

GENERAL NOTES:

- ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF PUBLIC IMPROVEMENTS SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE LOCAL JURISDICTION MUNICIPAL CODE, TECHNICAL MANUALS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE TECHNICAL MANUAL OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY PUBLIC WORKS OR UTILITIES INSPECTOR.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE.
- THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE TOWN/CITY AND ALL UTILITY COMPANIES INVOLVED WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY UTILITY SERVICE.
- THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE CRITERIA AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB ONSITE AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
- IF DURING THE CONSTRUCTION PROCESS CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT PUBLIC WORKS INSPECTOR IMMEDIATELY.
- ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH MUTCD TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (TOWN/CITY, COUNTY OR STATE) FOR APPROVAL PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN OR AFFECTING THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR AS DESIGNATED TO BE PROVIDED, INSTALLED, OR CONSTRUCTED UNLESS SPECIFICALLY NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE AND AVAILABLE TO PUBLIC WORKS INSPECTOR AT ALL TIMES.
- DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTANT ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
- THE CONTRACTOR SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF THE COLORADO PERMIT FOR STORM WATER DISCHARGE (IF APPLICABLE), THE STORM WATER MANAGEMENT PLAN, AND THE EROSION CONTROL PLAN.
- ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED AT THE LIMITS OF CONSTRUCTION PRIOR TO ANY OTHER EARTH-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR LANDSCAPING.
- THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF THE WATER LINES AND DRY UTILITIES.
- THERE SHALL BE NO SITE CONSTRUCTION ACTIVITIES ON SATURDAYS UNLESS SPECIFICALLY APPROVED BY PUBLIC WORKS INSPECTOR AND NO SITE CONSTRUCTION ACTIVITIES ON SUNDAYS OR HOLIDAYS UNLESS THERE IS PRIOR WRITTEN APPROVAL BY THE PUBLIC WORKS DIRECTOR.
- NO SOLID OBJECT (EXCLUDING FIRE HYDRANTS AND TRAFFIC CONTROL DEVICES AND TRAFFIC SIGNS) EXCEEDING THIRTY (30) INCHES IN HEIGHT ABOVE THE FLOWLINE ELEVATION OF THE ADJACENT STREET, INCLUDING BUT NOT LIMITED TO BUILDINGS, UTILITY CABINETS, WALLS, FENCES, LANDSCAPE PLANTINGS, CROPS, CUT SLOPES, AND BERMS, SHALL BE PLACED WITHIN SIGHT DISTANCE LINES AND SIGHT DISTANCE EASEMENTS.

BENCHMARK:

ELEVATIONS ARE BASED ON COLORADO SPRINGS UTILITIES FACILITIES INFORMATION SYSTEM (FIMS) "BLT 167", A 2" ALUMINUM CAP IN CONCRETE LOCATED ON AN ELECTRIC TRANSFORMER PAD AT THE SOUTHEAST CORNER OF WOODMEN ROAD AND MERIDIAN ROAD, WITH AN ELEVATION OF 6873.18 (NGVD 29).

BASS OF BEARING:

S 89° 49'00" W BETWEEN SOUTHEAST CORNER, SECTION1, T13S, R65W, SIXTH P.M. AND THE SOUTH ¼ CORNER, SECTION1 T13S, R65W, SIXTH P.M.

LEGAL DESCRIPTION:

LOT 10 , FALCON MARKETPLACE, ACCORDING TO THE PLAT AS RECORDED DECEMBER 23, 2019 AT RECEPTION NO. 219714441, COUNTY OF EL PASO, STATE OF COLORADO.

ENGINEERS CERTIFICATION:

THESE CONSTRUCTION DRAWINGS WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF THE STORM DRAINAGE AND SANITARY CONSTRUCTION DETAILS AND TECHNICAL SPECIFICATIONS AND THE STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA OF THE COUNTY OF EL PASO.

THOMAS PANNELL, P.E.  
COLORADO NO. 53615

# SITE DEVELOPMENT PLANS FOR SUPER STAR CAR WASH FALCON MARKETPLACE LOT 10

LOCATED IN A PORTION OF THE SE ¼ OF SECTION 1, TOWNSHIP 13 SOUTH,  
RANGE 65 WEST OF THE 6TH. P.M.  
EL PASO COUNTY, STATE OF COLORADO



VICINITY MAP

SCALE= 1" = 500'

PROPERTY OWNER:

SUPER STAR CAR WASH  
1830 N 95TH AVE, SUITE 106  
PHOENIX, AZ 85037  
CONTACT: TIM VARLEY  
PHONE: (801) 651-1748

ENGINEER:

BOWMAN CONSULTING  
1526 COLE BLVD, SUITE 100  
LAKEWOOD, CO 80401  
CONTACT: THOMAS PANNELL, SR. PROJECT MANAGER  
PHONE: (303) 801-2900

SURVEYOR:

BOWMAN CONSULTING  
1526 COLE BLVD, SUITE 100  
LAKEWOOD, CO 80401  
CONTACT: BRIAN SOCIA, DIRECTOR OF SURVEY  
PHONE: (303) 801-2900

DEVELOPER:

EVERGREEN  
2390 EAST CAMELBACK ROAD,  
PHOENIX, AZ 85016  
CONTACT: KAREN LEVITT ORTIZ, DEVELOPMENT MANAGER  
PHONE: (602) 808-8600

ARCHITECT:

CAWLEY ARCHITECTS  
730 NORTH 52ND STREET, SUITE 203  
PHOENIX, AZ 85008  
CONTACT: CHRISTOPHER BARTA, SENIOR PROJECT MANAGER  
PHONE: (602) 393-5060

COUNTY:

EL PASO COUNTY  
2880 INTERNATIONAL CIRCLE, SUITE 110  
COLORADO SPRINGS, CO 80910  
CONTACT: RYAN HOWSER, PLANNER 1  
PHONE: (719) 520-6300

NOTES:

OWNER IS AWARE THAT THE ACCESS PERMITS (AP211569, AP211570) ARE SUBJECT OF CONDITIONS OF APPROVAL.

Please add the following ADA note:

The parties responsible for this plan have familiarized themselves with all current accessibility criteria and specifications and the proposed plan reflects all site elements required by the applicable ADA design standards and guidelines as published by the United States Department of Justice. Approval of this plan by El Paso County does not assure compliance with the ADA or any regulations or guidelines enacted or promulgated under or with respect to such laws.

GENERAL COMMENT THROUGHOUT : Please remove all separate plan sets from this plan set and include in the appropriate plan sets. You are including lighting, landscaping, grading, and stormwater pages that do not need to be included in this set.

Sheet List Table	
SHEET NUMBER	SHEET TITLE
C1.0	COVER
C1.1	GENERAL NOTES
C1.2	LOCAL GENERAL NOTES
C2.0	SITE PLAN
C3.0	GRADING PLAN
C4.0	UTILITY PLAN
C5.0	STORM PLAN & PROFILE
C6.0	SANITARY PLAN AND PROFILE
C7.0	CONSTRUCTION DETAILS
C7.1	CONSTRUCTION DETAILS
C7.2	WATER DETAILS
C7.3	SANITARY DETAILS
C7.4	WATER RECLAMATION SYSTEM DETAILS
Lq.01	LANDSCAPE PLAN
Lq.02	IRRIGATION PLAN
Lq.03	LANDSCAPE & IRRIGATION NOTES
DR1.0	ELECTRICAL SITE LIGHTING PLAN
DR2.0	ELECTRICAL SITE PHOTOMETRICS - PRE-CURFEW
DR2.1	ELECTRICAL SITE PHOTOMETRICS - POST-CURFEW
DR3.0	ELECTRICAL SITE PHOTOMETRICS - DETAILS

ENGINEERS STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

OWNERS STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

EL PASO COUNTY:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.  
FILED IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

Please replace signature block with a signature block for the Planning and Community Development Department Director.

PCD FILING NO.:  
PPR-21-008

**Bowman**

Phone: (303) 801-2900  
www.bowmanconsulting.com


REVISIONS		DATE
REVISION	DESCRIPTION	
1	SSCW - FALCON MARKETPLACE - 2ND SDP SUBMITTAL	07/15/2021
2	SSCW - FALCON MARKETPLACE - 3RD SDP SUBMITTAL	08/13/2021

COLORADO  
EL PASO COUNTY  
COVER  
SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10  
SITE DEVELOPMENT PLAN

SEAL

DESIGN SWK	DRAWN SWK	CHKD TOP
SCALE	H: 1" = XXX' V: 1" = XXX'	
JOB No.	020441-01-001	
DATE :	02/09/2021	
SHEET C1.0		



	WETLANDS
<div> <div>LEGEND NOTES</div> <hr/> <ol style="list-style-type: none"> <li>THIS IS A STANDARD SHEET, THEREFORE SOME ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT BE USED ON THE PROJECT.</li> <li>ADDITIONAL LEGENDS AND NOTES MAY BE FOUND ON OTHER SHEETS ASSOCIATED WITH THIS PLAN. THESE LEGENDS AND NOTES ARE TO BE REFERENCED IN ADDITION TO THIS STANDARD SHEET.</li> </ol> </div>	

FD	FLARED END SECTION	TC	TIME OF CONCENTRATION
FE	FIRST FLOOR OR FINISH FLOOR	TEL	TELEPHONE
FF	FINISH GRADE	TEMP	TEMPERATURE
FG	FIRE HYDRANT	TH	TEST HOLE
FH	FLOW LINE	TO	TOP OF FOUNDATION
FL	FOUNDATION	TOF	TOP OF PIPE
FND	FOYER	TP	TEST PIT OR TREE PROTECTION
FNY	FLOOD PLAIN	TW	TOP OF WALL OR TAILWATER
FS	FEET PER SECOND	TYE	TYPICAL
FPS	FEET OR FACTOR OF SAFETY		
FT	FOOT OR FEET	UE	UTILITY EASEMENT
G	GAS	UG	UNDERGROUND
GA	GARAGE	UGE	UNDERGROUND ELECTRIC
GB	GRADE BREAK	UGT	UNDERGROUND TELEPHONE
GFA	GROSS FLOOR AREA	UGC	UNDERGROUND CABLE
GR	GUARD RAIL OR GRATE INLET	UD	UNDERDRAIN
GV	GATE VALVE	UL	UPPER LEVEL
	HEAD	UP	UTILITY POLE
H	HANDICAP	USGS	US GEOLOGICAL SURVEY
HC	HORIZONTAL BEND	UTIL	UTILITY
HB	HOT BITUMINOUS PAVEMENT		
HBP	HYDRAULIC GRADE LINE	V	VOLUME
HGL	HORIZONTAL	V OR VEL	VELOCITY
HORIZ	HIGH POINT	VAN	HANDICAPPED VAN PARKING SPACE
HP	HAND RAIL	VB	VERTICAL BEND
HR	HEIGHT	VC	VERTICAL CURVE
HT	HEADWATER	VF	VERTICAL FOOT
I		W	WEIGHT OR WIDTH
IA	RAINFALL INTENSITY	WBL	WEST BOUND LANE
ID	INSIDE DIAMETER OR IDENTIFICATION	WL	WATER LINE
IE	INVERT ELEVATION	WM	WATER METER
IN	INCH	W/M OR WM	WATER MAIN
INV	INVERT	W/TB	WITH THRUST BLOCK
INV P	IRON PIPE	WSEL	WATER SURFACE ELEVATION
IPF	IRON PIPE FOUND	WV	WATER VALVE
IPS	IRON PIPE SET		
IRR	IRRIGATION	XG	CROSSING
	JUNCTION BOX	XNF	TRANSFORMER
J	JOINT	YI	YARD INLET
JNT		YR	YEAR

EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH, SHALL BE ASSUMED BY THE CONTRACTOR.

ALL RIGHT-OF-WAY DEDICATED FOR PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.

AN AIR QUALITY PERMIT SHALL BE OBTAINED IF REQUIRED.

ANY LIGHTING SHOWN HEREON IS AS SPECIFIED BY THE CLIENT AND IS INCLUDED FOR INFORMATION PURPOSES ONLY, AS DIRECTED BY THE OWNER AND/OR PUBLIC AGENCY REQUIREMENTS. BOWMAN CONSULTING GROUP, LTD. HAS NOT PERFORMED THE LIGHTING DESIGN, AND THEREFORE DOES NOT WARRANT AND IS NOT RESPONSIBLE FOR THE DEGREE AND/OR ADEQUACY OF ILLUMINATION ON THIS PROJECT.

THE CONTRACTOR WILL BE REQUIRED TO NOTIFY ALL RESIDENCES WITHIN VICINITY OF THE PROPERTY BOUNDARY TEN (10) DAYS PRIOR TO ANY BLASTING IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AGENCY REQUIREMENTS.

NO BLASTING SHALL BE PERMITTED WITHIN 25' OF EXISTING UTILITY LINES OR STRUCTURES. BLASTING TO BE EXTENDED 25' BEYOND PROPOSED STRUCTURES IF CONDITIONS WARRANT FUTURE EXTENSIONS.

ALL RETAINING WALLS 4' IN HEIGHT AND OVER (MEASURED FROM BOTTOM OF FOOTER TO TOP OF WALL) REQUIRE A SEPARATE BUILDING PERMIT.

THE APPROVAL OF THIS PLAN DOES NOT CONSTITUTE THE APPROVAL OF FUTURE WORK.

ALL HANDICAPPED SPACES SHALL HAVE AN ABOVE GRADE IDENTIFICATION SIGN MEETING APPROPRIATE GOVERNING AGENCY STANDARDS.

WHERE A PROPOSED PIPE CROSSES OR PARALLELS A STREET OR DRIVE AISLE, THE ASPHALT SHALL BE NEATLY SAWCUT TO FULL DEPTH. AFTER INSTALLATION OF THE PIPE, THE ROADWAY SHALL BE PATCHED IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AGENCY STANDARDS.

- APPROVED EROSION AND SEDIMENT CONTROL, "BEST MANAGEMENT PRACTICES" SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THE PROJECT. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL BMP'S WEEKLY AND AFTER SIGNIFICANT PRECIPITATION EVENTS. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IN A TIMELY MANNER. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM A BMP WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR, AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP. A BUILDUP OF EXCESSIVE SEDIMENT OCCURRING IN FLAT AREAS, BEHIND STRAW BALES, AND BEHIND SILT FENCES WILL BE REMOVED PROMPTLY. DISLOCATED STRAW BALES AND COLLAPSED OR TORN SILT FENCES WILL BE IMMEDIATELY REPAIRED.
- THE CLEANING OF CEMENT TRUCK DELIVERY CHUTES SHALL OCCUR IN A PREDEFINED CONTAINMENT AREA. THE DISCHARGE OF WATER CONTAINING CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED.
- EROSION BALES SHALL BE PLACED SUCH THAT RUNOFF WILL NOT FLOW BETWEEN, AROUND OR UNDER BALES. BALES TO BE ANCHORED WITH 2" X 2" X 3' WOODEN STAKES OR TWO PER BALE.
- WHEN TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE REMOVED, ANY SILT AND SEDIMENT DEPOSITS SHALL BE REMOVED AND SPREAD EVENLY IN OPEN AREAS.
- BEST MANAGEMENT PRACTICES (BMP) DETAILS SHOWN ON THESE PLANS ARE CONCEPTUAL ONLY. ADJUST AS NECESSARY TO FIT FIELD CONDITIONS.
- TEMPORARY SEDIMENT BASINS SHALL BE USED DURING CONSTRUCTION TO CONTAIN ALL RUNOFF FROM THE SITE. IF TRENCH DEWATERING OR GROUND WATER REMOVAL IS REQUIRED, THE SEDIMENT POND OR OTHER APPROVED MEANS SHALL BE USED TO DETAIN ALL WATER PUMPED BY THESE OPERATIONS.
- THE CONTRACTOR SHALL SUBMIT A SCHEDULE OF CONSTRUCTION, GRADING AND LANDSCAPING, INCLUDING THE NAME AND 24 HOUR PHONE NUMBER OF THE RESPONSIBLE PARTY TO CONTACT REGARDING ANY EROSION OR SEDIMENT PROBLEM TO THE APPROPRIATE GOVERNING AGENCY PRIOR TO BEGINNING ANY CONSTRUCTION.
- EROSION CONTROL MEASURES TO BE COORDINATED WITH CONSTRUCTION MANAGER.
- EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH REGULATIONS OF THE APPROPRIATE GOVERNING AGENCY.

SEAL		SUPER S		EL PASO COUNTY	
DESIGN SWK	DRAWN SWK	CHKD TOP			
SCALE	H: 1" = XXX' V: 1" = XXX'				
JOB No. 020441-01-001					
DATE : 02/09/2021					
SHEET C1.1					



STANDARD NOTES FOR EL PASO COUNTY  
GRADING AND EROSION CONTROL PLANS

1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
2. ANY WITHSTANDING ANYTHING DEFERRED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
3. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR AND SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. ONCE THE ESQCP IS APPROVED AND A NOTICE TO PROCEED HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT MAY CONTRIBUTE POLLUTANTS TO STORMWATER. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES IS NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN PRIOR TO IMPLEMENTATION.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GOING DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED AND TEMPORARILY USED FOR LONGER THAN 14 DAYS. AN AREA THAT IS GOING TO REMAIN IN AN INTERMEDIATE STATE FOR MORE THAN 60 DAYS SHALL ALSO BE STABILIZED.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED.
9. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
10. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE HYDROLOGY OR HYDRAULICS OF A PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE EGM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
11. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND LAND DISTURBANCE. DISTURBANCES ARE TO BE PLANNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE, UNLESS INFEASIBLE.
12. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED.
13. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
14. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASH WATER SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY.
15. DETERMINING OPERATIONS: UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT MAY NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF.
16. EROSION CONTROL: BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
18. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC TRAFFIC AND WEATHER CONDITIONS.
19. TRACKING OF SOLS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
20. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPEARANCES AS A RESULT OF SITE DISTURBANCE.
21. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
22. NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE EGM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
23. BULK STORAGE OF PETROLEUM PRODUCTS OR OTHER LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL HAVE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
24. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCH FLOW LINE. INDICATORS SHALL BE PROVIDED WITH THE COLORADO WATER DRAINAGE ACT (TITLE 25, ARTICLE 8, ORS), AND THE CLEAN WATER ACT (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE EGM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO ACTUAL CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY COLE GARNER GEOTECHNICAL AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:  
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT  
WATER QUALITY CONTROL DIVISION  
WCDD - PERMITS  
4300 CHERRY CREEK DRIVE SOUTH  
DENVER, CO 80246-1530  
ATTN: PERMITS UNIT

