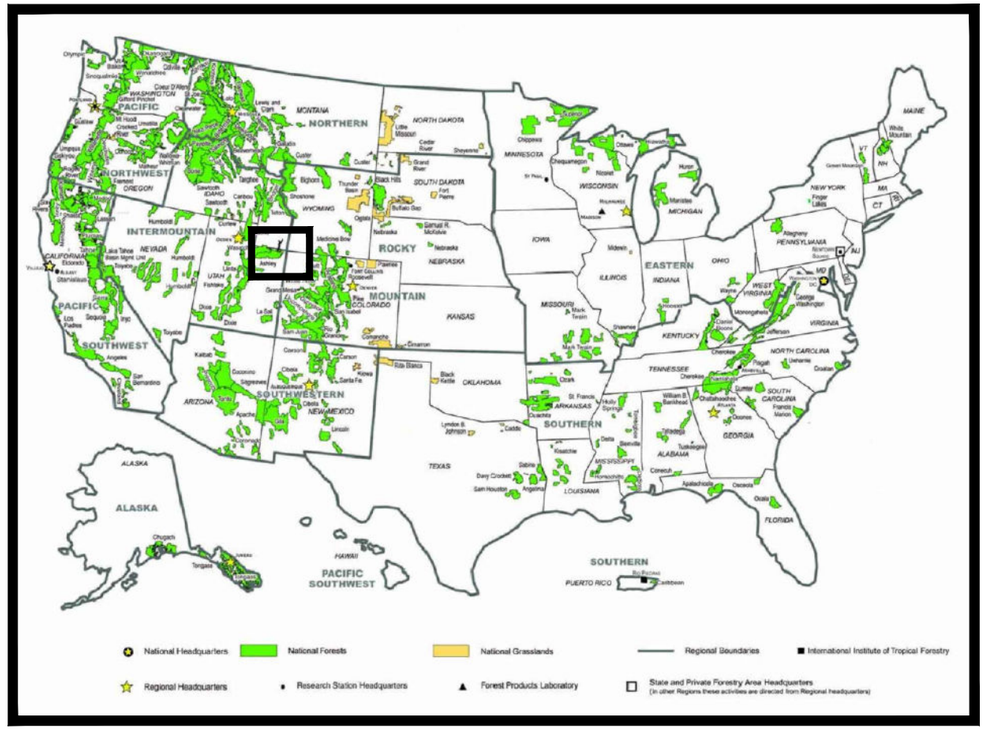
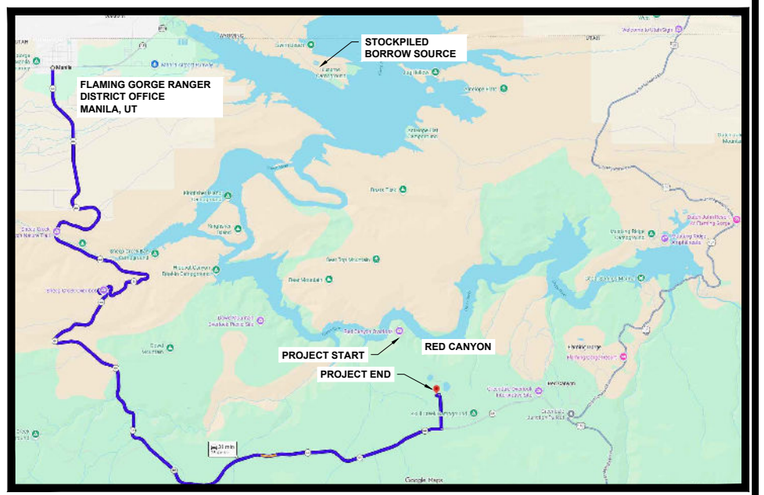
United States Department of Agriculture
Forest Service

