

IRRIGATION SCHEDULE				
SYMBOL	MANUFACTURER	MODEL NO.	DESCRIPTION	DETAIL NO.
	RAIN BIRD	RD-12-S-P30 WITH MATCHED PRECIPITATION RATE SERIES NOZZLE	HI-POP SPRAY HEAD	7
	RAIN BIRD	RD-12-S-P30 WITH 6ST. CORNER SERIES NOZZLE	HI-POP SPRAY HEAD	7
	HUNTER	I-20-12 WITH #MPR25 MATCHED PRECIPITATION NOZZLE (RED)	HI-POP GEAR DRIVEN ROTOR	8
	HUNTER	I-20-12 WITH #MPR30 MATCHED PRECIPITATION NOZZLE (GREEN)	HI-POP GEAR DRIVEN ROTOR	8
	HUNTER	I-20-12 WITH #4 NOZZLE (BLUE)	HI-POP GEAR DRIVEN ROTOR	8
	RAIN BIRD	EPB-CP WITH NIBCO BALL VALVE	ELECTRIC CONTROL VALVE	6
	RAIN BIRD	44-LRC	QUICK COUPLING VALVE	2
	WEATHERTRAK	OPTIFLOW XR	ELECTRIC CONTROLLER	5
N/S	OLDCASTLE / CARSON	REFER TO SPECIFICATIONS AND DETAILS	VALVE BOXES	VARIOUS
N/S	AY MACDONALD	76001 - 1/4 TURN - 1"	MANUAL DRAIN VALVE	1
		LINE SIZE - 2 1/2" & SMALLER	GATE VALVE	3
	RAIN BIRD	EPB-CP - 1.5"	MASTER CONTROL VALVE	20
	WEATHERTRAK	FLOW HD - KTFLOWHD-P-150	FLOW SENSOR	4
		CLASS 200 BE - 2 1/2" & SMALLER	PVC MAINLINE	10
		CLASS 160	PVC SLEEVING	19
		CLASS 200 BE	PVC LATERAL	18
		CLASS 200 BE	SUBSURFACE HEADER PIPE - 1" PVC	16 & 18
	RAIN BIRD	EPB-CP-PRS-D - 1"	SUBSURFACE VALVE ASSEMBLY	10
	SPEARS	2121-005	DRIP LINE BLOW-OUT FLUSH VALVE	17
	NETAFIM	TLCV6-12 RINGS SPACED PER DETAIL	SUBSURFACE DRIPLINE RING - TREE	16
	NETAFIM	TLCV6-18 RINGS SPACED 18"	SUBSURFACE DRIPLINE	11, 12,, 13, 14, 15
			14 ANG DIRECT BURY CONTROL WIRES	
			WIRE SPLICE BOX	9
			EXISTING BACKFLOW DEVICE	
			EXISTING CONTROLLER	
			EXISTING CONTROL VALVE	
			EXISTING MAINLINE	
			CONTROLLER & STATION NO. CONTROL VALVE SIZE	
			NUMBER OF SPARE WIRES - 2 CONTROL AND 1 SPARE WIRES TO INDICATED CONTROLLER - SEE CONSTRUCTION NOTES	

IRRIGATION CONSTRUCTION NOTES

- DRAWINGS AND BASE INFORMATION - ALL BASE AND PLANTING INFORMATION HAVE BEEN PROVIDED BY WENK. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY HYDROSYSTEMS*KDI OF ANY DISCREPANCIES BETWEEN THE UTILITY OR PLANTING PLANS AND THE IRRIGATION PLAN. IF CONTRACTOR FAILS TO NOTIFY HYDROSYSTEMS*KDI AND MAKES CHANGES TO THE IRRIGATION SYSTEM DESIGN, THEY ASSUME ALL COSTS AND LIABILITIES ASSOCIATED WITH THOSE FIELD CHANGES. REFER TO SPECIFICATIONS FOR ADDITIONAL PROJECT REQUIREMENTS. CONTACT IRRIGATION CONSULTANT FOR CURRENT SPECIFICATIONS IF NOT PROVIDED.
- SYSTEM PRESSURE - HYDROSYSTEMS*KDI HAS TESTED THE STATIC WATER PRESSURE AND IS FOUND TO BE 40 PSI. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY PRESSURE PRIOR TO COMMENCING ANY CONSTRUCTION AND NOTIFY HYDROSYSTEMS*KDI OF ANY VARIANCE FROM THE STATED PRESSURE IMMEDIATELY. WRITTEN DOCUMENTATION OF PRESSURE TEST AND RESULTS SHALL BE PROVIDED TO HYDROSYSTEMS*KDI AT CONSTRUCTION ONSET. IF CONTRACTOR FAILS TO FIELD VERIFY PRESSURE AND/OR NOTIFY HYDROSYSTEMS*KDI OR ANY VARIATIONS FROM THIS PRESSURE, THEN THEY ASSUME ALL CONSTRUCTION AND ENGINEERING COSTS ASSOCIATED WITH SYSTEM MODIFICATIONS REQUIRED TO ACCOMMODATE ACTUAL SITE PRESSURE. THIS SYSTEM HAS BEEN DESIGNED FOR A REQUIRED STATIC PRESSURE OF 40 PSI MINIMUM.
- IRRIGATION SYSTEM OPERATION INTENT - THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO IRRIGATE THE ESTABLISHED LANDSCAPE WITHIN A SIX NIGHT PER WEEK, SIX HOUR PER NIGHT WATERING WINDOW. ESTABLISHMENT WATERING WILL REQUIRE UP TO TWICE AS MUCH IRRIGATION FOR A FOUR TO SIX WEEK PERIOD. THE DESIGN IS BASED ON THE FOLLOWING PROJECTED WEEKLY APPLICATION RATES AFTER ESTABLISHMENT. THESE FIGURES ARE BASED ON A 30-YEAR AVERAGE WEATHER DATA AND WILL NEED TO BE ADJUSTED DUE TO SEASONAL CHANGES AND WEATHER CONDITIONS ABOVE AND BELOW THE AVERAGE VALUES UTILIZED.

BLUEGRASS TURF	2.48" PER WEEK PEAK SEASON
ORNAMENTAL PLANTINGS	1.24" PER WEEK PEAK SEASON
NATIVE SEED MIXES	1.13" PER WEEK PEAK SEASON (TWO SEASONS)

NOTE: IT IS THE INTENT OF THIS DESIGN THAT NATIVE AREAS WOULD ONLY BE IRRIGATED FOR ESTABLISHMENT. SYSTEM WILL REMAIN FOR USE DURING YEARS WITH LESS THAN NORMAL RAINFALL.
- EQUIPMENT INSTALLATION - IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED WITHIN PROPERTY LIMITS AND WITHIN LANDSCAPED AREAS. INSTALLATION SHALL BE COORDINATED WITH OTHER UTILITY WORK. ALL OTHER UTILITIES SHALL TAKE PRECEDENCE OVER IRRIGATION LOCATION. ANY EQUIPMENT OTHER THAN VALVE BOXES OR SLEEVING THAT CONTAINS PIPE OR WIRES SHOWN OUTSIDE OF THESE LIMITS IS SHOWN IN THAT LOCATION FOR GRAPHICAL CLARITY ONLY. ALL VALVE BOXES SHALL BE INSTALLED A MINIMUM OF 2'-0" FROM EDGE OF ANY PAVED SURFACES UNLESS SPECIFICALLY INDICATED ON PLANS. BOXES INSTALLED IN OPEN TURF AREAS SHALL BE KEPT TO EDGES AND STAKED FOR REVIEW IF ALONG HIGH TRAFFIC AREAS. ALL VALVE BOXES SHALL BE PLACED A MINIMUM OF 3'-0" FROM THE CENTERLINE OF ANY DRAINAGE SWALE. ALL VALVE BOXES WITHIN PAVEMENT SHALL BE TIER 15 RATED BOXES FOR HEAVY DUTY NON-DELIBERATE TRAFFIC. BOX LID COLOR SHALL MATCH ADJACENT MATERIALS. IE. GREEN IN TURF, TAN IN MUD MOUND, GRAY IN STONE MOUND, PURPLE FOR RECLAIMED WATER SYSTEMS (IF REQUIRED). REFER TO LANDSCAPE PLANS FOR MATERIAL COLORS AND TYPES. ALL BOXES SHALL BE INSTALLED TO BE FLUSH WITH GRADE AND IN AN ORDERLY MANNER. WHERE MORTAR PAVING LIDS ARE INSTALLED ABOVE BOXES, IRRIGATION BOX WITH LID SHALL BE LOWERED TO ACCOMMODATE PAVING LID. REFER TO LANDSCAPE FOR ADDITIONAL INFORMATION. TO BE INSTALLED PER MANUFACTURE RECOMMENDATIONS.
- PIPING INSTALLATION - IRRIGATION PIPING SHALL MAINTAIN A MINIMUM DISTANCE FROM BUILDING FOUNDATIONS OF 5 FEET OR AS DESCRIBED IN SOILS REPORT, WHICHEVER IS GREATER. NO SPRAY IRRIGATION SHALL OCCUR WITHIN 10 FEET OF THE FOUNDATION. NO DRIP IRRIGATION SHALL OCCUR WITHIN 5 FEET OF THE FOUNDATION UNLESS SOIL MOISTURE SENSORS ARE INSTALLED ON VALVES SERVICING THESE AREAS. ALL IRRIGATION PIPING AND EMISSION DEVICES LOCATED ON TOP OF OR WITHIN BUILDING STRUCTURE SHALL CONFORM TO WATERPROOFING CONSULTANT REQUIREMENTS. PIPE ROUTING MAY BE SHOWN WITHIN THESE DISTANCES FOR GRAPHICAL CLARITY ONLY.
- MANUAL DRAIN VALVES - CONTRACTOR TO INSTALL ONE MANUAL DRAIN VALVE ON PRESSURE SUPPLY LINE DIRECTLY DOWNSTREAM OF BACKFLOW PREVENTER AND AT ALL LOW POINTS AND DEAD ENDS OF PRESSURE SUPPLY PIPING TO ENSURE COMPLETE DRAINAGE OF SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THESE LOCATIONS IN-FIELD AND INSTALLATION LOCATIONS SHALL BE NOTED ON AS-BUILTS.
- POP-UP SPRAY NOZZLES - CONTRACTOR TO INSTALL PLASTIC NOZZLES ON ALL POP-UP SPRAY HEADS. INSTALL 18 SERIES NOZZLES ON ALL HEADS SPACED AT 12" TO 14". INSTALL 12 SERIES NOZZLES ON ALL HEADS SPACED 10" TO 11". INSTALL 10 SERIES NOZZLES ON ALL HEADS SPACED AT 8" TO 9". INSTALL 8 SERIES NOZZLES ON ALL HEADS SPACED AT 6" TO 7". INSTALL SIDE STRIP NOZZLES ON ALL HEADS WITH AN "S" DESIGNATION AND RIGHT AND LEFT CORNER STRIP NOZZLES ON ALL HEADS WITH AN "L" OR "R" DESIGNATION. INSTALL LOW FLOW "SQ" SERIES NOZZLES WITH SQUARE SHORT RADIUS PATTERN WHERE INDICATED AT SPACING SHOWN. VARIABLE ARC NOZZLES SHOULD BE UTILIZED ADJACENT TO CURVILINEAR SHRUB BEDS OR FOR ANY ANGLES THAT ARE NOT A STANDARD NOZZLE ANGLE.
- UNLABELED PIPING - ALL UNLABELED LATERAL PIPING SHALL BE 1" MINIMUM UNLESS OTHERWISE NOTED.
- SLEEVING - ALL SLEEVING UNDER PAVED SURFACES SHOWN ON PLANS IS BY CONTRACTOR UNLESS OTHERWISE NOTED. SLEEVING SHALL BE INSTALLED IN THE SIZES AND QUANTITIES SHOWN ON PLANS OR BASED ON THE SCHEDULE BELOW. WHERE SLEEVES ARE SHOWN, BUT NOT LABELED, FOLLOW THE SCHEDULE BELOW. ALL MAINLINE, CONTROL WIRES AND DRIP LINES UNDER PAVED SURFACES ARE TO BE INSTALLED IN SLEEVING. ALL MAINLINE SLEEVE LOCATIONS TO INCLUDE A SEPARATE WIRE SLEEVE.

