

PARKER AND PINE PINE LANE AND S. PARKER ROAD LANDSCAPE AND IRRIGATION CONSTRUCTION DOCUMENTS

PARKER AND PINE FILING NO.1
A PART OF THE SOUTHEAST QUARTER OF SECTION 9 AND A PART OF THE
NORTHEAST QUARTER OF SECTION 16 TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE
6TH P.M. TOWN OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO

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VICINITY MAP
1" = 2,000'

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LEGAL DESCRIPTION

PARKER AND PINE FILING NO. COUNTY OF DOUGLAS, STATE OF COLORADO.

BENCHMARK

DOUGLAS CONTROL MONUMENT #1.095035, A 3 1/2" ALUMINUM CAP.

ELEVATION = 5906.34 FEET (NAVD 1988), AS PUBLISHED BY DOUGLAS COUNTY.

BASIS OF BEARINGS

BEARINGS SHOWN HEREON ARE BASED UPON THE WEST LINE OF THE SW 1/4 OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST, OF THE 6TH PRINCIPAL MERIDIAN BEARING S00°17'51"W AS REFERENCED ON THE PLAT OF PARKER AUTO PLAZA FILING NO.1 AND BOUND BY THE MONUMENTS SHOWN HEREON.

ParkWater LANDSCAPE/IRRIGATION WORKSHEET
Tap sizing for dedicated irrigation taps

Yellow fields require user input

Irrigation Water Requirement = (ET_o x PF x LA)/IE

Define Landscape & Irrigation System:		Site Summary:															
High Water Use Plant Material *Cool season turfgrass (Kentucky bluegrass) Plant Factor (PF, %) High 0.9 Landscape Area (LA, sq ft) 0 Irrigation Efficiency (IE, %) Overhead 0.65		Total Irrigated Area (sq ft) 41077 Avg Plant Factor (%) 0.77 Avg Irrigation Efficiency (%) 0.67															
High-Moderate Water Use Plant Material *Hybrid grass types (Texas hybrids, fescue, etc.) Plant Factor (PF, %) High-Med 0.8 Landscape Area (LA, sq ft) 37335 Irrigation Efficiency (IE, %) Overhead 0.65		Peak monthly ET, Parker, CO: Peak monthly ET (July): 7.56 in															
Moderate Water Use Plant Material *Traditional trees/shrubs/perennials, alternative grass types (buffalograss, blue grama, etc.) Plant Factor (PF, %) Med 0.5 Landscape Area (LA, sq ft) 3742 Irrigation Efficiency (IE, %) Drip 0.9		Irrigation Water Requirement (IWR): Peak monthly IWR: 225125 gal Maximum flow requirement 23.5 GPM *Max. flow requirements are based on peak monthly irrigation demands and follow PWSO's watering guidelines.															
Low Water Use Plant Material *Xeric trees/shrubs/perennials, native grass mixes Plant Factor (PF, %) Low 0.25 Landscape Area (LA, sq ft) 0 Irrigation Efficiency (IE, %) Drip 0.9		Hydraulic Requirements: <table border="1"> <thead> <tr> <th>Tap Size (in)</th> <th>Max GPM</th> </tr> </thead> <tbody> <tr> <td>3/4"</td> <td>10</td> </tr> <tr> <td>1"</td> <td>18</td> </tr> <tr> <td>1 1/2"</td> <td>40</td> </tr> <tr> <td>2"</td> <td>71</td> </tr> <tr> <td>3"</td> <td>189</td> </tr> <tr> <td>4"</td> <td>380</td> </tr> </tbody> </table> * 2" and smaller assumes Seamless K Copper Tube 3" and larger assumes Ductile Iron Pipe Class 350 Tap Size Requirement 1 1/2"		Tap Size (in)	Max GPM	3/4"	10	1"	18	1 1/2"	40	2"	71	3"	189	4"	380
Tap Size (in)	Max GPM																
3/4"	10																
1"	18																
1 1/2"	40																
2"	71																
3"	189																
4"	380																
System Design Pressure: 80 PSI <input type="checkbox"/> Design pressure has been field tested & verified <input checked="" type="checkbox"/> This form has been completed in compliance with PWSO's Engineering Standards & Specifications Manual regarding irrigation design specifications																	

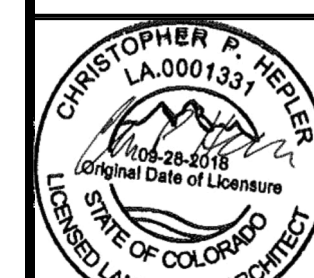
*PWSO holds final discretion for determining appropriate plant factor designations based on landscape plan submission.
Visit Appendix B of the SMWSA Model Ordinance for Plant Factor Guidelines

NO.	REVISION	BY	DATE	APPR.

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DRAWN BY: JRK
CHECKED BY: DLS
DATE: 08/11/20

PARKER AND PINE FILING 1
PARKER, CO
CONSTRUCTION DOCUMENTS
COVER SHEET



PROJECT NO.
096502001

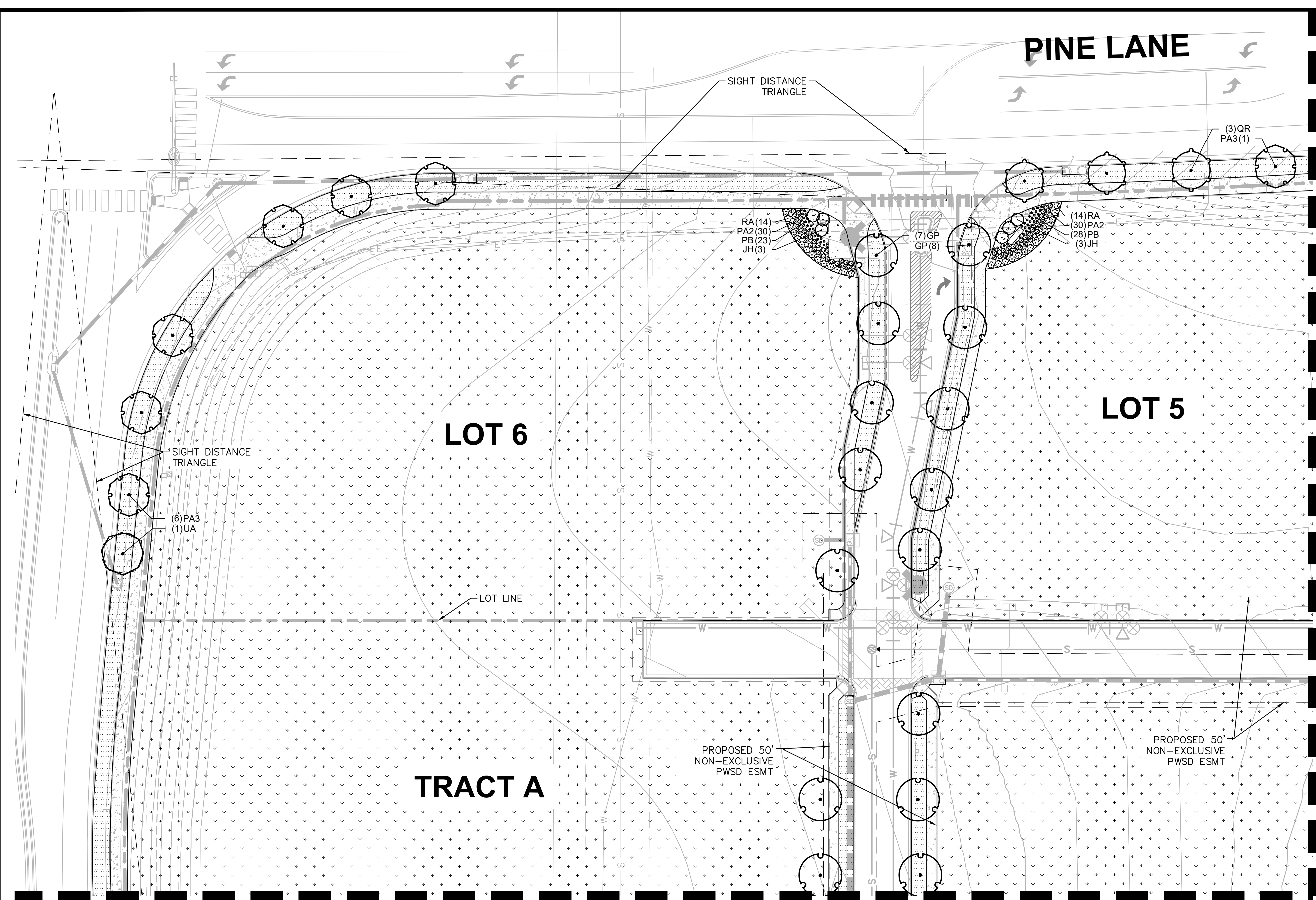
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096502001IR-CV

L1.0



C:\Users\lock\Kasperchek\Projects\Parker & Pine\Map\Use\CADD\PlanSheets\096502001IR-CV.dwg Kasperchek Lock 10/8/2019 10:57 AM THIS DOCUMENT, TOGETHER WITH THE COMMENTS AND REVISIONS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. RELEASE OF THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

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SEE SHEET L1.2 FOR CONTINUATION

SEE SHEET L1.3 FOR CONTINUATION

LANDSCAPE CALCULATIONS

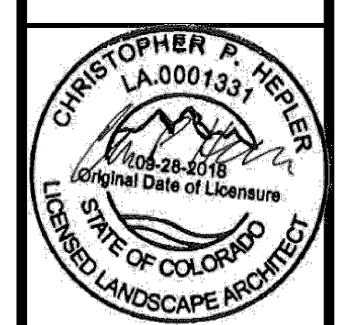
STREET TREES	REQUIRED	PROVIDED
1 TREE/ 40 LF	38 TREES	38 TREES
MINIMUM SITE LANDSCAPING STANDARDS		
SITE AREA: 694,869 SF	104,109 SF	705,365 SF
15% TOTAL SITE AREA		