UTAH
DAGGETT COUNTY
R-4 INTERMOUNTAIN REGION
ASHLEY NATIONAL FOREST
FLAMING GORGE RANGER DISTRICT

ROSS SPRINGS-RED CANYON WATERLINE REPLACEMENT



FOREST LOCATION



VICINITY MAP

TRAVEL DIRECTIONS:

FROM THE FLAMING GORGE RANGER DISTRICT OFFICE, TRAVEL SOUTH ON UT HIGHWAY 44 TOWARD VERNAL, UT FOR 24.5 MILES. TURN LEFT ONTO RED CANYON ROAD (FS 095), HEADING NORTHEAST FOR 0.8 MILES, THEN TURN LEFT ON FOREST ROAD 372 FOR 400' TO THE SOUTH END OF THE PROJECT. CONTINUE ON RED CANYON ROAD TO THE END OF THE ROAD NEAR THE NORTH END OF THE PROJECT.

COORDINATES: 40° 52.977' N, 109° 32.618' W
ELEVATION: 7450 FEET

INDEX OF SHEETS

SHEET	DWG	SHEET TITLE
1	G-1	COVER SHEET
2	W-1	SITE OVERVIEW, GENERAL NOTES, AND SURVEY CONTROL
3	W-2	WATERLINE PLAN AND PROFILE - STA. 0+00 TO 13+00
4	W-3	WATERLINE PLAN AND PROFILE - STA.13+00 TO 26+00
5	W-4	WATERLINE PLAN AND PROFILE - STA. 26+00 TO 39+00
6	W-5	WATERLINE PLAN AND PROFILE - STA. 39+00 TO 52+00
7	W-6	WATERLINE PLAN AND PROFILE - STA. 52+00 TO 64+00
8	D-1	AIR-VACUUM RELIEF VALVE DETAILS
9	D-2	TRENCH / COVER, VALVES, AND VALVE BOXES DETAILS
10	D-3	SYSTEM DRAINS AND LOCATING SYSTEM DETAILS

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE REPLACEMENT OF 4" ASBESTOS CEMENT PIPE (ABANDONED IN PLACE) WITH 4" HDPE WATER MAIN, AND ASSOCIATED VALVES AND CONNECTIONS TO LATERALS, ON THE ROSS SPRINGS PUBLIC WATER SYSTEM ON THE FLAMING GORGE RANGER DISTRICT OF THE ASHLEY NATIONAL FOREST. SPECIFICALLY, THIS PROJECT FOCUSES ON THE LOWER 1.1 MILES OF THE WATER SYSTEM SERVING THE RED CANYON CAMPGROUNDS AND VISITOR CENTER. WORK INCLUDES:

1. INSTALLING 4450 LINEAR FEET OF 4" HDPE PIPELINE, MOST OF WHICH IS SHALLOW BURY OR LAID ON CLEARED GROUND AND COVERED WITH IMPORTED FILL FROM A GOVERNMENT SOURCE.
2. COVER AND ADDITIONAL 1150 LINEAR FEET OF EXISTING PIPELINE WITH IMPORTED FILL FROM A GOVERNMENT SOURCE.
3. INSTALLING 2 COMBINATION AIR-VAC VALVES WITH UTILITY BOXES.
4. INSTALLING ASSOCIATED VALVES, DAYLIGHT DRAINS, AND PUMPOUT DRAINS; AND CONNECTING TO EXISTING LATERAL MAINS AND SERVICES.