SLEEVED PIPE SIZE/WIRE QUANTITY	REQUIRED SLEEVE SIZE & QUANTITY
3/4" - 1 1/2" PIPING	2" PVC (1)
1 1/2" - 2" PIPING	4" PVC (1)
1-25 CONTROL WIRES	2" PVC (1)
26-50 CONTROL WIRES	3" PVC (1)
COMMUNICATION CABLE	2" PVC (1)
- SPARE CONTROL WIRES - CONTRACTOR SHALL EXTEND FOUR SPARE WIRES (2 COMMON AND 2 CONTROL WIRES) FROM EACH CONTROLLER TO THE END OF THE MAINLINE SERVING THAT CONTROLLER OR AS SHOWN ON THE PLANS. INSTALL SPARE WIRES IN 10' ROUND VALVE BOX WITH QUICK COUPLING VALVE. REFER TO SPECIFICATIONS FOR WIRE COLOR. SEE IRRIGATION SCHEDULE FOR ADDITIONAL INFORMATION.
- ADJUSTMENT - CONTRACTOR SHALL FINE TUNE/ADJUST THE IRRIGATION SYSTEM TO REDUCE/AVOID OVERSPRAY ONTO HARD SURFACES BY ADJUSTING NOZZLE DIRECTION AND NOZZLE RADIUS.
- PLANS AND SPECIFICATIONS - CONTRACTOR RESPONSIBLE TO ENSURE WORK CONFORMS TO PLANS AND SPECIFICATIONS. AT ONSET OF CONSTRUCTION, VERIFY PLANS ARE CURRENT. DO NOT CONSTRUCT ANY PORTIONS OF THE IRRIGATION OFF OF PLANS MARKED NOT FOR CONSTRUCTION OR FOR REVIEW ONLY. FAILURE TO VERIFY CURRENT PLANS MAY RESULT IN RECONSTRUCTION AT CONTRACTOR'S EXPENSE. WHERE REQUIRED BY CITY, TOWN OR WATER DISTRICT ENTITY, CONTRACTOR SHALL CONSTRUCT ONLY OFF PLANS STAMPED WITH APPROVAL. REVISIONS TO APPROVED OR STAMPED PLANS SHALL CONFORM TO FIELD CHANGE PROCEDURES AND DOCUMENTATION.
- EXISTING IRRIGATION DAMAGE - CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING IRRIGATION SYSTEMS DAMAGED DURING NEW INSTALLATION. REPAIR OR REPLACEMENT SHALL BE DETERMINED BY OWNER OR OWNER'S REPRESENTATIVE AND PAID FOR BY THE LANDSCAPE CONTRACTOR.
- EXISTING IRRIGATION COORDINATION - EXISTING IRRIGATION SYSTEM SHALL NOT BE TURNED OFF FOR MORE THAN 24 HOURS MAXIMUM. CONTRACTOR SHALL COORDINATE TURN OFF OF SYSTEM WITH OWNER OR MAINTENANCE STAFF 12 HOURS PRIOR TO ANY NEW CONSTRUCTION.
- EXISTING TREE IRRIGATION - CONTRACTOR SHALL PROVIDE IRRIGATION DURING CONSTRUCTION TO EXISTING TREES AS REQUIRED BY TOWN OF PARK FORESTRY STANDARDS.
- SIMULTANEOUS ZONE OPERATION - THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE MULTIPLE ZONES SIMULTANEOUSLY BASED ON INDIVIDUAL ZONE FLOW. THE DESIGN IS INTENDED TO OPERATE MULTIPLE VALVES UP TO THE MAXIMUM FLOW IN THE POINT OF CONNECTION NOTE. REFER TO CONTROLLER SPECIFICATION FOR MAXIMUM SIMULTANEOUS VALVE COUNT.
- BACKFLOW DEVICES - ALL CONNECTION COMPONENTS AND BACKFLOW DEVICES SHALL BE LEAD-FREE. CONTRACTOR SHALL CONTACT WATER SERVICE PROVIDER FOR ANY ADDITIONAL REQUIREMENTS REGARDING BACKFLOW TESTING.
- CITY DETAILS - HYDROSYSTEMS*KDI WILL BE RESPONSIBLE FOR THE IRRIGATION DESIGN ITSELF. ALL DETAILS ARE STANDARD DETAILS DESIGNED AND SPECIFIED BY THE APPLICABLE GOVERNING AUTHORITY. CITY OF PARKER. HYDROSYSTEMS*KDI DID NOT DESIGN AND SPECIFY THIS DETAIL. HYDROSYSTEMS*KDI IS NOT RESPONSIBLE, AND ACCEPTS NO RESPONSIBILITY, FOR THE SELECTION AND SPECIFICATION OF THIS DETAIL, AND HYDROSYSTEMS*KDI MAKES NO REPRESENTATIONS WITH REGARD TO THIS DETAIL.
- WATER BUDGETS AND PROJECTIONS - HYDROSYSTEMS*KDI HAS BASED THE IRRIGATION DESIGN AND THE ASSOCIATED PROJECTED WATER USE UPON SUCH FACTORS AS CITY OR WATER DISTRICT IMPOSED REQUIREMENTS, PUBLISHED PLANT SPECIES WATER NEEDS, SELECTED IRRIGATION METHOD EFFICIENCIES AS REPORTED BY INDEPENDENT TESTING FACILITIES, HISTORICAL WEATHER DATA FOR THE PROJECT LOCATION, AND PROPER MAINTENANCE PROCEDURES. HYDROSYSTEMS*KDI IS NOT RESPONSIBLE, AND ACCEPTS NO RESPONSIBILITY, FOR THE ACTUAL WATER USAGE VARIATION THAT IS A RESULT OF FIELD MODIFICATIONS TO THE SYSTEM NOT MATCHING CONSTRUCTION DOCUMENTS, IMPROPER MAINTENANCE, WASTE DUE TO SYSTEM DAMAGE OR VANDALISM, OR WEATHER CONDITIONS THAT DEVIATE FROM PUBLISHED 30-YEAR HISTORICAL AVERAGES.
- PRESSURE TESTING - CONDUCT MAINLINE TEST IN PRESENCE OF CONSULTANT. ARRANGE FOR PRESENCE OF CONSULTANT 48 HOURS IN ADVANCE OF TESTING. SUPPLY FORCE PUMP AND ALL OTHER TEST EQUIPMENT. COMPRESSED AIR SHALL NOT BE USED FOR PRESSURE TESTING SYSTEM.
 - AFTER BACKFILLING, AND INSTALLATION OF ALL CONTROL VALVES, FILL PRESSURE SUPPLY LINE WITH WATER, AND PRESSURIZE TO 40 PSI OVER THE DESIGNATED STATIC PRESSURE OR 120 PSI, WHICHEVER IS GREATER, FOR A PERIOD OF 2 HOURS.
 - LEAKAGE, PRESSURE LOSS - TEST IS ACCEPTABLE IF NO LOSS OF PRESSURE IS EVIDENT DURING THE TEST PERIOD.
 - LEAKS - DETECT AND REPAIR LEAKS.
 - RETEST SYSTEM UNTIL TEST PRESSURE CAN BE MAINTAINED FOR DURATION OF TEST.
 - BEFORE FINAL ACCEPTANCE, PRESSURE SUPPLY LINE SHALL REMAIN UNDER PRESSURE FOR A PERIOD OF 48 HOURS.
 - PRESSURE TEST SHALL BE SCHEDULED AND PASSED PRIOR TO SCHEDULING OF SUBSTANTIAL COMPLETION WALK-THROUGH.
- CITY DETAILS - HYDROSYSTEMS*KDI WILL BE RESPONSIBLE FOR THE IRRIGATION DESIGN ITSELF. DETAILS #1, #2, #5-#18 ARE STANDARD DETAILS DESIGNED AND SPECIFIED BY THE APPLICABLE GOVERNING AUTHORITY, TOWN OF PARKER. HYDROSYSTEMS*KDI DID NOT DESIGN AND SPECIFY THIS DETAIL. HYDROSYSTEMS*KDI IS NOT RESPONSIBLE, AND ACCEPTS NO RESPONSIBILITY, FOR THE SELECTION AND SPECIFICATION OF THIS DETAIL, AND HYDROSYSTEMS*KDI MAKES NO REPRESENTATIONS WITH REGARD TO THIS DETAIL.

AndersonMasonDale Architects

Parker Town Hall Expansion
Parker, CO
22-093

Town of Parker
20120 Mainstreet
Parker, CO 80138

Architect
AndersonMasonDale Architects, P.C.
3186 Spier Boulevard
Denver, CO 80211
Telephone: 303-294-9448

Civil Engineer
S.A. Miro, Inc.
4582 S. Uteer Street #750
Denver, CO 80237
Telephone: 303-741-3737

Landscape Architect
Wenk Associates
1130 31st Street #101
Denver, CO 80202
Telephone: 303-628-0000

Structural Engineer
K&A, Inc.
1717 Washington Ave.
Golden, CO 80401
Telephone: 303-384-9910

Mechanical + Plumbing Engineer
The Ballard Group, Inc.
2925 S. Washworth Blvd. #200
Lakewood, CO 80227
Telephone: 303-988-4514

Electrical Engineer + Technology
AE Design
1900 Wazee Street #205
Denver, CO 80202
Telephone: 303-296-3034



ASSOCIATES

Issue	Date
SCHEMATIC DESIGN	01 MAY 2023
DESIGN DEVELOPMENT	21 OCT 2023
GMP/PERMIT DRAWINGS	17 MAY 2024

NOT FOR CONSTRUCTION

Project Number:	22-093
Drawn By:	EWP
Reviewed By:	JB/KD
Approved By:	JB/KD

IRRIGATION NOTES AND SCHEDULE

IR-000

DIRECTORY

IRRIGATION SCHEDULE	IR-000
IRRIGATION NOTES	IR-000
IRRIGATION PLANS	IR-101
IRRIGATION DETAILS	IR-201 - IR-202



Know what's below.
Call before you dig.
CALL A BUSINESS WITH AN ADVISOR BEFORE YOU DIG. GRADE. OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITY LINES.



KDI
HydroSystems
Irrigation Consulting & Water Management
13949 W. Colfax Ave., Suite 260
Lakewood, Colorado 80401
www.hydrosystems*kdi.com



ASSOCIATES

Issue	Date
SCHEMATIC DESIGN	01 MAY 2023
DESIGN DEVELOPMENT	21 OCT 2023
GMP/PERMIT DRAWINGS	17 MAY 2024

NOT FOR CONSTRUCTION	
Project Number:	22-093
Drawn By:	EWP
Reviewed By:	JBKD
Approved By:	JBKD

IRRIGATION PLAN

A CONTROLLER LOCATION "A"

PEDESTAL MOUNT ONE CONTROLLER (REFER TO SCHEDULE 4 STATION COUNT), REMOVE READY AT INDICATED LOCATION. 120 VOLT POWER IS AVAILABLE WITHIN 10 LF. OF CONTROLLER LOCATION. EXISTING CONTROL WIRES MAY REQUIRE EXTENSION AND RECONNECTION TO THE NEW CONTROLLER LOCATION. EACH EXISTING CONTROL WIRE SHALL BE TONED AND CONFIRMED FOR USE BY EXISTING ZONES. INSTALL NEW CONTROL WIRES AND SPARES AS NECESSARY TO NEW CONTROL VALVES. COORDINATE TOTAL CONTROLLER CAPACITY WITH TOWN OF PARKER PERSONNEL. LOCATE SHIELDED CABLE FROM NEW FLOW SENSOR AND CONNECT TO DATA RETRIEVAL UNIT LOCATED IN ASSOCIATED CONTROLLER. LOCATE MASTER VALVE WIRES WITH SPARES AND CONNECT 2 OF THE WIRES FROM THE MASTER VALVE TO THE DATA RETRIEVAL BOARD IN ASSOCIATED CONTROLLER. FINAL CONTROLLER LOCATION SHALL BE APPROVED BY OWNER OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. MOUNT ONE WEATHER SENSOR ON BUILDING WHERE THERE IS 20 FT. OF CLEARANCE FROM ANY OVERHANG OR OBSTRUCTING FEATURE.

1 EXISTING POINT OF CONNECTION #1 - 1.5"

PEAK FLOW REQUIREMENT: 38 GPM, REQUIRED STATIC PRESSURE: 90 PSI
CONTRACTOR SHALL FIELD LOCATE EXISTING 1.5" BACKFLOW PREVENTER AT THIS APPROXIMATE LOCATION. CUT EXISTING MAINLINE DOWNSTREAM OF BACKFLOW AND ISOLATION GATE VALVE AND REMOVE EXISTING MASTER VALVE, FLOW SENSOR AND OTHER EXISTING EQUIPMENT AND TURN THEM OVER TO OWNER. MAKE NEW 2.5" CLASS 200 PVC MAINLINE CONNECTION TO EXISTING 1.5" BACKFLOW PREVENTER WITH THREADED SCHEDULE 40 PVC ADAPTER AND ROUTE NEW 2.5" MAINLINE AND MAKE CONNECTION TO EXISTING MAINLINE AS SHOWN. INSTALL ONE NEW 1.5" FLOW SENSOR, GATE VALVE, QUICK COUPLER VALVE, AND 1.5" MASTER VALVE AS SHOWN. THE CONTROLLER PLATFORM FOR THIS PROJECT HAS NOT BEEN DETERMINED. EXTEND ONE PE84 SHIELDED CABLE FROM FLOW SENSOR TO DATA RETRIEVAL UNIT LOCATED IN ASSOCIATED CONTROLLER. EXTEND 4 UTILITY WIRES (TWO ORANGE AND TWO BLUE) AND CONNECT 2 OF THE WIRES FROM THE MASTER VALVE TO THE DATA RETRIEVAL BOARD IN ASSOCIATED CONTROLLER. SEE DETAIL SHEET FOR REQUIRED PIPE LENGTHS UPSTREAM AND DOWNSTREAM OF FLOW SENSING UNIT. WORK SHALL CONFORM TO LOCAL CODE, FEES, PERMITS AND INSPECTIONS ASSOCIATED WITH WORK ARE TO BE OBTAINED AND PAID FOR BY CONTRACTOR.

2 FIELD LOCATE EXISTING 2.5" MAINLINE AT THIS APPROXIMATION, CUT AND CAP BOTH SIDES OF THE MAINLINE EXTENDING SOUTH TO THE EXISTING IRRIGATION TAP.

3 CUT AND CAP EXISTING 2" IRRIGATION WATER SUPPLY, IN MECHANICAL ROOM, DOWNSTREAM OF EXISTING 2" IRRIGATION BACKFLOW PREVENTER.

4 ABANDON EXISTING 2.5" MAINLINE AND CONTROL WIRES IN THIS AREA, REMOVE EXISTING CONTROL VALVES AND TURN THEM OVER TO TOWN OF PARKER.

5 FIELD LOCATE EXISTING 2" MAINLINE TERMINATIONS AT THIS APPROXIMATE LOCATION. RECONNECT MAINLINES USING MECHANICAL JOINTS PER CITY SPECIFICATIONS, RECONNECT (4) EXISTING CONTROL WIRES, ROUTE (2) NEW COMMON AND (2) NEW SPARE WIRES TO THIS LOCATION, MAKE ALL WIRE SPLICES IN SPLICE BOX. PROTECT EXISTING GATE VALVES DURING CONSTRUCTION.

