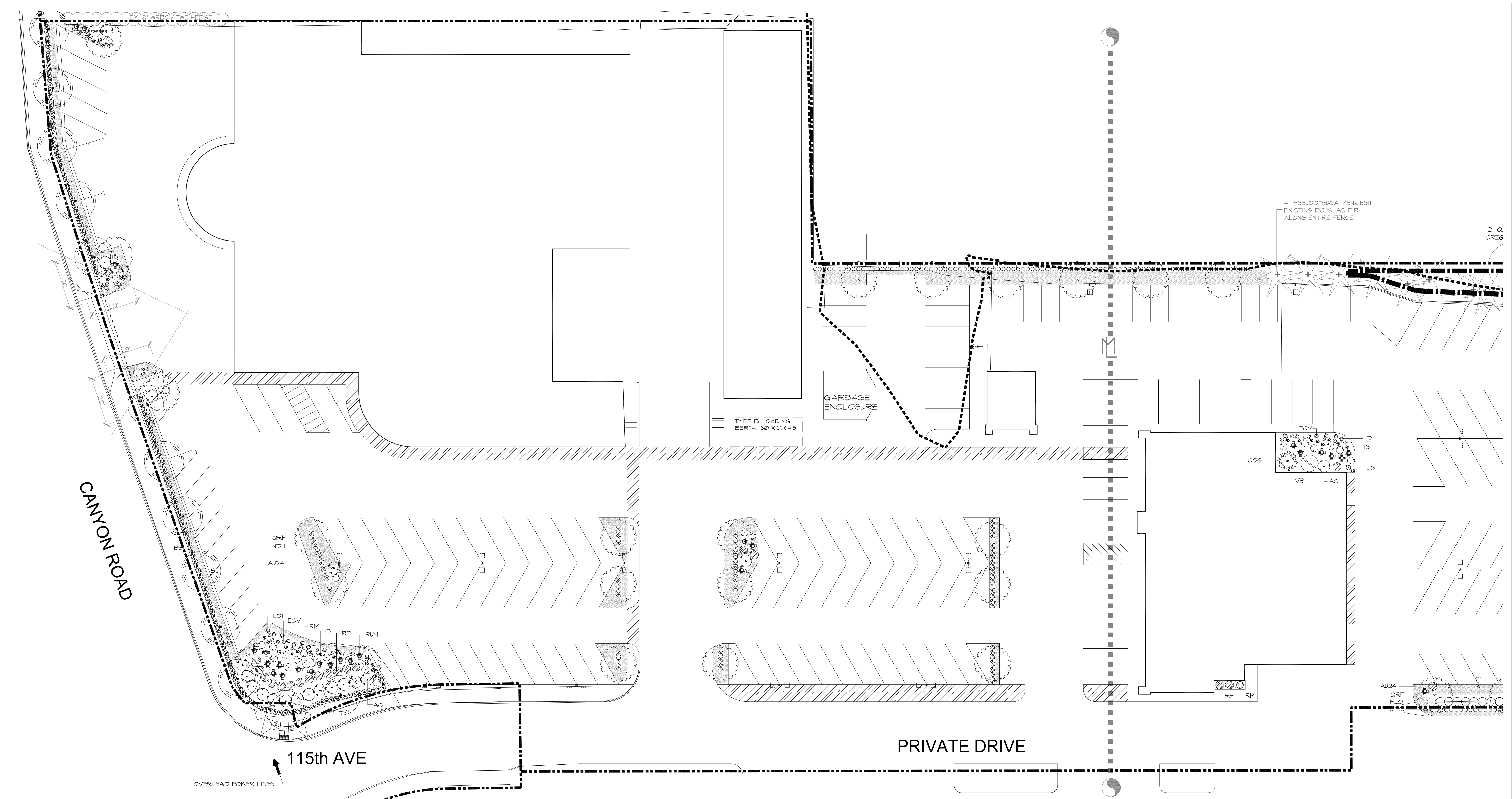


MULCH
 DARRELL MULCH
 LANDSCAPE
 ARCHITECTURE
 1907 N.E. 66TH AVENUE #168
 PORTLAND, OREGON 97213
 (503) 222-7416 TEL

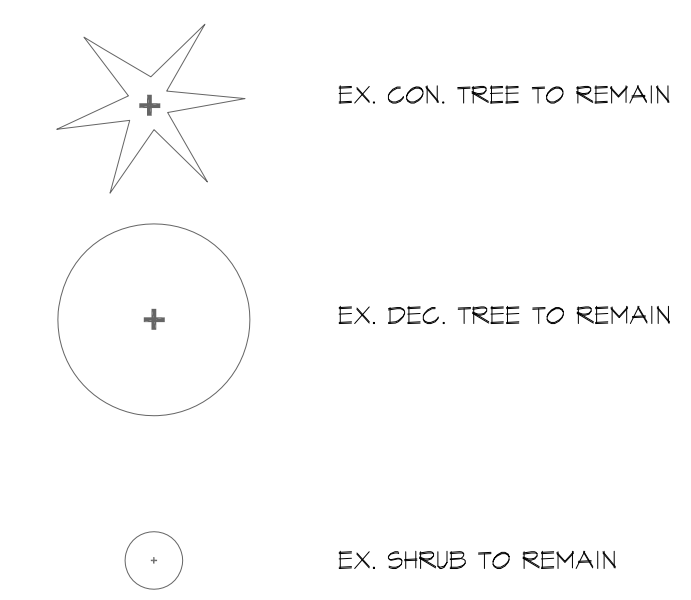
REGISTERED
 315
 Darrell Mulch
 OREGON
 10-18-93
 LANDSCAPE ARCHITECT

Carr Subaru
 11635 SW Canyon Rd, Beaverton, OR 97005



PLANT LEGEND "VERIFY ALL QUANTITIES"

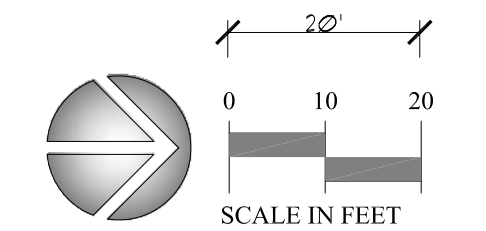
SYM.	#	BOTANICAL	COMMON	SIZE
Ag	20	ABELIA GRANDIFLORA	GLOSSY ABELIA	5 GAL
AU24	1059	ARCTOSTAPHYLOS UVA-URSINI-24IN-O.C.	NATIVE KINKIKINNICK	4 IN 24" O.C.
BS52	151	BUXUS S. 'SUFFRUTICOSA'	DWARF ENGLISH BOXWOOD	5 GAL
CNP	1	CHAMAECYPARIS N. 'PENDULA'	KEEPING ALASKAN CEDAR	8 FT-10 FT
CO6	1	CHAMAECYPARIS OBUSA 'GRACILIS'	SLENDER HINKI CYPRRESS	8 FT-10 FT
ECV	28	ERICA CARNEA 'VIVELLII'	SPRING HEATHER	2 GAL
IB	34	IBERIS SEMPERVIVENS	GANDYTUFF	2 GAL
J5	1	JUNIPERUS C. 'SKYROCKET'	SKYROCKET JUNIPER	8 FT-10 FT
LDI	27	LITHODORA DIFFUSA	LITHODORA	2 GAL
NDH	56	NANDINA DOMESTICA 'HARBOUR DWARF'	HARBOUR NANDINA	5 GAL
PLO	64	PRUNUS L. 'OTTO-LUYKEN'	OTTO-LUYKEN LAUREL	5 GAL
QR6	30	QUERCUS ROBUR 'FASTIGIATA'	SKYROCKET OAK	2 IN CAL
RM	24	ROSA MEIDLAND 'SCARLET'	SCARLET MEIDLAND ROSE	5 GAL
RP	20	RHOODENDRON 'F.J.M.'	F.J.M. RHODY	5 GAL
RUM	26	RHAPHIOPHIS U. MINOR 'GULF GREEN'	DWARF YEDDO HANTHORN	5 GAL
SJ	13	STYRAX JAPONICA 'O.P.L. Street Tree'	JAPANESE SNOWBELL	2 IN CAL
TOE6	209	THUJA O. 'EMERALD GREEN'	EMERALD GREEN ARBORVITAE	6 FT - 8 FT
VB	1	VIBURNUM BODNANTENSE	PINK DAWN VIBURNUM	5 GAL



