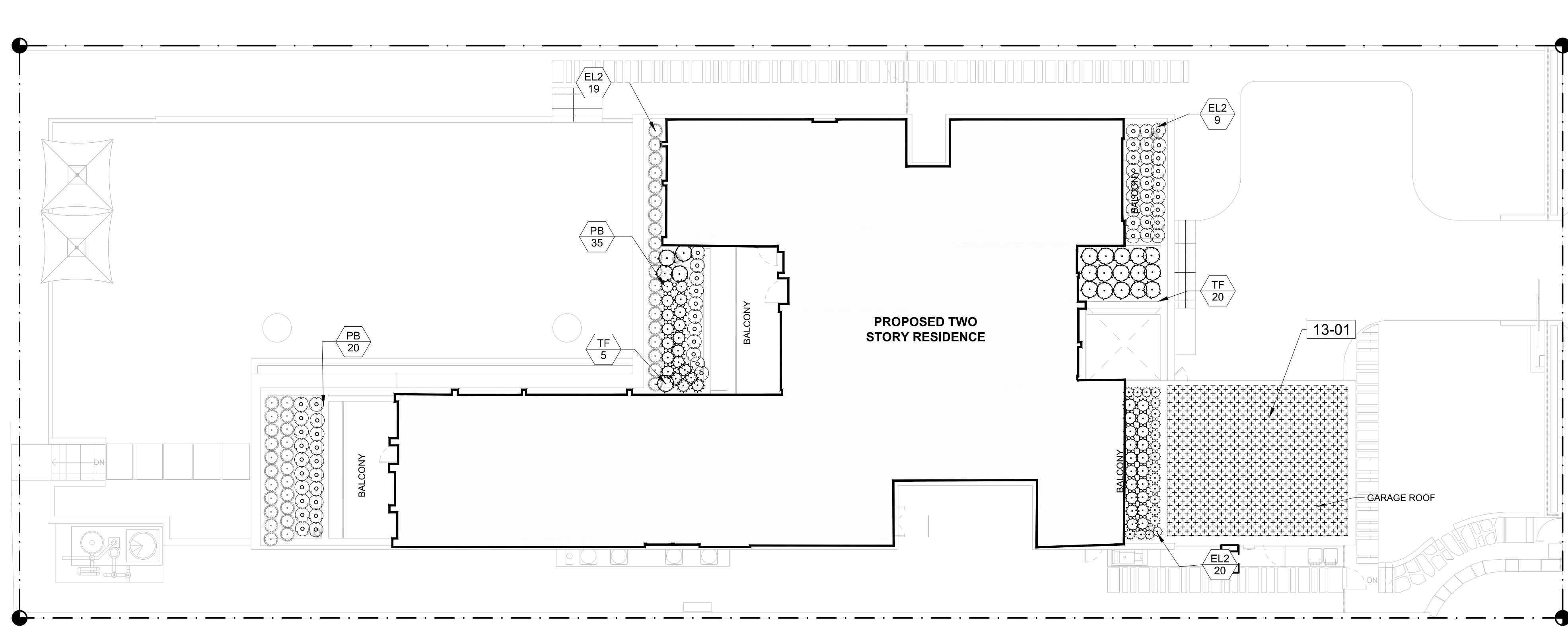


PLANT SCHEDULE

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HT
○	PB	55	PHILODENDRON	BURLE MARX	3 GAL.	
NATIVE SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HT
○	EL2	48	ERNODEA LITTORALIS	GOLDEN BEACH CREEPER	3 GAL.	18"
○	TF	25	TRIPSACUM DACTYLOIDES	FAKAHATCHEE	3 GAL.	18"+

REFERENCE NOTES SCHEDULE

SYMBOL	13 SPECIAL CONSTRUCTION AND STRUCTURES DESCRIPTION	QTY
13-01	ARTIFICIAL TURF SYNLAWN SYN PRO 60	847 SF



6444 ALLISON ROAD
CITY OF MIAMI BEACH
FL, 33141

MATTHEW AND LORI SIDMAN

ARCHITECT:
GRIFFIN K. MORRIS, RA
2900 SW 28TH TERRACE
SUITE 301
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STRUCTURAL ENGINEER:
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ROCHELL ENGINEERING, INC.
205 SANTILLANE AVENUE
CORAL GABLES, FL 33134

MEP ENGINEER:
OSCAR SEBELEN
RCI ENGINEERING
5230 S. UNIVERSITY DRIVE,
SUITE 106
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CIVIL ENGINEER:
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LANDSCAPE ARCHITECT:
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46 WALTHAM STREET, ST 3A
BOSTON, MA 02118
GENERAL CONTRACTOR:
TBD

PROFESSIONAL SEAL(S):



ARCHITECT LICENSE NO: AR100517

SIDMAN RESIDENCE

Issue Description:
Project Status
Revision Schedule

#	DATE	DESCRIPTION

05/02/2022	REVISION 1
01/14/2022	PERMIT SUBMITTAL

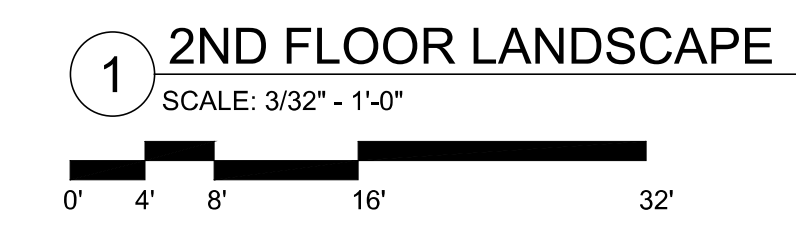
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Issue Date: 05/02/2022

SECOND FLOOR LANDSCAPE PLAN

L-132



2ND FLOOR LANDSCAPE
SCALE: 3/32" = 1'-0"

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LIGHTING SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
■	PATH LIGHT	18
▲	UPLIGHT	20
●	LANTERN	10
⊕	DOUBLE UPLIGHT	40

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▲ 05/02/2022 REVISION 1

■ 01/14/2022 PERMIT SUBMITTAL

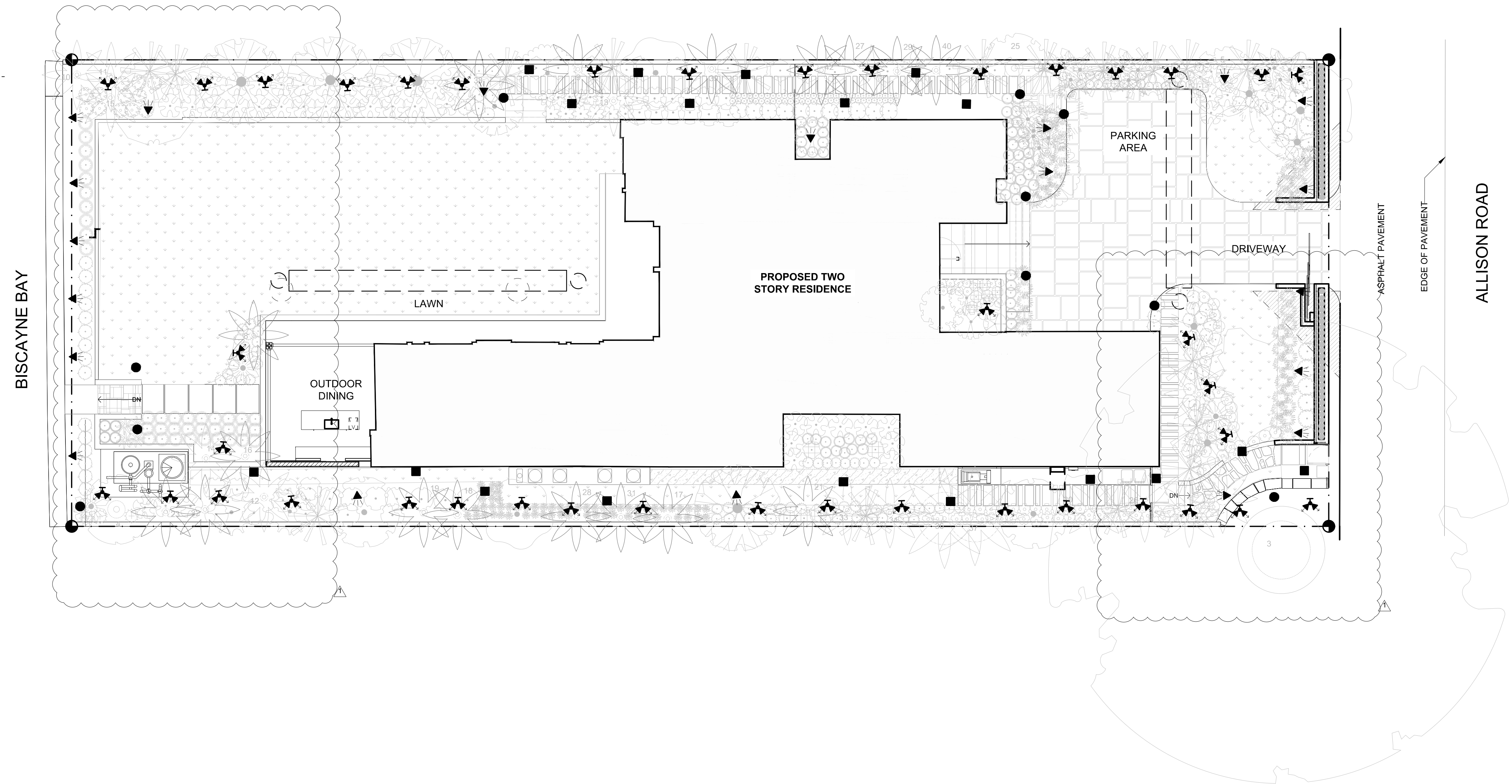
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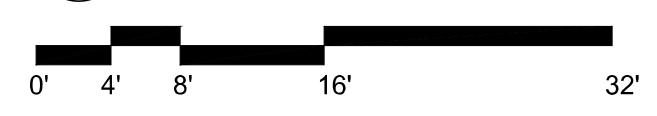
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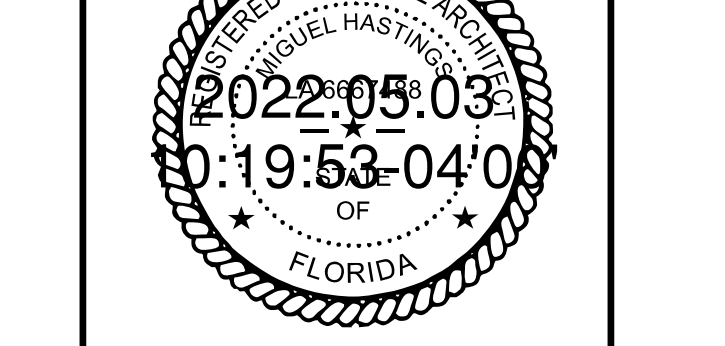
LIGHTING PLAN

L-140



1 LIGHTING PLAN
 SCALE: 3/32" = 1'-0"





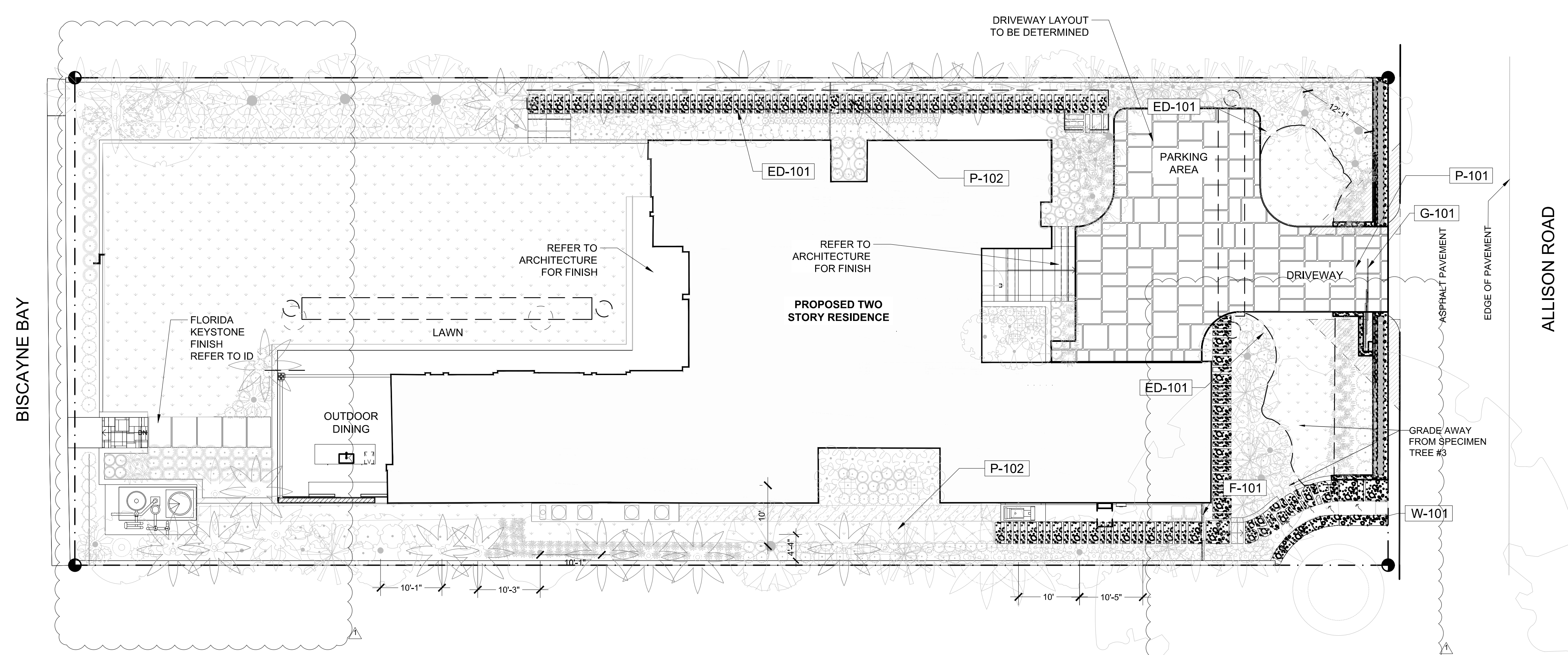
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REFERENCE NOTES SCHEDULE

SYMBOL	EDGING DESCRIPTION
ED-101	METAL EDGING
SYMBOL	FENCE DESCRIPTION
F-101	METAL FENCE
SYMBOL	GATE DESCRIPTION
G-101	MOTORIZED ROLLING GATE
SYMBOL	PAVING DESCRIPTION
P-101	FLORIDA KEYSTONE 3" STONE PAVERS LAYOUT TBD
P-102	FLORIDA KEYSTONE PAVERS
SYMBOL	WALL DESCRIPTION
W-101	OOLITE STONE BOULDER WALL



1 HARDSCAPE PLAN
 SCALE: 3/32" = 1'-0"



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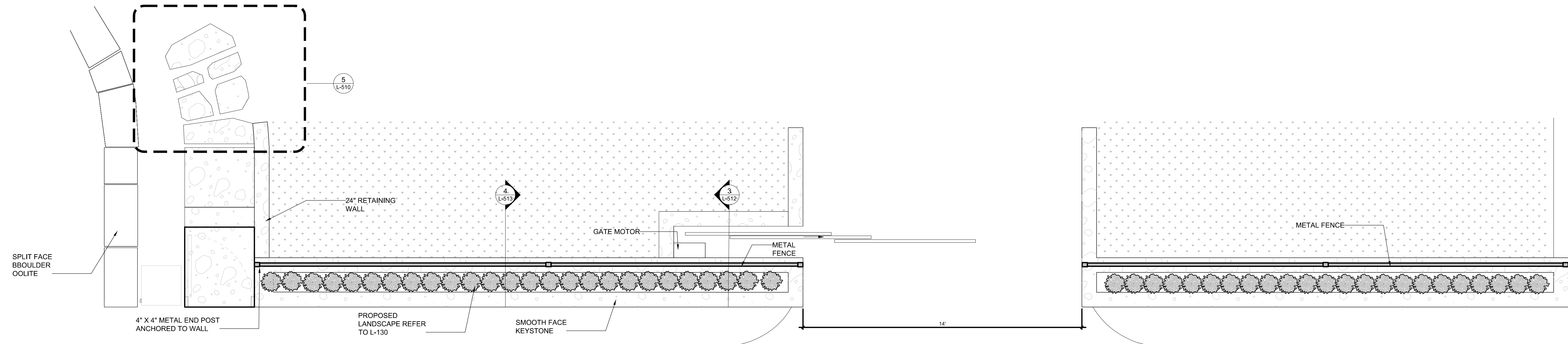
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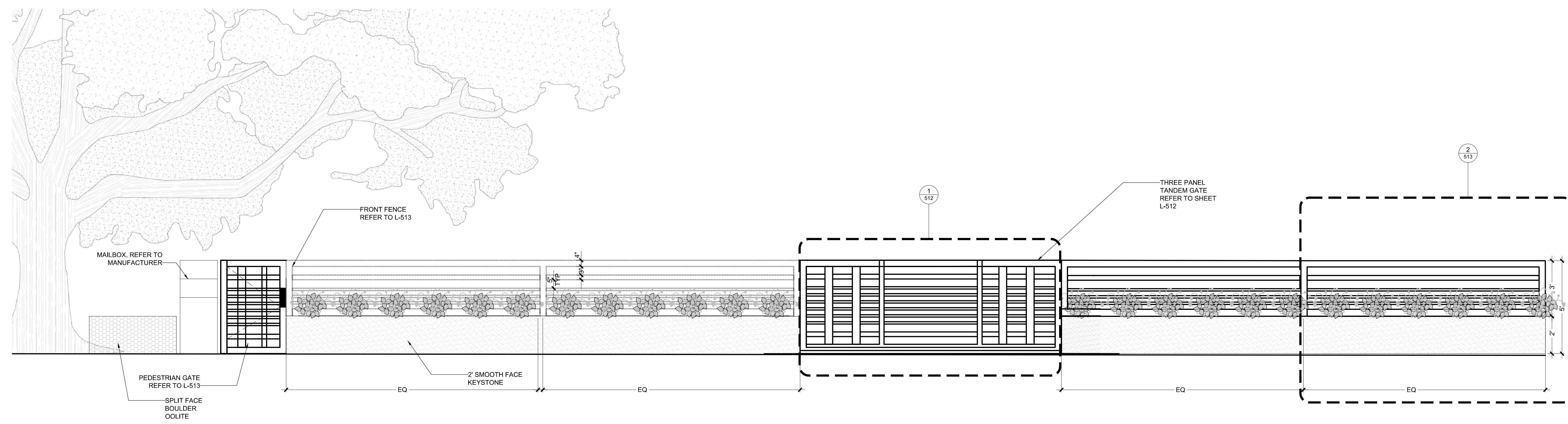
Issue Date: 05/02/2022

FRONT GATE PLAN AND ELEVATION

L-400



1 STREET FRONT PLAN
SCALE: 3/8" = 1'-0"



2 STREET FRONT ELEVATION
SCALE: 3/8" = 1'-0"

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6444 ALLISON ROAD
 CITY OF MIAMI BEACH
 FL, 33141

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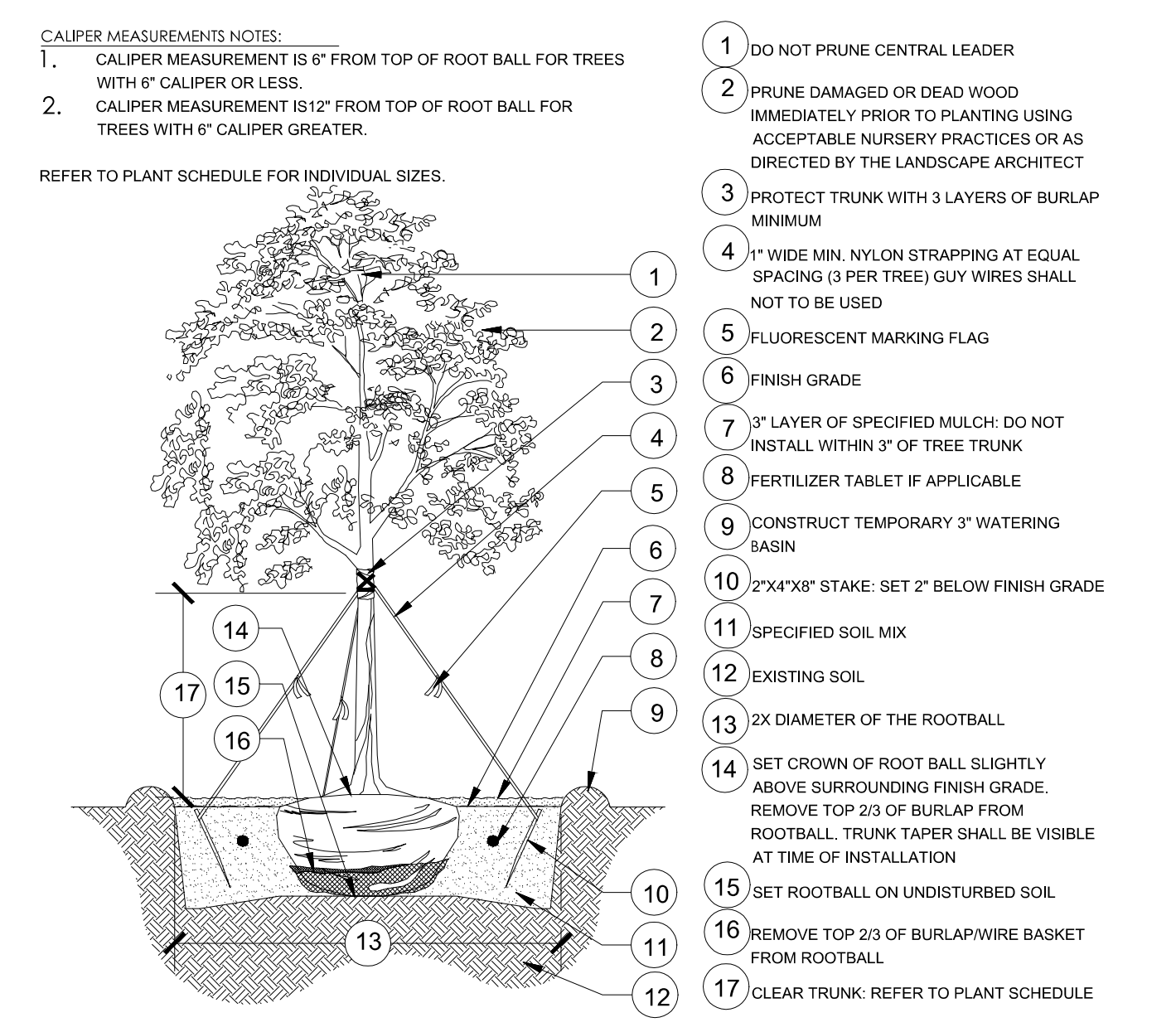
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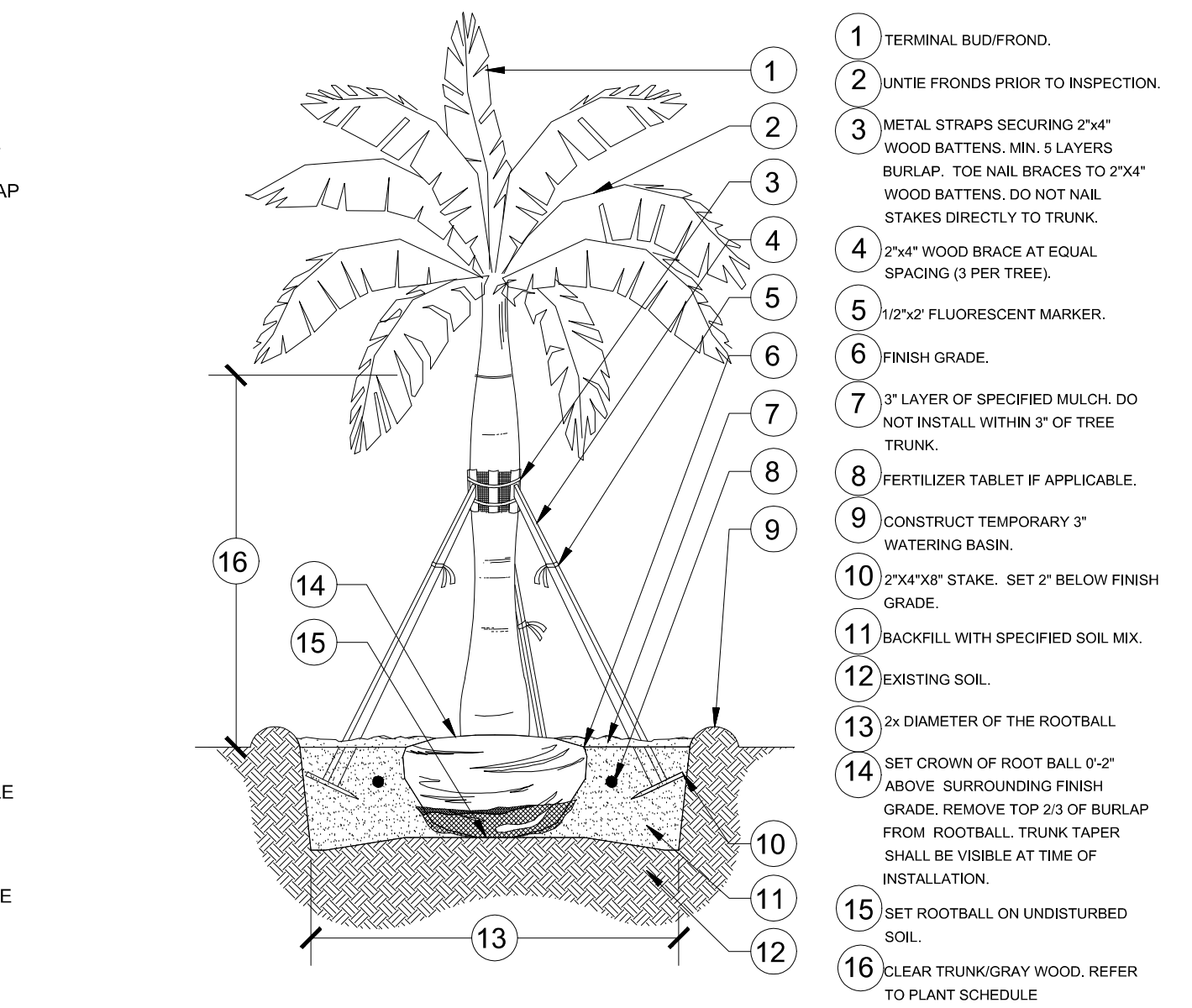
Issue Date: 05/02/2022

