

Received 12-27-2024

PRELIMINARY TREE RETENTION PLAN

DUPONT BUSINESS PARK

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR
A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON.
THE CITY RESERVES THE RIGHT TO MAKE REVISIONS,
ADDITIONS, DELETIONS, OR MODIFICATIONS SHOULD
CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION.
THE CITY, BY APPROVING THESE DRAWINGS, ASSUMES NO
LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.

**NOTE
ALL EXISTING TREES WITHIN
THIS HATCHED AREA
ARE INCLUDED IN TREE
RETENTION PLAN FOR
DUPONT 243-WEST AND
ARE NOT INCLUDED HERE**

LEGEND

EXISTING TREE TO BE REMOVED

TREE RETENTION

TOTAL PROJECT ACREAGE: 5.64 ACRES

TOTAL # OF HEALTHY TREES: 119 TREES
TREE RET. REQ. (1.5 TREES PER ACRE): 9 TREES

PROJECTED TREE RETENTION: 18 TREES

EXCESS OF TREE RET. OVER TREE REQ. 9 TREES
HEALTHY TREES TO BE REMOVED 68 TREES

PROPERTY BOUNDARY

SEQUALITCHEW ROAD

PROPOSED BUILDING

NOT A PART
THIS PORTION TO BE DEVELOPED UNDER A
SEPARATE LAND USE APPLICATION AND PERMITS

PROPERTY BOUNDARY

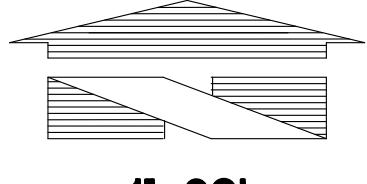
SEQUALITCHEW ROAD

PROPERTY BOUNDARY

LOT Y
CITY OF DUPONT BOUNDARY
LINE ADJUSTMENT NO. BLA 09-01
REC. NO. 20091215001

60' ACCESS AND UTILITIES EASE
PER REC. NO. 200911180327

OFFSITE TREES, TYP.
PROTECT DURING
CONSTRUCTION



1-20

1000

PRELIMINARY LANDSCAPE PLAN

FOR

DUPONT BUSINESS PARK

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.

CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

LEGEND

**EXISTING TREE TO BE RETAINED
PROTECT DURING CONSTRUCTION**

EXISTING TREE TO BE REMOVED

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PRELIMINARY LANDSCAPE PLAN FOR DUPONT BUSINESS PARK

AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696

For:

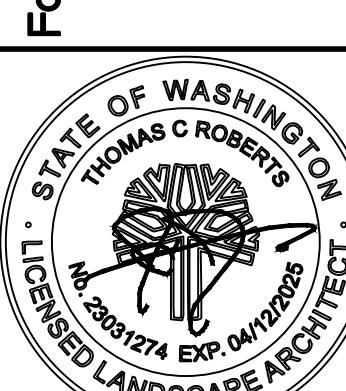
Barghausen
Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 barghausen.com

Job Number
18666
Sheet

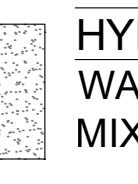
**NOT A PART
THIS PORTION TO BE DEVELOPED UNDER A
SEPARATE LAND USE APPLICATION AND PERMITS**

**PLANT SCHEDULE
FOR
DUPONT BUSINESS PARK**
A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

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BY: <u>CITY OF DUPONT</u> DATE: _____
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PLANT SCHEDULE FOR DUPONT BUSINESS PARK	
Title: <u>AVENUE 55, LLC 601 UNION STREET, SUITE 2930 SEATTLE, WA 98101 (206) 707-9696</u>	Revision: _____
1 12/23/24 TCR JMV JMV PER SITE PLAN	No. Date By Cld. Aper.
 For: <u>AVENUE 55, LLC 601 UNION STREET, SUITE 2930 SEATTLE, WA 98101 (206) 707-9696</u>	
Scale: _____	Designed TCR Drawn TCR Checked JMV Approved JMV Date 12/23/24
Horizontal N/A Vertical N/A	Horizontal N/A Vertical N/A
Xref: 18666	
Job Number: <u>18666</u>	
Sheet: <u>4</u>	
Page: <u>18666 (Preliminary) Rev. 18666</u> Drawing Date: <u>12/25/2024 3:01 PM</u>	

PLANT SCHEDULE

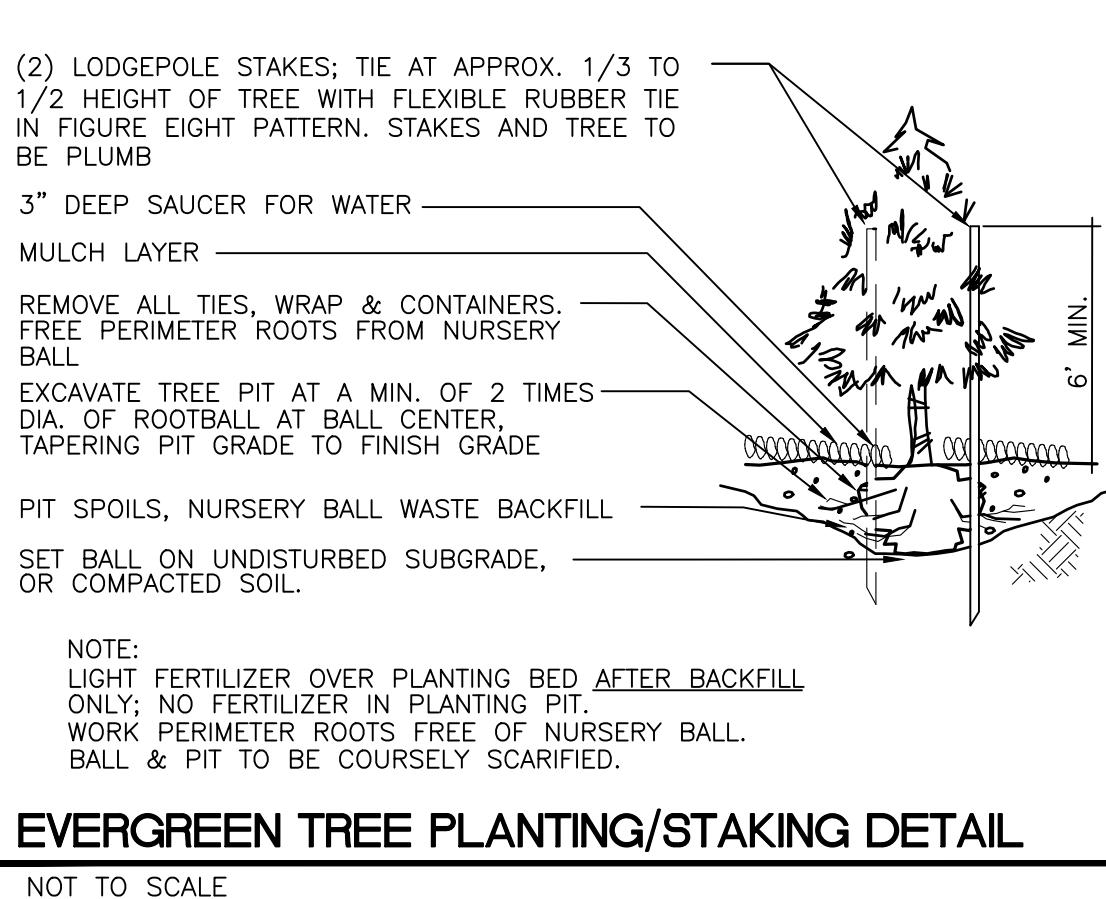
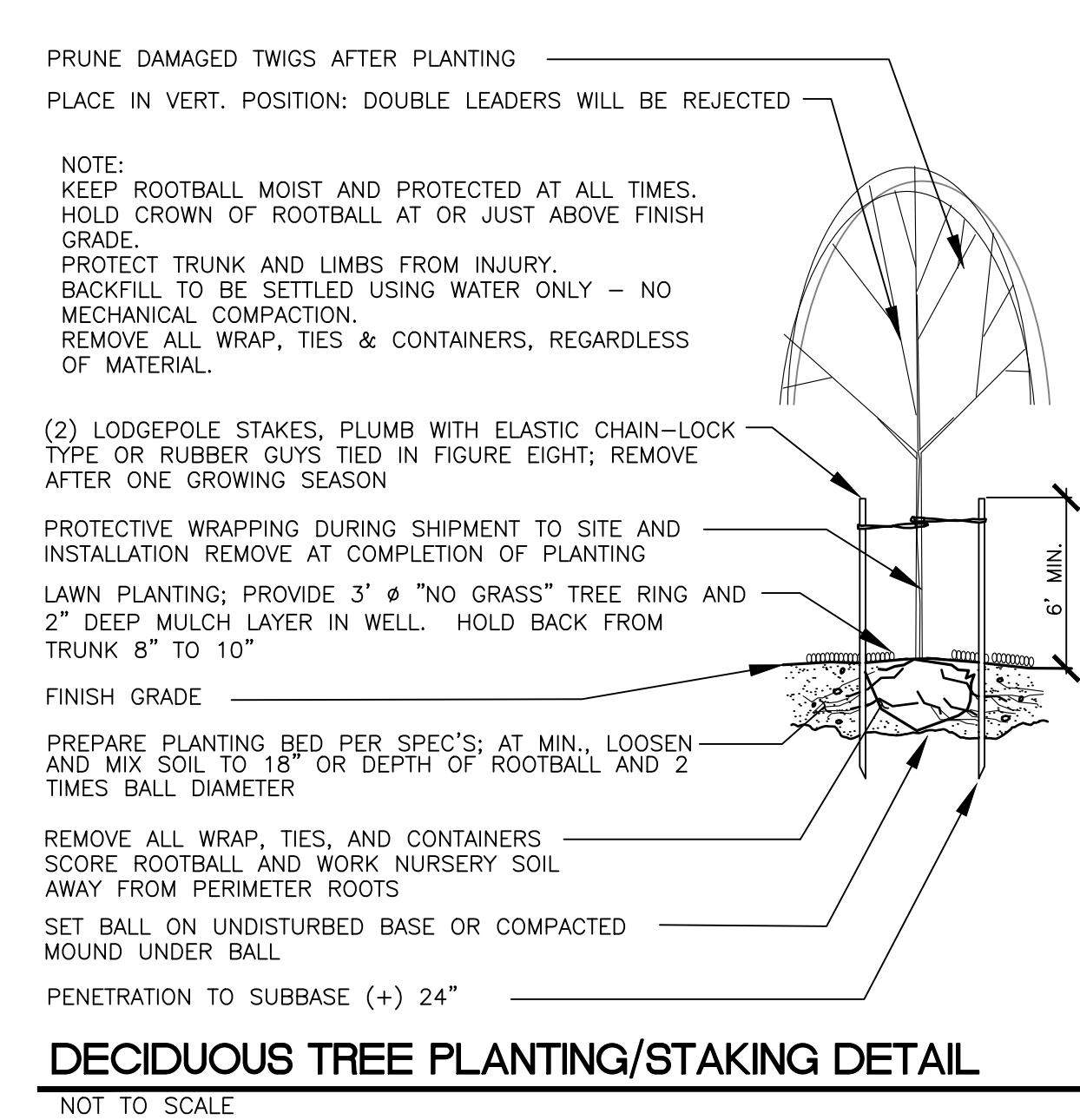
SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT.	SIZE	
TREES					
	27	ACER CIRCINATUM / VINE MAPLE	B & B	2" CAL	 TURFGRASS LAWN SOD OR HYDROSEED. COUNTRY GREEN LOW GROW SEED MIX OAE, 5 LBS. PER 1,000 SF (220 LBS. PER ACRE) 11,989 SF
	20	CORNUS KOUUSA / KOUSA DOGWOOD	B & B	2" CAL	 EROSION-CONTROL HYDROSEED WA. ST. D.O.T. EROSION CONTROL MIX OAE, 80-120 LBS. PER ACRE 6,646 SF
	22	GLEDTISIA TRIACANTHOS INERMIS 'SKYCOLE' / HONEY LOCUST	B & B	2" CAL	
	13	PINUS CONTORTA VAR. CONTORTA / SHORE PINE	B & B	6" MIN. HT.	
	25	PSEUDOTSUGA MENZIESII / DOUGLAS FIR	B & B	6" MIN. HT.	
	12	THUJA PLICATA 'EXCELSA' / EXCELSA CEDAR	B & B	6" MIN. HT.	

SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT.
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SHRUBS			
	31	ARBUcus UNEDO 'COMPACTA' / DWARF STRAWBERRY TREE	1 GAL.
	31	EUONYMUS ALATUS 'COMPACTUS' / COMPACT BURNING BUSH	1 GAL.
	182	MAHONIA AQUIFOLIUM / OREGON GRAPE	1 GAL.
	71	MAHONIA AQUIFOLIUM 'COMPACTA' / DWARF OREGON GRAPE	1 GAL.
	108	MYRICA CALIFORNICA / PACIFIC WAX MYRTLE	1 GAL.
	24	NANDINA DOMESTICA 'GULF STREAM' / DWARF HEAVENLY BAMBOO	1 GAL.
	53	PINUS MUGO 'PUMILIO' / DWARF MUGO PINE	1 GAL.
	32	RHAPHIOLEPIS UMBELLATA 'GULF GREEN' / YEDDA HAWTHORN	1 GAL.
	9	RHODODENDRON X 'ANAH KRUSCHKE' / RHODODENDRON	1 GAL.
	16	SARCOCOCCA CONFUSA / SWEETBOX	1 GAL.
	118	SYMPHORICARPOS ALBUS / SNOWBERRY	1 GAL.
	13	THUJA OCCIDENTALIS 'SMARAGD' / EMERALD GREEN ARBORVITAE	4" MIN. HT.
	83	VIBURNUM DAVIDII / DAVID VIBURNUM	1 GAL.

FERNS AND GRASSES			
	8	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / FEATHER REED GRASS	1 GAL.

SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT.	SPACING
GROUND COVERS				
	1,803	ARCTOSTAPHYLOS UVA-URSI 'MASSACHUSETTS' / KINNICKINICK	1 GAL.	36" o.c.
	409	FRAGARIA CHILOENSIS / BEACH STRAWBERRY	1 GAL.	36" o.c.



LANDSCAPE NOTES AND DETAILS

FOR DUPONT BUSINESS PARK

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M. CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

LANDSCAPE PLANTING NOTES AND MATERIALS

SCOPE OF WORK

FURNISH ALL MATERIALS, LABOR, EQUIPMENT AND RELATED ITEMS NECESSARY TO ACCOMPLISH TOPSOIL, TREATMENT AND PREPARATION OF SOIL, FINISH GRADING, PLACEMENT OF SPECIFIED PLANT MATERIALS, FERTILIZER, STAKING, MULCH, CLEAN-UP, DEBRIS REMOVAL, AND 30-DAY MAINTENANCE.

QUALIFICATIONS:
LANDSCAPE CONTRACTOR TO BE SKILLED AND KNOWLEDGEABLE IN THE FIELD OF WORK AND HAVE A MINIMUM OF FIVE (5) YEAR'S EXPERIENCE INSTALLING SIMILAR WORK. CONTRACTOR TO BE LICENSED TO PERFORM THE WORK SPECIFIED WITHIN THE PRESIDING JURISDICTION.

JOB CONDITIONS:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE SITE AND REPORT ANY DISCREPANCIES TO THE OWNER OR THE OWNER'S REPRESENTATIVES. ALL PLANT MATERIAL AND FINISH GRADES ARE SUBJECT TO APPROVAL BY THE OWNER.

PROTECTION:
SAVE AND PROTECT ALL EXISTING PLANTINGS SHOWN TO REMAIN. DO NOT PLANT UNTIL OTHER CONSTRUCTION OPERATIONS WHICH CONFLICT HAVE BEEN COMPLETED. IF AN IRRIGATION SYSTEM IS TO BE INSTALLED DO NOT PLANT UNTIL THE SYSTEM HAS BEEN INSTALLED, TESTED, AND APPROVED BY THE OWNER. HANDLE PLANTS WITH CARE - DO NOT DAMAGE OR BREAK ROOT SYSTEM, BARK, OR BRANCHES. REPAIR AND/OR REPLACE ITEMS DAMAGED AS A RESULT OF WORK, OR WORK NOT IN COMPLIANCE WITH PLANS AND SPECIFICATIONS, AS DIRECTED BY OWNER AT NO ADDITIONAL COST TO THE OWNER.

REPAIR OF EXISTING PLANTINGS:
DURING THE COURSE OF WORK, REPAIR ALL EXISTING PLANTING AREAS BY PRUNING DEAD GROWTH, RE-ESTABLISHING FINISH GRADE AND RE-MULCHING TO SPECIFIED DEPTH.

GUARANTEE:
GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THE JOB BY OWNER.

30-DAY MAINTENANCE:
CONTRACTOR TO PROVIDE OWNER WITH A SCOPE OF WORK AT TIME OF INITIAL PROJECT BID TO PROVIDE LANDSCAPE AND IRRIGATION MAINTENANCE FOR 30 DAYS FOLLOWING STORE OPENING. WORK TO INCLUDE MAINTENANCE AS DESCRIBED BELOW, IN PLANTING AND IRRIGATION MAINTENANCE.