Received
 Planning Division
 11/05/2021

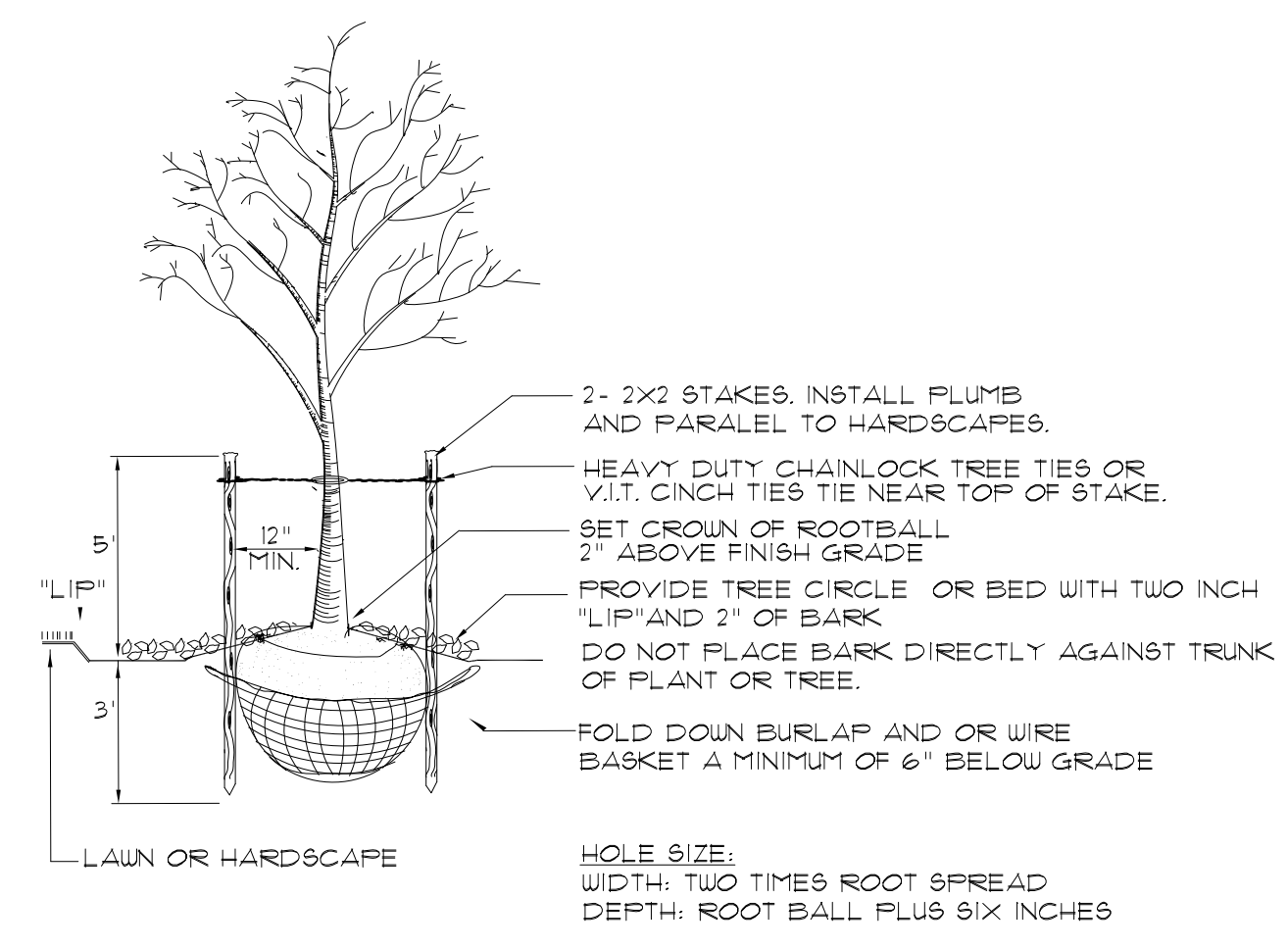
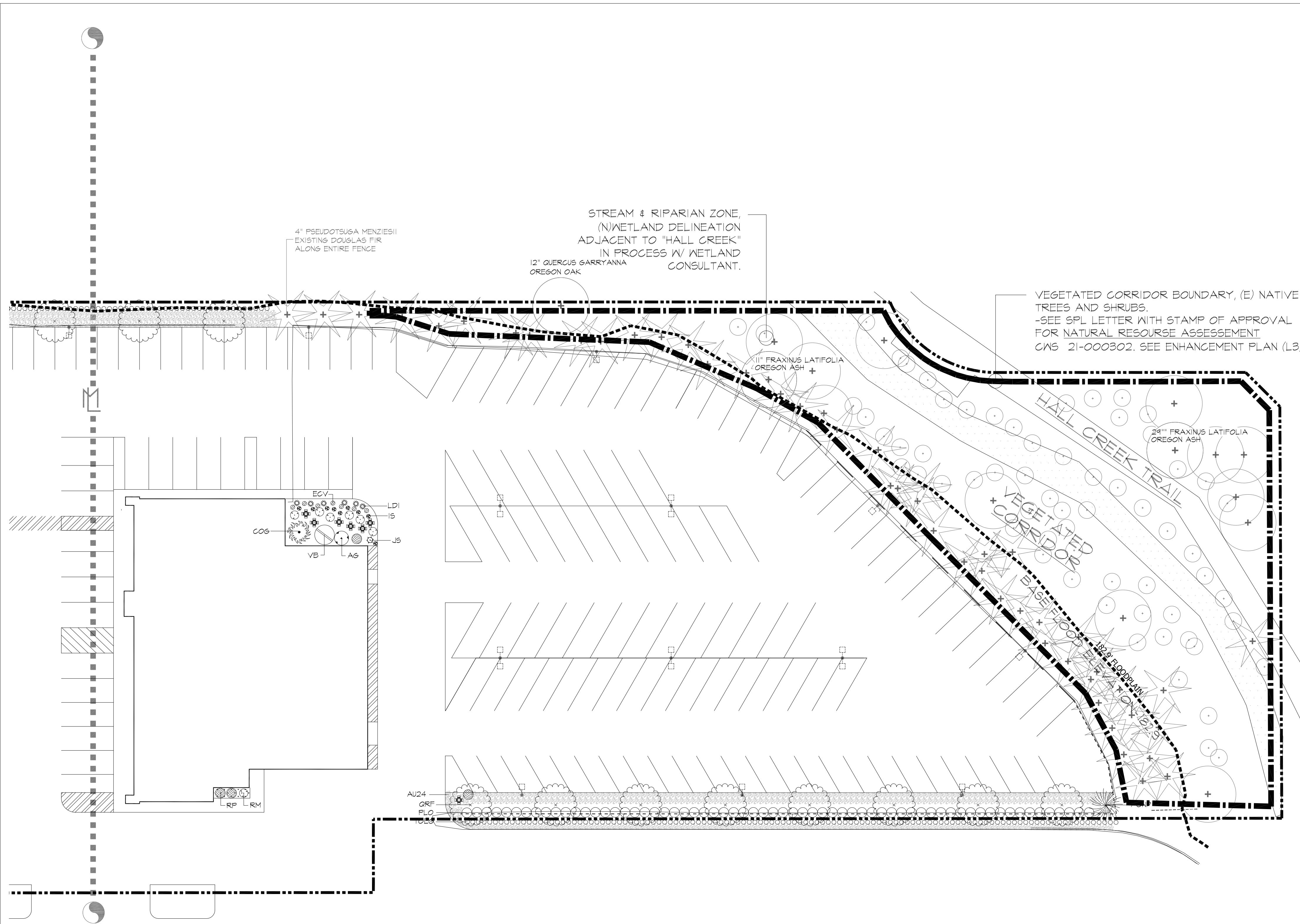
ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center. (Note: the telephone number for the Oregon Utility Notification Center is (503) 232-1987).

L1 PLANTING PLAN

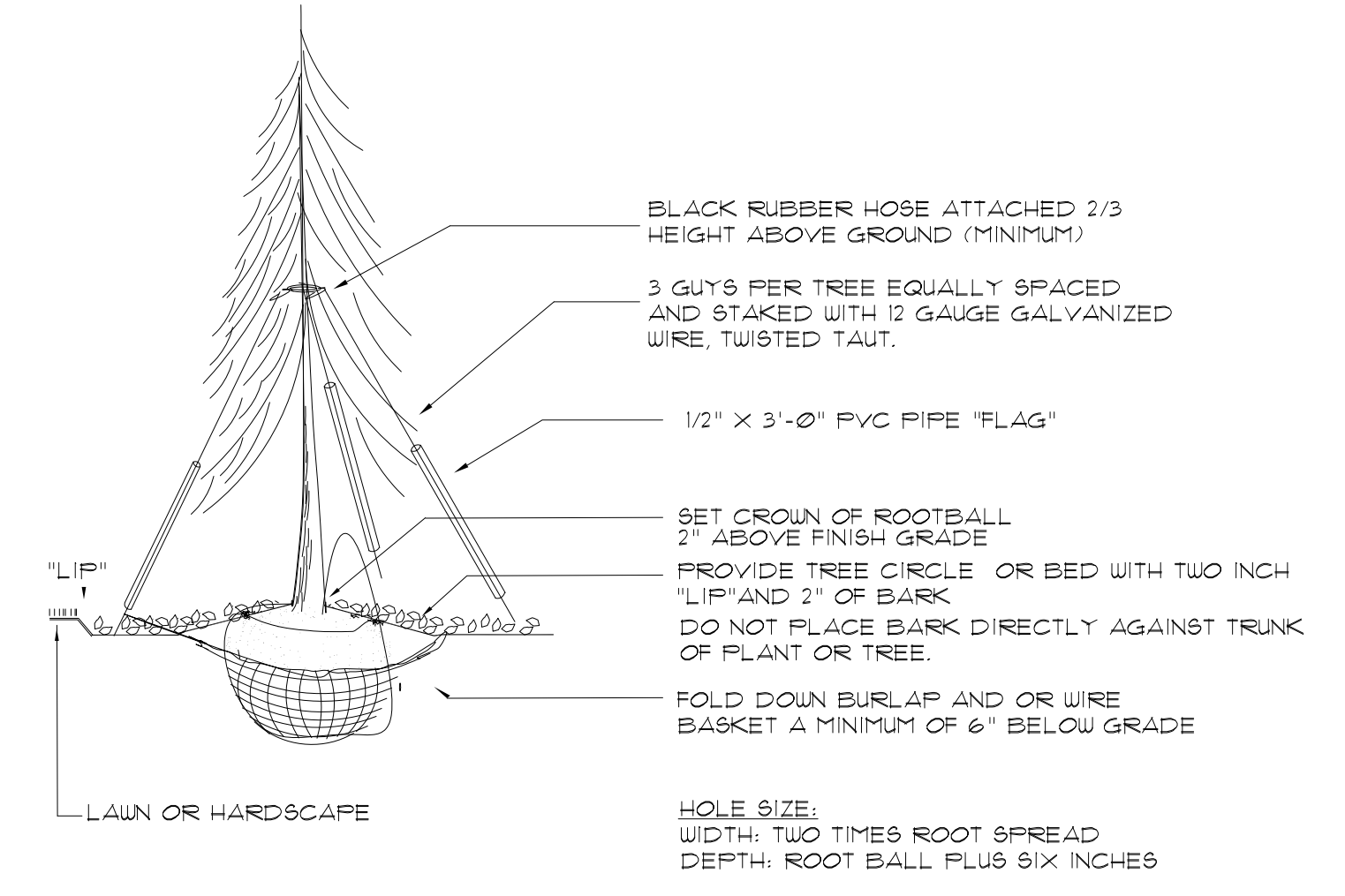


DATE:	10-11-21
PROJECT NO:	X
DESIGNED:	DM
DRAWN:	DM
CHECKED:	DM
REVISIONS:	