6 FIELD LOCATE EXISTING MAINLINE AT THIS APPROXIMATE LOCATION. CUT MAINLINE AND MAKE NEW 2" CLASS 200 PVC MAINLINE CONNECTION TO EXISTING WITH A SCHEDULE 40 TEE FITTING, ROUTE (6) NEW CONTROL WIRES, (2) NEW COMMON WIRES, AND (2) NEW SPARE WIRES TO THIS LOCATION AND EXTEND TO NEW VALVES, MAKE ALL WIRE SPLICES IN SPLICE BOX.

7 INSTALL NEW SPRINKLER ZONES IN THIS AREA TO BLEND INTO EXISTING NATIVE SPRINKLER COVERAGE, CONTACT DESIGNER FOR DIRECTION IF NECESSARY.

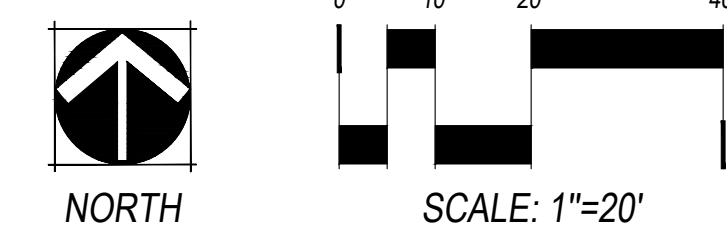
8 ADJUST EXISTING SPRINKLERS IN THIS AREA TO MATCH NEW HARDSCAPE AND PLANTING ALIGNMENT, REPAIR EXISTING IRRIGATION EQUIPMENT DAMAGED BY NEW CONSTRUCTION AND WIRE TRENCHING.

9 REMOVE EXISTING CONTROLLER AT THIS APPROXIMATE LOCATION AND TURN IT OVER TO CITY OF PARKER PERSONNEL, CUT AND TERMINATE ALL CONTROL WIRES IN SPLICE BOX.

10 FIELD LOCATE EXISTING 2" CLASS 200 PVC MAINLINE AND INSTALL NEW CONTROL VALVE AS SHOWN, RUN NEW CONTROL WIRE TO SERVE NEW VALVE AND INSTALL SPARES, PULLING SPARES INTO NEW VALVE BOX.

11 TRENCH NEW CONTROL WIRES NEXT TO EXISTING MAINLINE ROUTING, OFFSET BY 2", REPLACE AND REPAIR EXISTING IRRIGATION EQUIPMENT DAMAGED BY NEW CONSTRUCTION AND WIRE TRENCHING.

IRRIGATION EQUIPMENT IS SHOWN OUTSIDE LANDSCAPED AREA FOR GRAPHICAL CLARITY ONLY. INSTALL ALL IRRIGATION EQUIPMENT WITHIN LANDSCAPED AREAS. LANDSCAPE AND UTILITY WORK SHALL TAKE PRECEDENCE. COORDINATE WITH OTHER TRADES FOR LOCATION OF IRRIGATION TRENCHING AND COMPONENT INSTALLATION.



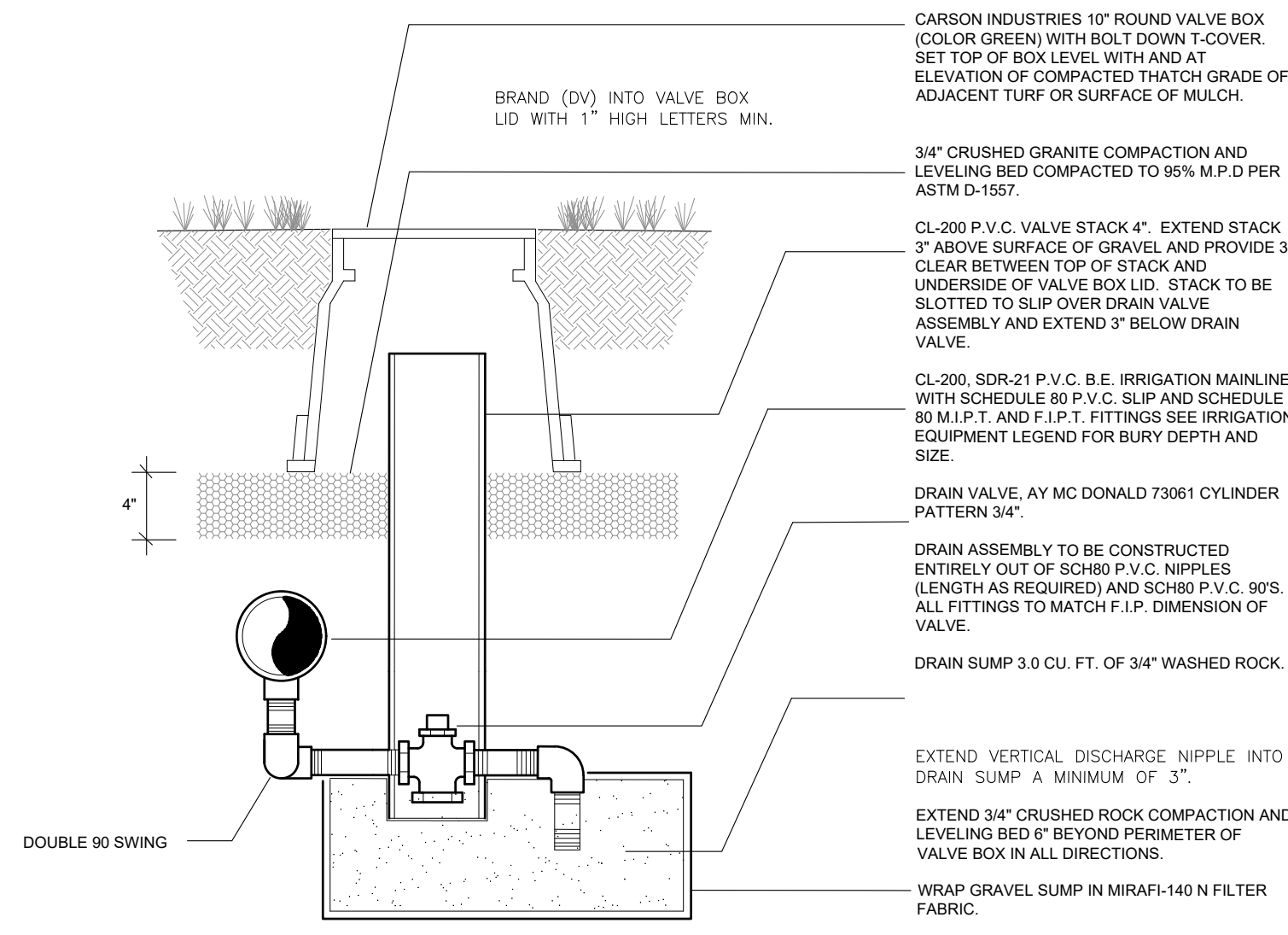
Know what's below.
Call before you dig.
CALL A BUSINESS OR AGENCY BEFORE YOU DIG. GRAVE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



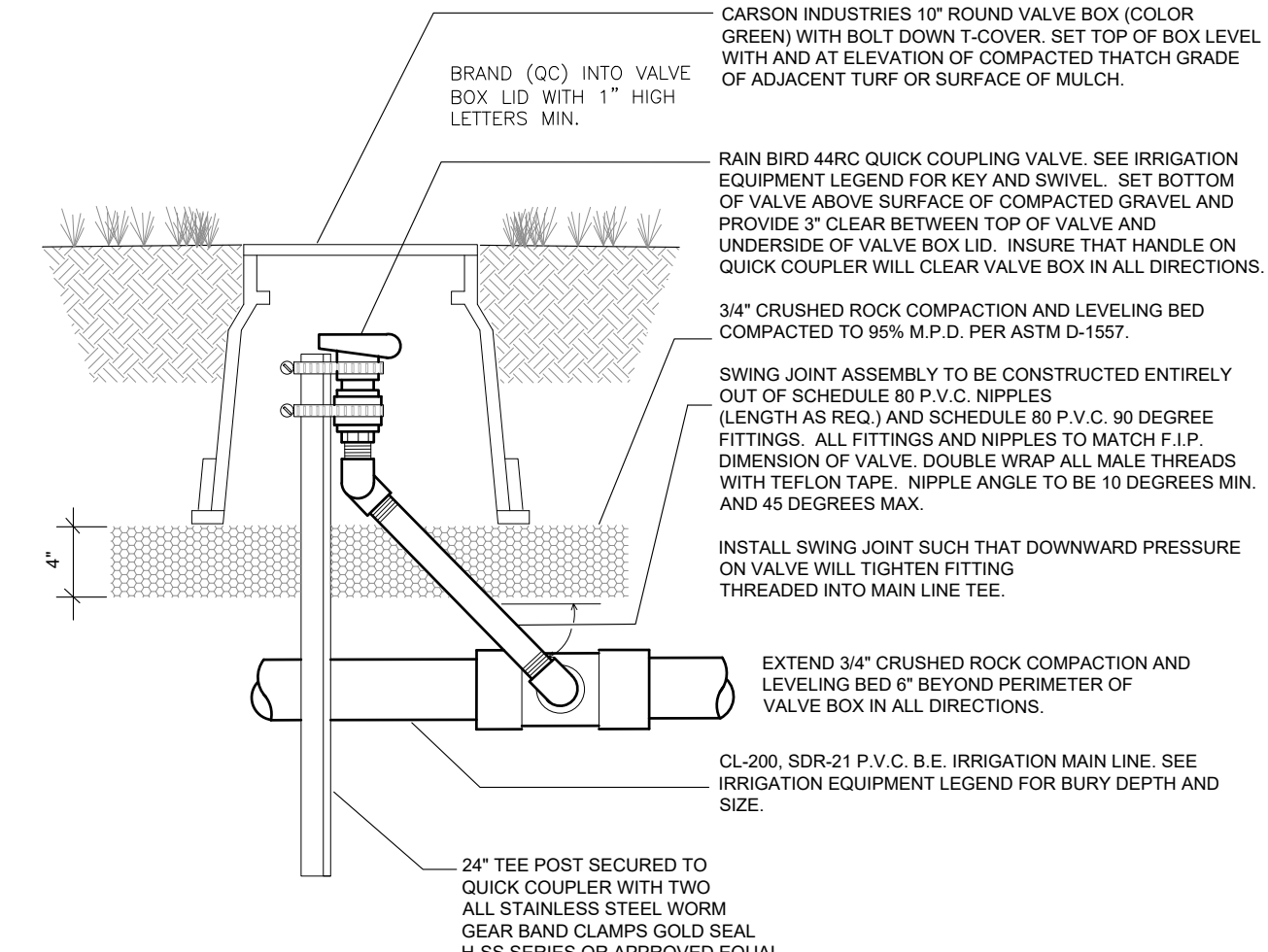
HydroSystems
Irrigation Consulting & Water Management
13949 W. Colfax Ave., Suite 280 Lakewood, Colorado 80401
o: 303.980.5327 www.hydrosystemsmdi.com

DIRECTORY

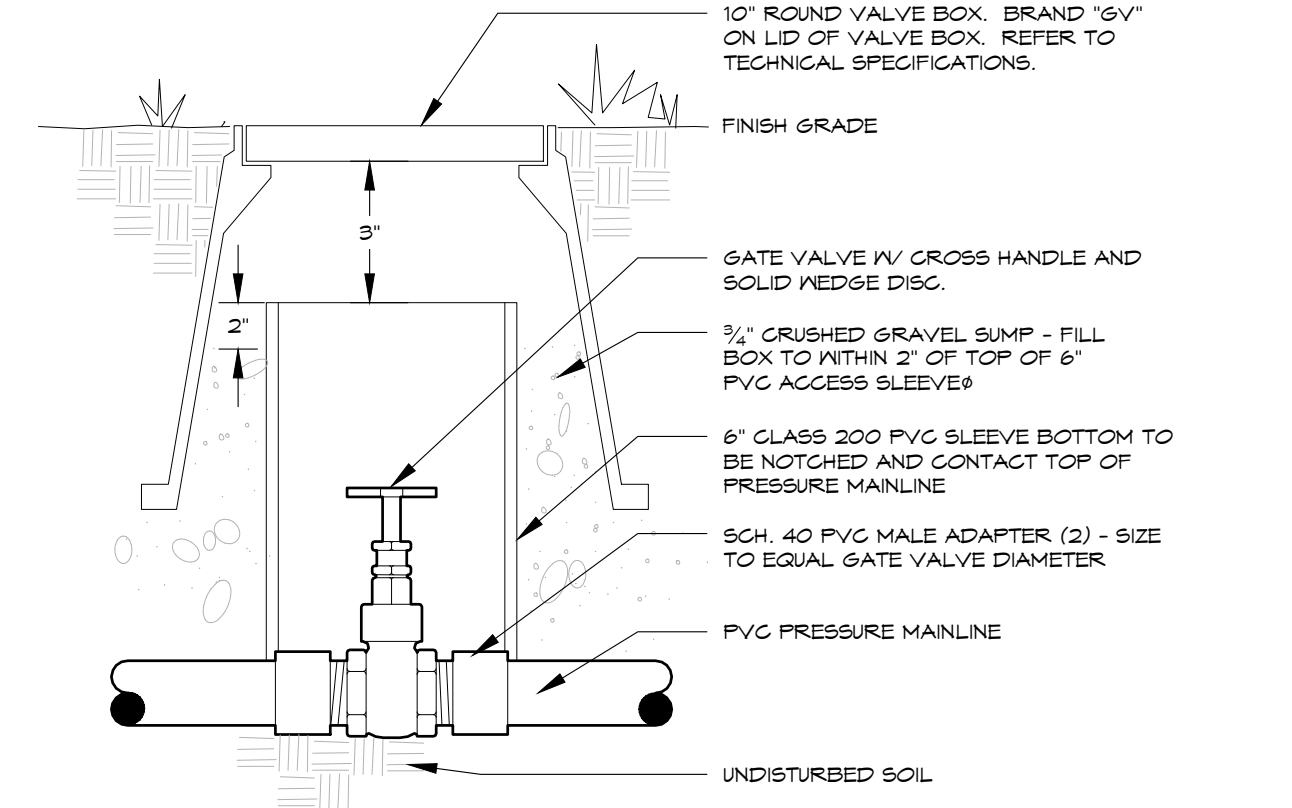
IRRIGATION SCHEDULE	IR-000
IRRIGATION NOTES	IR-000
IRRIGATION PLANS	IR-101
IRRIGATION DETAILS	IR-201 - IR-202