**WOODMAN HILLS METROPOLITAN DISTRICT GENERAL NOTES**

- ALL UTILITY CONSTRUCTION TO BE CONDUCTED IN CONFORMANCE WITH THE CURRENT WOODEN HILLS METROPOLITAN DISTRICT (WMHD, THE DISTRICT) SPECIFICATIONS.
- ALL PLANS ON THE JOB SITE SHALL BE SIGNED BY THE DISTRICT AND THE DISTRICT'S ENGINEER. ANY REVISION TO THE PLANS SHALL BE SO NOTED WITH THE OLD DRAWING MARKED NOT VALID.
- ALL STATIONING IS CENTER LINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE CENTER LINE UNLESS OTHERWISE NOTED.
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE DISTRICT. THE DISTRICT RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
- ALL OVER-LAY GRADING MUST BE COMPLETED TO WITHIN ONE (1) FOOT OF FINAL GRADE PRIOR TO INSTALLATION OF WATER AND WASTEWATER INFRASTRUCTURE.
- ALL WATER AND SEWER SERVICE LOCATIONS SHALL BE CLEARLY MARKED ON EITHER THE CURB HEAD OR THE FACE OF THE CURB, WITH AN "S" FOR WATER AND A "W" FOR SEWER.
- DUCTILE IRON PIPES, INCLUDING FITTINGS, VALVES AND FIRE HYDRANTS, SHALL BE WRAPPED WITH POLYETHYLENE TUBING, DOUBLE BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED. BONDING AND ANODE CONNECTIONS SHALL BE THOROUGHLY COATED WITH BITUMINOUS COATINGS.
- ALL DUCTILE IRON PIPE LESS THAN 12 INCHES AND FITTINGS SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING. ALL DUCTILE IRON PIPE 12 INCHES AND GREATER AND FITTINGS SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 300 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING.
- ALL PIPE MATERIAL, BACKFILL AND INSTALLATION SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS, COLORADO DEPARTMENT OF TRANSPORTATION, EL PASO COUNTY DEPARTMENT OF TRANSPORTATION, COLORADO SPRINGS UTILITIES AND THE GEOTECHNICAL ENGINEER.
- PUMPATION TESTS SHALL BE 95% STANDARD PROCTOR AS DETERMINED BY ASTM D698, UNLESS OTHERWISE APPROVED BY THE DISTRICT OR HIGHER STANDARD AS IMPOSED BY ANOTHER AGENCY HAVING RIGHT-OF-WAY JURISDICTION. THIS SHALL INCLUDE ALL VALVES, FIRE HYDRANT RUNS, WATER & SEWER SERVICE LINES AND MANHOLES. ALL REPORTS SHALL BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL.
- THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. THE LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE DISTRICT SHALL BE NOTIFIED OF ANY DEVIATIONS TO THE LINE AND/OR GRADE AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL SUBMIT TO THE DISTRICT AND THE ENGINEER OF RECORD A REPORT OF THE FIELD VERIFIED INFORMATION PRIOR TO THE START OF CONSTRUCTION.
- ALL BENDS SHALL BE FIELD STAKED PRIOR TO THE START OF CONSTRUCTION.
- BENDS, DEFLECTION & CUT PIPE LENGTHS SHALL BE USED TO HOLD HORIZONTAL ALIGNMENT OF SEWER AND WATER LINES TO NO MORE THAN 0.5' FROM THE DESIGNED ALIGNMENT. CONSTRUCTION STAKES TO BE AT 25' INTERVALS ALONG CURVES.
- ASSURE LOCATION OF PIPE LINE CONSTRUCTION.
- AT ALL LOCATIONS WHERE CAP AND STUD IS NOTED ON DRAWINGS, PROVIDE A PLUG AT THE END OF THE PIPE JOINT NEAREST THE SPECIFIED STATION. PROVIDE A REVERSE ANCHOR AT ALL WATER LINE PLUGS.
- ALL UNUSED SALVAGED WATER UTILITY MATERIAL SHALL BE RETURNED TO THE METROPOLITAN DISTRICT AS REQUESTED.
- AT THE CONTRACTOR'S EXPENSE, ALL UTILITY MAINS SHALL BE SUPPORTED AND PROTECTED SUCH THAT THEY SHALL FUNCTION CONTINUOUSLY DURING CONSTRUCTION OPERATIONS. SHOULD A UTILITY MAIN FAIL AS A RESULT OF THE CONTRACTOR'S OPERATION, IT SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR OR BY THE DISTRICT AT FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR/DEVELOPER.
- PUMPING OR BYPASS OPERATIONS SHALL BE REVIEWED AND APPROVED BY BOTH THE DISTRICT AND THE DISTRICT ENGINEER PRIOR TO EXECUTION.
- THE CONTRACTOR SHALL REPLACE OR REPAIR DAMAGE TO ALL SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO FENCES, LANDSCAPING, CURB AND GUTTER AND/OR ASPHALT THAT MAY BE CAUSED DURING CONSTRUCTION.
- ALL CONTRACTORS WORKING ON OR NEAR A WATER OR SEWER FACILITY (TO INCLUDE SERVICE LINES) SHALL HAVE LIABILITY INSURANCE NAMING THE DISTRICT AS AN ADDITIONAL INSURED AND SHALL PROVIDE A CURRENT COPY OF WORKERS COMPENSATION INSURANCE ON FILE WITH THE DISTRICT. NO WORK CAN PROCEED WITHOUT CURRENT CERTIFICATES ON FILE AT THE DISTRICT'S OFFICE.
- THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND ALL AFFECTED UTILITY COMPANIES ADJACENT TO THE PROPOSED UTILITY CONSTRUCTION A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION. A WEEKLY CONSTRUCTION MEETING SHALL BE REQUIRED WITH THE CONTRACTOR, DISTRICT ENGINEER AND ALL OTHER PARTIES AS DEEMED NECESSARY BY THE DISTRICT.
- COMMENCEMENT OF CONSTRUCTION OF WATER/SEWER SYSTEMS WITHIN METROPOLITAN DISTRICT:
- (A) PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING IS REQUIRED. A MINIMUM OF 48 HOURS IN ADVANCE OF COMMENCEMENT OF WORK, A REPRESENTATIVE OF THE DISTRICT OWNER OR DEVELOPER, A REPRESENTATIVE OF THE CONTRACTOR AND DESIGN ENGINEER ARE REQUIRED TO ATTEND. CONTACT THE DISTRICT TO SCHEDULE THE PRE-CONSTRUCTION MEETING. NO PRE-CONSTRUCTION MEETING CAN BE SCHEDULED PRIOR TO FOUR (4) SIGNED/APPROVED PLAN SETS ARE RECEIVED BY THE DISTRICT.
- (B) THE CONTRACTOR IS REQUIRED TO NOTIFY THE DISTRICT A MINIMUM OF 48 HOURS AND A MAXIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION ADJACENT TO THE KNOWN UTILITY LOCATIONS.
- (C) TESTING OF FACILITIES:
- (A) THE CONTRACTOR SHALL NOTIFY THE DISTRICT A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF ANY TEST YING.
- (B) ALL SECTIONS OF WATER LINE ARE TO MEET THE FOLLOWING PRESSURE TESTING REQUIREMENTS
- TEST 100 PSI OF ALL LINES
- MUST PASS PRESSURE TEST TO 200 PSI FOR TWO HOURS (UNLESS OTHERWISE APPROVED ON THE PLANS).
- (C) ALL SANITARY SEWER FACILITIES ARE TO MEET THE FOLLOWING PRESSURE TESTING REQUIREMENTS
- (A) ALL LINES SHALL BE JET CLEANED PRIOR TO VACUUM OR PRESSURE TESTING
- (B) ALL MANHOLES SHALL BE VACUUM TESTED WITH DISTRICT STAFF PRESENT PRIOR TO CCTV INSPECTION.
- (C) SEWER MAINS TO BE PRESSURE TEST PRIOR TO CCTV INSPECTION
- (D) ALL LINES SHALL BE CCTV INSPECTED AND VIDEO SHALL TO BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL
- PRELIMINARY ACCEPTANCE SHALL BE DEFINED AS THE POINT IN TIME THAT THE DISTRICT ACCEPTS THE FACILITY FOR USE. ALL SURFACE IMPROVEMENTS AND RESTORATION SHALL BE COMPLETED WITHIN 30 DAYS OF COMMENCEMENT. SHOULD THE CONTRACTOR FAIL TO COMPLETE ALL SURFACE IMPROVEMENTS AND RESTORATION WITHIN 30 DAYS OF COMMENCEMENT OF SERVICE, THE DISTRICT, AT THEIR DISCRETION, MAY ELECT TO COMPLETE THE IMPROVEMENTS AT THE CONTRACTORS COST.
- FINAL ACCEPTANCE BY THE DISTRICT OF ANY LINE OR SYSTEM SHALL NOT OCCUR UNTIL COMPLETION OF FINAL ASPHALT LAYERS AND/OR FINAL CURB AND/OR SIDEWALKS AND/OR LANDSCAPING. THE WARRANTY PERIOD FOR ALL FACILITIES PRIOR TO FINAL ACCEPTANCE SHALL BE 24 MONTHS COMMENCING AFTER PRELIMINARY ACCEPTANCE.
- ACCEPTANCE:
- (A) THE DISTRICT MAY GIVE PRELIMINARY ACCEPTANCE ONCE ALL OF THE TESTS ON ALL THE LINES HAVE BEEN COMPLETED AND A WALK-THRU HAS OCCURRED.
- (B) A SECOND ACCEPTANCE MAY OCCUR ONCE FIRST LOT OF ASPHALT GOES DOWN AND A SECOND WALK-THRU OF THE SYSTEM OCCURS. IF ALL LINES ARE CLEAN AND ACCESSIBLE, A FINAL ACCEPTANCE MAY OCCUR (THE DISTRICT WILL REQUIRE CLEANING AND RE-VIDEO OF THE SYSTEM DEPENDING ON THE SEVERITY OF THE CONTAMINATION)
- ALL WATER AND SEWER MAINS, INCLUDING SERVICE LINES, SHALL HAVE "AS-BUILT" DRAWINGS PREPARED AND APPROVED PRIOR TO PRELIMINARY ACCEPTANCE BY THE DISTRICT.
- ALL COMMERCIAL/BUSINESS DEVELOPMENTS SHALL HAVE AN EIGHT INCH (MIN.) WATER MAIN LOOPED THROUGH THE PROPOSED PROPERTY WITH GATE VALVES LOCATED WHERE THE MAIN ENTERS THE PROPERTY LINE. AN EIGHT INCH SEWER MAIN SHALL BE INSTALLED FOR SERVICE TO COMMERCIAL/BUSINESS DEVELOPMENTS, AND A MANHOLE SHALL BE LOCATED WHERE THE MAIN ENTERS THE PROPERTY. THE END OF THE MAINS SHALL BE MARKED WITH A RED FLAG AND A YELLOW CARBONATE MARKER ALONG WITH TRACER WIRE.
- AFTER REVIEW AND APPROVAL OF PLANS FOR THE EXTENSION OF LINES, FACILITIES AND/OR SERVICES, CONSTRUCTION MUST BE COMMENCED WITHIN 18 MONTHS FOR RESIDENTIAL SUBDIVISIONS AND 12 MONTHS FOR ANY COMMERCIAL INSTALLATIONS.
- INSPECTION FEES: CALL THE DISTRICT (719-495-2500) FOR FEE SCHEDULE.

## WATER SYSTEM INSTALLATION NOTES

- ALL WATER AND FORCE MAIN PIPE SHALL BE AWWA C900 PVC, OR EQUAL, PRESSURE CLASS 200. ALL WATER AND FORCE MAIN DEPTHS SHALL HAVE MECHANICAL RESTRAINTS AND THRUST BLOCKS. ALL WATER AND FORCE MAIN PIPE SHALL HAVE A MINIMUM COVER FACING OF FIVE AND ONE-HALF (5.5) FEET.
- ALL WATER VALVES ASSOCIATED WITH THE POTABLE WATER SYSTEM SHALL BE OPEN CLOCKWISE. ALL VALVES INSTALLED IN LANDSCAPED AREAS AND/OR NOT WITHIN PAVED STREETS SHALL BE MARKED WITH CARSONITE MARKERS. ALL VALVES ASSOCIATED WITH THE RAW WATER SYSTEM SHALL BE OPEN COUNTERCLOCKWISE AND MARKED WITH CARSONITE MARKERS AS APPLICABLE.
- THE DEVELOPER OR HIS ENGINEER SHALL LOCATE ALL FIRE HYDRANTS AND SERVICE STOP OUTS FOR FUTURE DEVELOPMENT. ANY REQUIRED REALIGNMENT, (HORIZONTAL OR VERTICAL), SHALL BE AT THE EXPENSE OF THE DEVELOPER. FIRE HYDRANT LOCATION SHALL BE REVIEWED AND APPROVED BY THE APPLICABLE FIRE AUTHORITY.
- FIRE HYDRANTS SHALL BE OPEN RIGHT WITH 7/8" X 7/8" SQUARE TAPERED ALONG WITH SERVICE CAPS. LUBRICATION TYPE: (GREASE). ACCEPTABLE BRANDS ARE AMERICAN AWK SERIES 2700 (MODERN) AND KENNEDY GUARDIAN (K81D, K81A AND K81AM). EACH FIRE HYDRANT LOCATION SHALL ALSO BE USED AS TEST STATION.
- ALL MAIN LINES (PVC & DUCTILE IRON) SHALL BE INSTALLED WITH COATED #12 TRACER WITH TEST STATIONS AT INTERVALS NO GREATER THAN 500 FT. VALVE LOCATIONS CAN BE USED FOR TEST STATIONS AND SERVICE STOPS.
- CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING WATER LINE WITHOUT THUNDER, OR ELSE NOTIFY THE DISTRICT OF ANY SERVICE SHUTDOWNS NECESSARY TO CONNECT TO EXISTING LINES.
- IRRIGATION SERVICES SHALL HAVE A STOP AND WASTE CURB STOP VALVE INSTALLED ALONG WITH TRACER WIRE EXTENDING BACK TO THE MAIN LINE.
- COMMENCEMENT OF USE OF WATER LINES AND/OR SYSTEMS:
  - A) NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL AFTER THE COMPLETION OF ALL PRESSURE TESTING, FLUSHING, BAC-T TESTING, COMPACTION TESTING, AND AS-BUILT DRAWINGS ARE SUBMITTED AND APPROVED BY THE DISTRICT.
  - B) NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL SERVICE LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.
  - C) ALL EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED BY THE DISTRICT, AND RECORDED.

## WASTEWATER SYSTEM INSTALLATION NOTES

39. SANITARY SEWER LENGTHS ARE AMH CENTER-AMH CENTER. ALL SANITARY SEWER PIPES SHALL BE SDR 35 PVC OR EQUIVAL. SEWER LINES MAY NOT EXCEED 7% GRADE FOR ANY SIZE WITHOUT PRIOR APPROVAL OF THE DISTRICT. ALL NEWLY CONSTRUCTED RESIDENTIAL SANITARY SEWER TAPS SHALL USE PRE-MANUFACTURED IN-LINE PVC PUSH-ON WYES. TAPPING SADDLES MAY ONLY BE USED FOR TAPPING PRE-EXISTING MAINS.
40. ALL SANITARY SEWER MANHOLES SHALL BE WRAPPED WITH RUT-116 RUBBER-NEK JOINT WRAP OR EQUIVALENT AND COATED.
41. COMPLETION OF USE OF SERVICE LINES AND SANITARY SEWERS SHALL BE:
- (A) NO SANITARY SEWER FACILITY SHALL BE PLACED IN SERVICE UNTIL THE COMPLETION OF ALL JET CLEANING, PRESSURE TESTING, VACUUM TESTING, CCTV INSPECTION, COMPACTION TESTING, AND AS-BUILT DRAWINGS ARE SUBMITTED AND APPROVED BY THE DISTRICT.
- (B) NO SANITARY SEWER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL SERVICE LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, ANY REQUIRED SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.
- (C) ALL NECESSARY EASEMENTS (PLATTED OR DECEDED) ARE DEDICATED, EXECUTED BY THE DISTRICT, AND RECORDED.
- (D) DOWNSTREAM PLUG CAN BE REMOVED ONCE FIRST LIFT OF ASPHALT IS DOWN AND THE ABOVE REQUIREMENTS ARE MET.

**Bowman**

526 Cole Blvd, Suite 100  
Bakewood, CO 80401  
Phone: (303) 801-2900  
[www.bowmanconsulting.com](http://www.bowmanconsulting.com)

REVISIONS		
REVISION	DESCRIPTION	DATE
1	SSOW – FALCON MARKETPLACE – 2ND SDP SUBMITTAL	07/15/2021
2	SSOW – FALCON MARKETPLACE – 3RD SDP SUBMITTAL	010/13/2021

LOCAL GENERAL NOTES

CAR WASH - FALCON MARKETPLACE  
SITE DEVELOPMENT PLAN

LOCAL GENERAL NOTES

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10

SITE DEVELOPMENT PLAN

COUNTY

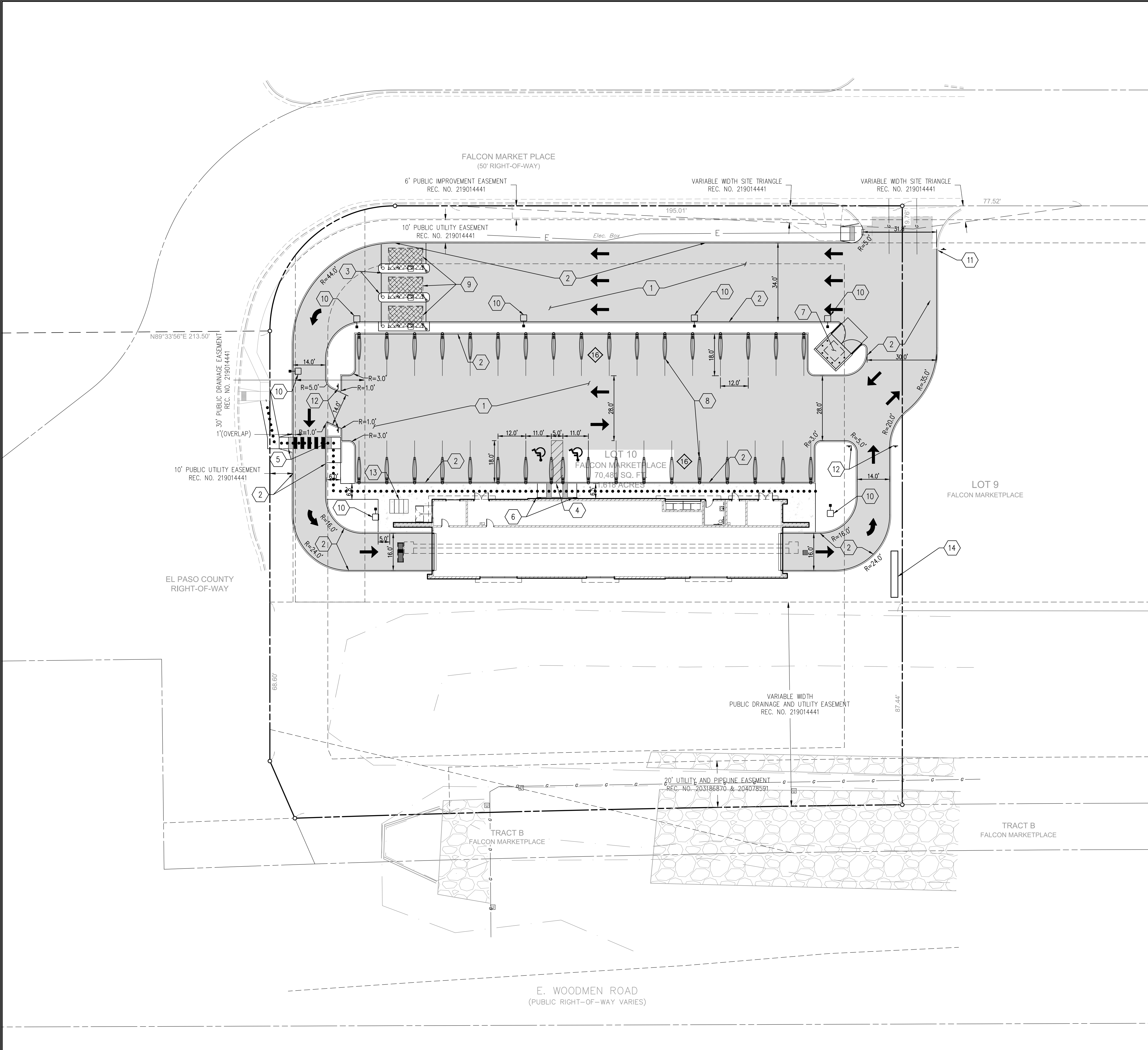
COL

T 10  
COLORADO

SUPER :  
EL PASO COUNTY

DESIGN SWK	DRAWN SWK	CHKD TOP
SCALE		H: 1" = XXX' V: 1" = XXX'
JOB No. 020441-01-001		
DATE : 02/09/2021		
SHEET C1.2		



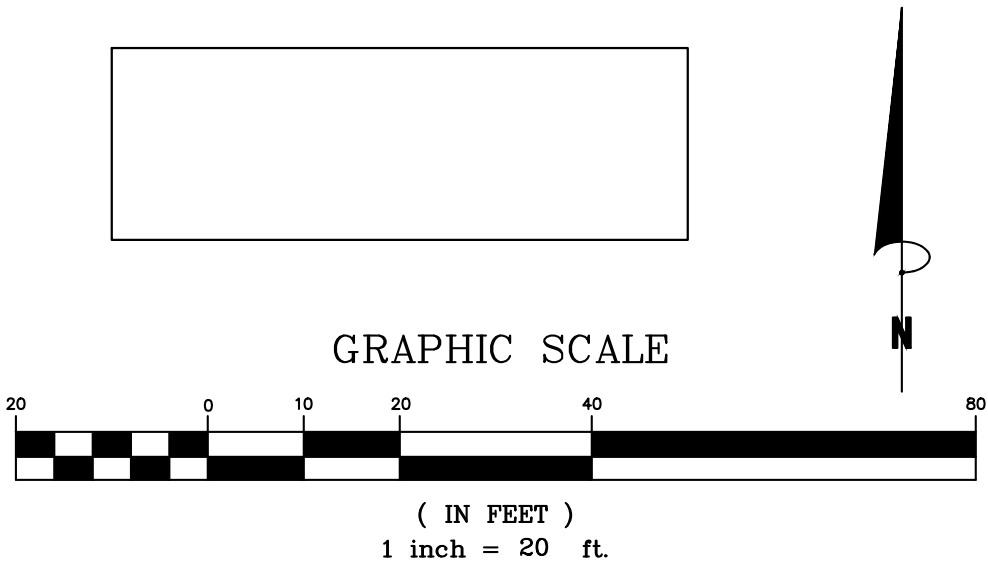


LEGEND		
EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY LINE	---
---	ADJACENT PROPERTY LINE	---
---	LOT LINE	---
---	RIGHT OF WAY	---
-X-	FENCE LINE	-X-
---	EASEMENT	---
---	VERTICAL CURB AND GUTTER	---
---	CONCRETE SIDEWALK	---
---	SIGN(S)	---
---	PARKING COUNT INDICATOR	---
---	ADA ACCESSIBLE ROUTE	---

KEY NOTES		
1	PROPOSED CONCRETE PAVEMENT	
2	PROPOSED 6" INTEGRAL CURB	
3	PROPOSED RAISED CONCRETE SLAB	
4	PROPOSED ADA RAMP (SEE DETAIL ON SHEET C7.0)	
5	PROPOSED ADA RAMP (SEE DETAIL ON SHEET C7.1)	
6	PROPOSED ADA PARKING SIGN	
7	PROPOSED TRASH ENCLOSURE	
8	PROPOSED VACUUM STATION (SEE DETAIL ON SHEET C7.1)	
9	PROPOSED CANOPY (SEE DETAIL ON SHEET C7.1)	
10	PROPOSED SITE LIGHT	
11	PROPOSED STOP SIGN	
12	PROPOSED "DO NOT ENTER" DIRECTIONAL SIGN	
13	PROPOSED BICYCLE PARKING	
14	DEVELOPMENT MONUMENT SIGN (BY OTHERS)	

SITE DATA TABLE		
PROPERTY ADDRESS	7525 FALCON MARKET PL	
PARCEL ID	5301403006	
ZONING DISTRICT	CR	
LAND USE	COMMERCIAL - CAR WASH	
TOTAL SITE AREA	70,481 SF	1.62 AC
OPEN SPACE AREA	10,012 SF	0.23 AC
IMPERVIOUS AREA	35,913 SF	0.83 AC
POND AREA	24,556 SF	0.56 AC
PARKING CALCULATIONS		
REQUIRED	STANDARD	ADA
PROVIDED	2	1
BUILDING SETBACKS		
LOCATION	REQUIRED	PROPOSED
FRONT - WOODMEN RD	50'	98'
SIDE - INTERNAL	0'	38'
SIDE - FALCON MARKET PL	25'	56'
REAR - FALCON MARKET PL	25'	126'
BUILDING HEIGHT		
MAX	45'	
PROPOSED	30'	

ACCESSIBILITY NOTES:  
THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATIONS AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.



# Bowman

Phone: (303) 801-2900  
www.bowmanconsulting.com

REVISIONS	DATE	DESCRIPTION
1	07/15/2021	SSCW - FALCON MARKETPLACE - 2ND SDP SUBMITTAL
2	010/13/2021	SSCW - FALCON MARKETPLACE - 3RD SDP SUBMITTAL

## SITE PLAN

### SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10

### SITE DEVELOPMENT PLAN

COLORADO

EL PASO COUNTY

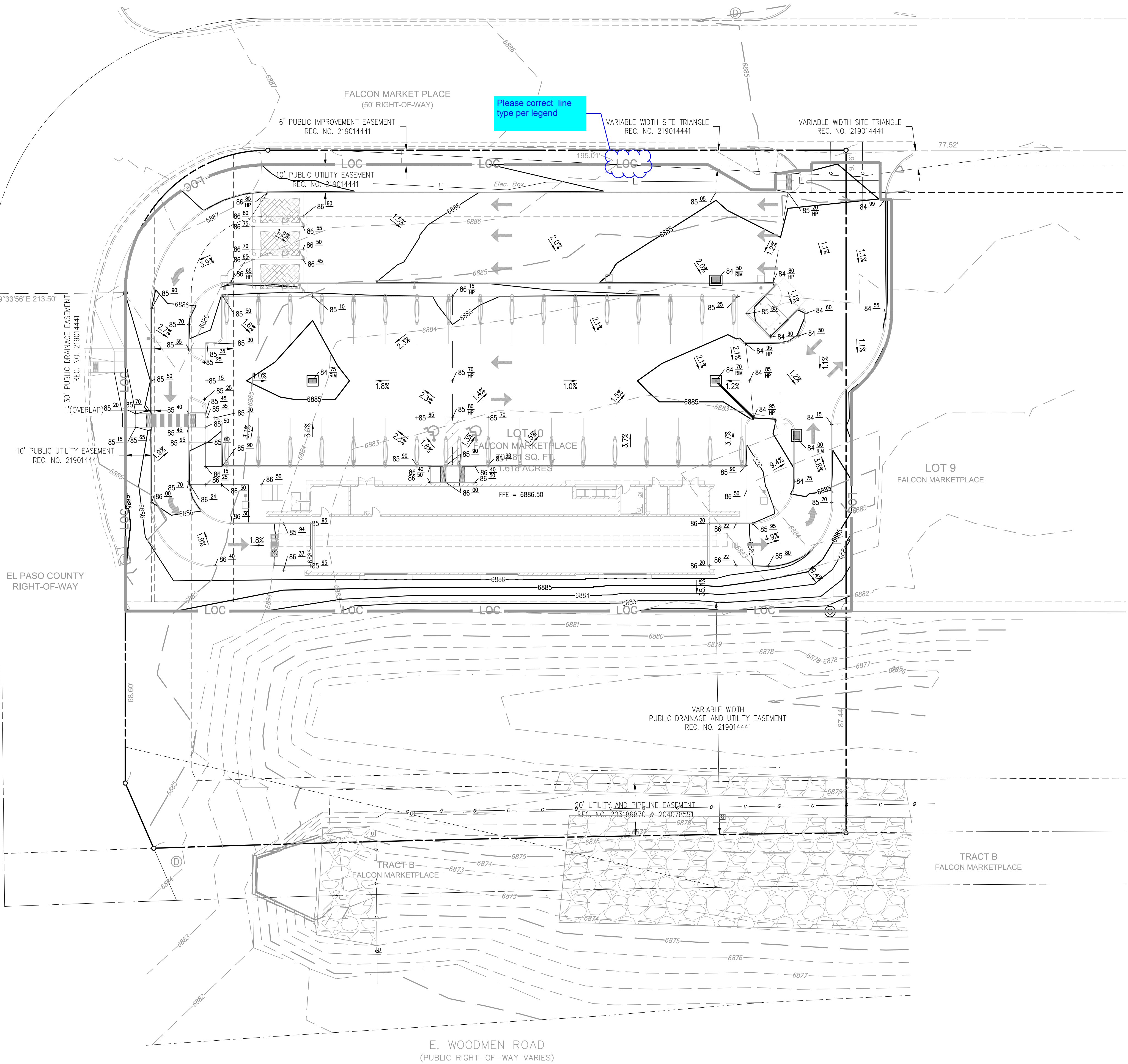
SEAL

NOT FOR CONSTRUCTION

DESIGN	DRAWN	CHKD
SWK	SWK	TOP
SCALE	H: 1" = 20' V: 1" = XXX'	
JOB No.	020441-01-001	
DATE :	02/09/2021	
SHEET	C2.0	

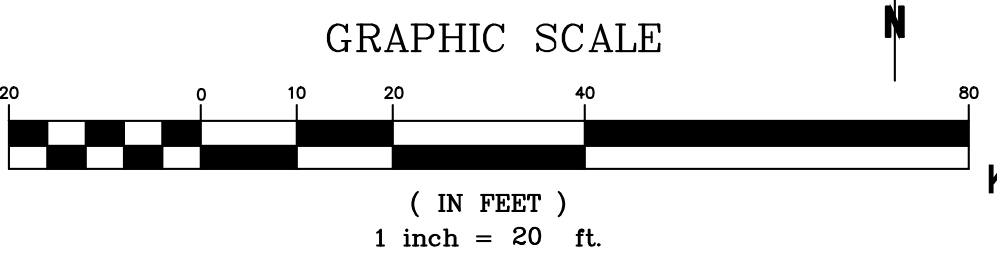


Per previous comments, please remove this page from this document and ensure it is included in the grading and erosion control plan