SUBMITTALS:
SUBMIT THE FOLLOWING TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO THE START OF ANY WORK:

- A) DOCUMENTATION THAT ALL PLANT MATERIAL HAS BEEN ORDERED.
- B) TOPSOIL ANALYSIS AND RECOMMENDED AMENDMENTS.
- C) TREE STAKING AND GUYING MATERIALS.
- D) ONE (1) QUART SIZE OF TOPSOIL AND MULCH.
- E) PLANTING SCHEDULE INCLUDING DATES AND TIMES.
- F) MAINTENANCE INSTRUCTIONS FOR ONE (1) FULL YEAR.

MATERIALS:

PLANT MATERIALS:
PLANT MATERIALS TO BE GRADE NO. 1, SIZED IN ACCORDANCE WITH (AAN) AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-2004). PRUNE PLANTS RECEIVED FROM THE NURSERY ONLY UPON AUTHORIZATION BY THE LANDSCAPE ARCHITECT. "B & B" INDICATES BALLED AND BURLAPPED; "CONT." INDICATES CONTAINER; "BR" INDICATES BARE ROOT; "CAL" INDICATES CALIPER AT 6" ABOVE SOIL LINE; "GAL" INDICATES GALLON.

A) SPECIFIED PLANT CANOPY SIZE OR CALIPER IS THE MINIMUM ACCEPTABLE CONTAINER OR BALL SIZE AND ESTABLISHES MINIMUM PLANT CONDITION TO BE PROVIDED.

B) QUALITY:

PLANT MATERIAL TO COMPLY WITH STATE AND FEDERAL LAWS FOR DISEASE INSPECTION, PLANTS TO BE FULLY LIVE, VIGOROUS, WELL FORMED, WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS. ROOT BALLS OF PLANTS TO BE SOLID AND FIRMLY HELD TOGETHER. SECURELY CONTAINED AND PROTECTED FROM INJURY AND DESTROYED PLANTS DETERMINED BY LANDSCAPE ARCHITECT TO HAVE BEEN DAMAGED; HAVE DEFORMITIES OF STEM, BRANCHES, OR ROOTS; LACK SYMMETRY, HAVE MULTIPLE LEADERS; "W" CROCHETS LESS THAN 30 DEGREES IN TREES, OR DO NOT MEET SIZE OR ANSI STANDARDS WILL BE REJECTED. PLANT MATERIAL TO BE FROM A SINGLE NURSERY SOURCE FOR EACH SPECIFIED SPECIES/HYBRID. NURSERY SOURCES TO BE THOSE LOCATED IN THE SAME REGION AS THE JOB SITE.

C) SUBSTITUTION:

NO SUBSTITUTION OF PLANT MATERIAL, SPECIES OR VARIETY, WILL BE PERMITTED UNLESS WRITTEN EVIDENCE IS SUBMITTED TO THE OWNER FROM TWO QUALIFIED PLANT BROKERAGE OFFICES. SUBSTITUTIONS WHICH ARE PERMITTED TO BE IN WRITING FROM THE OWNER AND LANDSCAPE ARCHITECT. THE SPECIFIED SIZE, SPECIES AND NEAREST VARIETY, AS APPROVED, TO BE FURNISHED. SUBSTITUTIONS MAY REQUIRE SUBMITTAL TO REVISED LANDSCAPE PLAN TO CITY FOR APPROVAL.

D) LABEL AT LEAST ONE (1) TREE, SHRUB, AND GROUNDCOVER OF EACH VARIETY WITH A SECURELY ATTACHED WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAMES.

E) DELIVER PLANT MATERIAL AFTER PREPARATION OF PLANTING AREAS HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX (6) HOURS AFTER DELIVERY, SET MATERIAL IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOT BALLS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

SOIL PREPARATION:
TOPSOIL, AMENDMENT, AND BACKFILL, ARE GENERAL REQUIREMENTS FOR ALL LANDSCAPE AREAS, UNLESS NOTED OTHERWISE ON THE PLANS. SOIL AMENDMENTS AND FERTILIZER NOTED BELOW ARE TO BE USED FOR BID PRICE BASIS ONLY. SPECIFIC AMENDMENTS AND FERTILIZERS WILL BE MADE AFTER SOIL SAMPLES ARE LABORATORY TESTED BY THE CONTRACTOR. PROVIDE CHANGE ORDER FOR ADDITIONAL OR REDUCTION OF MATERIALS REQUIRED OR NOT REQUIRED BY THE SOILS REPORT.

SOIL FERTILITY AND AGRICULTURAL SUITABILITY ANALYSIS:
AFTER ROUGH GRADING AND PRIOR TO SOIL PREPARATION, CONTRACTOR TO OBTAIN TWO REPRESENTATIVE SOIL SAMPLES, FROM LOCATIONS AS DIRECTED BY THE LANDSCAPE ARCHITECT, TO A SOIL TESTING LABORATORY. SUBMIT RESULTS TO LANDSCAPE ARCHITECT FOR REVIEW. TESTS TO INCLUDE FERTILITY AND SUITABILITY ANALYSIS WITH WRITTEN RECOMMENDATIONS FOR SOIL AMENDMENT, FERTILIZER, CONDITIONERS, APPLICATION RATES, AND POST-CONSTRUCTION MAINTENANCE PROGRAM. TESTS TO BE CONTRACTED WITH AND PAID FOR BY THE CONTRACTOR.

A) TOPSOIL:

CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL TOPSOIL AND FOR DETERMINING THE VOLUME OF TOPSOIL REQUIRED PER THE INFORMATION ON PLANS AND NOTED HERE-IN. CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY WEED CONTROL RESULTING FROM CONTAMINATED OFF-SITE SOURCES.

B) TOPSOIL TO CONSIST OF 1/3 BY VOLUME SANDY LOAM, 1/3 BY VOLUME COMPOSTED GARDEN MULCH, AND 1/3 BY VOLUME COARSE WASHED SAND OR EQUIVALENT.

C) TOPSOIL PREPARATION AND INSTALLATION:
1. VERIFY SUBGRADES TO -9 INCHES IN LANDSCAPE AREAS OR AS INDICATED ON PLANS. THIS ACCOMMODATES, TOPSOIL, AMENDMENTS, AND MULCH. 6" IMPORTED TOPSOIL FOR LANDSCAPE BEDS.
2. ERADICATE ANY SURFACE VEGETATION ROOTED IN THE SUB-GRADE PRIOR TO SUB-GRADE PREPARATION.
3. REMOVE SOIL LUMPS, ROCK, VEGETATION AND/OR DEBRIS LARGER THAN 2 INCHES FROM ALL SUB-GRADE PRIOR TO PLACEMENT OF SPECIFIED TOPSOIL.
4. REMOVE ANY ASPHALT EXTENDING BEYOND 6 INCHES FROM CURBS INTO ADJACENT LANDSCAPE AREAS.

D) TOPSOIL PLACEMENT:
1. PROVIDE A TOTAL FINISH COURSE OF 6 INCHES OF TOPSOIL FOR LANDSCAPE AREAS.
2. PLACE ADDITIONAL TOPSOIL AND SOIL MIX AS REQUIRED TO MEET FINISH ELEVATIONS.

MULCH (TOPDRESSING):
ONE-HALF-INCH (1/2") SIZE, TO ONE-QUARTER (1/4"), HEMLOCK/FIR BARK. FINE TEXTURED AND DARK BROWN IN COLOR.

STAKES:
2-INCH DIAMETER BY 8-FOOT MINIMUM LODGEPOLE PINE STAKES.

GUY MATERIAL:
1-INCH WIDE POLYETHYLENE CHAIN LOCK TYPE TIES; OR, 3/8" DIAMETER RUBBER. NO WIRE.

EXECUTION:

CONTAMINANTS:
VERIFY THAT ALL SOIL CONTAMINANTS (E.G., PAINT, SEALANTS, SOLVENTS, OILS, GREASES, CONCRETE/ASPHALT SPOILS, ETC.) HAVE BEEN SATISFACTORY REMOVED FROM ALL PLANTING AREAS. DO NOT BEGIN WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

FINISH GRADES:
FINE GRADE AND REMOVE ROCKS, DEBRIS, AND FOREIGN OBJECTS OVER 2 INCHES DIAMETER FROM TOP SURFACE OF PREPARED LANDSCAPE AREAS. FINISH ELEVATIONS TO BE DEFINED AS 3 INCHES BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL PLANTING BED AREAS AND 1-INCH BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL LAWN AREAS. FINISH GRADE REFER TO GRADES PRIOR TO INSTALLATION OF MULCH OR LAWN. ALL FINISH GRADES TO BE SMOOTH EVEN GRADES, LIGHTLY COMPACTED, AS SHOWN ON THE PLAN AND DETAILED. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES. SITE CIVIL DRAWINGS IDENTIFY FINAL ELEVATIONS. MOISTEN PREPARED AREAS BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL.

TREES AND SHRUBS:
ARRANGE TREES AND SHRUBS ON SITE IN PROPOSED LOCATIONS PER DRAWINGS. EXCAVATE PIT, PLANT AND STAKE OR GUY, AS CALLED OUT AND DETAILED. ALL TREES, SHRUBS, AND SUPPORTS TO STAND VERTICAL. BACKFILL SHALL BE PIT SPOILS. SETTLE BACKFILL USING WATER ONLY. NO MECHANICAL COMPACTION.

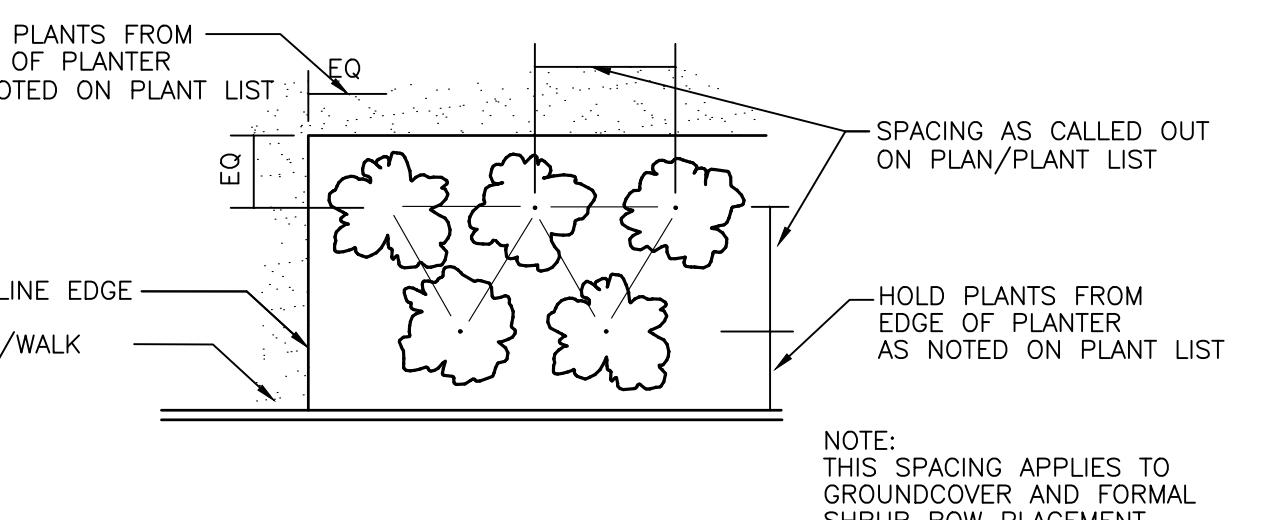
GROUNDCOVERS:
EXCAVATE PITS TO A MINIMUM OF 3 INCHES BELOW, AND TWICE THE ROOT BALL DIAMETER. WATER THOROUGHLY AND TAKE CARE TO ENSURE THAT ROOT CROWN IS AT PROPER GRADE, AS DETAILED.

MULCH:
MULCH ALL LANDSCAPE AREAS. MATCH DEPTH OF EXISTING MULCH. AT A MINIMUM, APPLY SUFFICIENT QUANTITY TO PROVIDE A 4-INCH DEPTH.

UTILITY CLEARANCES:
FIELD ADJUST PLANT LOCATIONS FOR 8-FOOT SEPARATION OF TREES/SHRUBS AND 2-FOOT SEPARATION FOR GROUNDCOVER FROM FIRE HYDRANTS AND UTILITY VAULTS.

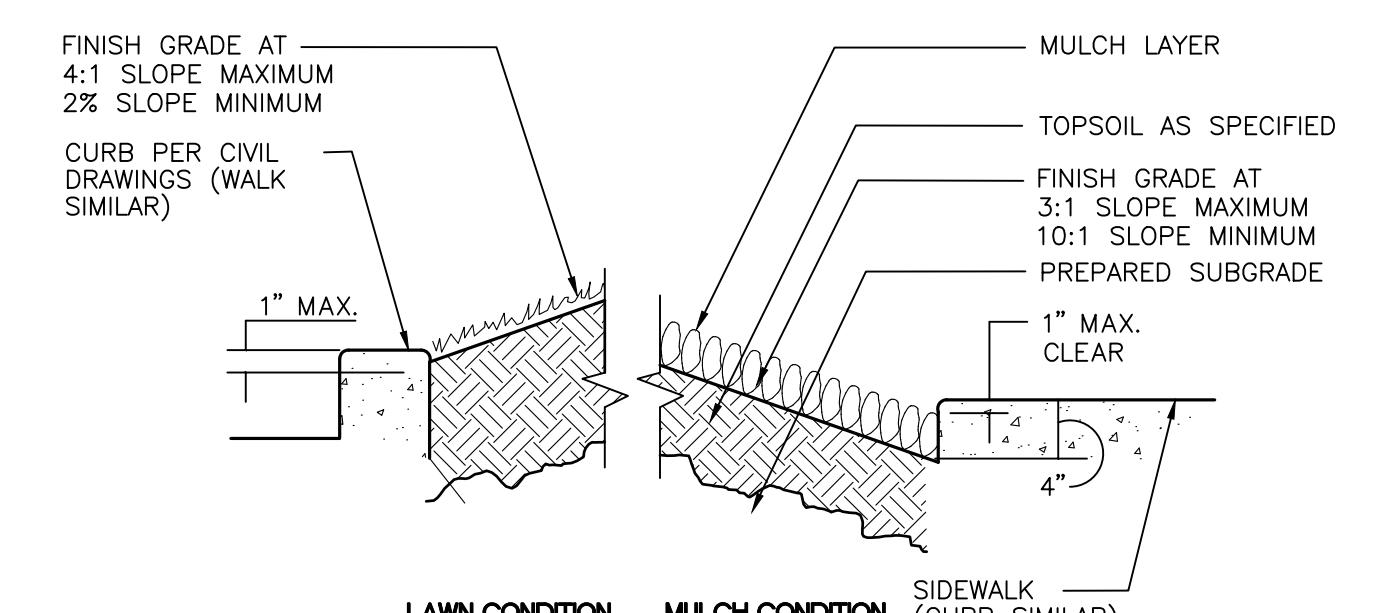
CLEANUP AND PROTECTION:
DURING LANDSCAPE WORK, KEEP ALL PAVEMENT CLEAN AND WORK AREAS IN AN ORDERLY CONDITION. PROTECT LANDSCAPE WORK AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIOD. TREAT, REPAIR, OR REPLACE DAMAGE LANDSCAPE WORK AS DIRECTED BY THE OWNER.

PLANTING MAINTENANCE:
PROVIDE FULL MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLERS. CONTRACTOR TO MAINTAIN PLANTINGS THROUGH COMPLETED INSTALLATION, AND UNTIL ACCEPTANCE OF LANDSCAPE INSTALLATION. PLANTING MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATING, TIGHTENING AND REPAIRING OF TREE GUYS, RESETTING PLANTS TO PROPER GRADES OR POSITION, RE-ESTABLISHING SETTLED GRADES; AND MOWING LAWNS WEEKLY AFTER LAWN ESTABLISHMENT. HERBICIDE IS NOT RECOMMENDED FOR ONE YEAR FOLLOWING LANDSCAPE INSTALLATION, INCLUDED IS REPLACEMENT OF DEAD PLANTS AND PLANTS SHOWING LOSS OF 40 PERCENT OR MORE OF CANOPY.