LANDSCAPE DETAILS

L-500

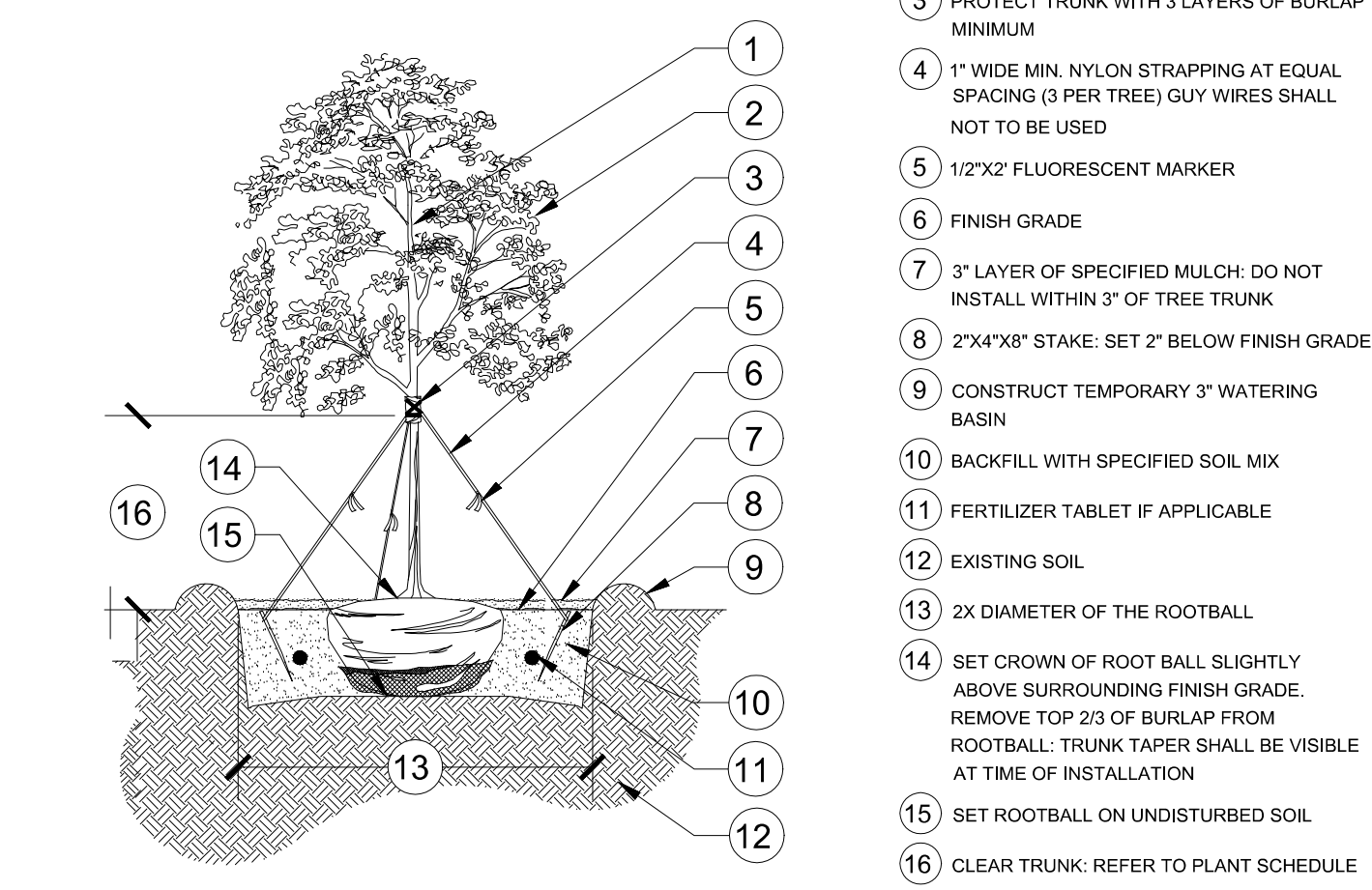


1 LARGE TREE PLANTING: 2" CALIPER AND GREATER
 N.T.S. 31-02

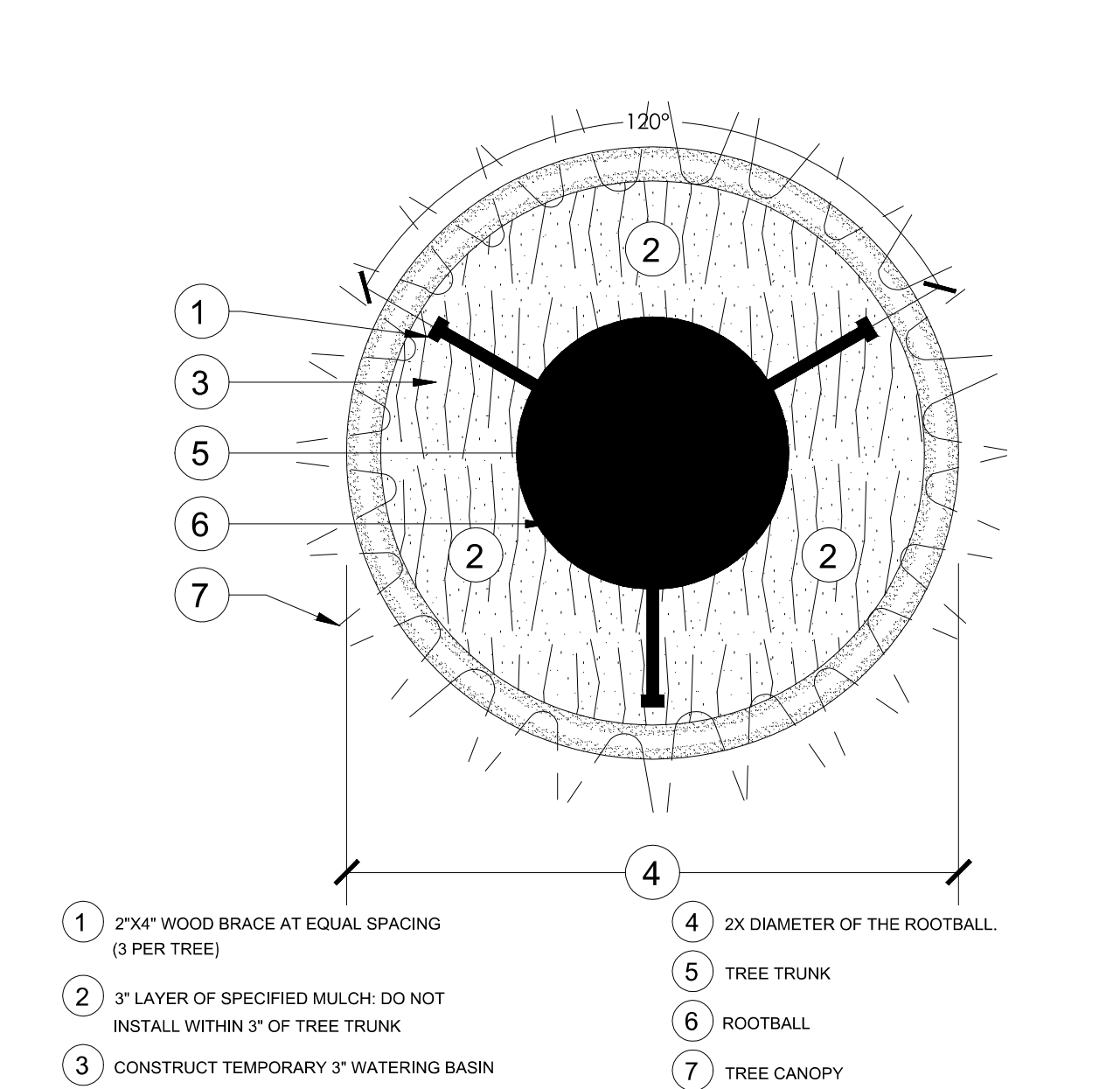


2 LARGE PALM PLANTING
 1/2" = 1'-0" 31-01

CALIPER MEASUREMENTS NOTES:
 1. CALIPER MEASUREMENT IS 6" FROM TOP OF ROOT BALL FOR TREES WITH 6" CALIPER OR LESS.
 2. CALIPER MEASUREMENT IS 12" FROM TOP OF ROOT BALL FOR TREES WITH 6" CALIPER GREATER.
 REFER TO PLANT SCHEDULE FOR INDIVIDUAL SIZES.

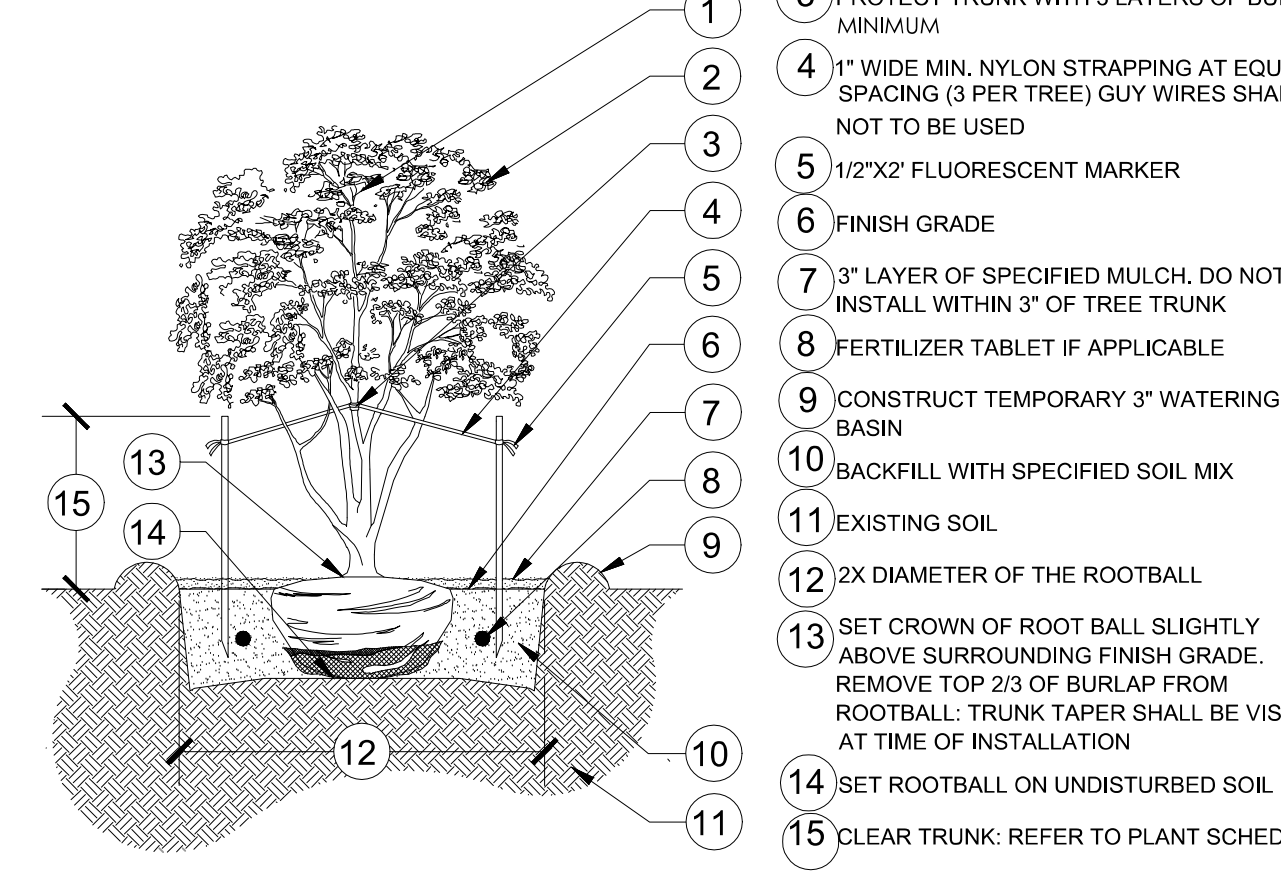


3 SMALL TREE PLANTING: LESS THAN 2" CALIPER
 N.T.S. 31-03

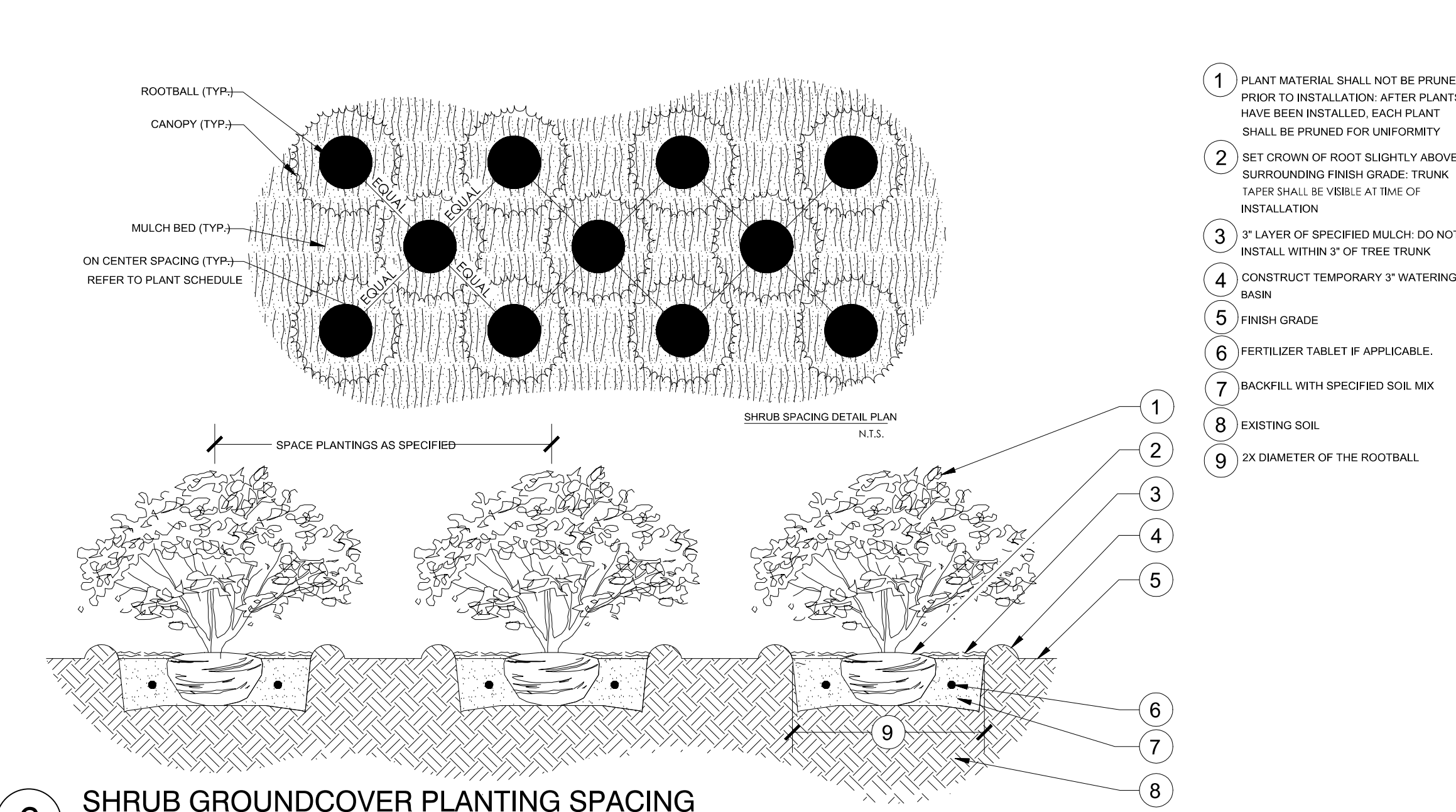


4 LARGE TREE STAKING
 N.T.S. 31-05

CALIPER MEASUREMENTS NOTES:
 1. CALIPER MEASUREMENT IS 6" FROM TOP OF ROOT BALL FOR TREES WITH 6" CALIPER OR LESS.
 2. CALIPER MEASUREMENT IS 12" FROM TOP OF ROOT BALL FOR TREES WITH 6" CALIPER GREATER.
 REFER TO PLANT SCHEDULE FOR INDIVIDUAL SIZES.



5 MULTI-TRUNK PLANTING
 1/2" = 1'-0" 31-22



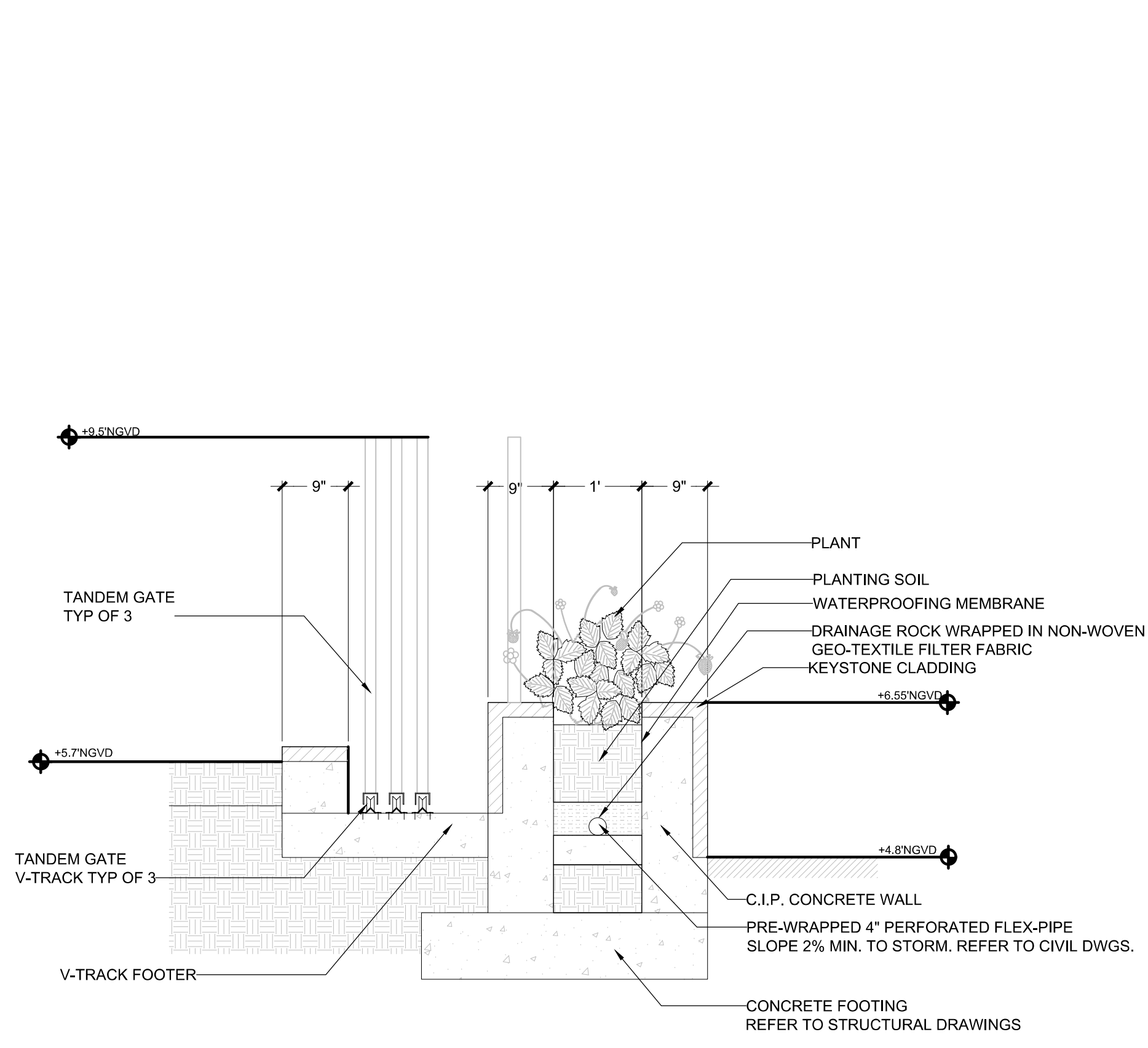
6 SHRUB GROUNDCOVER PLANTING SPACING
 N.T.S. 31-07