EXISTING	LEGEND DESCRIPTION	PROPOSED
---	PROPERTY LINE	---
---	ADJACENT PROPERTY LINE	---
---	LOT LINE	---
---	RIGHT OF WAY	---
---	LIMITS OF DISTURBANCE	---
---	FENCE LINE	---
---	EASEMENT	---
---	VERTICAL CURB AND GUTTER	---
---	CONCRETE SIDEWALK	---
---	MAJOR CONTOUR	---
---	MINOR CONTOUR	---
---	GRADE BREAK	---
---	SPOT ELEVATION	---
---	STORM SEWER MANHOLE	---
---	STORM SEWER INLET	---
---	TREE	---

NOTES:  
1. RIM ELEVATION AT CURB INLETS ARE FLOW LINE ELEVATION



REVISION	DESCRIPTION	DATE
1	SSCW - FALCON MARKETPLACE - 2ND SDP SUBMITAL	07/15/2021
2	SSCW - FALCON MARKETPLACE - 3RD SDP SUBMITAL	010/13/2021

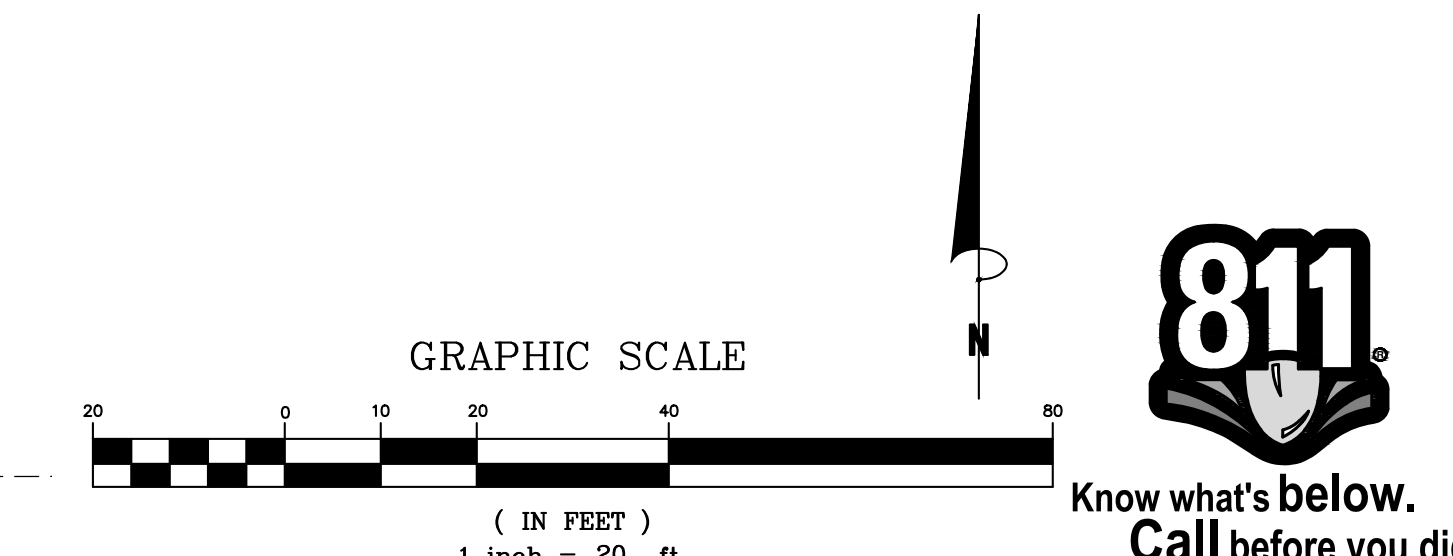
GRADING PLAN  
SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10  
SITE DEVELOPMENT PLAN

EL PASO COUNTY

COLORADO

DESIGN SWK	DRAWN SWK	CHKD TOP
SCALE	H: 1" = 20' V: 1" = XXX'	
JOB No.	020441-01-001	
DATE :	02/09/2021	
SHEET	C3.0	

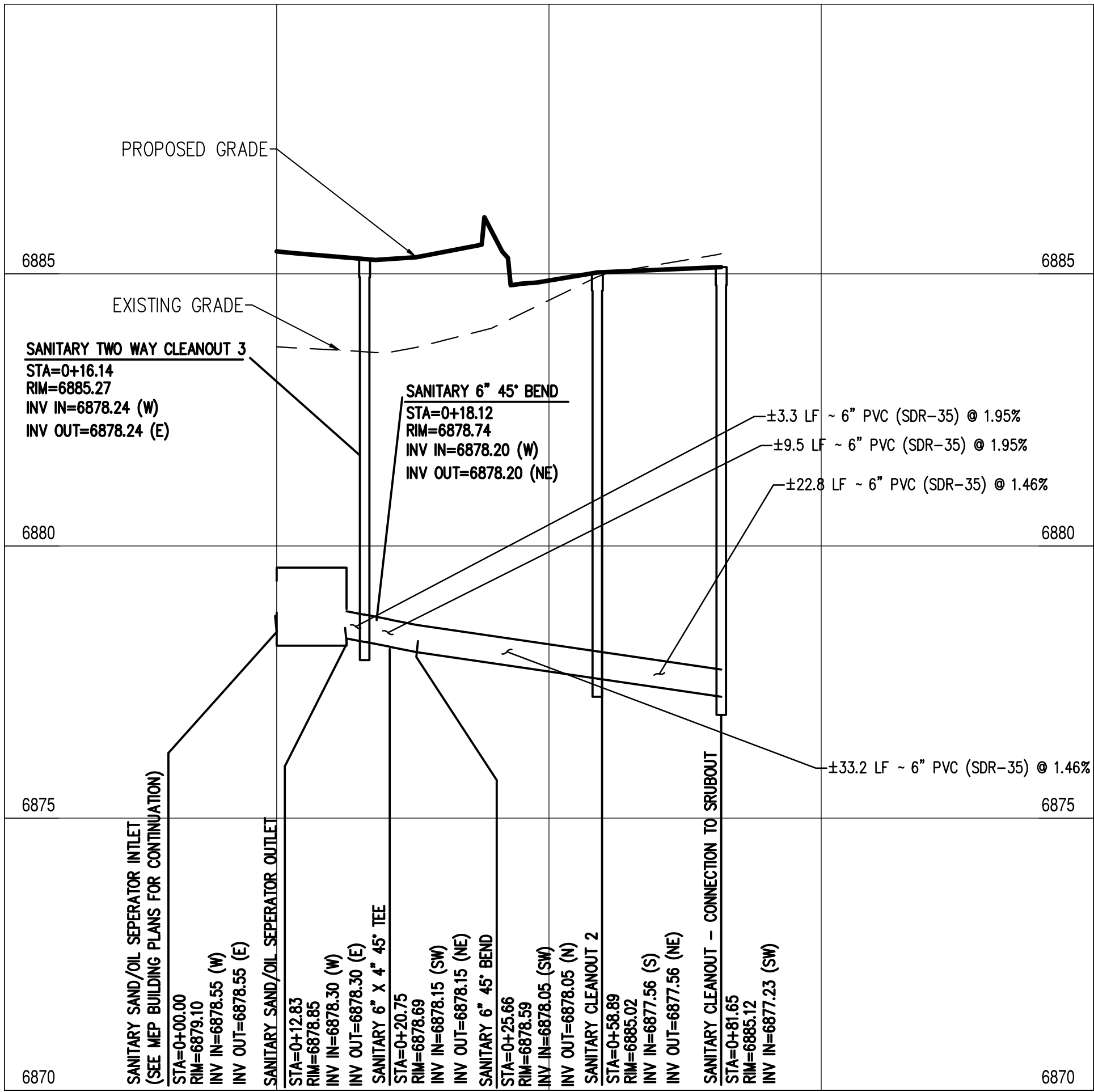
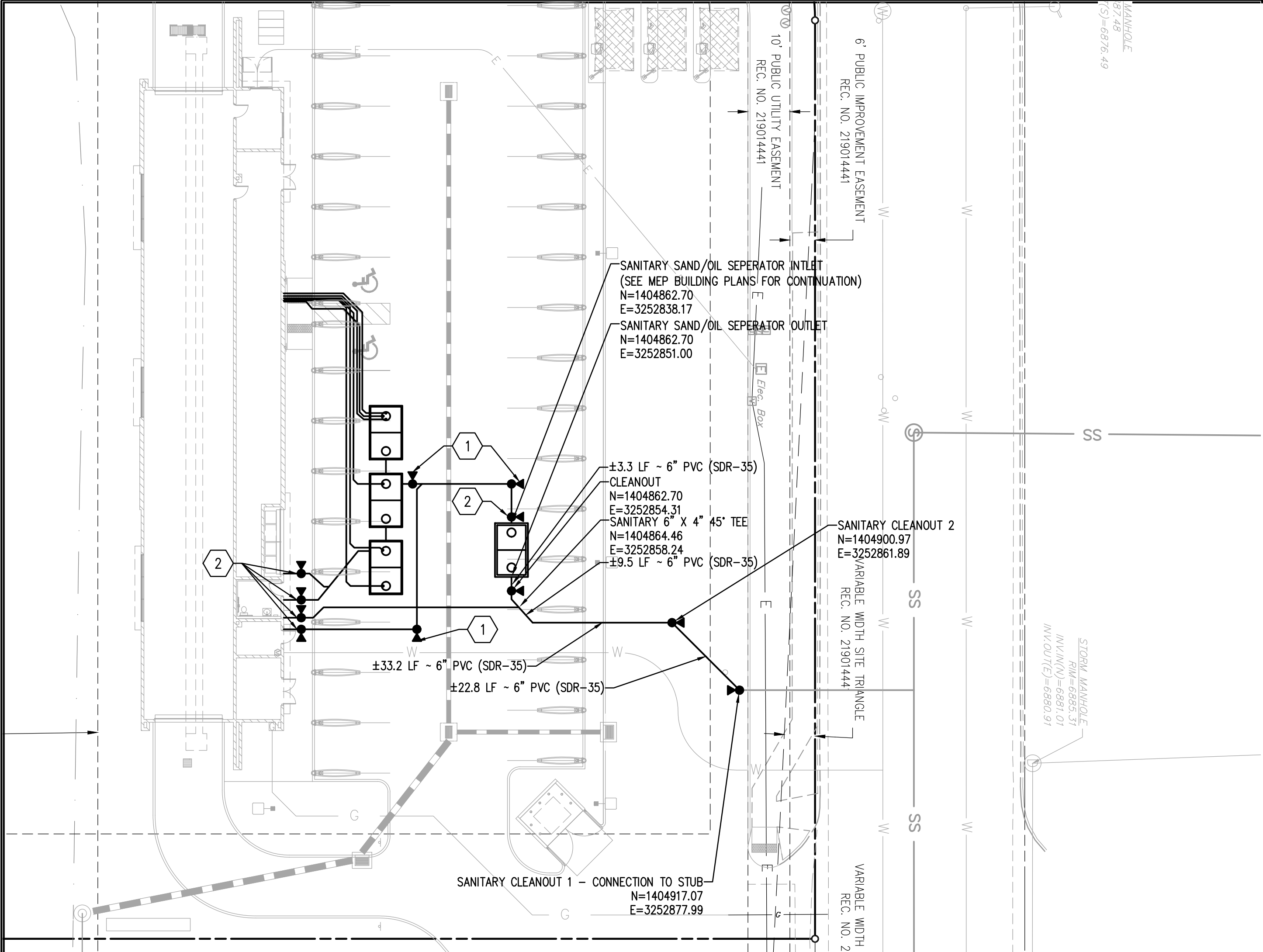










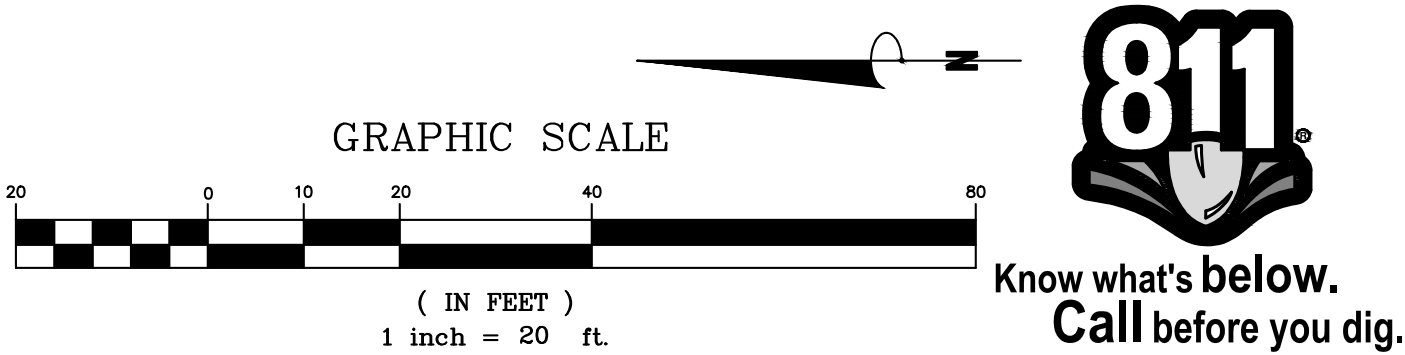


Alignment - SANITARY 1 PROFILE VIEW  
HORIZONTAL SCALE: 1"=20'  
VERTICAL SCALE: 1"=2'

LEGEND		
EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY LINE	---
---	ADJACENT PROPERTY LINE	---
---	LOT LINE	---
---	RIGHT OF WAY	---
---	EASEMENT	---
---	VERTICAL CURB AND GUTTER	---
---	CONCRETE SIDEWALK	---
W	WATER LINE	W
WM	WATER METER	WM
WV	WATER VALVE	WV
WV	FIRE HYDRANT	WV
SS	SANITARY LINE	SS
SS	SANITARY MANHOLE	SS
SS	SANITARY CLEANOUT	SS
SS	STORM SEWER PIPE	SS
SS	STORM SEWER MANHOLE	SS
SS	STORM SEWER INLET	SS
SS	STORM SEWER FLARED END SECTION	SS
SS	STORM SEWER HEADWALL	SS
SS	UNDERGROUND ELECTRIC	SS
SS	STREET LIGHT	SS
SS	TELECOM SERVICE	SS
SS	NATURAL GAS SERVICE	SS

- 1 PROPOSED SINGLE CLEANOUT  
2 PROPOSED TWO WAY CLEANOUT

- NOTES:
- CONTRACTOR TO FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES
  - WATER TO BE INSTALLED MINIMUM OF 5.5' BELOW FINAL GRADE
  - ALL WATER SERVICE SHALL BE AWWA C900 OR EQUAL
  - SANITARY SEWER SHALL BE INSTALLED A MINIMUM OF 5.5' BELOW FINAL GRADE
  - ALL SANITARY SHALL BE SDR-35 OR EQUAL
  - SEE MEP PLANS FOR SEWER DESIGN AT BUILDING, SAND & OIL SEPARATOR, AND WATER RECLAMATION SYSTEM



1

SSCW - FALCON MARKETPLACE - 2ND SDP SUBMITTAL

07/15/2021

2

SSCW - FALCON MARKETPLACE - 3RD SDP SUBMITTAL

010/13/2021

REVISION

DESCRIPTION

DATE

SANITARY PLAN AND PROFILE

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10

SITE DEVELOPMENT PLAN

COLORADO

EL PASO COUNTY

DESIGN

SWK

DRAWN

SWK

CHKD

TOP

SCALE

H: 1" = 20'

V: 1" = 2'

JOB No.

020441-01-001

DATE :