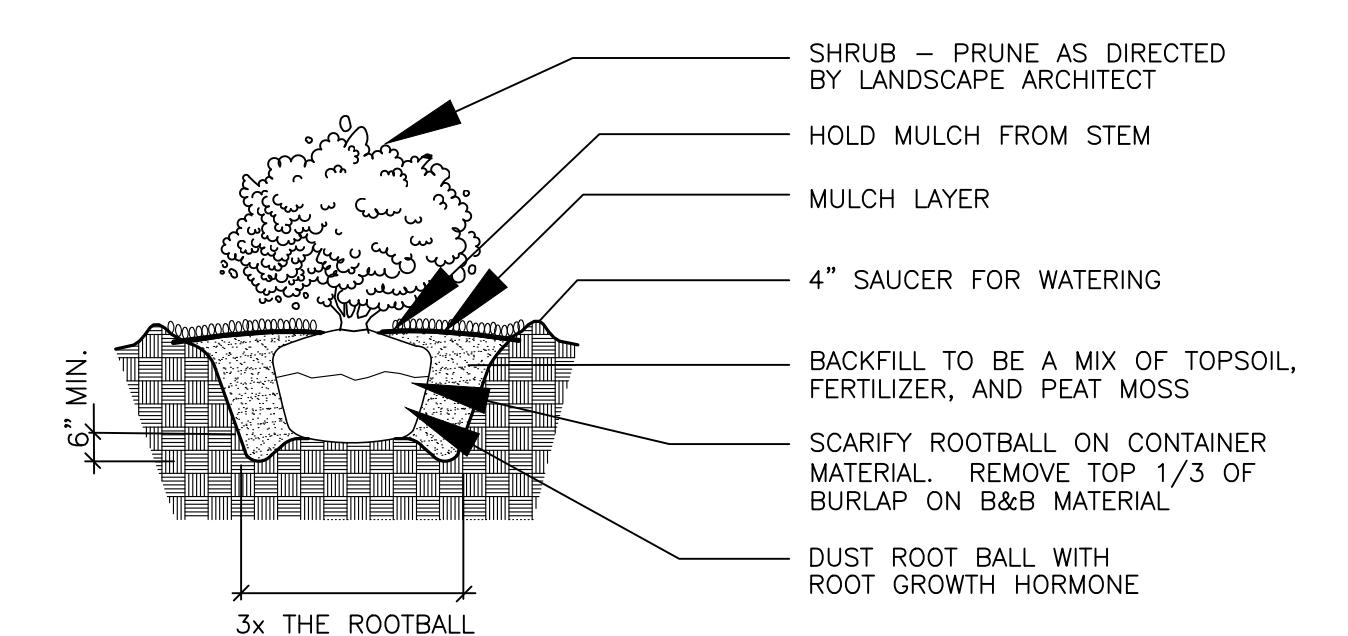
PLANT MATERIAL SPACING DETAIL

NOT TO SCALE



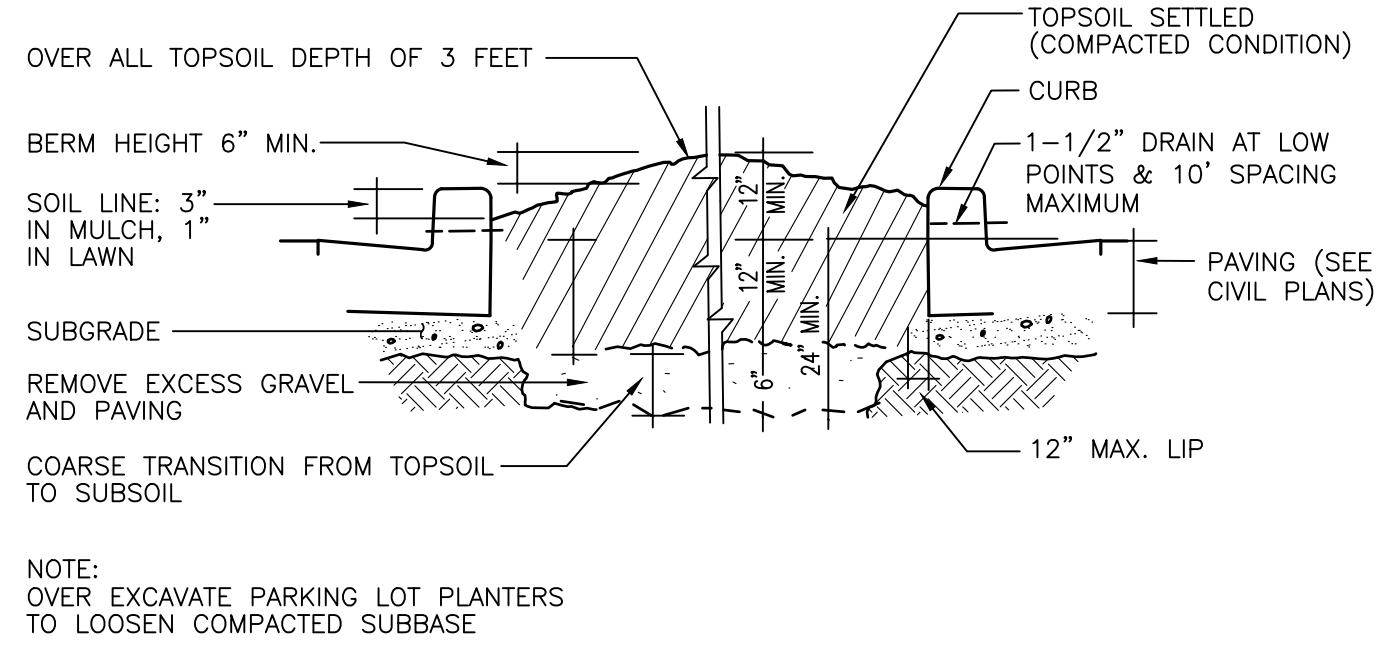
PLANTER SECTION DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

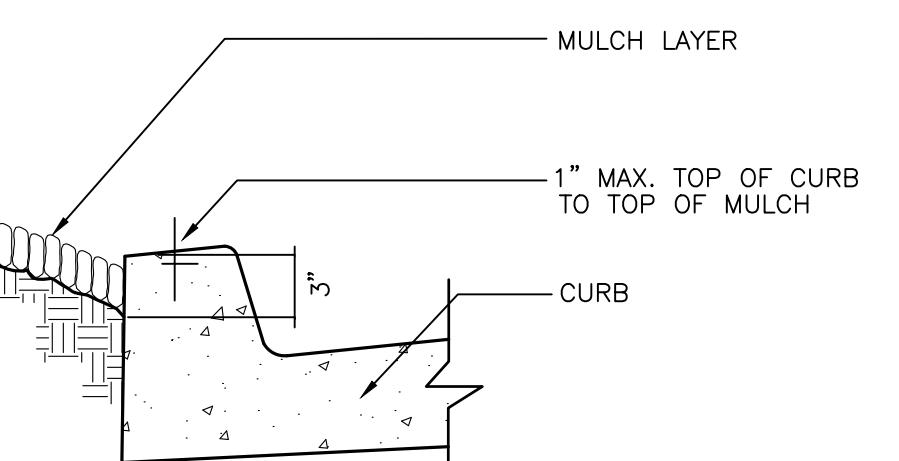
NOT TO SCALE



PARKING LOT PLANTER GRADING DETAIL

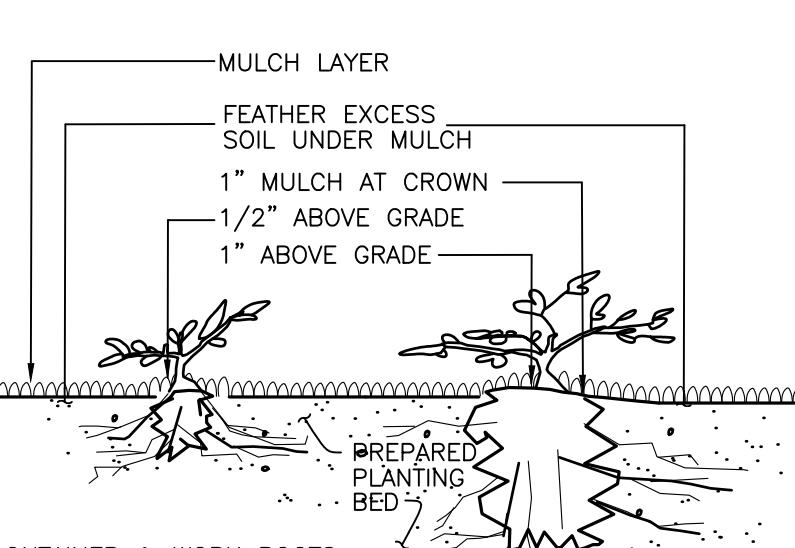
NOT TO SCALE

DEDUCT ALT #1: IF LANDSCAPE CONTRACTOR CAN DEMONSTRATE THAT PLANTER ISLANDS ARE NOT FULL OF NON-SOIL MATERIALS (CONCRETE WASTE, LUMBER, ROAD BASE, GRAVEL). FULL EXCAVATION AND REPLACE WITH 18"-21" OF TOPSOIL CAN BE ELIMINATED AND IN ITS PLACE, 6" OF COMPOST CAN BE PLACED ON SUB-GRADE AND CULTIVATED INTO TOP 12" OF EXISTING SOIL. TOP OF FINISH GRADE AND DEPTH OF MULCH STILL APPLIES



MULCH AT CURB DETAIL

NOT TO SCALE



LESS THAN 1 GAL. (PLANTED BEFORE MULCH)
1 GAL. CONTAINER and LARGER (PLANTED BEFORE MULCH)

GROUNDCOVER PLANTING DETAIL

NOT TO SCALE

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Revision

LANDSCAPE NOTES AND DETAILS FOR DUPONT BUSINESS PARK

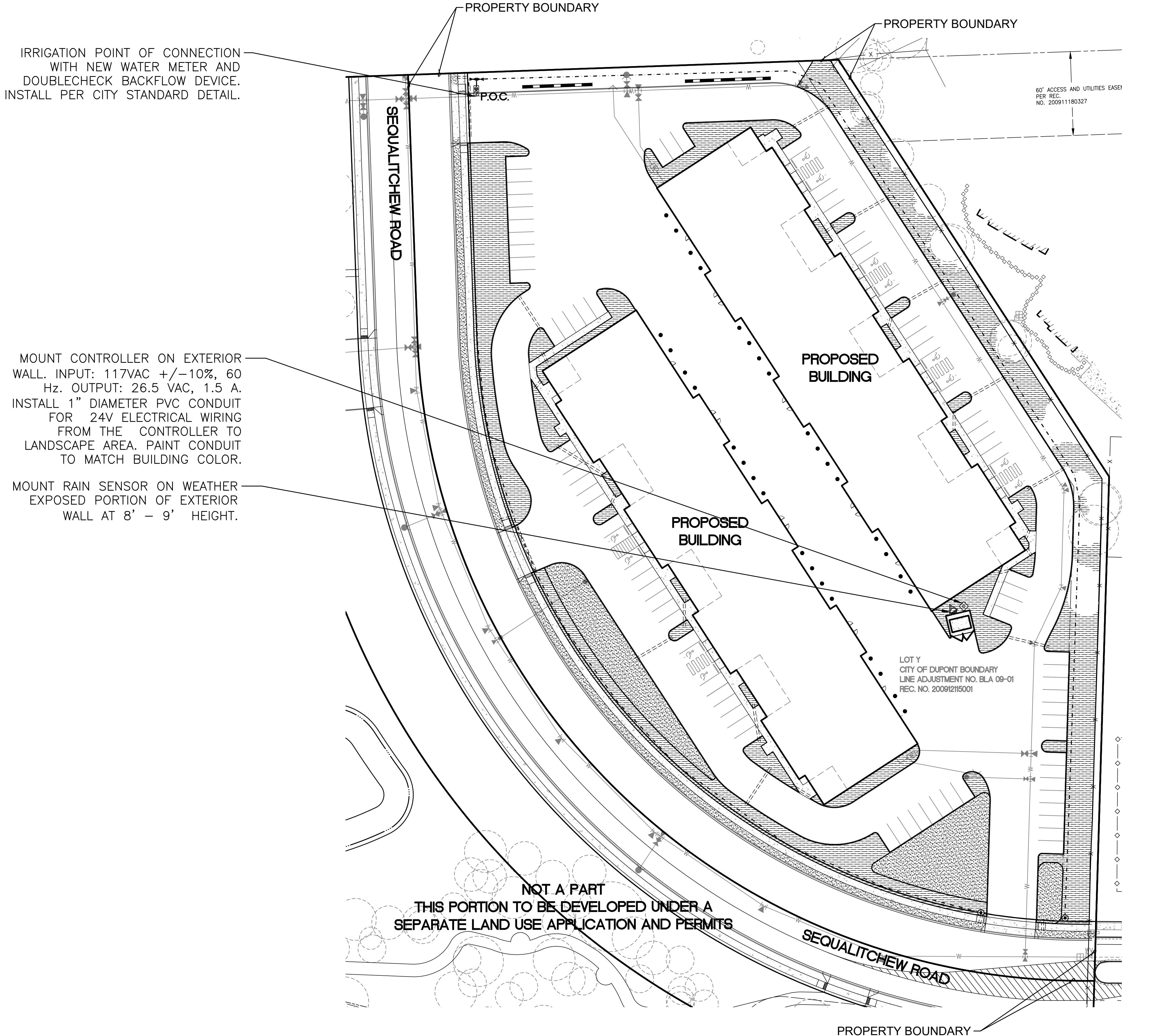
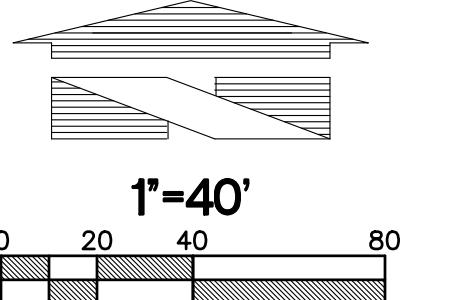
For: AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696
State of Washington
Thomas C. Roberts
Reg. No. 13831574
Exp. 04/29/2025
DUPONT WAREHOUSE
Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
barghausen.com
423-251-6222

Job Number 18666
Sheet L5 of 9
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PRELIMINARY IRRIGATION PLAN

FOR DUPONT BUSINESS PARK

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON



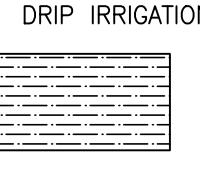
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IRRIGATION LEGEND

DESCRIPTION



HUNTER LANDSCAPE DRIPLINE COMPONENTS

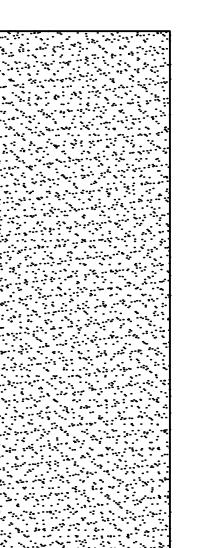
HDL-06-12-250-CV SUB-SURFACE DRIPLINE TUBING 0.6 GPH PRESSURE COMPENSATING EMITTERS WITH CHECK VALVE AT 12" ON-CENTER SPACING - ALL TUBING SHALL BE INSTALLED ON GRADE W/ 9" WIRE STAKES FOUR (4) FEET ON-CENTER; VERIFY THE LAYOUT AND 18" ON-CENTER SPACING IN THE FIELD PRIOR TO STARTING WORK. INSTALL ALL COMPONENTS PER MANUF. SPECIFICATIONS.

USE HUNTER PLD-LOC FITTINGS FOR CONNECTION BETWEEN PVC LATERAL LINES AND INLINE DRIP TUBING

SPRINKLER HEADS:

HUNTER MP ROTATOR WITH PRO-SPRAY POP-UP BODY AND CV DRAIN CHECK VALVE, 4" LAWN, 6" SHRUB

SYMBOL NOZZLE PSI GPM RADIUS



HUNTER-60 and 6H H, Q SERIES

30 0.98, 0.51 6'

HUNTER-1000 8-15 F, TH, TT, H, Q SERIES

35 0.65, 0.48, 0.37, 0.32, 0.16 8'

HUNTER-1000 8-15 F, TH, TT, H, Q SERIES

35 0.65, 0.48, 0.37, 0.32, 0.16 10'

HUNTER-1000 8-15 F, TH, TT, H, Q SERIES

35 0.65, 0.48, 0.37, 0.32, 0.16 12'

HUNTER-2000 13-21 F, TQ, TT, H, Q SERIES

30 1.29, 0.95, 0.74, 0.63, 0.33 15'

HUNTER ES515, SS530 SERIES

35 1.41, 0.65 5'x30', 5'x15'

HUNTER-3000 22-30 F, TQ, TT, H, Q SERIES 35 2.88, 2.19, 1.68, 1.44, 0.69 0.43 22'

● SPRAY IRRIGATION: HUNTER ICV 101/151C REMOTE CONTROL VALVE, IN VALVE BOX, ONE VALVE PER BOX
MAXIMUM 2 VALVES PER BOX

○ Drip irrigation: ICZ-101/151-XL REMOTE CONTROL DRIP ZONE KIT WITH FILTER AND PRESSURE REGULATOR
MAXIMUM 2 VALVES PER BOX

△ HUNTER SOLAR SYNC WIRE RAIN SENSOR COMBO

◇ HUNTER PRO-C CONTROLLER 3 TO 15 STATIONS, (HARDWIRE CONNECTION); PROVIDE GROUND AND BATTERIES PER MANUFACTURER'S SPECIFICATIONS

P.O.C. (POC)

WILKINS 950 XLT- 1" DOUBLE CHECK VALVE (STATE APPROVED); TEST AND CERTIFICATION BY LICENSED BACKFLOW TESTER
WILKINS 850 - BALL VALVE, SIZE TO MATCH PIPE
CARSON INDUSTRIES #1730 (TWO AT P.O.C.) GRADE LEVEL VAULT WITH BOLT LOCK LID

■ PLASTIC BALL VALVE, MATCH LINE SIZE, IN VALVE BOX

○ HUNTER HQ-33DLRC 3/4" QUICK COUPLING VALVE, IN VALVE BOX, PROVIDE TWO KEYS AND SWIVELS

— MAINLINE - SCH 40 PVC (18" COVER); SIZE PER PLAN, 1-1/2" SIZE MINIMUM

— LATERAL - SCH 40 PVC (12" COVER); SIZE PER PLAN, 3/4" SIZE MINIMUM

===== SLEEVE - SCH 40 PVC; 24" MINIMUM COVER AT VEHICLE CROSSINGS AND 18" MINIMUM COVER IN LANDSCAPE AREAS, 6" SIZE WHERE IRRIGATION MAINLINE TRAVELS THROUGH PIPE.
4" SIZE WHERE ONLY LATERALS TRAVEL THROUGH PIPE

IRRIGATION SHOWN DIAGRAMMATICALLY FOR PLAN CLARITY, COMMON TRENCH AND PLACE EQUIPMENT IN LANDSCAPE; MANIFOLD GROUPED VALVES IN ADJACENT SHRUB AREAS WHERE FEASIBLE.

