

UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

1. All materials, workmanship, construction, and construction of Public Improvements shall meet or exceed the standards and specifications set forth in the Town of Castle Rock (TCR) Municipal Code, TCR Technical Manuals, and applicable State and Federal Regulations. Where there is conflict between these Plans and the Technical Manual or any applicable Standards, the more stringent Standard shall apply. All Work shall be inspected and approved by the TCR Construction Inspector.
2. 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.
3. The Contractor must call the local utility location center at least 72 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.
4. The Contractor shall coordinate and cooperate with the Town 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 disruption of any utility service.
5. Contractor shall provide a minimum seventy-two (72) hours notice to the on-site TCR Construction Inspector, (720) 733-2200, prior to making any connections/tie-ins to existing Water, Sanitary Sewer, and/or Storm Sewer systems provided that the utility tie-in does not disrupt service to existing CR Water customers. If the tie-in will disrupt utility service, then Contractor shall provide a minimum of three (3) weeks notice to the TCR Construction Inspector to allow time for CR Water to provide written notification to existing customers affected by the tie-in. All Town utility tie-ins must be approved by CR Water prior to commencing work.
6. 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.
7. The Contractor shall be responsible for all aspects of safety including, but not limited to, excavation, trenching, shoring, traffic control, and security.
8. 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 the TCR Construction Inspector immediately.
9. All references to any published Standards shall refer to the latest revision of said Standard unless specifically stated otherwise.
10. The Contractor shall submit a Traffic Control Plan in accordance with MUTCD to the appropriate Right-of-Way authority (the 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.
11. 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.
12. The Contractor shall be responsible for recording As-Built information on a set of record drawings kept on the construction site and available to the TCR Construction Inspector at all times.
13. 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.
14. All initial sediment control measures shall be installed per the Temporary Erosion & Sediment Control (TESC) plan prior to any earth-disturbing activity. All erosion and sediment control practices must be maintained in effective operating condition at all times. Removal of control measures shall not occur without the approval of the stormwater inspector. The Contractor shall be responsible for keeping roadways free and clear of all construction debris and dirt tracked from the site. The Contractor shall also comply with all terms and conditions of the Colorado Construction General Permit for Stormwater Discharges.
15. The Contractor shall provide an action plan immediately following the pre-construction meeting detailing sufficient means to mitigate dust on site during overlot grading, rock crushing or other earthwork activities. If the Contractor fails to control dust, all earth disturbing activities shall be stopped until sufficient measures are taken to the Town's satisfaction. The Contractor shall also comply with all terms and conditions of the Colorado Air Quality Regulations for Land Development, as required.
16. 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.
17. There shall be no site construction activities on Saturdays unless specifically approved by the TCR Construction Inspector and no site construction activities on Sundays or holidays unless there is prior written approval by the Public Works Director.
18. 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.
19. This property is not located within any FEMA floodplain as per FEMA FIRF Panel No. 08035C0186G Dated March 16, 2016.
20. The project benchmark is Douglas County Benchmark DCBM ECKHARDT ELEVATION=6434.71 (NAVD88)
21. The Basis of Bearing for the project is based on the consideration that the South line of the Parcel B bears S88°06'21"E shown hereon; Southwest corner is a 3" Aluminum Monument with PLS 34989; Southeast corner is a #5 rebar with PLS 15605.

SHEET 1 of 3 = COVER SHEET
SHEET 2 of 2 = UTILITY PLAN

FIELD CHANGE ORDER TABLE		
FCO#	DATE	PURPOSE / DESCRIPTION
—	—	—

CASTLE ROCK WATER
STORMWATER
720-733-2235

TOWN OF CASTLE ROCK
UTILITIES DEPT.
PHONE: (720)733-6000

TOWN OF CASTLE ROCK PUBLIC WORKS
PHONE: (720)733-2462

GAS:
BLACK HILLS ENERGY
PHONE: (800) 890-5554

ELECTRIC:
CORE
PHONE: 303-688-3100

TELEPHONE:
CENTURY LINK COMMUNICATIONS
PHONE: 720-578-5142

DOUGLAS COUNTY BENCHMARK:
DCBM ECKHARDT
ELEVATION = 6434.71 (NAVD88)

RYAN LYNCH & JAMIELYNNE SHEPHERD
1320 SWEET SPRINGS CIR. APT 108
CASTLE PINES, CO 80108

DAVID E. ARCHER & ASSOCIATES, INC.
105 WILCOX STREET
CASTLE ROCK CO 80104
PHONE: (303)-688-4642
FAX: (303)-688-4675

A map showing the project location. The map includes Interstate 25 running vertically on the left. Mesa Ridge Lane runs diagonally from the top right towards the center. Sapphire Point Blvd. runs horizontally across the middle. Pawnee Trail runs diagonally from the top center towards the center. A black rectangle marks the 'SITE' location, which is situated south of Pawnee Trail and west of Sapphire Point Blvd. The word 'SITE' is written in bold capital letters with a line pointing to the black rectangle. The word 'SAPPHIRE POINT BLVD.' is written in bold capital letters with a line pointing to the horizontal road. The word 'PAWNEE TRAIL' is written in bold capital letters with a line pointing to the diagonal road. The word 'MESA RIDGE LANE' is written in bold capital letters with a line pointing to the diagonal road. The word 'INTERSTATE 25' is written in bold capital letters with a line pointing to the vertical road. The word 'SITE' is also written in bold capital letters with a line pointing to the black rectangle.

All water lines construction is subject to the General Notes on the cover sheet of these plans as well as the Water Line Construction Notes listed hereafter.

1. All water lines shall be 12" ductile iron pipe (DIP), conforming to the requirements of AWWA C150, CL350 (6.-12.-), CL250 (16.-and 20.-), CL200 (12.-and 14.-), with push-on gasketed joints or mechanical joint ends, in conformance with AWWA C114. Pipe joint-lined in accordance with AWWA C104, and exterior coating in accordance with C151; or 2) PVC pipe, conforming to AWWA C900 for pipe sizes 8. and 12.-, CL305 (DR14) and AWWA C905 for pipe size of 16.-, CL235 (DR18). Minimum distribution main size shall be 8.-. Water lines that are 10.-, 14.-, and 18.- in diameter are not permitted.

2. All water fittings shall be DIP conforming to AWWA C153 or C110 and shall have a pressure rating not less than the pipe.

3. All fittings shall be mechanical joint, unless approved by Castle Rock Water.

4. All DIP and fittings shall be encased in polyethylene to prevent corrosion. Polyethylene wrap, tape and installation shall meet the requirements of AWWA C105.

5. Gate valves shall be designed and manufactured in accordance with AWWA C509-1 and AWWA C515-01, as appropriate, and shall be ductile iron body and bonnet, resilient-seated wedge gate, non-rising stem type, O-ring seals, and slip-on connections (tapping valves, where allowed, shall be flange x MJ). Valve ends shall be mechanical joint, unless otherwise specified in the Plans. The valves shall be suitable for a working pressure of 200 PSI. They shall be closed by turning clockwise and shall have two-inch square cast iron operating nuts with an arrowcast in the nut indicating the direction of operation. The valve body shall be polyethylene reinforced with glass fibers. They shall be of such design as to maintain the full area of the pipe through the valve when open and shall be designed to take full pressure on either face. Valve shall have Type 304 stainless steel bonnet bolts and nuts and Type 304 stainless steel O-ring gland bolts and nuts. Valves shall be manufactured by American Flow Control, Kennedy or Mueller and shall have the manufacturer's name or initials on the bonnet and on the body.

6. All fire hydrants shall be: Facer W6B7-250 by Watertous Co. or Super Centurion 250, by Mueller Co., opening to the left. Refer to TCR standard Detail W-11.

7. All water lines shall be buried an absolute minimum of 5 feet from final grade to the top of the water main. The maximum bury depth shall be 6 feet, unless additional depth is required for utility crossings or other conflicts. Wherever such crossings occur, the depth shall be as shown on the plans.

8. All water lines shall be bedded in accordance with TCR standard Detail W-21.

9. Contractor shall maintain a minimum 18-inch vertical clearance and 10-foot horizontal clearance edge-to-edge between all water lines and any other piped utilities.

10. All bends, tees, fire hydrants and plugs at dead-end mains shall be restrained from thrust by using Megalug restraints per TCR standard Detail W-18 in combination with concrete thrust blocks per TCR standard Detail W-22.

11. Contractor shall be responsible for adjusting all fire hydrants and valve boxes to finish grade in accordance with TCR standard Detail W-10.

12. Prior to connecting to the Town's existing water system, all new waterlines and/or segments of waterlines shall be disinfected, pressure tested, and bacteriologically tested in accordance with Section 450.5 of the Town of Castle Rock Construction Methodology and Materials Manual; AWWA C651-14 and C600-5.2; and details W-35A and/or W-35B.