RECOMMENDED BY:

Cathleen Christensen — 6/29/2026
FOREST ENGINEER — DATE

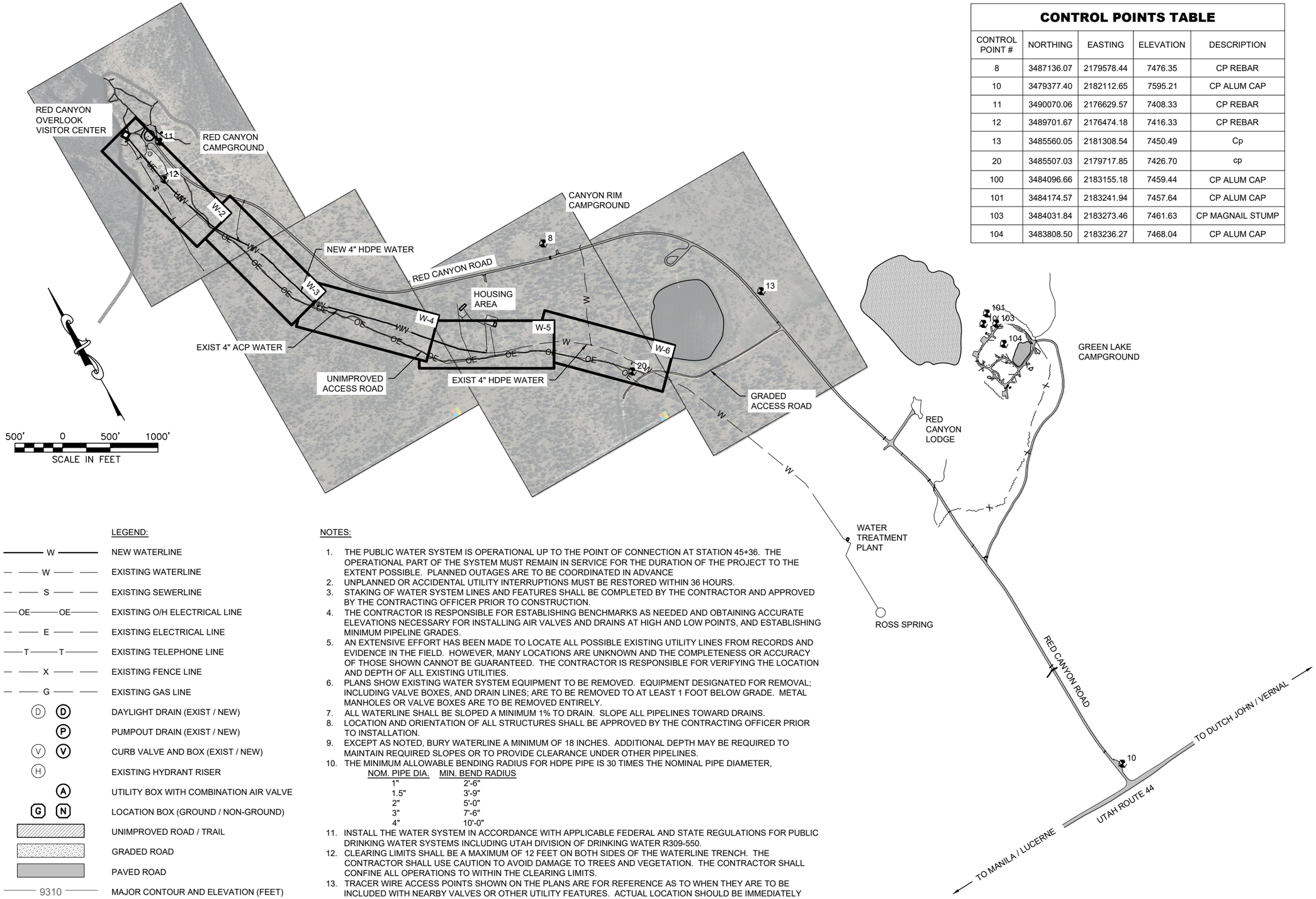
Lena Rux — 6/29/2026
DISTRICT RANGER — DATE

Kristy Groves — 6/29/2026
FOREST SUPERVISOR — DATE

APPROVED:

Kevin Bourne — 7/1/2026
DIRECTOR OR DEP. DIR. OF ENGINEERING — DATE

6/30/26 10:25 KCARNES X:\ASHLEY\ROSS WATERLINE\REPLACEMENT 2026\DRAWINGS\01 G1 TITLE SHEET.DWG;