SCH 40 PIPE SIZING CHART

PIPE SIZE	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
FLOW GPM	1-8	8.1-13	13.1-23	23.1-32	32.1-53	53.1-74 GPM (MAX.)

IRRIGATION CALCULATIONS

MAX. RATE OF FLOW: 30 GPM

ANNUAL WATER USAGE

TOTAL IRRIGATED AREA (NOT INCL. EROSION CONTROL HYDROSEED)
=52,389 SQUARE FEET

TOTAL LANDSCAPE AREA (INCL. EROSION CONTROL HYDROSEED):
=55,716 SQUARE FEET

ESTIMATED ANNUAL WATER USAGE (SEE FORMULA BELOW):

EWU = $(14.49 \times 0.3 \times 52,389 \times 0.62) / 0.81$

EWU = 141,195.7 / 0.81

EWU = 174,315.7 GALLONS PER YEAR

174,315.7 / 55,716 = 3.13 GAL/SF PER YEAR (DMC 25.90.040.3)

FORMULA: $EWU = (ET \times PF \times HA \times CF) / IE$

EWU: ESTIMATED WATER USE

ET: EVAPOTRANSPIRATION RATE = 14.49 INCHES

PF: PLANT FACTOR VALUE = 0.3

HA: LANDSCAPE AREA IN SQUARE FEET = 55,716

CF: CONVERSION FACTOR OF 0.62 (INCHES TO GALLONS PER SQUARE FOOT)

IE: IRRIGATION EFFICIENCY VALUE = 0.81

WATER CONSERVATION TECHNIQUES

PER DMC 25.90.040.1

- MULCH SPECIFIED FOR ALL TREE/SHRUB BEDS
- DROUGHT-TOLERANT LAWN, SHRUBS SPECIFIED (SEE PLANT SCHEDULE)
- IRRIGATION SYSTEM PER 25.90.040.1(e)

Job Number	Preliminary Irrigation Plan for Dupont Business Park	
	18666	Sheet L6 of 9
PRELIMINARY IRRIGATION PLAN FOR DUPONT BUSINESS PARK		
For: Avenue 55, LLC 601 Union Street, Suite 2930 Seattle, WA 98101 (206) 707-9696		
Title: Avenue 55, LLC 601 Union Street, Suite 2930 Seattle, WA 98101 (206) 707-9696		
1	12/23/24	TCR
No.	Date	By
1	12/23/24	JMV
Approved	JMV	Date
Checked	JMV	Date
Scale:	Horizontal	Vertical
1"	40'	N/A
Scale: 1" = 40'		
Approved for Construction		
By: City of Dupont Date: _____		
These drawings are approved for construction for a period of 12 months from the date shown hereon. The City reserves the right to make revisions, additions, deletions, or modifications should construction be delayed beyond this time limitation. The City, by approving these drawings, assumes no liability in regards to their accuracy or omissions.		
Thomas C. Roberts State of Washington Architect #18666 Dupont WA Warehouse		

IRRIGATION NOTES AND DETAILS

FOR DUPONT BUSINESS PARK

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

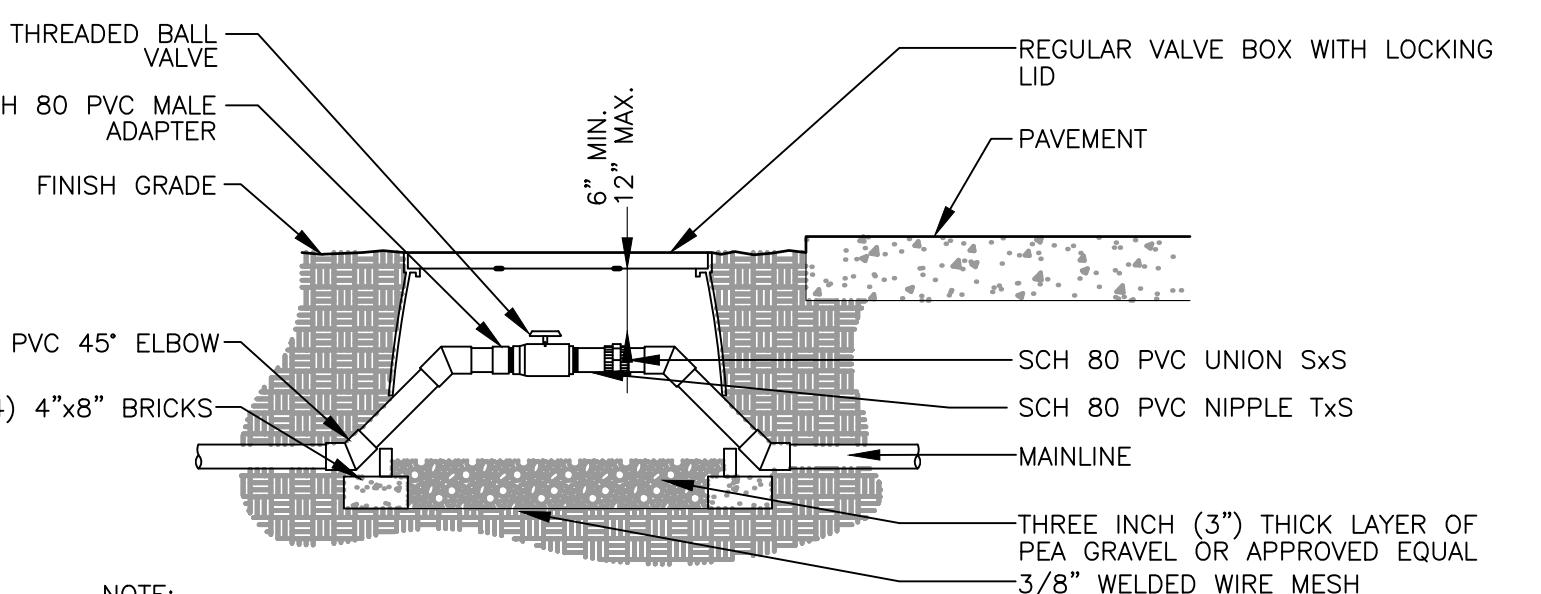
APPROVED FOR CONSTRUCTION

BY: CITY OF DUPONT DATE: _____

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LANDSCAPE IRRIGATION NOTES

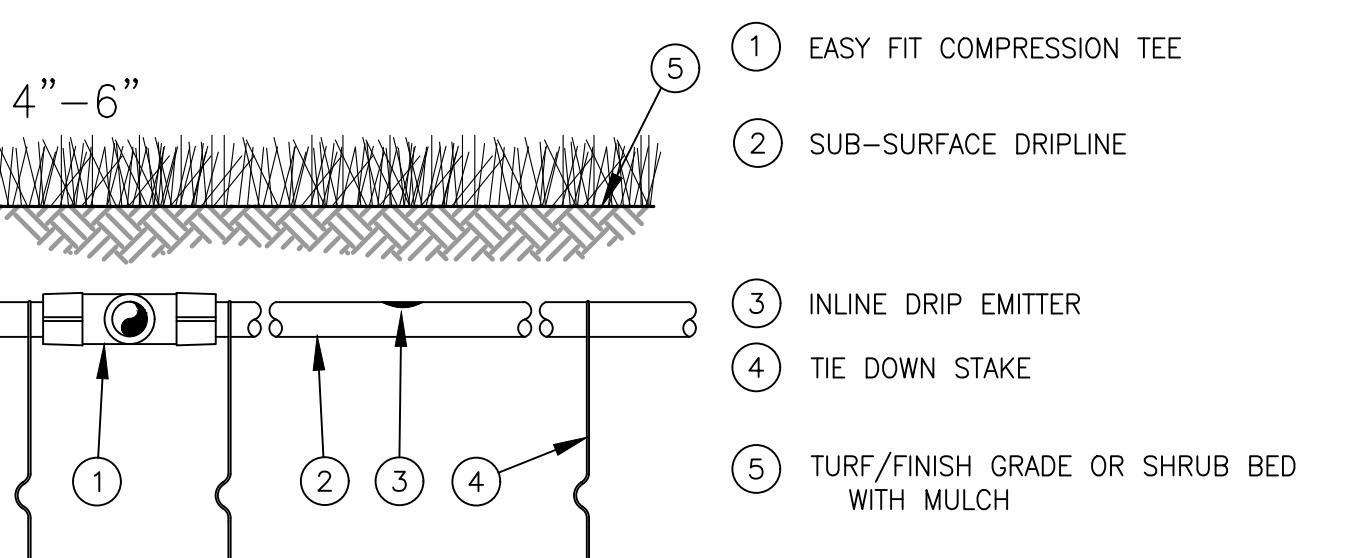
- GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR TO COORDINATE:
 - INSTALLATION OF 110V ELECTRICAL SERVICE FROM ELECTRICAL SOURCE TO AUTOMATIC CONTROLLER, INCLUDING WIRE HOOK-UP INTO MOUNTED CONTROLLER. IRRIGATION CONTRACTOR WILL MOUNT CONTROLLER PER DESIGN AND COORDINATE WITH GENERAL CONTRACTOR.
 - INSTALLATION OF IRRIGATION/SERVICE METER AND STUB TO IRRIGATION POINT OF CONNECTION, PER UTILITY PLAN(S). PROVIDE STANDARD THREADED STUB-OUT WITH THREADED CAP ON DISCHARGE SIDE OF METER. STUB-OUT TO BE INSTALLED APPROXIMATELY 18 INCHES BELOW FINISH GRADE.
 - VERIFICATION OF STATIC WATER PRESSURE AT POINT-OF-CONNECTION (P.O.C.) CONTRACTOR SHALL NOTIFY OWNER AND BARGHAUSEN CONSULTING ENGINEERS, INC., OF ANY VARIATION IN STATIC PRESSURE OVER 5 PSI GREATER/LESS THAN DESIGN PRESSURE.
 - INSTALLATION OF SLEEVING.
- PROVIDE ALL LABOR, MATERIALS, TRANSPORTATION, AND SERVICES NECESSARY TO FURNISH AND INSTALL A COMPLETE IRRIGATION SYSTEM AS INDICATED ON THE DRAWINGS AND/OR NOTES. PROVIDE A ONE (1) YEAR WARRANTY/GUARANTEE FROM FINAL ACCEPTANCE AGAINST ALL DEFECTS IN MATERIALS, EQUIPMENT, AND WORKMANSHIP.
- COORDINATE IRRIGATION INSTALLATION WITH GENERAL CONTRACTOR, ELECTRICAL CONTRACTOR, LANDSCAPE CONTRACTOR, OWNER, ARCHITECT, AND LANDSCAPE ARCHITECT.
- LANDSCAPE CONTRACTOR TO TEST AVAILABLE WATER PRESSURE PRIOR TO BEGINNING ANY WORK. PROVIDE LANDSCAPE ARCHITECT WITH WRITTEN PSI RESULTS.
- ALL WORK PER LOCAL CODE. INSTALLATION PER MANUFACTURER'S WRITTEN SPECIFICATIONS.
- CONTRACTOR TO OBTAIN AND PAY FOR ALL PERMITS, FEES, AND REQUIRED CITY INSPECTIONS.
- SUBMITTALS:
 - SUBMIT EACH ITEM LISTED BELOW FOR LANDSCAPE ARCHITECT'S REVIEW AND APPROVAL.
 - PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED,
 - CONTROL WIRING PATH DIAGRAM,
 - "AS-BUILT" DRAWINGS.
 - OPERATION AND MAINTENANCE MANUALS.
- PROVIDE AND KEEP UP TO DATE A COMPLETE "AS-BUILT" RECORD SET OF PRINTS WHICH ARE TO BE CORRECTED DAILY AND SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS AND NOTES AND EXACT "AS-BUILT" LOCATIONS, SIZES AND KIND OF EQUIPMENT. THIS SET OF DRAWINGS ARE TO BE KEPT ON SITE AND ARE TO BE USED ONLY AS THE RECORD SET. ALL WORK IS TO BE NEAT AND LEGIBLE ANNOTATIONS THEREON DAILY AS THE WORK PROCEEDS, SHOWING WORK AS ACTUALLY INSTALLED.
- DIMENSION FORM TWO (2) PERMANENT POINTS OF REFERENCE, BUILDING CORNERS, WALKS, OR ROAD INTERSECTIONS, ETC., THE LOCATION OF THE FOLLOWING:
 - CONNECTION TO WATER LINES (P.O.C.),
 - CONNECTIONS TO ELECTRICAL POWER,
 - GATE VALVE, QUICK COUPLERS, AND REMOTE CONTROL VALVE,
 - ROUTING OF MAINLINE (DIMENSION MAXIMUM 100' ALONG ROUTING),
 - ROUTING OF CONTROL WIRING,
 - OTHER RELATED EQUIPMENT AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- PREPARE AND PROVIDE PRIOR TO COMPLETION OF CONSTRUCTION, A THREE RING BINDER CONTAINING THE FOLLOWING INFORMATION:
 - INDEX SHEET STATING CONTRACTOR'S ADDRESS, TELEPHONE NUMBER, FAX, E-MAIL AND A LIST OF EQUIPMENT WITH NAME AND ADDRESS OF LOCAL MANUFACTURER'S REPRESENTATIVES,
 - CATALOG AND PARTS SHEETS ON EVERY MATERIAL AND EQUIPMENT INSTALLED UNDER THIS CONTRACT,
 - GUARANTEE STATEMENT,
 - COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL MAJOR EQUIPMENT,
 - CONSTRUCTION DETAILS FROM THE PROJECT,
 - COMPLETE TROUBLE-SHOOTING GUIDE TO COMMON IRRIGATION PROBLEMS,
 - WINTERIZATION AND SPRING START-UP PROCEDURES,
 - CHART OF APPROXIMATE WATERING TIMES FOR SPRING, SUMMER, AND FALL,
 - A COPY OF THE "AS-BUILT" DRAWINGS AND CONTROLLER CHART.
- ALL VALVES TO BE PLACED IN "CARSON" GRADE LEVEL BOXES WITH BOLT-LOCK LIDS (OR APPROVED EQUIVALENT). SET BOXES 2 INCHES HIGHER THAN FINISH GRADE IN MULCH AREAS AND FLUSH WITH FINISH GRADE IN LAWN AREAS. JUMBO BOX FOR CHECK VALVE, 10" ROUND BOX FOR GATE/QUICK COUPLER/WIRE SPLICES, AND 12" STANDARD FOR CONTROL VALVES. PROVIDE BOX EXTENSIONS AS REQUIRED.
- MAINLINE PIPE TO BE BURIED 18 INCHES, LATERALS 12 INCHES, AND SLEEVES 24" INCHES BELOW FINISH GRADE. NO ROCK OR DEBRIS TO BE BACKFILLED OVER PIPE.
- HEAD AND LINE POSITIONING IS DIAGRAMMATIC ON PLAN. ADJUST IN FIELD AS NECESSARY FOR 100% COVERAGE. VALVES TO BE POSITIONED ADJACENT TO PAVEMENT/CURBS, IN SHRUB BEDS WHERE POSSIBLE.
- FAMILIARIZE OWNERS FACILITY OPERATOR WITH IRRIGATION SYSTEM FUNCTION, CONTROLLER PROGRAMMING, SYSTEM OPERATION AND MAINTENANCE REQUIREMENTS.
- SPRINKLERS ON RISERS WILL NOT BE ALLOWED UNLESS NOTED ON PLANS.
- RADIUS REDUCTION TO BE MADE BY USE OF PRESSURE ADJUSTMENT, SCREENS, AND/OR ALTERNATE NOZZLES. IN-NOZZLE ADJUSTMENT IS LIMITED TO 10 PERCENT FOR SPRAY HEADS AND PER MANUFACTURER'S LIMITS FOR OTHER SPRINKLERS. SPRINKLER SPACING NOT EXCEED 60% OF THE DIAMETER OF THE PUBLISHED DATA.
- ALL CONTROL WIRE SPLICES TO BE MADE AT VALVE BOXES WITH WATER TIGHT ELECTRICAL SPLICES, 3M, SCOTT'S LOCK SEAL TACK 3576-78, OR EQUIVALENT.
- EACH VALVE BOX TO CONTAIN A MINIMUM OF TWO (2) SPARE ORANGE CONTROL WIRES FOR JACKETED WIRE. ROUTE SPARE WIRES FROM THE CONTROLLER TO THE LAST VALVE OF EACH MAINLINE BRANCH. COMMON WIRE TO BE WHITE. SINGLE STRAND WIRE TO BE A MINIMUM OF 14 GAUGE.
- ALL ELECTRICAL EQUIPMENT TO BE U.L. TESTED AND APPROVED, AND BEAR THE U.L. LABEL.
- CROSS CONNECTION PROTECTION INSPECTION REQUIRED. THE BACKFLOW DEVICE TO BE TESTED UPON THE ORIGINAL INSTALLATION. THE TESTING TO BE PERFORMED BY A PERSON HOLDING A CURRENT CERTIFICATE AS A BACKFLOW TESTER. THE TEST REPORT TO BE SUBMITTED TO THE LOCAL WATER DISTRICT, OR PURVYOR, AND OWNER WITH A COPY TO BARGHAUSEN CONSULTING ENGINEERS, INC. CONTRACTOR TO INCLUDE TESTING IN THE SCOPE OF WORK. OWNER IS RESPONSIBLE FOR ANNUAL INSPECTIONS AFTER THE INITIAL INSPECTION.
- CONTRACTOR TO PROVIDE SYSTEM WINTERIZATION/SPRING SERVICE WHEN INSTALLATION HAS BEEN COMPLETED WITHIN 90 DAYS OF NOVEMBER 1 FOR WINTERIZATION, OR MAY 15 FOR SPRING SERVICE. SERVICE TO BE PERFORMED AS NEAR AS PRACTICAL



NOTE:
 1. LOCATE VALVE BOXES IN PLANTING AREAS.
 2. WRAP VALVE BOX WITH A MINIMUM OF 3 MIL THICK PLASTIC AND SECURE IT USING DUCT TAPE OR ELECTRICAL TAPE.
 3. ALL THREADED CONNECTIONS TO BE MADE USING TEFLOON TAPE.
 4. ALL CHANGES IN ELEVATION SHALL BE MADE USING SCH 40 PVC 45° ELBOWS.