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 PARKER, CO
 CONSTRUCTION DOCUMENTS
 LANDSCAPE PLAN



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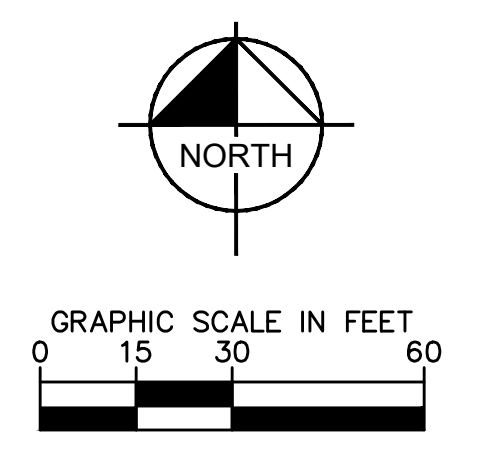
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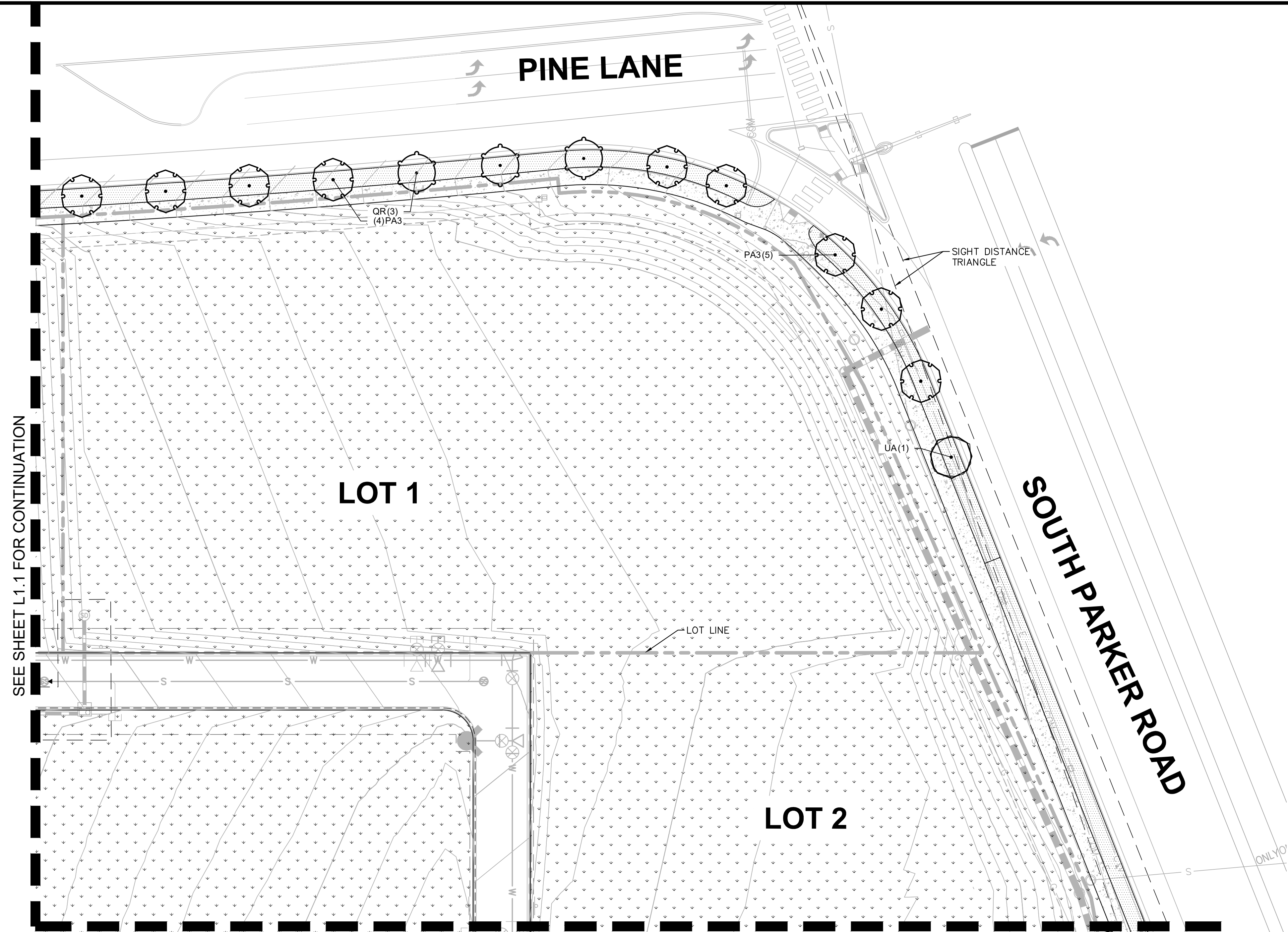
PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	COMMON NAME
	GP	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY GINKGO
	PA3	PYRUS CALLERYANA 'ARISTOCRAT' TM	ARISTOCRAT FLOWERING PEAR
	QR	QUERCUS ROBUR	ENGLISH OAK
	TG	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN
	UA	ULMUS X 'ACCOLADE'	ACCOLADE ELM
SHRUBS	CODE	BOTANICAL NAME	COMMON NAME
	JH	JUNIPERUS HORIZONTALIS	CREEPING JUNIPER
	PA2	PEROVSKIA X 'LITTLE SPIRE'	LITTLE SPIRE RUSSIAN SAGE

GROUND COVERS	CODE	BOTANICAL NAME	COMMON NAME
	PB	PENNISETUM ALOPECUROIDES 'LITTLE BUNNY'	LITTLE BUNNY FOUNTAIN GRASS
	RA	RIBES ALPINUM 'GREEN MOUND'	GREEN MOUND ALPINE CURRANT
	KB	KEN-TEX BLUEGRASS	KEN-TEX BLUEGRASS
	RM	RIVER ROCK MULCH 2-6"	3" DEPTH
	SM2	TOWN OF PARKER SEED MIX 3	TOWN OF PARKER SEED MIX 3



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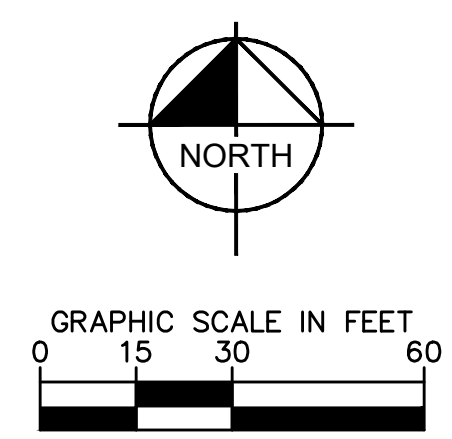
SEE SHEET L1.1 FOR CONTINUATION

SEE SHEET L1.4 FOR CONTINUATION

PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	COMMON NAME
	GP	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY GINKGO
	PA3	PYRUS CALLERYANA 'ARISTOCRAT' TM	ARISTOCRAT FLOWERING PEAR
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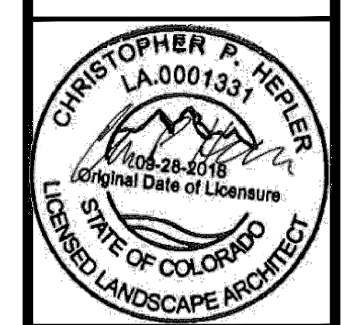


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 DATE: 08/11/20

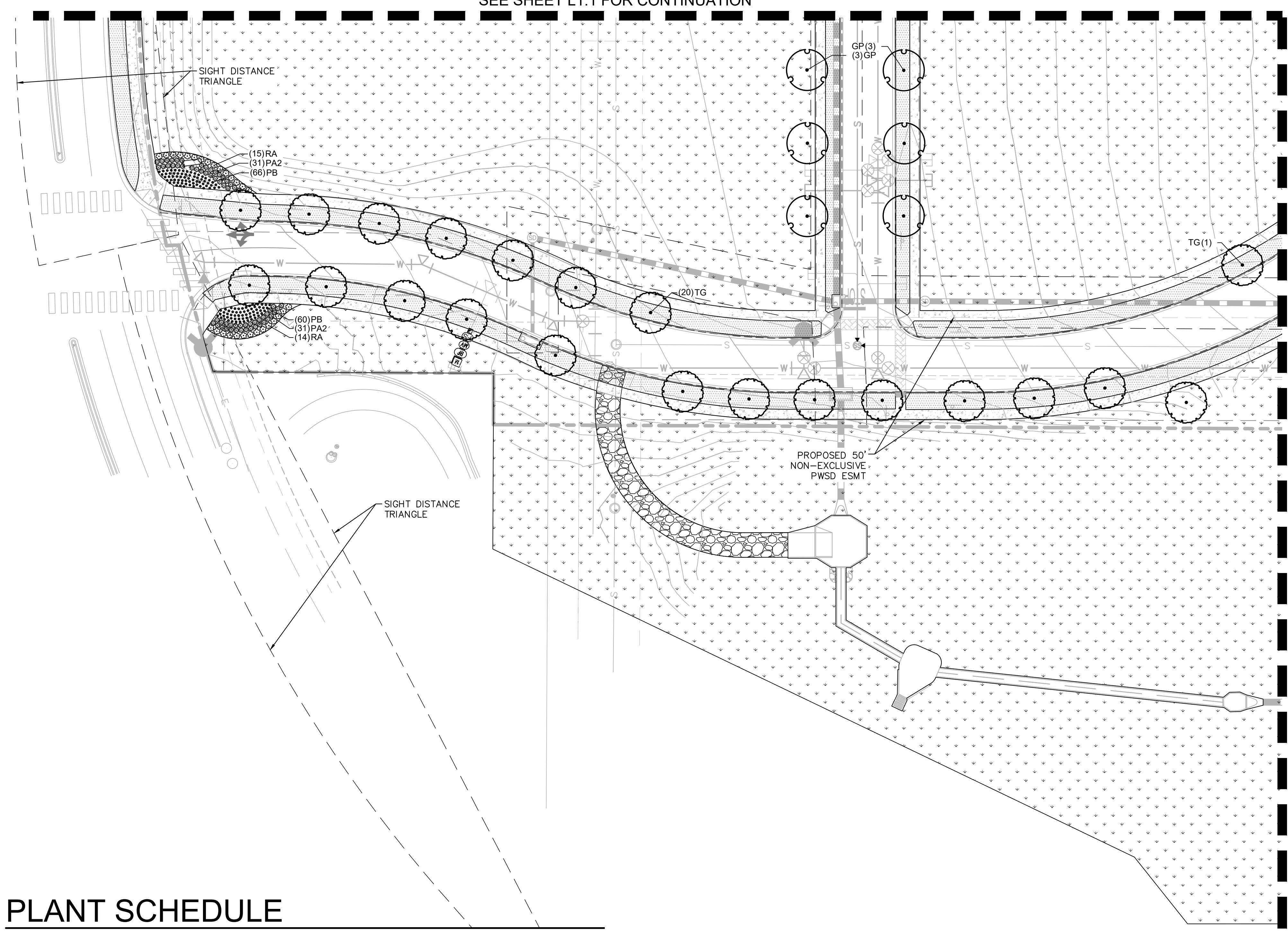
PARKER AND PINE FILING 1
 PARKER, CO
 CONSTRUCTION DOCUMENTS
 LANDSCAPE PLAN



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 096502001
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 096502001LA
L1.2

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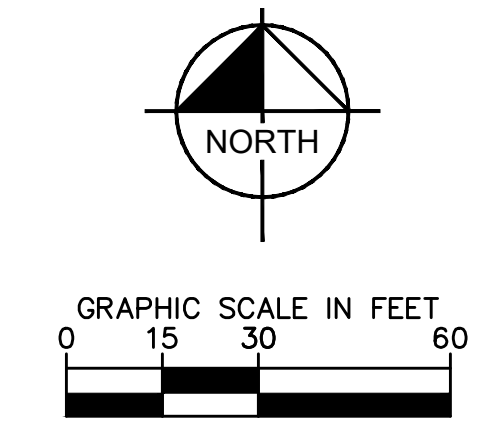


SEE SHEET L1.4 FOR CONTINUATION

PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	COMMON NAME
	GP	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY GINKGO
	PA3	PYRUS CALLERYANA 'ARISTOCRAT' TM	ARISTOCRAT FLOWERING PEAR
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	SM2	TOWN OF PARKER SEED MIX 3	TOWN OF PARKER SEED MIX 3



PARKER AND PINE FILING 1
 PARKER, CO
 CONSTRUCTION DOCUMENTS
 LANDSCAPE PLAN

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 CHECKED BY: CPH
 DATE: 08/11/20

PROJECT NO.
 096502001
 DRAWING NAME
 096502001LA
L1.3

NO.	REVISION	BY	DATE	APPR.