02/09/2021

SHEET

C6.0

NOT FOR CONSTRUCTION

811

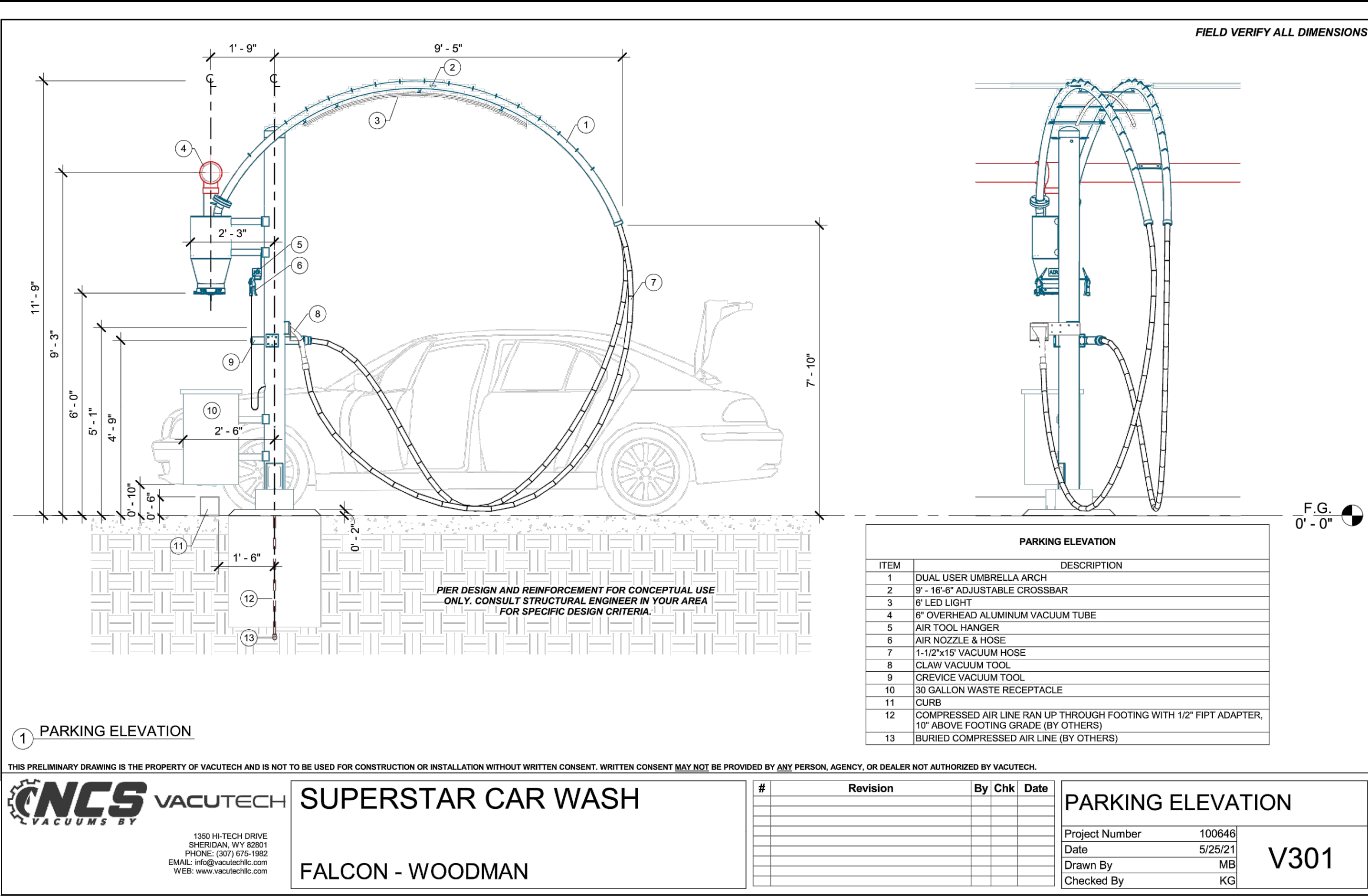
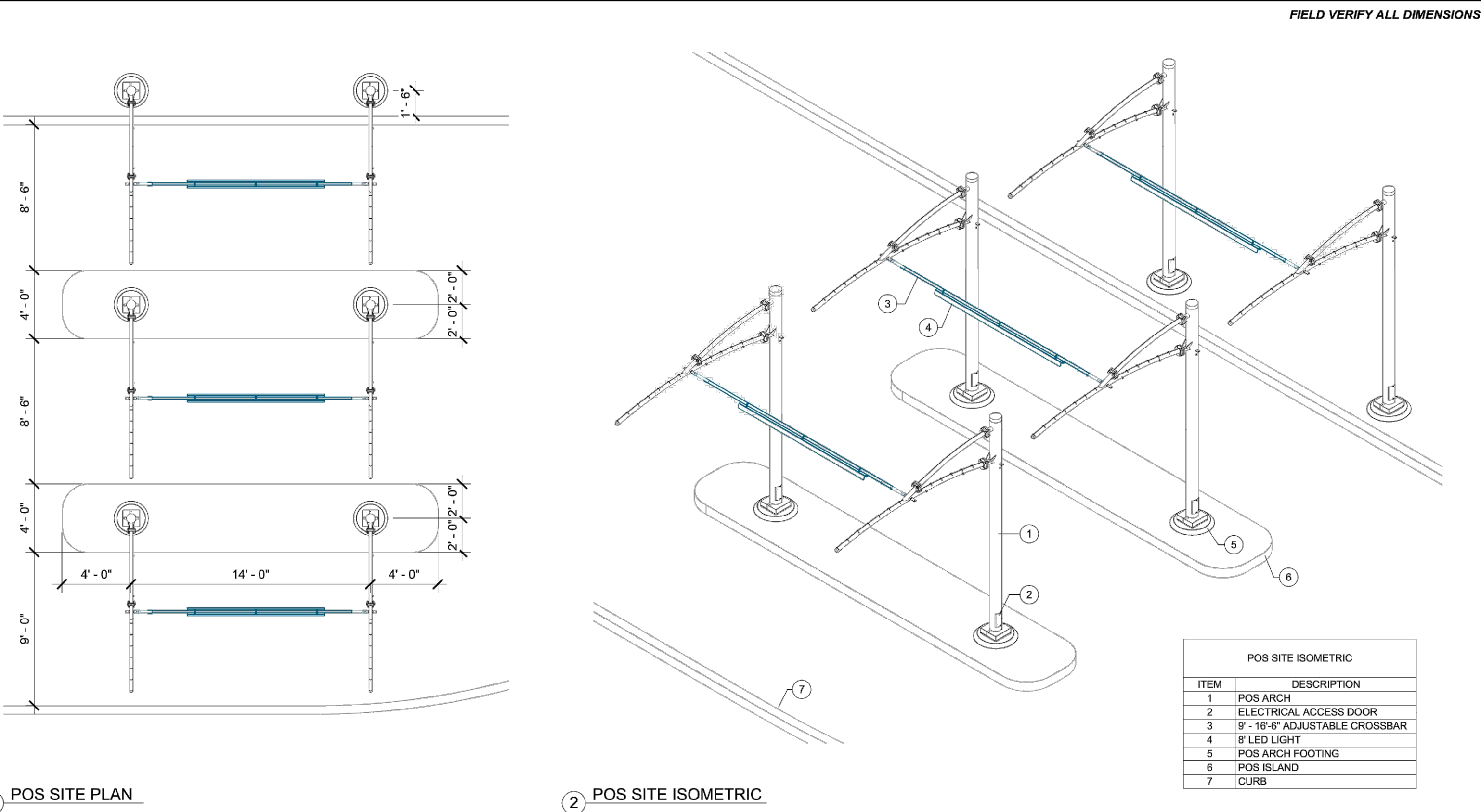
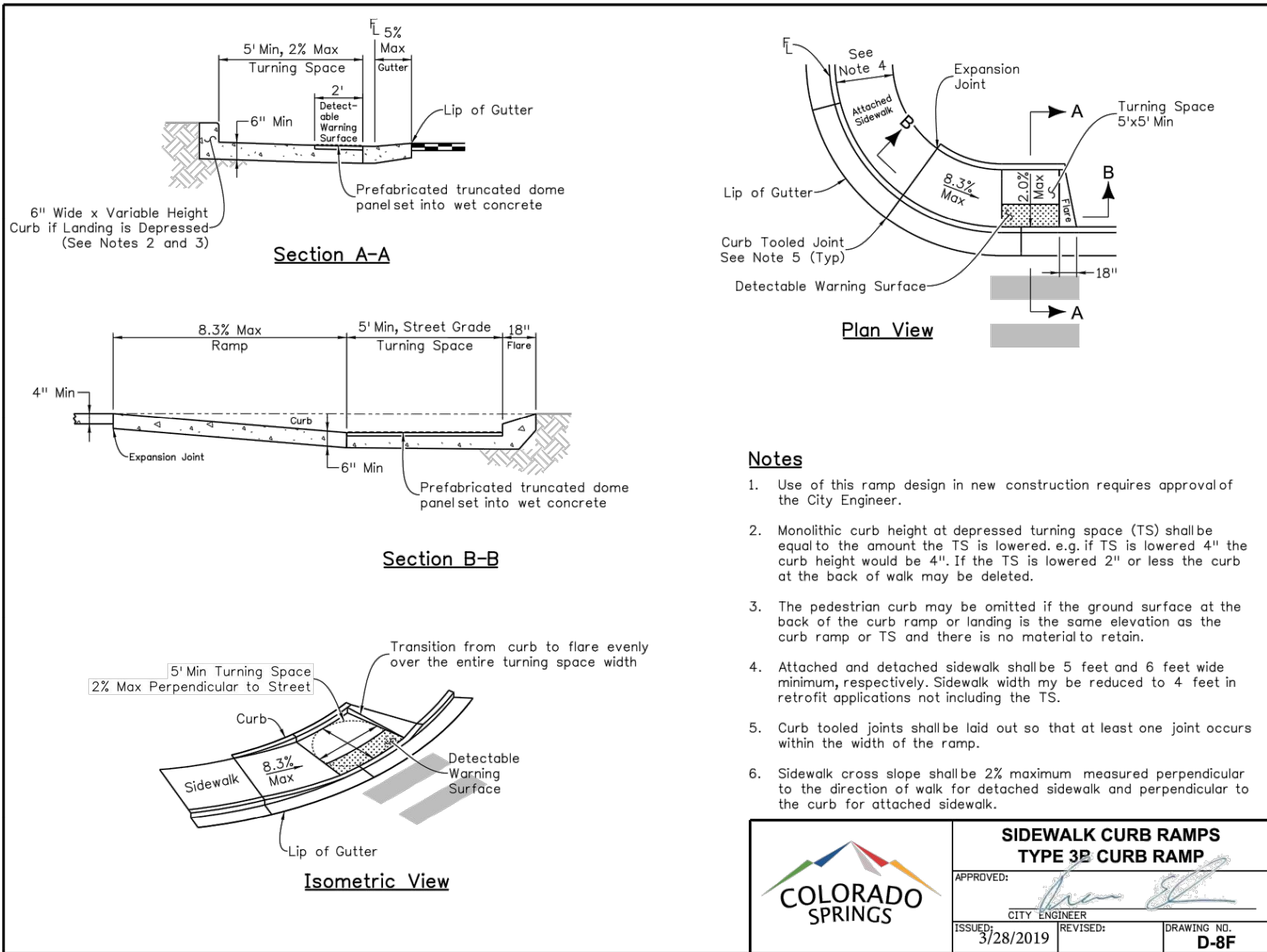
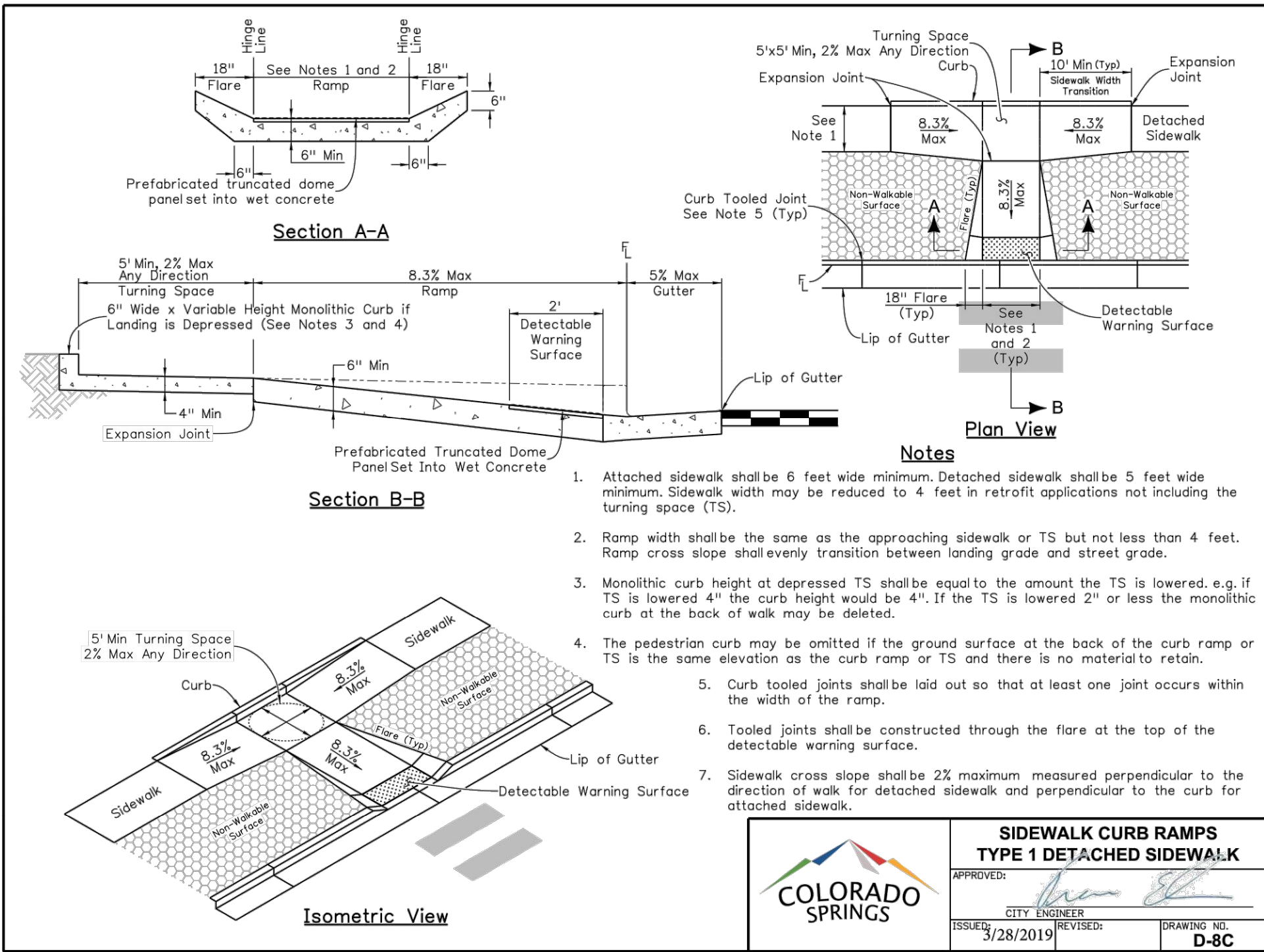
Know what's below. Call before you dig.

Cad file name: V:\020441 - Super Star Car Wash\020441-01-001 (ENG) - Super Star Car Wash- Falcon, CO\Engineering\Engineering Plans\SDP\020441-01-001-SAN.dwg

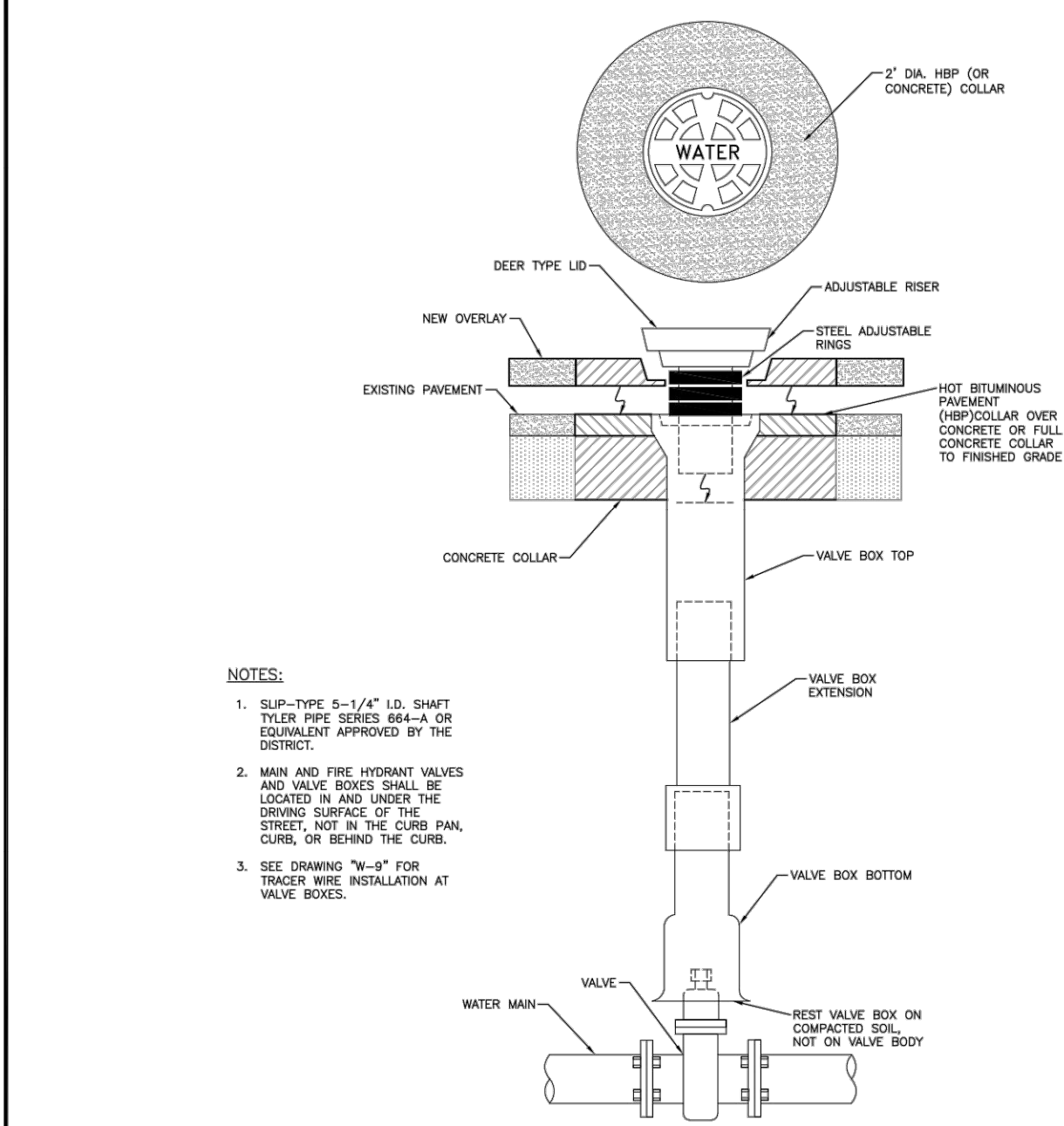








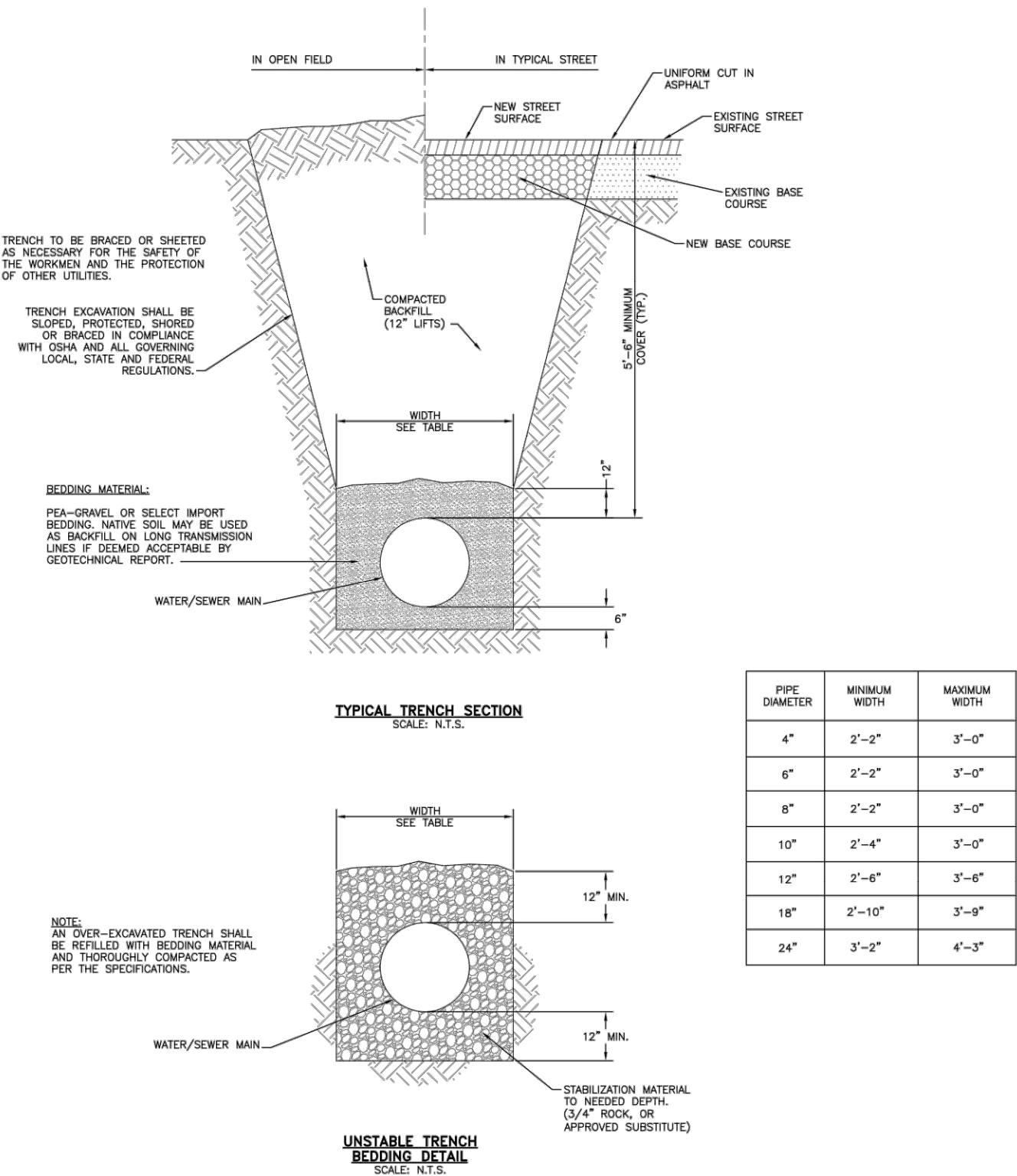




- NOTES:
1. SUB-TYPE 2-1/4\"/>
  2. MAIN AND FIRE HYDRANT VALVES AND VALVE BOXES SHALL BE LOCATED IN AND UNDER THE CURVED SURFACE OF THE CURB, NOT IN THE CURB PANEL, CURB, OR BEHIND THE CURB.
  3. SEE DRAWING "W-9" FOR TRACER WIRE INSTALLATION AT VALVE BOXES.

VALVE BOX INSTALLATION

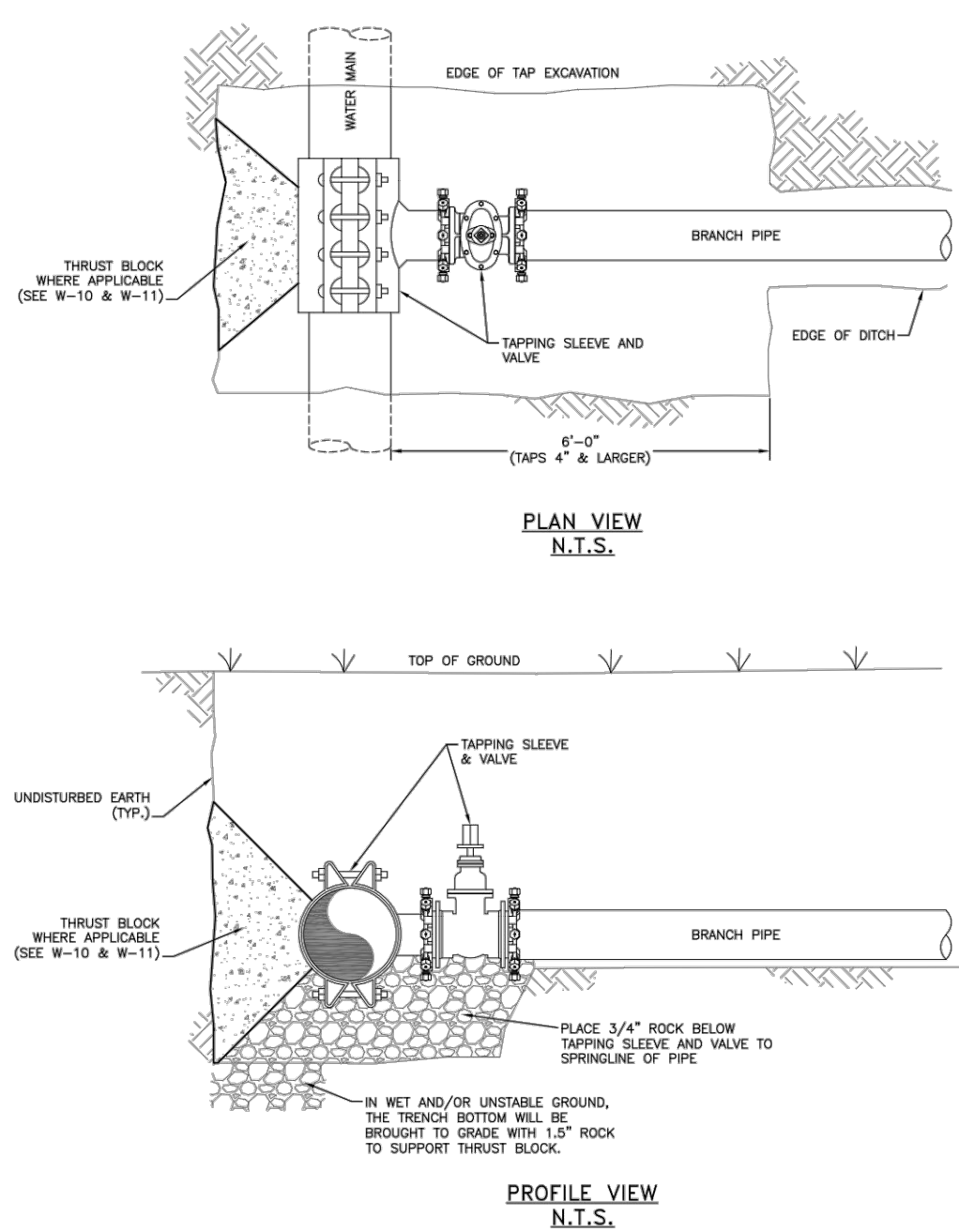
Drawn: GDM	Revised:	<b>WOODMEN HILLS</b> WATER & WASTEWATER SYSTEM	W-5
Date: MAR 2020	Revised:	METROPOLITAN DISTRICT STANDARD SPECIFICATIONS	
Scale: N.T.S.	Revised:		



PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	2'-2"	3'-0"
6"	2'-2"	3'-0"
8"	2'-2"	3'-0"
10"	2'-4"	3'-0"
12"	2'-6"	3'-8"
18"	2'-10"	3'-9"
24"	3'-2"	4'-3"

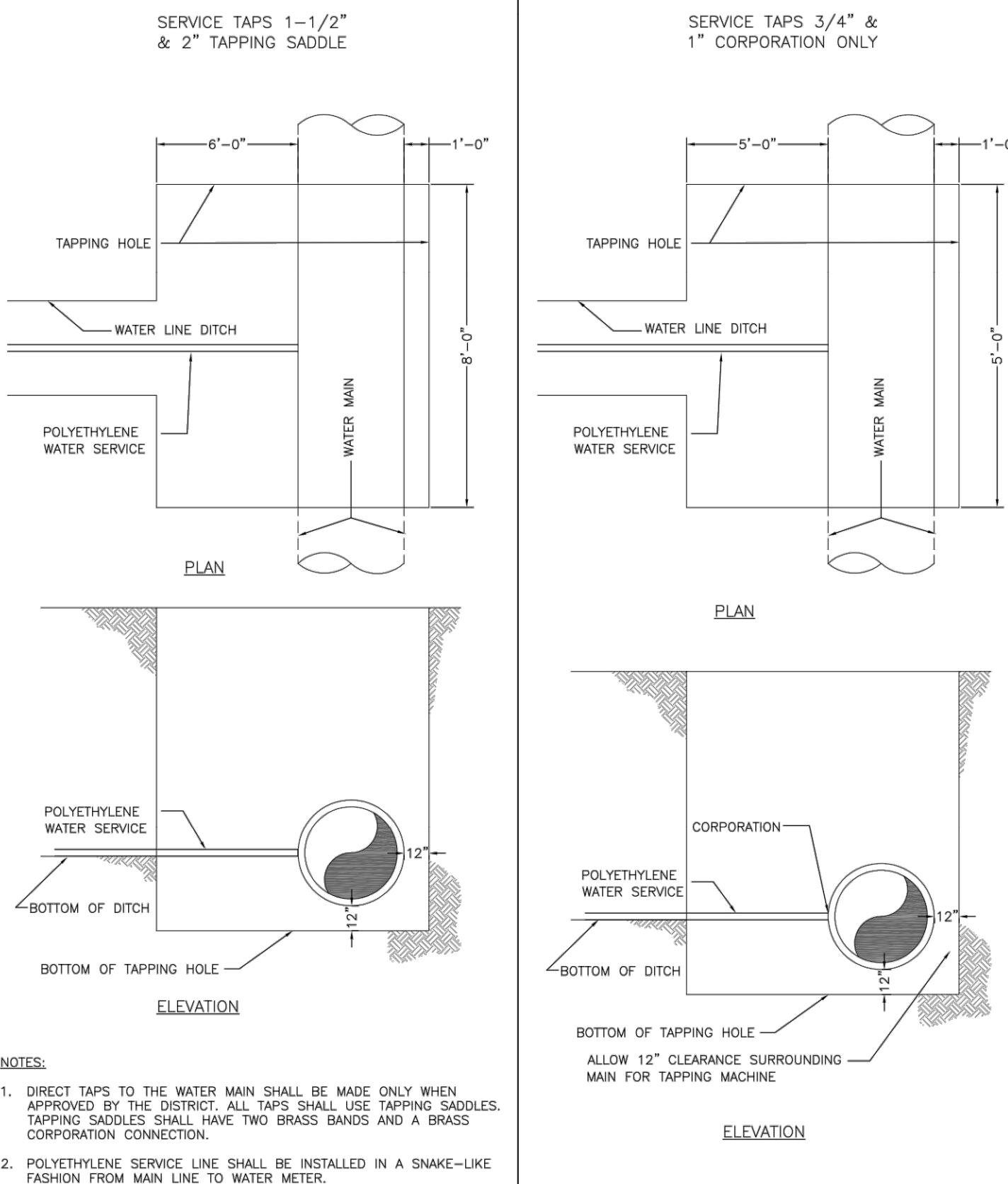
TYPICAL TRENCH CROSS-SECTION

Drawn: GDM	Revised:	<b>WOODMEN HILLS</b> WATER & WASTEWATER SYSTEM	W-12
Date: MAR 2020	Revised:	METROPOLITAN DISTRICT STANDARD SPECIFICATIONS	
Scale: N.T.S.	Revised:		