BALL VALVE DETAIL

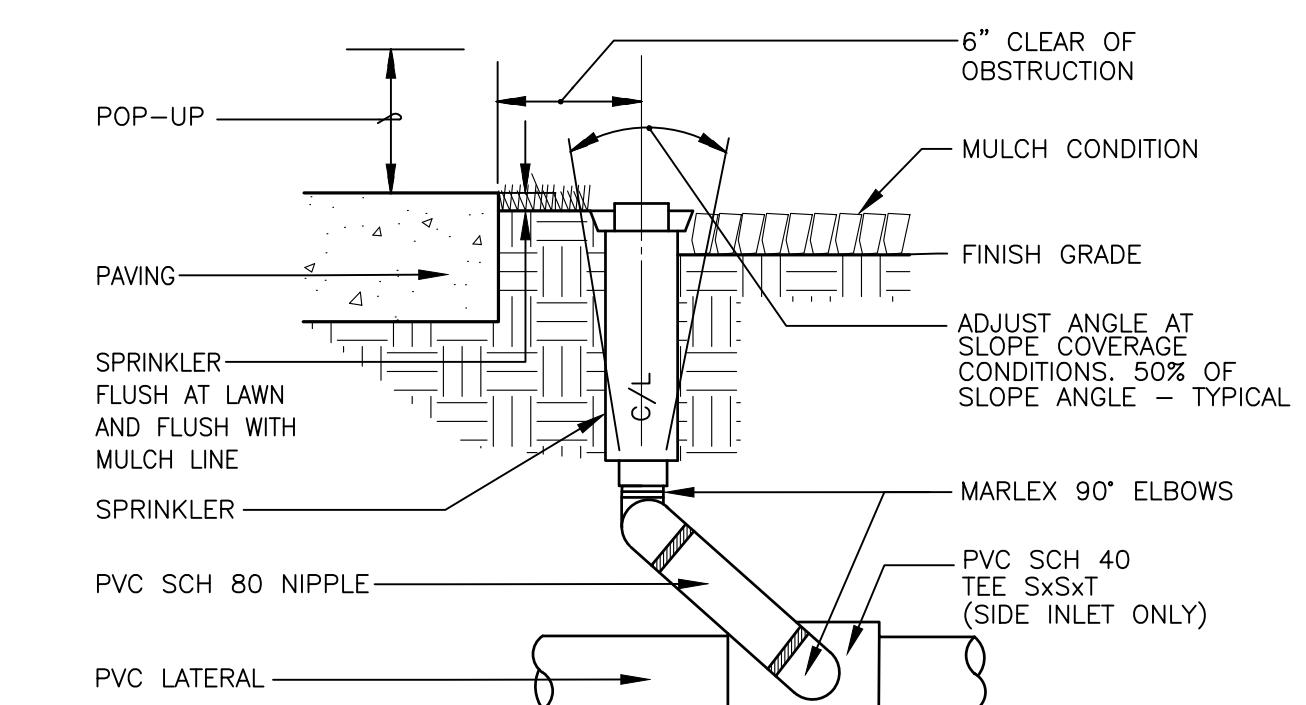
NOT TO SCALE



NOTES:
 1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
 2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.
 3. INSERTION PLOW AND TRENCHED INSTALLATIONS DO NOT REQUIRE TIE DOWN STAKES.

DRIPLINE BURIAL

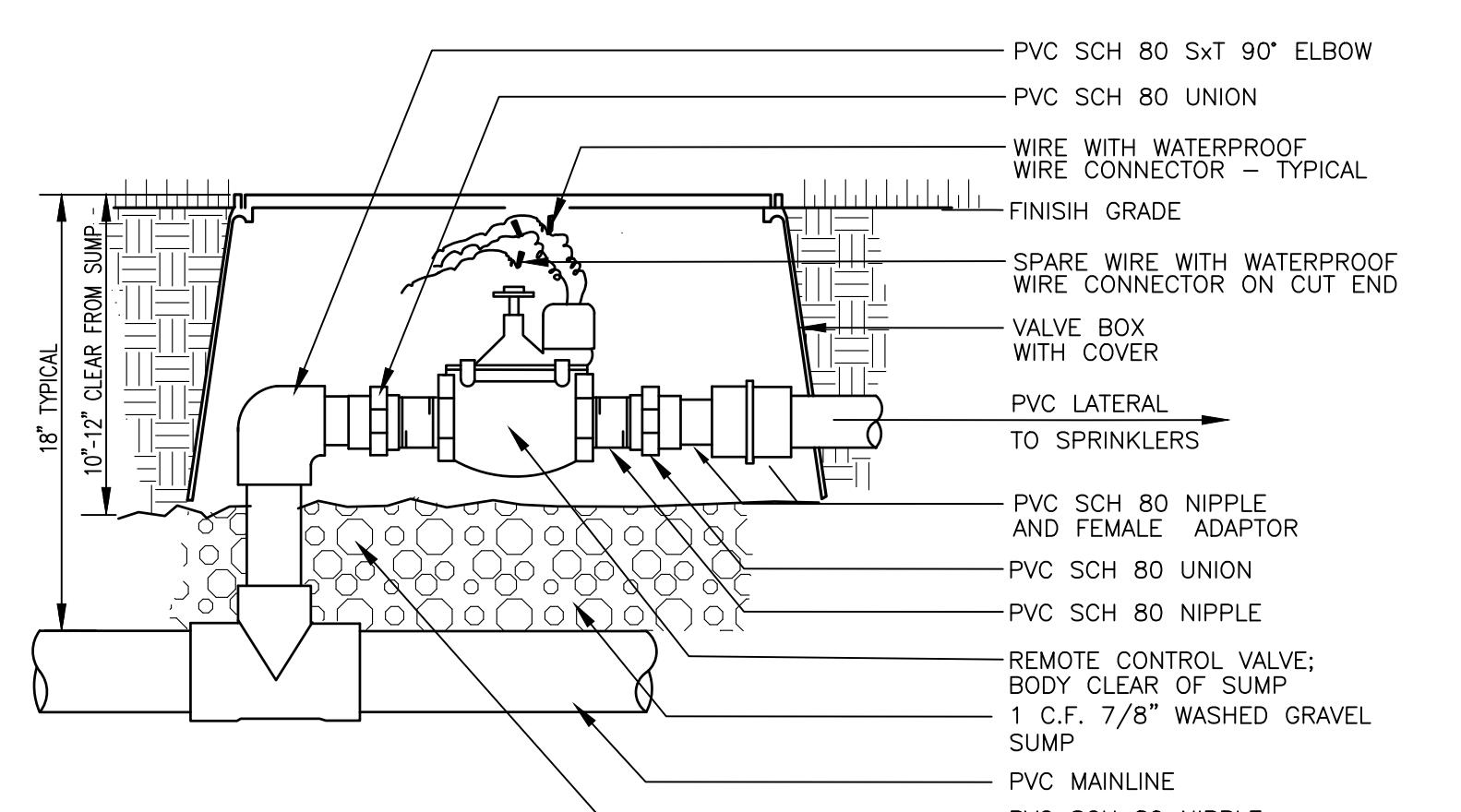
NOT TO SCALE



NOTE:
 MANUFACTURER'S LIMITS PREVAIL FOR INSTALLATION AND ADJUSTMENTS.
 PROVIDE SWING JOINT RISERS AT WALKS AND CURBS.
 24" FLEXIBLE RISERS ACCEPTABLE ELSEWHERE.

POP-UP RISER ASSEMBLY

NOT TO SCALE



NOTE:
 ONE VALVE PER BOX.
 PROVIDE EXTRA COILS (18") OF EACH WIRE IN VALVE BOX.
 COMPACT SOIL AROUND VALVE BOX.
 USE TEFLOON OR FLOWABLE SEALANT IN ALL THREADED FITTINGS, PER MANUFACTURER'S SPECIFICATIONS.

REMOTE CONTROL VALVE ASSEMBLY

NOT TO SCALE

Job Number	IRRIGATION NOTES AND DETAILS FOR DUPONT BUSINESS PARK			Revision
	1	12/23/24	TCR	
No.	Date	Checked	Approved	Per Site Plan
Title: AVENUE 55, LLC 601 UNION STREET, SUITE 2930 SEATTLE, WA 98101 (206) 707-9696				
For: BARGHAUSEN CONSULTING ENGINEERS, INC. 18215 72nd Avenue South Kent, WA 98032 barghausen.com 425.251.6222				
State: WA Ref: 18666 Date/Time: 12/25/2024 3:01 PM Scale: Horizontal N/A Vertical N/A				
APPROVED FOR CONSTRUCTION By: CITY OF DUPONT Date: _____ These drawings are approved for construction for a period of 12 months from the date shown hereon. The city reserves the right to make revisions, additions, deletions, or modifications should construction be delayed beyond this time limitation. The city, by approving these drawings, assumes no liability in regards to their accuracy or omissions.				

IRRIGATION DETAILS

FOR DUPONT BUSINESS PARK

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

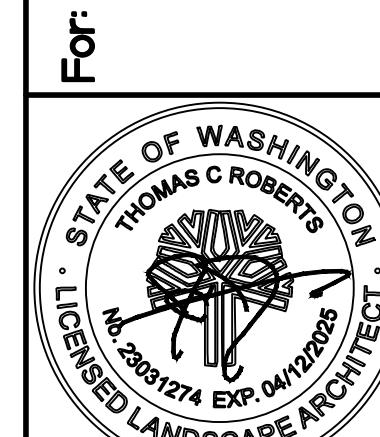
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IRRIGATION DETAILS
FOR
DUPONT BUSINESS PARK

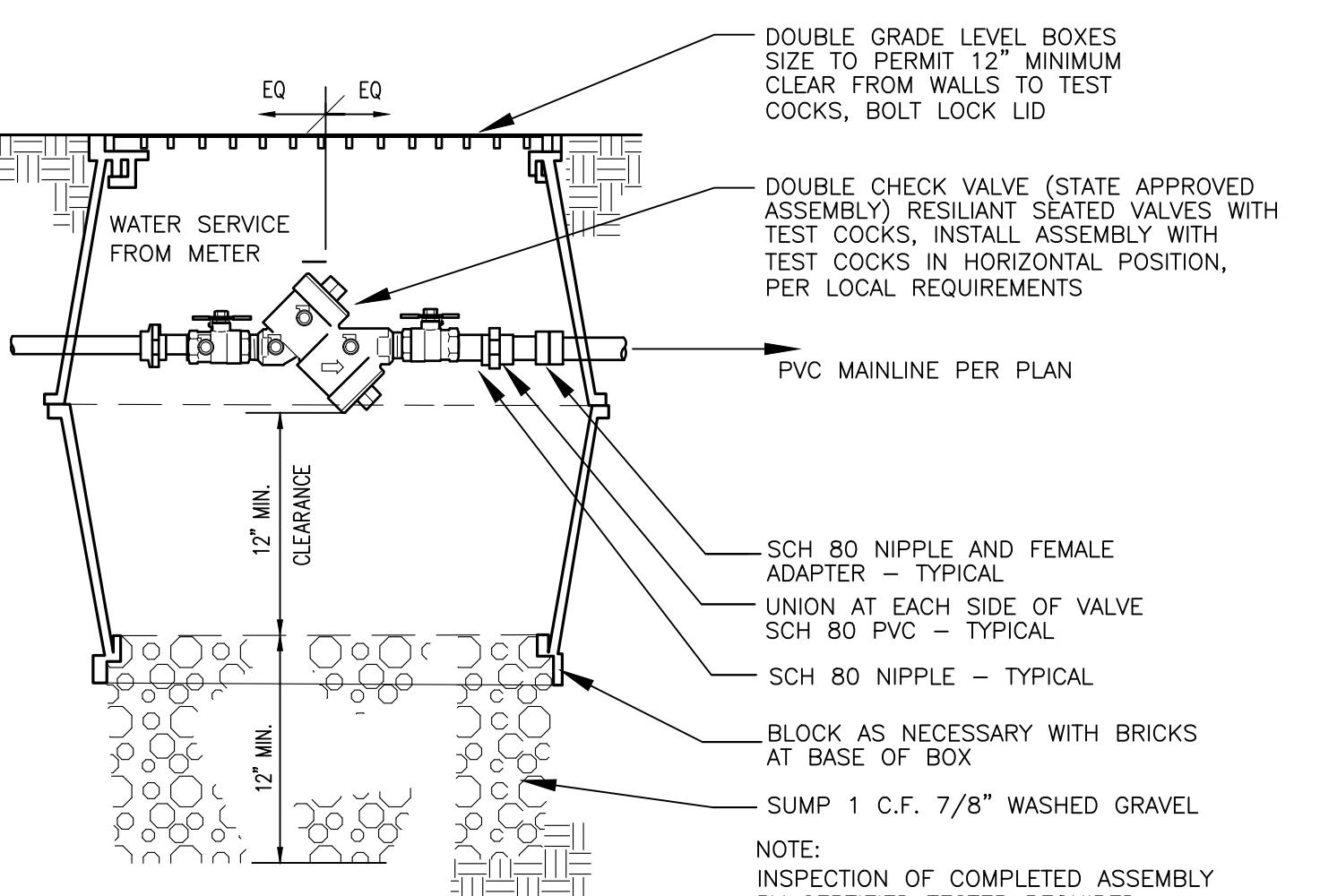
AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696



DUPONT WA WAREHOUSE

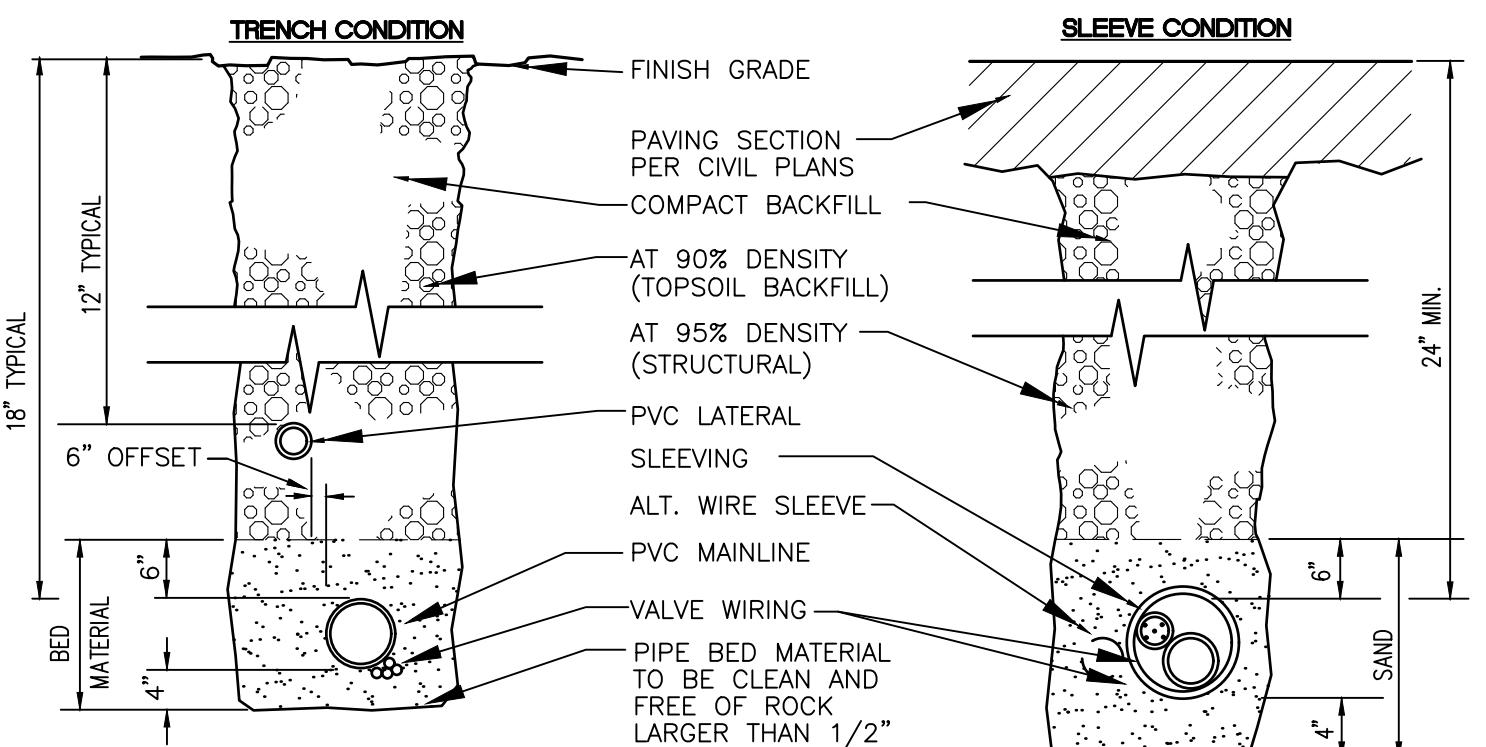
Job Number
18666
Sheet
L8 9

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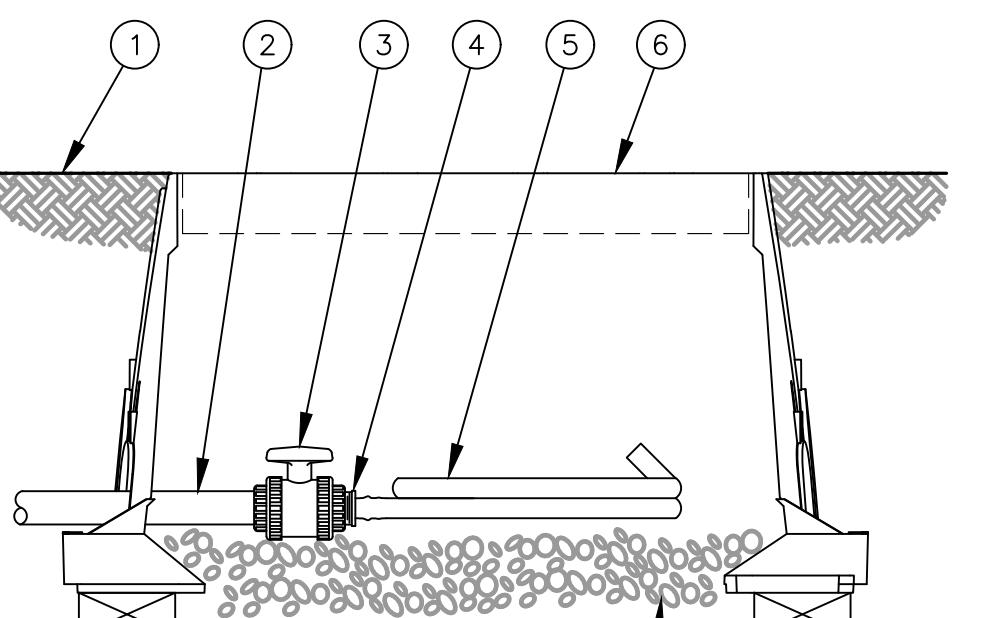
CHECK VALVE ASSEMBLY DETAIL