GENERAL LANDSCAPE SPECIFICATIONS

- A. SCOPE OF WORK**
1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.
 2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.
- B. PROTECTION OF EXISTING STRUCTURES**
1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BEST MANAGEMENT PRACTICES (BMP) DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MAINTENANCE OF TRAFFIC (MOT) THAT MAY BE REQUIRED FOR THE PROJECT.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION; THE SAFETY AND PROTECTION THEREOF; REPAIRING ANY DAMAGE THERE TO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- C. PROTECTION OF EXISTING PLANT MATERIALS**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC.. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF FOUR HUNDRED DOLLARS (\$400) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER INCHES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PLANTING AREAS WHICH WILL ADVERSELY AFFECT THE PLANT GROWTH. THE CONTRACTOR SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
 2. SEE TREE MITIGATION PLAN AND NOTES, IF APPLICABLE.
- D. MATERIALS**
1. GENERAL
MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)
 2. PLANT MATERIALS
a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL PLANT MATERIAL SHALL MEET OR EXCEED CURRENT AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1 AND THE COLORADO NURSERY ACT AND ACCOMPANYING RULES AND REGULATIONS. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS.
b. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY.
c. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM PROJECT LANDSCAPE ARCHITECT.
d. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE PROJECT LANDSCAPE ARCHITECT.
e. THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.
f. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.
- E. SOIL MIXTURE**
1. CONTRACTOR SHALL TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW:
 2. SOIL MIXTURE SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW. CONTRACTOR TO SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.
a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT OPENINGS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEIOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND HAVE A PH BETWEEN 5.5 AND 7.5. SUBMIT SOIL SAMPLE AND PH TESTING RESULTS FOR APPROVAL.
b. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND.
 3. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT THE PROJECT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.
- F. WATER**
1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.... IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.
* WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.
- G. FERTILIZER**
1. CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.
* FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.
- H. MULCH**
1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES CLEAR MULCH FROM EACH PLANTS CROWN (BASE) OR AS SHOWN IN PLANTING DETAILS. MULCH SHALL BE DOUBLE SHREDDED HARDWOOD MULCH. DYED MULCH IS NOT ACCEPTABLE. SUBMIT SAMPLES TO PROJECT LANDSCAPE ARCHITECT FOR APPROVAL.
 2. MULCH SHALL BE PROVIDED OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE RING (Ø MINIMUM) PLANTED UNDER THIS CONTRACT, AS WELL AS FOR ANY EXISTING LANDSCAPE AREAS AS SHOWN ON PLANS.
- I. DIGGING AND HANDLING**
1. ALL TREES SPECIFIED SHALL BE BALLED AND BURLAPPED (B&B) UNLESS OTHERWISE APPROVED BY PROJECT LANDSCAPE ARCHITECT.
 2. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSPORT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILT-PRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

3. B&B AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.
- J. CONTAINER GROWN STOCK**
1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.
 2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
 3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.
- K. MATERIALS LIST**
1. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE PLANS SHALL GOVERN. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.
- L. FINE GRADING**
1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.
 2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH.
 3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.
- M. PLANTING PROCEDURES**
1. THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, BUILDING MATERIALS, AND TOXIC MATERIAL SHALL BE COMPLETELY REMOVED FROM PLANTING AREAS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS IN PLANTING AREAS WHICH WILL ADVERSELY AFFECT THE PLANT GROWTH, THE CONTRACTOR SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
 2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL COLORADO (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
 3. CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL PLANTING AREAS TO A MINIMUM DEPTH OF 36" OR TO NATIVE SOIL. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.
 4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.
 5. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK UPON ARRIVAL AT THE SITE. PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE SHALL BE EXERCISED.
 6. WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
 7. PRIOR TO EXCAVATION OF TREE OPENINGS, AN AREA EQUAL TO TWO TIMES THE DIAMETER OF THE ROOT BALL SHALL BE ROTO-TILLED TO A DEPTH EQUAL TO THE DEPTH OF THE ROOT BALL.
 8. EXCAVATION OF TREE OPENINGS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.
 9. IN CONTINUOUS SHRUB AND GROUND COVER BEDS, THE ROTO-TILLED PERIMETER SHOULD EXTEND TO A DISTANCE OF ONE FOOT BEYOND THE DIAMETER OF A SINGLE ROOT BALL. THE BED SHALL BE TILLED TO A DEPTH EQUAL TO THE ROOT BALL DEPTH PLUS 6".
 10. TREE OPENINGS FOR WELL DRAINED SOILS SHALL BE DUG SO THAT THE BOTTOM OF THE ROOT BALL WILL REST ON UNDISTURBED SOIL AND THE TOP OF THE ROOT BALL WILL BE FLUSH WITH FINISH GRADE. IN POORLY DRAINED SOILS THE TREE OPENING SHALL BE DUG SO THAT THE ROOT BALL RESTS ON UNDISTURBED SOIL AND THE TOP OF THE ROOT BALL IS 1" ABOVE FINISH GRADE. PLANT PIT WALLS SHALL BE SCARIFIED PRIOR TO PLANT INSTALLATION.
 11. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
 12. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION 'E'.
 13. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMING).
 14. AMEND PINE AND OAK PLANT OPENINGS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT OPENINGS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
 15. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET, ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE.
 16. ALL BURLAP, ROPE, WIRES, BASKETS, ETC., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
 17. TREES SHALL BE PRUNED, IN ACCORDANCE WITH ANSI A-300, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST.
 18. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOWN ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6". REMOVE AND DISPOSE ALL DEBRIS MIX TOP 4" OF THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
 19. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.
 20. ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S RECOMMENDATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)
- N. LAWN SODDING**
1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
 2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
 3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.
 4. SODDING
a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.
b. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID

- UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SO AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.
 6. LAWN MAINTENANCE
a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"x12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK, INCLUDING REGRADING IF NECESSARY.
b. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.
- O. CLEANUP**
1. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM CONTRACTORS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.
- P. PLANT MATERIAL MAINTENANCE**
1. ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, PRUNING AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.
- Q. FINAL INSPECTION AND ACCEPTANCE OF WORK**
1. FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.
- R. WARRANTY**
1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.
2. ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.
3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE, THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH.

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	MATURE H x W	
	GP	21	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY GINKGO	B & B	2" CAL MIN	12'-14" HT MIN	40 X 20'	
	PA3	21	PYRUS CALLERYANA 'ARISTOCRAT' TM	ARISTOCRAT FLOWERING PEAR	B & B	2" CAL MIN	8' - 10' HT. MIN.	15 X 12'	
	QR	6	QUERCUS ROBUR	ENGLISH OAK	B & B	2" CAL MIN	12'-14" HT MIN	75 X 75'	
	TG	39	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	B & B	2" CAL MIN	8' - 10' HT. MIN.	30 X 25'	
	UA	12	ULMUS X 'ACCOLADE'	ACCOLADE ELM	B & B	2" CAL MIN	10' - 12' HT. MIN.	50 X 25'	
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING	SIZE	REMARKS	
	JH	6	JUNIPERUS HORIZONTALIS	CREeping JUNIPER	5 GAL	SEE PLAN	36" SPRD MIN	1 X 7'	
	PA2	188	PEROVSKIA X 'LITTLE SPIRE'	LITTLE SPIRE RUSSIAN SAGE	5 GAL	SEE PLAN	18" FULL	2 X 2'	
	PB	440	PENNSETUM ALOPECUROIDES 'LITTLE BUNNY'	LITTLE BUNNY FOUNTAIN GRASS	5 GAL	SEE PLAN	12" FULL	1 X 1'	
	RA	93	RIBES ALPINUM 'GREEN MOUND'	GREEN MOUND ALPINE CURRANT	5 GAL	SEE PLAN	18" FULL	3 X 3'	
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACING	SPACING	REMARKS
	KB	37,335 SF	KEN-TEX BLUEGRASS	KEN-TEX BLUEGRASS	SOD				
	RM	3,742 SF	RIVER ROCK MULCH 2-6"	3" DEPTH					
	SM2	657,729 SF	TOWN OF PARKER SEED MIX 3	TOWN OF PARKER SEED MIX 3	SEED				

NO.	REVISION	BY	DATE

Kimley»Horn
2020 KIMLEY-HORN AND ASSOCIATES, INC.
4582 South Ulster Street, Suite 1500
Denver, Colorado 80237 (303) 228-2300

DESIGNED BY: NBB
DRAWN BY: NBB
CHECKED BY: CPH
DATE: 08/11/20

PARKER AND PINE FILING 1
PARKER, CO
CONSTRUCTION DOCUMENTS
LANDSCAPE NOTES AND SCHEDULE

PROJECT NO.
096502001

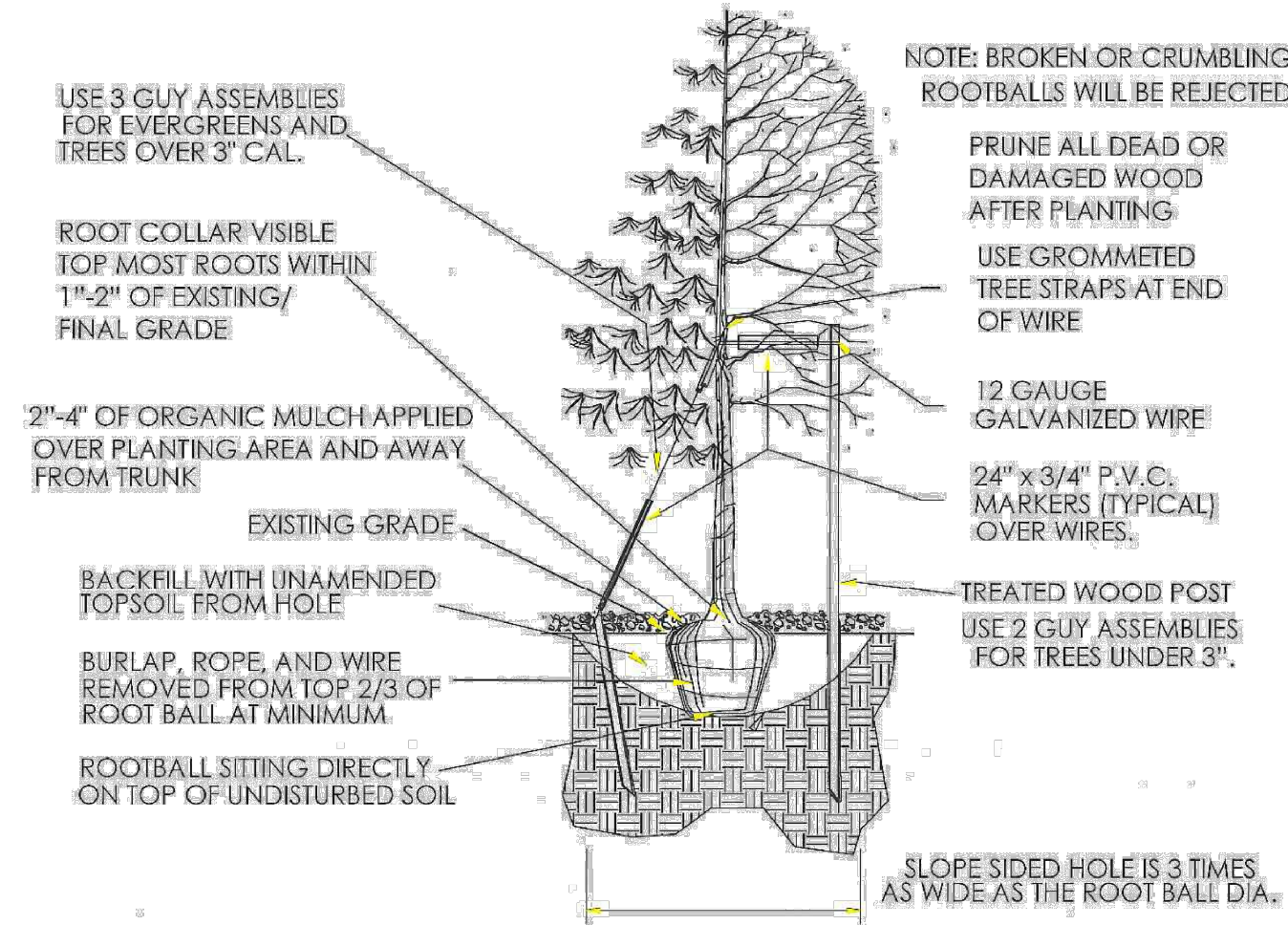
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TOWN OF PARKER PLANTING STANDARDS