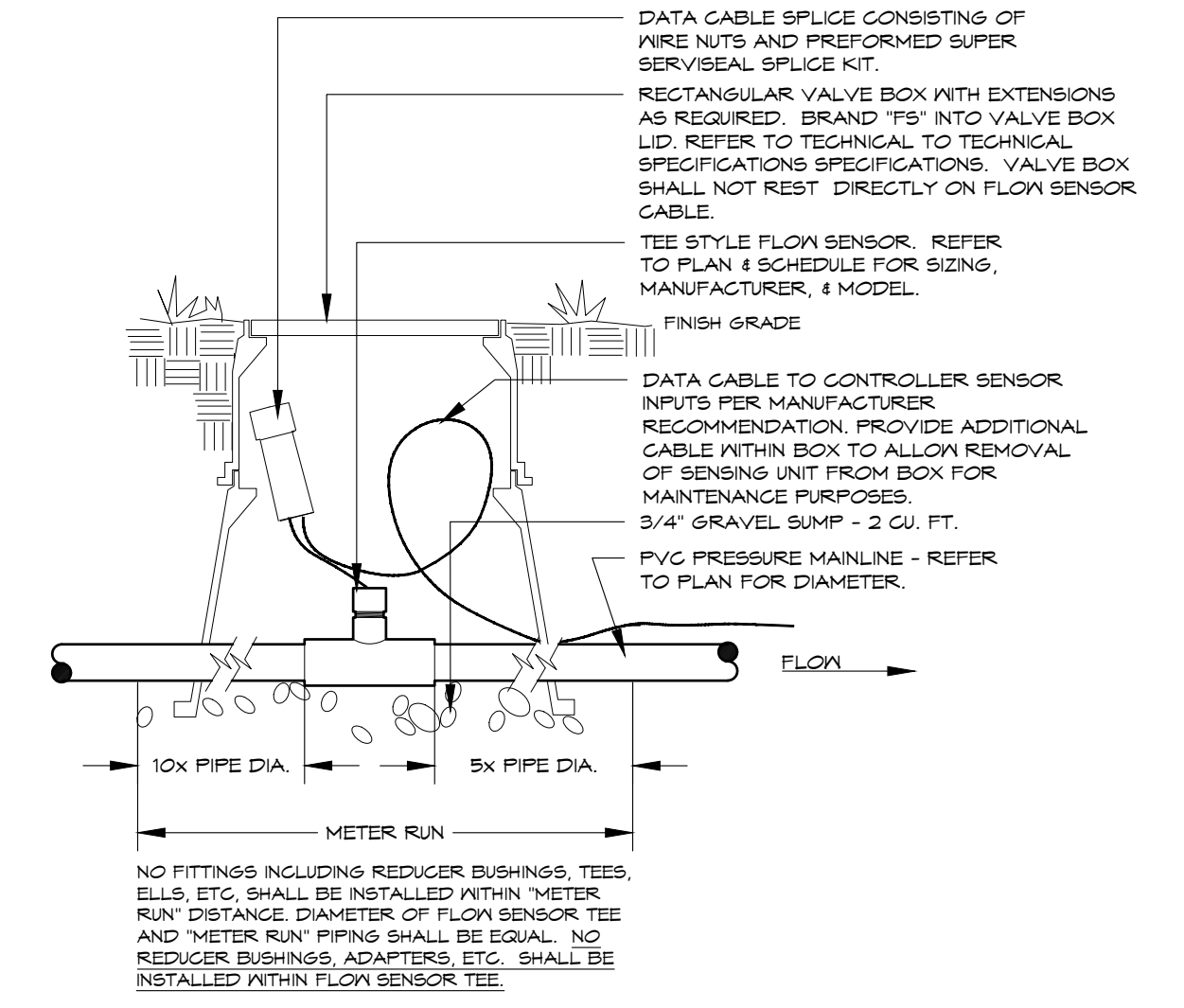
1 MANUAL DRAIN VALVE
NO SCALE



2 QUICK COUPLER VALVE
NO SCALE

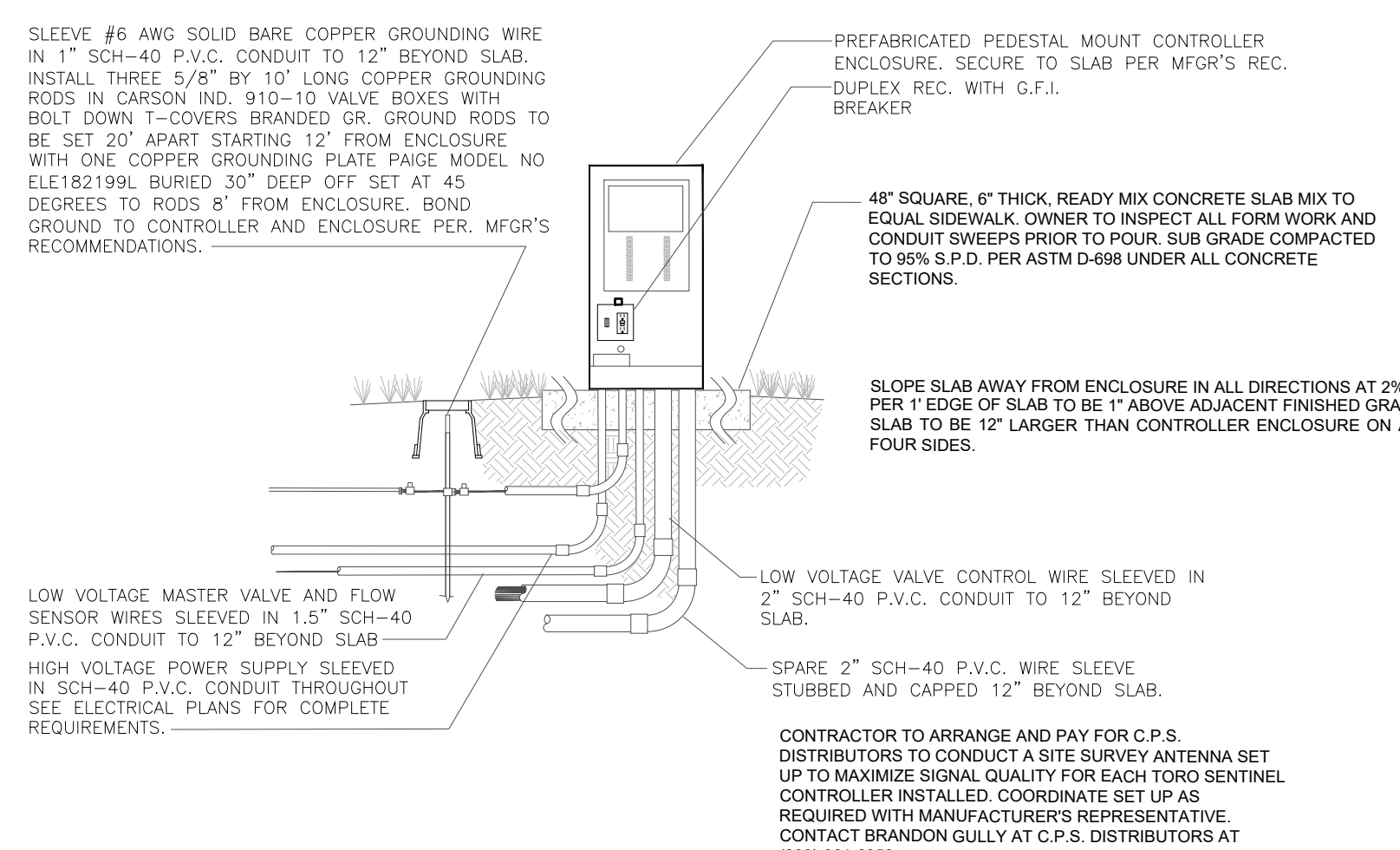


3 GATE VALVE
2.5" & SMALLER - X-HANDLE

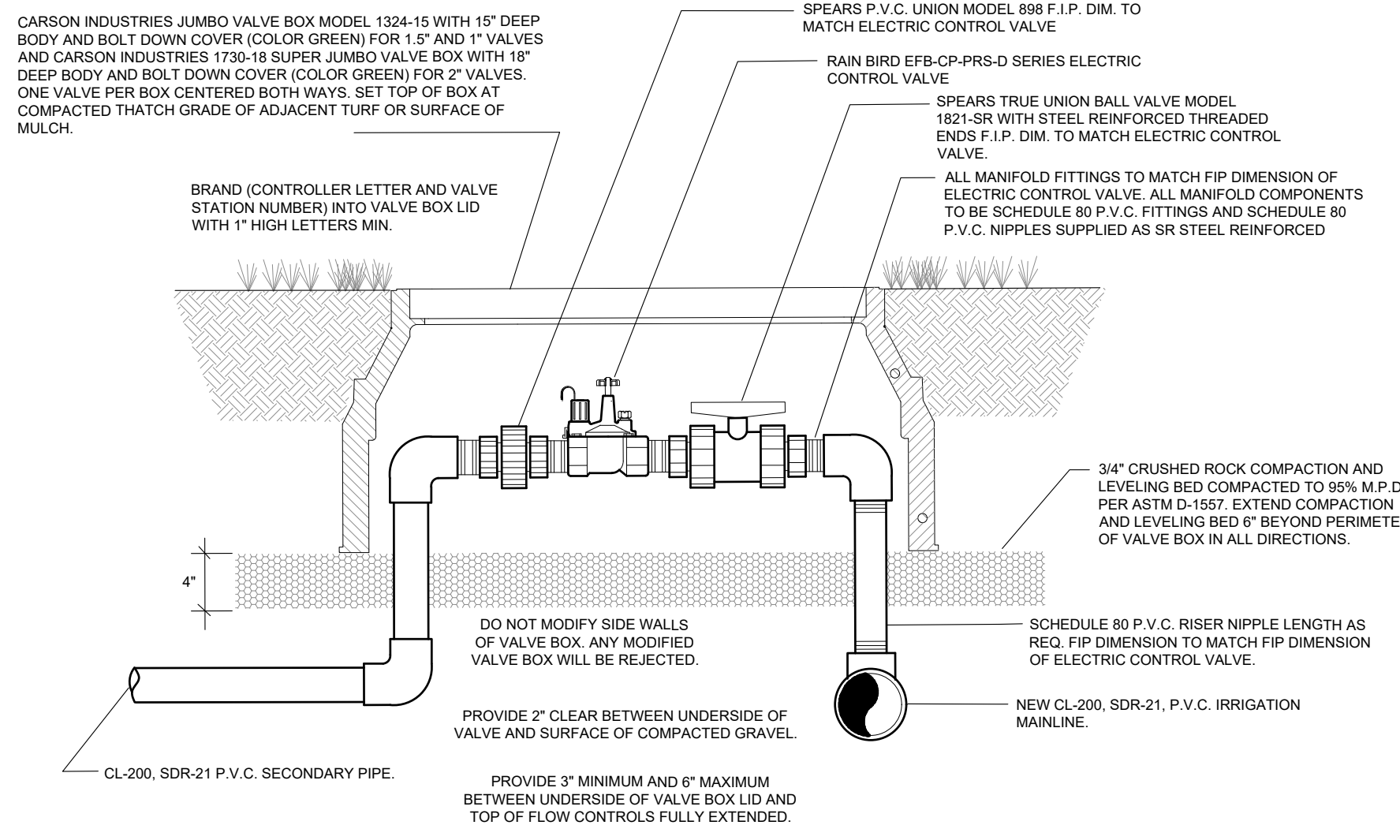


4 FLOW SENSOR
VIA DATA CABLE - TEE STYLE

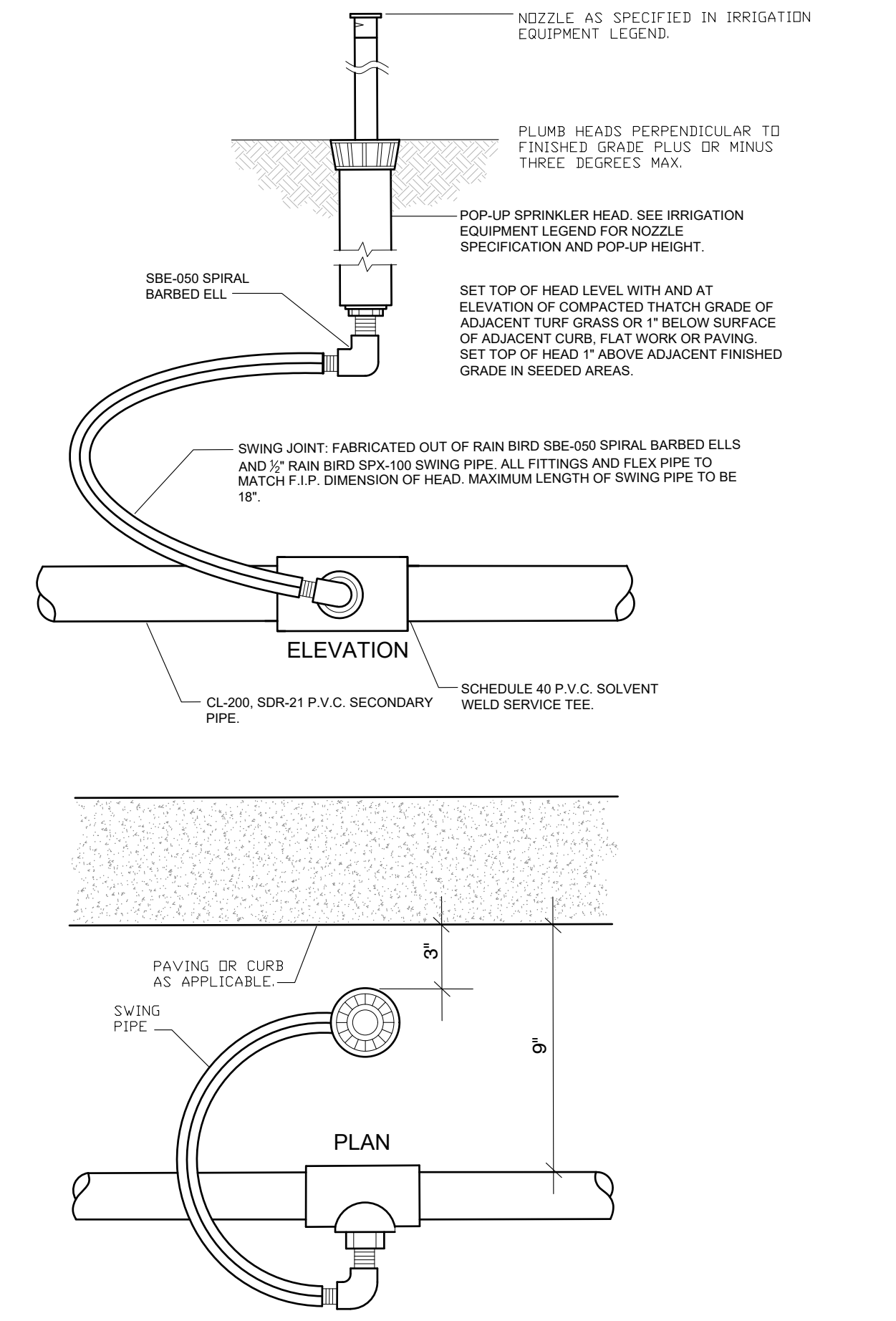
Controller Specification Summary:
SEE ELECTRICAL ENGINEERING DRAWINGS FOR NEW AND RELOCATED CONTROLLER ELECTRICAL SERVICE.
CONTROLLER (C1) - CONTRACTOR TO SUPPLY AND INSTALL ONE NEW TORO SENTINEL SERIES CONTROLLER MODEL NO. (SEE DRAWINGS)



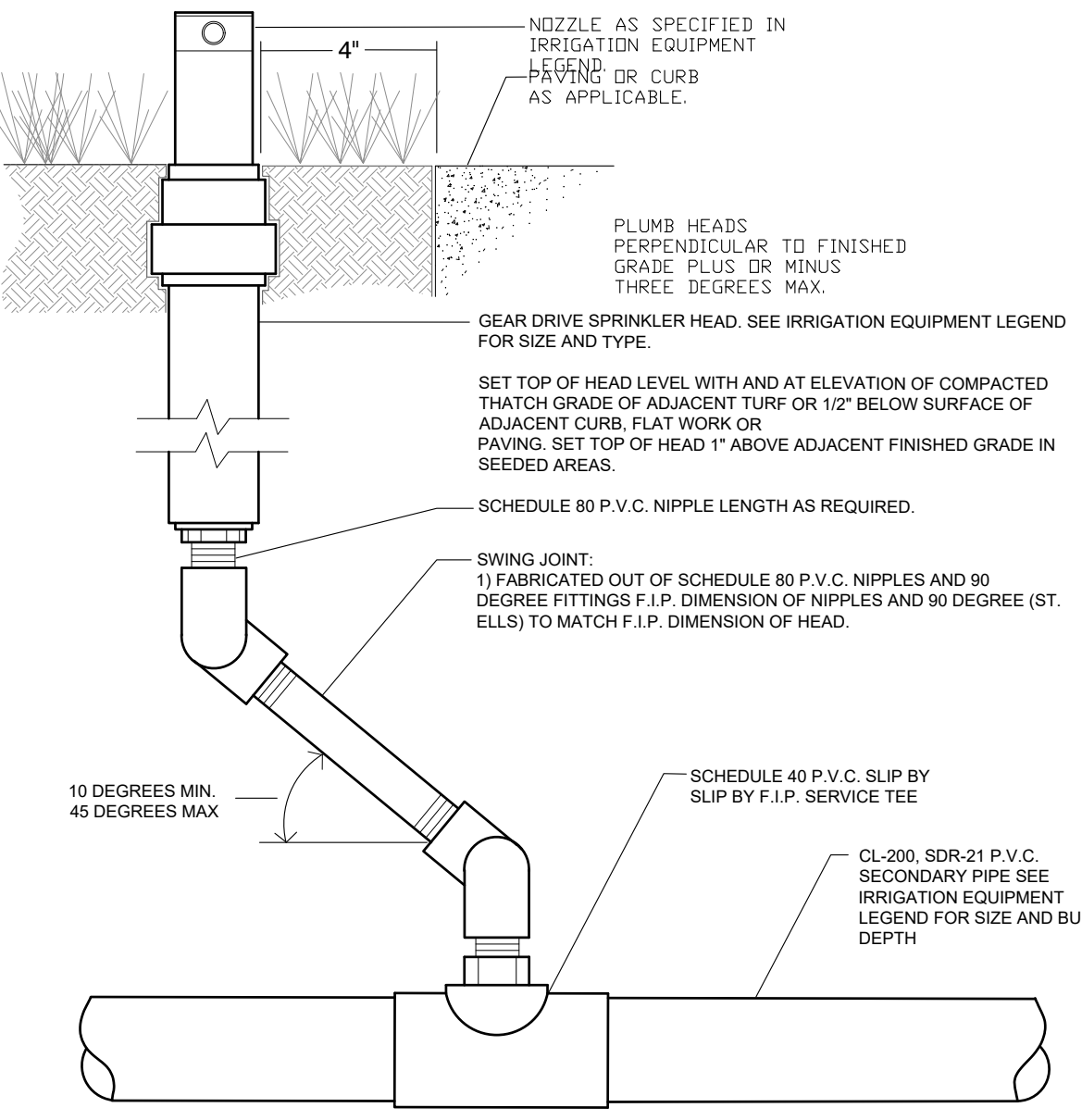