CONTROL POINTS TABLE

CONTROL POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
8	3487136.07	2179578.44	7476.35	CP REBAR
10	3479377.40	2182112.65	7595.21	CP ALUM CAP
11	3490070.06	2176629.57	7408.33	CP REBAR
12	3489701.67	2176474.18	7416.33	CP REBAR
13	3485560.05	2181308.54	7450.49	Cp
20	3485507.03	2179717.85	7426.70	cp
100	3484096.66	2183155.18	7459.44	CP ALUM CAP
101	3484174.57	2183241.94	7457.64	CP ALUM CAP
103	3484031.84	2183273.46	7461.63	CP MAGNAIL STUMP
104	3483808.50	2183236.27	7468.04	CP ALUM CAP

LEGEND:

- NEW WATERLINE
- EXISTING WATERLINE
- EXISTING SEWERLINE
- EXISTING O/H ELECTRICAL LINE
- EXISTING ELECTRICAL LINE
- EXISTING TELEPHONE LINE
- EXISTING FENCE LINE
- EXISTING GAS LINE
- DAYLIGHT DRAIN (EXIST / NEW)
- PUMPOUT DRAIN (EXIST / NEW)
- CURB VALVE AND BOX (EXIST / NEW)
- EXISTING HYDRANT RISER
- UTILITY BOX WITH COMBINATION AIR VALVE
- LOCATION BOX (GROUND / NON-GROUND)
- UNIMPROVED ROAD / TRAIL
- GRADED ROAD
- PAVED ROAD
- 9310 — MAJOR CONTOUR AND ELEVATION (FEET)

NOTES:

1. THE PUBLIC WATER SYSTEM IS OPERATIONAL UP TO THE POINT OF CONNECTION AT STATION 45+36. THE OPERATIONAL PART OF THE SYSTEM MUST REMAIN IN SERVICE FOR THE DURATION OF THE PROJECT TO THE EXTENT POSSIBLE. PLANNED OUTAGES ARE TO BE COORDINATED IN ADVANCE
2. UNPLANNED OR ACCIDENTAL UTILITY INTERRUPTIONS MUST BE RESTORED WITHIN 36 HOURS.
3. STAKING OF WATER SYSTEM LINES AND FEATURES SHALL BE COMPLETED BY THE CONTRACTOR AND APPROVED BY THE CONTRACTING OFFICER PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING BENCHMARKS AS NEEDED AND OBTAINING ACCURATE ELEVATIONS NECESSARY FOR INSTALLING AIR VALVES AND DRAINS AT HIGH AND LOW POINTS, AND ESTABLISHING MINIMUM PIPELINE GRADES.
5. AN EXTENSIVE EFFORT HAS BEEN MADE TO LOCATE ALL POSSIBLE EXISTING UTILITY LINES FROM RECORDS AND EVIDENCE IN THE FIELD. HOWEVER, MANY LOCATIONS ARE UNKNOWN AND THE COMPLETENESS OR ACCURACY OF THOSE SHOWN CANNOT BE GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES.
6. PLANS SHOW EXISTING WATER SYSTEM EQUIPMENT TO BE REMOVED. EQUIPMENT DESIGNATED FOR REMOVAL; INCLUDING VALVE BOXES, AND DRAIN LINES; ARE TO BE REMOVED TO AT LEAST 1 FOOT BELOW GRADE. METAL MANHOLES OR VALVE BOXES ARE TO BE REMOVED ENTIRELY.
7. ALL WATERLINE SHALL BE SLOPED A MINIMUM 1% TO DRAIN. SLOPE ALL PIPELINES TOWARD DRAINS.
8. LOCATION AND ORIENTATION OF ALL STRUCTURES SHALL BE APPROVED BY THE CONTRACTING OFFICER PRIOR TO INSTALLATION.
9. EXCEPT AS NOTED, BURY WATERLINE A MINIMUM OF 18 INCHES. ADDITIONAL DEPTH MAY BE REQUIRED TO MAINTAIN REQUIRED SLOPES OR TO PROVIDE CLEARANCE UNDER OTHER PIPELINES.
10. THE MINIMUM ALLOWABLE BENDING RADIUS FOR HDPE PIPE IS 30 TIMES THE NOMINAL PIPE DIAMETER,