13. The new waterlines and/or segments of waterlines shall be tested in the same manner as the existing waterlines. The new waterlines and/or segments of waterlines are not physically connected to the Town's existing water system. Town and Contractor shall furnish materials as shown on Details W-35A and/or W-35B. Contractor shall perform all procedures for testing, flushing and disinfecting of all water lines. Testing shall be done in the presence of the TCR Construction Inspector. Contractor shall provide a minimum seventy-two (72) hour notice to, and obtain approval from the on-site TCR Construction Inspector, (720)733-2200, prior to disinfection, pressure testing, and bacteriological testing of any new waterlines and/or segments of waterlines.

13. Distances for water lines are horizontal distance from the center of the fitting to center of the fitting. Therefore, distances shown on the plans are approximate and could vary due to vertical alignment and fitting dimensions.

14. All domestic water service lines shall be type K copper insulated with polywrap, from the main to the meter. The water meter shall be installed in accordance with applicable state and federal requirements. For all excavation operations, safety is the responsibility of the contractor.

15. Water line trenches shall be sloped or braced and sheeted as necessary for the safety of the workers and the protection of the water lines, in accordance with all applicable state and federal requirements. For all excavation operations, safety is the responsibility of the contractor.

16. Water lines shall be aligned 6 feet off the north and east gutter flow lines of public streets wherever possible. See Detail W-13.

17. Where water line improvements are difficult to locate on the surface, the Contractor shall be required to install permanent water line markers, in accordance with TCR standard Detail W-23, or at the discretion of the TCR Construction Inspector.

18. Tracer wire shall be used on all DIP and PVC water mains, and warning tape shall be placed 1 foot above all DIP and PVC pipe. Refer to Town of Castle Rock Standard Tracer Wire requirements, in these General Notes. Test Stations shall be constructed per Standard Detail W-28.

19. The new waterlines and/or segments of waterlines shall be tested in the same manner as the existing waterlines. The new waterlines and/or segments of waterlines are not physically connected to the Town's existing water system. Town and Contractor shall furnish materials as shown on Details W-35A and/or W-35B. Contractor shall perform all procedures for testing, flushing and disinfecting of all water lines. Testing shall be done in the presence of the TCR Construction Inspector. Contractor shall provide a minimum seventy-two (72) hour notice to, and obtain approval from the on-site TCR Construction Inspector, (720)733-2200, prior to disinfection, pressure testing, and bacteriological testing of any new waterlines and/or segments of waterlines.

20. Maximum deflection for water main shall not exceed one-half of the manufacturer's maximum allowable deflection or 2.5 degrees, whichever is less.

21. All residential water service lines shall be constructed perpendicular to the front property line in conformance with the Town of Castle Rock Water System Design Criteria Manual and Water Details.

22. The new waterlines and/or segments of waterlines shall be tested in the same manner as the existing waterlines. The new waterlines and/or segments of waterlines are not physically connected to the Town's existing water system. Town and Contractor shall furnish materials as shown on Details W-35A and/or W-35B. Contractor shall perform all procedures for testing, flushing and disinfecting of all water lines. Testing shall be done in the presence of the TCR Construction Inspector. Contractor shall provide a minimum seventy-two (72) hour notice to, and obtain approval from the on-site TCR Construction Inspector, (720)733-2200, prior to disinfection, pressure testing, and bacteriological testing of any new waterlines and/or segments of waterlines.

23. The size of the irrigation tap, line, meter and backflow prevention assembly shall be the same to a minimum distance of 10 pipe diameters past the winterization tee.

24. The minimum horizontal separation between utility lines carrying the same material (e.g., water and water) shall be 5 feet.

25. When the water line crosses over other appurtenances on/in an existing water line, the pipe material between the existing water line and the cut in tee or other appurtenance shall remain consistent.

26. Contractor is responsible to provide backflow prevention downstream of the meter. Acceptable backflow prevention assemblies are as follows:

- Commercial Potable Water Service: Reduced Pressure Assembly.
- Residential Potable Water Service: Double Check Valve Assembly, Reduced Pressure Assembly.
- Commercial Fire Service: Reduced Pressure Detector Assembly, Double Check Valve Detector Assembly.
- Residential Fire Service: Reduced Pressure Detector Assembly, Double Check Valve Detector Assembly.
- Commercial and Multifamily Irrigation Water Service: Reduced Pressure Assembly.

The Double Check Detector Assembly (DCDA) is the only back flow prevention device rated for horizontal or vertical installation.

THESE PLANS HAVE BEEN REVIEWED BY THE TOWN OF CASTLE ROCK FOR CONCEPT ONLY. THE REVIEW DOES NOT IMPLY RESPONSIBILITY BY THE REVIEWING DEPARTMENT, THE TOWN ENGINEER, OR THE TOWN OF CASTLE ROCK FOR ACCURACY AND CORRECTNESS OF THE CALCULATIONS. FURTHERMORE, THE REVIEW DOES NOT IMPLY THAT QUANTITIES OF ITEMS ON THE PLANS ARE THE FINAL QUANTITIES REQUIRED. THE REVIEW SHALL NOT BE CONSTRUED FOR ANY REASON AS ACCEPTANCE OF FINANCIAL RESPONSIBILITY BY THE TOWN FOR ADDITIONAL QUANTITIES OF ITEMS SHOWN THAT MAY BE REQUIRED DURING THE CONSTRUCTION PHASE.

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF CASTLE ROCK MUNICIPAL CODE, TECHNICAL MANUALS AND/OR OTHER TOWN-APPROVED APPLICABLE STANDARDS.

TOWN OF CASTLE ROCK APPROVALS
THESE PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

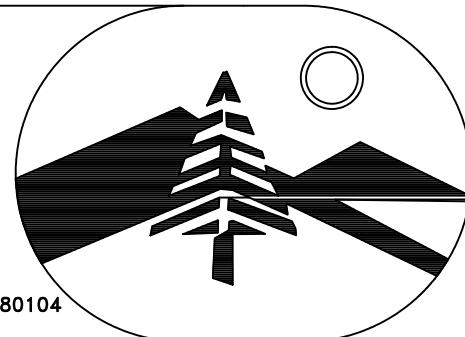
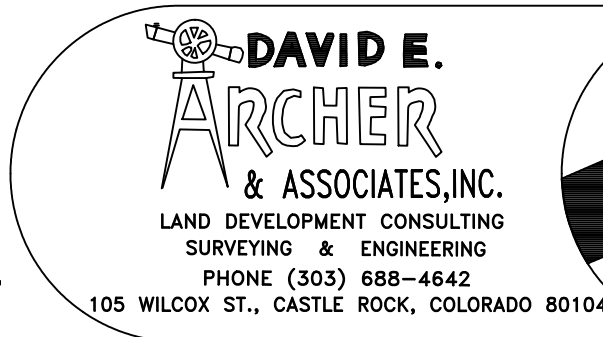
APPROVED BY:

DEVELOPMENT SERVICES DIRECTOR

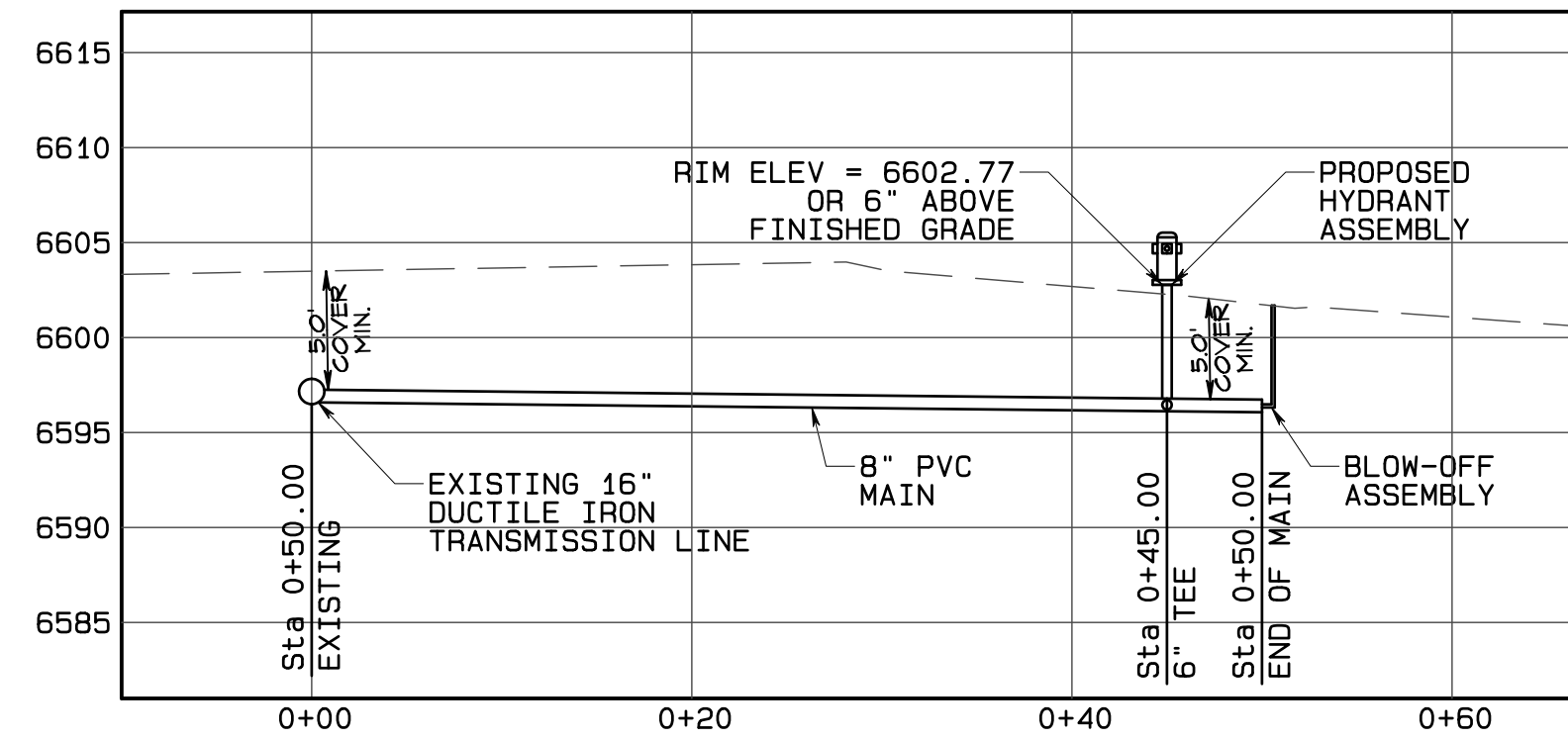
DATE _____

REVISIONS

SHEET 1 OF 2
SEPTEMBER 2025
JOB NUMBER 25-0097



S:\Drawings\2025\25-0097\Civil\Utility\UtilityPlan.pro
Mon Sep 22 14:47:32 2025



WATER LINE PROFILE
SCALE: (H)1"=10' (V)1"=10'

LEGEND

- [Hatched Box] = GRAVEL SURFACE
- [Circle Pattern Box] = RIPRAP
- [Solid Line] = EXISTING EDGE OF ASPHALT
- [Dashed Line] = PROPOSED CENTERLINE
- [Line with X's] = EXISTING FENCE
- [Line with Dashed Section] = STORM PIPE / CULVERT WITH FLARED END SECTION
- [Line with 'E's] = EXISTING OVERHEAD POWERLINE
- [Dashed Line] = EASEMENT
- [Solid Line with 1000'] = PROPOSED CONTOUR
- [Dashed Line with 1000'] = EXISTING CONTOUR
- [Line with 'W's] = PROPOSED WATER LINE
- [Line with 'W's] = EXISTING WATER LINE

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY, AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

ZACHARY E THATCHER PE NO. 64656 DATE

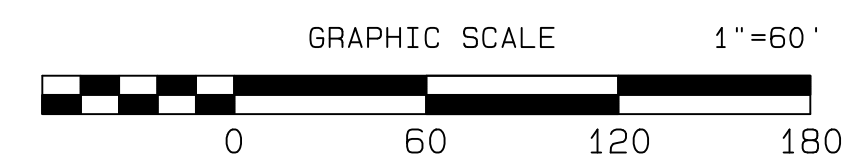
TOWN OF CASTLE ROCK APPROVALS
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DATE OF DEVELOPMENT SERVICES APPROVAL

APPROVED BY:

DEVELOPMENT SERVICES DIRECTOR DATE

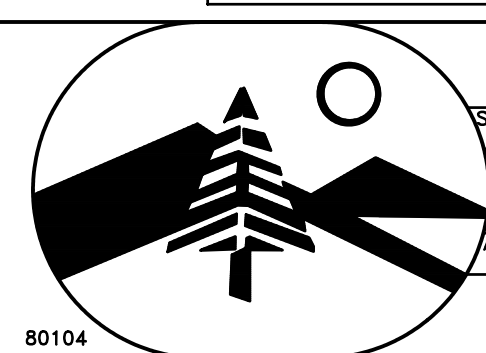
UTILITY PLAN

SCALE: 1"=60'