NOT TO SCALE



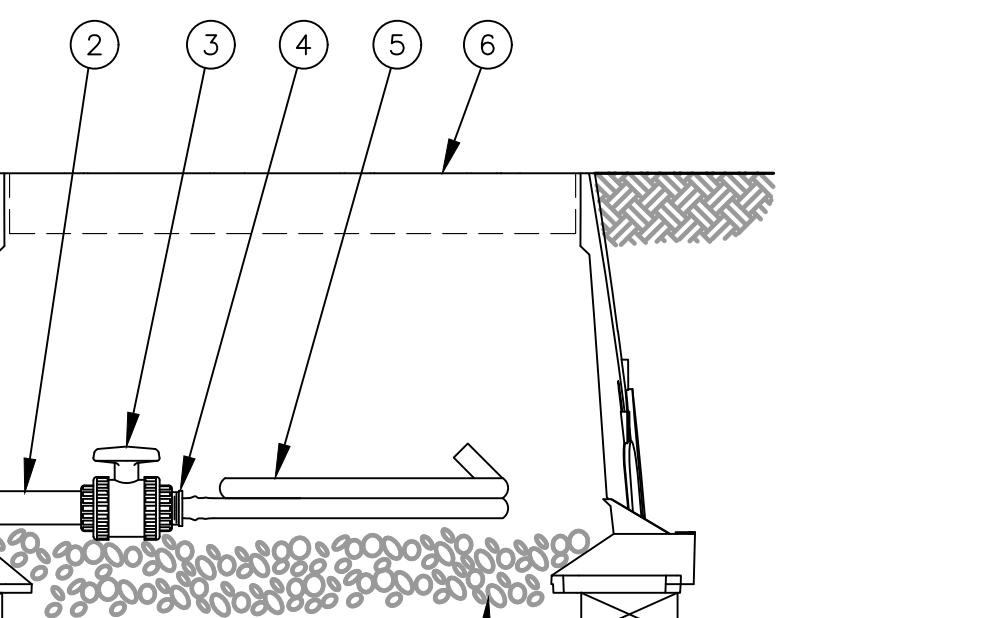
SLEEVE/TRENCHING DETAIL

NOT TO SCALE



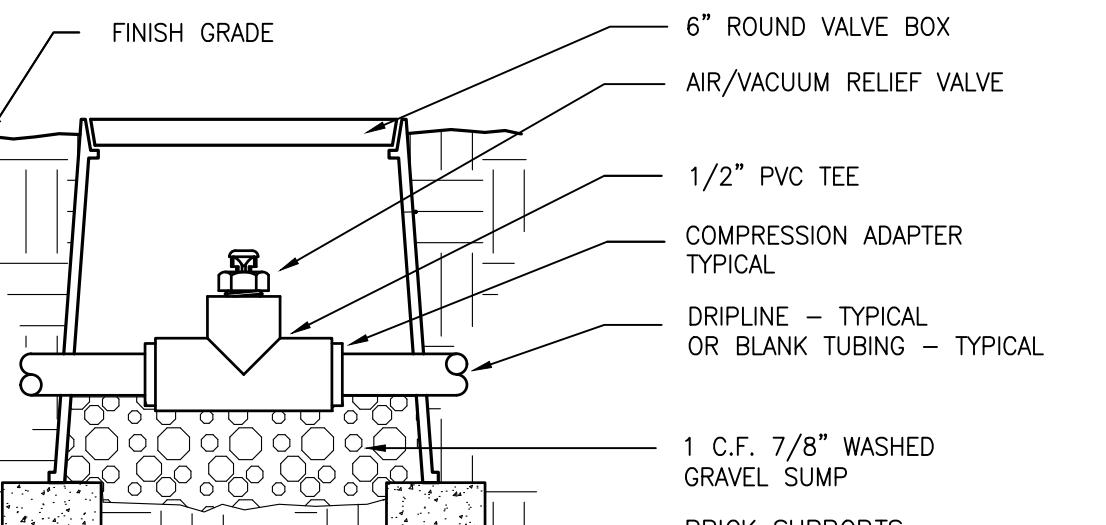
FLUSH POINT WITH BALL VALVE

NOT TO SCALE

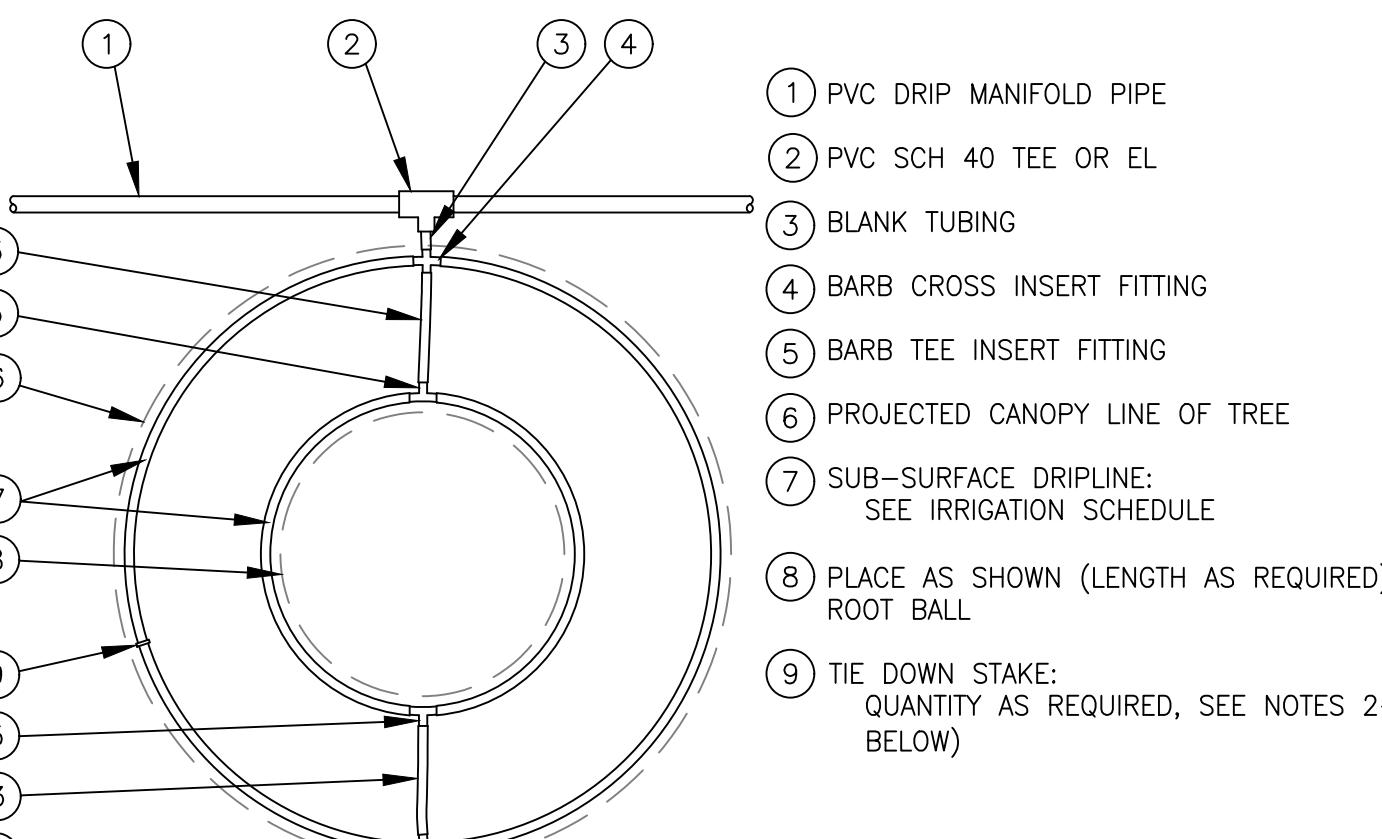


1/2" AIR/VACUUM RELIEF VALVE DETAIL

NOT TO SCALE



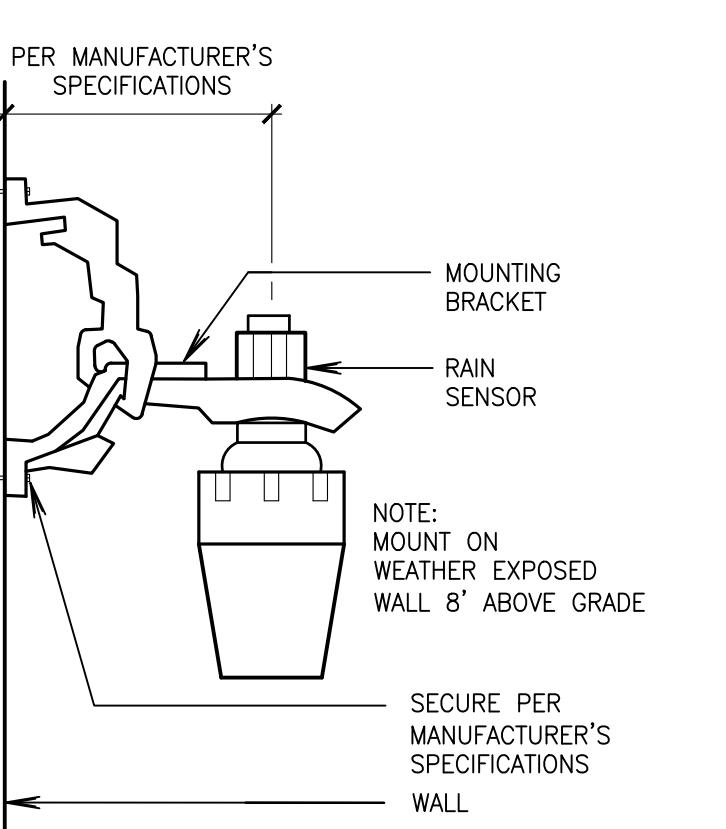
NOTE:
AIR/VACUUM RELIEF VALVE CANNOT BE CONNECTED LOWER THAN DRIPLINE LATERALS.
FOR USE ON ZONES OF 7 GPM OR LESS ONLY (PLUMBED TO TUBING).



NOTES:
1. DISTANCE BETWEEN LATERAL RINGS AND Emitter SPACING TO BE BASED ON SOIL TYPE, AND TREE CANOPY. SEE MANUFACTURER DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
2. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

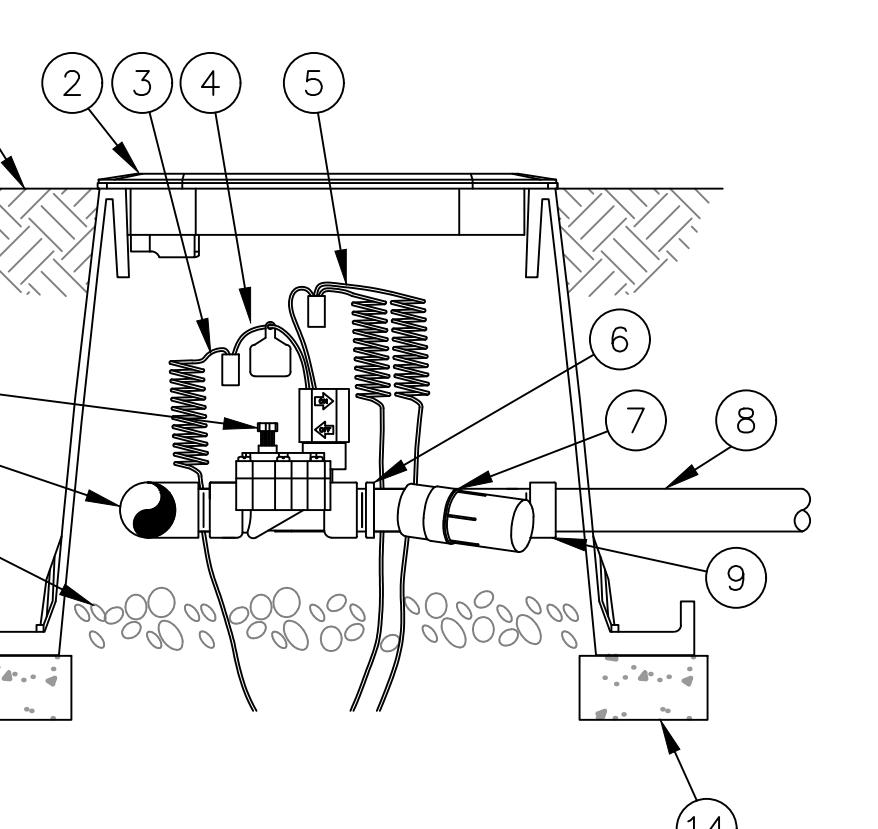
DRIPLINE AROUND TREE

NOT TO SCALE



RAIN SENSOR DETAIL

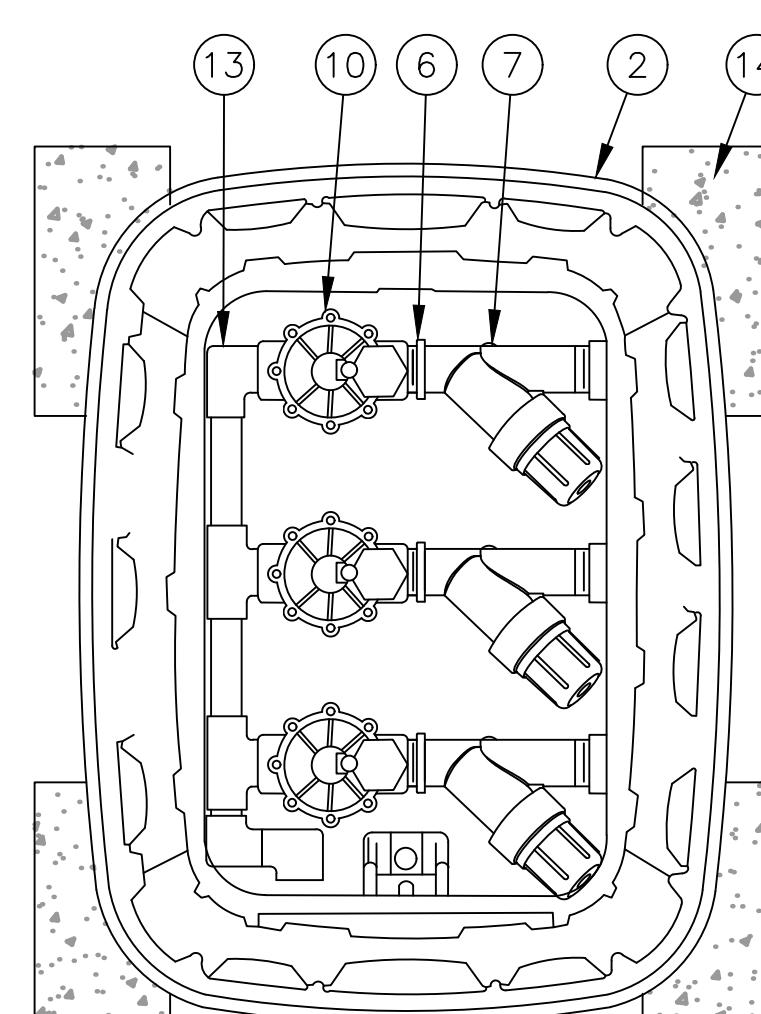
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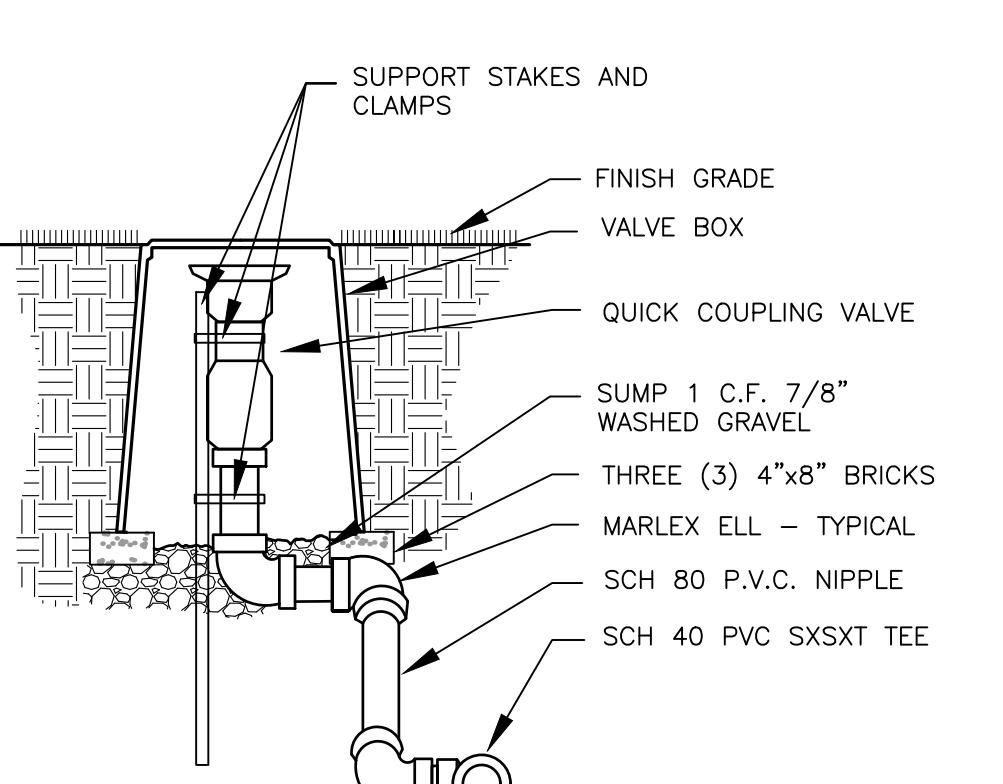
SIDE VIEW