NOM. PIPE DIA.	MIN. BEND RADIUS
1"	2'-6"
1.5"	3'-9"
2"	5'-0"
3"	7'-6"
4"	10'-0"

11. INSTALL THE WATER SYSTEM IN ACCORDANCE WITH APPLICABLE FEDERAL AND STATE REGULATIONS FOR PUBLIC DRINKING WATER SYSTEMS INCLUDING UTAH DIVISION OF DRINKING WATER R309-550.
12. CLEARING LIMITS SHALL BE A MAXIMUM OF 12 FEET ON BOTH SIDES OF THE WATERLINE TRENCH. THE CONTRACTOR SHALL USE CAUTION TO AVOID DAMAGE TO TREES AND VEGETATION. THE CONTRACTOR SHALL CONFINE ALL OPERATIONS TO WITHIN THE CLEARING LIMITS.
13. TRACER WIRE ACCESS POINTS SHOWN ON THE PLANS ARE FOR REFERENCE AS TO WHEN THEY ARE TO BE INCLUDED WITH NEARBY VALVES OR OTHER UTILITY FEATURES. ACTUAL LOCATION SHOULD BE IMMEDIATELY ADJACENT TO THE VALVES OR FEATURES SO THEY CAN BE READILY FOUND. SEE SHEET D-3 AND SPECIFICATION SECTION 330530 FOR MORE DETAILED INFORMATION ON ACCESS POINT AND WIRE LOCATION.

