROVIDE MINIMUM 5" CLEARANCE FROM ANY OTHER OUTDOOR EQUIPMENT**
- AND KEEP CLEAR OF ANY TREE CANOPY OR OTHER OVERHEAD OBSTRUCTIONS, AND ABOVE THE HEIGHT**
- LAID UNDER LATERAL LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF**
- TO ENSURE THE RAIN SENSOR IS PLACED IN A LOCATION WHERE IT CAN RECEIVE ADEQUATE**
- RAINFALL, WITHOUT OBSTRUCTIONS. IF IT IS PLACED IN AN INADEQUATE LOCATION, THE**
- IRRIGATION CONTRACTOR MAY BE REQUIRED TO RELOCATE IT AT NO ADDITIONAL COST TO THE**
- OWNER.**
- Q. NO PUMP ON SITE.**
- R. IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS**
- PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.**
- S. QUALITY CONTROL**
- 1. PERFORM REGULAR CHECKS AFTER IRRIGATION SYSTEM IS COMPLETED, BUT PRIOR TO ANY**
- PLANTING AND PERFORM TESTING IN THE PRESENCE OF THE IRRIGATION DESIGNER AND THE**
- CONSTRUCTION MANAGER.**
- 2. VERIFY AND ASSURE THAT ALL LAWN AND PLANTING AREAS ARE WATERED**
- COMPLETELY AND UNIFORMLY.**
- 3. MAKE ALL NECESSARY ADJUSTMENTS TO PROVIDE COMPLETE COVERAGE, INCLUDING**
- REALIGNMENT OF HEADS AND REPLACEMENT OF NOZZLES.**
- T. CLEAN UP**
- 1. DURING IRRIGATION EXCAVATION AND INSTALLATION, KEEP ALL PAVEMENT CLEAN AND ALL**
- WORK AREAS IN A NEAT, ORDERLY CONDITION.**
- 2. REMOVE ALL EXCESS DEBRIS, TRASH, AND SUITABLE FOR USE AS INTENDED. THE IRRIGATION**
- CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL**
- ACCEPTABILITY.**
- 3. WHEN THE REJECTED WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE**
- CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S**
- SATISFACTION WITHIN 24 HOURS.**
- 4. IF THE CONTRACTOR DOES NOT COMMECE UNTIL THE WORK HAS BEEN RE-INSPECTED**
- BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL**
- ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE**
- PERIOD WILL COMMENCE.**
- 5. CONTROLLER CHART: THE IRRIGATION CONTRACTOR SHALL PROVIDE A 11" x 17"**
- COLOR-CODED, LAMINATED COPY OF THE IRRIGATION LAYOUT AND PLACE IT IN THE**
- OWNER'S OWNERS MANUAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LABELING THE AREAS**
- COVERED BY EACH VALVE, USING A SEPARATE COLOR FOR EACH ZONE.**
- U. TURN THE FOLLOWING ITEMS IN TO THE OWNER UPON COMPLETION OF THE INSTALLATION:**
- a. RECORD DRAWING(S)**
- b. CONTROLLER MANUAL (1)**
- c. CONTROLLER KEYS (2)**
- d. A MINIMUM OF (2) COPIES OF RECORD DRAWINGS: A RECORD DRAWING IS A RECORD**
- OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED**
- V. REFER TO THE PLANTING SPECIFICATIONS FOR ADDITIONAL CONDITIONS OF FINAL ACCEPTANCE**
- AND START OF THE MAINTENANCE PERIOD.**
- W. WARRANTY**
- 1. THE IRRIGATION SYSTEM SUPPLIED AND INSTALLED SHALL BE WARRANTED (LABOR AND**
- MATERIALS) TO REMAIN OPERATIONAL FOR A PERIOD OF 12 MONTHS AFTER THE DATE OF**
- FINAL ACCEPTANCE. DURING THIS PERIOD, THE CONTRACTOR SHALL ALSO REPAIR ANY**
- DEFECTS OR DAMAGE TO THE IRRIGATION SYSTEM CAUSED BY DEFECTS IN MATERIALS**
- OR WORKMANSHIP.**
- 2. BY THE END OF THE WARRANTY PERIOD, ANY IRRIGATION PART THAT IS EITHER**
- NON-OPERATIONAL OR THAT IS OPERATING BELOW STANDARDS AS DETERMINED BY THE**
- ENGINEER SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. THE**
- REPLACEMENT PARTS SHALL BE OF THE SAME KIND AS SPECIFIED IN THE IRRIGATION LEGEND, AND SHALL BE**
- INSTALLED AS ORIGINALLY SPECIFIED.**
- 3. NON-PARTS DAMAGE CAUSED BY ACTIONS DUE TO ACTS OF GOD, VANDALISM, AND/OR THE**
- OWNER'S IMPROPER MAINTENANCE SHALL NOT BE COVERED BY THIS WARRANTY.**
- X. SHOULD THE PERMITTING JURISDICTION REQUIRE AN IRRIGATION AUDIT, THE IRRIGATION**
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF A THIRD-PARTY CERTIFIED LANDSCAPE IRRIGATION**
- AUDITOR, AT NO ADDITIONAL COST TO THE OWNER.**