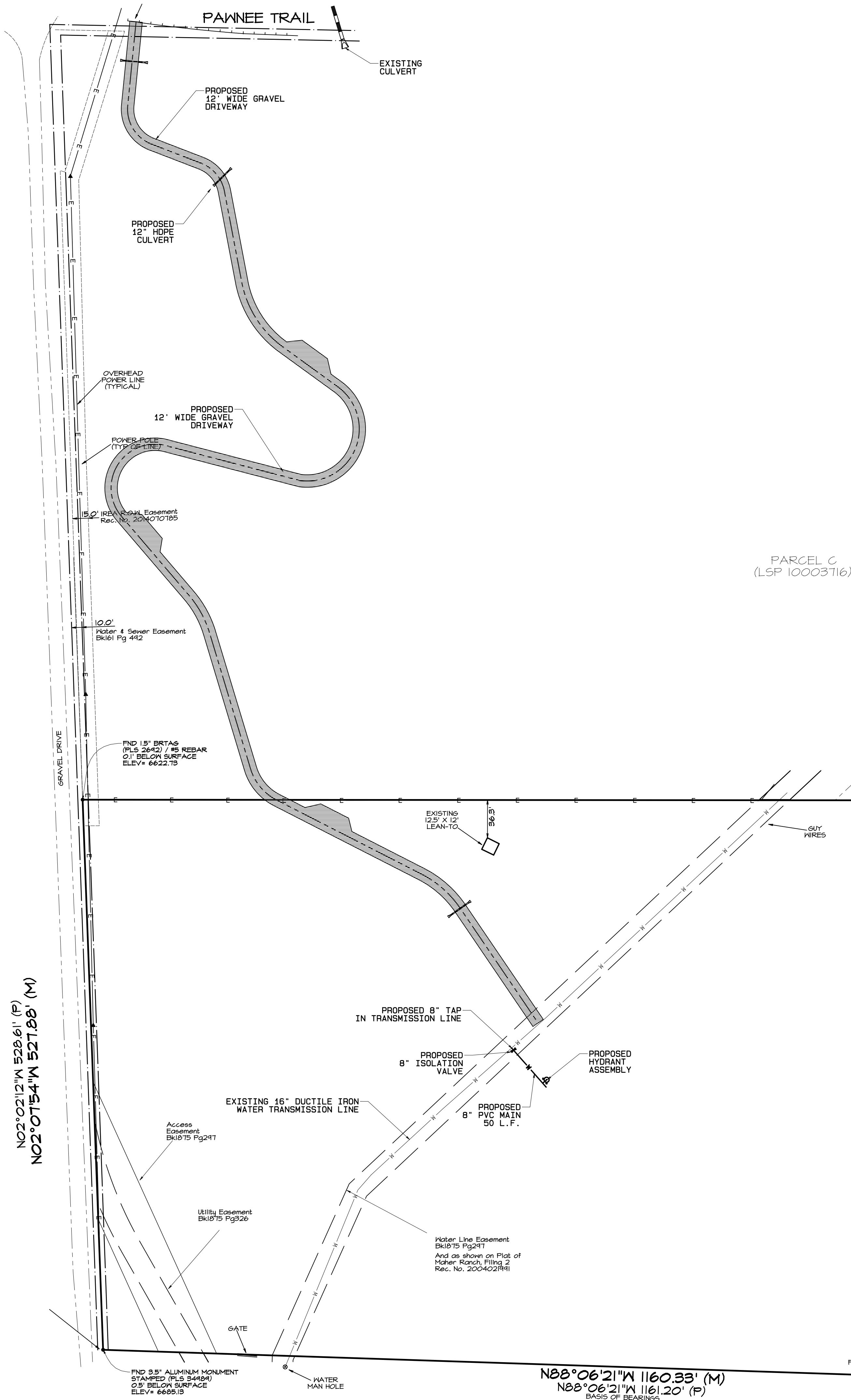


REVISIONS

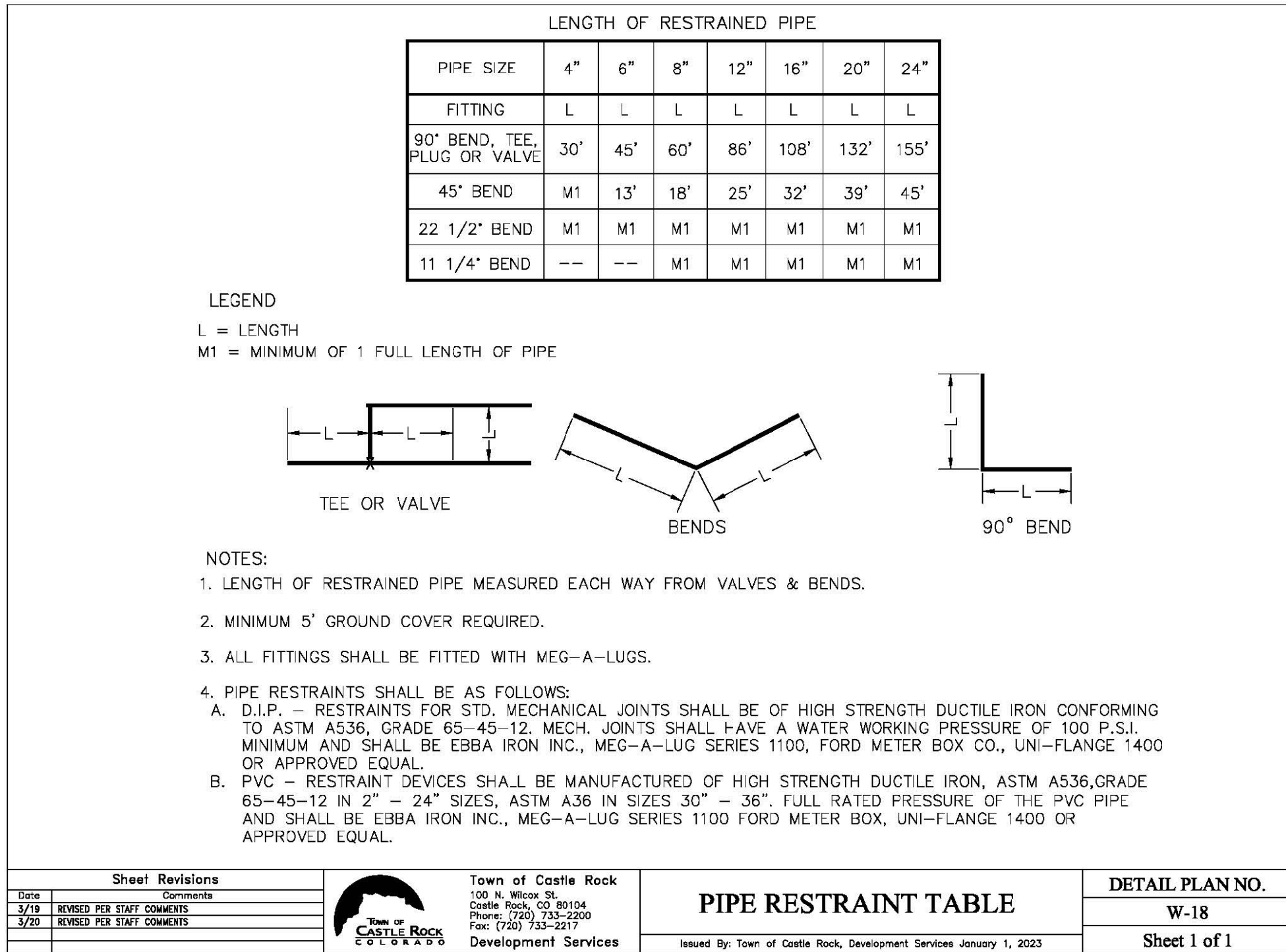
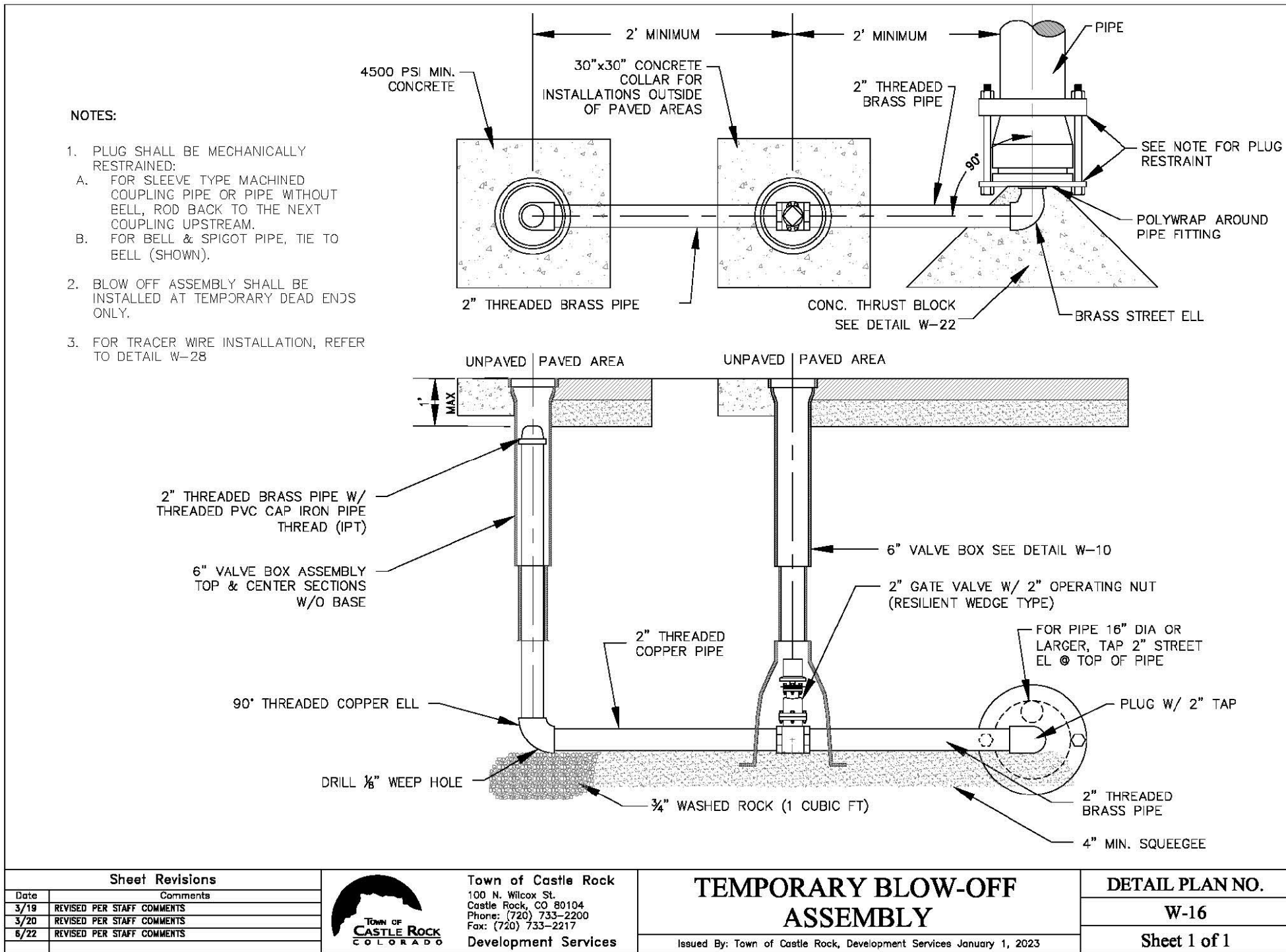