DRIP IRRIGATION VALVE

NOT TO SCALE

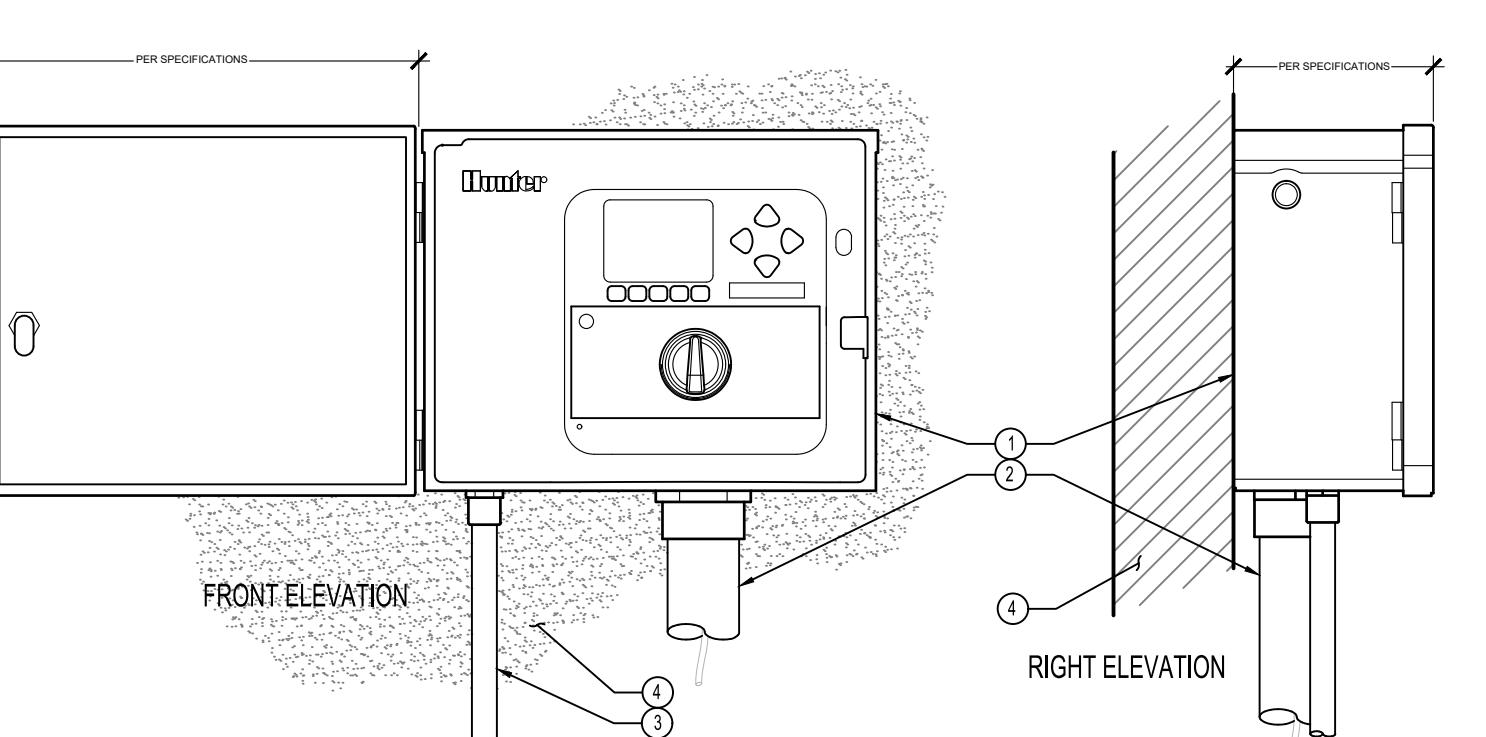


TOP VIEW



QUICK COUPLING VALVE DETAIL

NOT TO SCALE



IRRIGATION CONTROLLER, WALL MOUNT

NOT TO SCALE

LEGEND:
① IRRIGATION CONTROLLER (ACC) PER PLAN
② IRRIGATION CONTROL WIRE IN CONDUIT
SIZE AND TYPE PER LOCAL CODES
③ ELECTRICAL SUPPLY CONDUIT
CONNECT TO POWER SOURCE, J-BOX INSIDE
CONTROLLER
④ ADJACENT SURFACE TO MOUNT CONTROLLER PER PLAN

NOTE:
MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL.
CONTROLLER SHALL BE HARD-WIRED TO GROUNDED
110 VAC POWER SOURCE

1	12/23/24	TCR	JMV	JWV	PER SITE PLAN
No.	Date	By	Cld.	Appl.	

Title:

AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696

IRRIGATION DETAILS

FOR

DUPONT BUSINESS PARK

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

APPROVED FOR CONSTRUCTION

BY: CITY OF DUPONT DATE: _____

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Revision

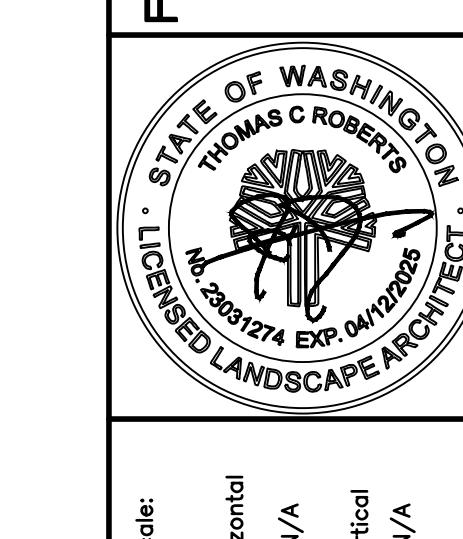
IRRIGATION DETAILS FOR DUPONT BUSINESS PARK

Plan

Title:

AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696

For:



Ref: 18666

Scale: _____
Horizontal N/A
Vertical N/A

Designed

Drawn

Checked

M.V.

Approved

M.V.

Date

12/23/24

Scale: 1 = 1

TRUBERS

Xref: 18666

Date/Time: 12/25/2024 3:01 PM

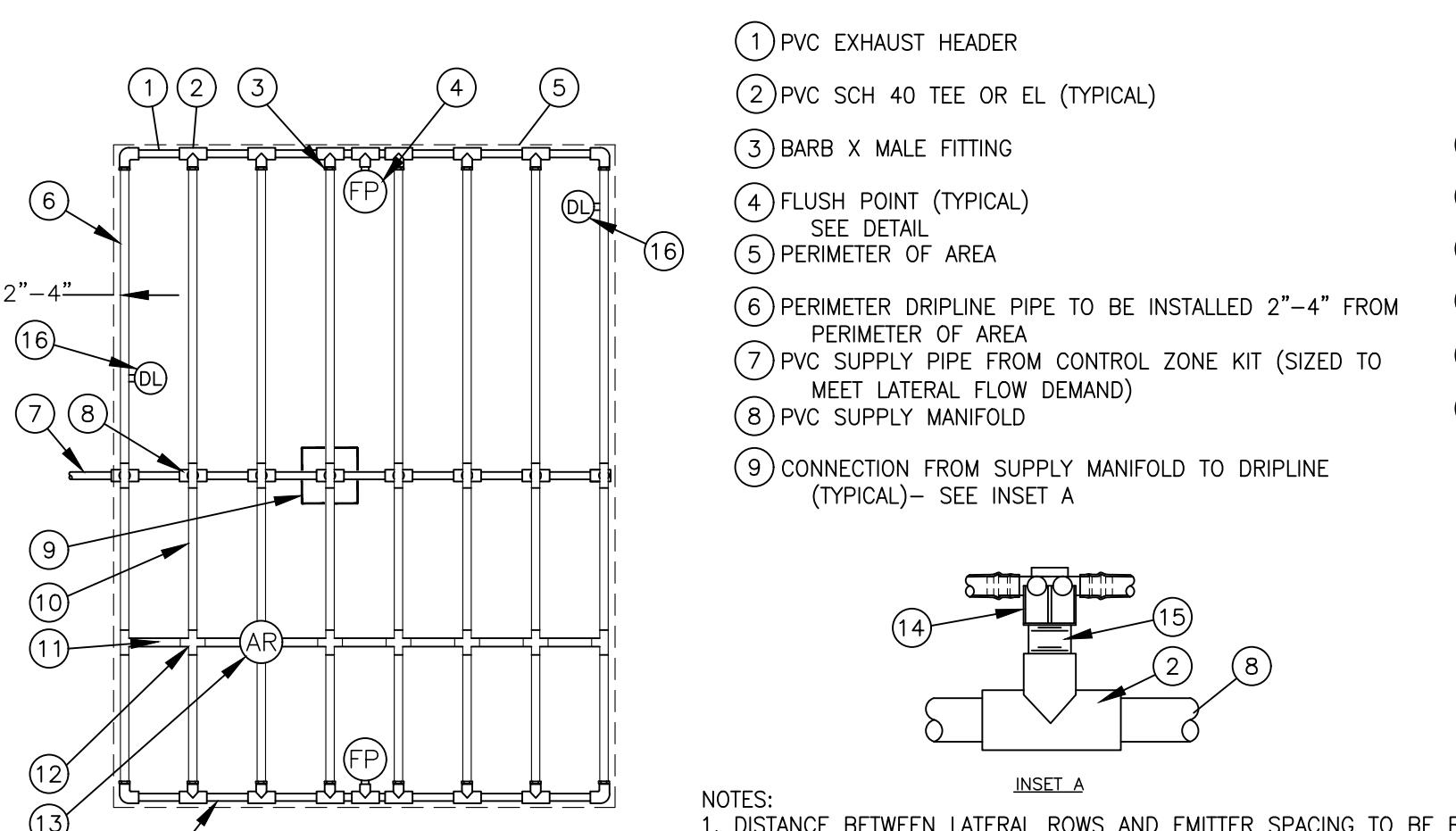
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Sheet: 18666

Page: 1 of 1

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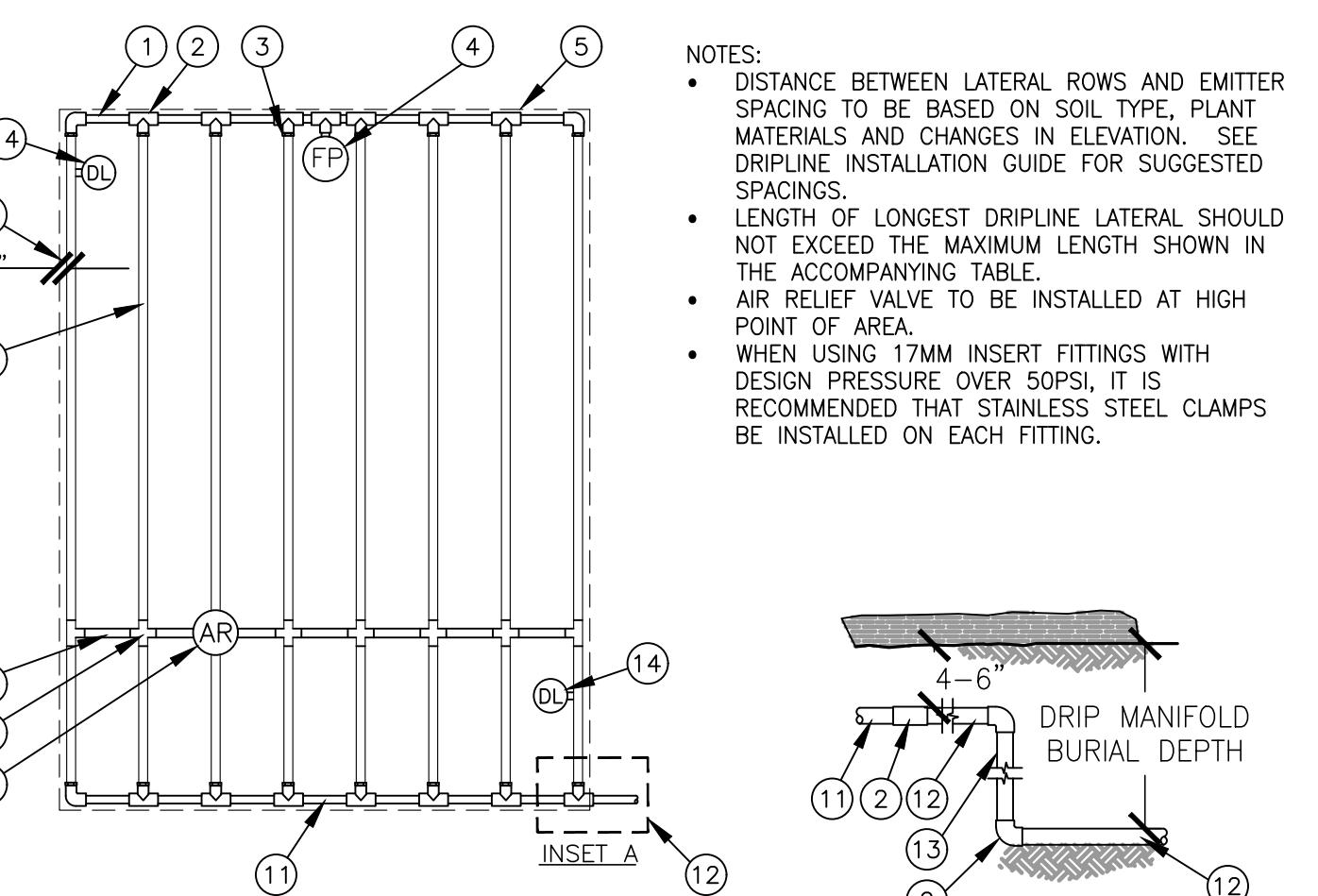
DRILINE CENTER FEED LAYOUT

NOT TO SCALE

① PVC EXHAUST HEADER
② PVC SCH 40 TEE OR EL (TYPICAL)
③ BARB X MALE FITTING
④ FLUSH POINT (TYPICAL)
⑤ PERIMETER OF AREA
⑥ PERIMETER DRILINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
⑦ PVC SUPPLY PIPE FROM CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
⑧ PVC SUPPLY MANIFOLD
⑨ CONNECTION FROM SUPPLY MANIFOLD TO DRILINE (TYPICAL) SEE INSET A
⑩ SUB-SURFACE DRILINE
⑪ BLANK TUBING
⑫ BARB X BARB INSERT TEE OR CROSS
⑬ 1/2" AIR RELIEF VALVE
⑭ BARB X FEMALE FITTING
⑮ PVC NIPPLE, LENGTH AS NECESSARY
⑯ DRILINE INDICATOR. SEE DETAIL FOR ADDITIONAL INFORMATION

Dripline Maximum Lateral Lengths (Feet)			
Inlet Pressure psi	12" Spacing Nominal Flow (gph)	18" Spacing Nominal Flow (gph)	24" Spacing Nominal Flow (gph)
15	273	155	314
20	318	169	353
30	360	230	413
40	395	255	465
50	417	285	528
60	460	290	596
	0.6	0.6	0.6
	0.9	0.9	0.9
	273	314	424
	155	169	322
	318	353	368
	230	294	308
	413	508	586
	360	385	414
	255	402	474
	285	420	488
	528	720	800
	290	596	514

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND Emitter SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE IRRIGATION SCHEDULE FOR SPACING.
2. LENGTH OF LONGEST DRILINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
3. AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
4. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.