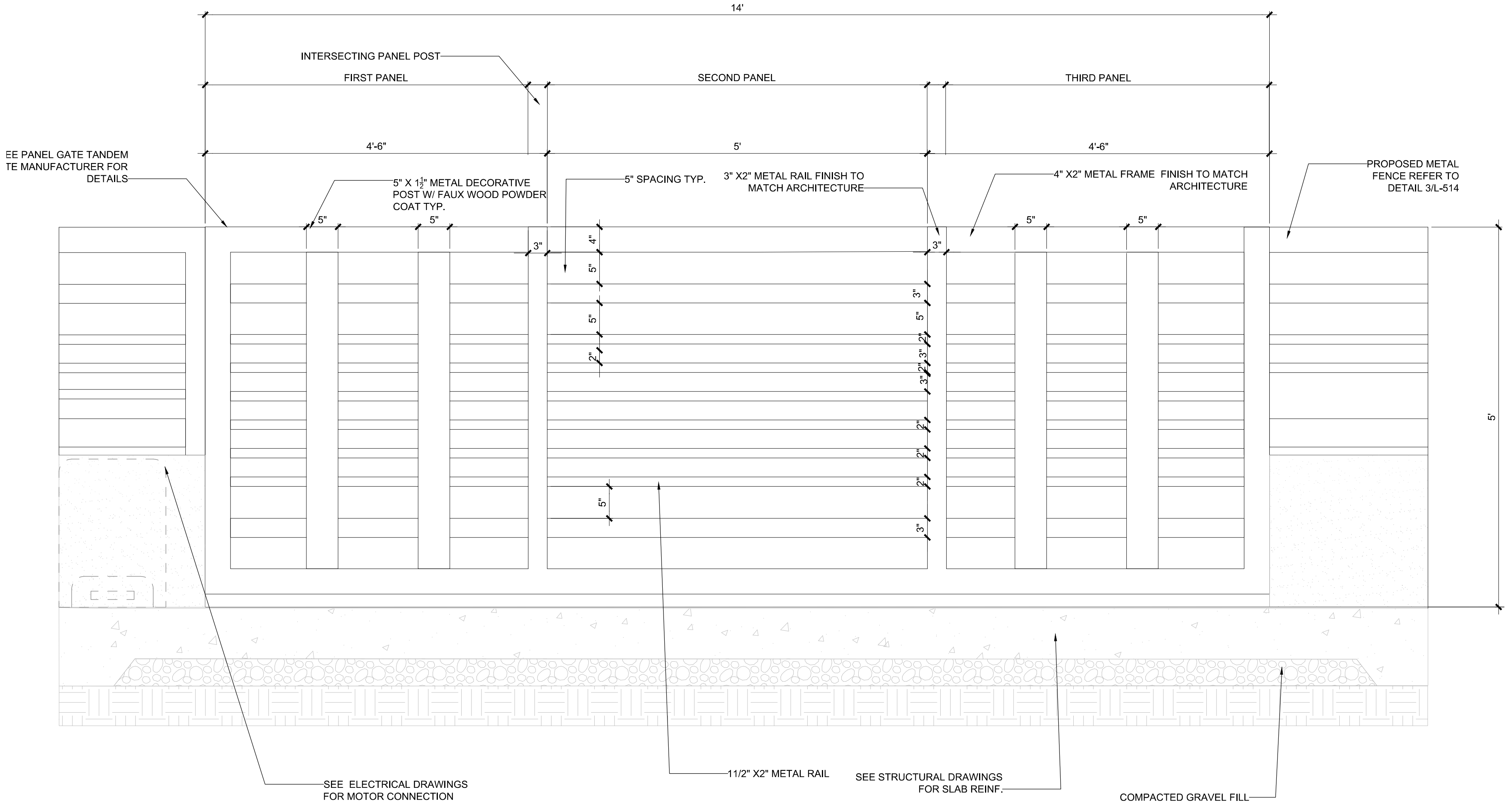
#	DATE	DESCRIPTION

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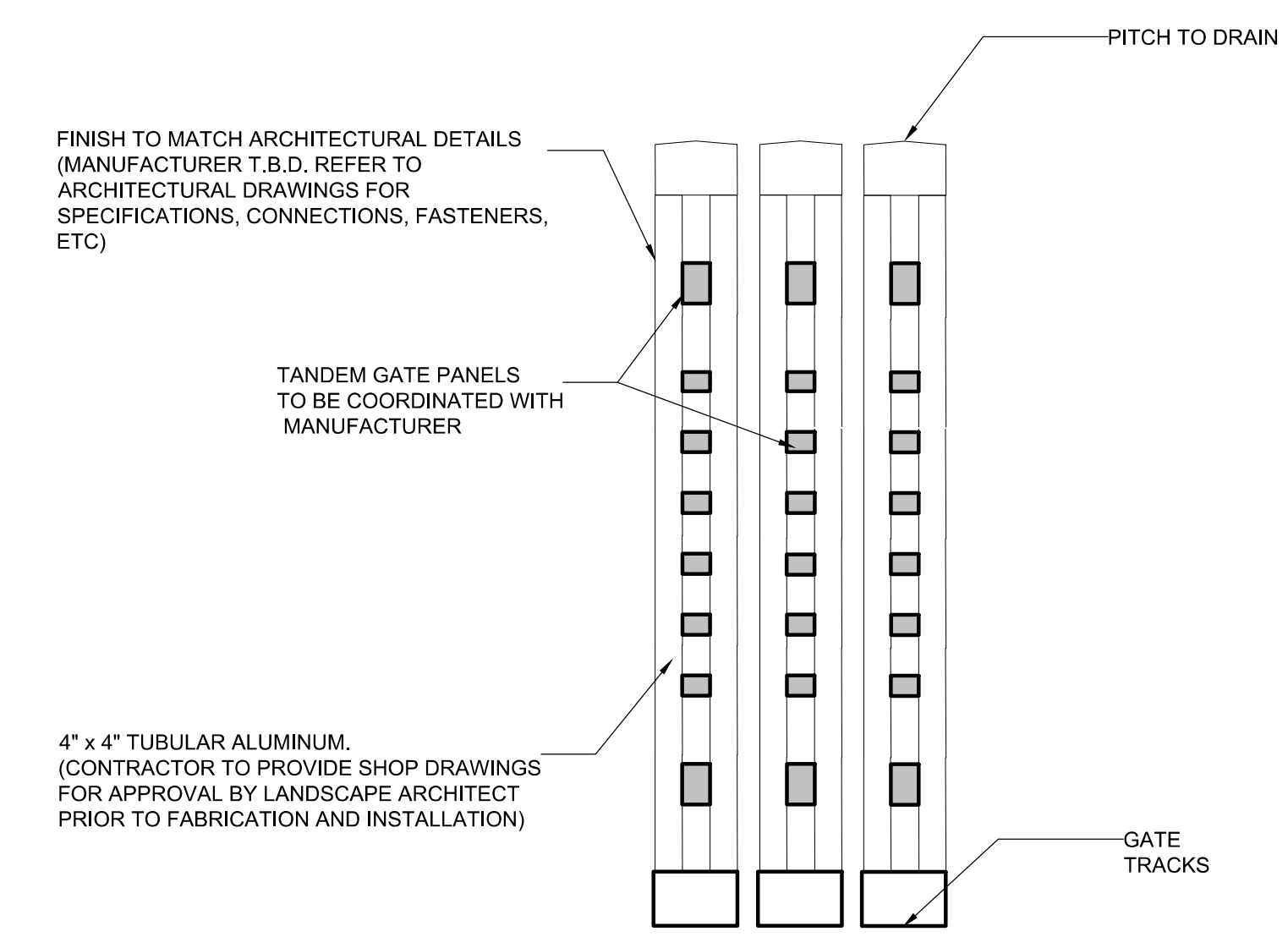
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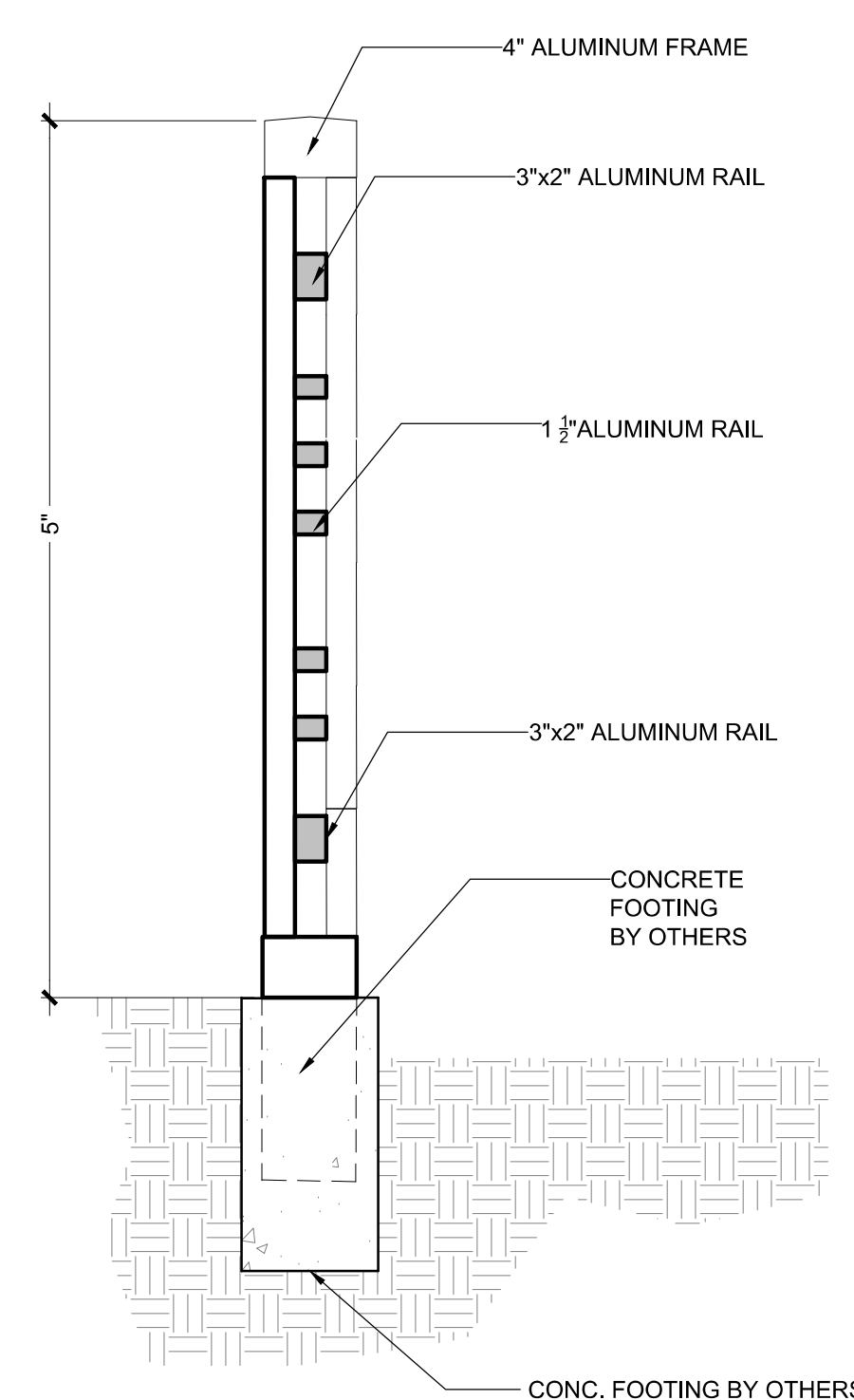
3 FRONT YARD WALL SECTION WITH TANDEM GATE
 SCALE: 1" = 1'-0"



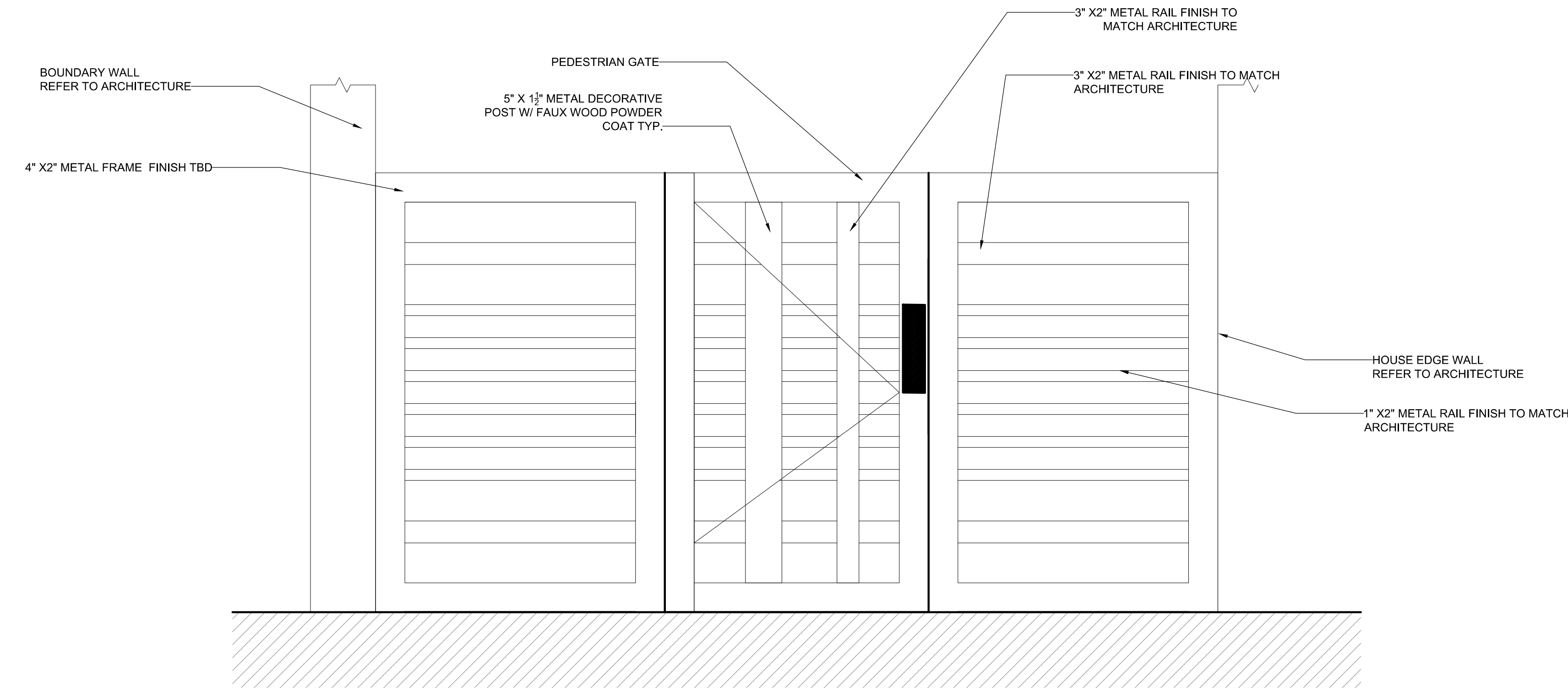
1 3 PANELS TANDEM GATE ELEVATION
 SCALE: 1" = 1'-0"



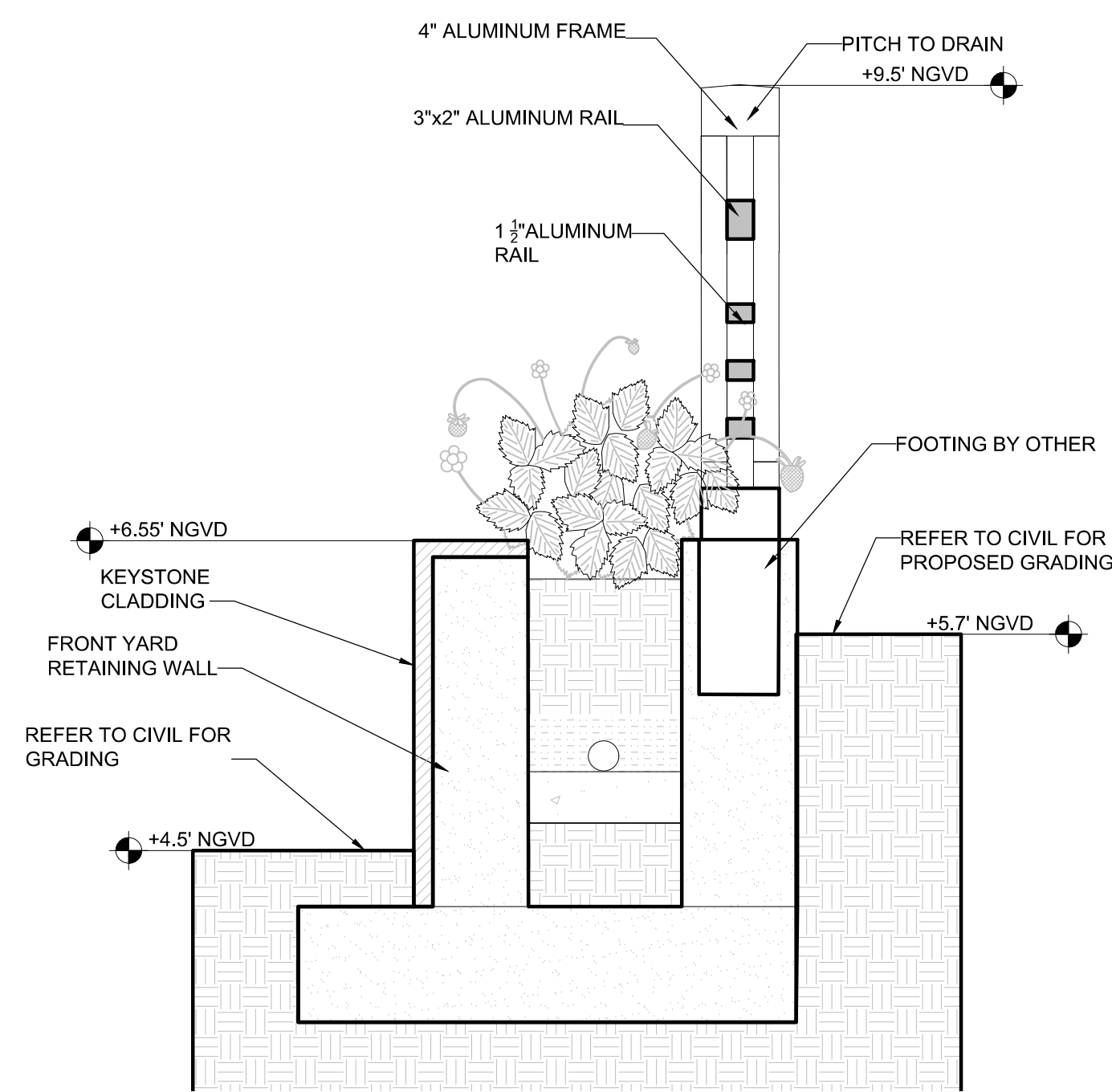
2 3 PANELS TANDEM GATE SECTION
 SCALE: 1" = 1'-0"



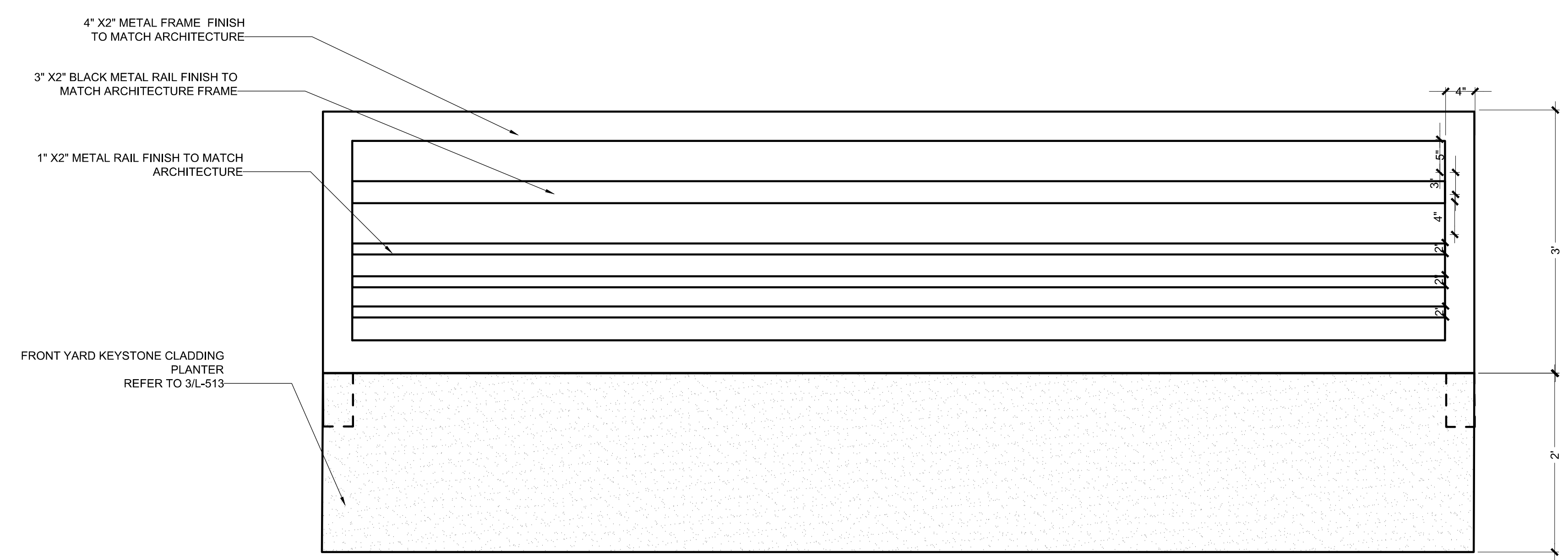
3 POOL GATE AND FENCE SECTION DETAIL
 SCALE: 1" = 1'-0"



1 POOL GATE AND FENCE DETAIL
 SCALE: 1" = 1'-0"



4 SITE WALL AND FENCE SECTION DETAIL
 SCALE: 1" = 1'-0"



2 SITE WALL AND FENCE DETAIL
 SCALE: 1" = 1'-0"

6444 ALLISON ROAD
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 GENERAL CONTRACTOR:
 TBD

PROFESSIONAL SEAL(S):



ARCHITECT LICENSE NO: AR100517

SIDMAN RESIDENCE

Issue Description:
 Project Status
 Revision Schedule

#	DATE	DESCRIPTION
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2	01/14/2022	PERMIT SUBMITTAL

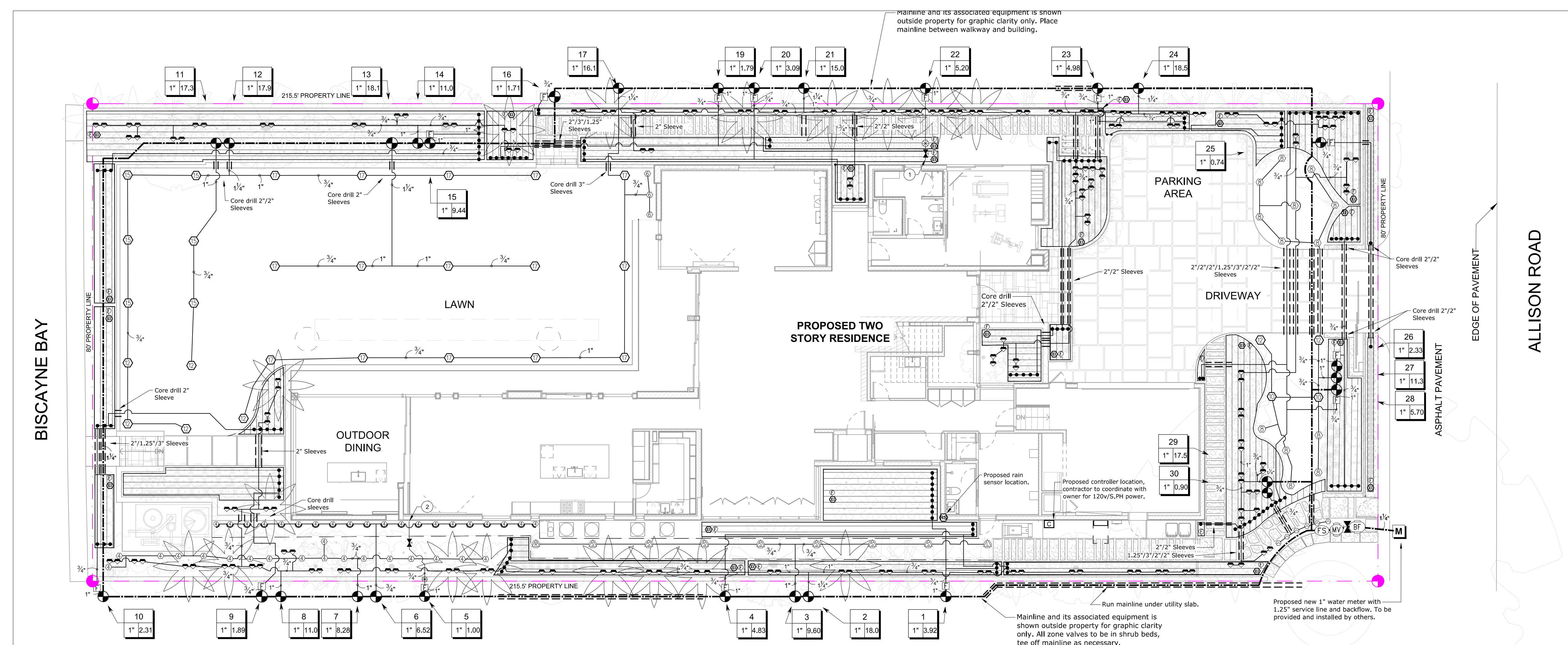
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FRONT AND SIDE
 YARD GATE DETAIL

L-513



- Notes:
- All lateral sleeves are to be 2-inches.
 - All mainline sleeves are to be 3-inches.
 - All zone control wires (18 gauge) shall be incased in an 1.5-inch Sch-40 conduit. Use sweep elbows for all directional changes and splice/pull boxes and needed.
 - All sleeves running through raised planter walls and retaining walls shall be core drilled, and sealed (water proofed) after lateral / mainline pipe is installed.
 - All irrigation plans IR-1 thru IR-5 must be onsite whenever contractor and or his crew is performing work.

IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter PROS-06-CV adjustable arc Turf Spray, 6" Pop-Up. With Drain Check Valve.	25
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter PCB 10 Flood Bubbler, 1/2" FIPT.	30
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter RZWS-SLEEVE-10-CV 25 10" long RZWS with Sleeve installed. .25 GPM or .50 GPM bubbler options, and 1/2" swing joint for connection to 1/2" pipe, Check Valve	30
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Netafim TL050MFV-1 Automatic flush valve, 1/2" male pipe thread.	
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Netafim 65ARIA075 3/4" Male Pipe Thread Guardian Air/Vacuum Relief Vent. Install above mulch. On sloping terrain to prevent collapsing of pipes. UV Resistant.	
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter ECO-ID ECO-ID: 1/2" FPT connection with 12-60 PSI operating pressure. Specify with Hunter SJ swing joint.	
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter HDL-09-12-CV HDL-09-12-CV: Hunter Dripline w/ 0.9 GPH emitters at 12" O.C. Check valve, dark brown tubing w/ black striping. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. Install with Hunter PLD barbed or PLD-LOC fittings.	3,222 s.f.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter PGV-101A 1" Plastic Electric Remote Control Valve, Angle Configuration, With Flow Control.	
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Nibco T-113 Class 125 bronze gate shut off valve with wheel handle, same size as mainline pipe diameter at valve location.	
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter ICV-G-FS 1" Plastic Electric Master Valve, Globe Configuration, with Filter Sentry.	
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Matco-Norca 521N 1/2"-4" Brass Swing Check Valve, IPS. With BUNA-N Seat. Same size as Lateral pipe.	
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Proposed Zum 950XL 1" Double Check Valve Assembly, to be provided, certified and installed by others.	
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter HCC-800-PL 32 Hunter Outdoor Wi-Fi enabled, full-functioning controller with touchscreen & (2) ICM-800 Modules. Plastic Cabinet.	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter WRF-CLIK Rain/freeze Sensor, install within 1000 ft of controller, in line of sight. 22-28 VAC/VDC 100 mA power from timer transformer.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter HC-100-FLOW 1" Flow meter for use with Hydramise enabled controller to monitor flow and provide system alerts. Also functions as stand alone flow totalizer/sub meter on any irrigation system.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Hunter HY-100 1" MPT x MPT threaded inlet and outlet filter with 150 mesh stainless steel screen. See detail for installation to valve.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Cap for future use Cap at the mainline or lateral line for future use. The pressure and flow provided to that location are indicated next to the cap symbol.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Proposed Water Meter 1" New 1" Potable Water Meter by others. See specifications for additional requirements.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Irrigation Lateral Line: PVC Schedule 40 Sch-40 solvent weld bell end PVC pipe. Use only Weld-on Medium body 721 Blue glue with P-70 purple primer. Apply solvent weld glue per manufactures instructions. See specifications and details for additional installation instructions.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Designed and installed by others, for reference for the irrigation contractor only: Proposed copper pipe routing from out-door sub-out at ground level, through building to planters. Stub-outs shall be 12" from building and or passed walkway on ground level shall be 12-inches, in planter; 6-inches below top of soil.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Irrigation Mainline: PVC Schedule 40 Sch-40 solvent weld bell end PVC pipe. Use only Weld-on Medium body 721 Blue glue with P-70 purple primer. Apply solvent weld glue per manufactures instructions. See specifications and details for additional additional instructions.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Pipe Sleeve: PVC Schedule 40 Steeving sizes 1.5-inch thru 4-inch shall be Sch-40 pipe, Steeving 6-inch and larger shall be Class 200 pipe. See details and specifications for additional installation instructions.
⊕ ⊙ ⊗ ⊖ ⊗ ⊕ ⊖	Valve Callout # - Valve Number # # - Valve Flow # # - Valve Size

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	PSI	PSI @ POC	PRECIP
1	Hunter PGV-101A	1"	Area for Dripline	3.92	33.32	45.69	1.45 in/h
2	Hunter PGV-101A	1"	Bubbler	16.00	40.49	53.14	2.99 in/h
3	Hunter PGV-101A	1"	Turf Spray	9.60	33.89	46.55	3.09 in/h
4	Hunter PGV-101A	1"	Area for Dripline	4.83	33.83	46.61	1.44 in/h
5	Hunter PGV-101A	1"	2nd FL Drip	1.00	30.66	43.78	1.44 in/h
6	Hunter PGV-101A	1"	Turf Spray	6.52	33.79	46.94	3.96 in/h
7	Hunter PGV-101A	1"	Turf Spray	8.28	33.67	46.83	3.87 in/h
8	Hunter PGV-101A	1"	Bubbler	11.00	38.73	51.92	3.14 in/h
9	Hunter PGV-101A	1"	Area for Dripline	1.89	33.24	46.43	1.44 in/h
10	Hunter PGV-101A	1"	Area for Dripline	2.31	27.03	40.25	1.45 in/h
11	Hunter PGV-101A	1"	Area for Dripline	17.34	28.23	41.31	1.44 in/h
12	Hunter PGV-101A	1"	Turf Spray	17.87	29.21	42.3	1.02 in/h
13	Hunter PGV-101A	1"	Turf Spray	18.14	27.71	40.89	0.8 in/h
14	Hunter PGV-101A	1"	Bubbler	11.00	33.46	46.65	3.24 in/h
15	Hunter PGV-101A	1"	Area for Dripline	9.44	26.5	39.7	1.44 in/h
16	Hunter PGV-101A	1"	Area for Dripline	1.71	26.02	39.24	1.44 in/h
17	Hunter PGV-101A	1"	Turf Spray	16.13	35.7	48.91	0.99 in/h
19	Hunter PGV-101A	1"	Area for Dripline	1.79	26.96	40.14	1.45 in/h
20	Hunter PGV-101A	1"	Area for Dripline	3.09	27.26	40.43	1.43 in/h
21	Hunter PGV-101A	1"	Bubbler	15.00	32.82	45.96	3.3 in/h
22	Hunter PGV-101A	1"	2nd FL Drip	5.20	38.51	51.56	1.44 in/h
23	Hunter PGV-101A	1"	Area for Dripline	4.98	33.47	46.31	1.44 in/h
24	Hunter PGV-101A	1"	Bubbler	18.50	40.05	52.83	4.91 in/h
25	Hunter PGV-101A	1"	Area for Dripline	0.74	26.02	38.37	1.46 in/h
26	Hunter PGV-101A	1"	Area for Dripline	2.33	26.14	37.92	1.45 in/h
27	Hunter PGV-101A	1"	Turf Spray	11.31	27.21	38.99	2.62 in/h
28	Hunter PGV-101A	1"	Area for Dripline	5.70	26.72	38.48	1.51 in/h
29	Hunter PGV-101A	1"	Bubbler	17.50	33.39	44.92	3.6 in/h
30	Hunter PGV-101A	1"	Turf Spray	0.90	26.01	37.1	3.76 in/h

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	SUN	MON	TUE	WED	THU	FRI	SAT	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	195.8	65.3
2	Hunter PGV-101A	Bubbler	1.50 in/h	12 min				12 min			0.6	24	432.0	216.0
3	Hunter PGV-101A	Turf Spray	3.09 in/h	13 min				13 min			1.3	26	249.6	124.8
4	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	241.5	80.5
5	Hunter PGV-101A	2nd FL Drip	1.44 in/h	17 min		17 min		17 min			1.2	50	51.0	16.5
6	Hunter PGV-101A	Turf Spray	3.96 in/h	10 min				10 min			1.3	20	128.4	64.2
7	Hunter PGV-101A	Turf Spray	3.87 in/h	10 min				10 min			1.3	20	166.9	83.4
8	Hunter PGV-101A	Bubbler	1.50 in/h	12 min				12 min			0.6	24	264.0	132.0
9	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	94.5	31.5
10	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	115.5	38.5
11	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	867.2	289.1
12	Hunter PGV-101A	Turf Spray	1.02 in/h	38 min				38 min			1.3	76	1,366.4	683.2
13	Hunter PGV-101A	Turf Spray	0.8 in/h	49 min				49 min			1.3	98	1,769.0	884.5
14	Hunter PGV-101A	Bubbler	1.50 in/h	12 min				12 min			0.6	24	264.0	132.0
15	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	471.8	157.3
16	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	85.5	28.5
17	Hunter PGV-101A	Turf Spray	0.99 in/h	39 min				39 min			1.3	79	1,270.9	635.4
19	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	89.3	29.8
20	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	154.5	51.5
21	Hunter PGV-101A	Bubbler	1.50 in/h	12 min				12 min			0.6	24	360.0	180.0
22	Hunter PGV-101A	2nd FL Drip	1.44 in/h	17 min		17 min		17 min			1.2	50	260.0	87.7
23	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	249.0	83.0
24	Hunter PGV-101A	Bubbler	1.50 in/h	12 min				12 min			0.6	24	444.0	222.0
25	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	36.8	12.3
26	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	116.3	38.8
27	Hunter PGV-101A	Turf Spray	2.62 in/h	15 min				15 min			1.3	30	336.8	168.4
28	Hunter PGV-101A	Area for Dripline	1.44 in/h	17 min		17 min		17 min			1.2	50	285.0	95.0
29	Hunter PGV-101A	Bubbler	1.50 in/h	12 min				12 min			0.6	24	420.0	210.0
30	Hunter PGV-101A	Turf Spray	3.76 in/h	10 min				10 min			1.3	20	18.7	9.3
TOTALS:				442 min		220 min		442 min					10,803.1	4,849.50

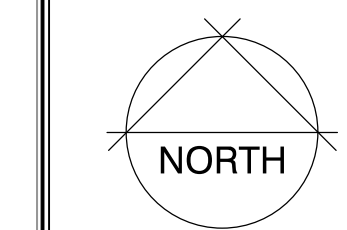
NOTE: Water schedule is based on 10 year average rain fall estimate, contractor to program controller according to current weather conditions.

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	3/4" copper stub-out from building with female thread adaptor and PVC male plug. To be provided and installed by others. Irrigation contractor scope of work starts from adaptor.
2	1/2" copper stub-out from building with female thread adaptor and PVC male plug. To be provided and installed by others. Irrigation contractor scope of work starts from adaptor.
3	Proposed copper pipe routing, to be designed by building architect and installed as part of plumbers scope of work.
4	Proposed stub-up location in planter. Stub-up shall have a female threaded adaptor with PVC male threaded plug. Top of plug must be minimum 6-inches below top of soil. Installation and water proofing by others.
5	Planter drain, provided by others.
6	Irrigation contractor to start his scope of work from copper adaptor. Start with a 1/2" x 3/4" male x slip adaptor and then a slip tee. Run a 3/4" sch-40 above ground and install the air/vac valve minimum 3-inches above mulch. On tee side outlet, run lateral to drip supply header.
7	Flush valve piped back to this location from dis-charge header for ease of maintenance.

IRRIGATION PLAN

SIDEMAN RESIDENCE
6444 ALLISON ROAD
CITY OF MIAMI BEACH, FL., 33141



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of 5



Scale: 1" = 10'