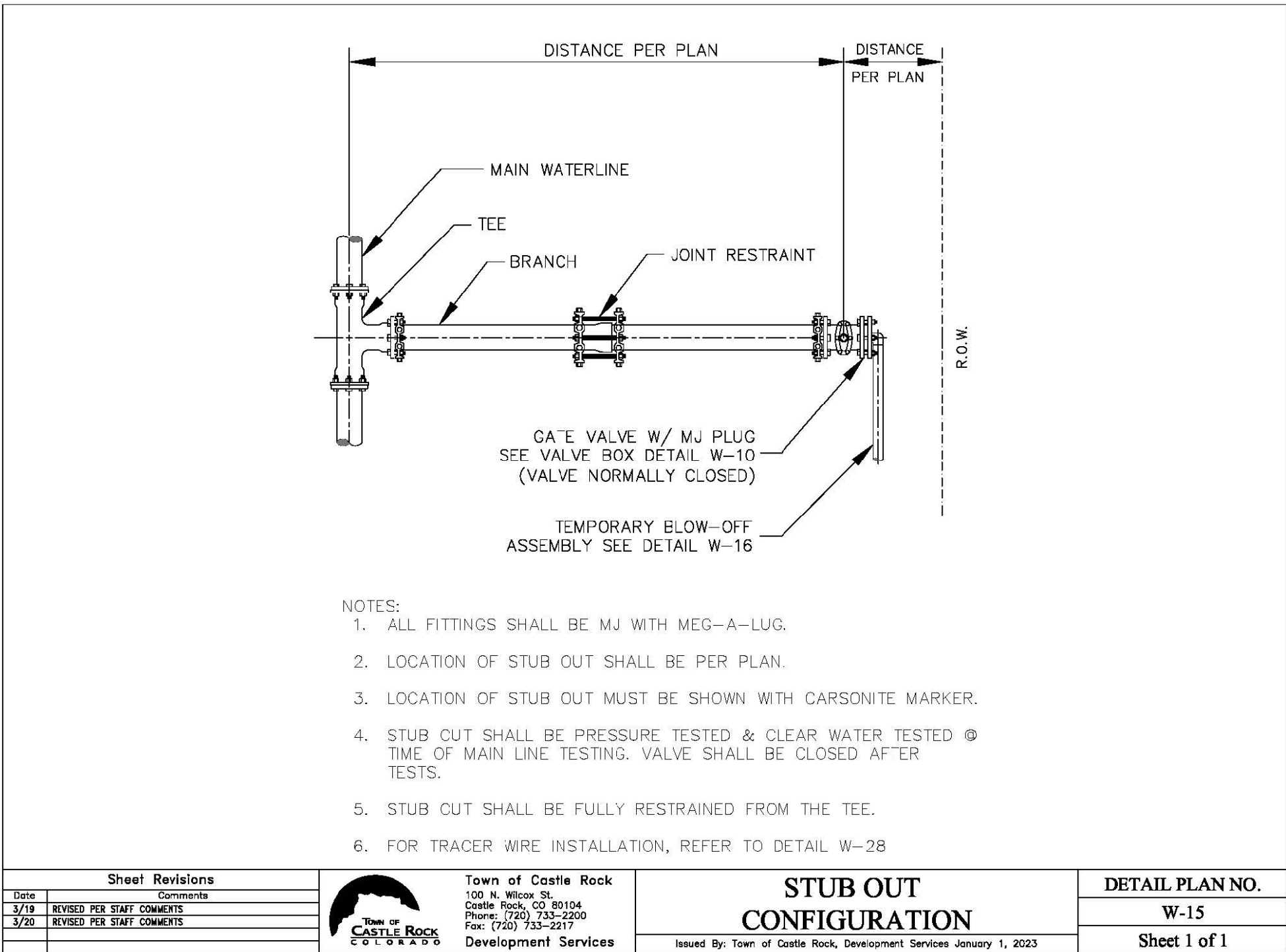
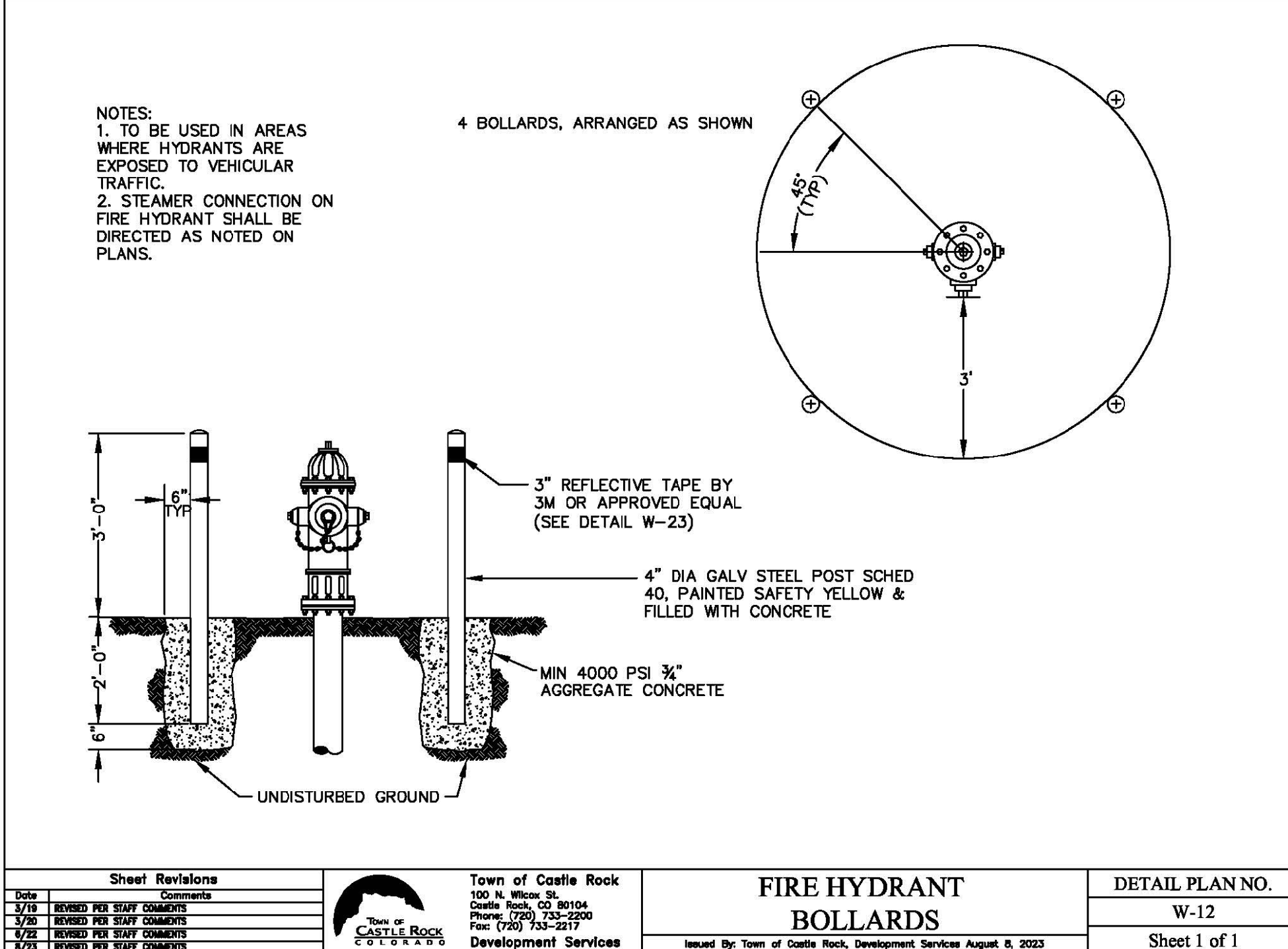
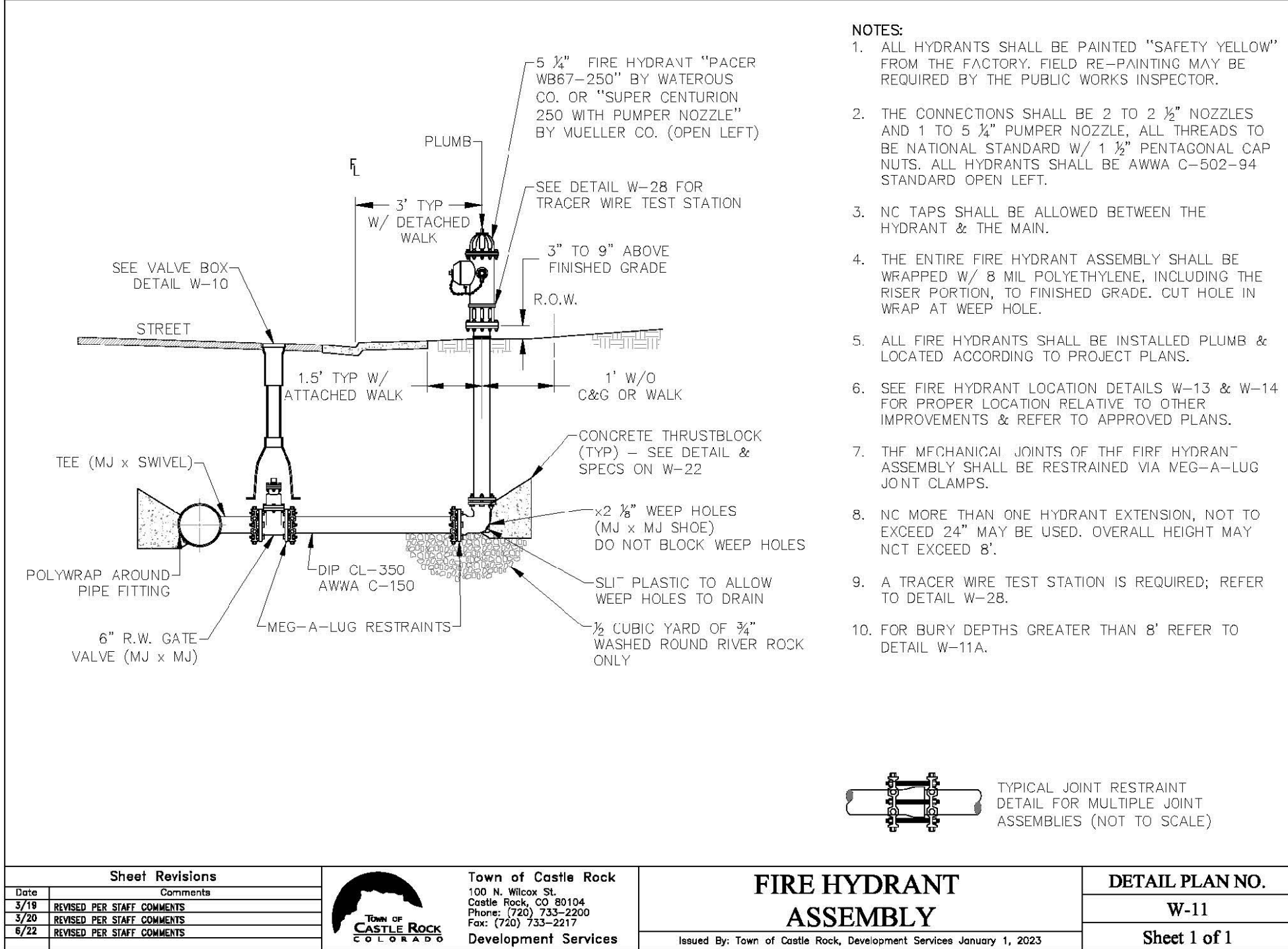