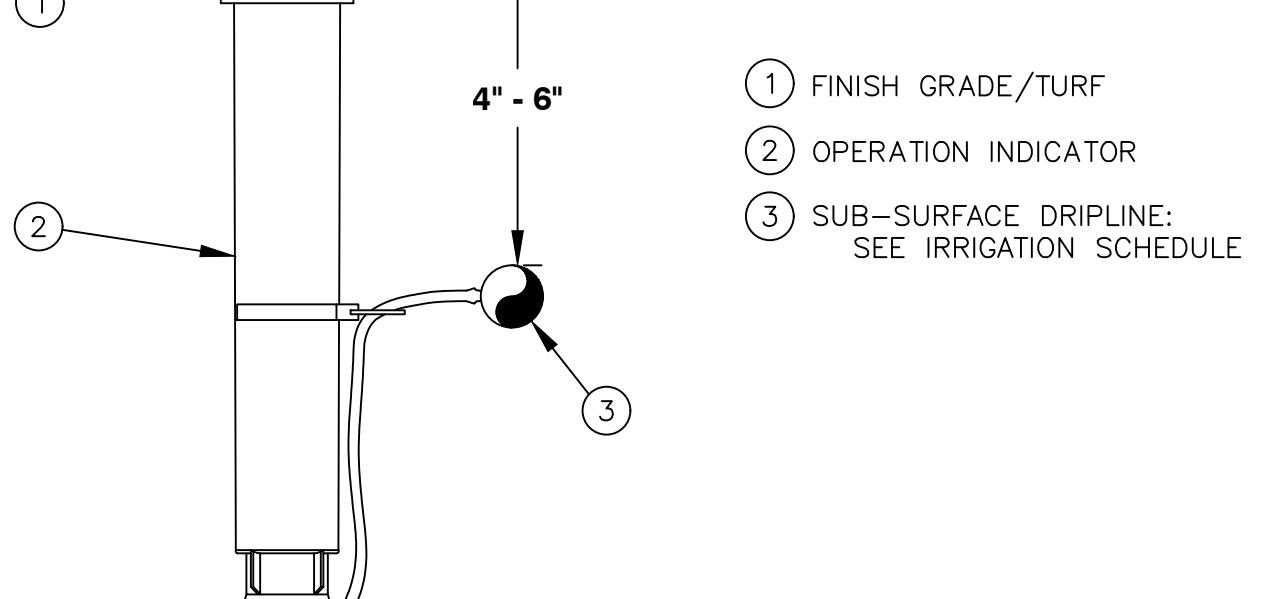
DRILINE END FEED LAYOUT

NOT TO SCALE

① PVC EXHAUST HEADER
② PVC SCH 40 TEE OR EL (TYPICAL)
③ BARB X MALE FITTING
④ FLUSH POINT (TYPICAL)
⑤ PERIMETER OF AREA
⑥ PERIMETER DRILINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
⑦ SUB-SURFACE DRILINE
⑧ BLANK TUBING
⑨ BARB X BARB INSERT TEE OR CROSS
⑩ 1/2" AIR RELIEF VALVE
⑪ PVC SUPPLY HEADER
⑫ PVC DRIP MANIFOLD FROM CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
⑬ PVC SCH 40 RISER PIPE
⑭ DRILINE INDICATOR. SEE DETAIL FOR ADD'L INFO

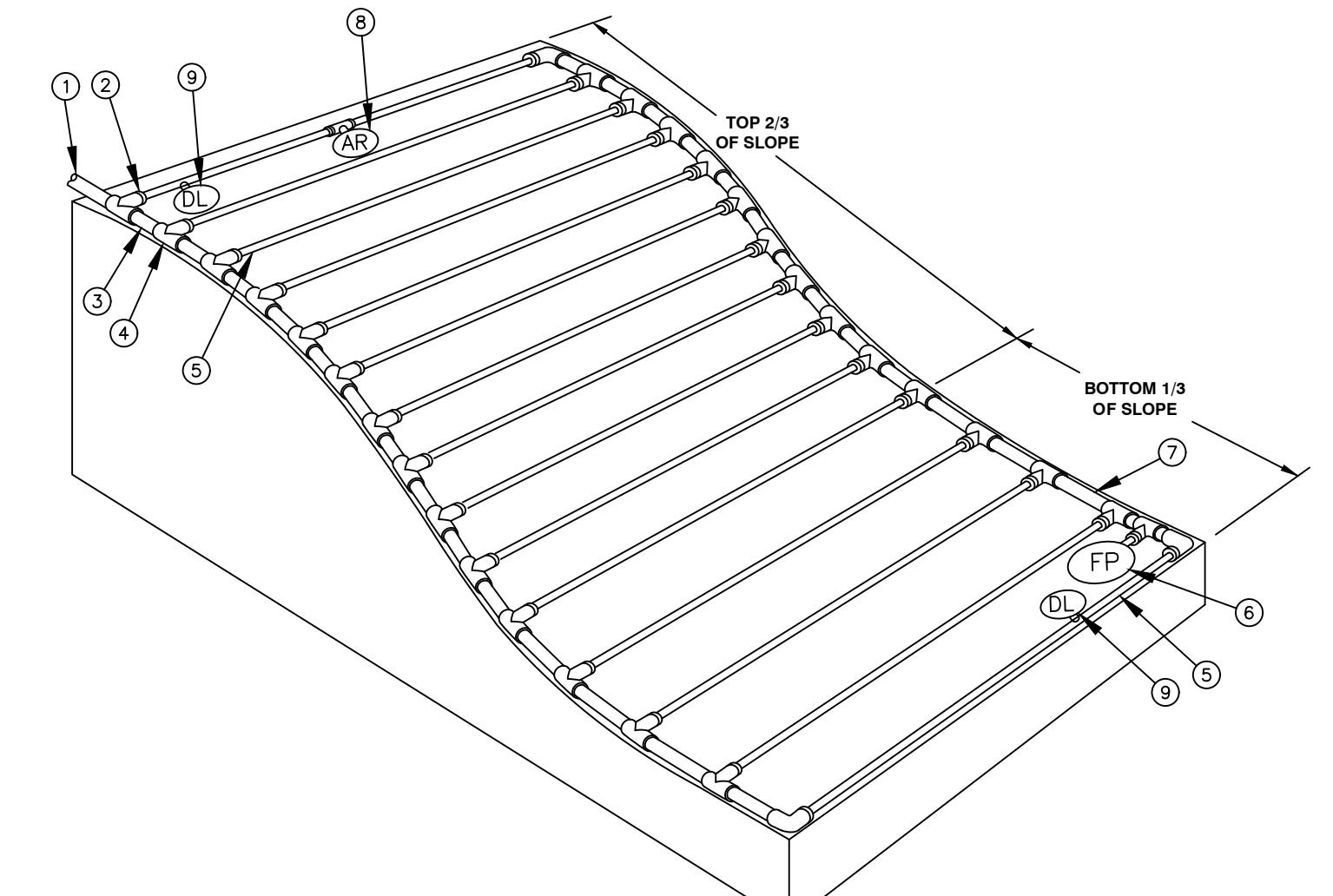
Dripline Maximum Lateral Lengths (Feet)			
Inlet Pressure psi	12" Spacing Nominal Flow (gph)	18" Spacing Nominal Flow (gph)	24" Spacing Nominal Flow (gph)
15	273	155	314
20	318	169	353
30	360	230	413
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50	417	285	528
60	460	290	596
	0.6	0.6	0.6
	0.9	0.9	0.9
	273	314	424
	155	169	322
	318	353	368
	230	294	308
	413	508	586
	360	385	414
	255	402	474
	285	420	488
	528	720	800
	290	596	514

NOTES:
• DISTANCE BETWEEN LATERAL ROWS AND Emitter SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE DRILINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
• LENGTH OF LONGEST DRILINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
• AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
• WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.



DRIP IRRIGATION DRILINE INDICATOR

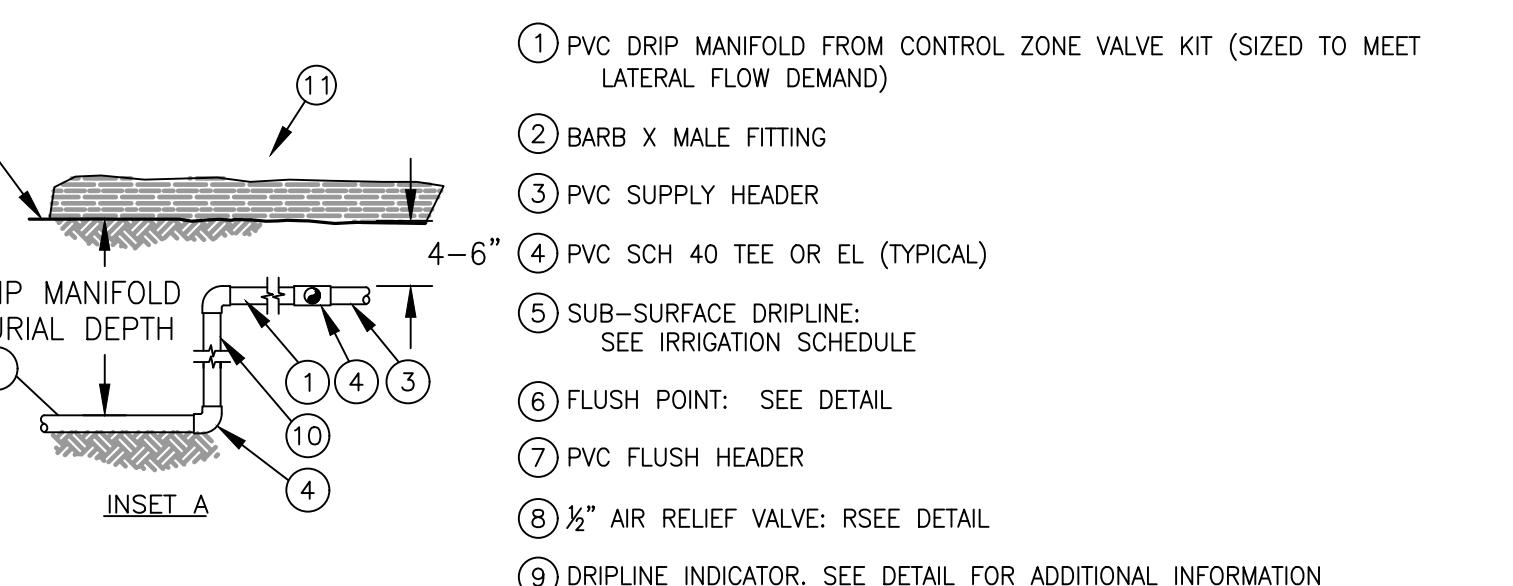
NOT TO SCALE



DRILINE SLOPED LAYOUT

NOT TO SCALE

NOTES:
• DISTANCE BETWEEN LATERAL ROWS AND Emitter SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. DISTANCE BETWEEN LATERAL ROWS FOR BOTTOM 1/3 OF SLOPE TO BE SPACED GREATER THAN OPTIMAL ROW DISTANCE. SEE MANUFACTURER DRILINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
• LENGTH OF LONGEST DRILINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
• WHEN ELEVATION CHANGE EXCEEDS 8 FEET IT IS RECOMMENDED THAT A NEW DRILINE ZONE BE CREATED.
• INSTALL AIR RELIEF VALVE AT HIGH POINTS IN DRIP LATERAL.
• WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

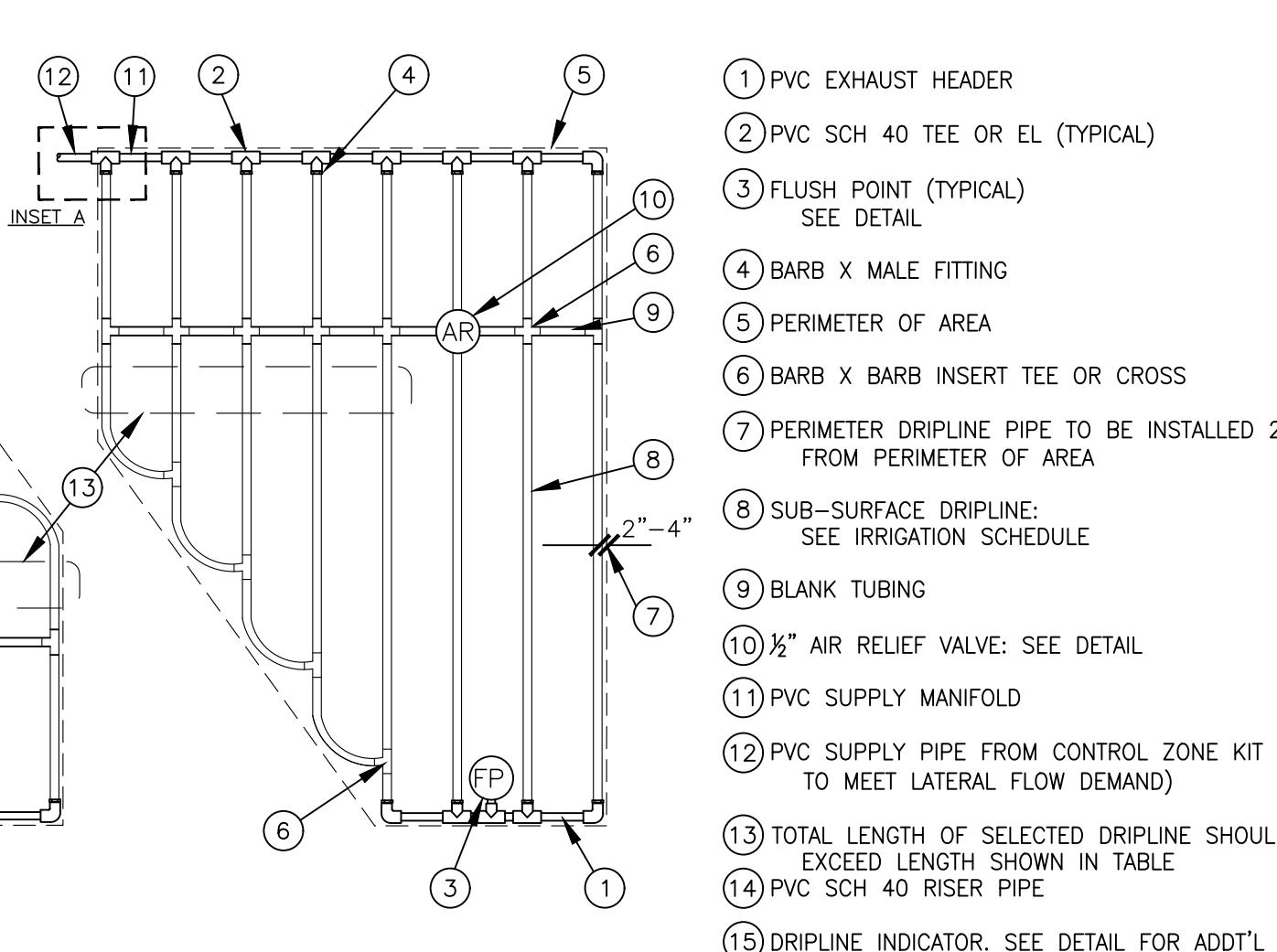


DRILINE ODD CURVES LAYOUT

NOT TO SCALE

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND Emitter SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS FOR SPACING.
2. LENGTH OF LONGEST DRILINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. INSTALL AIR RELIEF VALVE AT HIGH POINTS IN DRIP LATERAL.
4. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

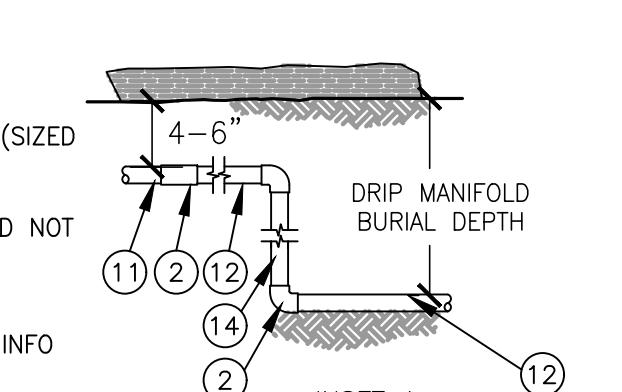
① PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
② PVC SCH 40 TEE OR EL (TYPICAL)
③ PERIMETER DRILINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
④ PVC SUPPLY MANIFOLD
⑤ PVC SCH 40 TEE OR EL (TYPICAL)
⑥ BARB X MALE FITTING
⑦ SUB-SURFACE DRILINE: SEE IRRIGATION SCHEDULE
⑧ BARB X BARB INSERT TEE
⑨ TOTAL LENGTH OF SELECTED DRILINE SHOULD NOT EXCEED LENGTH SHOWN IN TABLE
⑩ PVC FLUSH HEADER
⑪ FLUSH POINT: SEE DETAIL
⑫ PVC RISER PIPE
⑬ TURF OR MULCH
⑭ FINISH GRADE
⑮ 1/2" AIR RELIEF VALVE: SEE DETAIL
⑯ DRILINE INDICATOR. SEE DETAIL FOR ADD'L INFO



DRILINE IRREGULAR SHAPED LAYOUT

NOT TO SCALE

NOTES:
• DISTANCE BETWEEN LATERAL ROWS AND Emitter SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE MANUFACTURER DRILINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
• LENGTH OF LONGEST DRILINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
• AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
• WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.



DRILINE IRREGULAR SHAPED LAYOUT

NOT TO SCALE

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