Design Date: 10-31-21

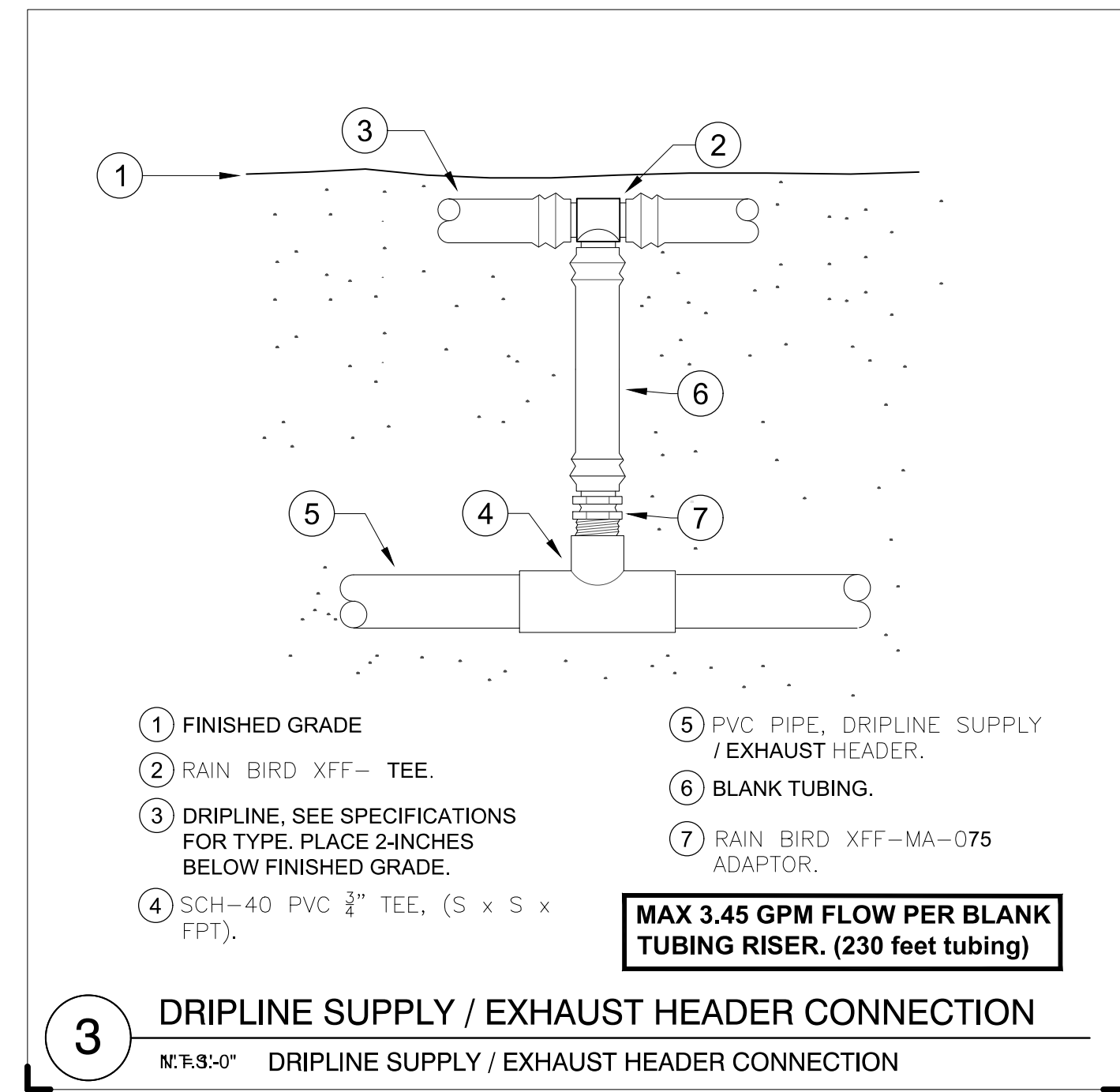
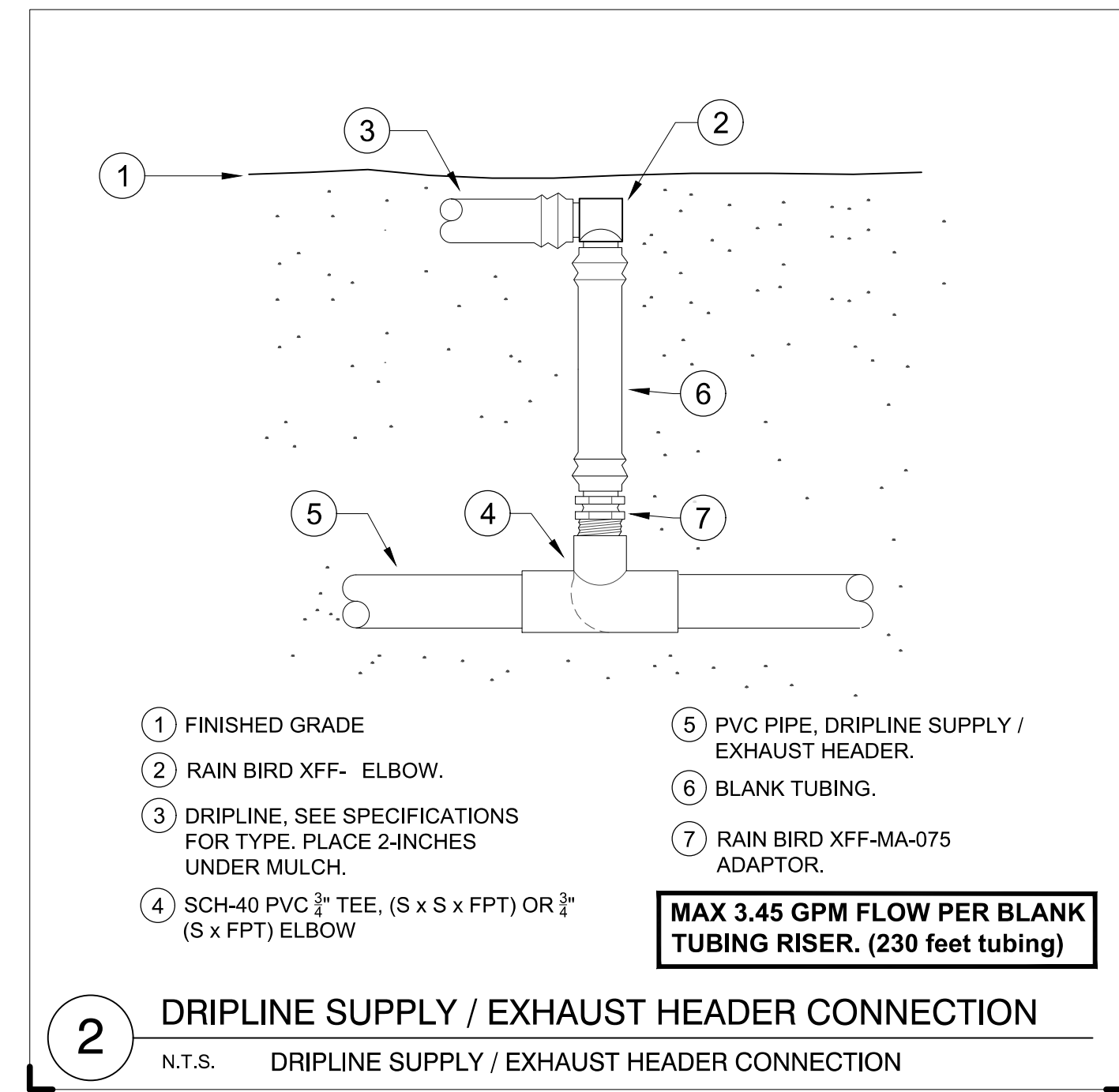
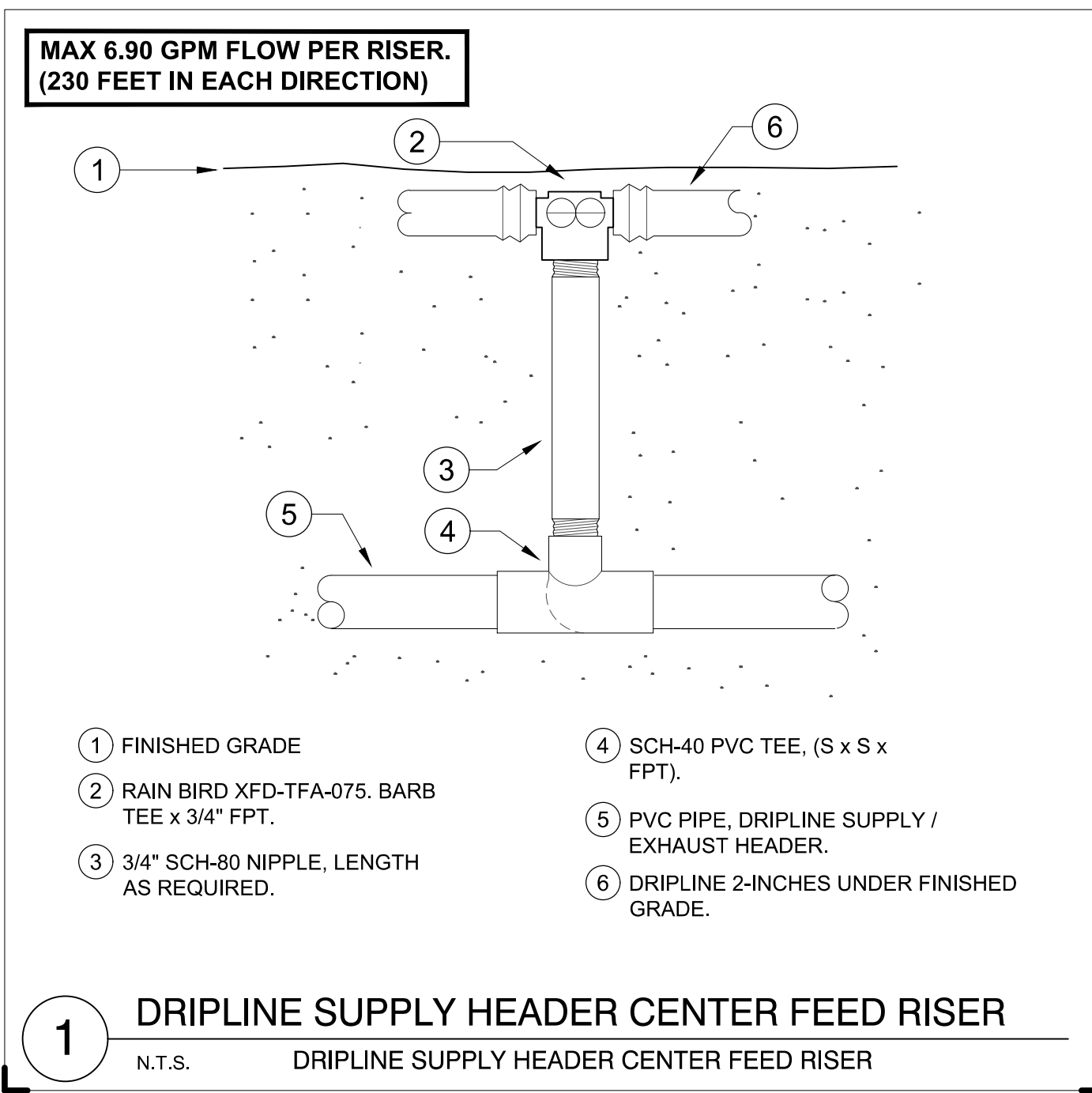
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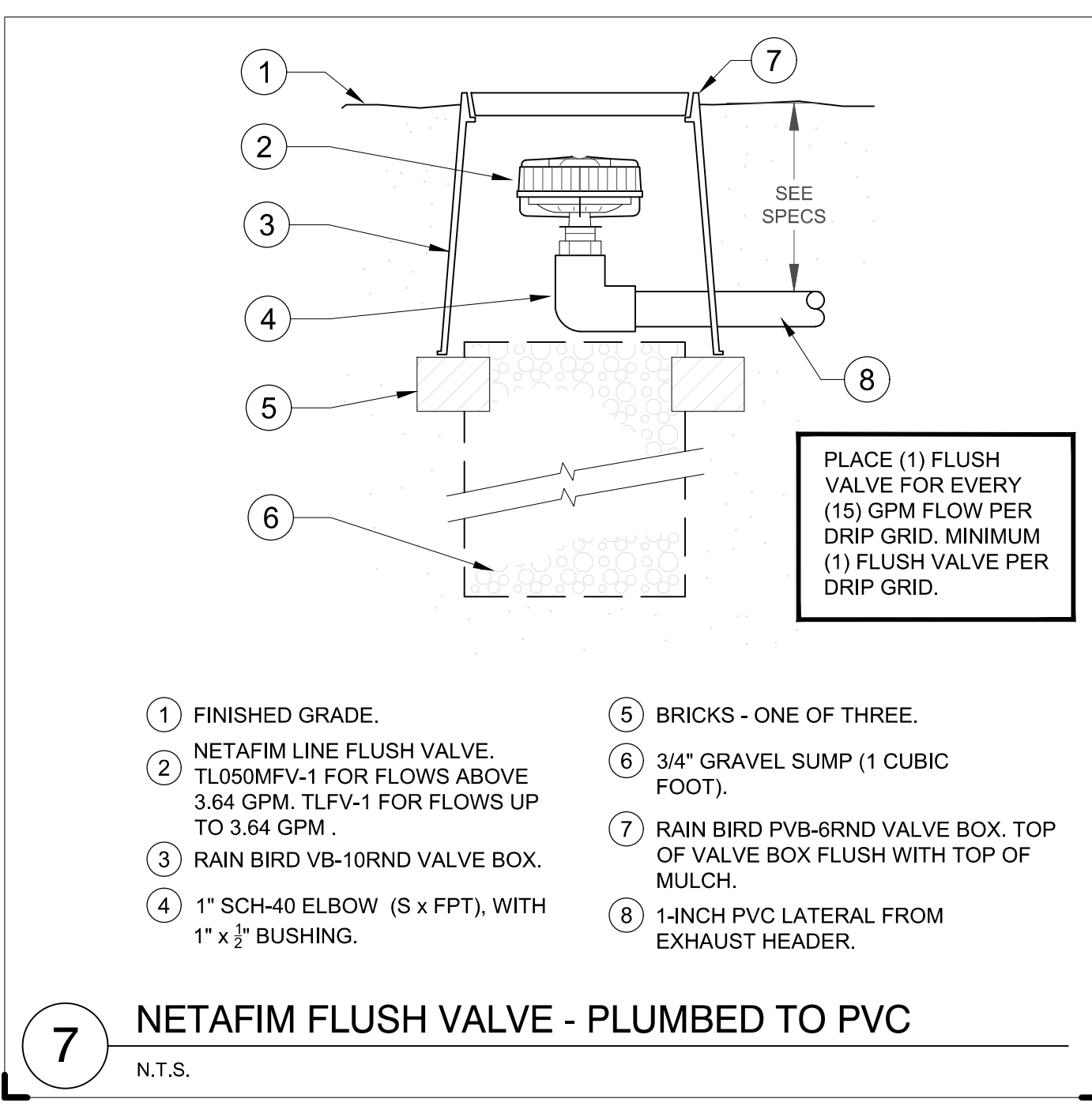
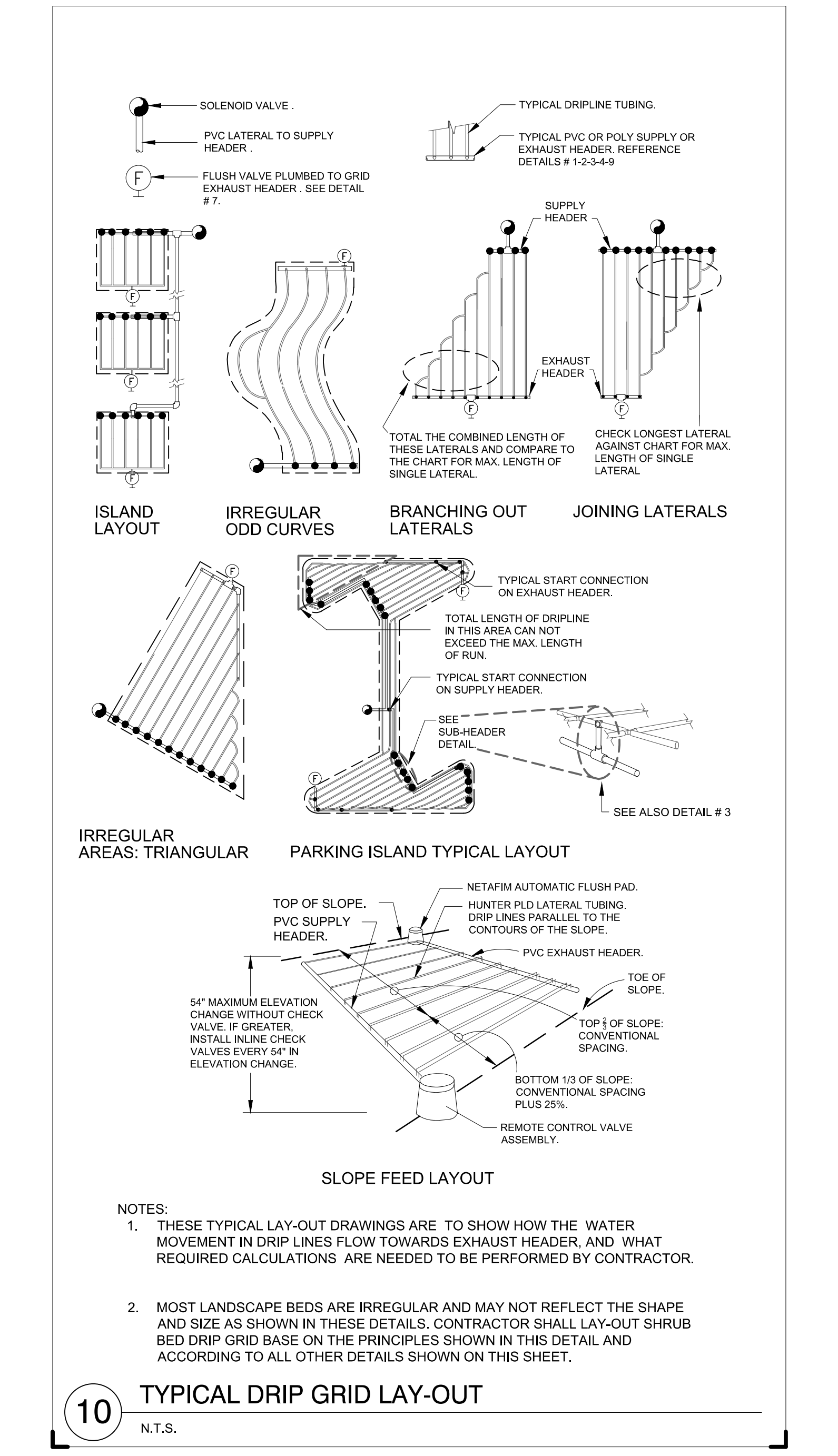
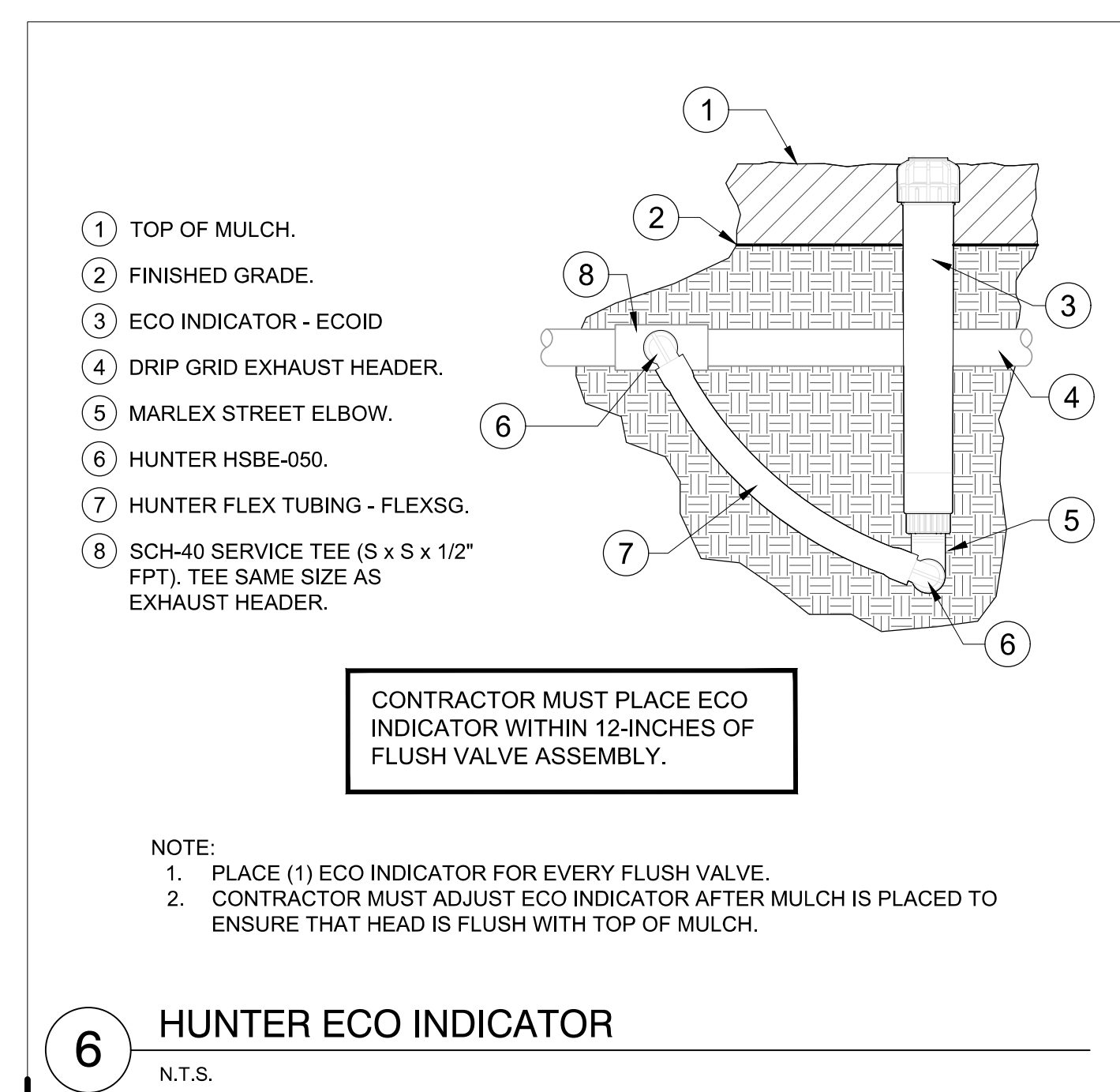
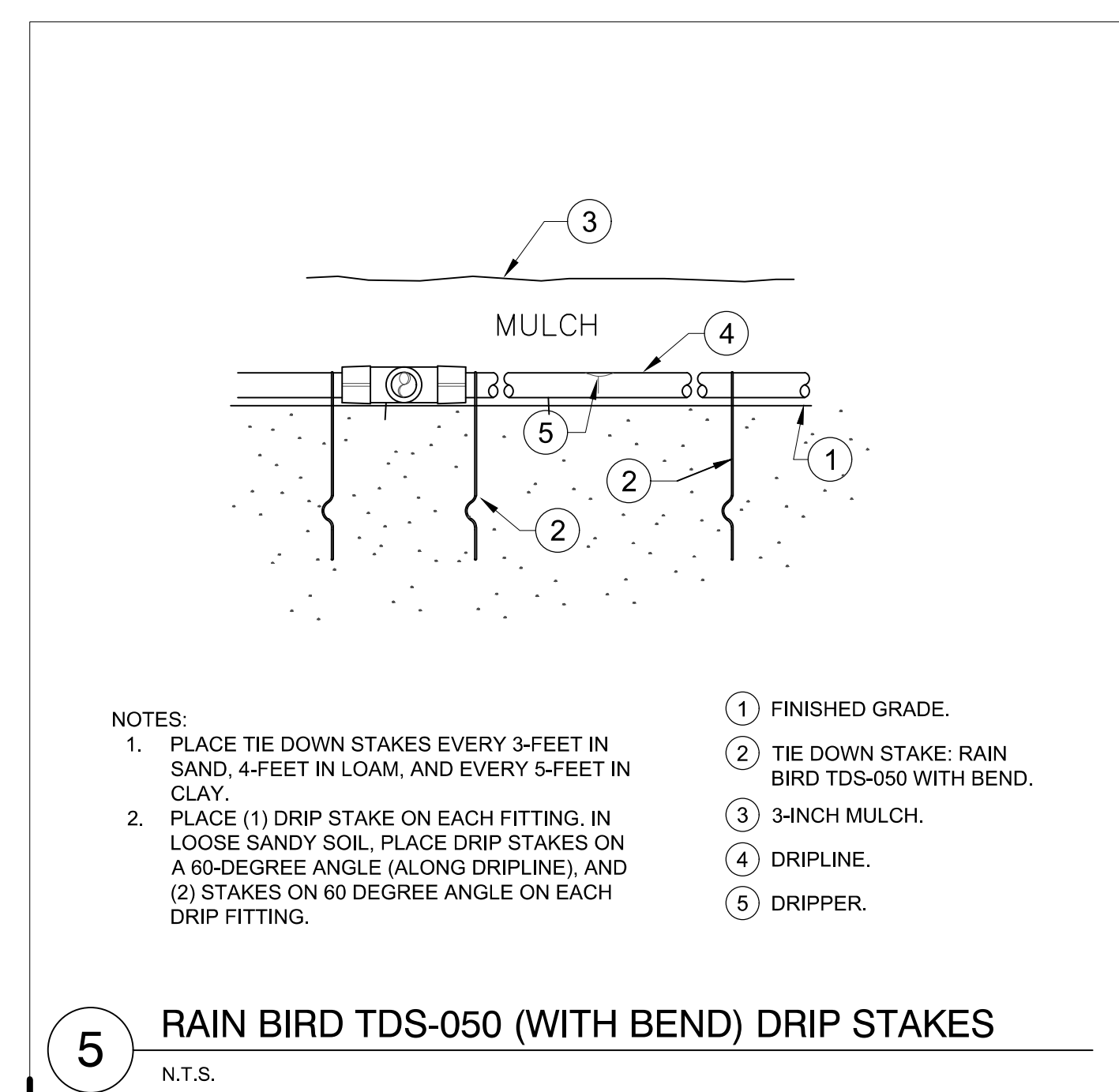
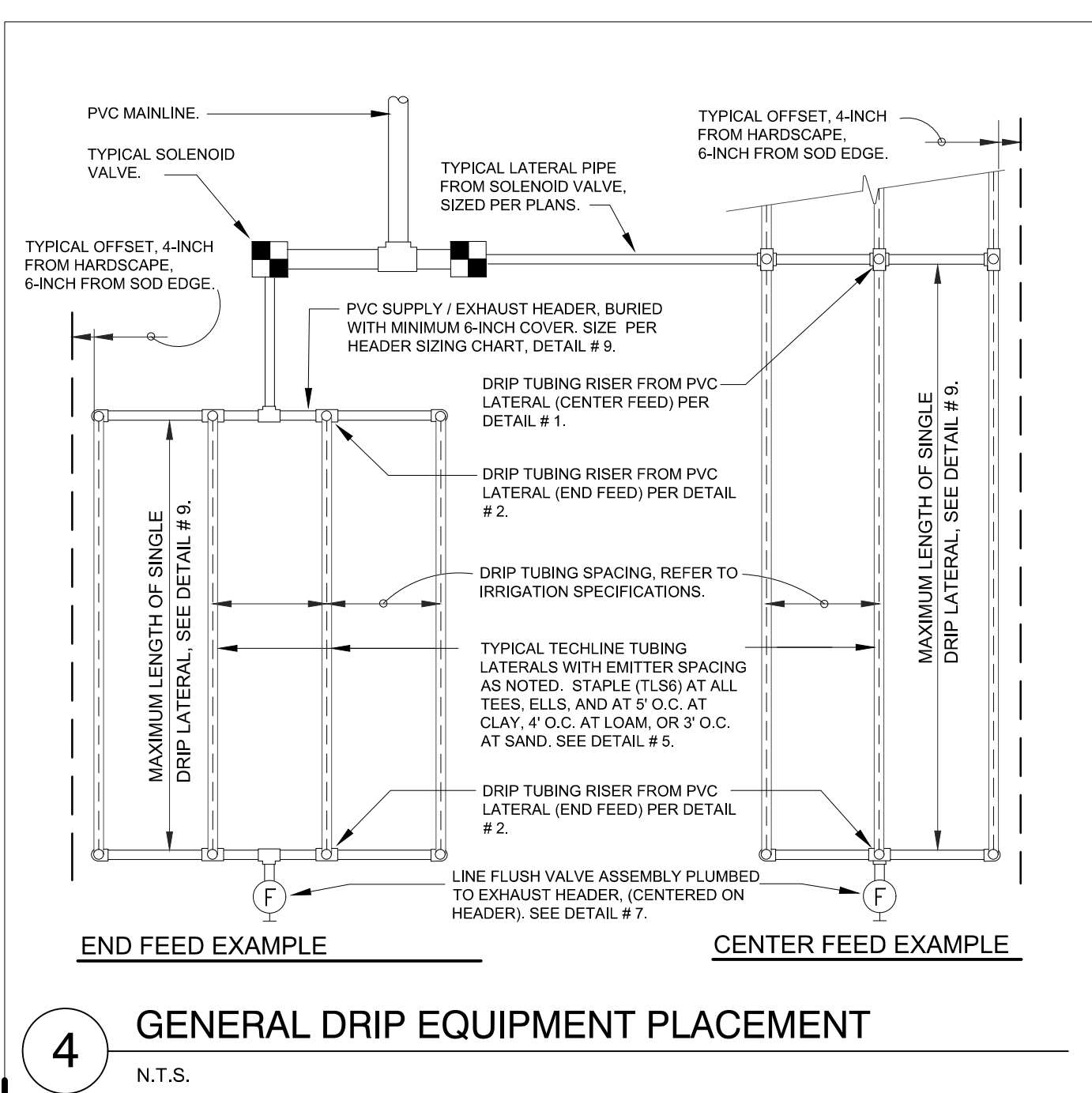
Modified:

Revisions:

1.	10/31/21: Added Zone Area and modified layout.
2.	11/01/21: Added Zone Area and modified layout.
3.	02/02/22: Modified system to be more efficient.
4.	05/01/22: Modified system to be more efficient.



- DRIP SPECIFICATIONS:**
- DRIP TUBING; HUNTER HDL-CV-GOP, ROW SPACING 12-INCHES. DRIP GRID LAY-OUT IS BASED ON 30 PSI. IF PRESSURE BY SOLENOID VALVE IS HIGHER THAN 50 PSI, INSTALL AS-50 ON SOLENOID VALVE.
 - INSTALL DRIP SYSTEM IN THE FOLLOWING ORDER: A). WITH ALL MAINLINE AND IT'S ASSOCIATE EQUIPMENT (INCLUDING 120 MESH FILTER AT P.O.C. IF NOT USING POTABLE WATER) COMPLETELY INSTALLED, FLUSH MAINLINE TILL FREE AND CLEAR OF DEBRIS. B). INSTALL ALL LATERALS TO THE VARIOUS DRIP GRIDS, AND SUPPLY HEADERS WITH RISERS EXTENDED ABOVE GROUND. CENTER FEED RISERS, TEMPORARY EXTEND NIPPLES WITH PIPE AND COUPLINGS (DO NOT GLUE). FLUSH TILL FREE AND CLEAR OF DEBRIS, TEMPORARY CAP NIPPLES, SEAL BLANK TUBING (RISERS) WITH TAPE. C). INSTALL EXHAUST HEADERS - RISERS - FLUSH POINTS. D). INSTALL DRIP GRID, STAPLE TUBING PER DETAIL #5, CONNECT DRIP TUBING TO SUPPLY HEADER RISERS. FLUSH TILL FREE AND CLEAR OF DEBRIS. E). CONNECT DRIP GRID TO EXHAUST HEADER RISERS, FLUSH SYSTEM USING "FLUSH VALVE". PVC DISCHARGE AND EXHAUST HEADERS MUST BE BURIED WITH MINIMUM 6" COVER. MULCH IS NOT CONSIDERED AS COVERAGE.
 - INSTALL OPERATION INDICATORS; ONE AT END OF EACH DRIP GRID. SEE DETAIL #6. ACTIVATE DRIP ZONE, ENSURE ALL OPERATION INDICATORS ARE FULLY EXTENDED, ADJUST STREAM SPRAY TO WHERE IT CAN EASILY BE SEEN BY MAINTENANCE PERSON.
 - PRESSURE TEST WITH OWNERS REPRESENTATIVE PRESENT; PER ZONE, TEMPORARY INSTALL (2) PRESSURE GAUGES (LIQUID FILLED PRESSURE GAUGES) ON (2) FLUSH POINTS, (1) ON LARGEST GRID "FLUSH POINT" AND THE OTHER ON FARTHEST GRID "FLUSH POINT". ACTIVATE ZONE, AFTER FLOW HAS STABILIZED, VERIFY ALL ZONE OPERATION INDICATORS ARE FULLY EXTENDED, CHECK PRESSURE ON BOTH GAUGES, PRESSURE MUST BE 20 PSI OR HIGHER TO PASS TEST. IF TEST FAILS, CONTRACTOR TO LOCATE AND CORRECT PROBLEM AND RETEST. IT IS IN THE CONTRACTORS BEST INTEREST TO PERFORM HIS OWN TEST BEFORE HE CALLS OWNERS REPRESENTATIVE PRESENTS TO AVOID RE-INSPECTION FEE'S.
 - PRESSURE TEST RESULTS SHALL BE NOTED AS-BUILD DRAWING BY THE "FLUSH VALVE" WHERE TESTS WAS TAKEN. ALL "FLUSH VALVE" LOCATIONS SHALL BE INCLUDED IN AS-BUILD DRAWINGS.