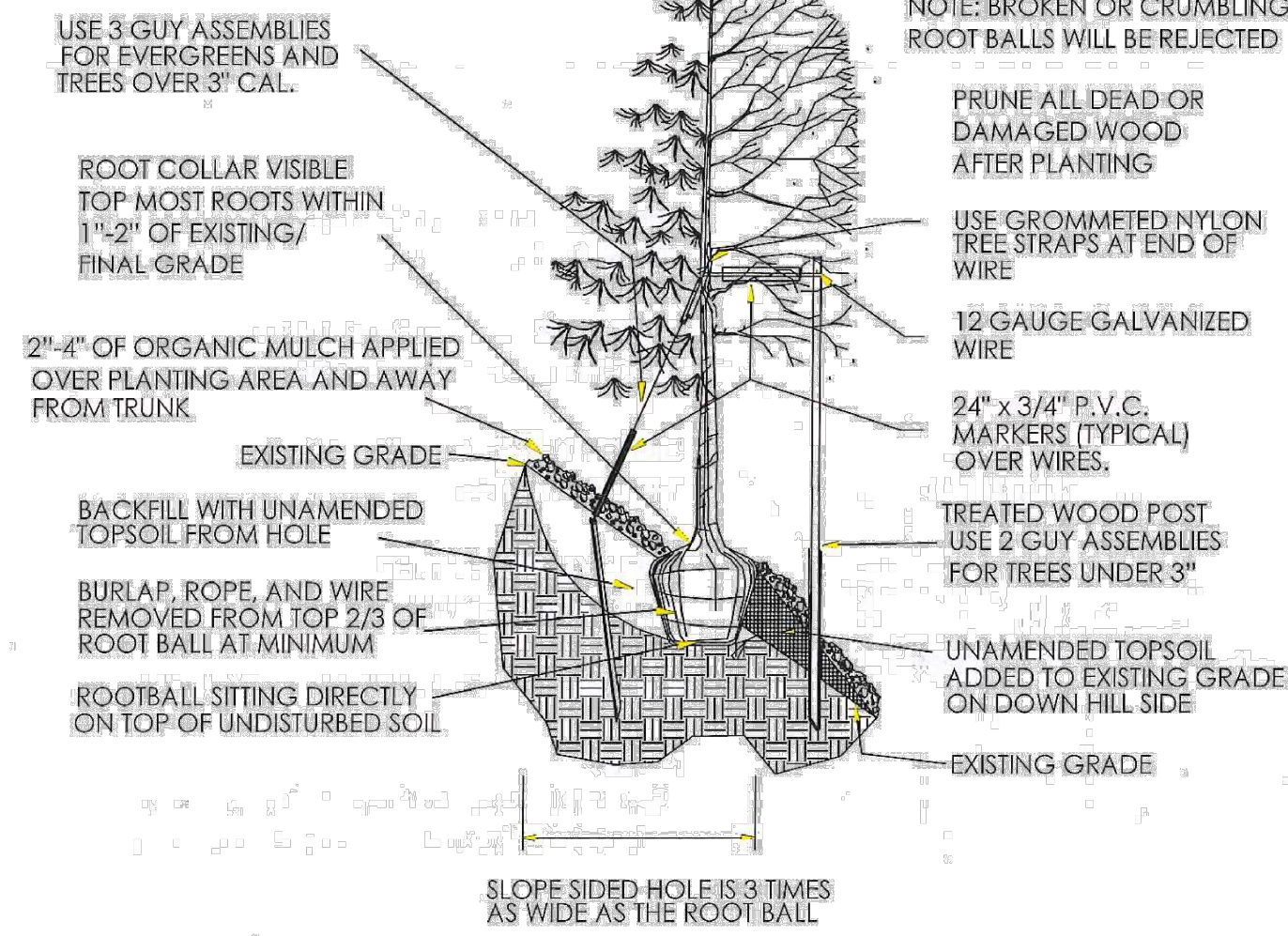
- Excavate planting holes with sloping sides. Make excavations at least three times as wide as the root ball diameter and no deeper than the distance from the top most roots in the root ball to the bottom of the root ball to allow for setting. Do not disturb soil at bottom of planting holes, but do score the sides of the planting hole. The planting area shall be loosened and aerated at least three times the diameter of the root ball. Backfill shall consist of existing on site topsoil - no amendments shall be used unless otherwise specified.
- Trees shall be planted with the root collar/flare visible above grade AND two or more structural roots located within the top 1" to 2" of the root ball/finished grade measured 3" to 4" from trunk. This includes trees that are set on slopes (see slope planting detail). Trees that do not have a visible root collar shall be rejected. Do not cover the root ball with soil.
- When root ball will remain intact, cut off bottom 1/2 of wire basket before placing tree in hole, cut off remainder of basket AFTER tree is set in hole, remove basket completely. At a minimum, the top 2/3 of the burlap and basket shall be removed from the root ball on all trees. Remove all nylon ties, twine, rope and burlap. Remove unnecessary packing material.
- Form soil into a 3" to 5" tall watering ring (saucer) around planting area. This is not necessary in irrigated turf areas. Apply 2" to 4" depth of specified mulch over planting area and inside saucers, away from trunk.
- Staking and guying of trees is optional in most planting situations. In areas of extreme winds, or on steep slopes, staking may be required to stabilize trees. Staking and guying must be removed within 1 year of planting date.
- Tree wrap is not to be used on any new plantings, except in late fall planting situations, and only then after consultation with the Town Arborist.
- Resetting of improperly planted trees will only be allowed if it is determined that doing so will in no way compromise the root ball, and shall only be done with approval of the Town Arborist.

TOWN OF PARKER LANDSCAPE MAINTENANCE NOTES

- ALL PLANTINGS SHALL BE MAINTAINED IN A HEALTHY AND ATTRACTIVE MANNER, AS DETERMINED BY THE TOWN. MAINTENANCE SHALL BE CONDUCTED BY THE PROPERTY OWNER OF RECORD, THE PROPERTY OWNER'S AGENT OR TENANT OR A HOMEOWNERS ASSOCIATION WHICH HAS ASSUMED LANDSCAPE MAINTENANCE RESPONSIBILITY.
- ALL ORNAMENTAL LANDSCAPING SHALL BE MAINTAINED FREE FROM DISEASE, PESTS, WEEDS, AND LITTER. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, WATERING, FERTILIZING, WEEDING, CLEANING, MOWING, EDGING, MULCHING, PRUNING, TRIMMING, SPRAYING, CULTIVATING, OR OTHER MAINTENANCE AS NEEDED AND IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES. AREAS OF NATIVE OR NATURALIZED LANDSCAPE ARE EXEMPT FROM THIS LEVEL OF MAINTENANCE. ACCEPTABLE MAINTENANCE OF NATIVE PLANTS INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF DEAD OR DISEASED PLANTS, WEED CONTROL AND SEASONAL MOWING.
- DEAD PLANT MATERIALS SHALL BE REMOVED AND REPLACED WITH HEALTHY PLANTING MATERIALS OF COMPARABLE SIZE AND SPECIES THAT MEET THE ORIGINAL INTENT OF THE APPROVED LANDSCAPE DESIGN WITHIN FORTY-FIVE (45) DAYS OF THEIR DEATH, UNLESS SEASONAL CONDITIONS PROHIBIT REMOVAL AND REPLACEMENT. IN SUCH CASE, THE REMOVAL AND REPLACEMENT SHALL OCCUR WITHIN A REASONABLE PERIOD OF TIME APPROVED BY THE TOWN.
- NON-LIVING LANDSCAPE MATERIALS SUCH AS ROCK, STONE, BARK CHIPS AND SHAVINGS WHICH NO LONGER COVER THE AREA IN WHICH THEY WERE ORIGINALLY DEPOSITED SHALL BE REGULARLY REPLENISHED TO MAINTAIN THE FULL COVERAGE TO A MINIMUM DEPTH OF THREE (3) INCHES FOR ROCK MULCHES AND FOUR (4) INCHES FOR WOOD MULCH.
- LANDSCAPING STRUCTURAL FEATURES (E.G. FENCING, WALLS, PLANTER BOXES) AND SITE FURNISHINGS SHALL BE MAINTAINED IN A SOUND, STRUCTURAL AND ATTRACTIVE CONDITION. IRRIGATION SYSTEMS ARE TO BE MONITORED AND ADJUSTED PERIODICALLY TO ENSURE THAT THE WATER DEMANDS OF ALL PLANT MATERIALS ARE BEING MET.
- IRRIGATION SYSTEM REPAIRS SHALL BE MADE WITHIN SEVEN (7) DAYS OF DISCOVERY OF DAMAGE, UNLESS SEASONAL CONDITIONS PROHIBIT REPAIRS.
- LANDSCAPE AREAS SHALL BE FREE FROM TRASH AND DEBRIS.
- FAILURE TO REPLACE DEAD LANDSCAPE MATERIALS WITHIN A REASONABLE PERIOD OF TIME, AS SPECIFIED IN PARAGRAPH (2) ABOVE, SHALL BE CONSIDERED A VIOLATION OF THE SITE PLAN APPROVAL AND IS SUBJECT TO ENFORCEMENT AND PENALTY PROVISIONS OF THIS TITLE.