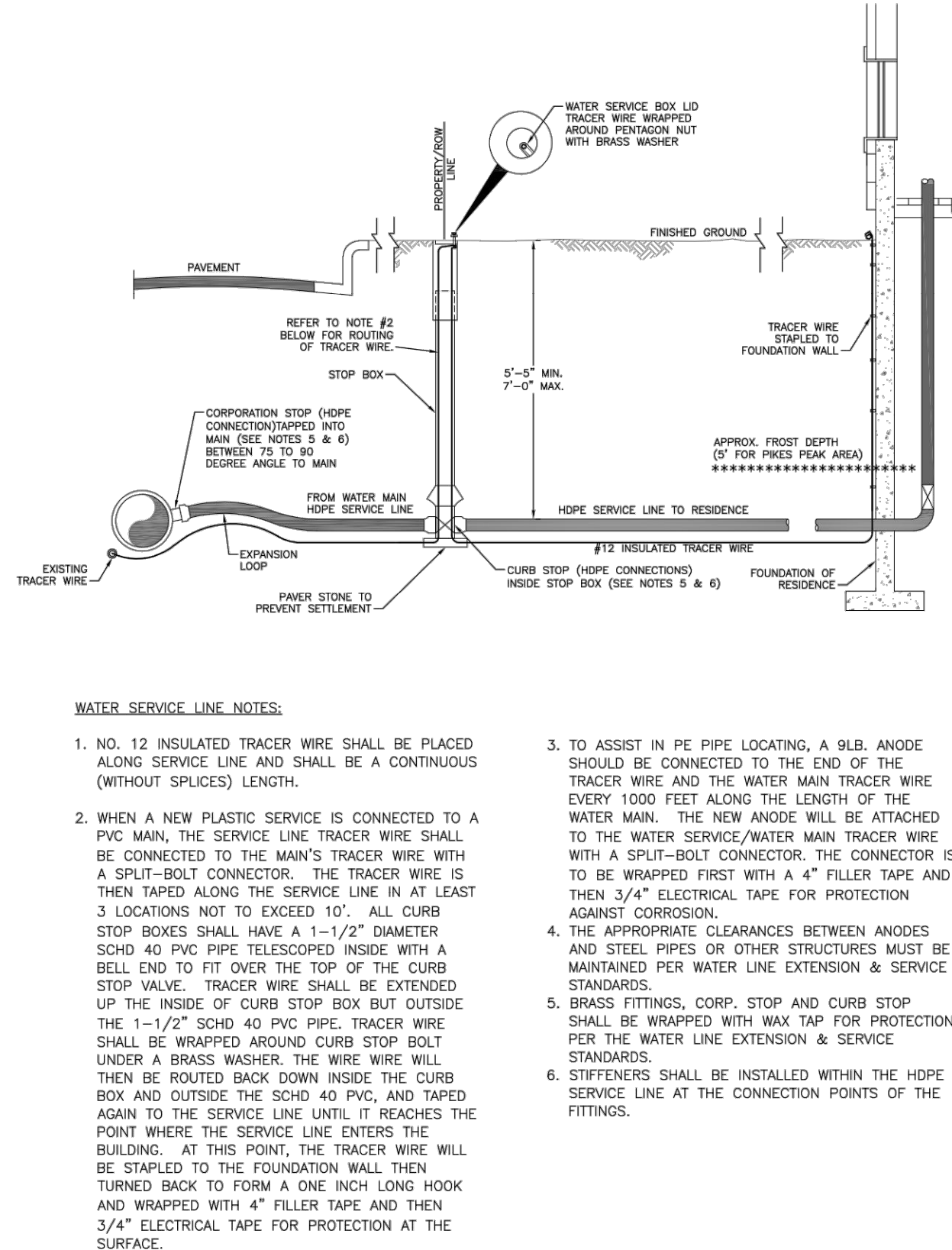
PIPE TAPPING DETAIL

Drawn: GDM	Revised:	<b>WOODMEN HILLS</b> WATER & WASTEWATER SYSTEM	W-21
Date: MAR 2020	Revised:	METROPOLITAN DISTRICT STANDARD SPECIFICATIONS	
Scale: N.T.S.	Revised:		



TAPPING DETAIL - 3/4" THRU 2"

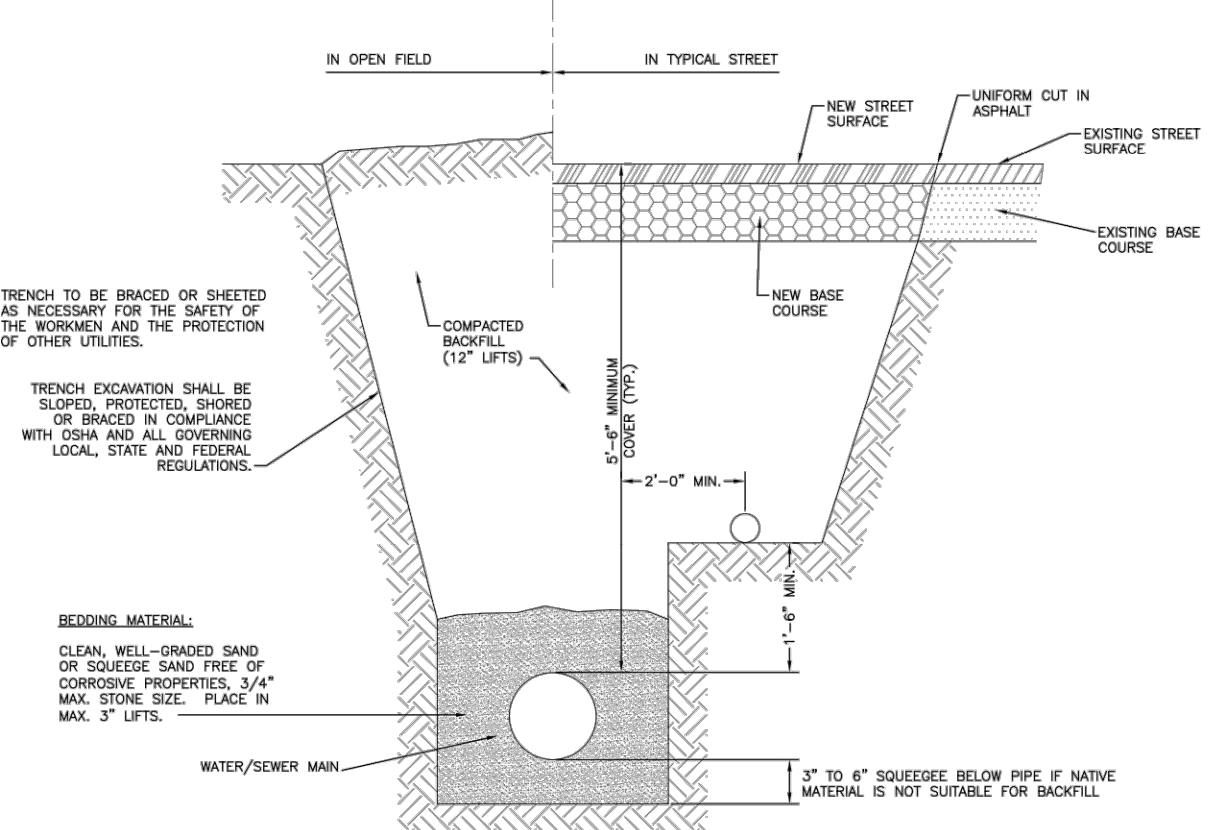
Drawn: GDM	Revised:	<b>WOODMEN HILLS</b> WATER & WASTEWATER SYSTEM	W-32
Date: MAR 2020	Revised:	METROPOLITAN DISTRICT STANDARD SPECIFICATIONS	
Scale: N.T.S.	Revised:		



- WATER SERVICE LINE NOTES:
1. NO. 12 INSULATED TRACER WIRE SHALL BE PLACED ALONG SERVICE LINE AND SHALL BE A CONTINUOUS (WITHOUT SPLICES) LENGTH.
  2. WHEN A NEW PLASTIC SERVICE IS CONNECTED TO A PVC MAIN, THE SERVICE LINE TRACER WIRE SHALL BE CONNECTED TO THE MAIN'S TRACER WIRE WITH A SPLIT-BOLT CONNECTOR. THE TRACER WIRE IS THEN TAPED ALONG THE SERVICE LINE IN AT LEAST 3 LOCATIONS NOT TO EXCEED 10'. ALL CURB STOP BOXES SHALL HAVE A 1-1/2" DIAMETER SCHD 40 PVC PIPE TELESKOPED INSIDE WITH A BELL END TO FIT OVER THE TOP OF THE CURB STOP VALVE. TRACER WIRE SHALL BE EXTENDED UP THE INSIDE OF CURB STOP BOX BUT OUTSIDE THE 1-1/2" SCHD 40 PVC PIPE. TRACER WIRE SHALL BE WRAPPED AROUND CURB STOP BOLT UNDER A BRASS WASHER. THE WIRE WILL THEN BE ROUTED BACK DOWN INSIDE THE CURB BOX AND OUTSIDE THE SCHD 40 PVC, AND TAPED AGAIN TO THE SERVICE LINE UNTIL IT REACHES THE POINT WHERE THE SERVICE LINE ENTERS THE BUILDING. AT THIS POINT, THE TRACER WIRE WILL BE STAPLED TO THE FOUNDATION WALL THEN TURNED BACK TO FORM A ONE INCH LONG HOOK AND WRAPPED WITH 4" ELECTRICAL TAPE FOR PROTECTION AT THE SURFACE.
  3. TO ASSIST IN PE PIPE LOCATING, A 9LB. ANODE SHOULD BE CONNECTED TO THE END OF THE TRACER WIRE AND THE WATER MAIN TRACER WIRE EVERY 1000 FEET ALONG THE LENGTH OF THE WATER MAIN. THE NEW ANODE WILL BE ATTACHED TO THE WATER SERVICE/WATER MAIN TRACER WIRE WITH A SPLIT-BOLT CONNECTOR. THE CONNECTOR IS TO BE WRAPPED FIRST WITH A 4" FILLER TAPE AND THEN 3/4" ELECTRICAL TAPE FOR PROTECTION AGAINST CORROSION.
  4. THE APPROPRIATE CLEARANCES BETWEEN ANODES AND STEEL PIPES OR OTHER STRUCTURES MUST BE MAINTAINED PER WATER LINE EXTENSION & SERVICE STANDARDS.
  5. BRASS FITTINGS, CORP. STOP AND CURB STOP SHALL BE WRAPPED WITH MAX TAP FOR PROTECTION PER THE WATER LINE EXTENSION & SERVICE STANDARDS.
  6. STIFFENERS SHALL BE INSTALLED WITHIN THE HOPE SERVICE LINE AT THE CONNECTION POINTS OF THE FITTINGS.

TYPICAL INSTALLATION FOR SERVICE LINE & STOP BOX

Drawn: GDM	Revised:	<b>WOODMEN HILLS</b> WATER & WASTEWATER SYSTEM	W-33
Date: MAR 2020	Revised:	METROPOLITAN DISTRICT STANDARD SPECIFICATIONS	
Scale: N.T.S.	Revised:		



- NOTES:
1. SPECIFIC CASE-BY-CASE APPROVAL BY THE DISTRICT SHALL BE REQUIRED PRIOR TO INSTALLATION OF WATER AND SEWER SERVICES IN A COMMON TRENCH.
  2. USE OF COMMON TRENCH FOR WATER AND SEWER SERVICES SHALL NOT BE PERMITTED IN PUBLIC RIGHT-OF-WAY OR BETWEEN THE WATER CORPORATION STOP AND CURB STOP.
  3. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND ANY OTHER APPLICABLE CODE OR REGULATION.

TYP. SERVICE LINE TRENCH - COMMON DITCH FOR WATER/SEWER

Drawn: GDM	Revised:	<b>WOODMEN HILLS</b> WATER & WASTEWATER SYSTEM	W-34
Date: MAR 2020	Revised:	METROPOLITAN DISTRICT STANDARD SPECIFICATIONS	
Scale: N.T.S.	Revised:		

REVISION	DESCRIPTION	DATE
1	SSCW - FALCON MARKETPLACE - 2ND SDP SUBMITTAL	07/15/2021
2	SSCW - FALCON MARKETPLACE - 3RD SDP SUBMITTAL	01/13/2022