XFS-CV DRIPLINE GENERAL GUIDELINES FOR WATERING TIME

	TURF			SHRUB & GROUND COVER		
	CLAY	LOAM	SANDY	CLAY	LOAM	SANDY
DIPPER FLOW (GPH)	0.40	0.60	0.90	0.40	0.60	0.90
DRIPPER INTERVAL	24"	12"	12"	24"	18"	12"
LATERAL (ROW) SPACING	18"-24"	12"	9"-12"	18"-24"	18"-24"	12"-18"
APPLICATION RATE (IN/HR)	.22-.17	.96	.93-1.44	.22-.17	.43-.32	1.44-.96
TIME TO APPLY 1/4"	68-88	16	8-10	68-88	35-47	10-16

8 RAIN BIRD XFS-CV DRIPLINE TABLE -1
N.T.S.

HUNTER HDL-CV MAXIMUM LENGTH OF SINGLE LATERAL (FEET)

DRIPPER SPACING	12"			18"			24"		
	0.4	0.6	0.9	0.4	0.6	0.9	0.6	0.9	
DRIPPER FLOW RATE (GPH)									
INLET PRESSURE (PSI)	15	285	236	164	404	333	233	423	
	20	339	280	192	475	395	273	501	
	30	411	339	236	582	482	333	610	
	40	463	385	267	657	545	376	688	

HUNTER HDL-CV FLOW PER 100 FEET

DRIPPER SPACING	0.4 GPH DRIPPER			0.6 GPH DRIPPER			0.9 GPH DRIPPER		
	GPH	GPM	GPM	GPH	GPM	GPM	GPH	GPM	
12"	-	-	40.00	0.67	60.00	1.00	90.00	1.50	
18"	-	-	26.67	0.44	40.00	0.67	59.90	0.99	
24"	-	-	20.00	0.33	30.00	0.50	45.00	0.75	

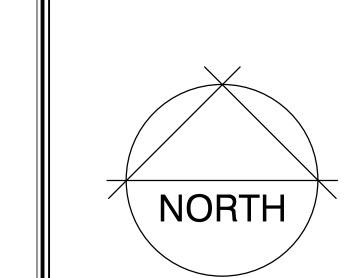
SUPPLY AND EXHAUST HEADER SIZING CHART (UNLESS NOTED ON PLANS)

STEP 1: ADD LENGTH OF ALL TECHLINE LATERAL TUBING CONNECTED TO THE HEADER.
STEP 2: DIVIDE THIS TOTAL LENGTH BY 100 TO INDICATE THE LENGTH IN UNITS OF 100.
STEP 3: LOCATE THE GPM THAT APPLIES FOR EACH UNIT OF 100 FEET LENGTH ON THE CHART "TECHLINE FLOW PER 100 FEET". MULTIPLY THIS GPM NUMBER TIMES THE UNITS OF 100 FEET FOR THE TOTAL GPM AT THIS HEADER.
STEP 4: SIZE THE HEADER WITH THE FOLLOWING:
1 TO 6 GPM: 3/4" HEADER.
6 TO 10 GPM: 1" HEADER.
10 TO 20 GPM: 1 1/4" HEADER.
20 TO 30 GPM: 1 1/2" HEADER.