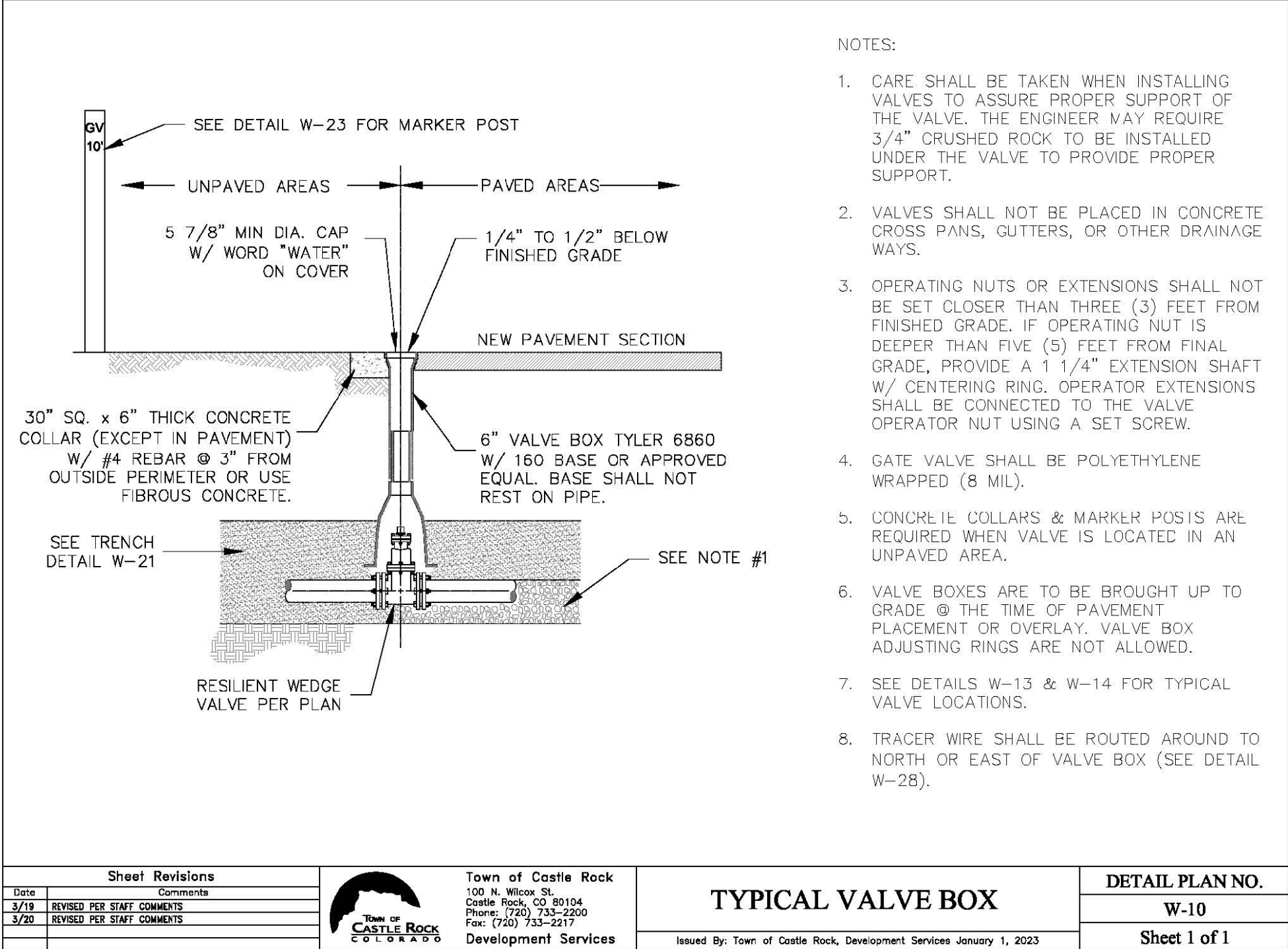
DAVID E.
ARCHER
& ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104