5 CONTROLLER AND ENCLOSURE ELEVATION
NO SCALE



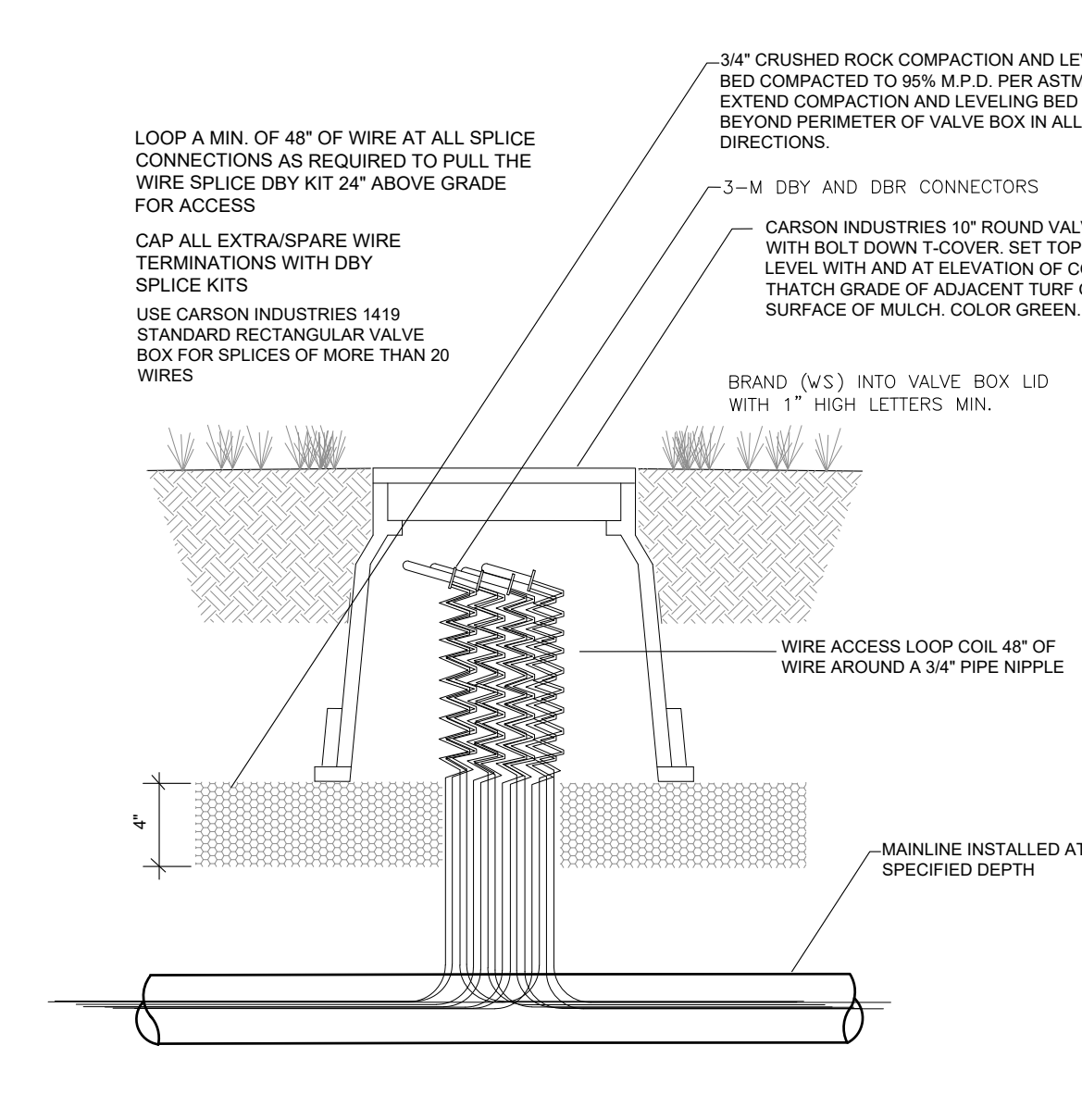
6 ELECTRIC CONTROL VALVE FOR SPRAY ZONES
NO SCALE



7 POP-UP SPRINKLER HEAD
NO SCALE



8 GEAR DRIVE SPRINKLER HEAD
NO SCALE



9 WIRE SPlice ACCESS LOOP
NO SCALE

DIRECTORY
IRRIGATION SCHEDULE IR-000
IRRIGATION NOTES IR-000
IRRIGATION PLANS IR-101
IRRIGATION DETAILS IR-201 - IR-202

Issue	Date
SCHEMATIC DESIGN	01 MAY 2023
DESIGN DEVELOPMENT	21 OCT 2023
GMP/PERMIT DRAWINGS	17 MAY 2024

NOT FOR CONSTRUCTION

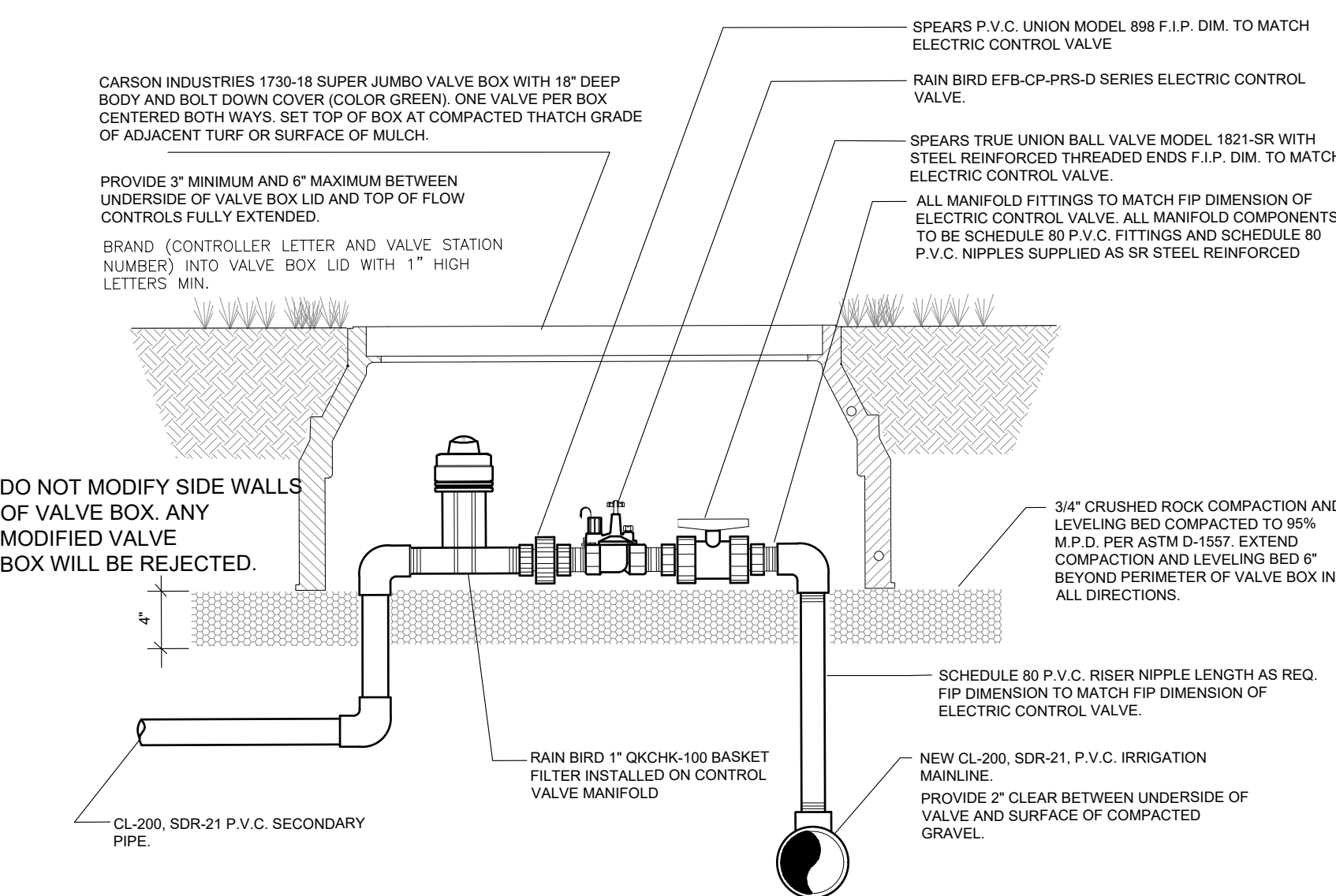
Project Number:	22-093
Drawn By:	EP
Reviewed By:	JB/KD
Approved By:	JB/KD