9 HUNTER HDL-CV DRIPLINE TABLE - 2
N.T.S.

IRRIGATION DRIP DETAILS

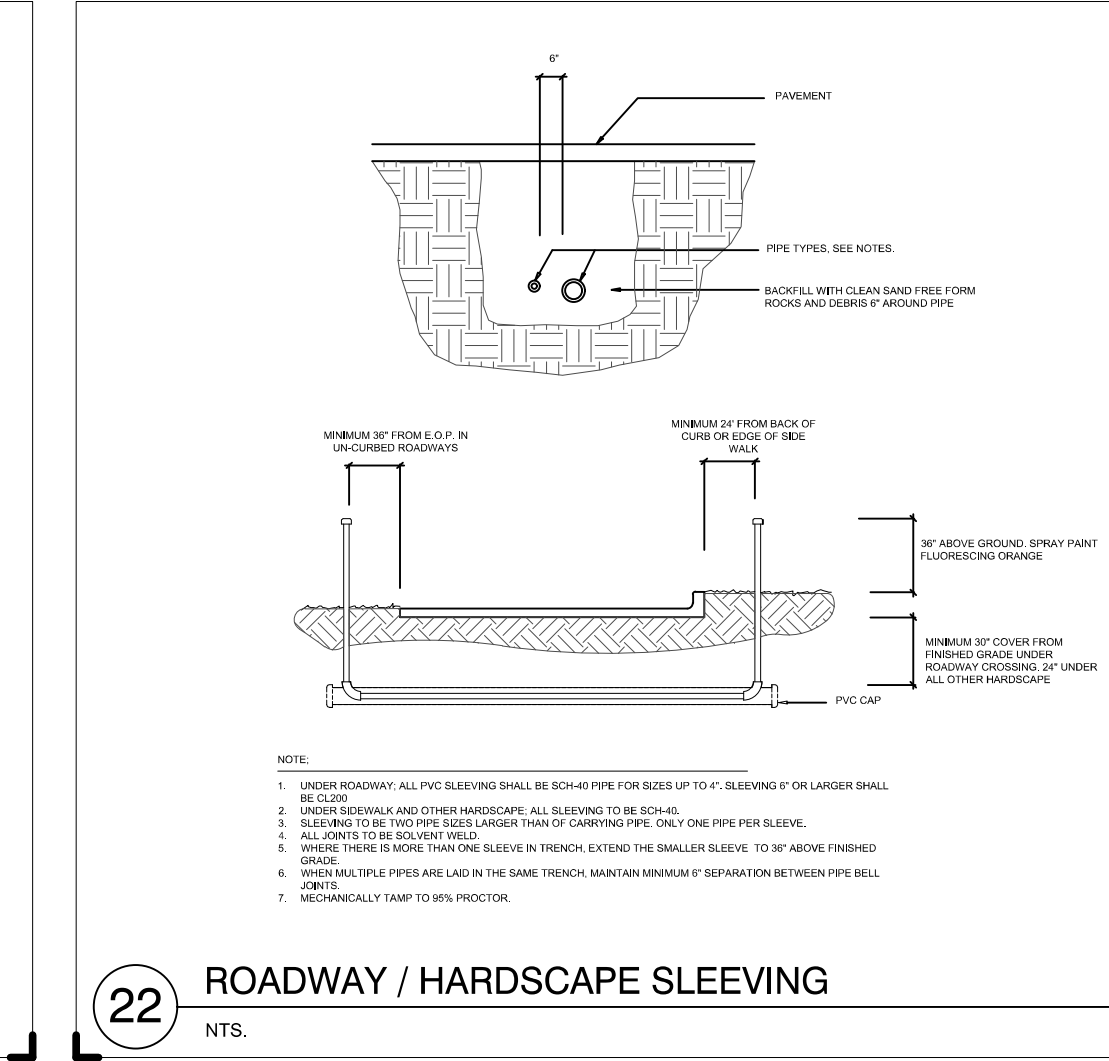
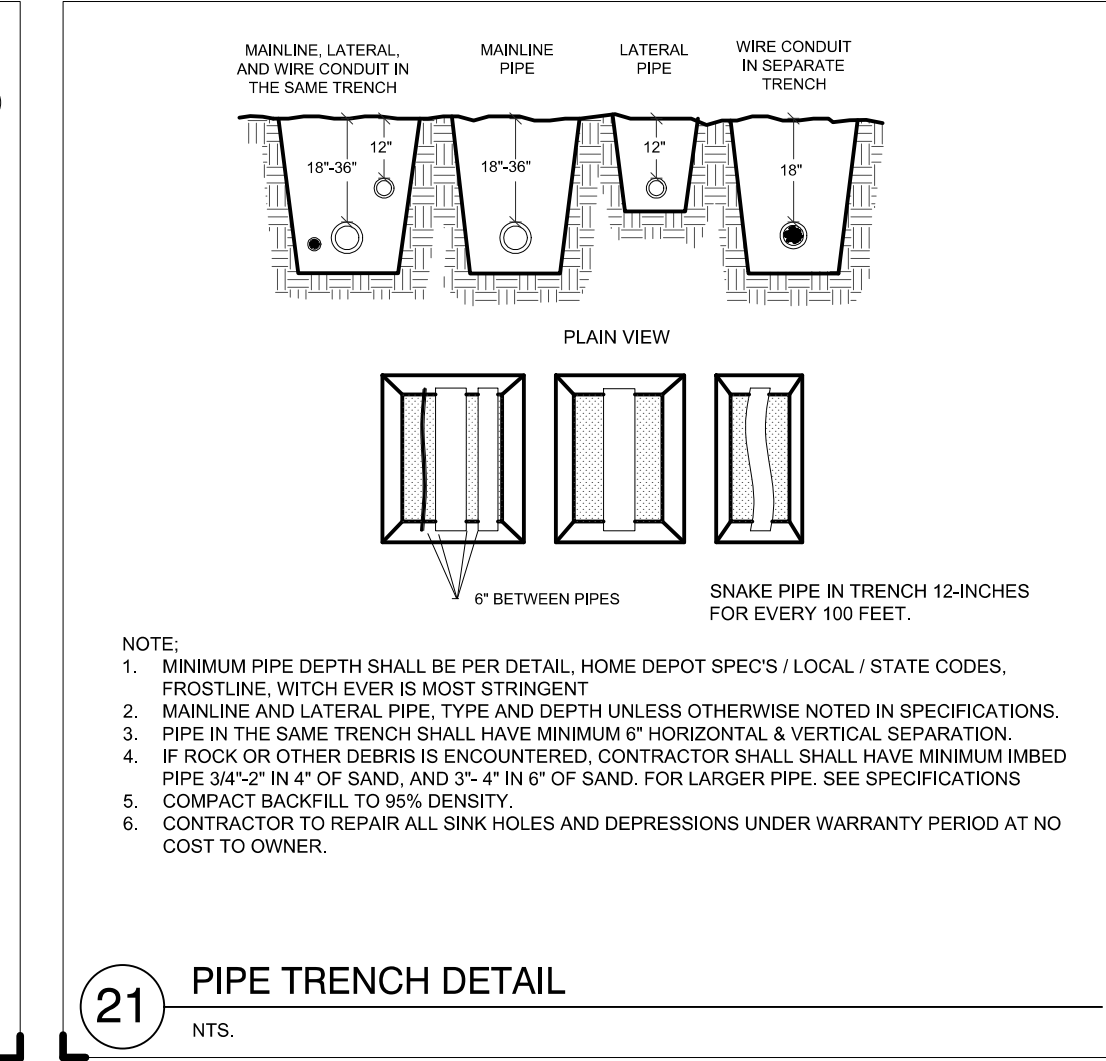
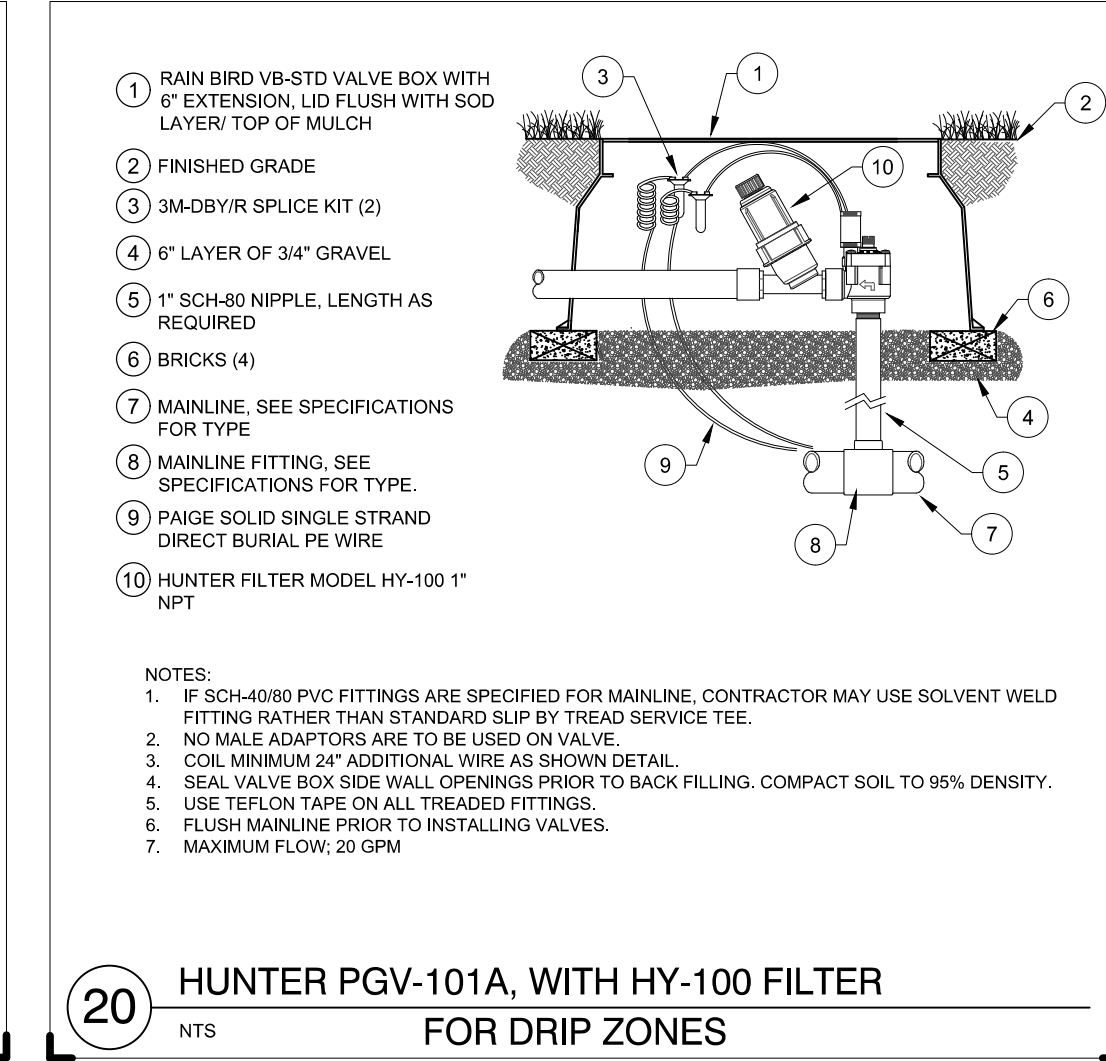
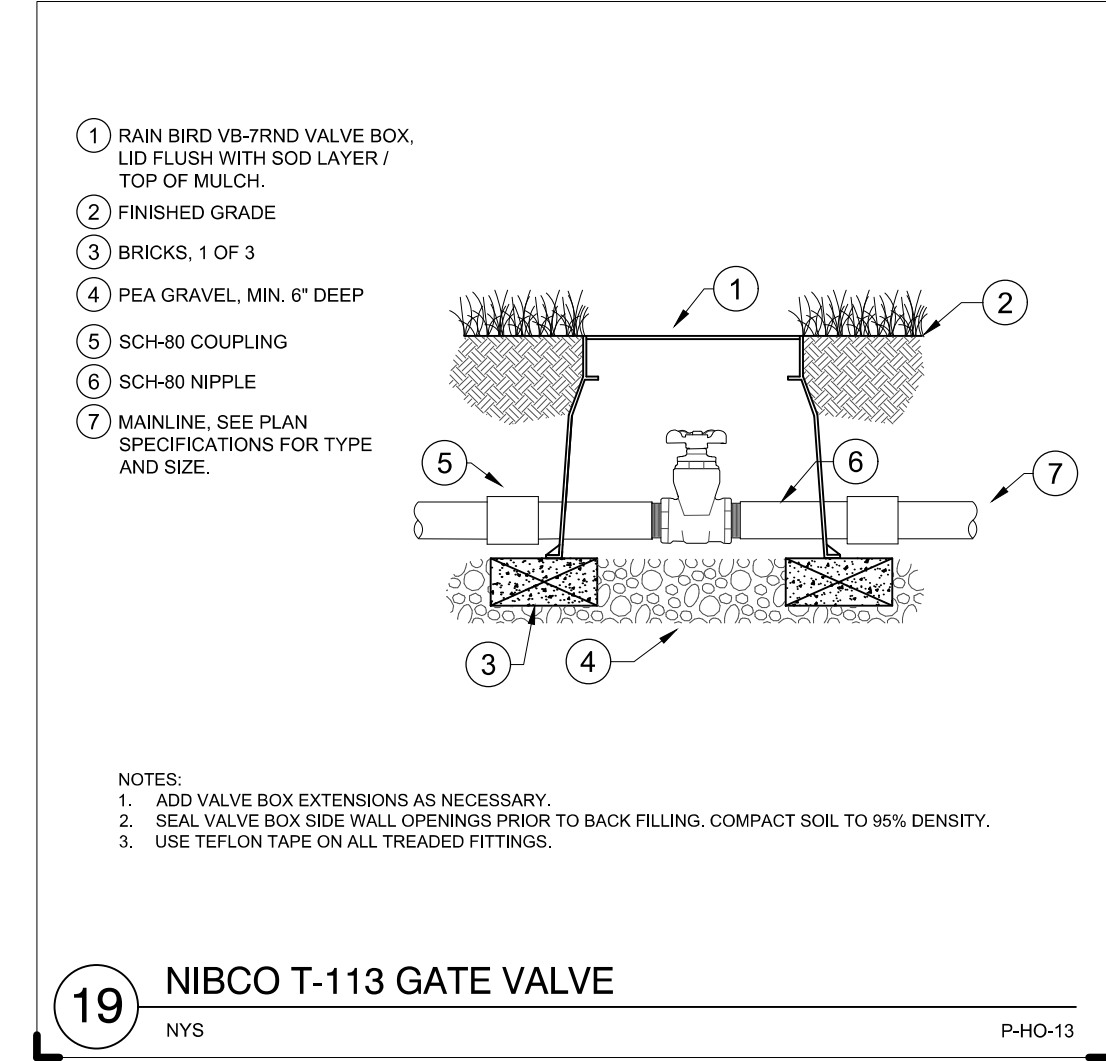
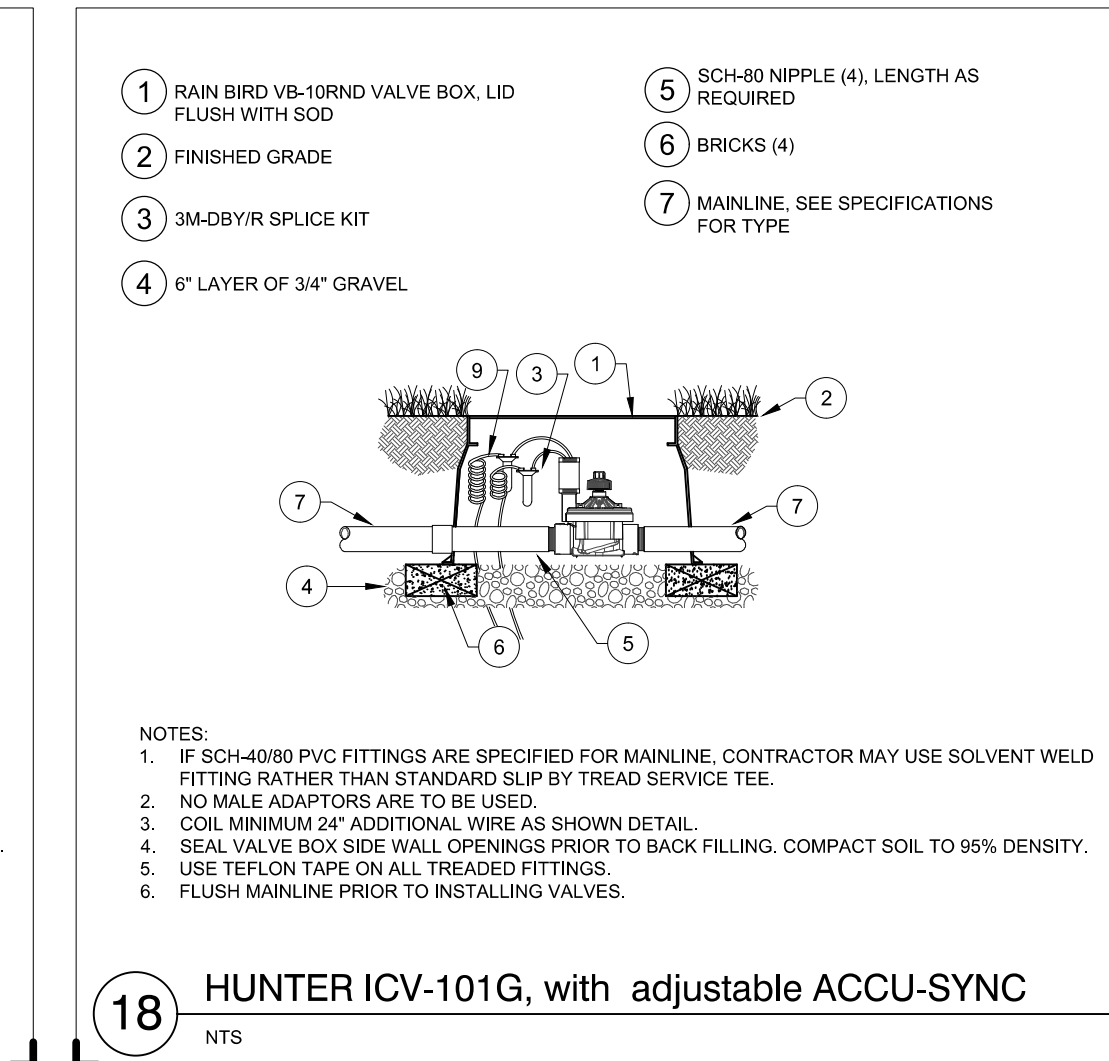
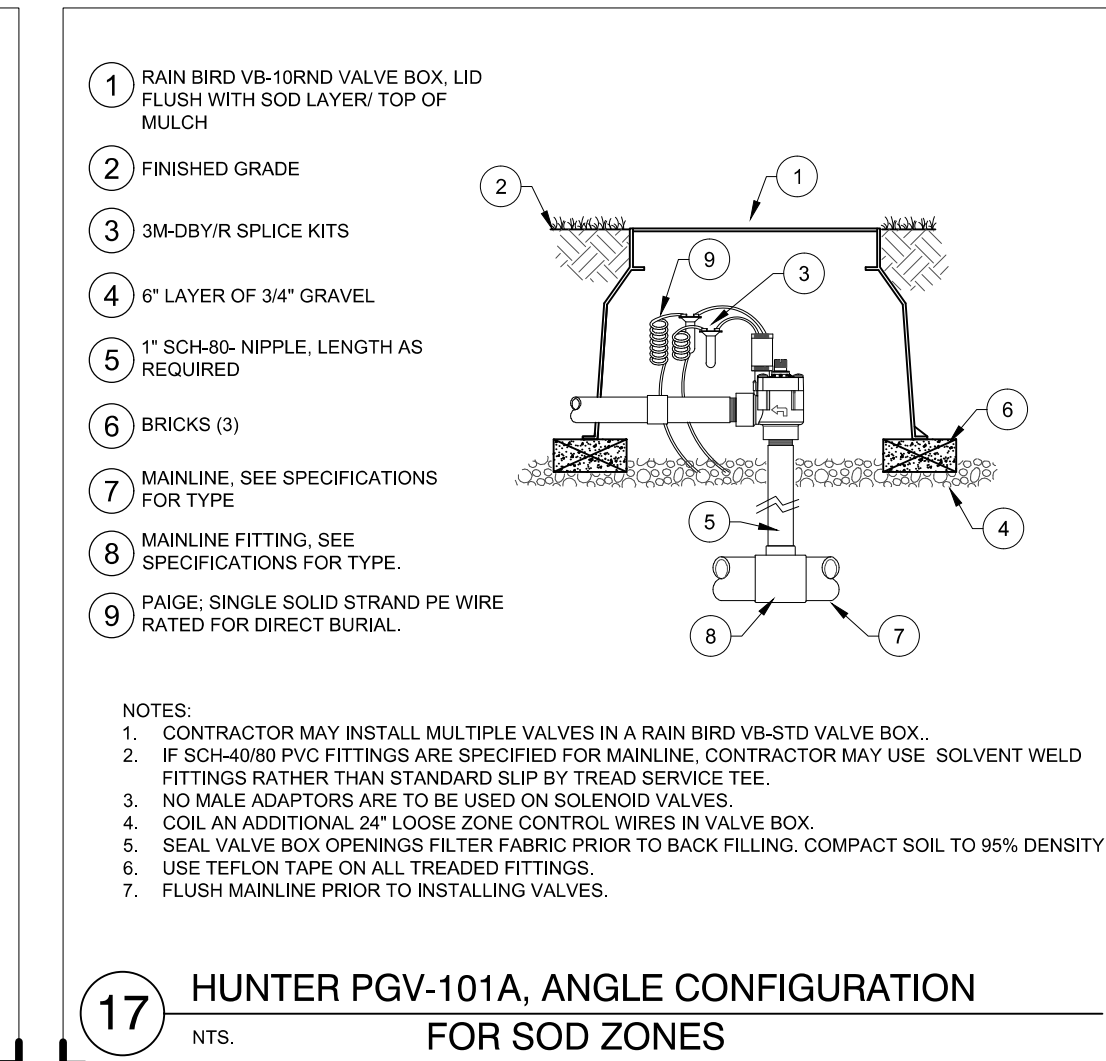
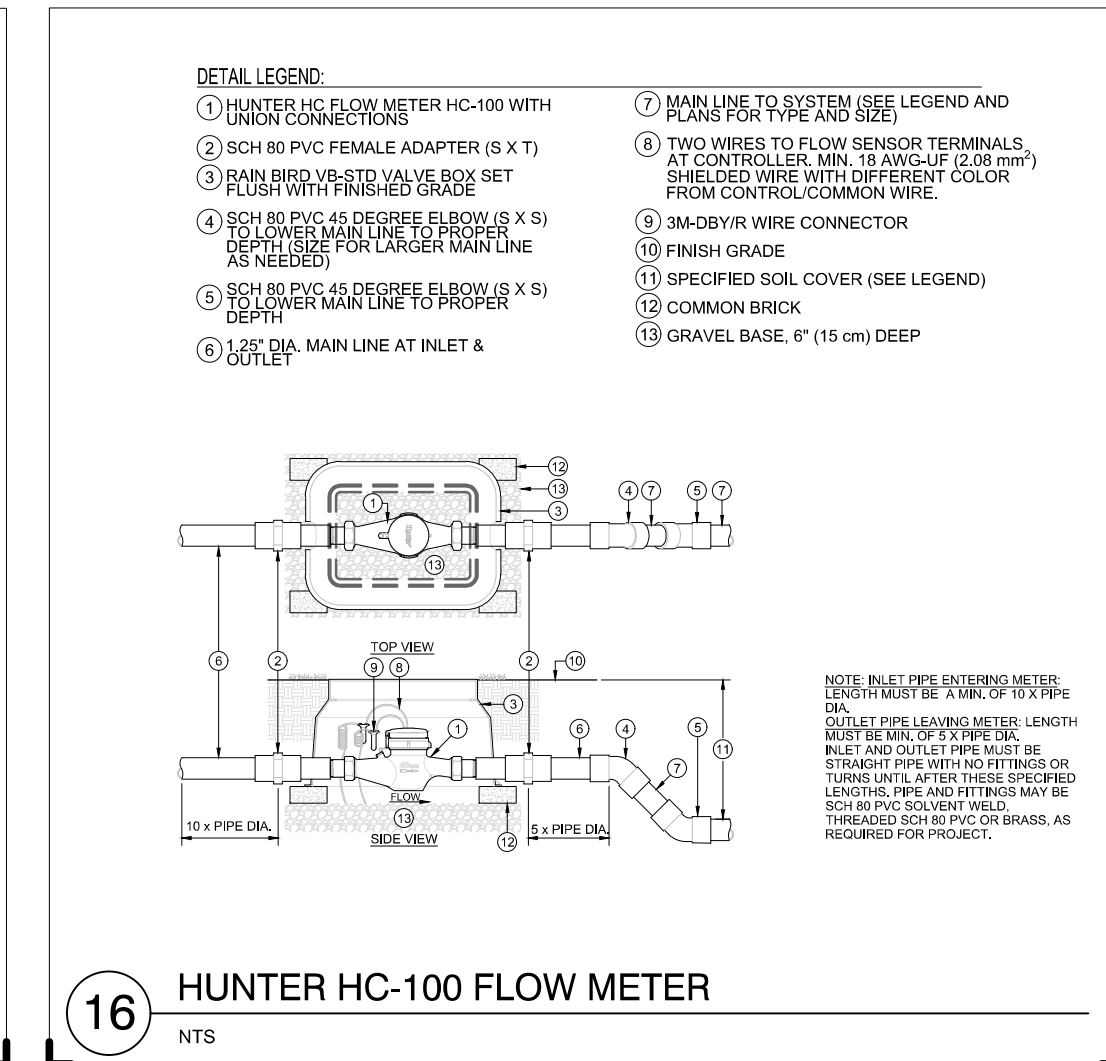
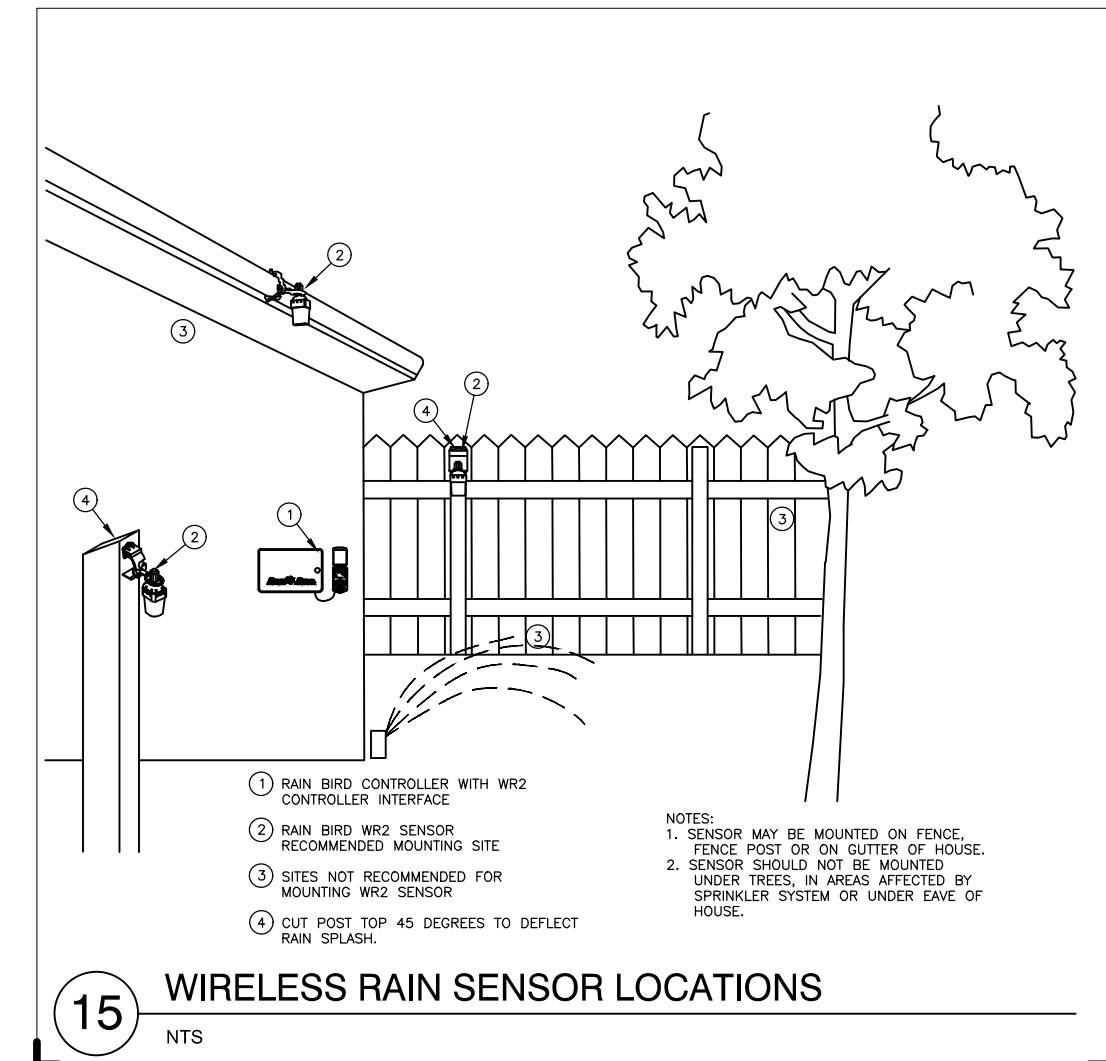
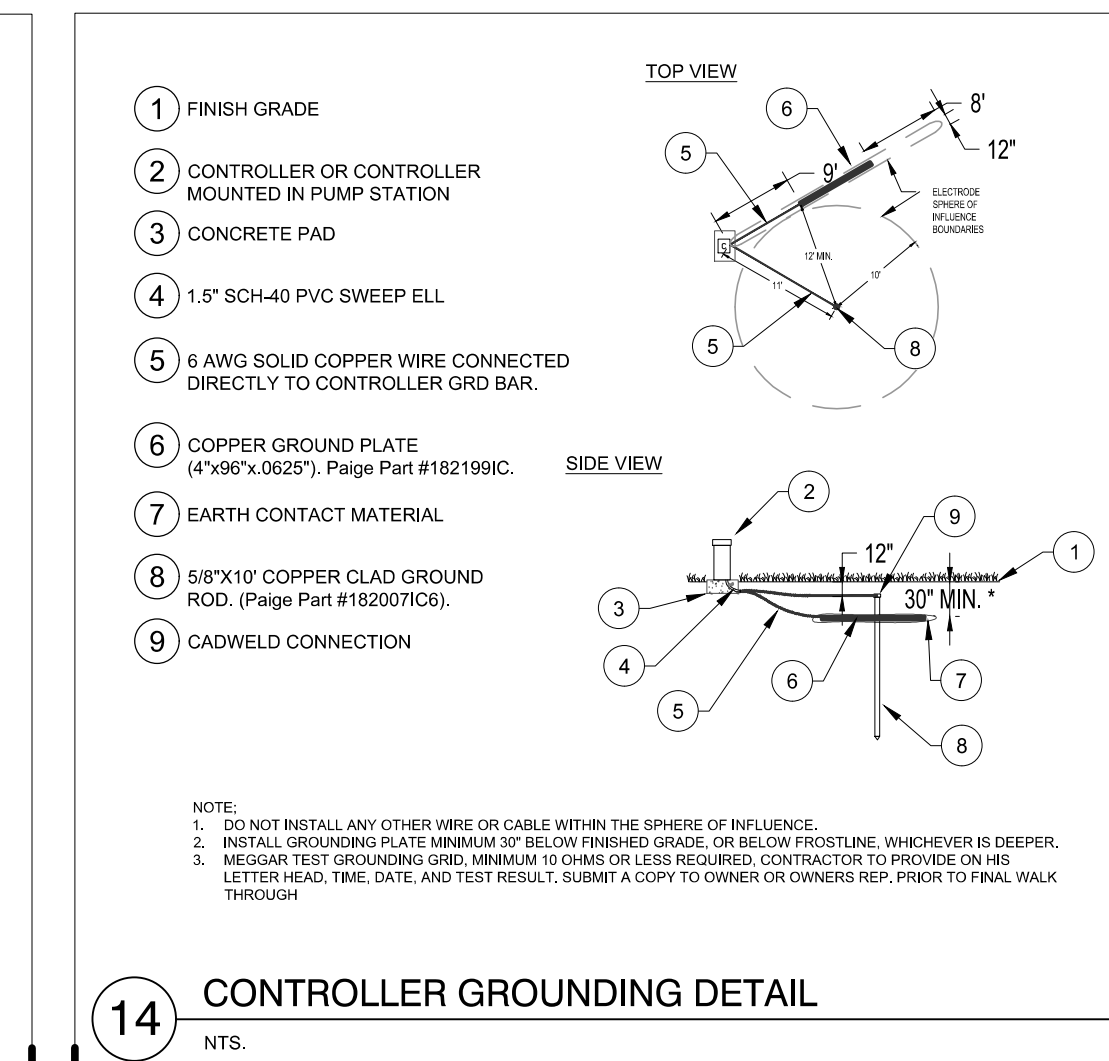
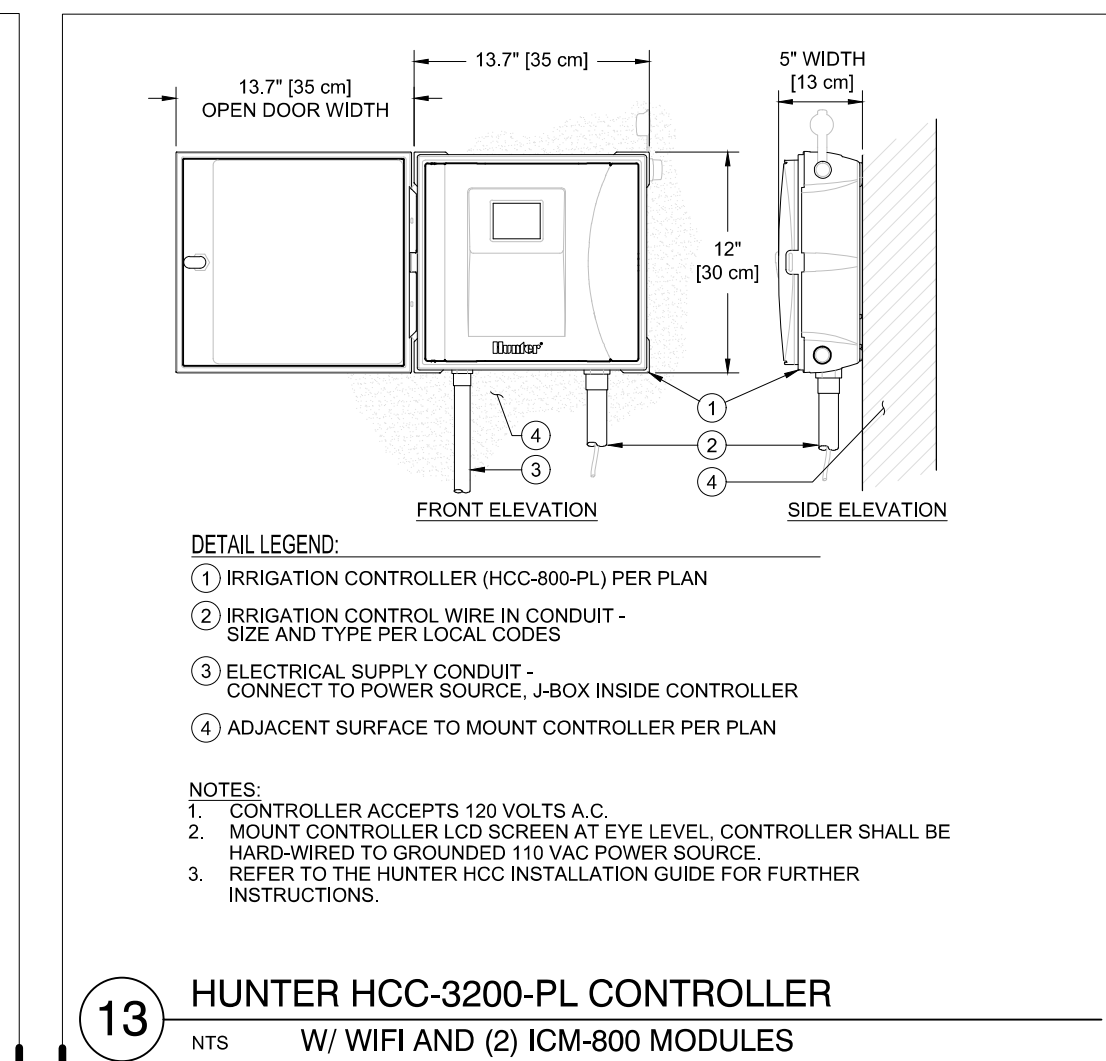
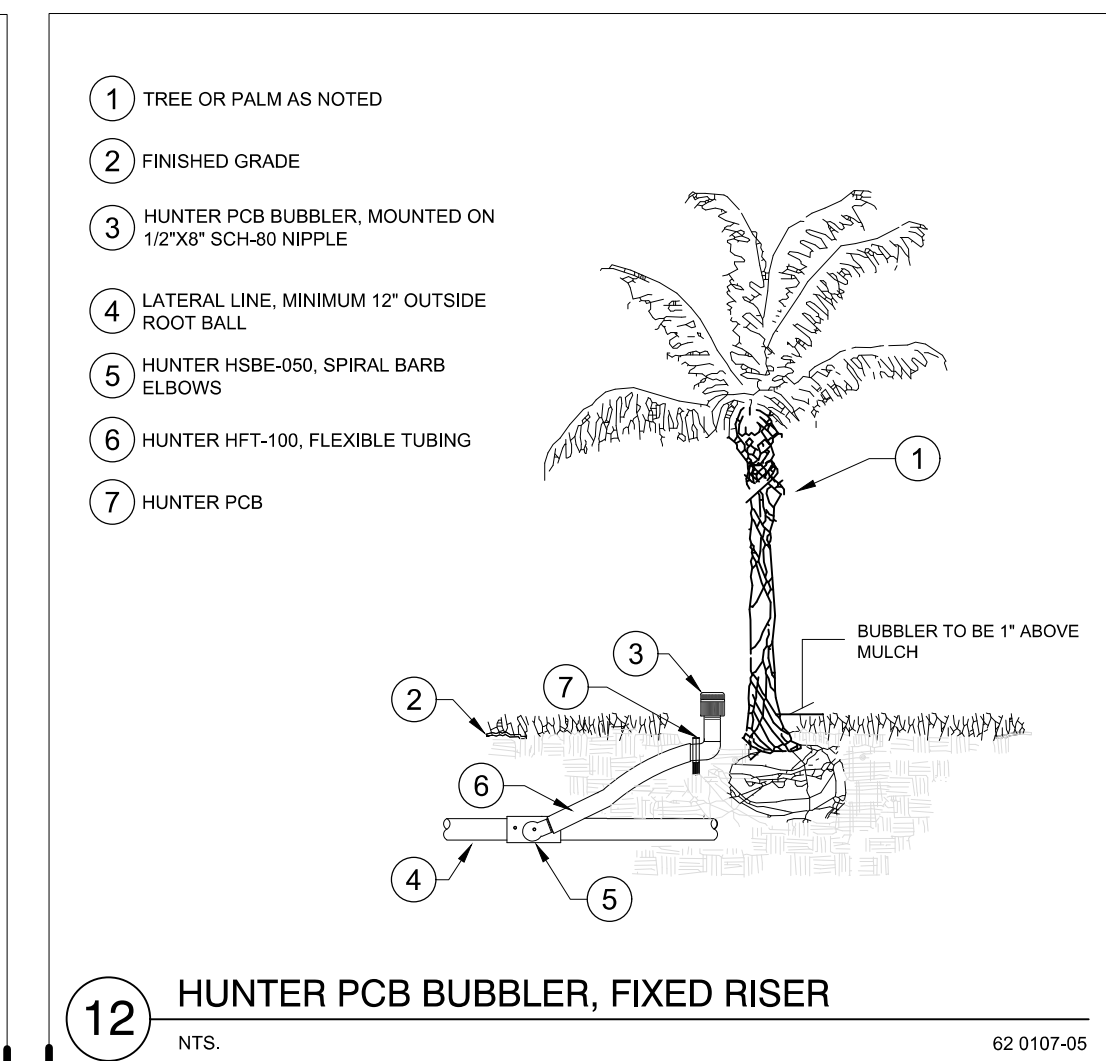
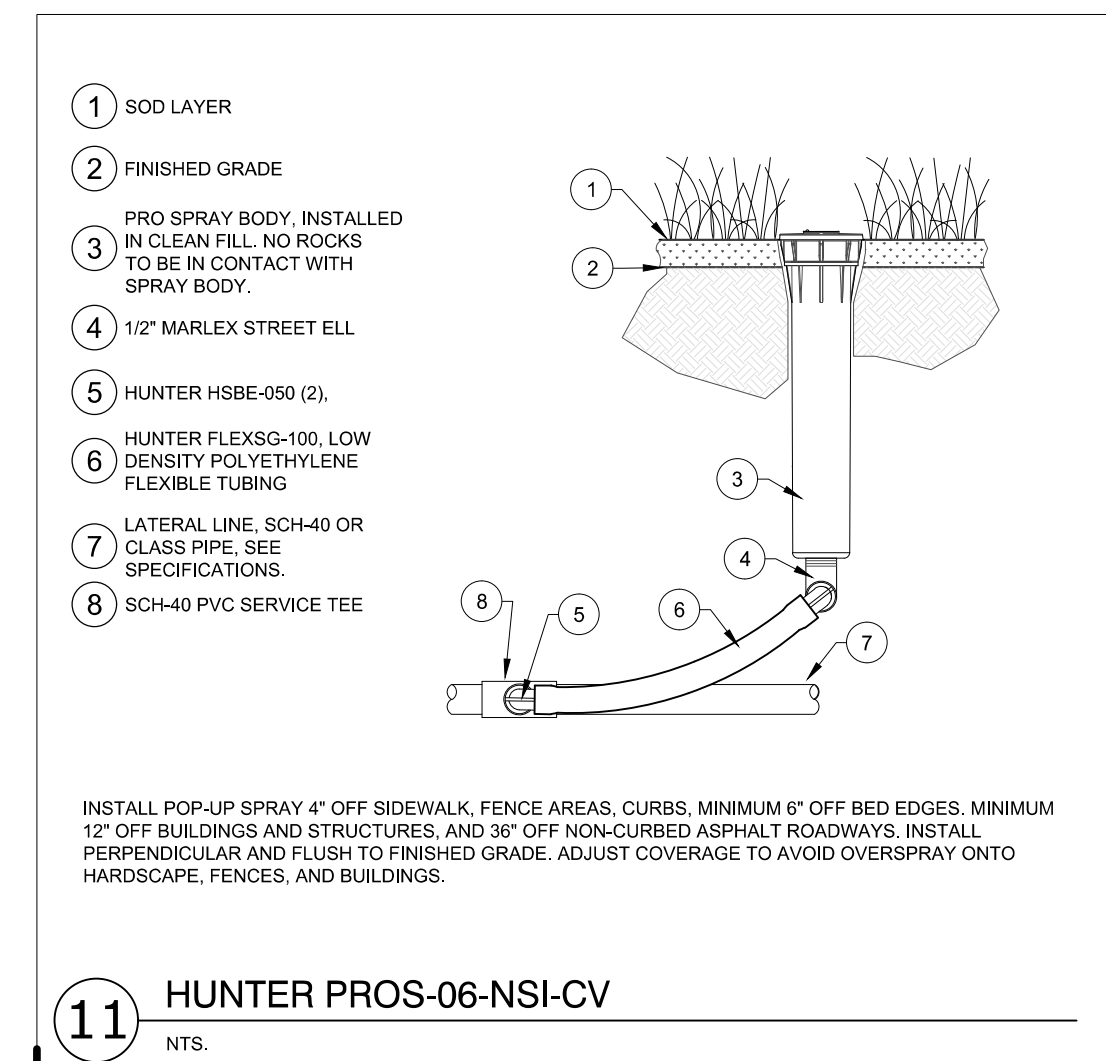
SIDEMAN RESIDENCE
6444 ALLISON ROAD
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of 5