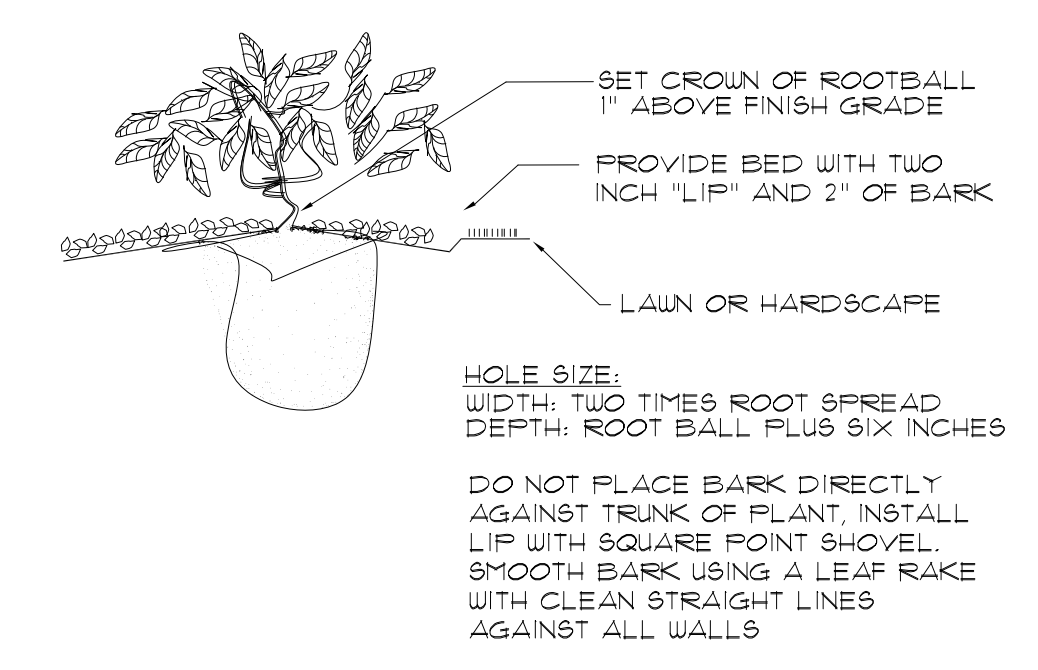
SHEET
L1
 5



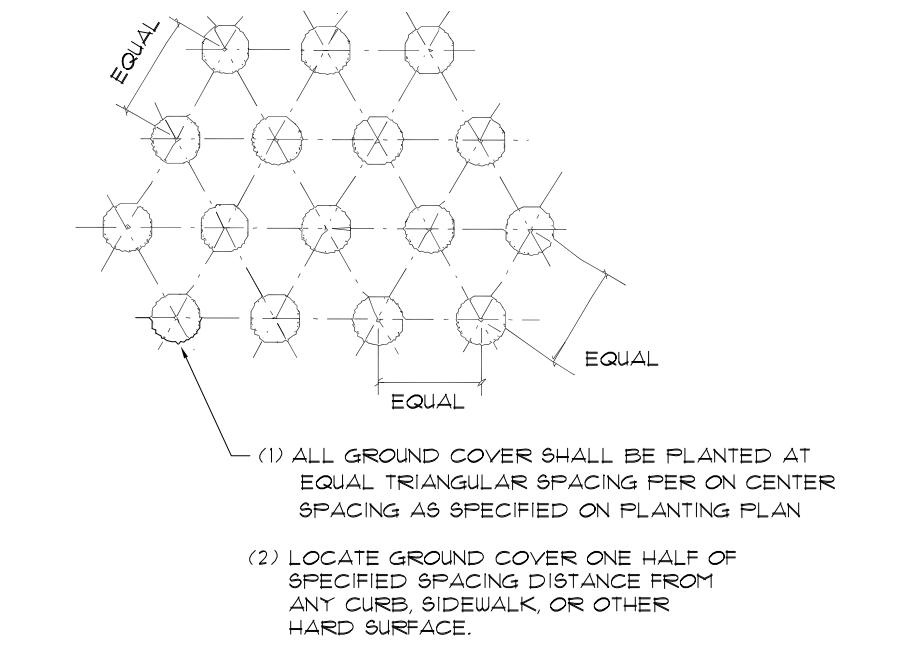
1 TREE PLANTING DETAIL
L2 NOT TO SCALE



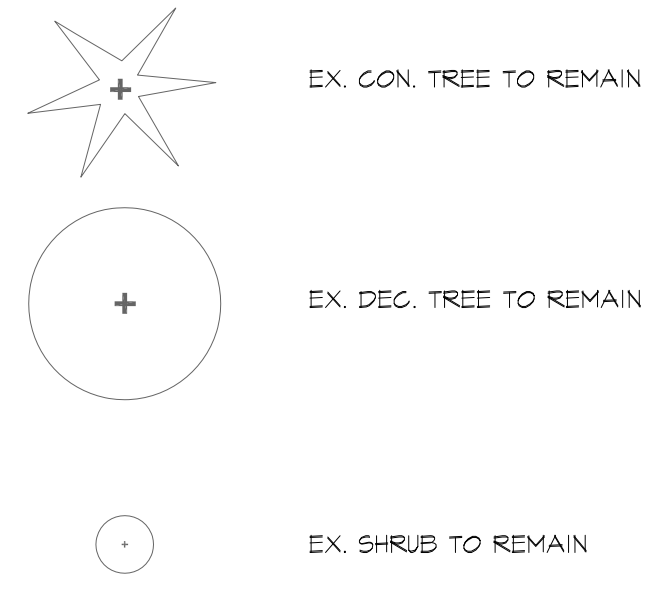
2 CONIFEROUS TREE DETAIL
L2 NOT TO SCALE



3 SHRUB PLANTING DETAIL
L2 NOT TO SCALE

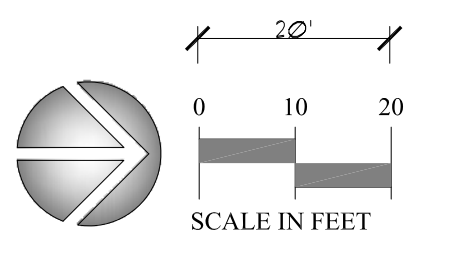


4 GROUND COVER DETAIL
L2 NOT TO SCALE



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L2 PLANTING PLAN



MULCH
DARRELL MULCH
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ARCHITECTURE
1907 N.E. 66TH AVENUE #168
PORTLAND, OREGON 97213
(503) 222-7416 TEL

REGISTERED
315
Darrell Mulch
LANDSCAPE ARCHITECT
OREGON
10-18-93

Carr Subaru
11635 SW Canyon Rd, Beaverton, OR 97005

DATE:	10-11-21
PROJECT NO:	X
DESIGNED:	DM
DRAWN:	DM
CHECKED:	DM
REVISIONS:	

SHEET
L2
5

VEGETATED CORRIDOR ENHANCEMENT

A total of (14,440 SF) of VC will be enhanced to good corridor condition, as shown on Figure 4. This will include enhancements within Plant Communities A (currently in DEGRADED corridor condition and B, (currently in MARGINAL corridor condition).

Enhancement includes the removal of invasive species, and planting of native trees and shrubs per CNS Appendix A @Planting Requirements. Bare areas greater than 25 square feet will also be seeded with a native seed mix.

I. Vegetated Corridors and Sensitive Areas

Trees and shrubs shall be planted using the following equations to achieve the specified densities on a per acre basis.

- A) Total number of trees per acre = area in square feet x 0.011/100
- B) Total number of shrubs per acre = area in square feet x 0.05/5/100
- C) Groundcover = plant with a native seed mix to achieve 100% areal coverage

FENCING

SENSITIVE AREA AND VEGETATED CORRIDOR BOUNDARIES AS SHOWN ON THE SERVICE PROVIDER LETTER, INCLUDING LIMITS OF APPROVED, TEMPORARY CONSTRUCTION ENCROACHMENT. ORANGE CONSTRUCTION FENCING SHALL BE NOTED AT VEGETATED CORRIDOR BOUNDARIES AS WELL AS AT ENCROACHMENT LIMITS DURING CONSTRUCTION. NOTE PERMANENT TYPE FENCING AND SIGNAGE BETWEEN THE DEVELOPMENT AND THE VEGETATED CORRIDOR FOR PROJECT COMPLETION IS REQUIRED.

MONITORING

REMOVE BY HAND TOOLS ALL EXOTIC SPECIES. I.D. TAGS TO BE PLACED ON ALL PLANTS FOR MONITORING PURPOSES. TREES, SHRUBS, AND GROUNDCOVERS PLANTED IN UPLAND AREAS SHALL BE MULCHED A MINIMUM OF THREE INCHES IN DEPTH AND 18 INCHES IN DIAMETER.