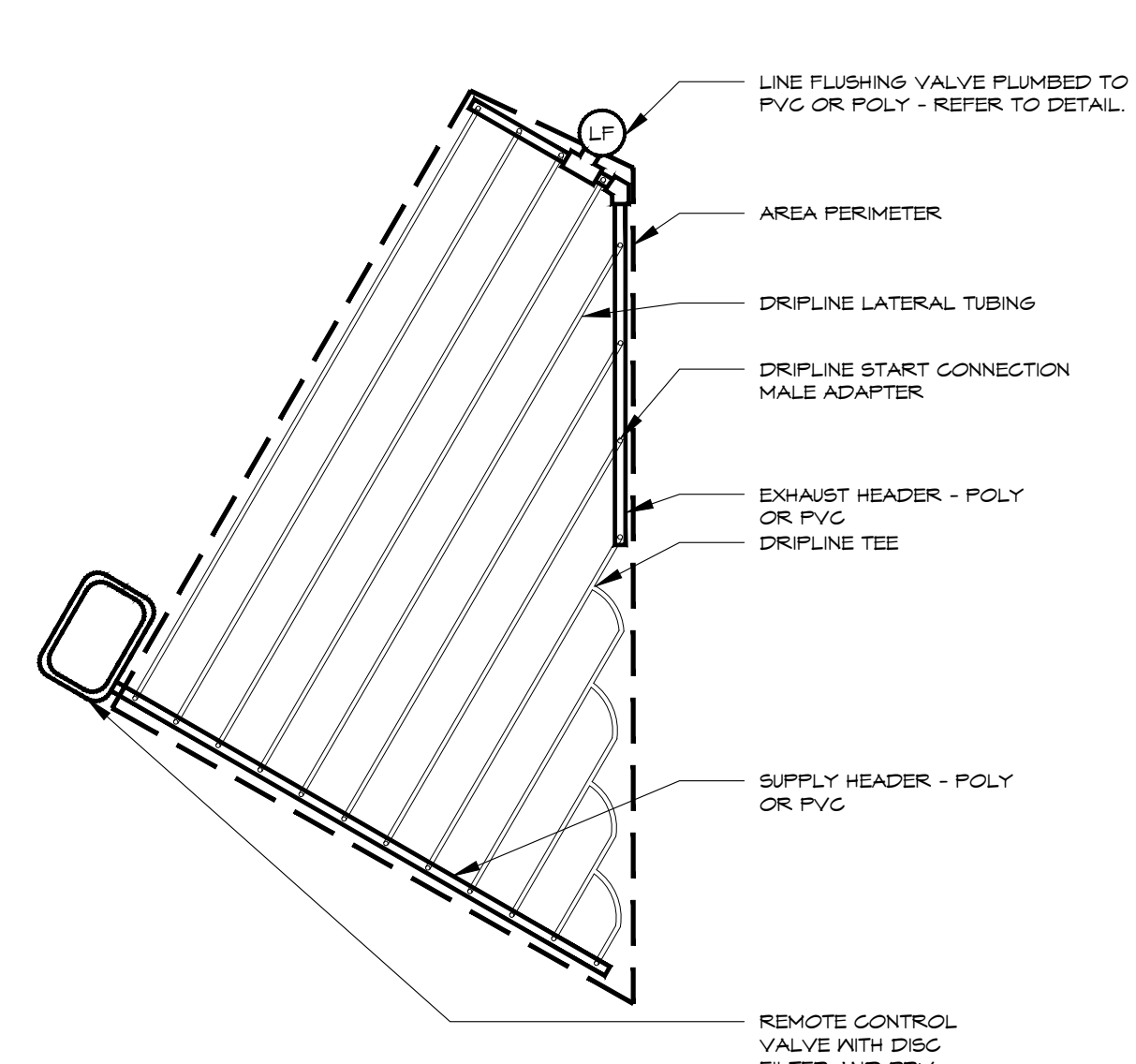
Know what's below.
Call before you dig.
CALL A BUSINESS DAY IN ADVANCE BEFORE YOU DIG. GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



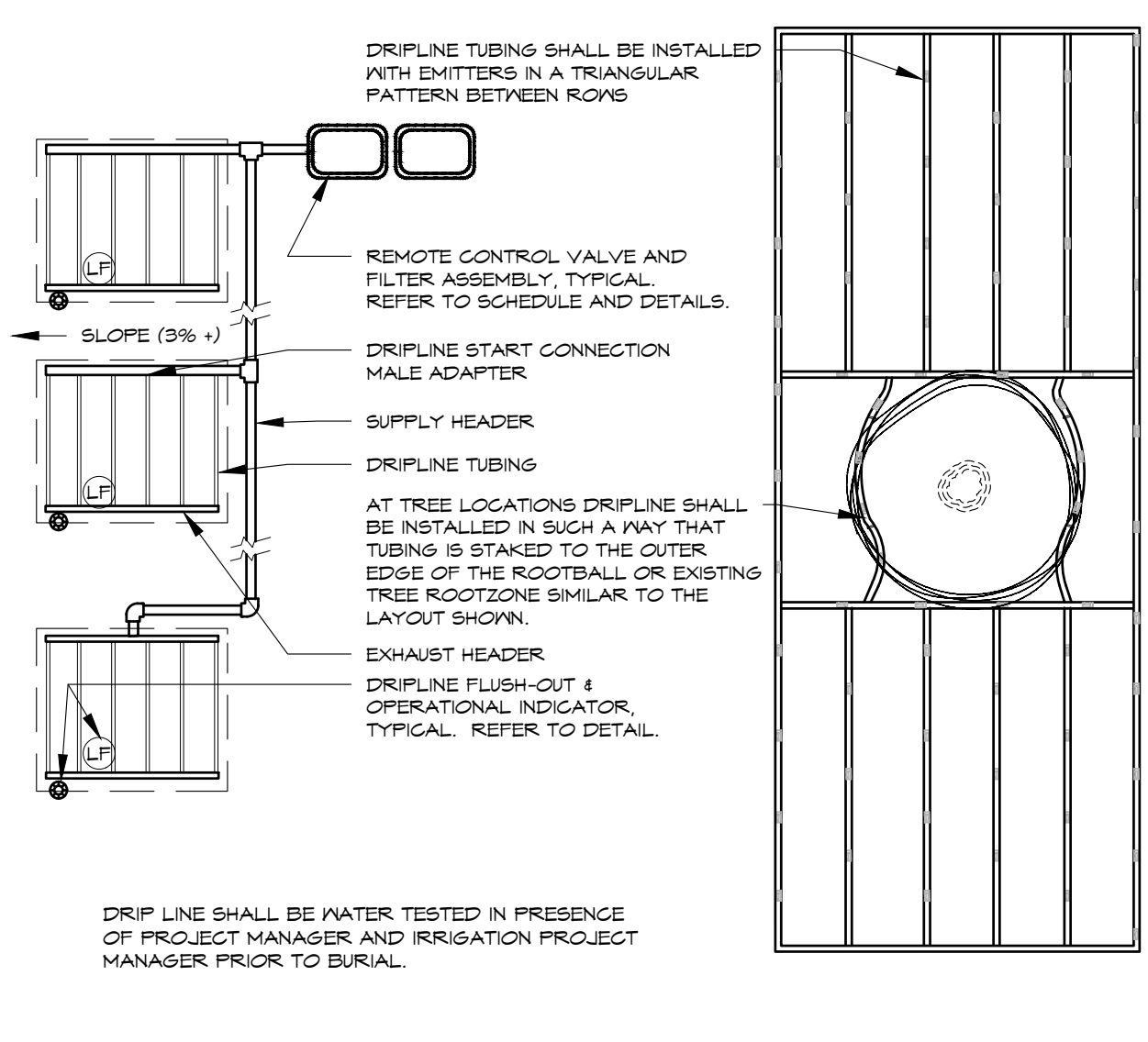
Irrigation Consulting & Water Management
13949 W. Colfax Ave., Suite 200
Lakewood, Colorado 80401
o. 303.980.5327 www.hydrosystemskd.com



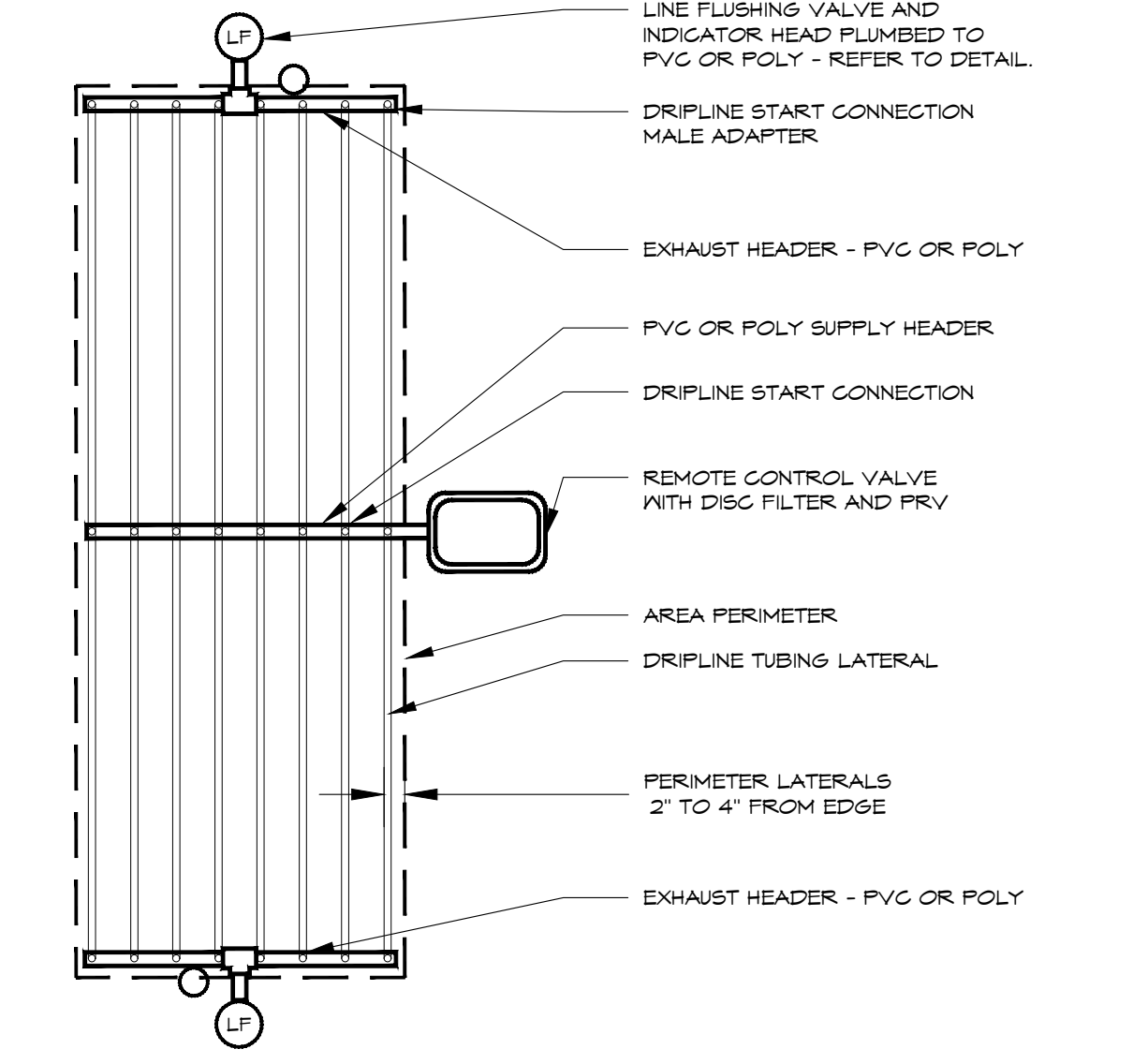
10 ELECTRIC CONTROL VALVE FOR DRIFTER LINE ZONES
NO SCALE