DESIGN	DRAWN	CHKD
SWK	SWK	TOP
SCALE	H: 1" = XXX'	V: 1" = XXX'
JOB No.	020441-01-001	
DATE	02/09/2021	
SHEET	C7.2	



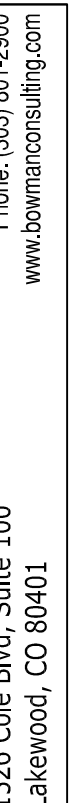




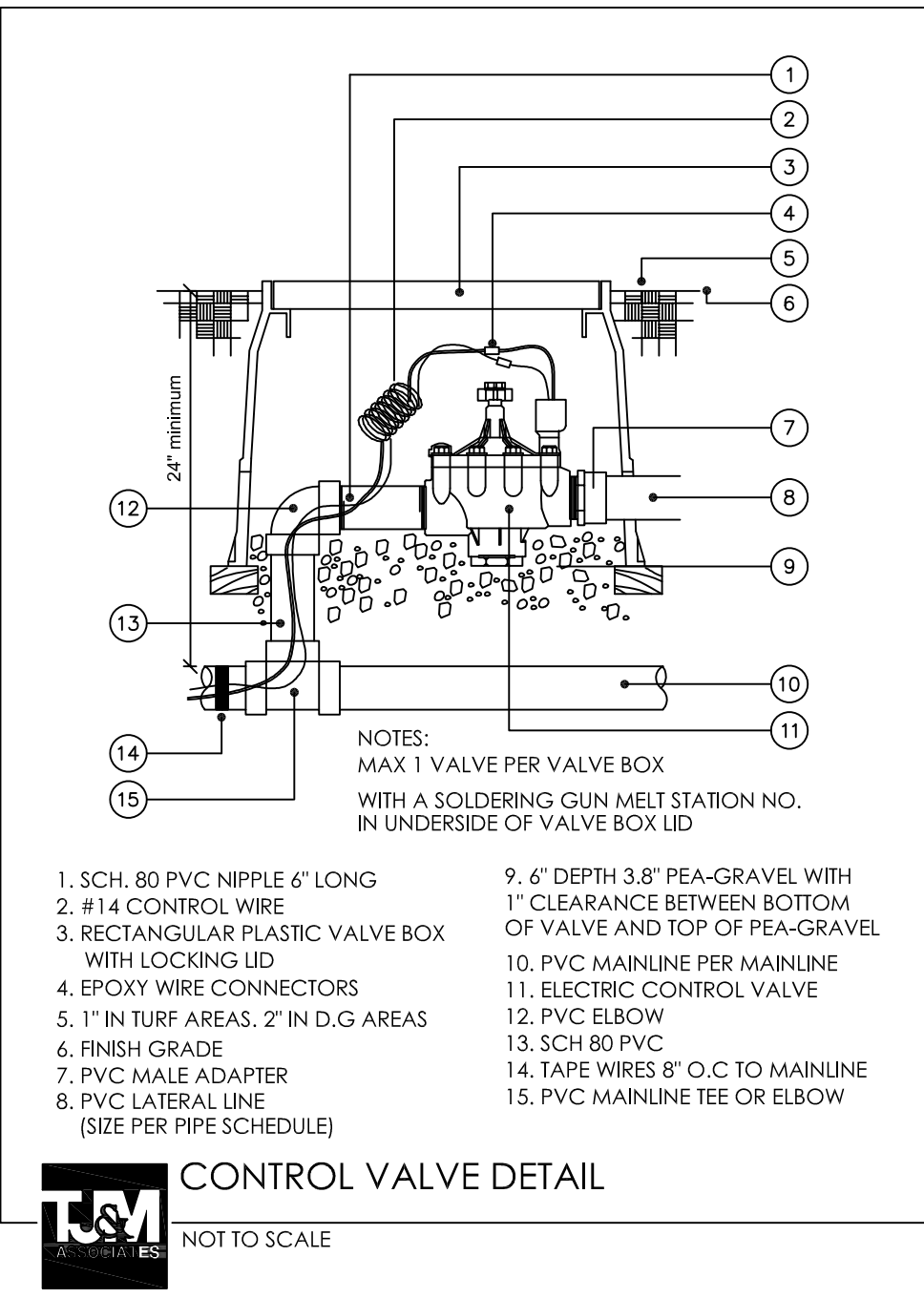






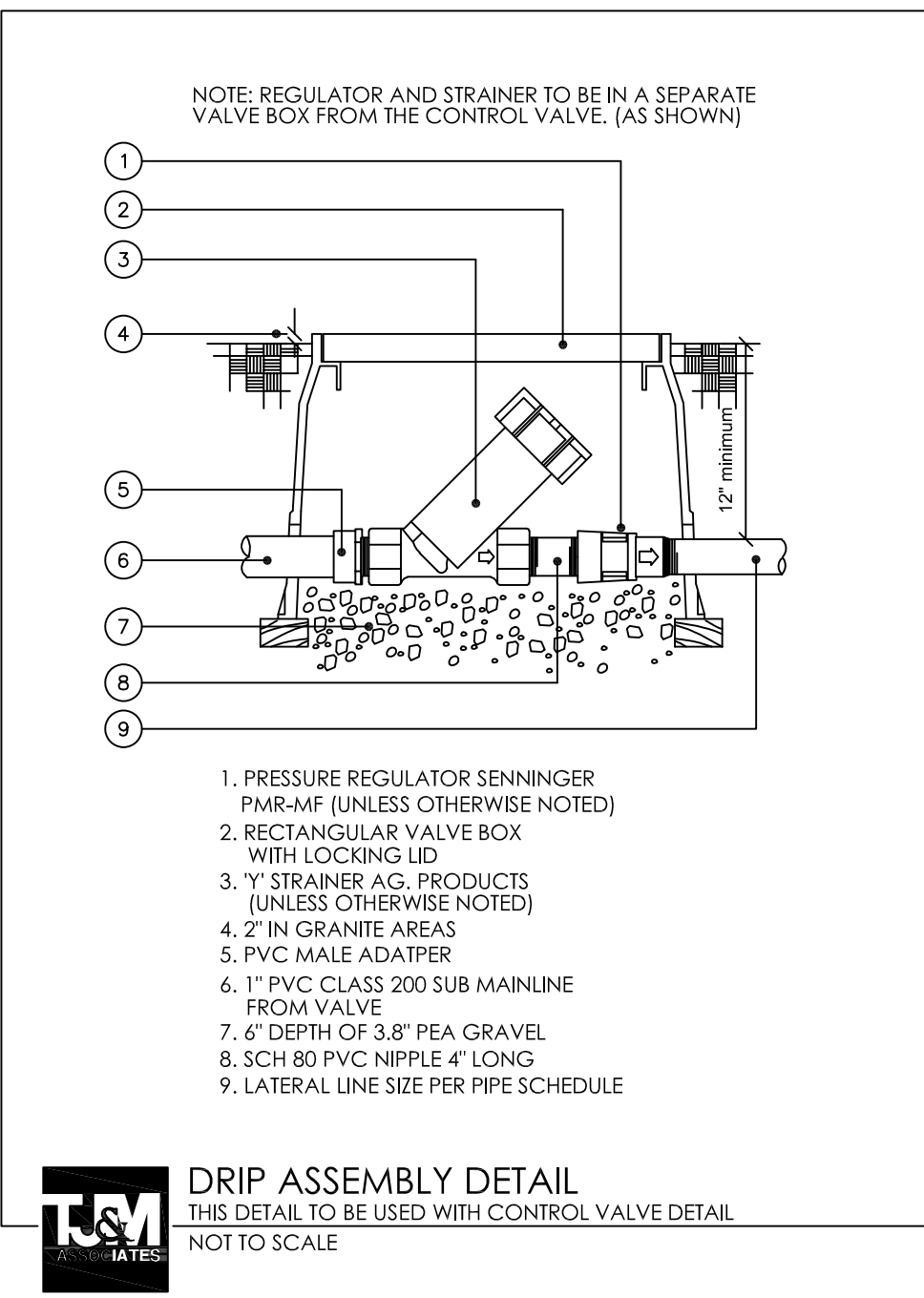






CONTROL VALVE DETAIL

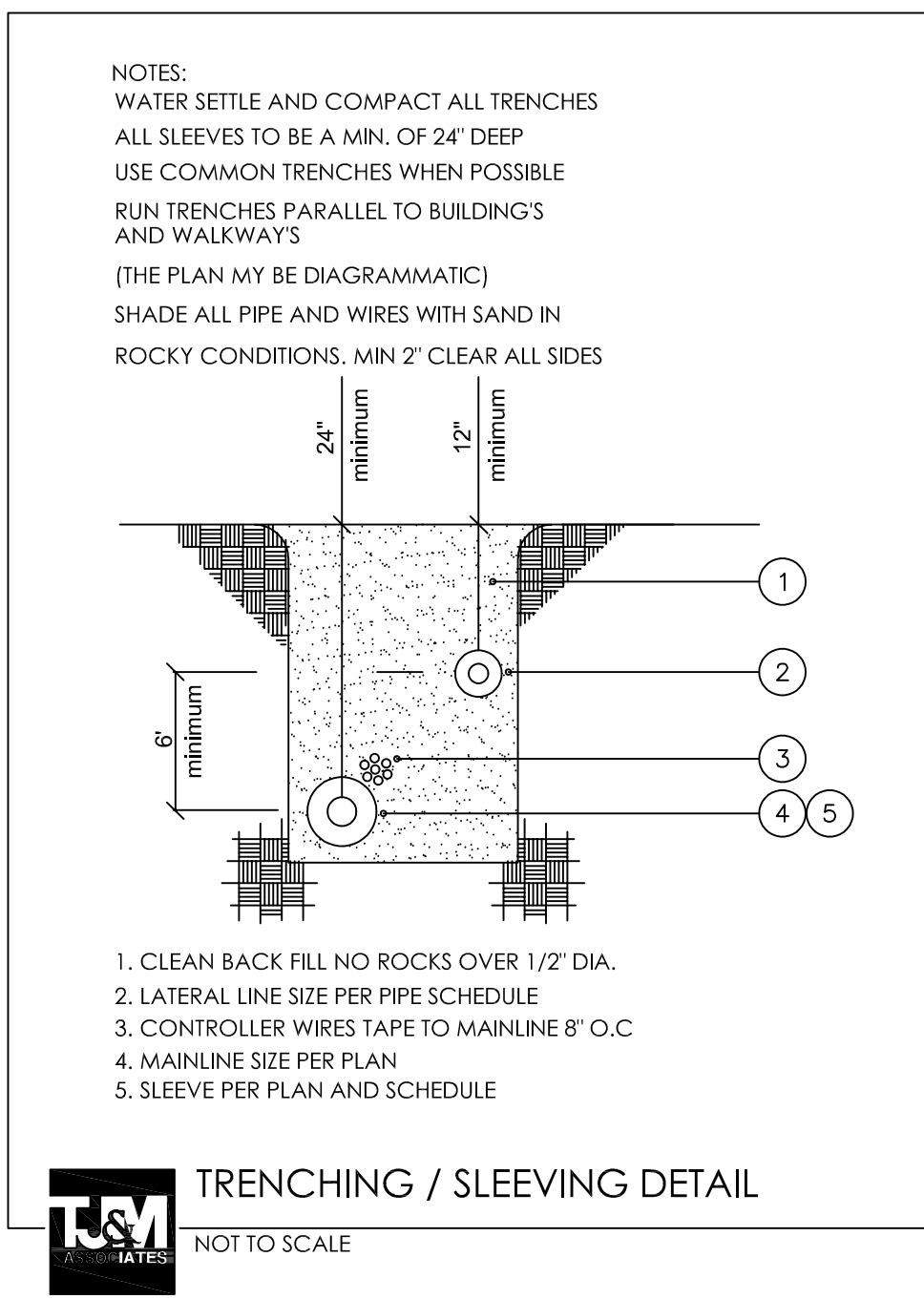
NOT TO SCALE



DRIP ASSEMBLY DETAIL

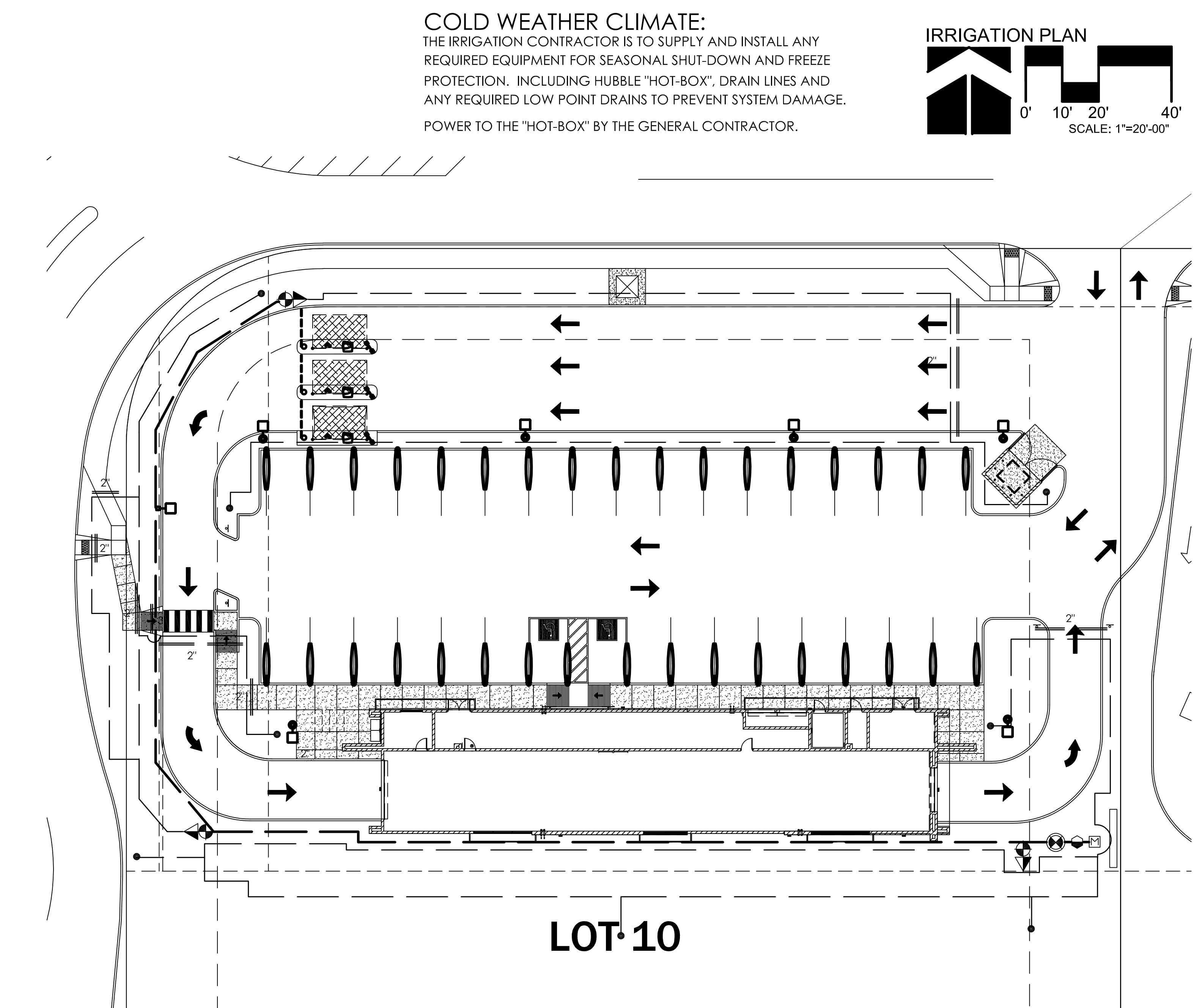
THIS DETAIL TO BE USED WITH CONTROL VALVE DETAIL

NOT TO SCALE

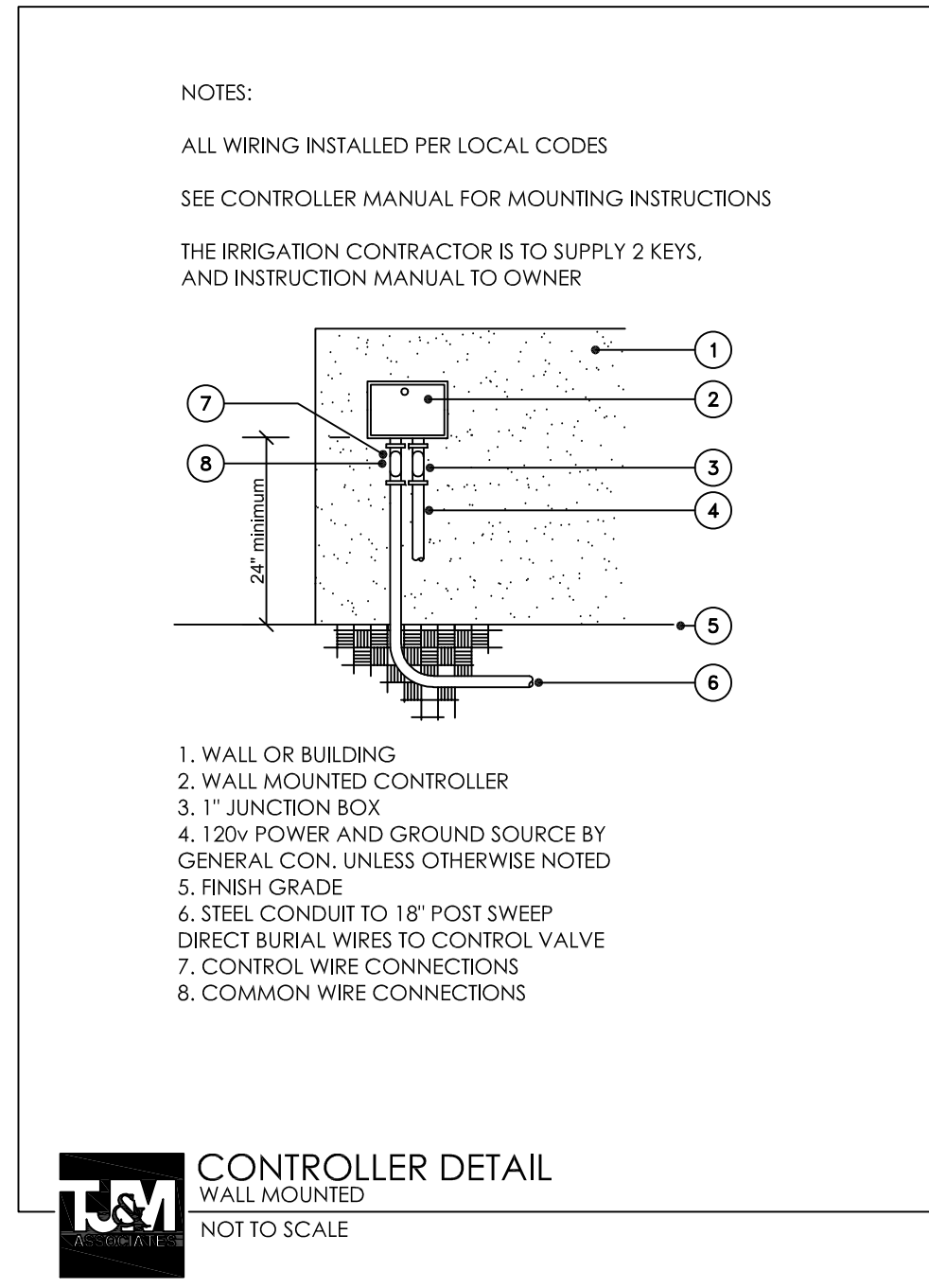


TRENCHING / SLEEVING DETAIL

NOT TO SCALE



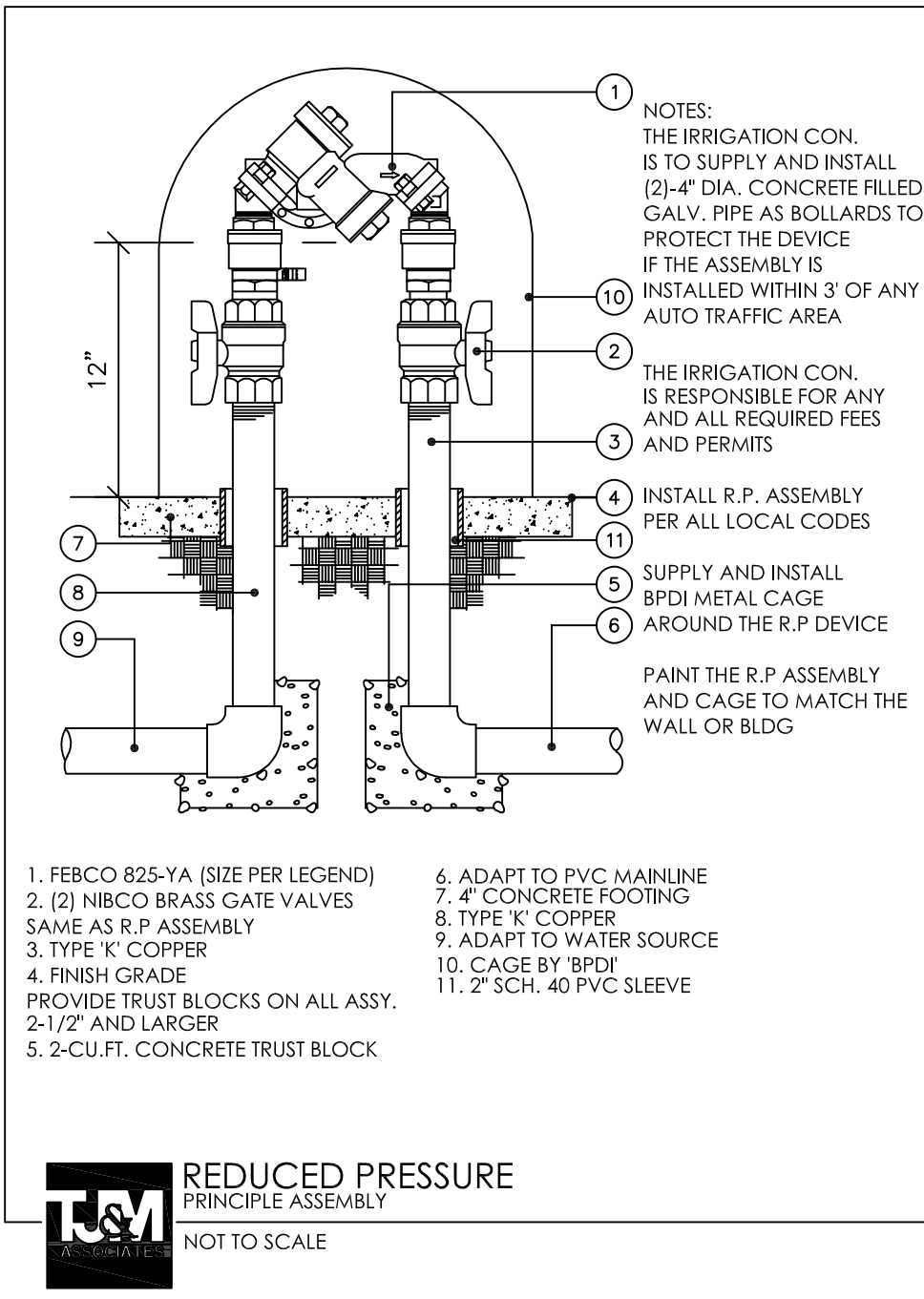
LOT 10



CONTROLLER DETAIL

WALL MOUNTED

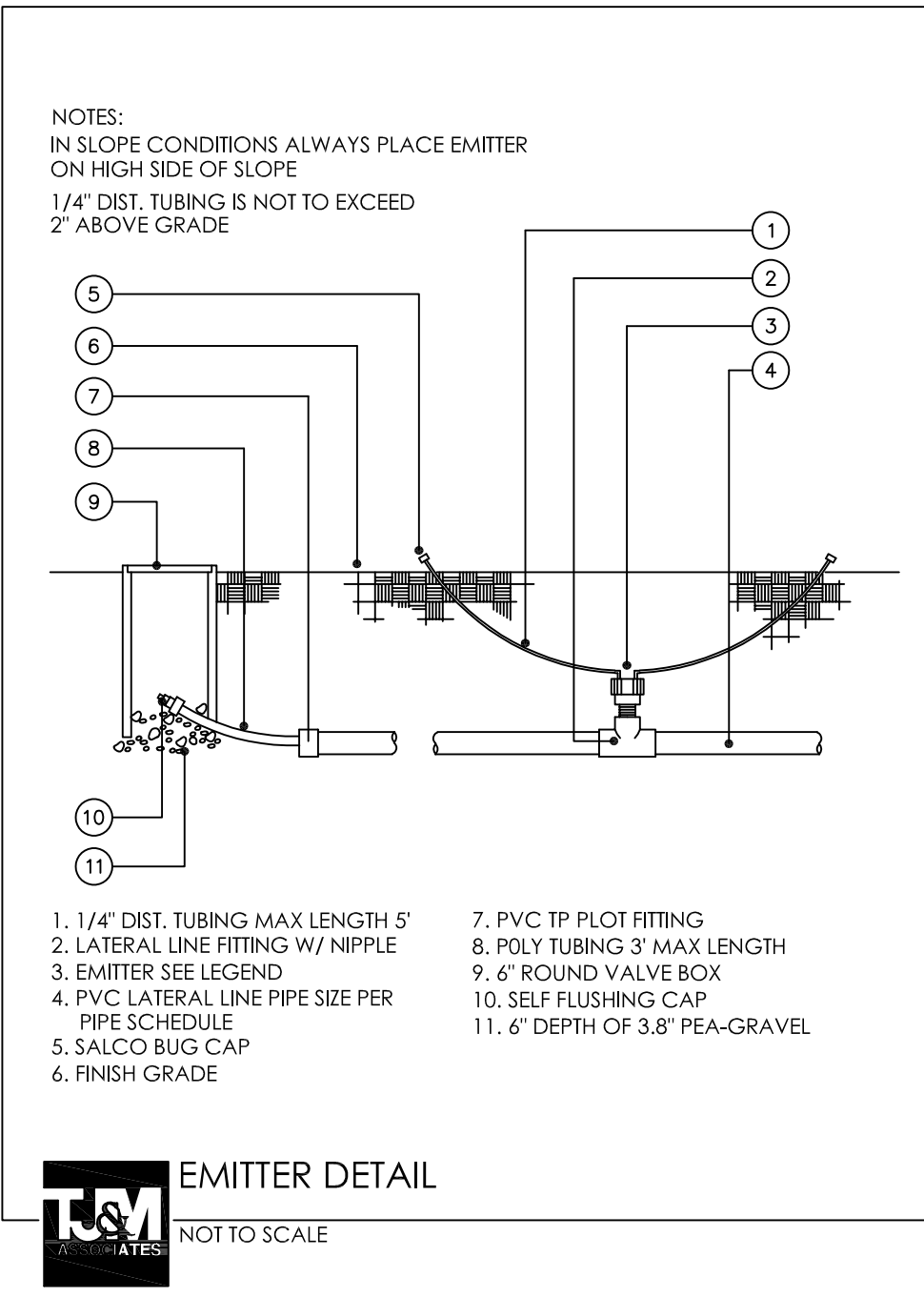
NOT TO SCALE



REDUCED PRESSURE

PRINCIPLE ASSEMBLY

NOT TO SCALE



EMITTER DETAIL

NOT TO SCALE

**CLARITY NOTE:**  
FOR GRAPHIC CLARITY THE EMITTERS HAVE NOT BEEN SHOWN  
VERIFY EMITTER COUNT WITH PLANT COUNT AND EMITTER SCHEDULE.

FOR GRAPHIC CLARITY THE SLEEVES HAVE NOT BEEN SHOWN. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR ALL SLEEVES PER THE FOLLOWING SCHEDULE.

**SLEEVING SCHEDULE:**  
WIRES 2" SCH. 40 PVC (QTY AS REQUIRED)  
MAIN LINE 4" SCH. 40 PVC (OR DBL THE MAINLINE SIZE)  
DRIP LATERAL 2" SCH. 40 PVC  
TURF LATERAL 3" SCH. 40 PVC (OR DBL THE LATERAL LINE SIZE)

PLANT SIZE	GA. PER HR.	EMITTER SIZE
36" BOX	6	(1) HUNTER MPE-20
24" BOX	4	(1) HUNTER MPE-20
15 GALLON	4	(1) HUNTER MPE-10
5 GALLON	1	(1) HUNTER HEB-10
1 GALLON	1	(1) HUNTER HEB-10

**NOTES:**  
EMITTER SIZING AND QUANTITIES MAY VARY DEPENDING ON SOIL TYPE AND CLIMATE CONDITIONS VERIFY PRIOR TO BID. ALL NON-METALIC WATER AND IRRIGATION PIPING LARGER THAN 2" REQUIRE MIN. 18 AWA INSULATED COPPER TRACER WIRE SUITABLE FOR DIRECT BURIAL

THE IRRIGATION CONTRACTOR MAY SUBSTITUTE  
(1) MULTI EMITTER FOR (6) SINGLE EMITTERS IN GROUND AREAS AS LONG AS DIST. TUBING DOES NOT EXCEED 5 FT

**FOUNDATION NOTE:**  
NO END CAPS ARE TO BE PLACED WITHIN 15' OF ANY FOUNDATION OR FOOTING. ADJUST LAYOUT AS REQUIRED.  
NO HIGH WATER USE, OR HIGH FLOW PRODUCTS ARE TO BE USED WITHIN 15' OF ANY FOUNDATION OR FOOTING. THE IRRIGATION IS TO BE MONITORED ON A REGULAR BASIS TO AVOID SOIL SATURATION AROUND FOUNDATIONS AND FOOTINGS. THIS IRRIGATION PLAN IS DIAGRAMMATIC ADJUST LAYOUT AS REQUIRED.

- IRRIGATION LEGEND**
- 1" LANDSCAPE METER
  - FEBCO 825-YA-1" R.P. ASSY. W/ GUARDSHACK CAGE PAINTED TO MATCH BUILDING
  - HUNTER ICV-(SIZE PER MAINLINE) MASTER VALVE INSTALL IN VALVE BOX ADJACENT TO BACKFLOW
  - HUNTER DRIP CONTROL ZONE KIT  
PCZ-101-25 (30gph to 600gph) (.5gpm to 10gpm)  
ICZ-101-25 (601gph to 1,200gph) (10gpm to 20gpm)
  - HUNTER I-CORE-1C-600-M (MODULES AS REQUIRED)  
6 STATION CONTROLLER (POWER PER GENERAL CONTRACTOR)
  - HUNTER HEB-10 (1/2" THREADED) PRESSURE COMP. SINGLE PORT EMITTER  
HUNTER MPE-(SIZE PER SCHEDULE) (1/2" THREADED) PRESSURE COMP. MULTI PORT EMITTER
  - 1.5" MAINLINE (SCH40)
  - CLASS 200-3/4" DRIP LATERAL LINE
  - AG. PRODUCTS SELF FLUSHING ENDCAP (SEE FOUNDATION NOTE)
  - SCH 40 PVC SLEEVE (SEE SLEEVING SCHEDULE)

PIPE SIZE	GPM	PIPE CLASS
1/2"	0-5	315
3/4"	6-10	200
1"	11-15	200
1 1/4"	16-25	200
1 1/2"	26-35	200
2"	36-60	200

**T.J. McQUEEN & ASSOCIATES, INC.**  
LANDSCAPE ARCHITECTURE  
URBAN DESIGN  
SITE PLANNING  
10450 N. 74th Street , Suite 120  
Scottsdale, Arizona 85258  
P.(602)265-0320  
EMAIL: timmcqueen@tjmla.net



Know what's below.  
Call before you dig.

SEAL  
TIMOTHY J. McQUEEN  
914  
04/15/2021  
09.30.21  
Original Seal to be returned  
STATE OF COLORADO  
LICENSED LANDSCAPE ARCHITECT

DESIGN	DRAIN	CHK
SWK	SWK	TOP
SCALE	1/4" = 1'	
JOB No.	020441-01-001	
DATE :	02/09/2021	
SHEET	La.02	

**Bowman**

Phone: (303) 901-2800  
www.bowmanconsulting.com  
1526 Cole Blvd, Suite 100  
Lakewood, CO 80401

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10  
SITE DEVELOPMENT PLAN  
EL PASO COUNTY  
COLORADO



UNDERGROUND SPRINKLER SYSTEM

Part 1 – General

1.01 WORK INCLUDED

A. The work included under these specifications shall consist of the furnishing of all labor, materials, permits, tools, and equipment necessary for the complete installation of a sprinkler irrigation system in accordance with the following specifications and accompanying drawings.

B. It is the intent of these drawings and specifications to form a guide for a complete installation, and although some items may not be specifically noted, but are reasonably necessary for a complete installation, they shall be furnished under this contract. Sprinklers shall be located and spaced so that adequate overlapping of the spray will provide uniform head to head(100% coverage). The system shall efficiently and evenly irrigate all areas, and shall be complete in every respect, ready for operation by the Owner.

C. It is the responsibility of the Irrigation Contractor to provide 100% coverage to all landscape areas.

1.02 CONTRACTOR'S QUALIFICATIONS

A. Installers shall be licensed irrigation contractors with experience in the installation of automatic underground lawn sprinkling systems. All work shall be performed in a professional workmanlike manner by mechanics skilled in the trade.

B. The Contractor shall be responsible for any damage to any covered by these specifications, under his care and custody, until final acceptance of his work.

C. The Contractor shall obtain all permits from, pay required fees to, and arrange any necessary inspections by any government agency having jurisdiction over the work.