MAINTENANCE

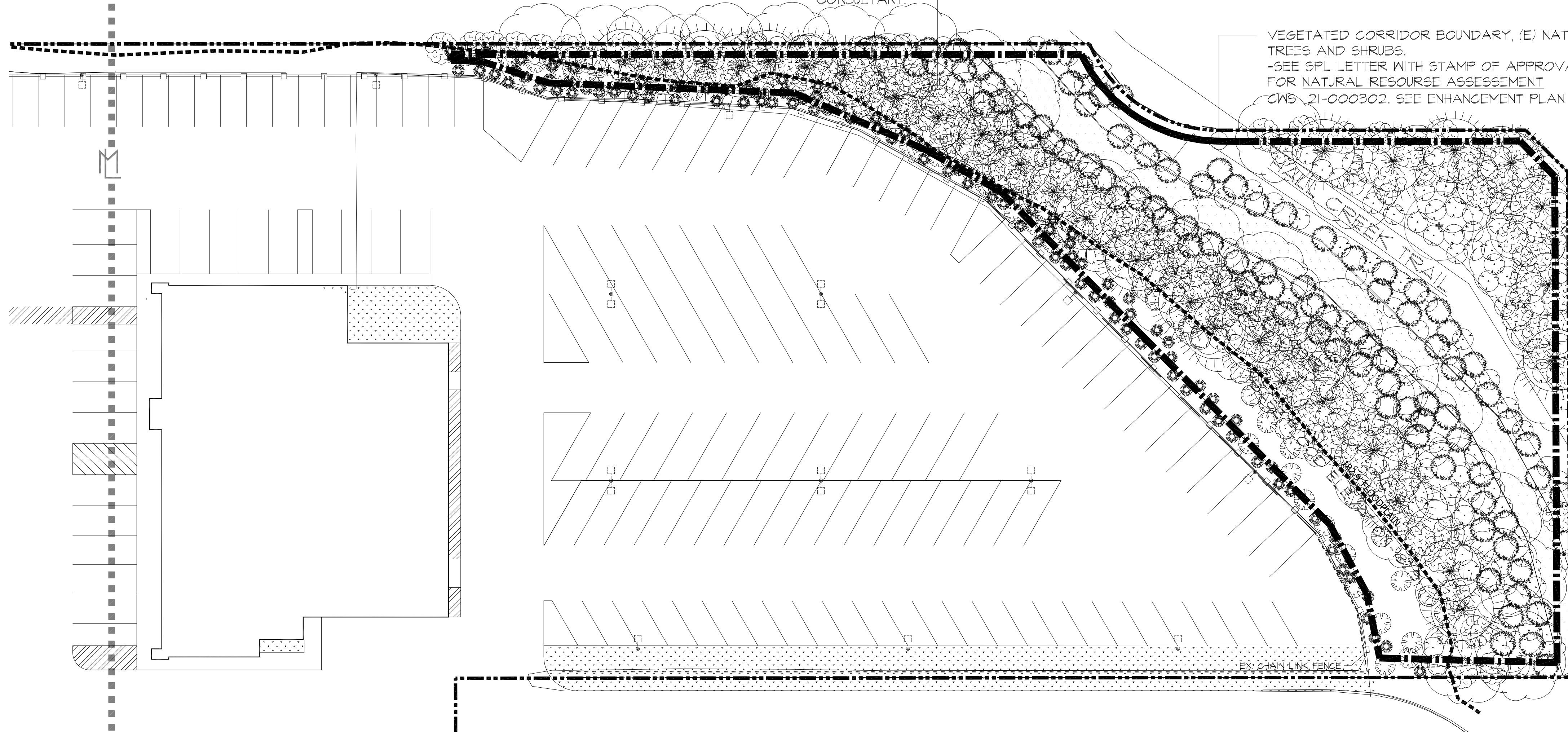
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15005 SW TV Hwy
Beaverton OR, 97005
(503) 644-2161

- I. SHALL MONITOR THE REQUIRED PLANTINGS FOR TWO YEARS TO ENSURE SURVIVAL AND REPLACEMENT AS DESCRIBED AS FOLLOWS: THE LANDOWNER IS RESPONSIBLE FOR THE ONGOING SURVIVAL OF REQUIRED PLANTINGS AND IS RESPONSIBLE FOR SUPPLYING AND REPLACING ANY DEAD PLANTS.

- A. CONDUCT ANNUAL PLANT INSPECTION DURING THE EARLY SUMMER GROWING SEASON.
- B. A COUNT OF THE NUMBER OF PLANTS THAT HAVE DIED. ONE REPLACEMENT PLANT MUST BE PLANTED FOR EACH PLANT THAT HAS DIED (REPLACEMENT MUST OCCUR WITHIN ONE PLANTING SEASON).
- C. A LIST OF REPLACEMENT PLANTS.
- D. PROVIDE THREE LETTERS (TO SERVE AS MONITORING AND MAINTENANCE REPORTS) TO CLEAN WATER SERVICES CONTAINING THE ABOVE MONITORING INFORMATION. SUBMIT THE FIRST LETTER TO VERIFY THE SITE HAS BEEN PLANTED. SUBMIT THE SECOND LETTER WITHIN 12 TO 14 MONTHS AFTER INITIAL PLANTING AND THE THIRD LETTER 24 TO 27 MONTHS AFTER INITIAL PLANTING.

STREAM & RIPARIAN ZONE, (N)WETLAND DELINEATION ADJACENT TO "HALL CREEK" IN PROCESS W WETLAND CONSULTANT.

VEGETATED CORRIDOR BOUNDARY, (E) NATIVE TREES AND SHRUBS.
-SEE SPL LETTER WITH STAMP OF APPROVAL FOR NATURAL RESOURCE ASSESSMENT CNS 21-000302. SEE ENHANCEMENT PLAN (L3)



Plant Community Enhancement (Plant Types & Quantities)

PLANT COMMUNITY A DEGRADED (1,200 SF)
112 TREES REQUIRED - 23 EXISTING = 89 NEEDED
560 SHRUBS REQUIRED - 158 EXISTING = 392 NEEDED

TABLE 4 // PLANT COMMUNITY ENHANCEMENT (PLANT TYPES & QUANTITIES) // 344 IN NRA

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
TREES			
ALNUS RUBRA	RED ALDER	2 GAL	59
THUJA PLICATA	RED CEDAR	2 GAL	30
SHRUBS			
ROSA FISOCARPA	SWAMP ROSE	1 GAL	200
OEMLERIA CERASIFORMIS	INDIAN PLUM	1 GAL	100
CORNUS STOLONIFERA	REDTING DOGWOOD	1 GAL	42

GROUNDCOVER = PLANT WITH A NATIVE SEED MIX TO ACHIEVE 100% AREAL COVERAGE

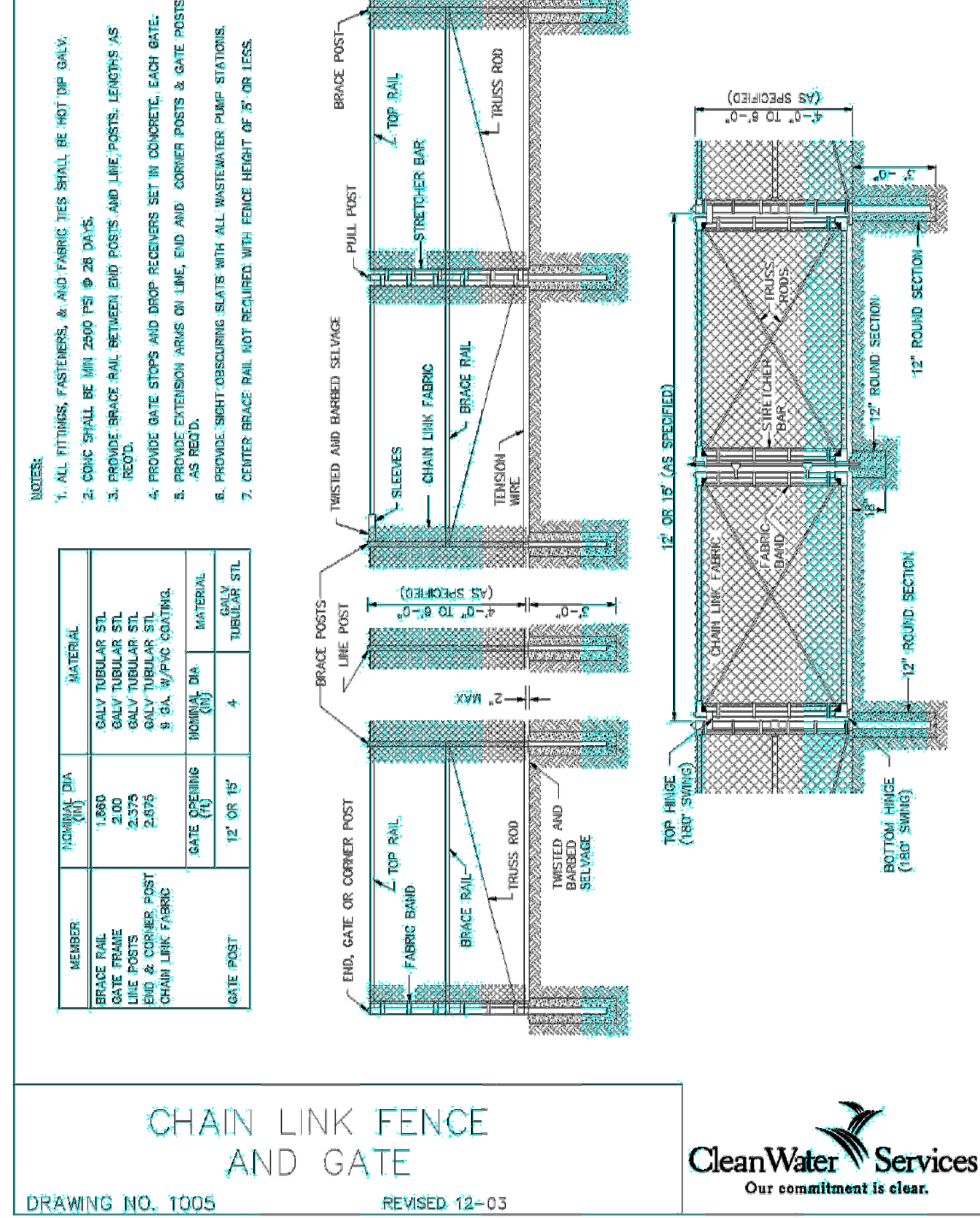
Plant Community Enhancement (Plant Types & Quantities)