TITLE	UTILITY PLAN
SCALE	1"=60'
DATE	04/05/25
DRN	ZET
TRD	
APVD	
CLIENT	RYAN LYNCH
JOB NUMBER	25-0097
SHEET	2 of 4



TRACT IN SW 1/4 23-7-67



I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY, AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

TOWN OF CASTLE ROCK APPROVALS
THESE PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

APPROVED BY:

DEVELOPMENT SERVICES DIRECTOR

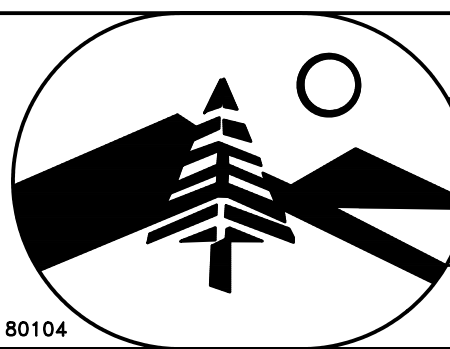
DATE

ZACHARY E THATCHER PE NO. 64656

DATE

REVISIONS

DAVID E. ARCHER & ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104



SCALE -
DATE 04/05/25
BY: JET
APP'D:

TITLE WATER LINE DETAILS

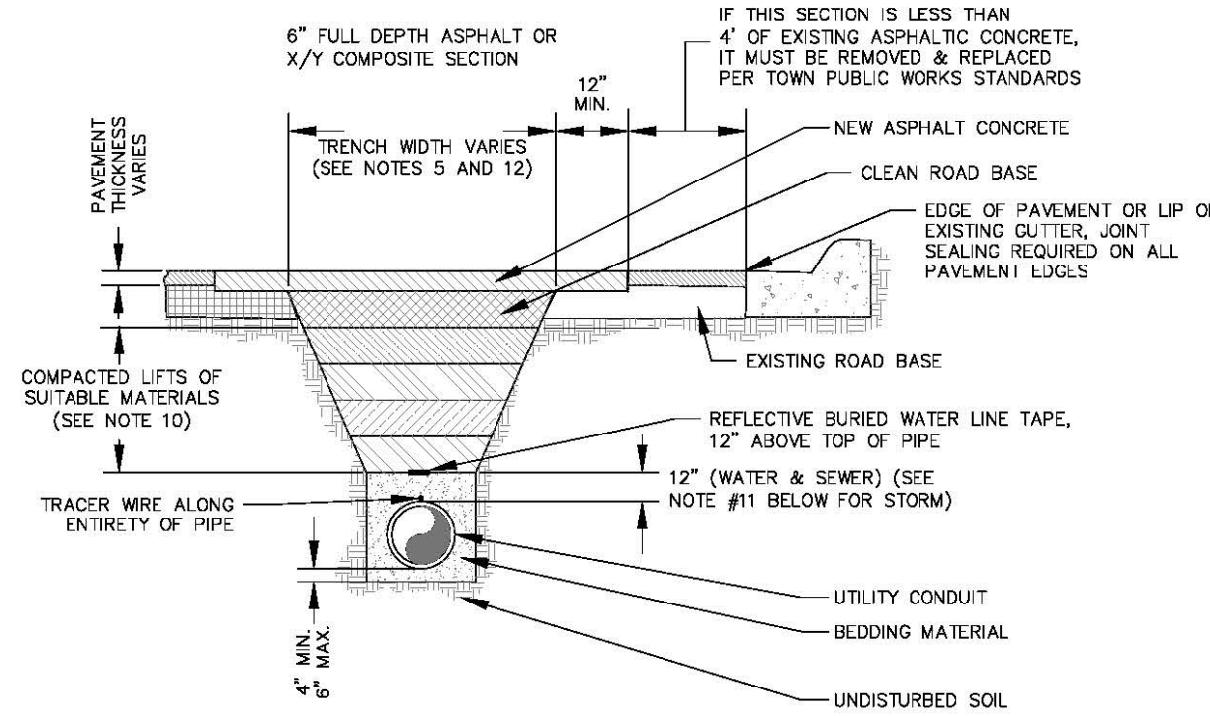
TBD PAWNEE TRAIL
CASTLE ROCK, CO 80108

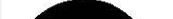
CLIENT RYAN LYNCH

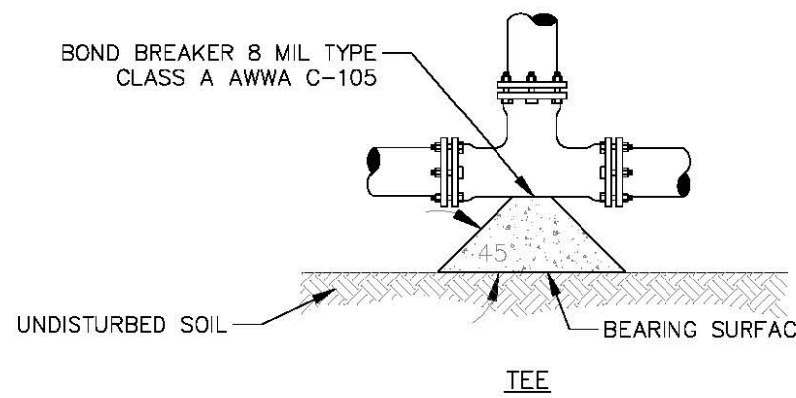
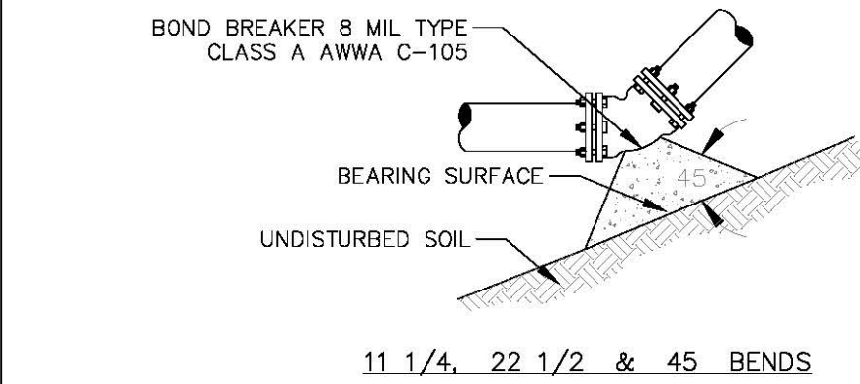
PHONE (303) 688-4642
Sheet 3 of 4 JOB NUMBER 25-0097

NOTES:

- ALL TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH THIS DETAIL UNLESS OTHERWISE SPECIFIED BY PUBLIC WORKS.
- PRIOR TO PLACEMENT OF CONCRETE, ALL EDGES SHALL BE SAW CUT TO A CLEAN, STRAIGHT, AND VERTICAL EDGE.
- PRIOR TO PLACEMENT OF ASPHALT, 18 INCHES OF ADJACENT ASPHALT SHALL BE WIDENED TO 2 INCH DEPTH ON ALL SIDES TO MATCH EXISTING PAVEMENT. INNER SURFACE TO BE TACKED WITH HSS-1.
- WHEN SUBSTITUTING FOOT BACKFILL MATERIAL, FLOWABLE FILL SHALL CONFORM TO MOPEC CLSM STANDARDS.
- TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE DIAMETER OF THE PIPE.
- 95% OF ASTM D698 STANDARD COMPACTION EFFORT IS REQUIRED ON ALL TRENCHING ZONES, IN BOTH IMPROVED & UNIMPROVED AREAS.
- IN UNIMPROVED AREAS, ALL DISTURBED AREAS SHALL BE REGRADED, SEEDED & MULCHED.
- IN CONCRETE ROADWAYS, A MINIMUM OF 1/2 PANEL WIDTH OR 10' x 3' SECTION WILL BE ALLOWED TO REMAIN, OTHERWISE THE ENTIRE CONCRETE PANEL MUST BE REPLACED.
- USE #4 REBAR AT 2' CENTERS ALONG THE PERIMETER OF CONCRETE REPLACEMENT SECTIONS.
- 6" MAXIMUM COMPACTIONED LIFT THICKNESS IF FLOWABLE FILL NOT REQUIRED.
- BEDDING MATERIAL DEPTH WHEN INSTALLING STORM SEWER SHALL BE UP TO SPRING LINE, EXCEPT IN AREAS OF UNSUITABLE BACKFILL, THEN BEDDING MATERIAL SHALL BE 12" ABOVE PIPE.
- TRENCH WIDTHS LESS THAN 4" OR TRENCHING THAT EXPERIENCES CAVING-IN OR SLOUGHING SHALL REQUIRE FLOWABLE FILL IN ORDER TO ACHIEVE COMPACTION.

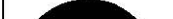


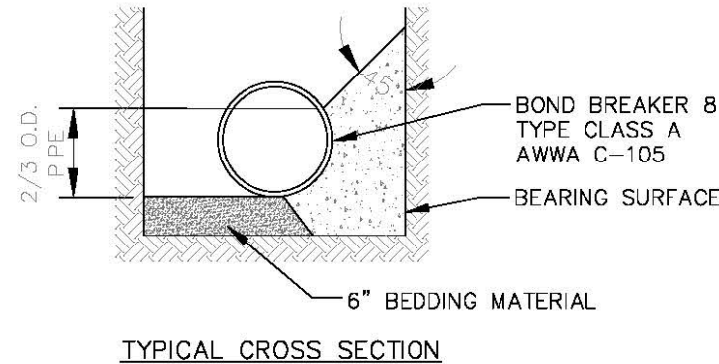
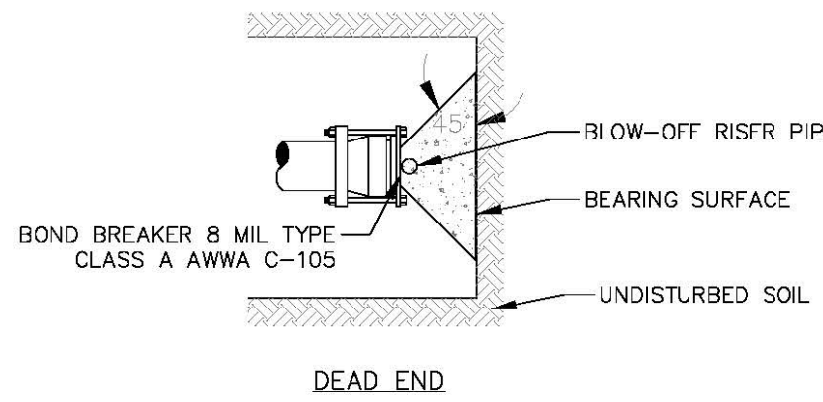
Sheet Revisions			Town of Castle Rock 100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	WATER TRENCH DETAIL		DETAIL PLAN NO.
Date	Comments					W-21
3/19	REVISED PER STAFF COMMENTS					
3/20	REVISED PER STAFF COMMENTS					
Issued By: Town of Castle Rock, Development Services January 1, 2023				Sheet 1 of 1		



NOTES:

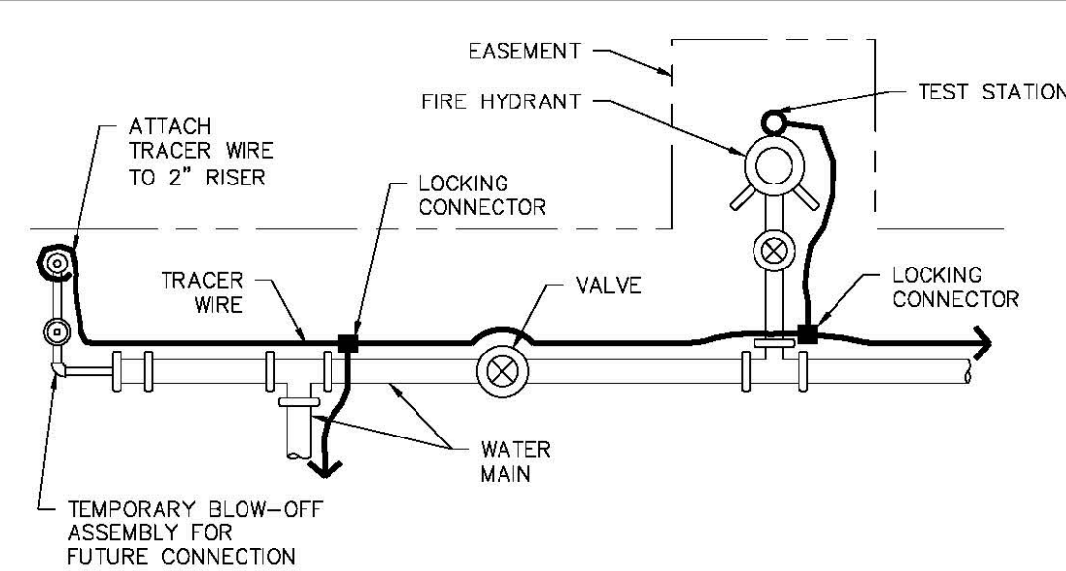
- BEARING AREAS SHOWN ON THE CHART ARE MINIMUM AREAS & ARE DESIGNED USING THE FOLLOWING CRITERIA:
 - INTERNAL WORKING PRESSURE OF 150 PSI.
 - TRANSIENT (WATER HAMMER) PRESSURE OF 120 PSI FOR 4", 6" & 8" DIAMETER LINES, 110 PSI FOR 12" LINES, & 70 PSI FOR 20" LINES.
 - THRUSTBLOCK CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
- ALL SIZES OF BENDS, TEES & DEAD ENDS SHALL HAVE CONCRETE THRUSTBLOCKS.
- THRUSTBLOCKS ARE NOT A SUBSTITUTE FOR JOINT RESTRAINT.