1.03 VERIFICATION OF DRAWINGS AND SPECIFICATIONS

A. It shall be the Contractor's responsibility to carefully examine the drawings and specifications, and to visit the site in order to check existing conditions prior to bidding. Any conflict or errors shall be immediately brought to the attention of the Landscape Architect for interpretation or instructions. Otherwise, any changes necessary to meet existing conditions, shall be made at the Contractor's expense.

B. It is the Irrigation Contractor's responsibility to verify water pressure, water source, and size in the field prior to construction. Should a discrepancy exist between design pressure and the field pressure the Landscape Architect shall be notified immediately.

1.04 WORKING CONDITIONS

A. The Contractor shall confine his operations to the areas allotted to him by the Owner, for his work for material and equipment storage.

B. The Contractor shall continuously maintain a competent superintendent, satisfactory to the Owner, on the work during progress, with authority to act for the Contractor in all matters pertaining to the work.

C. The Contractor shall not assign nor sublet any portion of this work without written approval by the Owner.

D. The Contractor shall be responsible for staking out the system from the drawings, using the property lines and building dimensions as a guide.

E. The Contractor shall coordinate his work with that of the other trades, so as to avoid any conflict, and carry the installations to a rapid completion without any unnecessary delays.

PART 2 – PRODUCTS

2.01 PIPING

A. All pressure main piping, on the supply side of the zone valves, shall be class 200 PVC with integrally formed bell-tie joint couplers. All fittings shall be solvent welded, schedule 40 PVC.

B. All lateral piping, on the discharge side of the zone valves, two inches (2") and under, shall be class 200 PVC. Fittings shall be schedule 40 PVC material. 1/2" pvc to be class 315.

C. All plastic to metal shall be made with PVC schedule 40 male adapters or PVC schedule 80 nipples. Joint compound for such connections shall be Permatest Type II teflon tape or a prior approved equivalent.

D. Where pipes are installed under roads, drives, parking areas or walks, schedule 40 PVC sleeves shall be provided for the lines. In planting areas, where cultivation might damage shallow plastic piping, protective sleeves must be provided, unless copper tubing is installed. Risers in flower beds and shrubbery shall be schedule 80 PVC.

2.02 SPRINKLER HEADS

A. Emitter heads shall not be on PVC laterals, or prior approved equivalent.

2.03 AUTOMATIC CONTROLLER

A. Unit features shall include mechanical time control design, adjustable time setting up to 60 minutes per station, 24-hour clock, 14-day calendar, and automatic rapid advance. Unit shall be UL listed and shall operate on 120 volt, 1 phase, 60 Hertz power. General Contractor to bring power to controller. Irrigation Contractor to hardwire to controller, see detail.

2.04 QUICKCOUPLING VALVES

A. Furnish and install where shown on the drawings quick-coupler with swivel and hose bib, 3/4" size or prior approved equivalent. They shall be mounted on one inch (1") copper swing joint risers, and the tops shall be set flush with the top of the planters. Furnish and deliver to the Owner double-lug coupler key complete with one inch (1") hose swivel for connecting to the above valves. Also furnish two (2) lockout cover key.

2.05 ELECTRICAL CONTROL CABLE

A. All electrical control and ground wire shall be irrigation control cable of size as required. All wiring to be used for connecting the automatic remote control valve to the automatic controllers shall be Type "UF", 600 volt, stranded, or solid copper, single conductor wire with PVC insulation and bear UL approval for direct underground burial feeder cable.

B. All control or "hot" wires shall be on one color and all common or "ground" wire shall be or another color(white).

C. Verifications of wire types and installation procedures shall be checked to conform to local codes.

D. All electric control cable shall be of size as determined by the equipment manufacturer and shall be installed in the piping trenches wherever possible and in the manner recommended by the manufacturer, leaving slack in the wire. Expansion joints in the wire may be provided at 200-foot intervals by making 5 or 6 turns of the wire around a piece of 1/2 inch pipe. Where it is necessary to run wire in a separate trench, the wire shall be a minimum cover of twelve (12") inches.

PART 3 – INSTALLATION

3.01 PROTECTION OF UTILITIES, IRRIGATION SYSTEM, ETC.

A. The Contractor shall verify the location of all utilities and note location of utilities, irrigation piping and underground obstructions. The contractor shall be responsible for the cost of repairing buried conduit, cables or pipelines damaged during the installation of the irrigation system.

B. The Contractor shall clearly make and maintain markers showing locations of irrigation system wiring and piping installed in order that other contractors may avoid damaging this work.

C. The Contractor shall take necessary precautions to protect site conditions and plant materials which are to remain. Should damage be incurred, Contractor shall repair damage to its original condition or furnish and install equal replacement at his expense.

D. The Contractor shall coordinate with the Landscape Architect to provide irrigation to existing materials.

E. contact blue stake prior to digging.

3.02 EXCAVATION

A. The Contractor shall do all necessary excavation for the proper installation of his work. Machine trenchers used on the site shall be of an approved type to cut smooth-bottom trenches on uniform slopes. Trenches shall be no wider than necessary to lay the pipe, except where necessary to make joints. Over excavating shall be backfilled and carefully tamped to provide a smooth and firm bearing surface for laying the pipe. When necessary, Contractor must provide bermsides and lights for public protection. Minimum depth of cover shall be at least twenty four (24) inches for the main piping, and at least twelve (12) inches for the lateral branch lines.

3.03 PIPE INSTALLATION

A. All pipe lines shall be installed in the locations and of the sizes indicated, and of the materials specified. Parallel piping may be installed in the same trench. Piping shall be laid accurately to the line and grade required, with full uniform bearing on the trench bottom. No piping shall be laid on soft fill or other unstable material. No direct contact, with other piping or structures, will be permitted at crossing. Interior of piping shall be kept clear of foreign matter before installation, and shall be kept clean by means of plugged or capped ends after lowering into the trench. The supply main lines shall be flushed out and tested for leaks with control valves in place, before backfilling the pits. All lateral piping sections shall be flushed out before sprinkler heads are attached. All pipe shall be installed in strict accordance with recommendations of the manufacturer. This shall apply to thrust blocking, handling, storage, depth of cover, expansion allowance, testing, etc.

B. Under existing drives or sidewalks, the Contractor shall either saw cut concrete and replace it to the former condition or install the pipe by boring or jacking under the area. pvc sleeves to be at a 24" depth

3.04 BACKFILLING

A. As soon as the work has been installed, inspected and accepted, all excavations and trenches shall be filled and water settled with fine earth materials, free from clods, rocks, or other unsuitable substances. Trenches must be left flush with adjacent finished grade after completion of the work. Flooding of trenches will be permitted downstream of zone valves. Care shall be taken to place any previously tilted and fertilized soil in the top portion of the trench and subsoil will not be allowed in the top six (6) inches of the backfill.

13.05 SPRINKLER HEADS

A. Sprinklers shall be set plumb and level with the turf at locations shown on the drawings. In lawn areas where grass has not been established, the heads shall be installed in temporary risers at least three (3) inches above the grade. After the turf is established, the Contractor shall, within ten (10) days after notification, lower the heads to their permanent positions flush with the finished grade. This elevation is critical and Contractor shall exercise care to set them exactly at grade – never below.

3.06 AUTOMATIC VALVES

A. Each sprinkler zone shall be operated by automatic electric valves in the sizes indicated on the drawings. Each valve shall be provided with a built-in pressure regulator capable of holding a steady downstream pressure, regardless of fluctuations in the main supply pressure. The valves shall be installed where shown and supplied with a tag on which the valve's zone number shall be plainly marked.

B. All valves to be in valve boxes. Valve boxes to have a pea-gravel spring per detail.

3.07 WATER SUPPLY

A. Connection shall be made to the sprinkler outside the building as shown on the drawings.

B. Water meter to be supplied by others. Unless otherwise noted.

3.08 ELECTRICAL WORK

A. The Electrical Contractor will provide a single source of electrical power for the irrigation system as shown on the drawings. The Underground Sprinkler System Contractor shall furnish and install complete and properly operating all the required electrical work for the lawn irrigation system. This shall include all power and control wiring along with switches, safety switches, relays, transformers, fuses, conduit, wiring devices, etc. required for a properly

operating system.

B. All electrical work shall be done in accordance with the National Electrical Code and local ordinances.

C. All wire connections, at remote control valves (either direct buried or in control boxes) and at all wire splices, shall be left with sufficient "slack" so that in case of repair the valve bonnet or splice may be brought to the surface without disconnecting the wires.

D. Each remote control valve or group of remote control valves, which are to be connected to one station of a controller, shall have wire sizes as shown in the wiring diagrams on the drawings or as specified. All remote control valves, which are to be connected to the same controller, shall be connected to a common ground wire to a size as shown on the drawings or as specified. Each individual controller shall have a separate common ground wire system entirely independent of the common ground wire system of all other controllers. Only those remote control valves which are being controlled by one specific controller shall be connected to that controller's common ground wire system.

3.09 TESTING

A. After all supports, anchors, and thrust blocks are in place, the line shall be tested at a pressure of 150 psi for 30 minutes. Should any leaks be found, they shall be repaired and the line retested until satisfactory. Zone line shall be tested at 80 psi in like manner. After testing, the system shall be thoroughly flushed out before the heads may be installed. Upon completion, an operating test shall be performed to visually check the coverage of the system. Any heads, which do not function according to the manufacturer's data shall be replaced with sprinklers that do or the installation shall be otherwise corrected to provide satisfactory performance. Final adjustment to the sprinkler heads and automatic equipment will be done by the Contractor upon completion of the installation to the satisfaction of the Landscape Architect. Minor adjustment from then on shall be made by the Owner's Maintenance Staff.

3.10 DRAWINGS OF RECORD

A. The Contractor shall provide and keep up to date a complete "as-built" record set of mylar sepals which shall be corrected to show any changes from the original drawings. These record drawings shall show location of all control lines, valves, valve boxes, main lines, flush caps, controllers, and any substitutions as well as any deviation in piping or location of buried valves, etc. with accurate dimensions indicated.

B. After completion of the sprinkler installation, the Contractor shall deliver to the Owner three prints of the correct and completed "as-built" set of drawings, along with three bound instruction folders covering the equipment installed. Contractor shall present the above information as a condition precedent to the completion payment.

3.11 GUARANTEE

A. Within ten (10) days after the Contractor's notification that the sprinkler installation is complete, the Landscape Architect will inspect the system and, if necessary, submit a "punch list" to the Contractor. Acceptance by the Landscape Architect of these corrections will signify final acceptance by the Owner.

B. The entire sprinkler system shall be guaranteed for a period of one year from this final acceptance date. The Contractor shall promptly replace, without cost to the Owner, any defective materials of faulty workmanship which may develop within this guarantee period, including restoration of any property damaged during repairs. He shall also be responsible for damages resulting from leaks which may occur in the piping system installed by him, and he shall repair, at his expense, all damage so caused, in a manner satisfactory to the Owner. However the Contractor shall not be held liable for damages occasioned by strikes, fire, weather, violence or theft, acts of God, acts of other contractors, or any other cause beyond the control of the Contractor.

C. It will be the Owner's responsibility to maintain the system in working order during the guarantee period, performing necessary minor maintenance, keeping grass from obstructing the sprinkler heads, protecting against vandalism and preventing damage during the landscape maintenance operation.

D. The Contractor shall service the system at the Owner's request during the guarantee period, and shall be paid for work performed which is not covered by the guarantee, in accordance with a predetermined schedule of fees.

LANDSCAPING

Part 1 – General

1.01 WORK INCLUDED

A. The work included under these specifications shall consist of the furnishing of all labor, material, permits, tools, and equipment necessary for the complete installation of the landscaping materials as shown on the drawings and as described in the following specifications.

1.02 QUALITY ASSURANCE

A. For standard products, the manufacturer's analysis will be acceptable. For all other materials, analysis shall be by a recognized laboratory.

B. Analysis shall be made in accordance with the current methods of the Association of Official Agricultural Chemists.

C. Soils shall be analyzed for their composition and fertility in sustaining plant growth and health.

D. All plants furnished under this specification shall be from nursery grown stock, and they shall meet the ARIZONA NURSERY ASSOCIATION of the American Association of Nurserymen, inc. requirements as to sizing, grading, and quality. Plant materials specified shall conform with the nomenclature of STANDARDIZED PLANT NAMES, Second Edition. The Landscape Architect reserves the right to refuse all plant material based on overall appearance and quality regardless of specifications.

E. Plants of the species specified shall be furnished in the variety, size, grade and quality indicated. Specifications and planting plans shall be strictly adhered to and no changes or substitutions will be allowed prior to bidding without written permission of the Landscape Architect, Owner, or Owner's Representative.

F. By submitting a proposal and accepting award of the Contract, the Contractor acknowledges that he has investigated the supply of planting stock available and has obtained firm commitments from his suppliers assuring delivery of the specific plant materials as required for completion of the project.

G. All plant materials shall be grown in accordance with good horticulture practices and shall bear evidence of proper nursery care during growth under climatic conditions similar to those in the locality of the project for at least two years. They shall have been previously transplanted or root pruned according to standard nursery practice and inspected by State Control Agencies.

H. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, unsound, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the entire intact upon removal of the container.

I. Planting, sodding and seeding shall be performed by personnel familiar with planting procedures and under the supervision of a qualified planting foreman.

1.03 SUBMITTALS

A. Submit a soil fertility test of the planting soil for approval by the Landscape Architect prior to delivery of soil to the project site. Test reports shall indicate the location of the source for soil.

B. Upon completion of the work, submit a schedule satisfactory to the Landscape Architect for the maintenance of all plant material.

PART 2 – PRODUCTS

2.01 SOD

A. Approved nursery grade cultivated grass sod; species and cultivar as indicated on the drawings with strong, fibrous root system, free from stones and burned or bare spots.

B. PLANTING SOIL FOR PLANT PITS AND BEDS

A. Fertile, friable, natural loam containing a liberal amount of humus, capable of sustaining vigorous plant growth. The Ph value of the planting soil shall not be higher than 7.5 or lower than 5.5. It shall be free of any admixture of stones, lumps, clods or hard earth, plants, or their roots, sticks, and other extraneous matter. Do not use planting soil for planting operations while in a frozen or muddy condition

2.03 PEAT

A. Acceptable peat moss consisting of at least 73% organic content of natural occurrence. It shall be brown, clean, low in content of mineral and woody materials, mildly acid, and granulated or shredded.

2.04 FERTILIZER

A. Commercial Fertilizer: A complete fertilizer, conforming to FS 0-F-24F-21, Type I, Grade A, part of the elements of which are derived from organic sources containing the following percentages by weight:

10% nitrogen 5% phosphoric acid—10% phosphoric acid

10% potash 5% potash

B. Organic Fertilizer: An organic activated fertilizer containing a minimum of five percent nitrogen, three percent phosphoric acid and organic basic elements by weight.

C. Deliver fertilizer mixed as specified in standard size bags, showing weights, analysis and name of manufacturer. Store in weatherproof storage place in such manner that it will be kept dry and its effectiveness not impaired.

D. The Landscape Architect reserves the right to vary the percentages of the components of the fertilizers subject to the results of the soil fertility tests.

2.05 WATER

A. Shall be furnished by the Owner. The Contractor shall furnish all necessary hose, equipment, attachments, and accessories for the adequate irrigation of all planted areas as may be required to complete the work as specified.

2.06 PLANT MATERIAL

A. All old abrasions and cuts shall be completely calloused over. All shrubs shall be measured when their branches are in their normal position. Height and spread dimensions specified refer to the main body of the plant and not from branch or root tip to tip.

B. Shrubs shall be matched specimens from single block source.

C. Evergreen trees not fully branched from top to bottom will be rejected, and those with terminal leaders exceeding twelve (12) inches in length will also be rejected. During the spring planting season, any evergreen plant delivered with new growth in an advanced stage of candling out will be rejected.

D. Plants shall not be pruned before delivery. Trees which have damaged or crooked leaders, or multiple leaders, unless specified will be rejected. Trees with bark abrasions, sunscald, disfiguring knots, or fresh cuts of limb over 1 1/4 inches which have not completely calloused will be rejected. Plants shall be freshly dug or container grown. Heeled in plants or plants from cold storage will not be accepted.

E. Plants shall be true to species and variety, and shall conform to measurements specified on the Drawings. Plants larger than specified may be used if approved by the Landscape Architect. Use of such plants shall not increase contract price. If larger plants are approved, the soil of earth shall be increased proportionally with the size of the plant.

F. Substitutions of plant materials will not be permitted unless authorized in writing by the Landscape Architect. Proof must be submitted that use of nearest equivalent size of variety with corresponding adjustment of Contract Price. Such proof shall be substantiated and submitted in writing.

G. It shall be the responsibility of the Contractor to determine required quantities of plants, as no compensation will be made for error in plant quantities. If plant counts occur on plant legend, it is for the convenience of the contractor

only. Verify plant counts with plan. In case of discrepancy, plan shall govern.

H. Each plant shall be properly identified with legible waterproof tags securely fastened. Tags shall remain on the plants until after final acceptance and then be promptly removed by the Contractor.

PART 3 – INSTALLATION

3.01 INSPECTION OF PLANT MATERIAL

A. Plants shall be subject to inspection and approval by Landscape Architect at place of growth and upon delivery. Written request for inspection of plant materials at place of growth shall be submitted to Landscape Architect at least ten (10) calendar days prior to delivery. This written request shall state place of growth and quantity of plants to be inspected. Landscape Architect reserves the right to waive inspection. Such approval shall not impair the right of inspection and rejection upon delivery at the project site or during the progress of the work for size and condition of balls or roots, diseases, insects, and latent defects or injuries. Rejected plants must be immediately removed from the project site.

B. Certificates of inspection of plant materials as may be required by Federal, State or other authorities to accompany shipments and be furnished to Owner upon completion of project.

3.02 DIGGING AND HANDLING

A. Digging shall be done the same season of planting and shall be done by hand as to not injure plants and to meet size requirements. No plant other than the required samples shall be dug or delivered to the site until the required inspections have been made and the plants or samples approved.

B. Dig balled and burlapped (BB) plants with firm, unbroken natural balls of earth, of sufficient diameter and depth to include the fibrous and feeding roots. No synthetic or mudded in balls will be accepted. No plants moved with a ball will be accepted if the ball is cracked or broken before or during planting operations.

C. Roots or balls of all plants shall be adequately protected at all times from excessive exposure to wind, sun, rain, hail, etc. Balled and burlapped plants that cannot be planted immediately on delivery shall be set out on the ground and well protected with soil, wet moss and other acceptable material. Bare rooted plants shall be planted or heeled-in immediately upon delivery.

D. All plant material shall be handled carefully to prevent injury to rootballs, trunks, or branches. Any plant suffering damage sufficient to impair its health and/or natural form will be rejected. No plant shall be bound with wire or rope at any time so as to damage the bark or break branches.

3.03 FERTILIZING SOD SUBSOIL

A. Apply fertilizer at a rate recommended by manufacturer. Apply after fine grading and prior to compaction. Mix thoroughly into upper two (2) inches of topsoil.

B. Lightly water to aid the breakdown of fertilizer.

C. Apply fertilizer within 48 hours before laying sod.

3.04 LAYING SOD

A. Lay sod as soon as possible after delivery to prevent deterioration.

B. Lay sod closely knit together with no open joints visible, and pieces not overlapped. Lay smooth and flush with adjoining grass areas. Finish grade to be one and a half inches (1-1/2") below paving and top of surface curbs.

C. Immediately water sodded areas after installation. Water in sufficient amounts to saturate sod and upper four (4) inches of soil.

D. After sod and soil has dried sufficiently to prevent damage, roll sodded areas to ensure good bare between sod and soil and to remove minor depressions and irregularities. Ensure rolling equipment weight not over 250 lbs. or less than 150 lbs.

3.05 TIME OF PLANTING

A. The contractor shall notify the Landscape Architect in writing when other divisions of the work have progressed sufficiently to commence landscaping work, including placing of topsoil to finish grade. Thereafter, conduct planting operations under favorable weather conditions.

B. Any plant material installed during typical off seasons (hot summer months or freezing winter months) shall be done at the Contractor's own risk and the Contractor shall be held responsible for replacement of any plant material damaged due to these adverse conditions.

3.06 PLANTING OPERATIONS

A. General

1. The Contractor shall coordinate all aspects of a the landscape operations with all aspects of the site construction. The work shall proceed as the indicated portions of the site become available, consistent with the seasonal limitations for landscape planting.

2. The Contractor shall be responsible for any damage to utilities construction, sidewalk construction, and underground sprinkler systems and shall bear the full cost to repair the damage. Accomplishment of repairs shall be equal to the original installation prior to damage. Any damage shall be immediately reported to the Landscape Architect and repairs shall be approved by him before it is buried.

3. Maintain all trench or grade stakes for work under other Sections until their removal is approved by the Landscape Architect.

4. The Contractor shall stake plant location, shrub pits and other planting areas and secure the Landscape Architect's approval before starting excavation of same, making adjustments as necessary.

5. Unless otherwise directed by Landscape Architect, indication of plant on drawings is to be interpreted as including digging of hole, furnishing plant of specified size, work of planting, mulching, guying, staking, wrapping and watering.

B. Plant Pits and Beds

1. Plant pits shall be excavated with vertical sides, large enough to allow twelve (12) inches of space around the ball in all directions. Adjust depth as necessary to permit a minimum of twelve (12) inches planting soil under the ball when the plant is set at the proper depth.

2. Planting pit backfill for all trees and shrub shall be as follows:

a. 2/3 parts by volume on site soil.

b. 1/3 parts by volume forest mulch.

3. One pound 16-20-0 per cubic yard of mix.

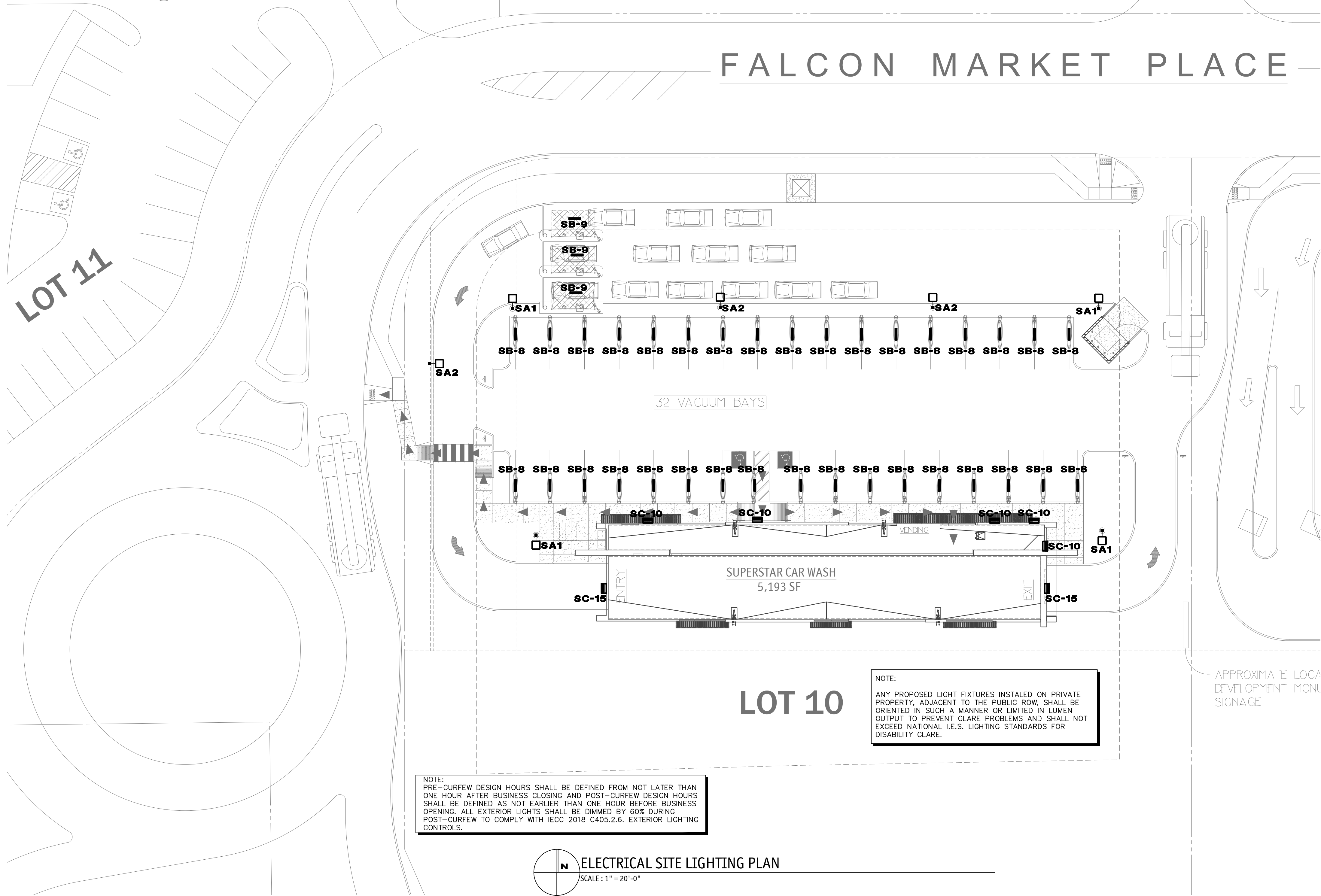
4. Planting pits shall be backfilled with prepared backfill and be water settled to a grade sufficient that in the setting of the plant, the finish grade level after settlement will be the same as that at which plants were grown. Agriform tablets to be used with each planting (six for 36-inch ball, three for 18" globe, two for 5" globe, and one for 1 gallon).