SYMB C

MANUFACTURER/MODEL

- | | |
|---|---|
|  | RAIN BIRD R-VAN-STRIP 1806-SAM-P45, TURF ROTARY, 5'X15" (LCS AND RCS), 5'X30" (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/ 1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET. |
| | <ul style="list-style-type: none"> RAIN BIRD R-VAN14 1806-SAM-P45, TURF ROTARY, 6'-14" 45'-270" AND 360" HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET. |
| | <ul style="list-style-type: none"> RAIN BIRD R-VAN18 1806-SAM-P45, TURF ROTARY, 13'-18" 45'-270" AND 360" HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET. |
|  | RAINBIRD 1806-SAM-PRS SERIES POP UP SPRAY HEADS WITH ADAPTER AND RAINBIRD #1402 SERIES BUBBLER NOZZLES. (TWO PER TREE)
SEE INSTALLATION NOTE #N-5 REGARDING TREE BUBBLER LATERAL PIPE |
|  | RAINBIRD 5004PCSAMR, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, PART CIRCLE, #4.0 NOZZLE UNLESS NOTED OTHERWISE |
|  | RAINBIRD 5004FCSAMR, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, FULL CIRCLE, #8.0 NOZZLE UNLESS NOTED OTHERWISE |
|  | RAINBIRD XCZ-100-PRB-COM / 150-PRB-COM SERIES AUTOMATIC DRIP VALVE ASSEMBLY WITH 40 PSI PRESSURE REGULATOR XCZ-100-PRB-COM - 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 0.3GPM TO 20GPM. |
|  | RAINBIRD PEB SERIES ELECTRIC REMOTE CONTROL, "TREE BUBBLER ZONE" VALVE
SEE INSTALLATION NOTE #N-5 REGARDING TREE BUBBLER LATERAL PIPE |
|  | RAINBIRD PEB SERIES
1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. |
| <div>  </div> <div> <p>AREA TO RECEIVE DRIPLINE</p> <p>RAINBIRD XFS-CV-06-12 SERIES DRIP TUBE IN SHRUB BED INSTALLED AT 2" DEPTH</p> </div> <div>  </div> <div> <p>PIPE TRANSITION POINT ABOVE GRADE PIPE TRANSITION POINT FROM PVC LATERAL TO DRIP TUBING WITH RISER TO ABOVE GRADE INSTALLATION.</p> </div> | |



1. L.I.C. SHALL SELECT R-VAN SPRAY NOZZLES FOR "HEAD-TO-HEAD" COVERAGE, ADJUSTED FOR NO OVERSPRAY ONTO WALLS AND WALKS. NO OVERSPRAY INTO STREETS IS PERMITTED
2. ALL PIPE TO BE SIZED SUCH THAT FLOWS WILL NOT EXCEED VELOCITY OF 5 FPS

The diagram shows a hexagonal callout box divided into three horizontal sections. Each section contains a black dot followed by a hash symbol (#). Lines connect these symbols to labels on the right: 'Valve Number' for the top section, 'Valve Flow' for the middle section, and 'Valve Size' for the bottom section.

IRRIGATION WATER CONSERVATION SHALL BE ACCOMPLISHED THROUGH THE FOLLOWING EFFORTS:

1. SEPARATE TURF / SHRUB ZONES FOR SCHEDULING ADJUSTMENT
2. NO OVERSPRAY ONTO PAVEMENT PERMITTED
3. USE OF RAIN SENSOR SHUT OFF OVER-RIDE DEVICE

LATERAL PIPE SHALL BE SIZED TO ALLOW A MAXIMUM FLOW VELOCITY OF FIVE FEET PER SECOND ACCORDING TO THE FOLLOWING CHART:

FLOW IN GPM	LATERAL PIPE SIZE
3/4" TO 5 GPM	3/4" CLASS 200
6 - 10 GPM	3/4" CLASS 200
11 - 15 GPM	1" CLASS 200
16 - 28 GPM	1 1/4" CLASS 200
29 - 35 GPM	1 1/2" CLASS 200
36 - 54 GPM	2" CLASS 200
55 - 81 GPM	2 1/2" CLASS 200
82 - 120 GPM	3" CLASS 200