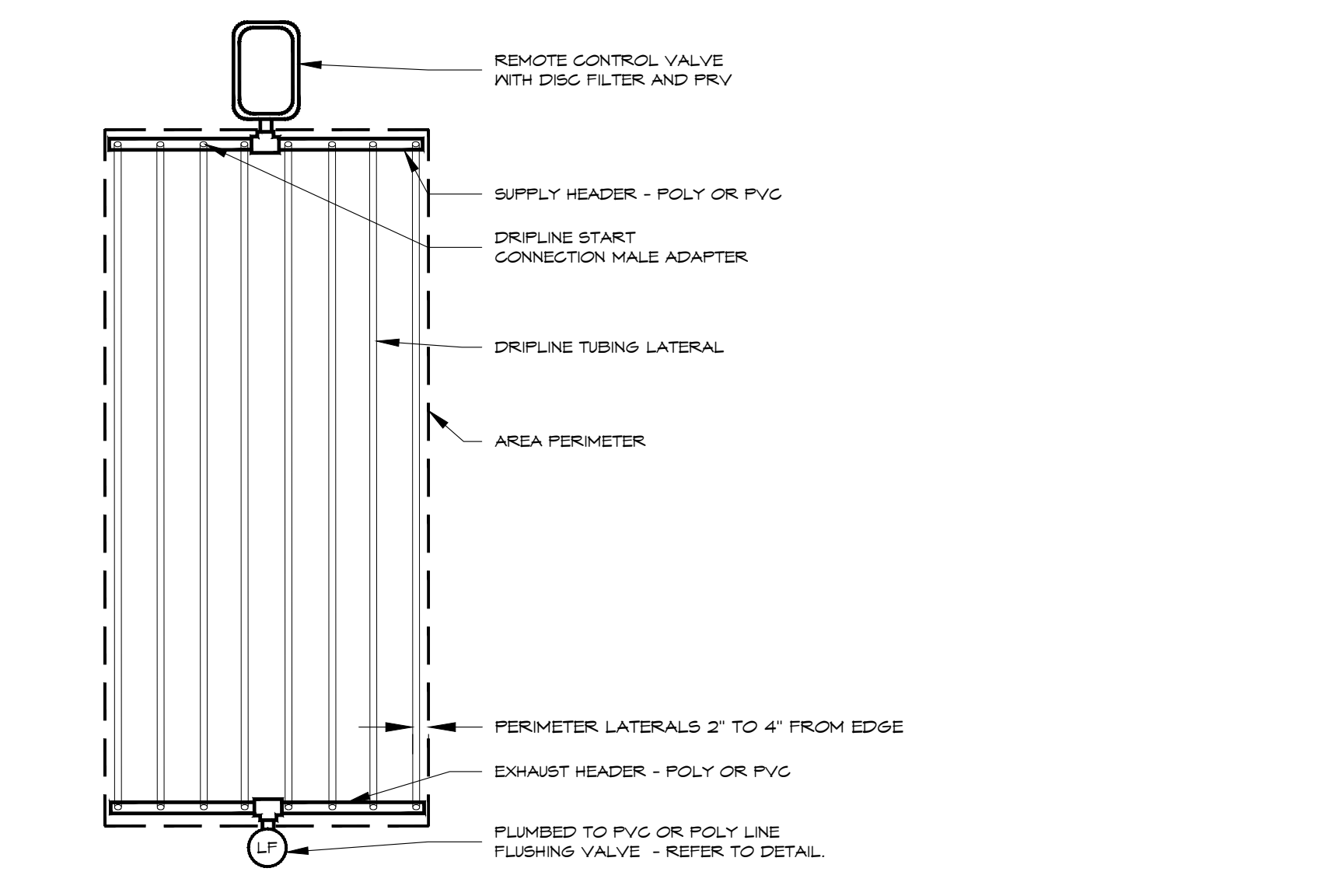
11 SUBSURFACE DRIFT - TOP VIEW
IRREGULAR AREAS
NO SCALE



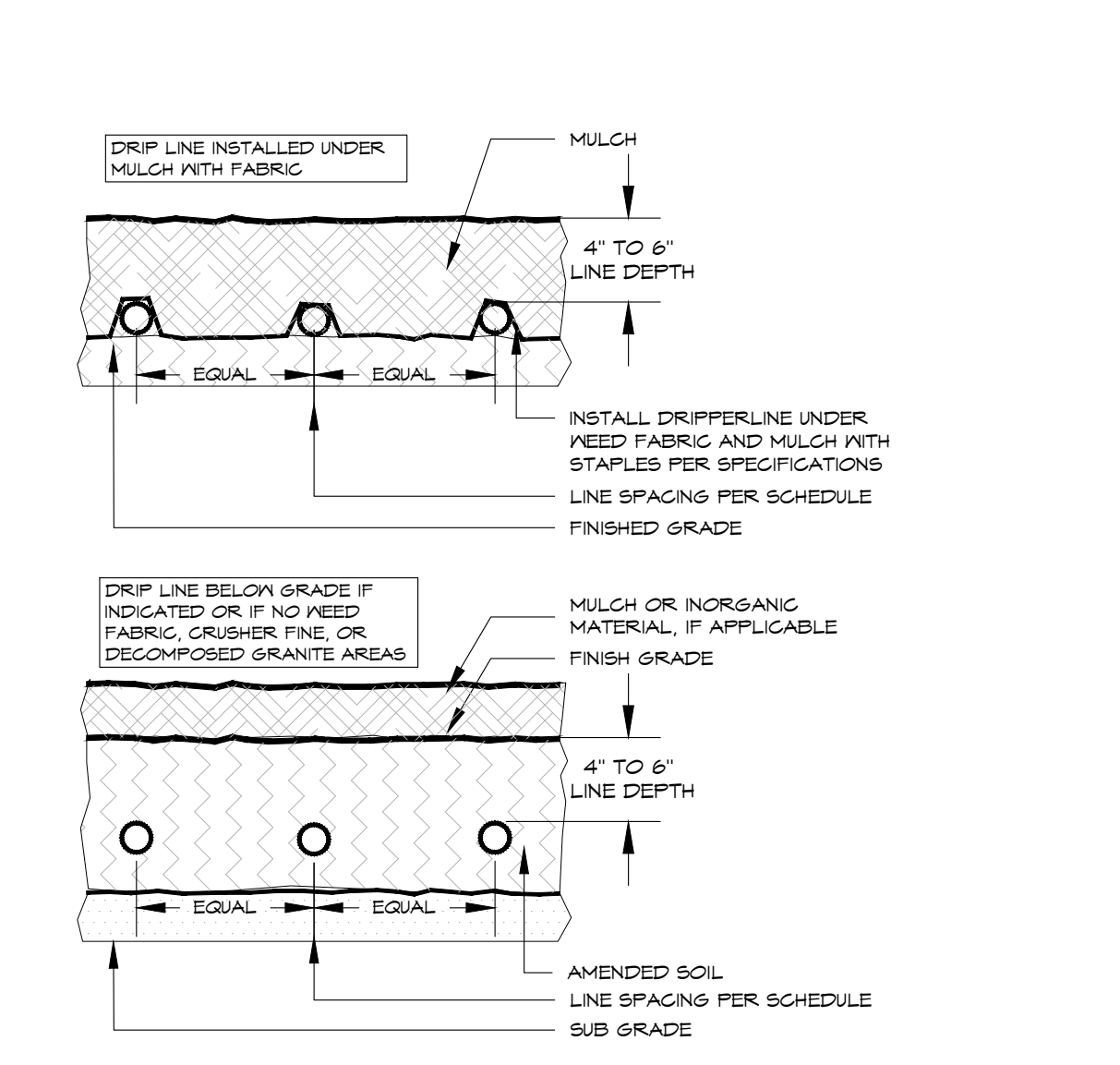
12 EMITTER TUBING LAYOUT
AREAS AROUND TREES
NO SCALE



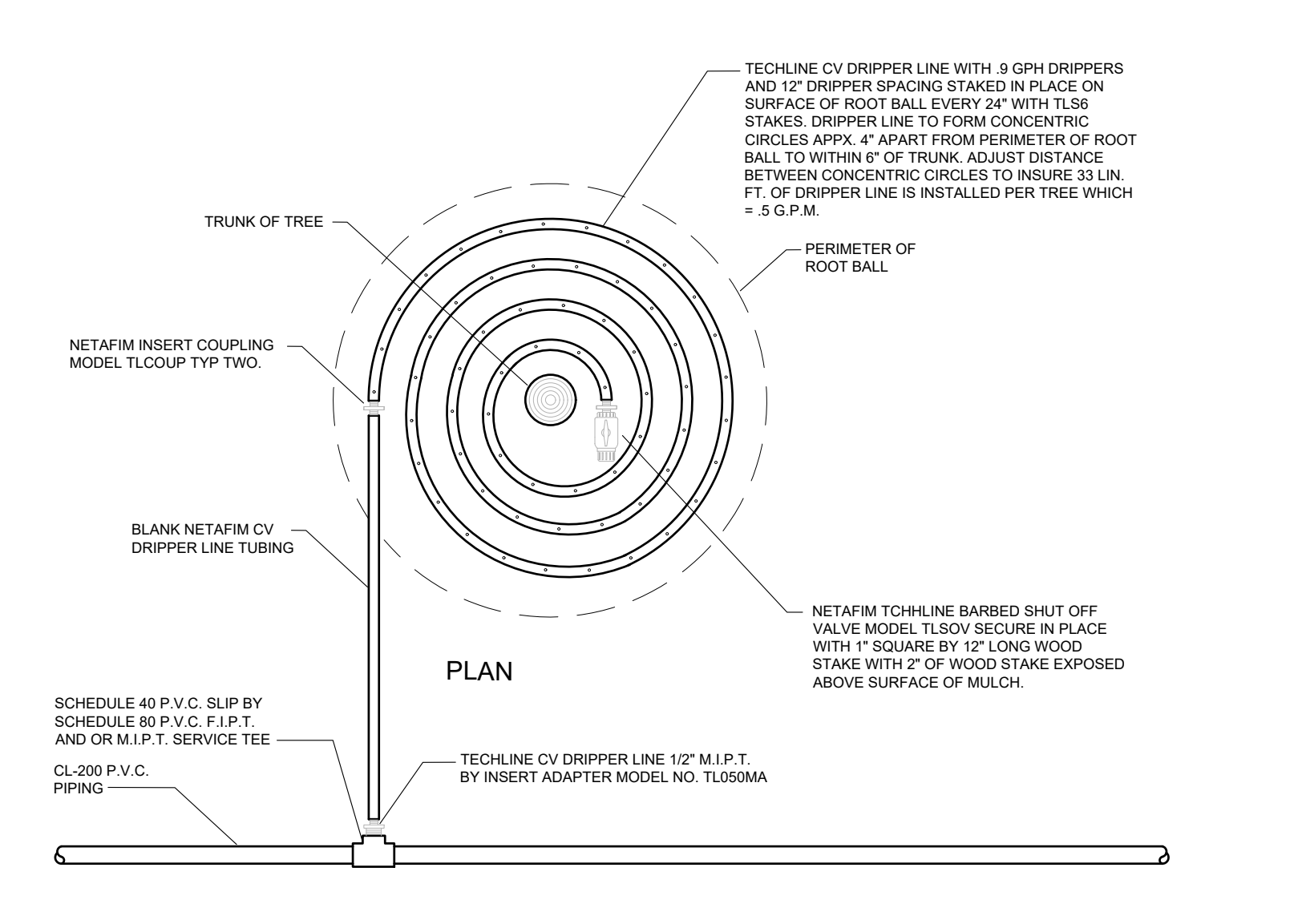
13 SUBSURFACE DRIFT - TOP VIEW
CENTER FEED LAYOUT
NO SCALE



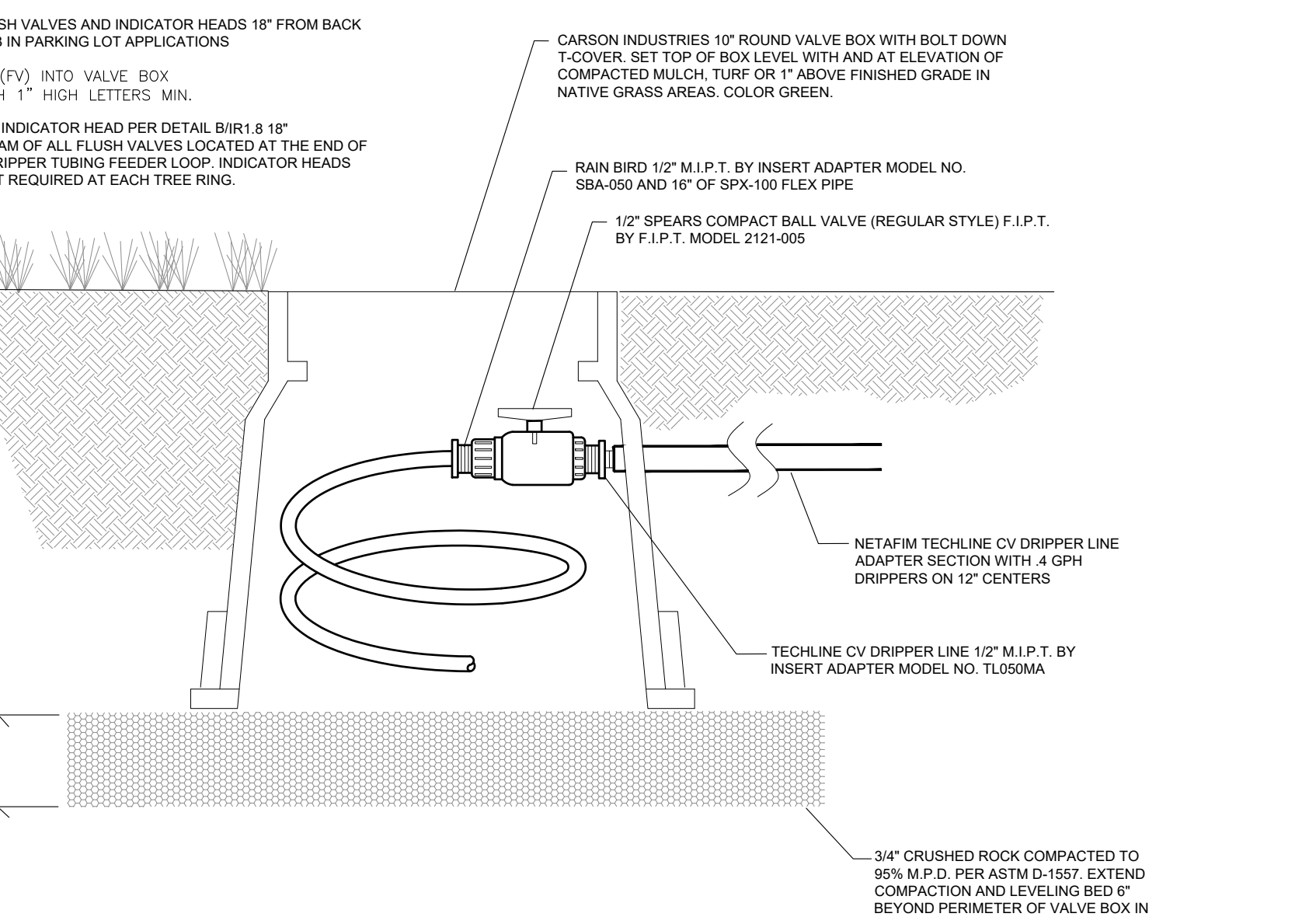
14 SUBSURFACE DRIFT - TOP VIEW
END FEED LAYOUT
NO SCALE