Sheet Revisions			Town of Castle Rock 100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 743-2200 Fax: (720) 733-2217 Development Services	HORIZONTAL BEND THRUSTBLOCKS		DETAIL PLAN NO.
Date	Comments					W-22
2/19	REVISED PER STAFF COMMENTS					
3/20	REVISED PER STAFF COMMENTS					
6/22	REVISED PER STAFF COMMENTS					
Issued By: Town of Castle Rock, Development Services January 1, 2023				Sheet 1 of 1		



MINIMUM BEARING SURFACE AREA
(IN SQUARE FEET)

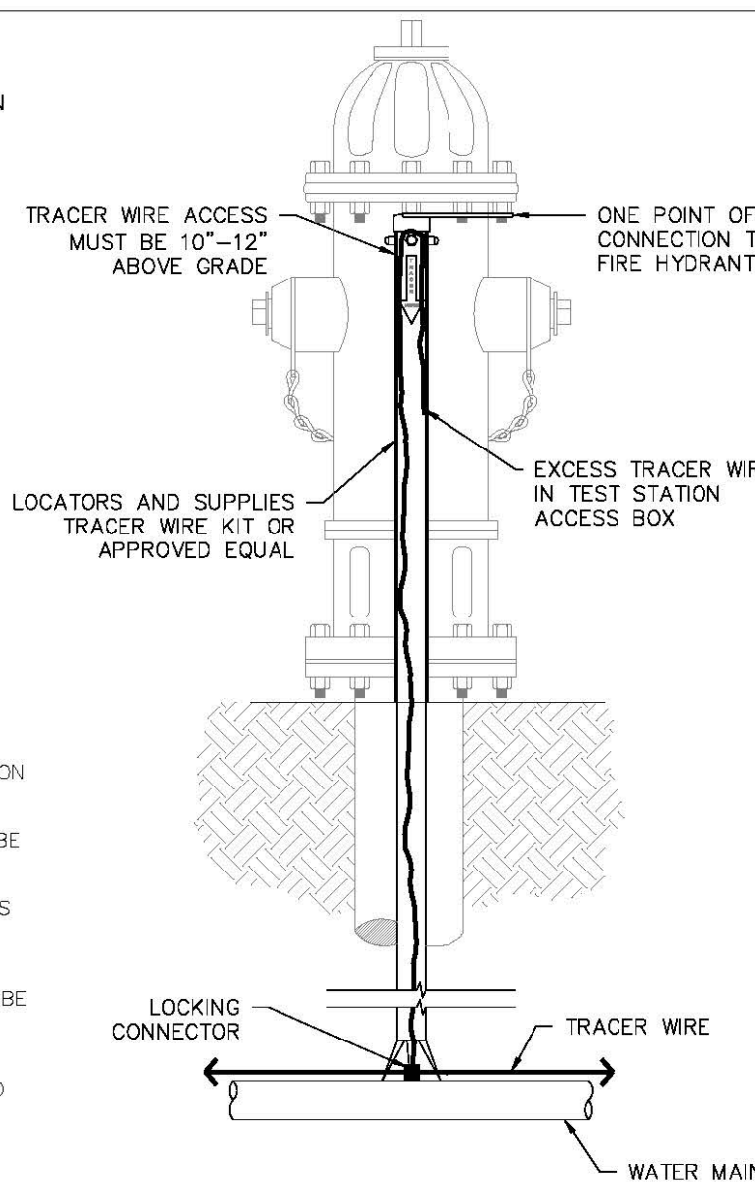
SIZE OF PIPE	11 1/4"	22 1/2"	45"	90"	TEE OR DEAD END
6"	2.00	2.00	2.25	4.25	3.00
8"	2.00	2.00	4.00	6.00	5.25
12"	2.00	4.25	8.25	12.00	11.00
16"	3.50	6.50	12.50	23.00	16.50
20"	5.00	10.00	19.50	35.50	25.00



TRACER WIRE SAMPLE PLAN

NOTES:

- REFER TO STANDARD NOTES FOR TOWN OF CASTLE ROCK GENERAL TRACER WIRE REQUIREMENTS. FOR TEST STATION AT MANHOLE, REFER TO DETAIL SD-5.
- TRACER WIRE AND TEST STATION LIDS SHALL BE BLUE FOR POTABLE WATER DISTRIBUTION SYSTEM AND PURPLE FOR RECLAIMED OR RAW WATER COMPONENTS.
- TRACER WIRE IN PLAN IS SHOWN AWAY FROM PIPE FOR CLARITY. TRACER WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5-FOOT INTERVALS.
- TRACER WIRE SHALL BE LAID CONTINUOUSLY, PASSING AROUND THE OUTSIDE OF VALVES AND FITTINGS ON THE NORTH OR EAST SIDE.
- TEST STATIONS SHALL BE INSTALLED AT EVERY FIRE HYDRANT, AS SHOWN, OR AT A MINIMUM INTERVAL OF 500 FEET. TEST STATIONS NOT LOCATED NEAR HYDRANTS MUST BE PLACED BEHIND EDGE OF PAVEMENT.
- AT ALL TEMPORARY BLOW-OFFS, THE END OF THE TRACER WIRE SHALL BE CONTAINED WITHIN A CORROSION PREVENTION CAP, THEN BROUGHT TO SURFACE AND ATTACHED TO THE RISER PIPE AT GRADE WITHIN THE EASEMENT OR R.O.W.
- TEST STATIONS SHALL LIE WITHIN UTILITY EASEMENT OR PUBLIC R.O.W.
- PROVIDE ADEQUATE LENGTH OF TRACER WIRE TO EXTEND 12 INCHES ABOVE GRADE.
- TEST STATIONS NOT LOCATED AT A FIRE HYDRANT MUST BE AT GRADE WITH LOCKING LID.



FIRE HYDRANT TRACER WIRE DETAIL

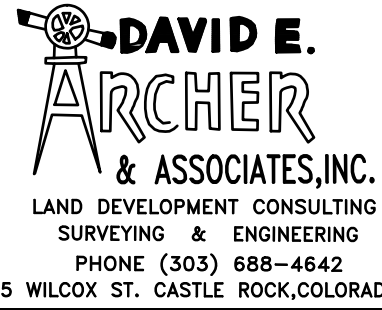
Sheet Revisions			Town of Castle Rock 100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	TRACER WIRE DETAIL		DETAIL PLAN NO.
Date	Comments					W-28
2/19	REVISED PER STAFF COMMENTS					
3/20	REVISED PER STAFF COMMENTS					
7/22	REVISED PER STAFF COMMENTS					
Issued By: Town of Castle Rock, Development Services January 1, 2023				Sheet 1 of 1		

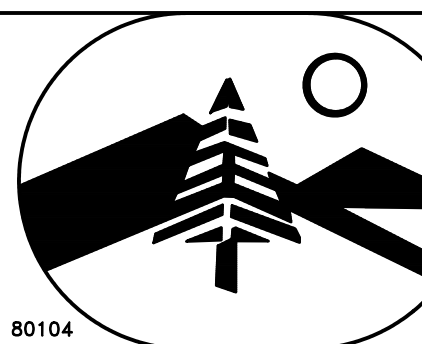
I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY, AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

ZACHARY E THATCHER PE NO. 64656

DATE

REVISIONS

**DAVID E. ARCHER**
& ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104



SCALE -
DATE 04/05/25
BY: JET
APPROVED: [Signature]

TITLE WATER LINE DETAILS

TBD PAVINEE TRAIL
CASTLE ROCK, CO 80108

CLIENT RYAN LYNCH

Sheet 4 of 4 JOB NUMBER 25-0097

TOWN OF CASTLE ROCK APPROVALS
THESE PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

APPROVED BY:

DEVELOPMENT SERVICES DIRECTOR

DATE