PLANT COMMUNITY B MARGINAL (3,240 SF)
32 TREES REQUIRED - 31 EXISTING = 1 NEEDED
162 SHRUBS REQUIRED - 3 EXISTING = 159 NEEDED

TABLE 4 // PLANT COMMUNITY ENHANCEMENT (PLANT TYPES & QUANTITIES) // 344 IN NRA

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
TREES			
ACER CIRCINATUM	VINE MAPLE	2 GAL	0
ALNUS RUBRA	RED ALDER	2 GAL	0
SHRUBS			
RIBES SANGUINUM	NATIVE CURRANT	1 GAL	4
MAHONIA AQUIFOLIUM	TALL OREGON GRAPE	1 GAL	50
POLYSTICHUM MUNITUM	SWORD FERN	1 GAL	100

GROUNDCOVER = PLANT WITH A NATIVE SEED MIX TO ACHIEVE 100% AREAL COVERAGE



1 FENCING DETAIL
L3 NOT TO SCALE



12"x18" SIGNS SHALL BE PLACED IN A MANNER AS TO CLEARLY IDENTIFY THE SENSITIVE AREA AND VEGETATED CORRIDOR AS WELL AS AT ALL POINTS OF ENTRY SUCH AS THE BEGINNING OF PATHS, TRAIL HEADS AND ANY PLACE THAT THE PUBLIC MAY WANT OR BE ABLE TO ENTER AREA.



4"x4" SIGNS SHALL BE USED FOR AREAS WHERE A LARGE NUMBER OF SIGNS ARE NEEDED SUCH AS THE BACK OR SIDE YARDS ON EACH LOT ADJACENT TO THE SENSITIVE AREA OR VEGETATED CORRIDOR IN NEW SUBDIVISIONS OF PARTITIONS.



2 SIGNAGE DETAIL
L3 NOT TO SCALE

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REGISTERED
315
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OREGON
10-18-93

Carr Subaru
11635 SW Canyon Rd, Beaverton, OR 97005

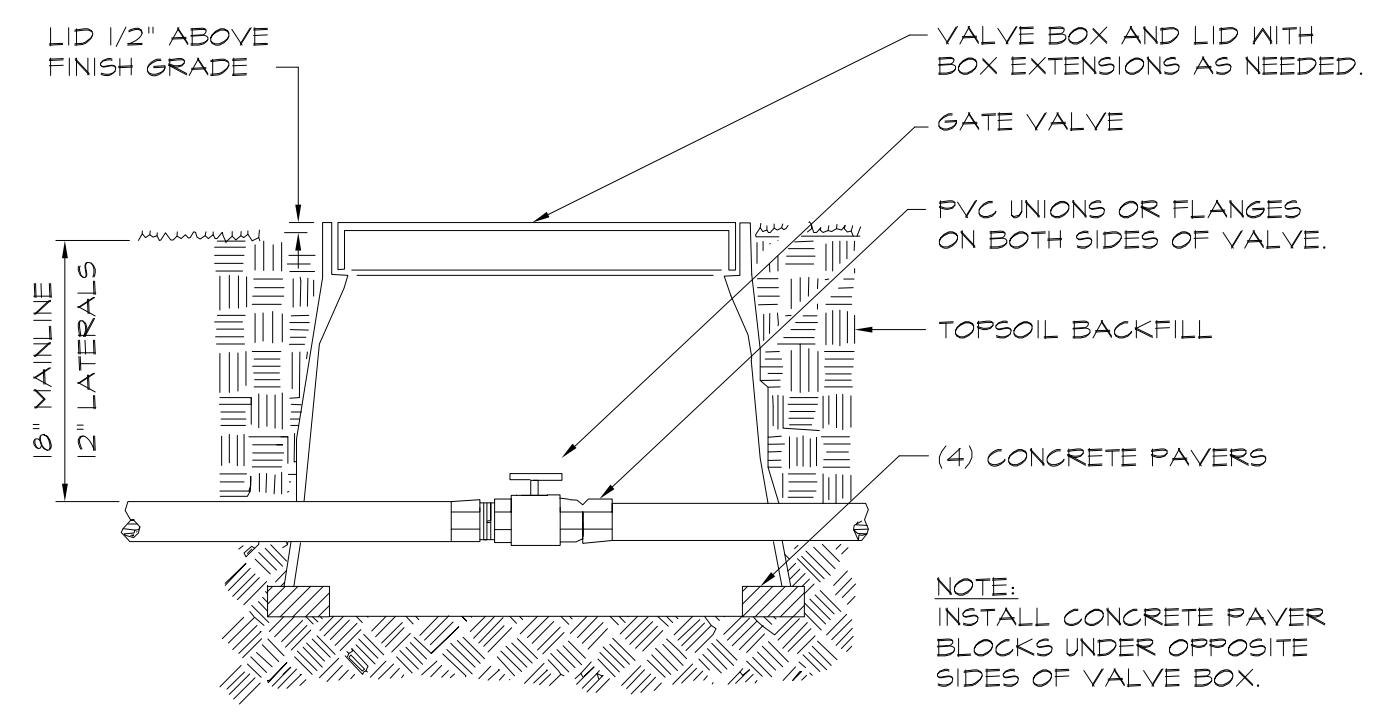
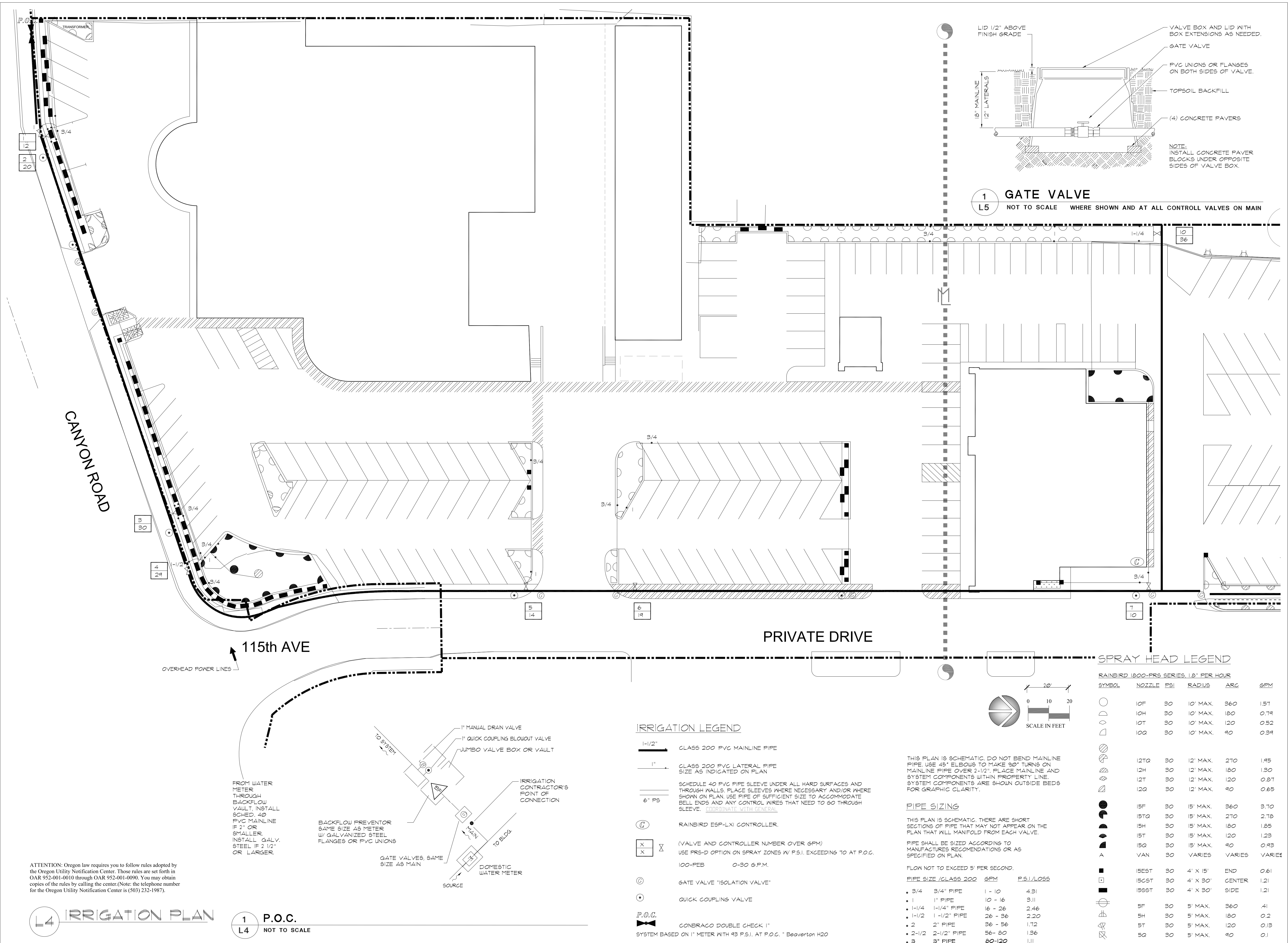
DATE:	10-11-21
PROJECT NO:	X
DESIGNED:	DM
DRAWN:	DM
CHECKED:	DM
REVISIONS:	

SHEET
L3
5

L3 ENHANCEMENT PLAN
SEE SPL LETTER WITH STAMP OF APPROVAL FOR NATURAL RESOURCE ASSESSMENT CNS 21-000302, ...