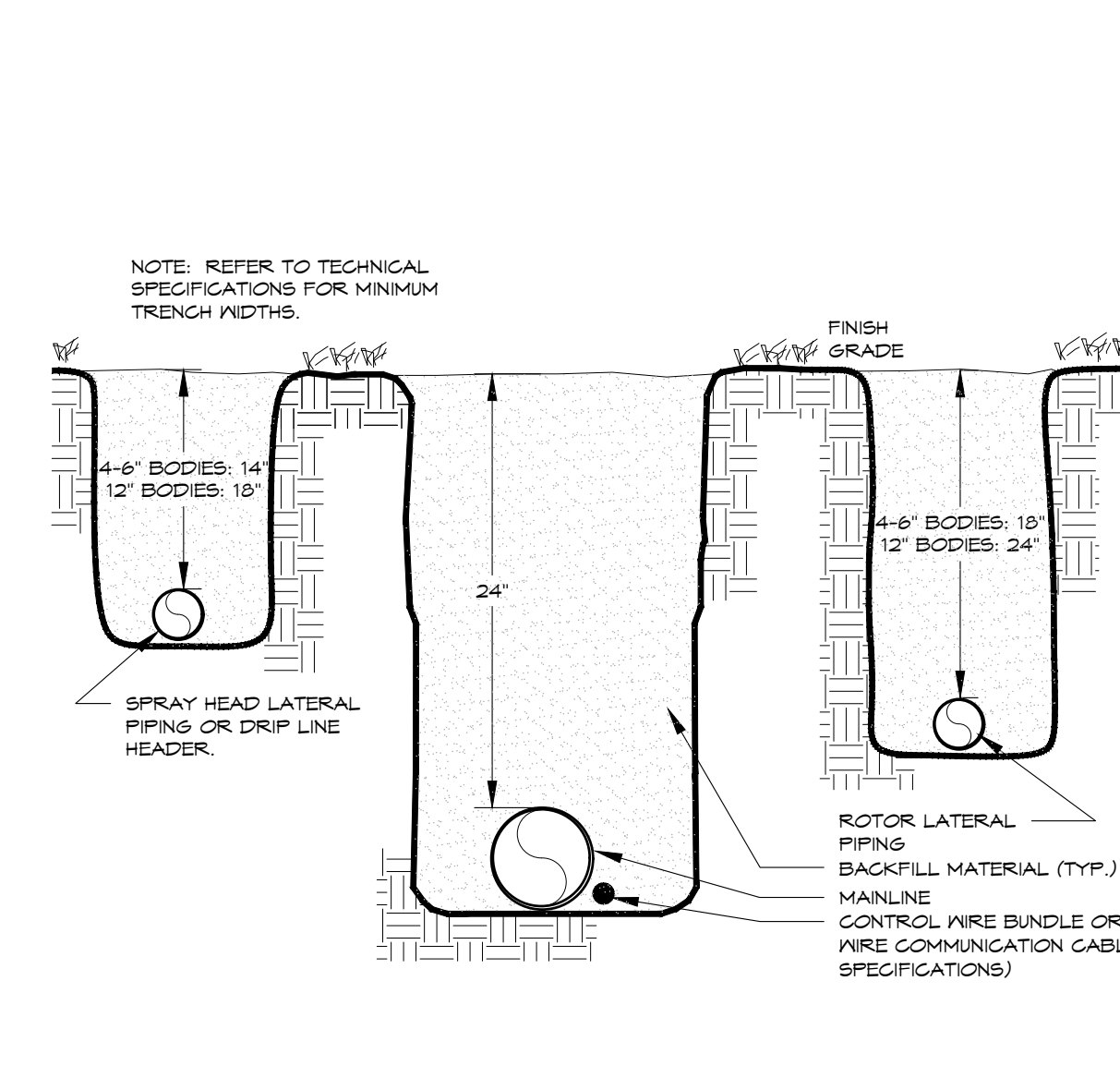
15 SUBSURFACE DRIFT
HORIZONTAL VIEW
NO SCALE



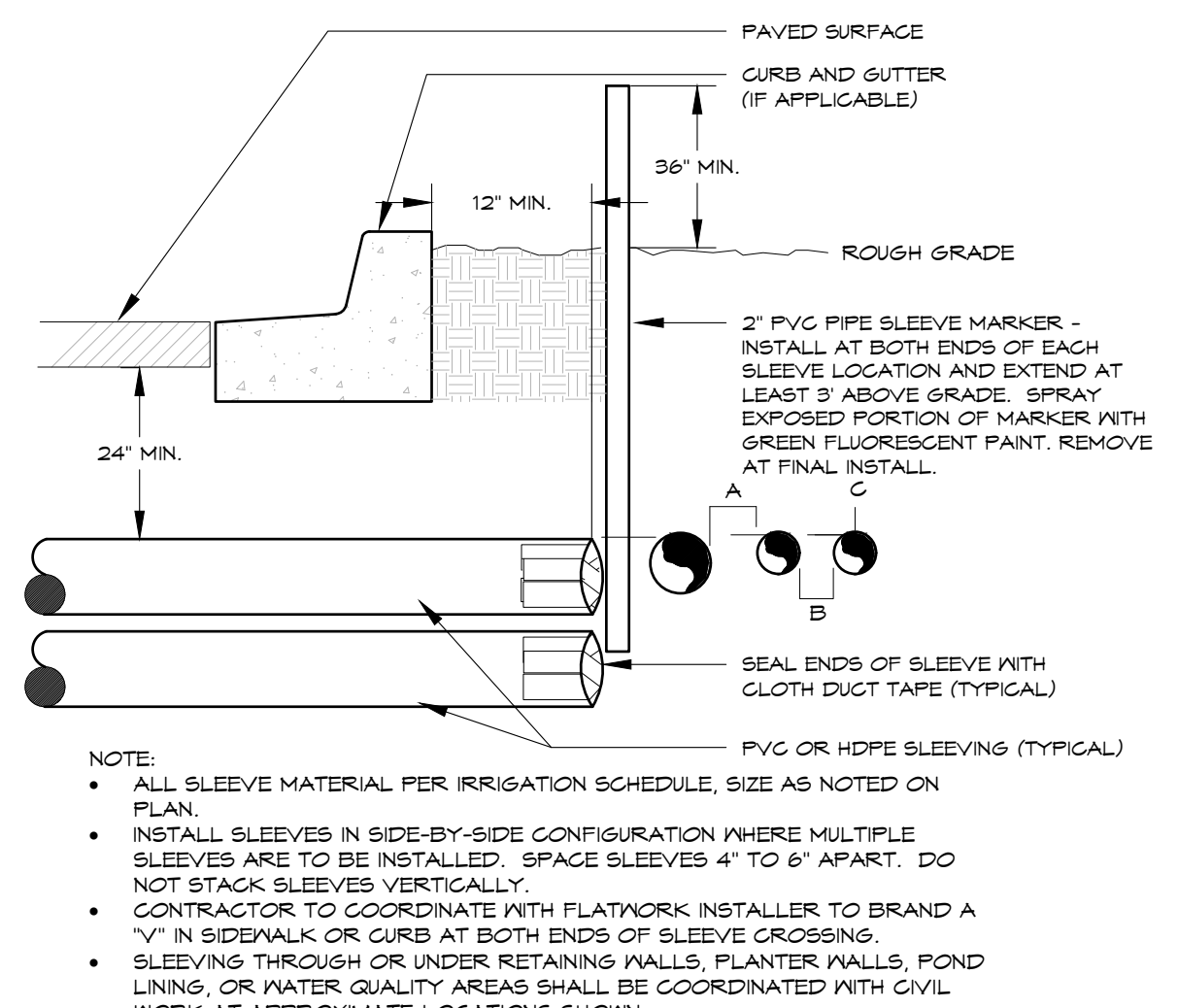
16 CV DRIFTER LINE WITH FLUSH VALVE INSTALLATION FOR TREE IRRIGATION IN
NATIVE AND SHRUB AREAS
NO SCALE



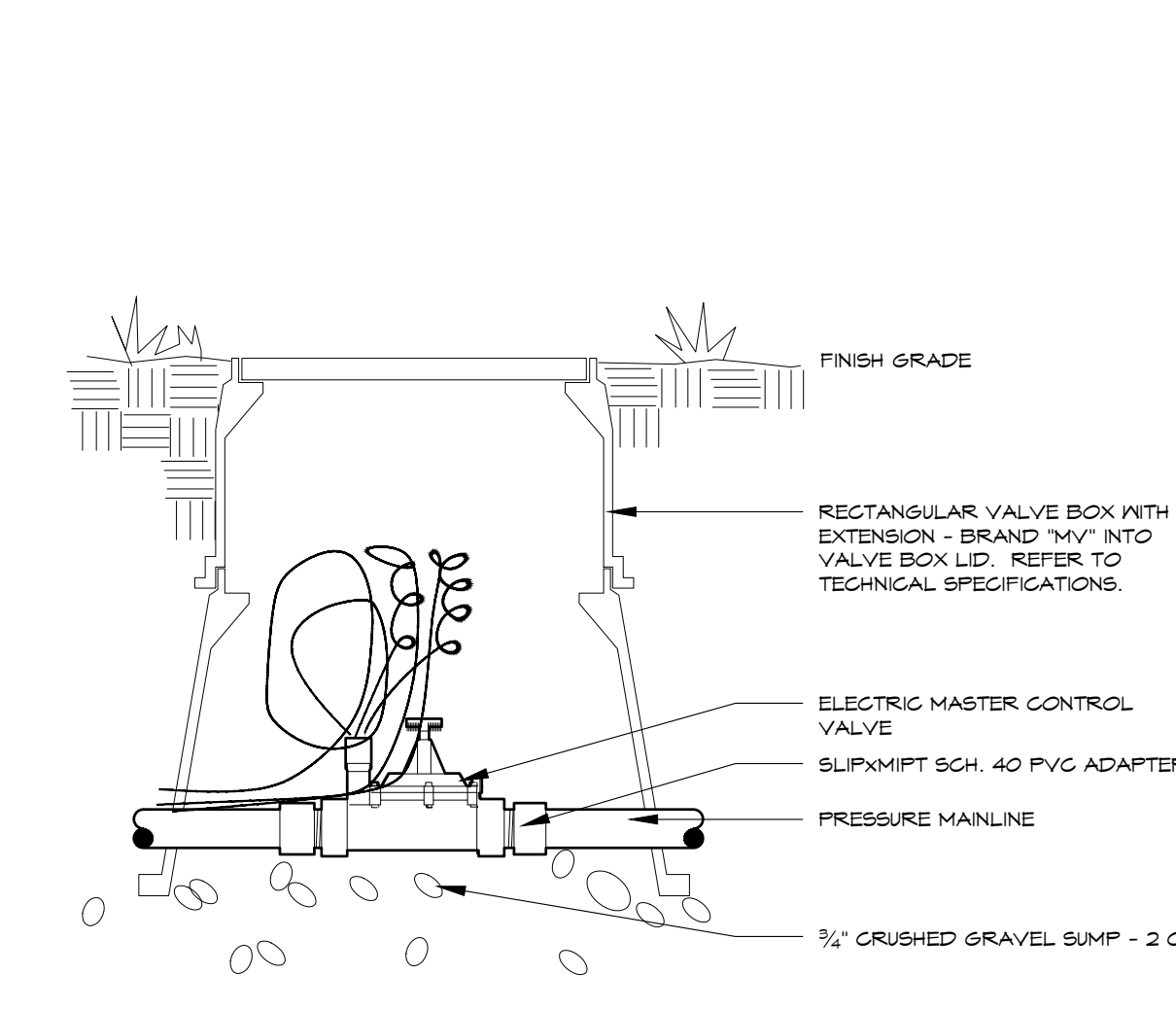
17 CV DRIFTER LINE FLUSH VALVE INSTALLATION AT END OF EACH DRIFTER PIPE LOOP
NO SCALE



18 TRENCH
24\"/>



19 IRRIGATION SLEEVING
TYPICAL



20 MASTER VALVE
24V - Small - Typical

DIRECTORY

IRRIGATION SCHEDULE	IR-000
IRRIGATION NOTES	IR-000
IRRIGATION PLANS	IR-101
IRRIGATION DETAILS	IR-201 - IR-202



Know what's below.
Call before you dig.
CALL OR DIG BEFORE YOU ADVANCE BEFORE YOU
DIG. GRAZE, OR EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES.



Irrigation Consulting & Water Management
13949 W. Colfax Ave., Suite 200
Lakewood, Colorado 80401
o: 303.980.5327 www.hydrosystemsksd.com