C. Installations

1. Set plants in center of pits, plumb and straight and at such a level that after settlement the crown of the plant shall be two (2) inches below the finish grade and forming a shallow trough directly over the ball of earth and slightly smaller than the pit to facilitate watering. Space all plants as shown.

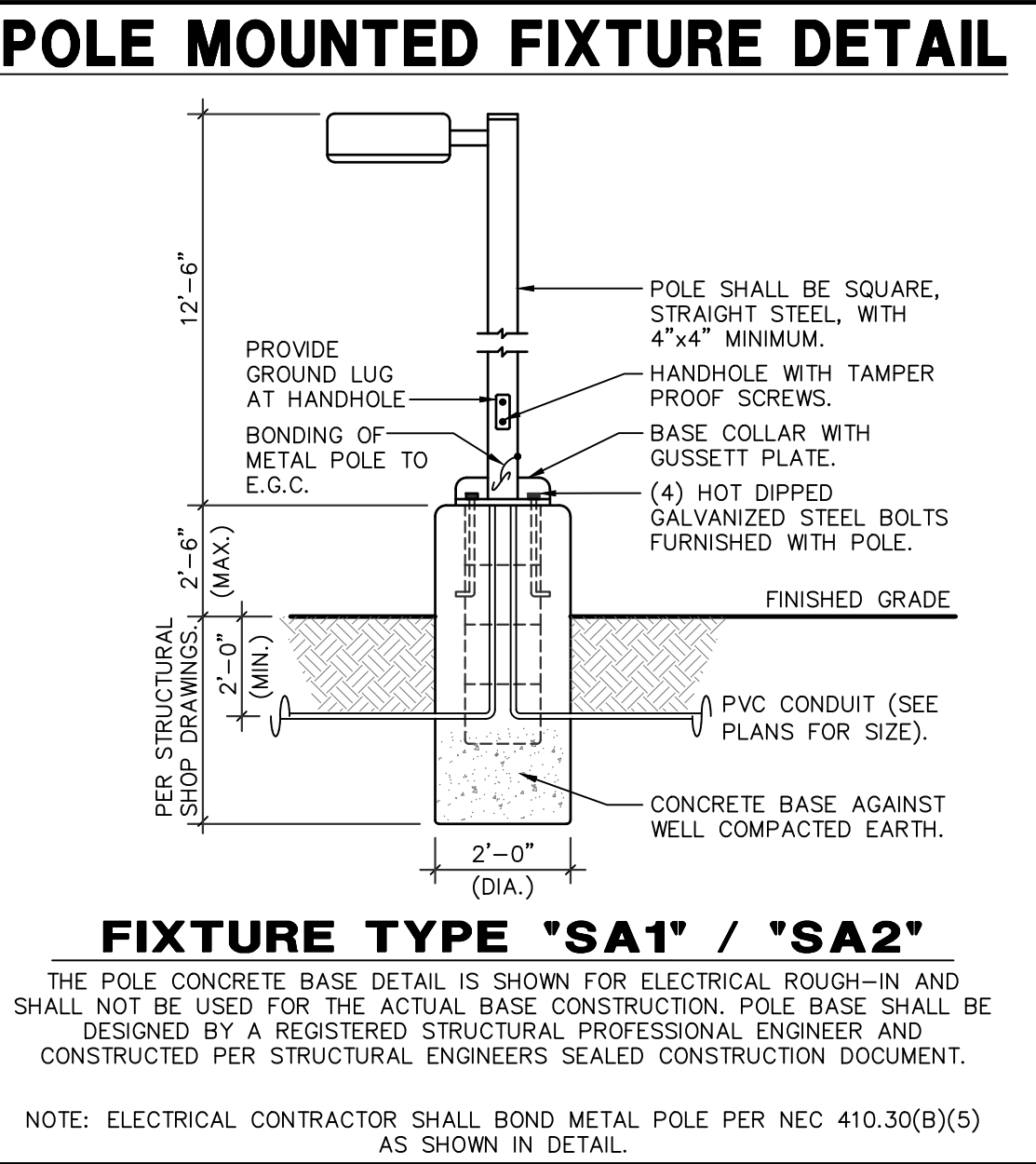
2. Set balled and burlapped plants upon a well tamped layer of planting soil. Backfill around ball with planting soil in six to eight (6-8) inch lifts, each thoroughly tamped and puddled to top of pit. Avoid air pockets. Remove all ropes and wires from tops and sides of balls. No burlap shall be pulled out from under the balls





LUMINAIRE SCHEDULE				
1. PROVIDE 90 MINUTE EMERGENCY BATTERY BACK-UP FOR ALL EMERGENCY FIXTURES. SEE SCHEDULE BELOW FOR SPECIFICATIONS AND LUMEN REQUIREMENTS.				
2. MODULAR WIRING SYSTEM FOR LIGHT FIXTURES IS AN ACCEPTABLE ALTERNATE.				
3. BASE BID FOR LUMINAIRES SHALL BE BASED ON MANUFACTURERS LISTED IN CONTRACT DOCUMENTS. UPON AWARD OF PROJECT, ALTERNATES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED WITH WRITTEN OWNER APPROVAL & AN ITEMIZED DEDUCT TO BASE BID.				
4. ALTERNATE FIXTURE SELECTIONS MAY REQUIRE ADDITIONAL TIME FOR SUBMITTAL REVIEW & POSSIBLE ENGINEERING DESIGN CHANGES, TO BE BILLED TO THE CONTRACTOR.				
5. PROVIDE MINIMUM 10 MINUTE TIME DELAY ON EMERGENCY FIXTURES WHEN HID AREA LIGHTING IS USED.				
MARK	MANUFACTURER MODEL NUMBER	VOLTS	LAMPS CRI/CCT INPUT WATTS	REMARKS/MOUNTING
SA1	LITHONIA DSX0-LED-P1-40K- TSM-MVOLT-SSS	MVOLT	LED - 38W	POLE MOUNTED FIXTURE. REFER TO POLE MOUNTED FIXTURE DETAIL THIS SHEET.
SA2	LITHONIA DSX0-LED-P1-40K- BLC-MVOLT-SSS	MVOLT	LED - 38W	POLE MOUNTED FIXTURE. REFER TO POLE MOUNTED FIXTURE DETAIL THIS SHEET.
SB-8	LITHONIA DMW2-2000LM-MD- PFL-MVOLT-40K-80CRI	MVOLT	LED - 19W	2' UNDER CANOPY FIXTURE.
SB-9	LITHONIA DMW2-2000LM-MD- PFL-MVOLT-40K-90CRI	MVOLT	LED - 19W	2' UNDER CANOPY FIXTURE.
SC-10	LITHONIA WST-LED-P1-40K -VW-MVOLT	MVOLT	LED - 12W	WALL MOUNTED LED AREA LIGHT. PROVIDE WITH 90 MINUTE BATTERY BACKUP WHERE NOTED 'EM'.
SC-15	LITHONIA WST-LED-P1-40K -VW-MVOLT	MVOLT	LED - 12W	WALL MOUNTED LED AREA LIGHT. PROVIDE WITH 90 MINUTE BATTERY BACKUP WHERE NOTED 'EM'.

- GENERAL NOTES - SITE**
- REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND COMPLETE CONTRACTUAL OBLIGATIONS.
  - ELECTRICAL CONTRACTOR SHALL CONTACT TELEPHONE COMPANY REGARDING EXACT LOCATION OF ALL PRIMARY SERVICE EQUIPMENT, TRENCH LOCATION, ETC.
  - ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY TELEPHONE TRENCHING, BACKFILL, AND CONDUIT STUBS INTO TRENCH AS REQUIRED BY TELEPHONE COMPANY AND TO THEIR SPECIFICATIONS.
  - ALL WIRING FOR OUTSIDE LIGHTING SHALL BE A MINIMUM OF #10 COPPER WITH TYPE THWN INSULATION. RUN UNDERGROUND CIRCUITS IN P.V.C. AND PROVIDE A #10 COPPER BOND IN ADDITION TO CIRCUIT CONDUCTORS. UNDERGROUND WIRING SHALL COMPLY WITH APPLICABLE CODES OF THE NEC.
  - ELECTRICAL CONTRACTOR SHALL PROVIDE NECESSARY SECONDARY CONDUCTORS, POWER TRENCHING, BACKFILL AND CONCRETE PADS FOR TRANSFORMERS AND SERVICE EQUIPMENT. ADDITIONALLY PROVIDE CONDUIT STUBS INTO TRENCH PER POWER COMPANY SPECIFICATIONS AND REQUIREMENTS.
  - ALL WIRING SHALL BE COPPER. WIRING #4 AWG AND LARGER SHALL BE XHHW TYPE INSULATION.



**PRELIMINARY  
NOT FOR CONSTRUCTION**



Know what's below.  
Call before you dig.

**DESIGN CODES  
IBC, 2018      NEC, 2017**

**ELECTRICAL CONTRACTOR SHALL NOTIFY  
DESIGNER/ENGINEER PRIOR TO ANY DEVIATION  
FROM THIS SET OF ELECTRICAL DESIGN PLANS.  
ANY CHANGES TO THE DESIGN, IF APPROVED  
BY ENGINEER, WILL REQUIRE REVISIONS TO  
PLANS AND POSSIBLE ADDITIONAL SERVICE  
FEE.**

**HAWKINS DESIGN GROUP INC.**  
ELECTRICAL CONSULTING ENGINEERS  
140 WEST HARVEL ROAD  
MESA, ARIZONA 85203  
PH 480.813.9000 FAX 480.813.9001  
EMAIL [email@hawkinsdsg.com](mailto:email@hawkinsdsg.com)

Project Contact/Designer: **Chad Curry**  
Project # **20473**

IF DRAWING IS NOT PLOTTED AT 24 X 36 THEY ARE NOT FULL SIZE

Phone: (303) 801-0900  
www.bowmanconsulting.com

REVISIONS	DATE	DESCRIPTION
1	05/11/2021	SSOW-FALCON MARKETPLACE-2nd SPP SUBMITTAL

**SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10**

**SITE DEVELOPMENT PLAN**

**COLORADO**

**EL PASO COUNTY**

DESIGN: CRC  
DRAWN: CRC  
CHKD: AG

SCALE: H: V:  
DATE: 02/09/2021

SHEET







**PRELIMINARY NOT FOR CONSTRUCTION**



Expires: XX/XX/XX



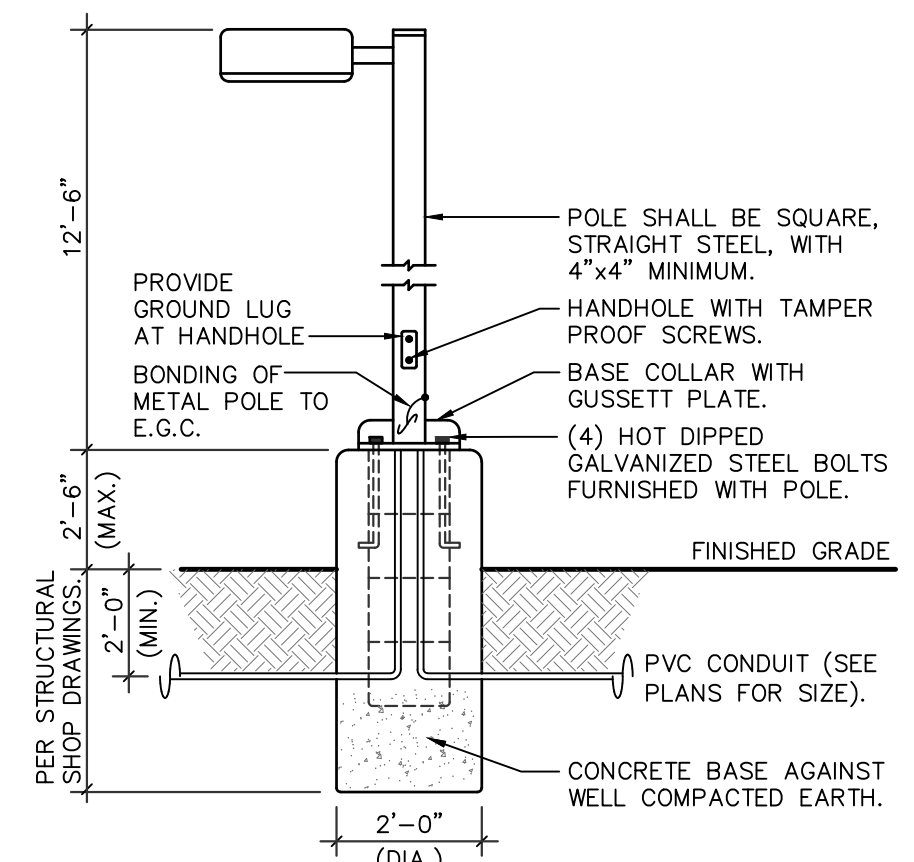




Schedule									
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Lumens per Lamp	LLF	Wattage
	SA1	3	Lithonia Lighting	DSXO LED P1 40K TSM MVOLT/ SSS POLE MOUNT AT15'	DSXO LED P1 40K TSM MVOLT	LED	4891	0.65	38
	SA2	3	Lithonia Lighting	DSXO LED P1 40K BLC MVOLT / SSS POLE MOUNT AT15'	DSXO LED P1 40K BLC MVOLT	LED	3862	0.65	38
	SB-8	34	Lithonia Lighting	DHW2 2000LM WD PFL MVOLT 40K 80CRE	DHW2 L24 2000LM WD PFL MVOLT G21 40K 80CRE (GLEDS)		1913	0.65	18.78
	SB-9	3	Lithonia Lighting	DHW2 2000LM WD PFL MVOLT 40K 90CRE	DHW2 L24 2000LM WD PFL MVOLT G21 40K 90CRE (GLEDS, MOUNTED @ 9'-0" AFG	LED	1823	0.65	18.78
	SC-10	5	Lithonia Lighting	WST LED P1 40K VW MVOLT (FINISH)	WST LED, Performance package 1, 4000 K, visual comfort wide, MVOLT, MOUNTED @ 10'-0" AFG	LED	1659	0.65	12
	SC-15	2	Lithonia Lighting	WST LED P1 40K VW MVOLT (FINISH)	WST LED, Performance package 1, 4000 K, visual comfort wide, MVOLT, MOUNTED @ 15'-0" AFG	LED	1659	0.65	12

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PROPERTY LINE - FC @ GRADE		0.0 fc	0.1 fc	0.0 fc	N/A	N/A
SITE - FC @ GRADE		1.9 fc	6.9 fc	0.2 fc	34.5:1	9.5:1

## POLE MOUNTED FIXTURE DETAIL

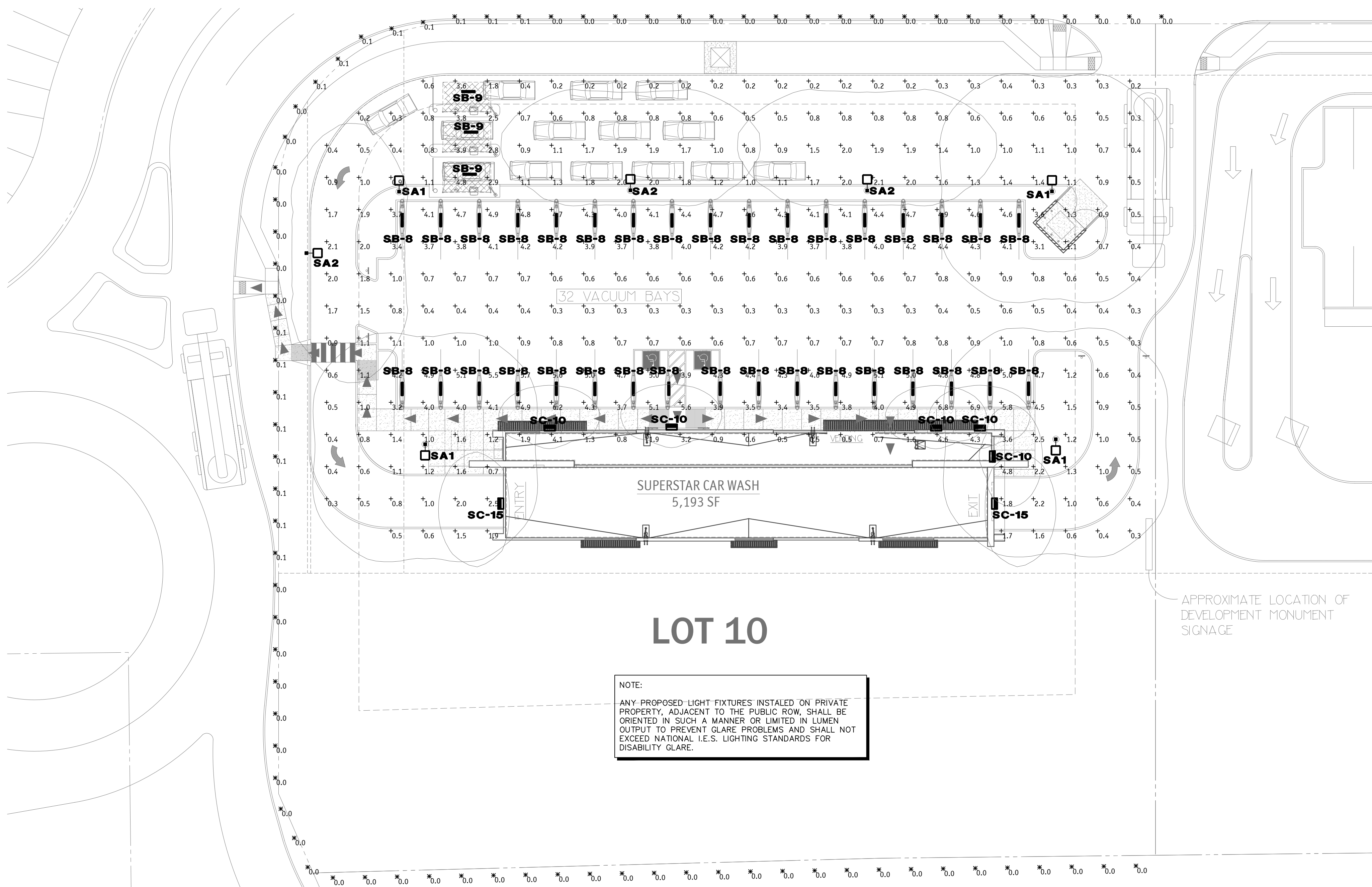


### FIXTURE TYPE "SA1" / "SA2"

THE POLE CONCRETE BASE DETAIL IS SHOWN FOR ELECTRICAL ROUGH-IN AND SHALL NOT BE USED FOR THE ACTUAL BASE CONSTRUCTION. POLE BASE SHALL BE DESIGNED BY A REGISTERED STRUCTURAL PROFESSIONAL ENGINEER AND CONSTRUCTED PER STRUCTURAL ENGINEERS SEALED CONSTRUCTION DOCUMENT.

NOTE: ELECTRICAL CONTRACTOR SHALL BOND METAL POLE PER NEC 410.30(B)(5)  
AS SHOWN IN DETAIL.

NOTE:  
PRE-CURFEW DESIGN HOURS SHALL BE DEFINED FROM NOT LATER THAN ONE HOUR AFTER BUSINESS CLOSING AND POST-CURFEW DESIGN HOURS SHALL BE DEFINED AS NOT EARLIER THAN ONE HOUR BEFORE BUSINESS OPENING. ALL EXTERIOR LIGHTS SHALL BE DIMMED BY 60% DURING POST-CURFEW TO COMPLY WITH IECC 2018 C405.2.6. EXTERIOR LIGHTING CONTROLS.



NOTE:

ANY PROPOSED LIGHT FIXTURES INSTALLED ON PRIVATE PROPERTY, ADJACENT TO THE PUBLIC ROW, SHALL BE ORIENTED IN SUCH A MANNER OR LIMITED IN LUMEN OUTPUT TO PREVENT GLARE PROBLEMS AND SHALL NOT EXCEED NATIONAL I.E.S. LIGHTING STANDARDS FOR DISABILITY GLARE.

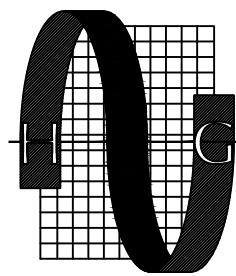
**PRELIMINARY**  
**NOT FOR CONSTRUCTION**



Know what's **below**.  
**Call** before you dig.

## DESIGN CODES

**ELECTRICAL CONTRACTOR SHALL NOTIFY DESIGNER/ENGINEER PRIOR TO ANY DEVIATION FROM THIS SET OF ELECTRICAL DESIGN PLANS. ANY CHANGES TO THE DESIGN, IF APPROVED BY ENGINEER, WILL REQUIRE REVISIONS TO PLANS AND POSSIBLE ADDITIONAL SERVICE FEE.**



**Project Contact/Designer:** Chad Curry  
**Project #** 20473  
**HAWKINS DESIGN GROUP INC.**  
**ELECTRICAL CONSULTING ENGINEERS**  
1140 WEST HARWELL ROAD  
MESA, ARIZONA 85233  
PH. 480.813.9000 FAX. 480.813.9001  
EMAIL. email@hawkinsdg.com

IF DRAWING IS NOT PLOTTED AT 24 X 36 THEY ARE NOT FULL SIZE

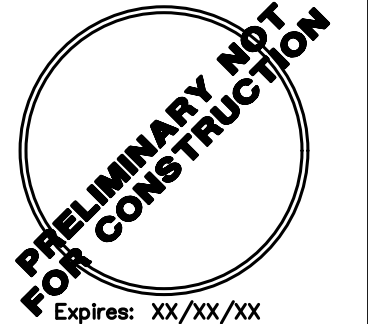
REVISION	DESCRIPTION	DATE
1	SSOW-FALCON MARKETPLACE-2nd SPD SUBMITTAL	05/11/2021

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10  
SITE DEVELOPMENT PLAN

EL PASO COUNTY

COLORADO

AL



DESIGN	DRAWN	CHKD
CBC	CBC	AG

SCALE	H: V:	
-------	----------	--

DR21

709/2021

SHEET