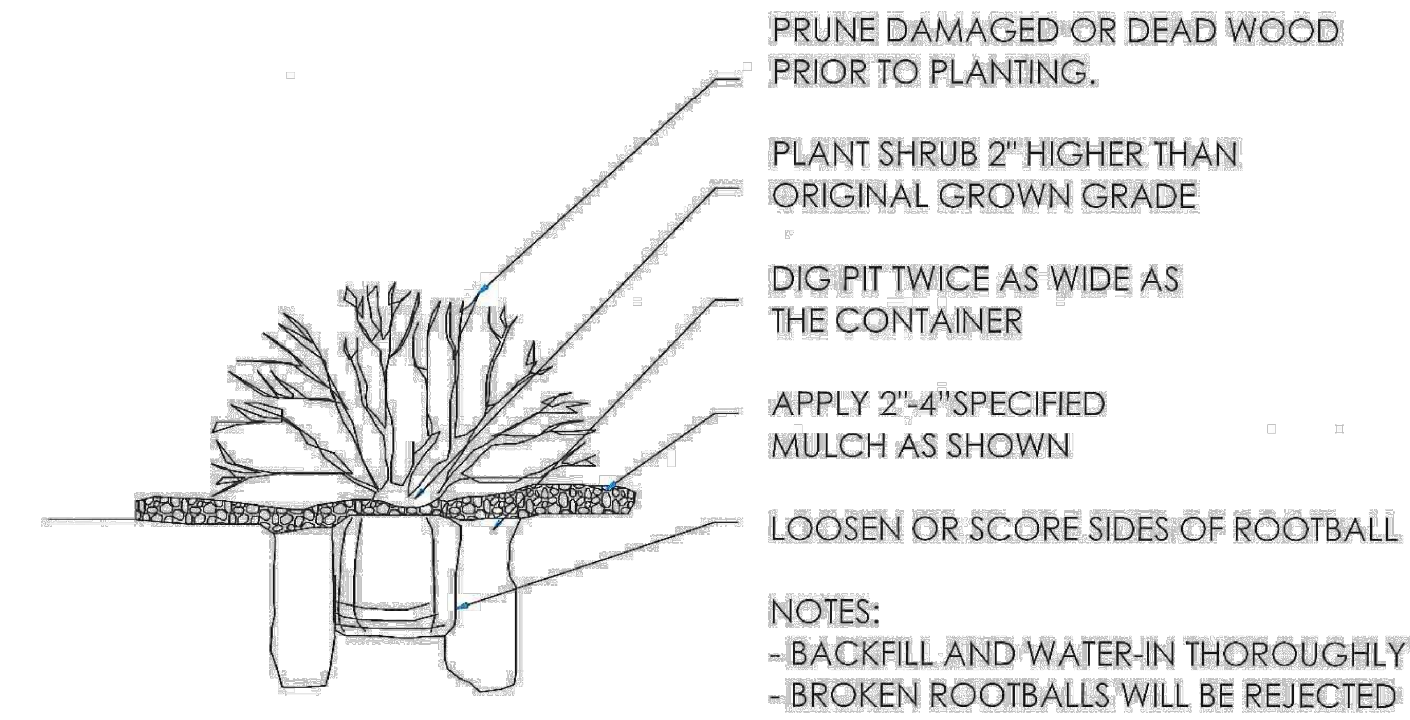
TOWN OF PARKER PLANTING STANDARDS

TOWN OF PARKER TREE PLANTING DETAIL - SLOPES



TOWN OF PARKER PLANTING STANDARDS

TOWN OF PARKER PLANTING DETAIL - SHRUBS

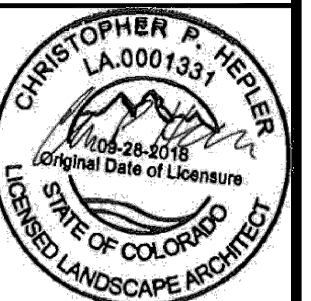


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DESIGNED BY: NBB
 DRAWN BY: NBB
 CHECKED BY: CPH
 DATE: 08/11/20

PARKER AND PINE FILING 1
 PARKER, CO
 CONSTRUCTION DOCUMENTS
 LANDSCAPE DETAILS



PROJECT NO.
096502001

DRAWING NAME
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 THIS DOCUMENT, WHETHER PRINTED OR ELECTRONIC, IS THE PROPERTY OF KIMLEY-HORN AND ASSOCIATES, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED, COPIED, STORED IN A RETRIEVING SYSTEM, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

GENERAL IRRIGATION SPECIFICATIONS AND NOTES

- THE SYSTEM SHALL BE DESIGNED TO PROVIDE 100% COVERAGE. ANY CHANGES MADE IN THE LAYOUT DUE TO FIELD CONDITIONS SHALL BE IN ACCORDANCE WITH THESE STANDARDS. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANS OR SPECIFICATIONS PRIOR TO BEGINNING OR CONTINUING WORK. THIS PLAN IS SCHEMATIC AND DUE TO THE NATURE OF CONSTRUCTION SLIGHT FIELD MODIFICATIONS MAY BE NECESSARY TO IMPLEMENT PLAN.
- THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
- ALL CONSTRUCTION SHALL CONFORM TO TOWN, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
- VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL FIELD VERIFY.
- CONTRACTOR TO VERIFY ACTUAL AVAILABLE WATER PRESSURE BEFORE BEGINNING INSTALLATION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AVAILABLE WATER PRESSURE EXCEEDS 5 PSI HIGHER OR LOWER THAN AVAILABLE WATER PRESSURE. REFER TO CRITICAL ANALYSIS FOR ASSUMED STATIC PRESSURE.
- CONTRACTOR TO FIELD VERIFY ALL POINT OF CONNECTION SOURCE INFORMATION INCLUDING PSI AND GPM PRIOR TO CONSTRUCTION.
- IRRIGATION DESIGN IS SCHEMATIC ONLY. FULL AND COMPLETE SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW BY THE OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN FOR PLANTER BED AND TREE LOCATIONS TO ENSURE ALL PLANT MATERIAL IS COVERED BY 100% HEAD-TO-HEAD IRRIGATION.
- CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION BEFORE RECEIVING FINAL PAYMENT.
- IRRIGATION CONTRACTOR TO COORDINATE POWER SUPPLY TO ELECTRIC CONTROLLERS WITH ELECTRICAL CONTRACTOR.
- IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION.
- IRRIGATION LATERAL LINES, MAIN LINES AND EQUIPMENT MAY BE SHOWN OUTSIDE PROPERTY LINES ON THIS PLAN. ALL IRRIGATION LINES AND EQUIPMENT ARE TO BE WITHIN AND IDENTIFIED WITHIN THE LIMITS OF THE PROPERTY LINE.
- LOCATE ALL IRRIGATION LINES WITHIN LANDSCAPED AREAS WHENEVER POSSIBLE. ALL LINES UNDER PAVEMENT MUST BE SLEEVED. ALL VALVES SHALL BE LOCATED WITHIN LANDSCAPED AREAS, AS SPECIFIED.
- IRRIGATION SYSTEMS CONNECTED TO POTABLE WATER SUPPLY, SHALL HAVE A BACKFLOW PREVENTER INSTALLED.
- SUPPLY LINE AND METER TO BE PROVIDED BY GENERAL CONTRACTOR. BACKFLOW PREVENTER TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BEGIN AFTER THE IRRIGATION WATER METER.
- INSTALL ALL BACKFLOW PREVENTION DEVICES AND ALL PIPING BETWEEN THE POINT OF CONNECTION AND THE BACKFLOW PREVENTER AS PER LOCAL CODES. FINAL LOCATION SHALL BE DETERMINED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- CONTRACTOR TO COORDINATE LOCATION OF ALL METERS AND BACKFLOW ASSEMBLIES WITH PROJECT OWNER.
- THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR SLEEVING AND DIRECTIONAL BORES.
- EXISTING TREES TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DO NOT TRENCH OR EXCAVATE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE.
- ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF THE SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN SHALL PENETRATE UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN THE PIPE IT CARRIES. ALL IRRIGATION SLEEVING TO BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. SEE SLEEVING DETAIL.
- ALL PRESSURIZED MAINLINES AND LATERALS UNDER PAVEMENT SHALL BE WITHIN SLEEVES AS NOTED. WHERE ELECTRIC OR HYDRAULIC VALVE CONTROL LINES PASS THROUGH A SLEEVE WITH OTHER MAIN OR LATERAL LINES THEY SHALL BE CONTAINED WITHIN A SEPARATE, SMALLER CONDUIT.
- SLEEVES UNDER EXISTING PAVEMENT MUST BE DIRECTIONAL BORE. OPEN CUT IS NOT AN OPTION.
- NUMBER THE TOP OF ALL VALVE BOX LIDS WITH MINIMUM 1" HEIGHT BLACK LETTERS TO CORRESPOND TO AUTOMATIC AND GATE VALVE DESIGNATIONS. ALL HOSE BIBB VALVE BOXES SHALL BE LABELED IN A SIMILAR MANNER WITH THE DESIGNATION "HB". LETTER OUTSIDE OF TIME CLOCK CABINETS TO CORRESPOND WITH IRRIGATION CLOCK PROGRAM DESIGNATION.
- THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAINLINE.
- ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN VALVE BOXES.
- ALL UNSIZED PIPE SHALL BE 3/4" UNLESS OTHERWISE NOTED ON PLAN. SEE LATERAL PIPE SIZING REQUIREMENTS.
- LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. PIPE SIZES ON EITHER SIDE OF SECTION VALVES CONNECTING MAINLINE TO SECTION LATERAL SHALL BE ONE (1) PIPE SIZE LARGER THAN VALVE SIZE. WHERE MAINLINES RUN PARALLEL TO PAVEMENT OR CURBING, THE MAINLINE SHALL BE OFFSET 2'-0" FROM THE EDGE OF PAVEMENT OR CURB.
- IRRIGATION ZONES SHALL BE SEPARATED FOR HIGH AND LOW WATER USE REQUIREMENTS AND OPERATED ON DIFFERENT WATERING CYCLES. BUBBLERS, DRIPLINE, AND SPRAY HEADS SHALL BE SEPARATED ON DIFFERENT VALVES. AT NO TIME SHALL MULTIPLE IRRIGATION HEAD TYPES BE LOCATED ON THE SAME VALVE.
- ALL DRIP ZONES SHALL BE INSTALLED WITH A FLUSH VALVE AND DRIP INDICATOR.
- IRRIGATION CONTRACTOR TO COORDINATE WITH OWNER FOR FINAL CONTROLLER AND RAIN SENSOR LOCATIONS. THE CONTROLLER SHALL BE PLACED IN A LOCKING CABINET APPROPRIATE FOR ITS LOCATION. (INDOOR VS. OUTDOOR USE)
- IRRIGATION CONTRACTOR SHALL REVIEW WINTERIZATION PROCEDURES FOR IRRIGATION SYSTEM WITH OWNERS REPRESENTATIVE.
- LOCATE THE AUTOMATIC RAIN / FREEZE SENSOR SHUTOFF DEVICE IN AN AREA THAT IS UNOBSTRUCTED BY TREES, ROOF OVERHANGS, OR ANY OTHER OVERHEAD OBJECT. THE SENSOR SHALL NOT BE PLACED WITHIN THE SPRAY ZONE OF ANY SPRINKLER HEAD, INCLUDING OFF-SITE IRRIGATION. CONTRACTOR SHALL LOCATE SENSOR WITHIN CLOSE PROXIMITY TO THE IRRIGATION CONTROLLER.
- CONTRACTOR SHALL PERFORM HYDRO-TESTING OF MAIN LINES.

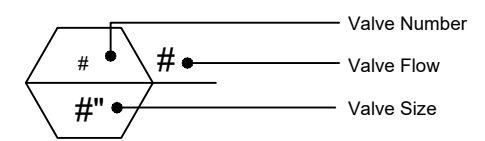
HYDRO-TESTING TO BE PERFORMED AS LISTED:

THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FORTY-EIGHT (48) HOURS IN ADVANCE OF TESTING. PRIOR TO BACKFILLING, CONTRACTOR SHALL FILL PIPING WITH WATER. IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, TAKING CARE TO PURGE THE AIR FROM IT. A SMALL, HIGH PRESSURE PUMP OR OTHER MEANS OF MAINTAINING A CONTINUOUS WATER SUPPLY SHALL BE CONNECTED TO THE PIPING AND SET SO AS TO MAINTAIN 125 PSI FOR TWO (2) HOURS WITHOUT INTERRUPTION. CONTRACTOR SHALL MAKE ANY NECESSARY CORRECTIONS AND RETEST THE SYSTEM UNTIL THE OWNER'S REPRESENTATIVE IS SATISFIED THAT THE SYSTEM IS REASONABLY SOUND.