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CleanWater Services
Our commitment is clear.



1 GATE VALVE
 L5 NOT TO SCALE WHERE SHOWN AND AT ALL CONTROLL VALVES ON MAIN

SPRAY HEAD LEGEND

RAINBIRD 1800-PRS SERIES, 1.8" PER HOUR

SYMBOL	NOZZLE	PSI	RADIUS	ARC	GPM
○	10F	30	10' MAX.	360	1.57
○	10H	30	10' MAX.	180	0.74
○	10T	30	10' MAX.	120	0.52
○	10Q	30	10' MAX.	90	0.39
○	12TQ	30	12' MAX.	270	1.95
○	12H	30	12' MAX.	180	1.30
○	12T	30	12' MAX.	120	0.87
○	12Q	30	12' MAX.	90	0.65
○	15F	30	15' MAX.	360	3.70
○	15TQ	30	15' MAX.	270	2.76
○	15H	30	15' MAX.	180	1.85
○	15T	30	15' MAX.	120	1.23
○	15Q	30	15' MAX.	90	0.93
○	VAN	30	VARIES	VARIES	VARIES
■	15EST	30	4' X 15'	END	0.61
■	15CST	30	4' X 30'	CENTER	1.21
■	15SST	30	4' X 30'	SIDE	1.21
○	5F	30	5' MAX.	360	.41
○	5H	30	5' MAX.	180	0.2
○	5T	30	5' MAX.	120	0.13
○	5Q	30	5' MAX.	90	0.1

IRRIGATION LEGEND

- 1-1/2" CLASS 200 PVC MAINLINE PIPE
- 1" CLASS 200 PVC LATERAL PIPE SIZE AS INDICATED ON PLAN
- SCHEDULE 40 PVC PIPE SLEEVE UNDER ALL HARD SURFACES AND THROUGH WALLS. PLACE SLEEVES WHERE NECESSARY AND/OR WHERE SHOWN ON PLAN. USE PIPE OF SUFFICIENT SIZE TO ACCOMMODATE BELL ENDS AND ANY CONTROL WIRES THAT NEED TO GO THROUGH SLEEVE. COORDINATE WITH GENERAL.
- 6" PS
- RAINBIRD ESP-LXI CONTROLLER.
- (X) (X) (VALVE AND CONTROLLER NUMBER OVER 6PM)
- USE PRS-D OPTION ON SPRAY ZONES W/ P.S.I. EXCEEDING TO AT P.O.C.
- 100-PEB 0-30 G.P.M.
- ⊙ GATE VALVE "ISOLATION VALVE"
- ⊙ QUICK COUPLING VALVE
- P.O.C. CONBRACO DOUBLE CHECK 1" SYSTEM BASED ON 1" METER WITH 43 P.S.I. AT P.O.C. * Beaverton H20

THIS PLAN IS SCHEMATIC. DO NOT BEND MAINLINE PIPE. USE 45° ELBOWS TO MAKE 90° TURNS ON MAINLINE PIPE OVER 2'-12". PLACE MAINLINE AND SYSTEM COMPONENTS WITHIN PROPERTY LINE. SYSTEM COMPONENTS ARE SHOWN OUTSIDE BEDS FOR GRAPHIC CLARITY.

PIPE SIZING

THIS PLAN IS SCHEMATIC. THERE ARE SHORT SECTIONS OF PIPE THAT MAY NOT APPEAR ON THE PLAN THAT WILL MANIFOLD FROM EACH VALVE.

PIPE SHALL BE SIZED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR AS SPECIFIED ON PLAN.

FLOW NOT TO EXCEED 5' PER SECOND.

PIPE SIZE	CLASS 200	GPM	P.S.I./LOSS
3/4"	3/4" PIPE	1 - 10	4.31
1"	1" PIPE	10 - 16	3.11
1-1/4"	1-1/4" PIPE	16 - 26	2.46
1-1/2"	1-1/2" PIPE	26 - 36	2.20
2"	2" PIPE	36 - 56	1.72
2-1/2"	2-1/2" PIPE	56 - 80	1.36
3"	3" PIPE	80-120	1.11

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DATE: 10-11-21

PROJECT NO: X

DESIGNED: DM

DRAWN: DM

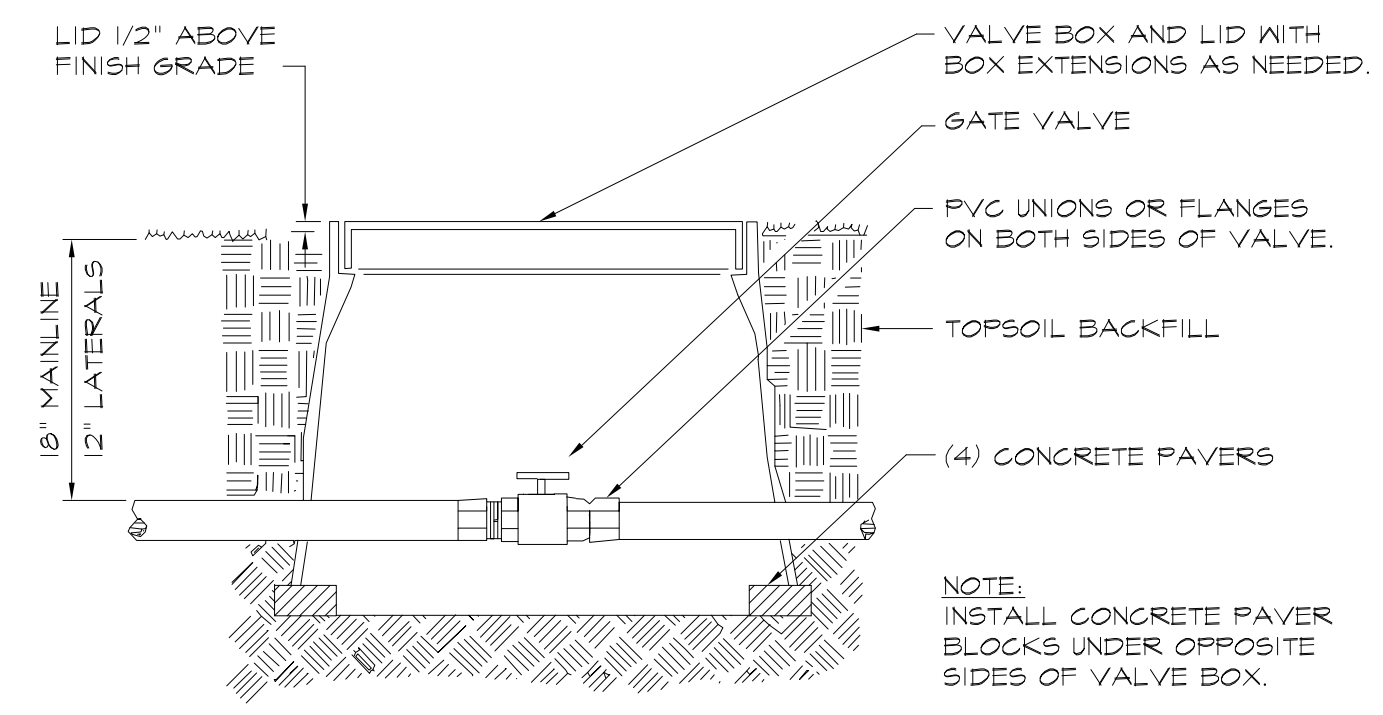
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REVISIONS:

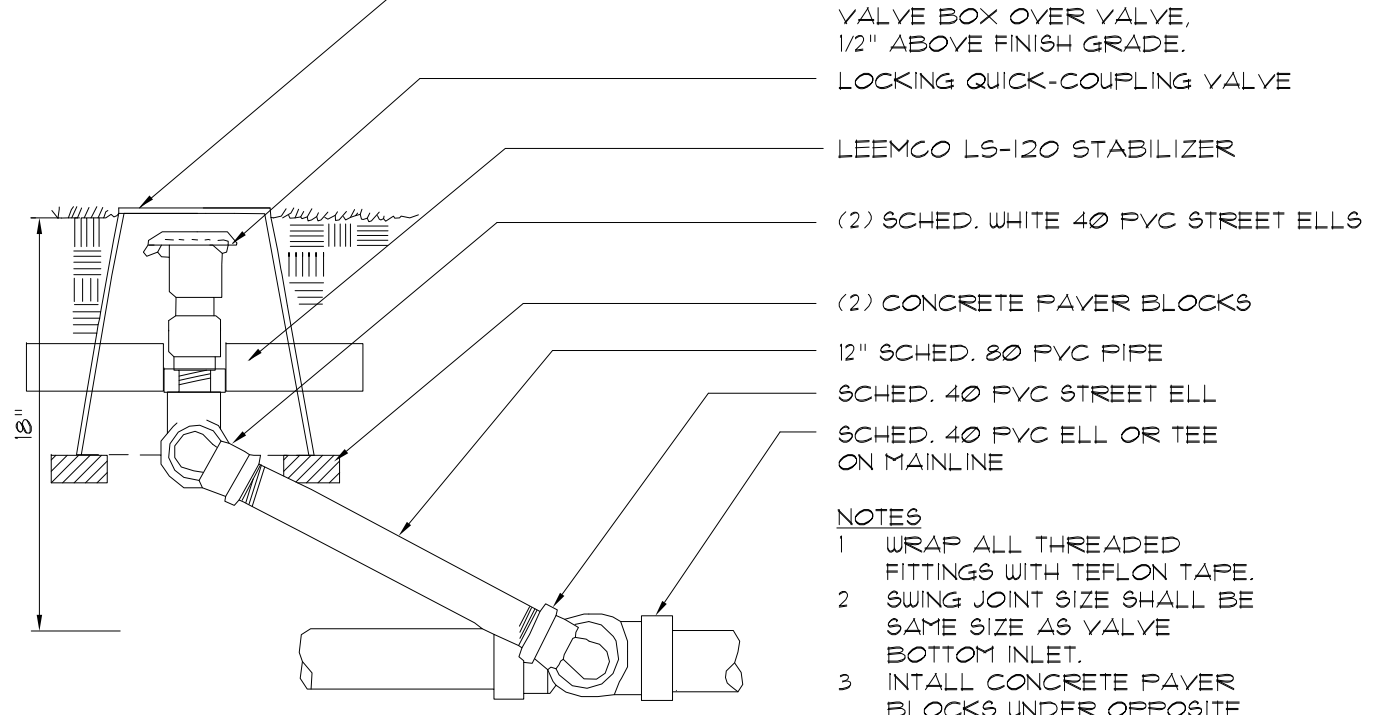
SHEET

L5

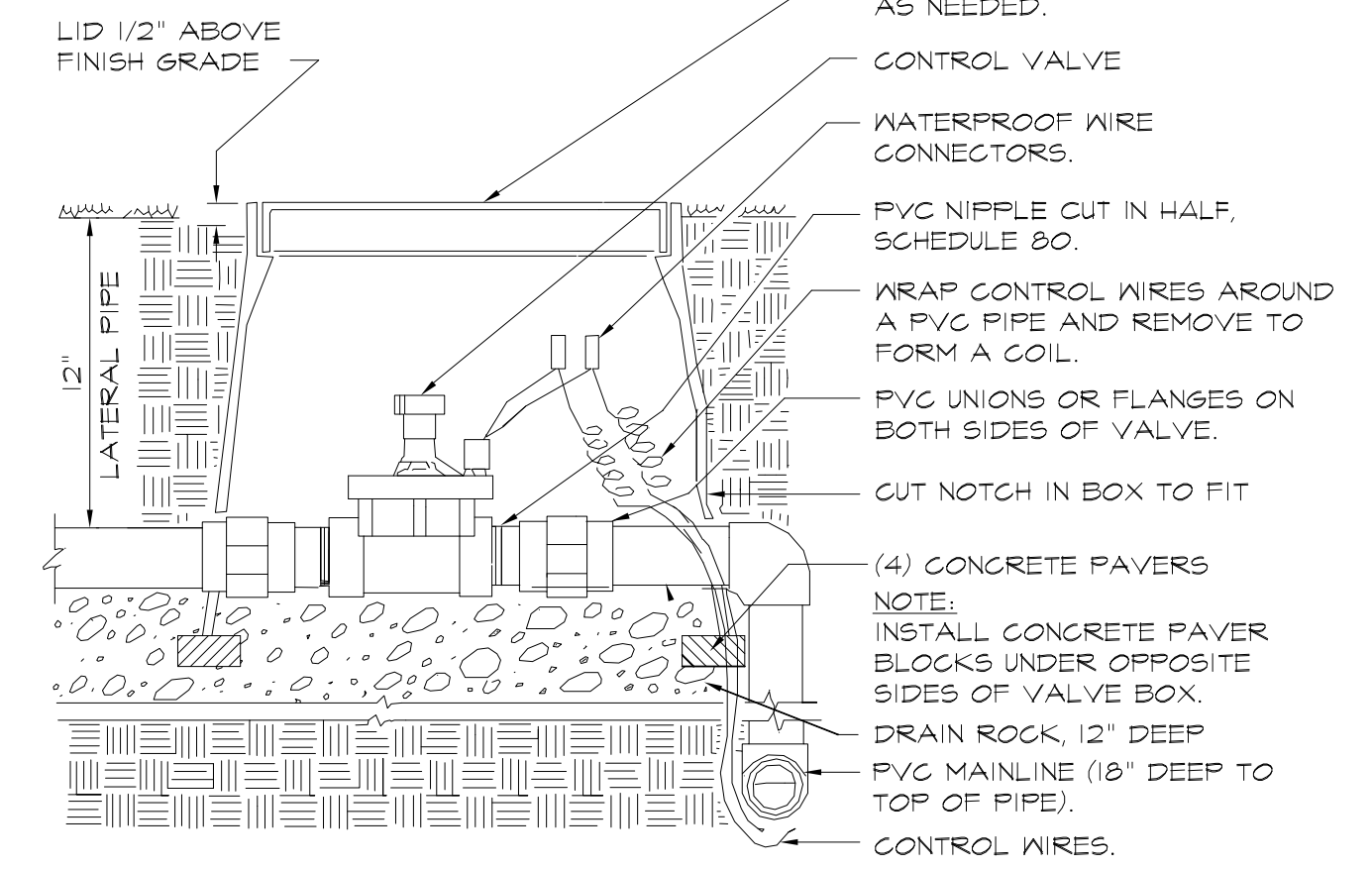
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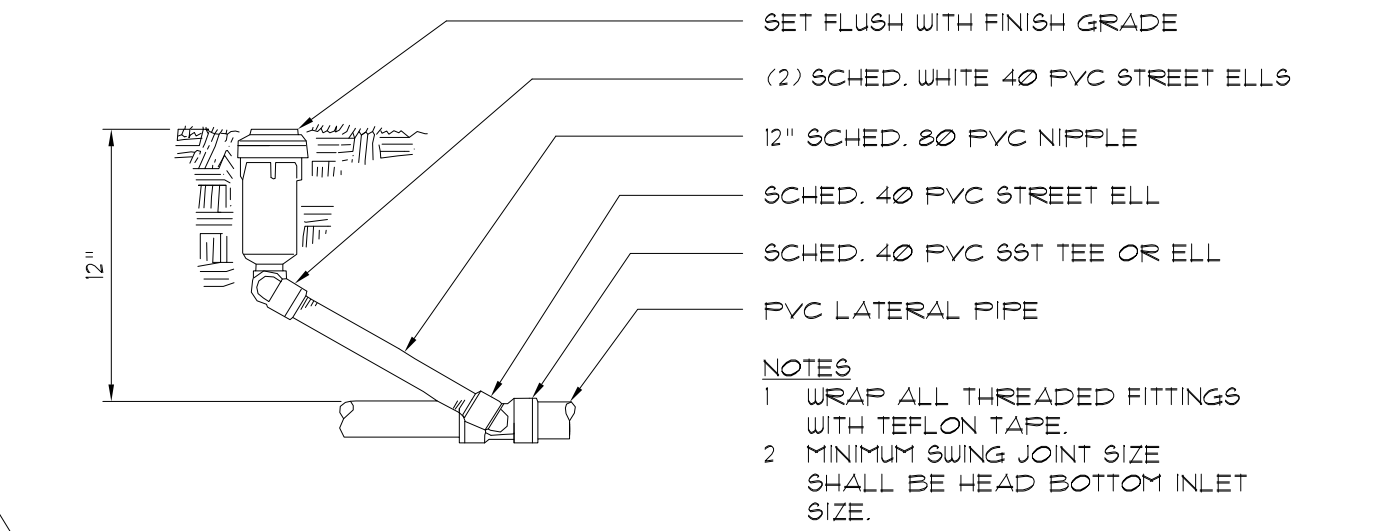
1 GATE VALVE
L5 NOT TO SCALE WHERE SHOWN AND AT ALL CONTROLL VALVES ON MAIN