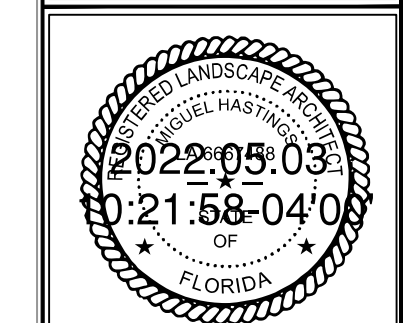
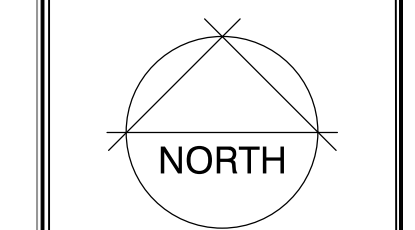
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 Drawn By: R1
 Date: 05-01-2022
 Modified: 05-01-2022

Revisions:
 1. 10/25/21: Added 2nd floor address and modified landscape on main, second, and third floor of building. Checked layout with owner and architect.
 2. 05/01/22: Modified landscape to be more of a natural look. Checked layout with architect and landscape contractor.
 3. 05/01/22: Modified landscape to be more of a natural look. Checked layout with architect and landscape contractor.
 4. 05/01/22: Modified landscape to be more of a natural look. Checked layout with architect and landscape contractor.



IRRIGATION DETAILS

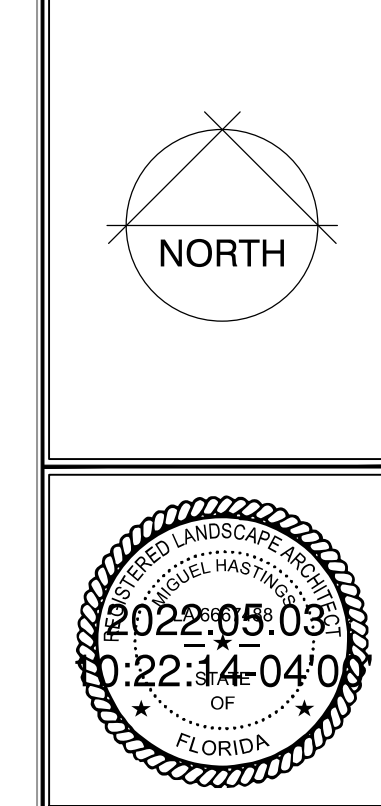
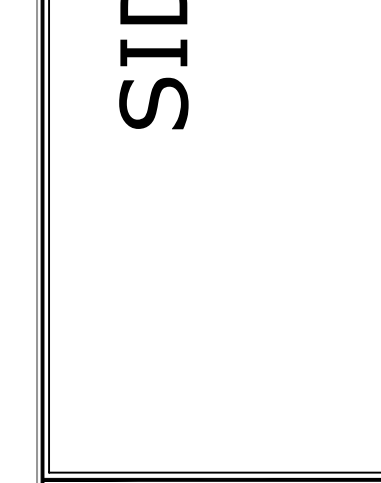
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 6444 ALLISON ROAD
 CITY OF MIAMI BEACH, FL., 33141



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Date Modified: 05-01-2022
09/29/2022 9:08:17 AM
Revisions:
1. Add to Address from final plan and specifications
2. Update to match final plan and specifications
3. Update to match final plan and specifications
4. Update to match final plan and specifications

IRRIGATION
NOTES / SPECIFICATIONS

SIDEMAN RESIDENCE
6444 ALLISON ROAD
CITY OF MIAMI BEACH, FL., 33141



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of 5

IRRIGATION NOTES & SPECIFICATIONS

PLAN:
Irrigation design on this plan is diagrammatic and shows the intent of the scope of work. Due to the narrow planting areas with trees and utilities, some of the irrigation equipment and pipes are shown outside the planting area for clarity. Some bubblers, mainline, valves and other equipment / pipe are off-set from its intended location for clarity. Contractor is required to obtain utility / landscape plans to assist in bidding and planning his scope of work. It is the responsibility of the contractor to ensure that the system is installed to all applicable laws, codes, rules, regulations of the governing authorities, and according to manufactures recommended installation instructions. All required permits pertaining to the irrigation installation shall be obtained by the irrigation contractor prior to commencing work. Cost for all permits shall be included in his proposal.

SCOPE OF WORK:
Existing property, building will be demolished and rebuilt. Existing irrigation system - no information available at this time. There will be planters on the second floor balcony's that will be irrigated. All copper pipe shown in this plan from stub-out on ground level to stub-up in planters is for irrigation contractors reference only, to be design to code by building architect and included in plumbing plans as well as water meter and back flow preventer. Contractor must visit site to take in consideration the additional work / material concerning existing obstructions such as narrow corridors where trees to remain, as well as on-site utilities. Contractor must work with and coordinate his work with other subs such as staking location of ; septic drain field, tree / palm locations, power line running to electrical meter, building utilities and so on. Work with project manager for timing of installing under concrete slabs and walkways. All drip zone valves shall be equip with Hunter adjustable pressure regulators (AS-ADJ), Y-Filters (HY-100), see detail #20 on sheet IR-4.

Contractor and his crew must have experience in site renovating projects, and knowledge of the complexity that follows working in establish landscape and working on narrow planting areas with dense utilities. Contractor must have the ability to plan ahead based on expected hardship of working around newly installed utilities and work with landscape contractor to stake out tree/palm locations prior to commencing work. It is the irrigation contractors sole responsibility to keep close communication with G.C. and other subs during the entire project, concerning work schedule and areas to be worked on.

Contractor shall maintain a current as-build drawing on daily bases for review of owners representatives, General contractor, landscape architect when requested. Contractor must carefully read all notes, specification and details. If he has any question of concern of any items or needs clarification for anything, contractor must submit and RFI prior to submitting his bid. Submitting his bid, he agrees to all information in drawings, details, requirements and specifications are understood and included in his bid proposal. No change orders will be issued for required material, labor needed to complete the irrigation system as per plan intent. All required permits pertaining to the irrigation installation shall be obtained by the irrigation contractor prior to commencing work. Cost for all permits shall be included in his proposal.

The work contemplated by these plans, details and specifications consists of contractor providing a fully automatic and operable irrigation system for all areas to be landscaped with 100% head-to-head coverage as outlined in plans. The plans and specifications have gone to great length to show in the intent of the project and may not include all items that are necessary to complete the system. This scope of work consists of furnishing all components necessary for the installation, testing, programming controller, and delivery of a complete, fully functional automatic landscape irrigation system that completely complies with the irrigation plans, specifications, notes, details and all applicable laws, regulations, codes and ordinances. This work shall include, but not be limited to, including and providing of all required material (pipe, valves, fittings, controllers, wire, primer, glue, etc.), layout, excavation, assembly, installation, back filling, compacting, repair of hardscape - landscape- other subs work damage by contractor, controller, control wires, wire conduit, grounding, daily cleanup, maintenance, guarantee and as-built plans.

Contractor is solely responsible to protect the public / workers for all hazards created by his work according to O.S.H.A. regulations - with the use of but not limited to; barricades - warning tape.

Contractor shall adjust irrigation head placement to maximize coverage and adjust pipe routing to avoid utilities, trees and other obstructions. Use nozzle radius reduction screw (max. 25%) to adjust coverage and ensure pop-up sprays have head to head coverage 100% within the intended planting area. No overspray into preserve area or onto hardscape. If the bed lines are changed from plans, it shall be the contractors responsibility to adjust pop-up heads as needed to ensure head to head coverage to maintain 0.70 DU. Heads shall not be spaced farther apart than radius of throw. Example; if a 15-foot nozzle is reduce to 13-foot radius of throw - then the head shall be space 13-feet away from adjacent head.

The contractor and his / her on site installation crew must have experience and be well versed in all state and local codes and of the manufactures equipment installation procedures for all the products and specified equipment in these plans.

The Irrigation Contractor shall completely familiarize himself with the site conditions and requirements of the irrigation plan prior to submitting his bid for the work in this irrigation project. Should the Contract Documents be at variance with the requirements of the authority having jurisdiction, notify Owner's Representative for instructions before proceeding with work affected.

Contractor must have minimum 3 consecutive years experience in area of project and having installed other jobs of similar size and scope including drip irrigation and its associated equipment. Contractor to provide owner with minimum 3 references and list of similar projects with owners names and telephone numbers.

Contractor shall verify all underground utilities 72 hours prior to commencement of work. A copy of the locating ticket shall be on site at all times. The information and location for the new utilities in this community may not be available to the locating services, contractor must work with owner / owners representative for location of newly installed site utility, and electrical lines.

Irrigation contractor shall coordinate his / her work with other contractors for the location of their under ground utilities and trees/palms for the installation of lateral and mainline pipe routing, sleeves through block walls, under roadways and paving, etc. Irrigation contractor shall repair or replace at no cost to owner all hardscape, utilities and landscape damaged by his/her work.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the Irrigation contractor shall be their responsibility.

POINT OF CONNECTION

1-inch potable water meter and backflow, provided, installed and certified by others. 1-inch water meter shall have minimum 1.25" service line as well as piping running to and from back flow. Design flow and pressure minimums; 19 gpm @ 55 psi.

Prior to commencing work, irrigation contractor must pressure record water meter for (1) week ²⁴ (use digital recorder with 15 minute intervals). If falls below minimum static pressure (55 psi) during normal irrigation hours, contractor must send a copy of recording to owners rep and landscape architect and wait for farther instructions. (Owner to provide room for a single phase circuit to a potential future 1 hp booster pump. Proposed booster pump location by irrigation controller).

CONTROLLER
Proposed location of controller as shown on plans. Controller: Hunter HCC-32 station controller. Verify WIFI connection to controller, work with owner to install WIFI extension to improve WIFI signal if needed. Controller shall be equipped with a power on/off switch, to power down controller for maintenance.

Contractor program controller for current weather conditions, link controller and set-up online. Instruct owner of the controller operations and assist in down loading software onto his/hers phone or tablet.

All controller conduits running to a "Splice Box / valve box" must be sealed with silicon rated for outdoor use. Controller shall be equipped with a Hunter wireless rain sensor, (receiver mount next to controller). Mount transmitter on roof gutter, verify good signal before fastening sensor. Sensor to be located in an area with minimum 6 foot radius, clear of vertical obstructions.

- Zone control wires, 18 gauge stolid strand rated for direct burial:
1. Controller shall have two Hot legs of a different color (red and blue) , each running East and West of controller. Common wire shall remain White. 2 spare wires in each direction, (brown and purple)
 2. All zone control wires shall be incased in a 1.25-inch Sch-40 conduit, using SCH-40 sweep elbows in all directional changes. Down size wire conduit as needed with 1" been minimum.
 3. All splice and valve boxes, contractor shall leave an additional 30-inch of loose cable (measured from top of valve box) , rolled up to the side in valve box.
 4. Portions of mainline with no zone control wires running besides it, contractor shall run a 14 gauge tracer wire along mainline, and tracer wire in closest valve box. Tag both ends of tracer wire with "TW", seal wire ends with "King" grease caps.
 5. 18 gauge multi-strand cable is not permitted.

The use of "Hunter EZ-Decoder System" rather than the convention wiring is an approved alternate. EZ-Decoder system must be install per "Hunters" and these specifications.

ELECTRICAL CONNECTIONS AND CONTROL WIRE
Confirm to the National Electrical Code (NEC) and local electrical codes. A license electrician shall install all 120v/S.P.H. power for controller, power to controller and associated equipment T.B.D. Irigation contractor to coordinate with owner prior to commencing work..

Hunter PGV zone control valves:
Solenoid valves shall be install according to detail #17-18-20 on sheet IR-4. Place valve boxes no closer than 12-inches to walk ways, 18" to curbs and edge of footings to structures. Valve clusters (2 or more) shall be uniformly spaced 3 feet apart (between valve boxes) and parallel to each other. Valve box for wire splices, install as needed, shall be installed according to valve detail.

Valve boxes in shrub bed areas shall be set perpendicular and flush to top of mulch, to test; step on valve box and mulch, you must not feel any movement to valve box and must not feel transition from lid to mulch. Contractor to seal around cut out openings for pipe in valve boxes for soil intrusion.

GATE VALVE: Nibco T113. Installed as per detail #19 on sheet IR-4. If gate valve needs to be set lower than detail shows, contractor shall use a 6-inch drain pipe to extend down to gate valve. Contractor must provide owner with (2) 48-inch valve keys. All valve boxes including splice / pull boxes shall part of as-build drawing.

MAINLINE AND VALVE BOXES IN R.O.W.:
Not permitted.

HUNTER: PROS-06
Pop-up heads shall be installed as per detail #11 on sheet IR-4 and according to plans. Contractor shall make minor head location adjustment to maximize coverage maintaining head to head coverage. All heads shall be set perpendicular and flush with finished grade, soil compacted around head. To test in sod area; when stepping on head, no movement shall occur and head and grass shall feel as one flat surface, and set 6-inch from edge of adjacent walks, curbs, shrub bed edge, or paved areas at time of installation. Do not intentionally install a pop-up head behind an obstacles, blocking coverage because plan puts it there. Contractor shall re-adjust all pop-up heads and bubblers as needed after landscape is completely installed with mulch laid.

It shall be the contractors responsibility to establish the location of all sprinkler heads in order to assure proper coverage of all areas. Full and complete head to head coverage is required.

Contractor shall use nozzle radius reduction to reduce over spray onto hardscape and other structures (max 25% of published radius). If grass coverage changes from irrigation plan, contractor shall adjust head spacing / nozzle in shrub and grass area accordantly. Head spacing shall never be greater than radius of throw (of adjusted throw).

BUBBLERS:
Bubbler may be off-set from there intended location for clarity. Contractor to stake all trees and palms before running mainline and or laterals. If ground slopes, place bubblers on high side of root ball. Maintenance; Adjusted (flow) as tree / palms mature. After tree /palms have established, drought tolerant plant material shall be cut off by capping (treaded PVC caps) bubblers. Leave removed bubblers with owner for future use.

PIPE;

All pipe shall be new and free from defects. Pipe PVC fittings to be manufactured by LASCO or Spears.

Threaded PVC nipples shall be Sch-80 per ASTM D2464

Laterals: SCH-40 IPS solvent weld pipe, ASTM D-2241, D-1784 solvent weld BE, installed with minimum 12" cover, measured from finished grade to top of pipe. All lateral pipe fittings up to 2.5" shall be Sch-40 ASTM D-2466. Above ground pipe and fittings; Sch-40 pipe with Sch-80 fittings. Use IPS 725 solvent weld (ASTM D2564) Blue cement with purple primer for welding SCH-40 & 80 PCV joints/fittings up to 4". When pipe ends are cut, contractor shall remove burrs from cut and cleaned pipe ends as per manufactures installation procedures. Apply solvent weld as per manufactures instructions and guidelines. See detail #21, sheet IR- for placement in trench.

Mainline: SCH-40 IPS solvent weld PVC pipe, ASTM D-2241, D-1785. When pipe ends are cut, contractor shall remove burrs from cut and cleaned pipe end as per manufactures installation procedures. Installed mainline pipe up to 3-inches with minimum 24"cover, measured from finished grade to top of pipe. All mainline fittings shall be Sch-80 ASTM D-2467. Use only IPS 705 PVC Clear Median-body, medium setting cement (ASTM D2564) with purple primer for fittings. Apply solvent weld and primer as per manufactures instructions and guidelines. See detail #21, sheet IR-5 for placement in trench.

SLEEVEING
Sleeve minimal size 1.5-inch. Sleeves up to 4" shall be Sch-40 bell end, ASTM D-2466. Sleeves 6-inch or larger shall be Class 200 SDR 21 pipe, ASTM D-2241 solvent weld BE. Sleeve coverage and solvent weld same as mainline specifications above. Sleeve size to be two pipe sizes larger than carrying pipe, only one pipe per sleeve. See detail #21 on sheet IR-4 for additional requirements. All sleeve ends locations shall be marked on as-build drawing. Irrigation Contractor must coordinate Irrigation plan with landscape and site plan to avoid placing sleeves directly under parking signs - towards Trees and or its root barrier - into utility pipe/equipment. Sleeves are to be installed prior to rock is laid. Irrigation Contractor shall coordinate sleeve placement with General Contractor.

- TRENCHING**
1. Perform all trenching as required for the installation of work included under this section, including shoring of earth banks, if necessary. Restore all surfaces, existing underground installation, etc., damage or cut as a result of excavations, to their original condition.
 2. It shall be the Irrigation Contractor sole responsibility to secure all open trenches for public safety and workers according OSHA regulations, by the use of barricades, warning tape, etc.
 3. Should utilities not shown on the Construction Documents be found during excavations, Contractor shall promptly notify Owners Construction Representative and the Civil Engineer for instructions as to further action. Failure to do so will make Contractor liable for any and all damages thereto arising from his operations subsequent to discovery of such utilities. Indicate such utility crossings on the record drawings promptly.
 4. Mainline shall be installed straight and horizontal, all direction changes shall be accomplished with fittings. No deflection (bending) of pipe is permitted.
 5. Trenches shall be vertical sided construction wide enough to provide free working space around work installed and to provide ample space for backfilling and compaction.
 6. When (2) pipes are placed in the same trench, a six (6") is to be maintained between pipes. The Contractor shall not place two pipes on top of each other.
 7. Trenches located under paving shall be backfilled with sand (a layer of 6-inch below the pipe and 3-inches above the pipe) and compacted in layers 12-inches to 95% compaction. See pipe coverage in details #21 on sheet IR-6.
 8. The Contractor shall cut trenches for pipe to required grade lines and compact trench bottom to prove accurate grade and uniform bearing for the full length of the line.
 9. The Contractor shall be held responsible for any damages caused by these operations and shall immediately repair or replace damaged parts.
 10. Contractor shall be responsible for his reclaimed water main in all (Conflict areas)crossings of utilities are according to Palm Beach County specifications of crossing other utility lines.

CLOSING OF PIPE AND FLUSHING LINES
All testing shall be done under the supervision of the Owners Construction Representative. Submit written requests for inspections to the Owners Construction Representative ay leased (3) days prior to the anticipated inspection date.

1. With filter - master valve and flow sensor installed, flush all water lines (reclaimed water shall not run into the drainage system per EPA) under full head of water in mainline before installing irrigation solenoid valves. Repeat flushing after solenoid valves and lateral lines are installed. Maintain flushing till water is free from debris at farthest end.
2. After flushing, cap or plug all openings to prevent entrance of materials that would obstruct the pipe or clog heads. Leave in place until removal is necessary for completion of installation.

- TESTING**
- A. Making hydrostatic test when welded PVC joints have cured as per manufactures instructions.
 3. Pressurized mains:
 - a. Completely install water meter, mainlines, isolation valves and control valves.
 - b. Open all isolation valves.
 - c. Fill all lines with water till all air is expelled from pipe, shut off water meter.
 - d. Pressurize mainline with water (using hydrostatic pump) to 75 PSI. Monitor pressure gauge for pressure loss for 2 hours.
 - e. Their shall be no pressure loss during test to pass.
 - f. Leaks resulting from test shall be repaired and tests repeated until system passes.
- It is recommended that contractor perform his own test prior to calling for inspection to avoid any re-inspection fees.
- B. Electrical Testing
 - a. Wiring from the controller to each solenoid valve valve shall be tested for continuity at controller and operation prior to backfilling and making final connections.
 - b. Two-wire; test for continuity.
 - c. If resistance for solenoid valves is outside 60-20ohms range, contractor to locate

- short or defective wire.
- Final Inspection and Submittals**
1. As-built drawings ((2) sets), laminated controller charts hung on controller door, Laminated irrigation plan (reduced size) placed in pedestal, must be provided to owners representative on the day of final or final inspection will be terminated and re-scheduled. Fees for re-inspection will be carried by irrigation contractor.
 2. Coverage Walk Through; contractor to provide additional labor to operate controller with means to communicate via radio or phone. Head to head coverage - no overspray outside the coverage intended area - Heads offset bed lines & hardscape as specified - heads set perpendicular and plumb.
 3. Valve box placement set as per details and specifications - control wire splices and wire coils.
 4. Controller; Programmed - flow test for high flow shutdown - random zone, run zone and manually simulate rain shut down at transmitter. Conduits sealed with silicon - controller standing plumb - ground grid has 10 ohms or less (MEGGAR tested by electrician on his letter head).
 5. All punch list items completed.

If any items fail inspection and cannot be repaired, adjusted or modified to details / specifications before inspection is complete, Contractor will carry the cost/fees for reinspection.

Warranty:
Contractor to provide Owner with a written letter of warranty for one year on parts and labor on his letter head, starting from day of final acceptance. His warranty shall also cover repair of any depressions resulting from poor compaction and or non-sealed pipe