- ALL WIRING FOR CONNECTION OF THE VALVES TO THE CONTROLLER SHALL FOLLOW MANUFACTURERS SPECIFICATIONS.
- ALL CONTROL WIRE SHALL BE INSTALLED IN A 1 1/2" ELECTRICAL CONDUIT.
- CONTRACTOR TO MINIMIZE IRRIGATION OVERTHROW TO IMPERVIOUS AND NATURAL AREAS THROUGH FIELD ADJUSTMENTS TO INDIVIDUAL HEADS.
- ALL UNIMPROVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR.
- ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL PLANTED.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	RAIN BIRD R-VAN-STRIP 1806-SAM-P45	137
	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	752
	TURF ROTARY, 8-14' 45-270 DEGREES AND 360 DEGREES, 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 RWS-M-B-C-SOCK	200
	MINI ROOT WATERING SYSTEM WITH 4.0" DIAMETER X 18.0" LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, AND SAND SOCK FOR SANDY SOIL.	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	RAIN BIRD XCZ-100-PRB-COM	10
	WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER, 0.3GPM TO 20GPM.	
	RAIN BIRD MDCFAP	3
	DRIPLINE FLUSH VALVE CAP IN COMPRESSION FITTING COUPLER.	
	RAIN BIRD OPERIND	10
	DRIPLINE SYSTEM OPERATION INDICATOR, STEM RISES 6" FOR CLEAR VISIBILITY WHEN DRIP SYSTEM IS CHARGED TO A MINIMUM OF 20PSI. INCLUDES 16" OF 1/4" DISTRIBUTION TUBING WITH CONNECTION FITTING PRE-INSTALLED.	
	AREA TO RECEIVE DRIPLINE	3,578 L.F.
	RAIN BIRD XFS-CV-06-12	
	XFS-CV ON-SURFACE LANDSCAPE DRIPLINE WITH A HEAVY-DUTY 4.3 PSI CHECK VALVE, 0.8 GPM EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. SPECIFY XF INSERT FITTINGS.	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	RAIN BIRD PEB	20
	1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	
	RAIN BIRD 44-LRC	1
	1" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.	
	RAIN BIRD PEB2 2"	1
	1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	
	WATTS LF909M1 2"	1
	LEAD FREE REDUCED PRESSURE BACKFLOW PREVENTER.	
	RAIN BIRD ESP12LXMEF-LXMSS WITH (02) ESPLXMSM12	1
	36 STATION COMMERCIAL CONTROLLER, STAINLESS STEEL PEDESTAL, FLOW SENSING, ESP12LXMEF-LXMSS-LXMSSPED WITH (02) ESPLXMSM12	
	RAIN BIRD WR2-RFS	1
	WIRELESS RAIN/FREEZE SENSOR.	
	RAIN BIRD FS-200-B	1
	2" FLOW SENSOR FOR USE WITH RAIN BIRD MAXICOM, SITECONTROL, AND ESP-LXD CENTRAL CONTROL SYSTEMS, BRASS MODEL. SUGGESTED OPERATING RANGE OF 4.9 GPM TO 294.0 GPM. SENSORS SHOULD BE SIZED FOR FLOW RATHER THAN PIPE SIZE.	
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	14,834 L.F.
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 PVC CLASS 200 IRRIGATION PIPE.	4,305 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING FOR CONSTRUCTION.	671.7 L.F.



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	DESIGN PSI	PSI	PSI @ POC	PRECIP
1	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIPLINE	10.48		30	39.44	54.72	0.96 in/h
2	RAIN BIRD PEB	1"	TURF ROTARY	19.93		40	49.53	71.89	0.39 in/h
3	RAIN BIRD PEB	1"	TURF ROTARY	20.27		40	49.29	71.85	0.40 in/h
4	RAIN BIRD PEB	1"	TURF ROTARY	26.36		45	56.66	73.60	0.43 in/h
5	RAIN BIRD PEB	1"	TURF ROTARY	26.71		40	52.15	68.96	0.44 in/h
6	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	9.00		30	41.65	57.03	0.89 in/h
7	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	11.50		30	44.45	59.99	0.90 in/h
8	RAIN BIRD PEB	1-1/2"	TURF ROTARY	30.10		45	57.01	74.68	0.44 in/h
9	RAIN BIRD PEB	1-1/2"	TURF ROTARY	30.25		45	57.10	74.80	0.44 in/h
10	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	10.50		30	43.43	59.92	0.87 in/h
11	RAIN BIRD PEB	1"	TURF ROTARY	28.85		40	52.70	76.58	0.39 in/h
12	RAIN BIRD PEB	1"	TURF ROTARY	28.52		40	52.59	76.27	0.40 in/h
13	RAIN BIRD PEB	1"	TURF ROTARY	11.88		40	46.94	63.29	0.37 in/h
14	RAIN BIRD PEB	1"	TURF ROTARY	11.88		40	46.36	62.70	0.39 in/h
15	RAIN BIRD PEB	1"	TURF ROTARY	18.01		40	48.25	64.94	0.73 in/h
16	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIPLINE	14.54		30	44.31	60.66	0.96 in/h
17	RAIN BIRD PEB	1-1/2"	TURF ROTARY	34.28		40	47.57	70.30	0.56 in/h
18	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	7.00		30	37.28	52.93	0.90 in/h
19	RAIN BIRD PEB	1-1/2"	TURF ROTARY	27.47		40	46.53	68.34	0.56 in/h
20	RAIN BIRD PEB	1-1/2"	TURF ROTARY	38.50		40	49.25	73.52	0.56 in/h
22	RAIN BIRD PEB	1"	TURF ROTARY	29.89		40	43.22	70.40	0.56 in/h
23	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	6.50		30	36.78	52.30	0.91 in/h
24	RAIN BIRD PEB	1"	TURF ROTARY	26.75		40	47.08	66.55	0.56 in/h
25	RAIN BIRD PEB	1"	TURF ROTARY	11.52		45	51.54	67.52	0.74 in/h
26	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIPLINE	10.76		30	42.83	58.71	0.96 in/h
27	RAIN BIRD PEB	1"	TURF ROTARY	28.93		45	58.10	76.11	0.61 in/h
28	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	3.50		30	32.91	48.15	0.90 in/h
29	RAIN BIRD PEB	1-1/2"	TURF ROTARY	31.66		40	43.92	68.75	0.55 in/h
30	RAIN BIRD PEB	1"	TURF ROTARY	21.91		40	44.97	60.90	0.54 in/h
Unknown	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	2.00		30	32.30	47.53	0.94 in/h

CRITICAL ANALYSIS

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P.O.C. NUMBER: 01

Water Source Information:

FLOW AVAILABLE

Water Meter Size: 2"

Flow Available: 120.00 gpm

PRESSURE AVAILABLE

Static Pressure at POC: 80.00 psi

Elevation Change: 5.00 ft

Service Line Size: 8"

Length of Service Line: 20.00 ft

Pressure Available: 78.00 psi

DESIGN ANALYSIS

Maximum Station Flow: 38.50 gpm

Flow Available at POC: 120.00 gpm

Residual Flow Available: 81.50 gpm

Critical Station: 11

Design Pressure: 40.00 psi

Friction Loss: 6.73 psi

Fittings Loss: 0.67 psi

Elevation Loss: 0.00 psi

Loss through Valve: 5.29 psi

Pressure Req. at Critical Station: 52.70 psi

Loss for Fittings: 0.76 psi

Loss for Main Line: 7.57 psi

Loss for POC to Valve Elevation: 0.00 psi

Loss for Backflow: 10.00 psi

Loss for Master Valve: 4.80 psi

Loss for Water Meter: 0.75 psi

Critical Station Pressure at POC: 76.58 psi

Pressure Available: 78.00 psi

Residual Pressure Available: 1.42 psi

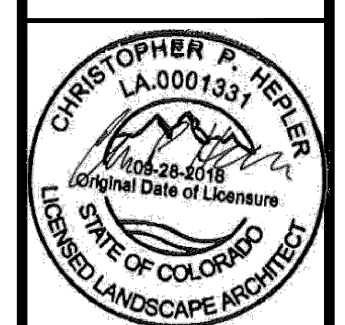
NO.	REVISION	BY	DATE	APPR.