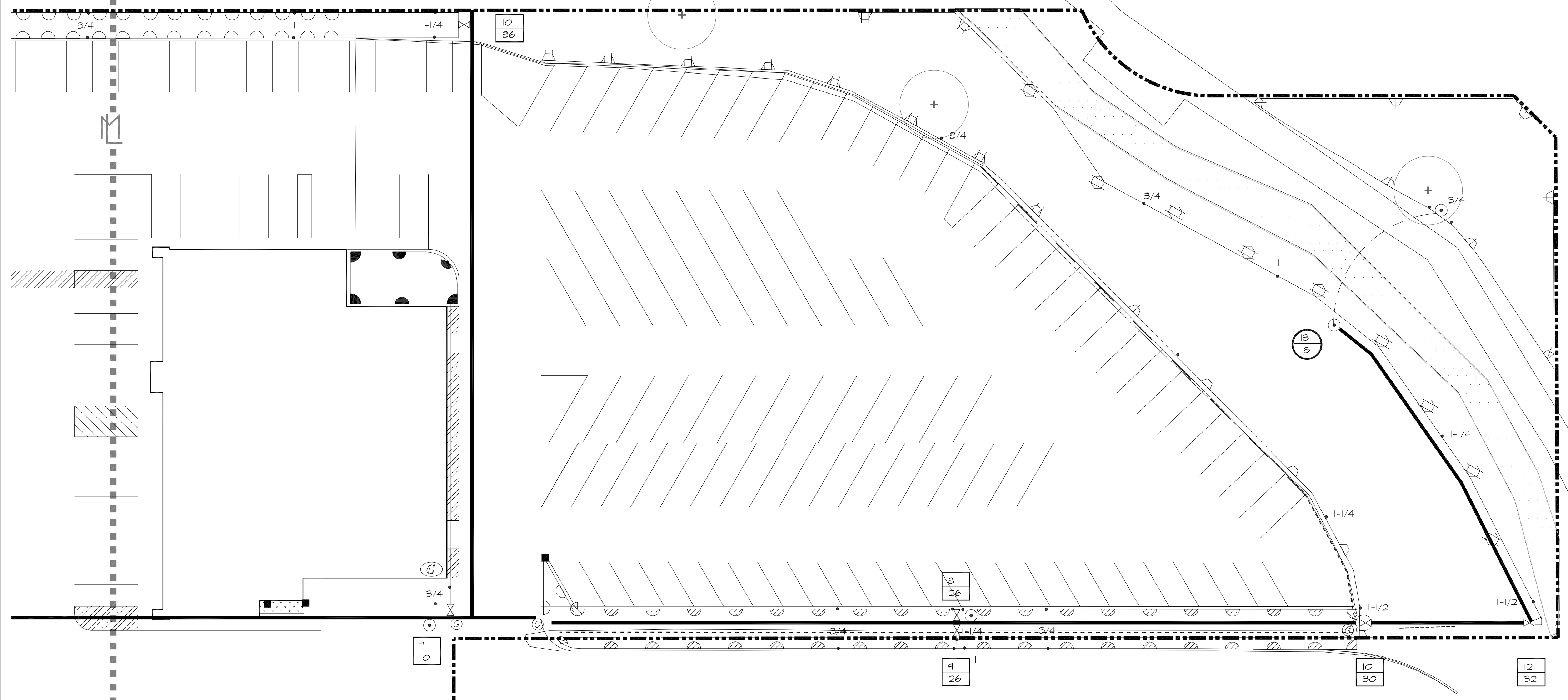
2 QUICK-COUPLING VALVE
L5 NOT TO SCALE



3 CONTROL VALVE
L5 NOT TO SCALE



4 SPRAY HEAD
L5 NOT TO SCALE



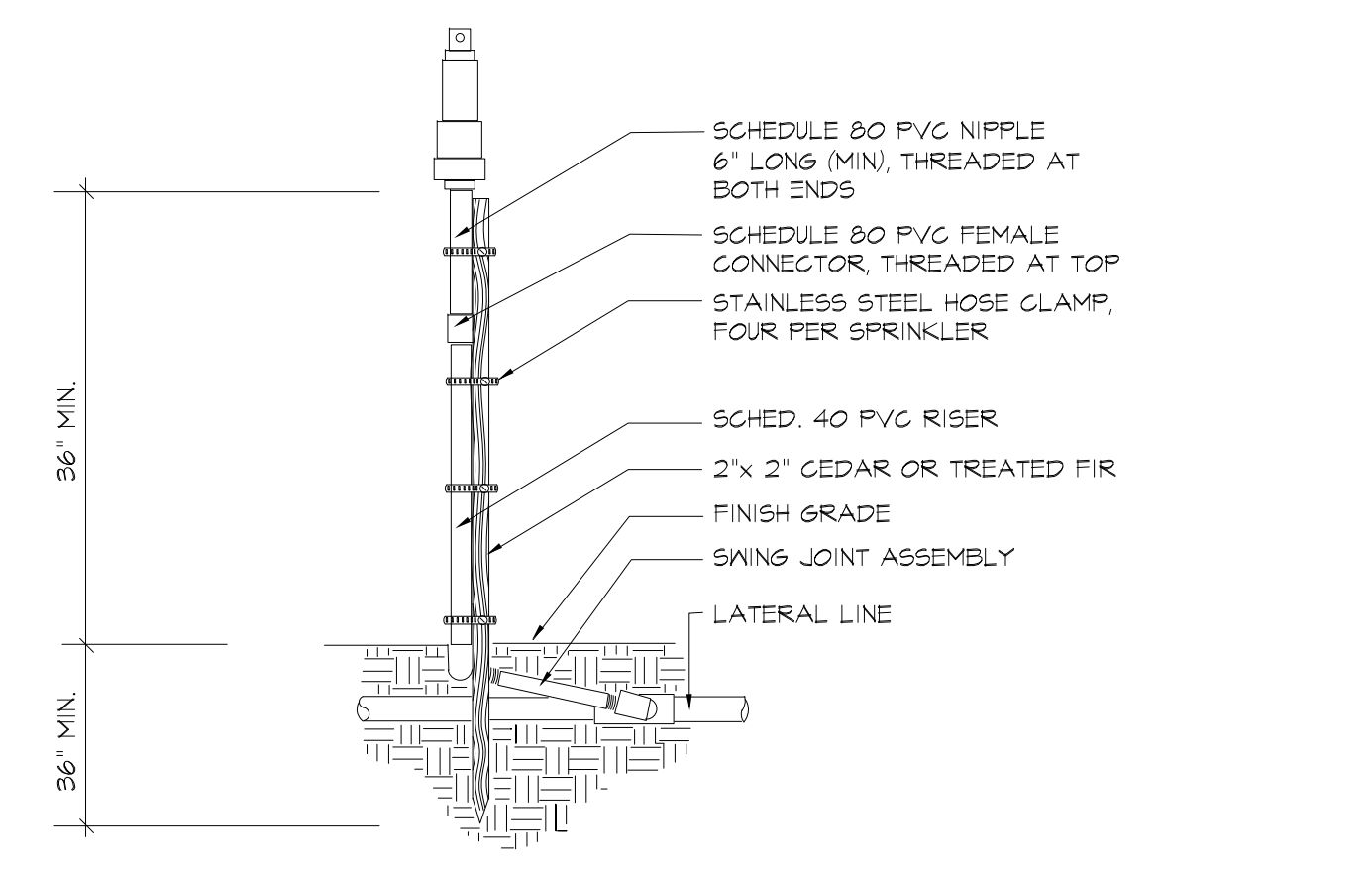
SPRAY HEAD LEGEND

RAINBIRD 1800-FRS SERIES 1.8" PER HOUR					
SYMBOL	NOZZLE	PSI	RADIUS	ARC	GPM
○	10F	30	10' MAX.	360	1.57
◐	10H	30	10' MAX.	180	0.79
◑	10T	30	10' MAX.	120	0.52
◒	10G	30	10' MAX.	90	0.34
◓	12TQ	30	12' MAX.	270	1.45
◔	12H	30	12' MAX.	180	1.30
◕	12T	30	12' MAX.	120	0.87
◖	12Q	30	12' MAX.	90	0.65
◗	15F	30	15' MAX.	360	3.70
◘	15TQ	30	15' MAX.	270	2.78
◙	15H	30	15' MAX.	180	1.85
◚	15T	30	15' MAX.	120	1.23
◛	15Q	30	15' MAX.	90	0.43
A	VAN	30	VARIABLES	VARIABLES	VARIABLES
■	15EST	30	4' X 15'	END	0.61
□	15CST	30	4' X 30'	CENTER	1.21
▣	15SST	30	4' X 30'	SIDE	1.21
◌	5F	30	5' MAX.	360	.41
◍	5H	30	5' MAX.	180	0.2
◎	5T	30	5' MAX.	120	0.13
●	5Q	30	5' MAX.	90	0.1

TEMPORARY IRRIGATION SYSTEM

HUNTER SERIES 1-20 ULTRA					
NOZZLE SYMBOL	NOZZLE	TYPE	PSI	RADIUS	GPM
⊗	# 3	1-20-365	40	20'-24'	3
⊙	# 2	1-20-ADS	40	20'-24'	2
⊕	# 1.5	1-20-ADS	40	20'-24'	1.5
⊖	# .75	1-20-ADS	40	20'-24'	.75
⊗	# 6	1-20-365	40	25'-29'	6
⊙	# 4	1-20-ADS	40	25'-29'	4
⊕	# 3	1-20-ADS	40	25'-29'	3
⊖	# 1.5	1-20-ADS	40	25'-29'	1.5
⊗	# 8	1-20-365	40	30'-33'	8
⊙	# 6	1-20-ADS	40	30'-33'	6
⊕	# 4	1-20-ADS	40	30'-33'	4
⊖	# 2	1-20-ADS	40	30'-33'	2

NOTES
1. CONTRACTOR TO HAND WATER IF NECESSARY.
2. REMOVE ALL COMPONENTS ONCE ESTABLISHED



5 STAKED ROTARY HEAD ASSEMBLY
L6 NOT TO SCALE

L5 IRRIGATION PLAN

THIS PLAN IS SCHEMATIC. DO NOT BEND MAINLINE PIPE. USE 45° ELBOUS TO MAKE 90° TURNS ON MAINLINE PIPE OVER 2'-1/2". PLACE MAINLINE AND SYSTEM COMPONENTS WITHIN PROPERTY LINE. SYSTEM COMPONENTS ARE SHOWN OUTSIDE BEDS FOR GRAPHIC CLARITY.

PIPE SIZING

THIS PLAN IS SCHEMATIC. THERE ARE SHORT SECTIONS OF PIPE THAT MAY NOT APPEAR ON THE PLAN THAT WILL MANIFOLD FROM EACH VALVE.

PIPE SHALL BE SIZED ACCORDING TO MANUFACTURERS RECOMMENDATIONS OR AS SPECIFIED ON PLAN.

FLOW NOT TO EXCEED 5' PER SECOND.

PIPE SIZE / CLASS 200	GPM	P.S.I./LOSS
• 3/4 3/4" PIPE	1 - 10	4.31
• 1 1" PIPE	10 - 16	3.11
• 1-1/4 1-1/4" PIPE	16 - 26	2.46
• 1-1/2 1-1/2" PIPE	26 - 36	2.20
• 2 2" PIPE	36 - 56	1.72
• 2-1/2 2-1/2" PIPE	56 - 80	1.36
• 3 3" PIPE	80-120	1.11