Kimley»Horn

2020 KIMLEY-HORN AND ASSOCIATES, INC.
 4582 South Ulster Street, Suite 1500
 Denver, Colorado 80237 (303) 228-2300

DESIGNED BY: DLS
 DRAWN BY: JRK
 CHECKED BY: DLS
 DATE: 08/11/20

PARKER AND PINE FILING 1
 PARKER, CO
 CONSTRUCTION DOCUMENTS
 IRRIGATION DETAILS

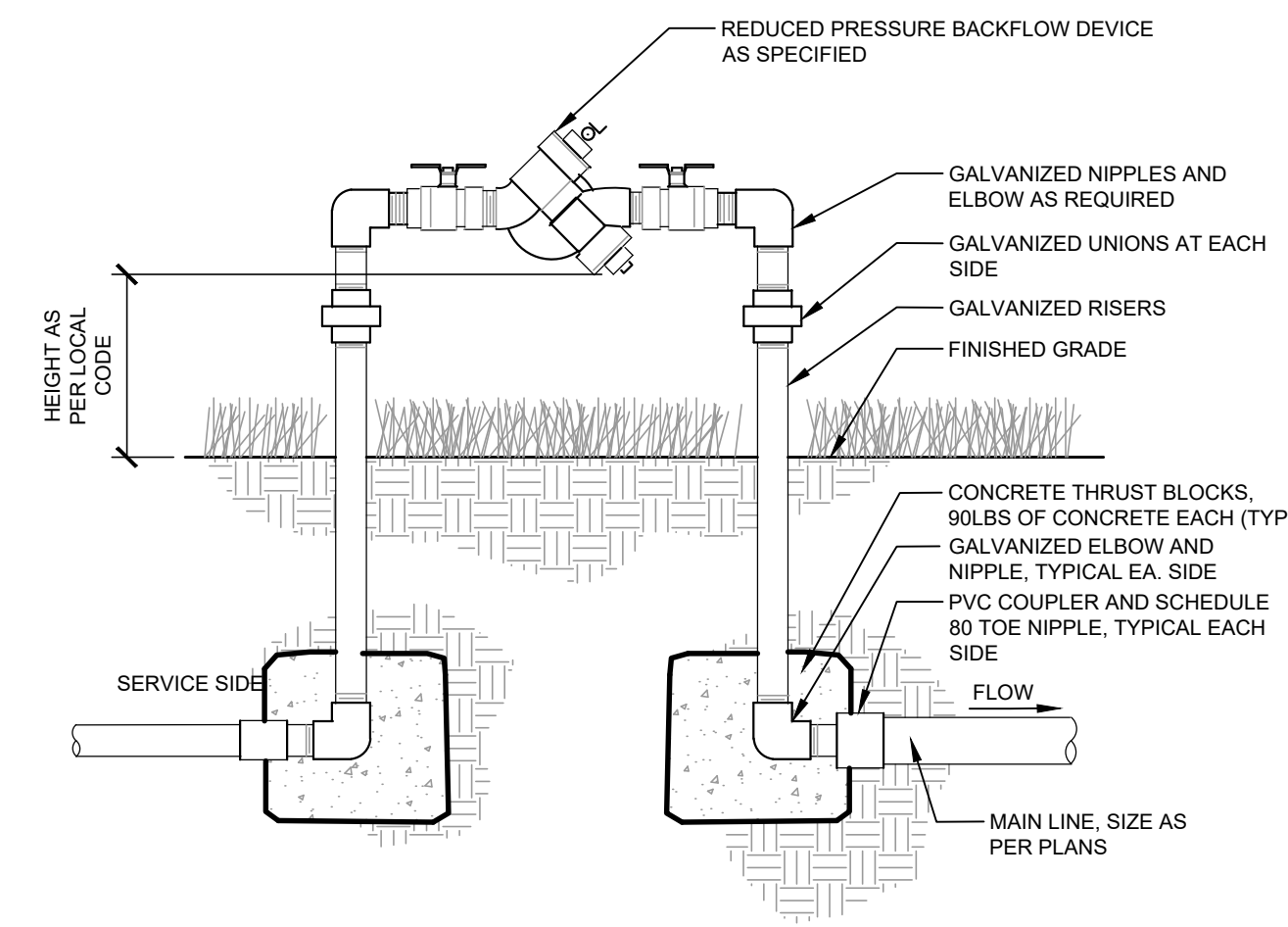


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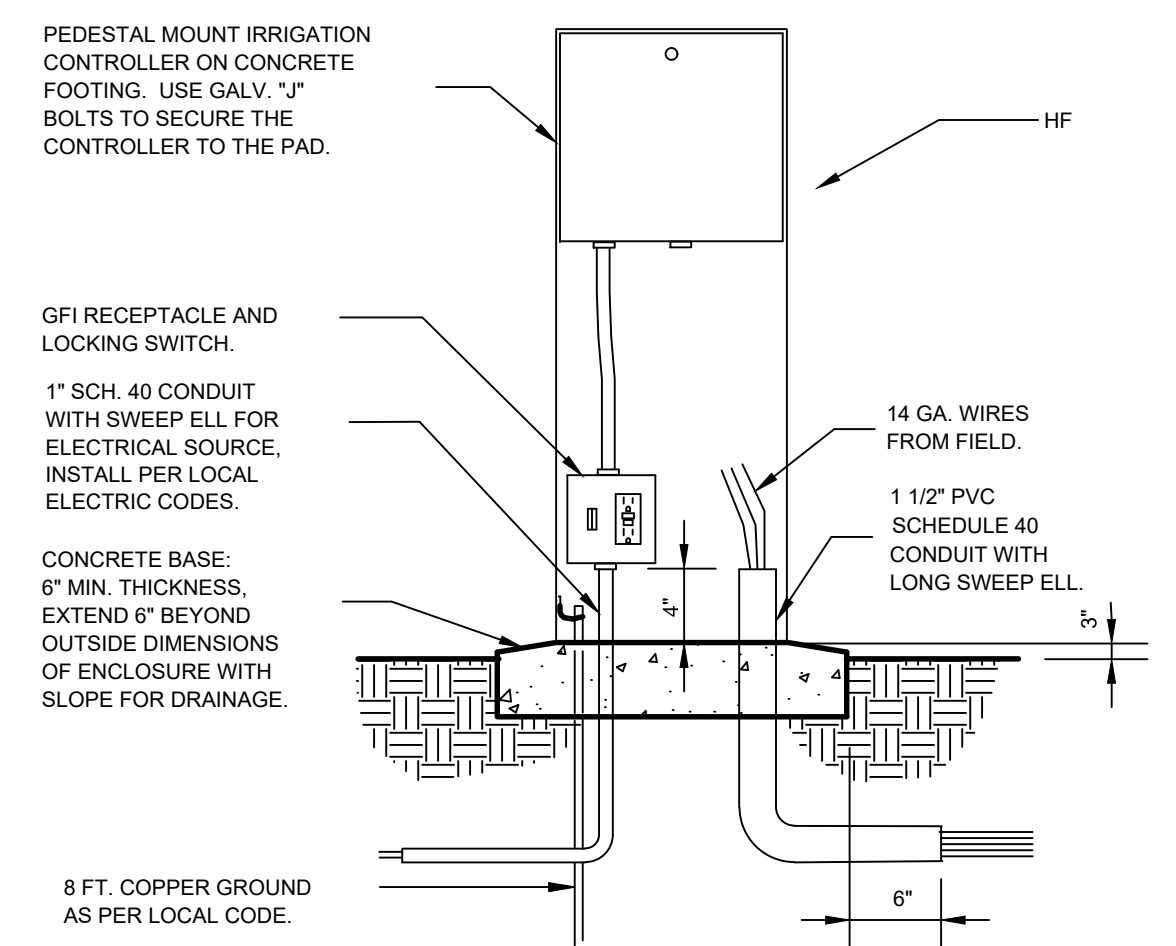
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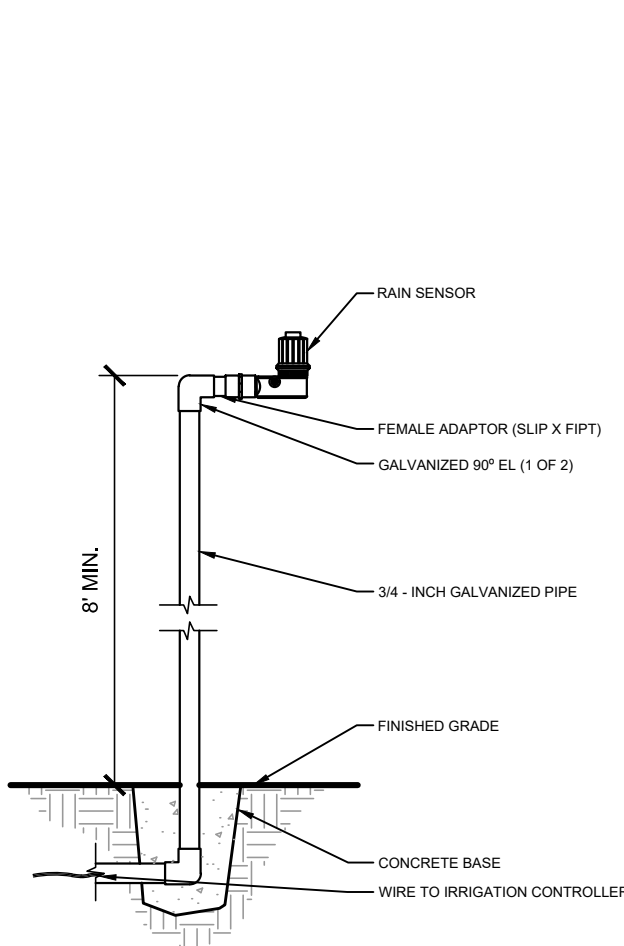
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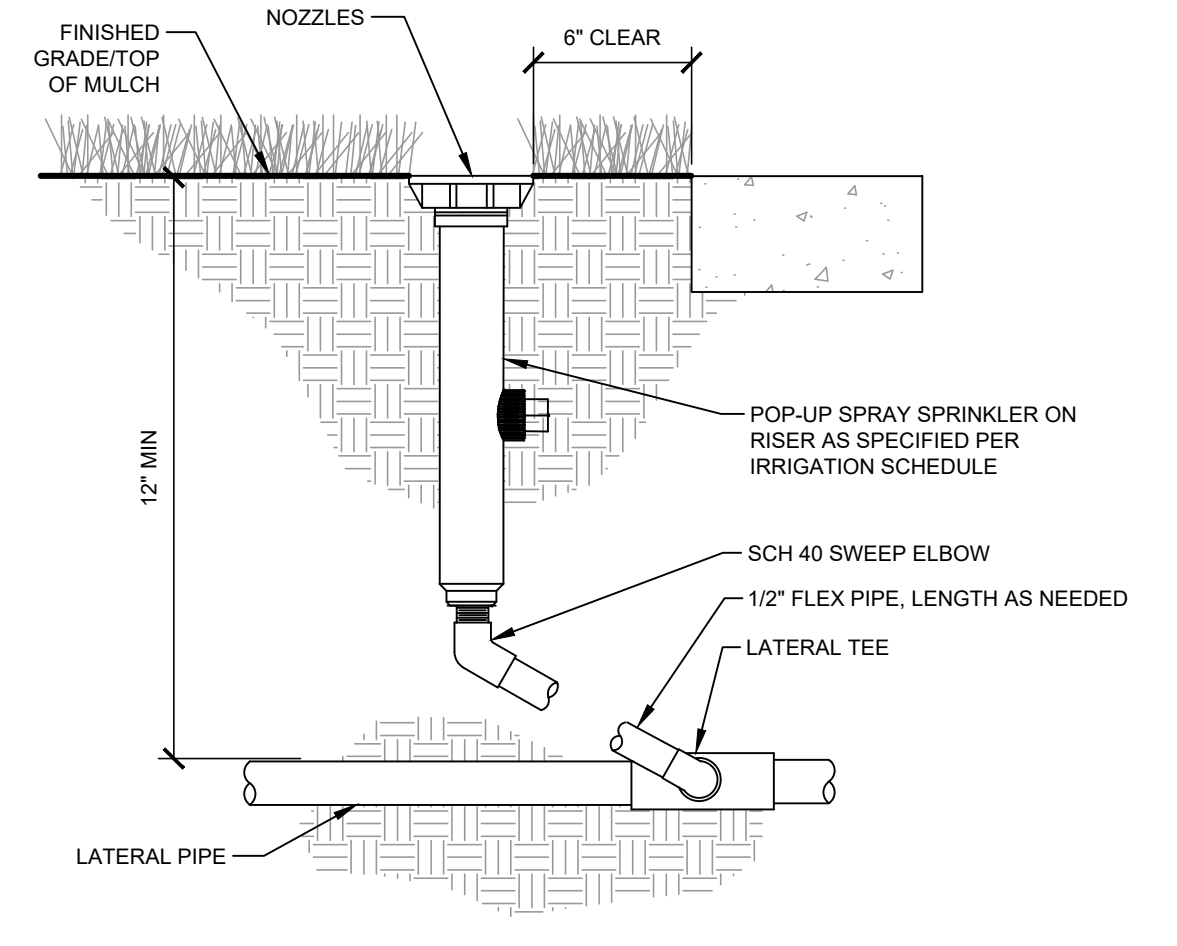
1 BACKFLOW PREVENTER
IR1.5 SECTION NTS



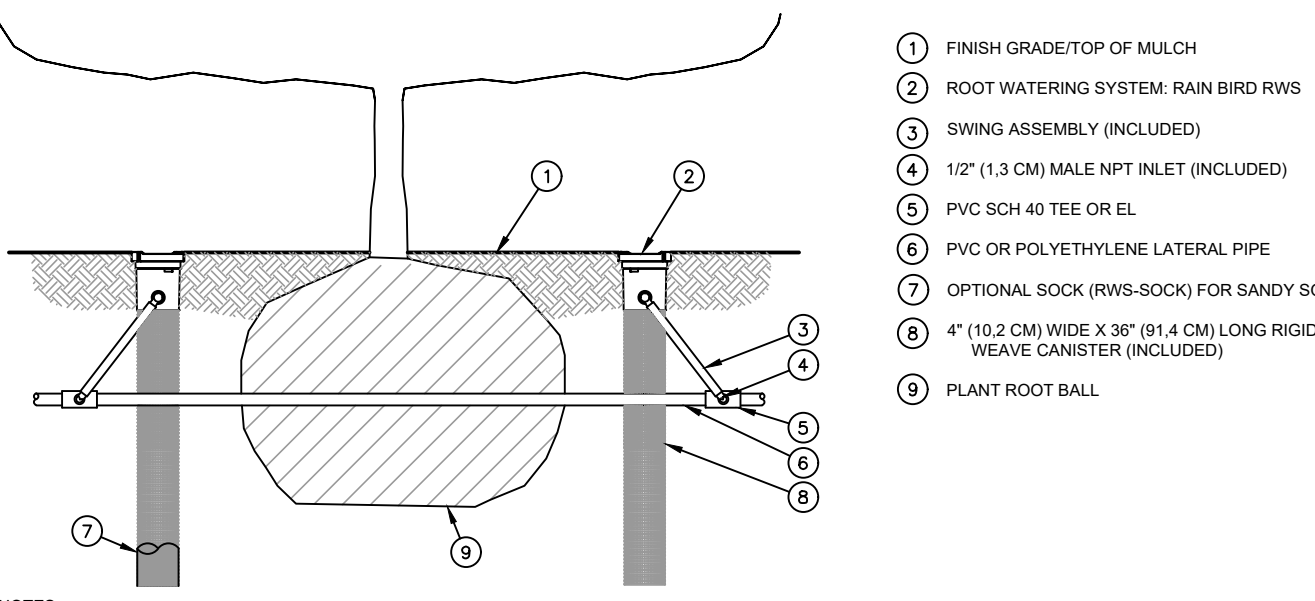
2 IRRIGATION CONTROLLER - PEDESTAL MOUNT
IR1.5 SECTION NTS



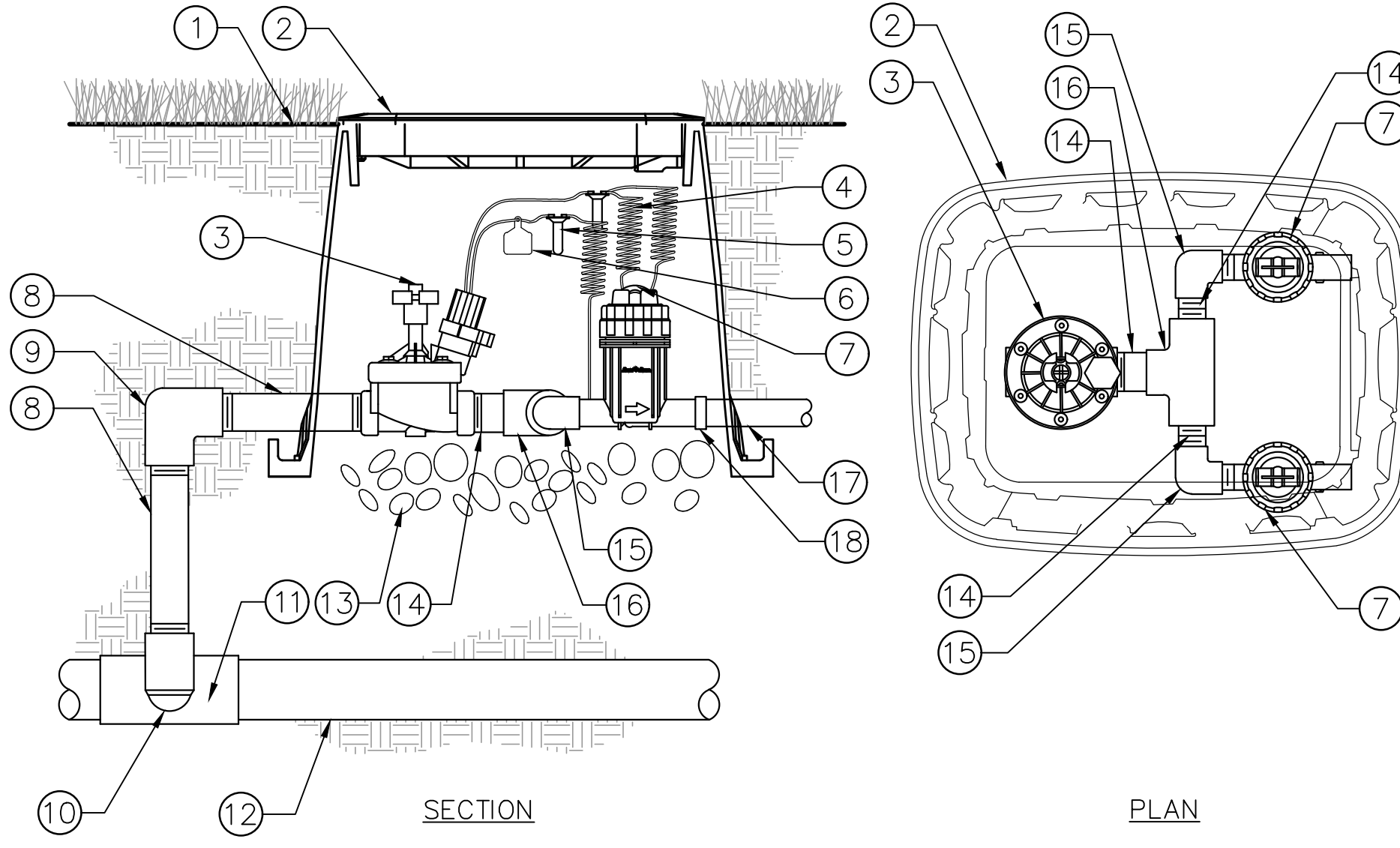
3 RAIN SENSOR - POLE MOUNT
IR1.5 SECTION NTS



4 TYPICAL SPRAY / ROTAR HEAD
IR1.5 SECTION NTS

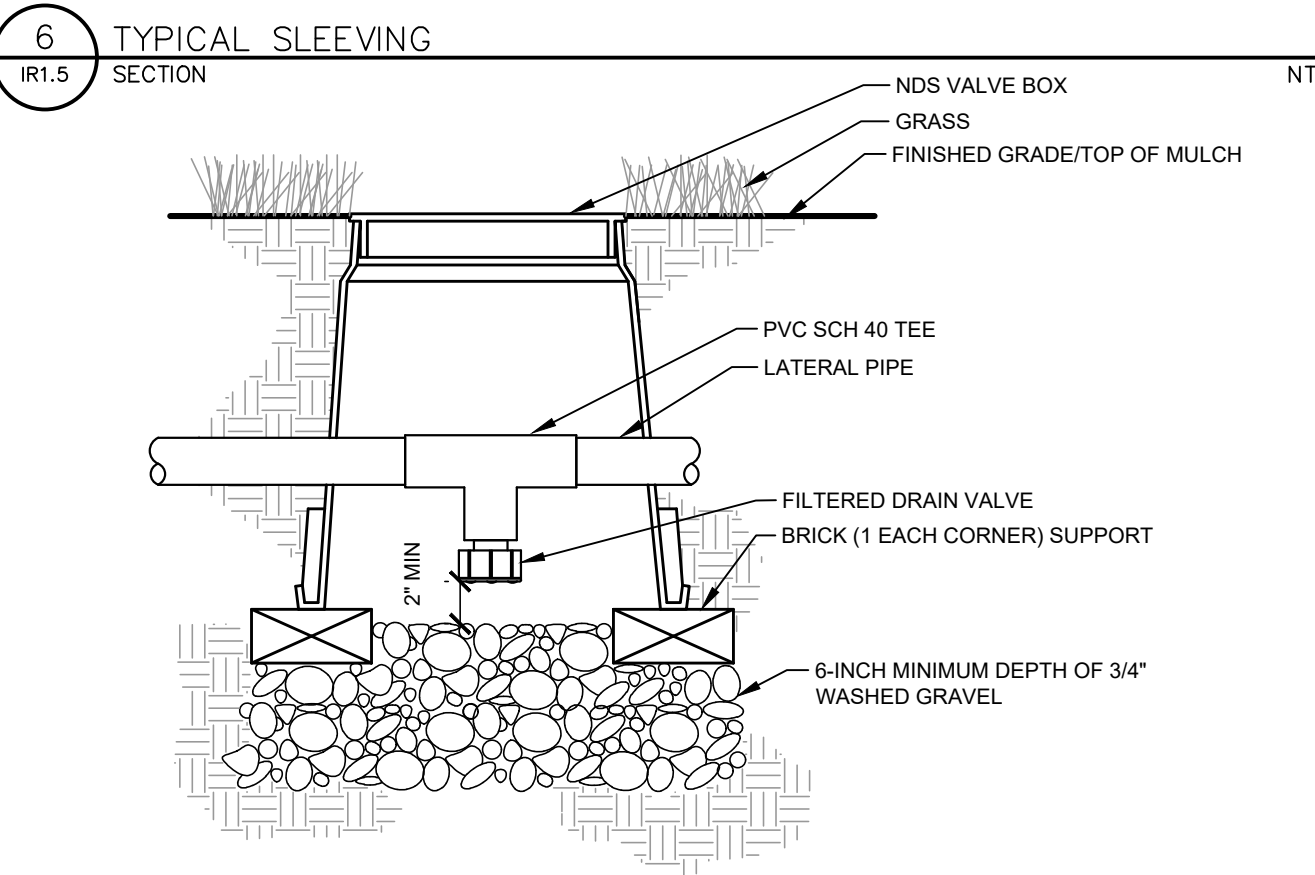


5 TYPICAL DRIPLINE
IR1.5 PLAN NTS

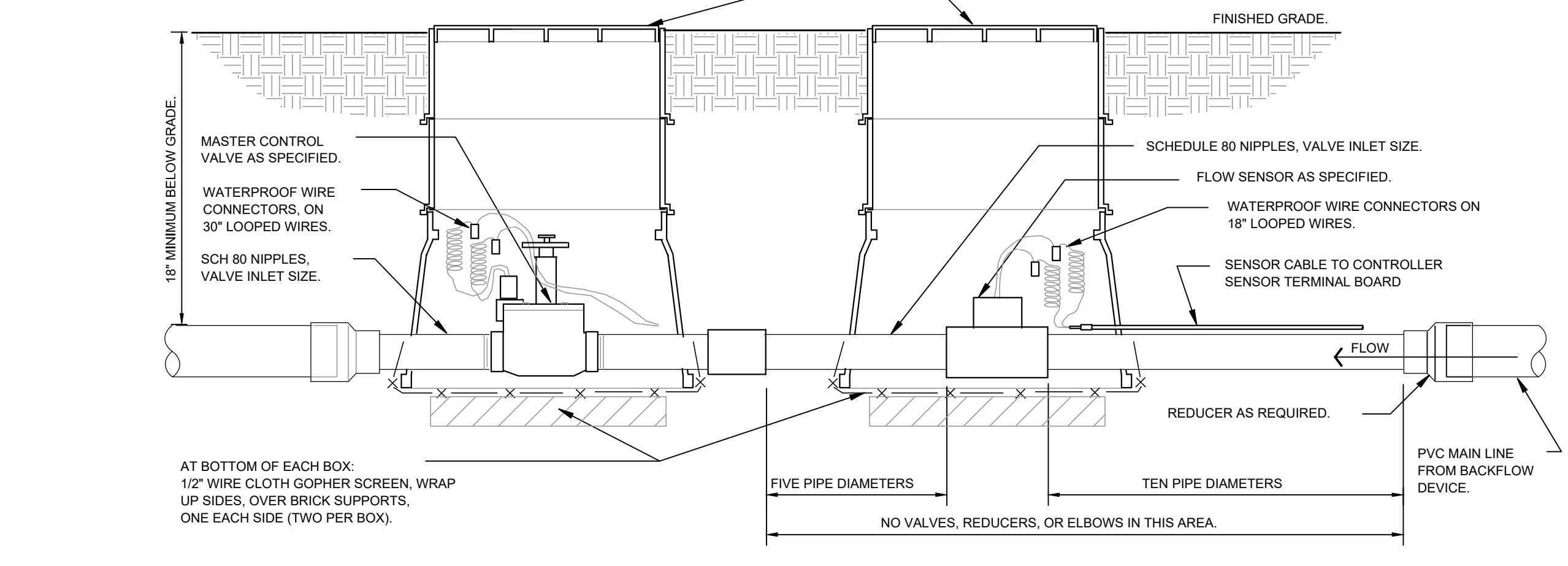


6 TYPICAL SLEEVING
IR1.5 SECTION NTS

- 1 FINISH GRADE/TOP OF MULCH
- 2 VALVE BOX WITH LOCKING COVER
- 3 REMOTE CONTROL VALVE
- 4 30-INCH LINEAR LENGTH OF WIRE, COILED
- 5 WATERPROOF CONNECTION
- 6 ID TAG
- 7 PRESSURE REGULATING QUICK CHECK BASKET FILTER
- 8 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- 9 PVC SCH 40 ELL
- 10 PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
- 11 PVC SCH 40 TEE OR ELL
- 12 MAINLINE PIPE COORDINATE WITH MEP FOR DEPTH AND CONNECTION
- 13 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- 14 PVC SCH 80 NIPPLE, CLOSE
- 15 PVC SCH 40 ELL
- 16 PVC SCH 40 TEE
- 17 LATERAL PIPE
- 18 PVC SCH 40 FEMALE ADAPTOR



7 DRIP ZONE VALVE KIT
IR1.5 SECTION / PLAN NTS



8 TYPICAL DRAIN VALVE
IR1.5 SECTION NTS

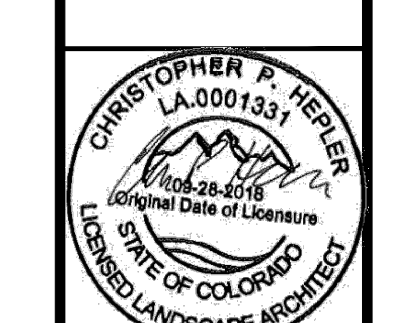
9 MASTER CONTROL VALVE / FLOW SENSOR ASSEMBLY
IR1.5 SECTION NTS

NO.	REVISION	BY	DATE	APPR

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 PARKER, CO
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PROJECT NO.
 096502001
 DRAWING NAME
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IR1.6