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PROJECT NAME

ROSS SPRINGS-RED CANYON WATERLINE REPLACEMENT

ASHLEY NATIONAL FOREST

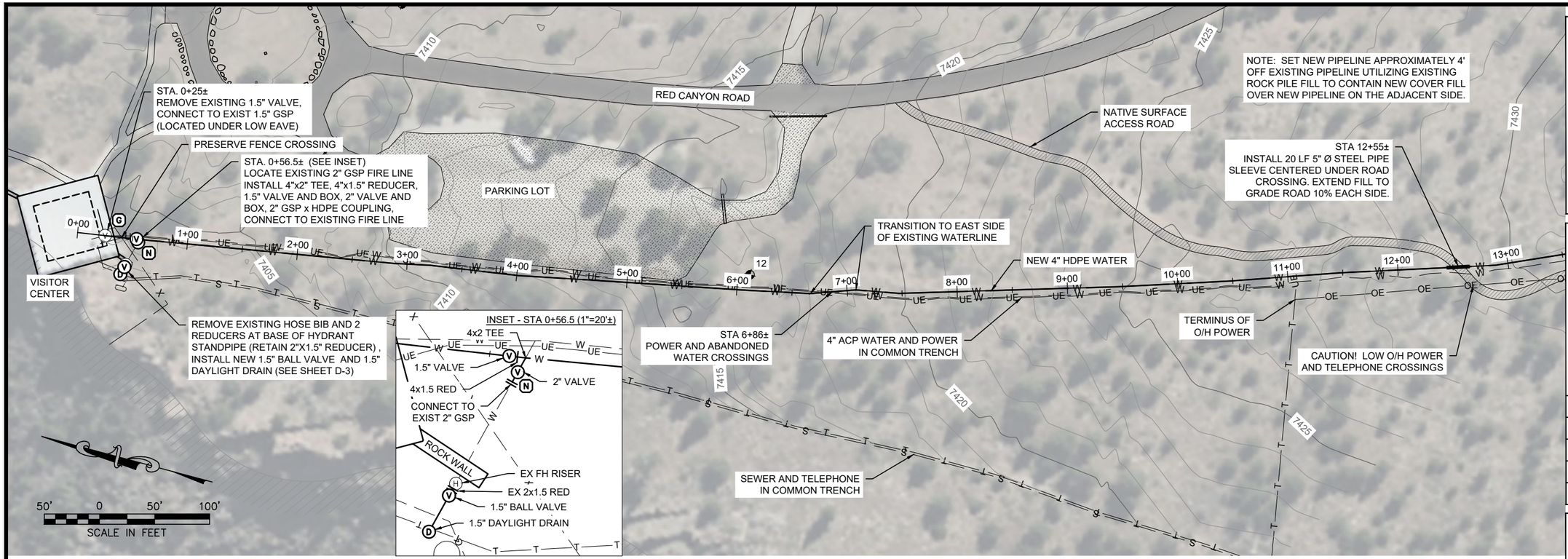
FLAMING GORGE DISTRICT

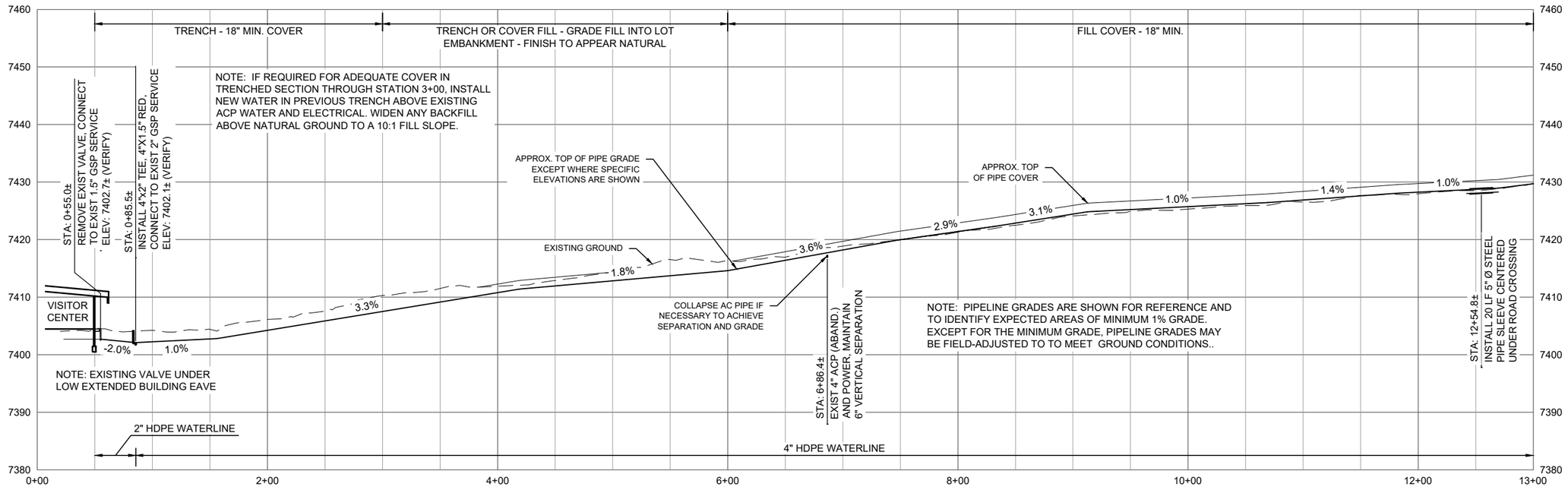
DRAWING TITLE

SITE OVERVIEW, GENERAL NOTES, AND SURVEY CONTROL

DATE	ARCHIVE NO.
DESIGNER: K CARNES	DRAWING SHEET NO. W-1
DRAWN: K CARNES	
CHECKED: R ANDERSON	
PROJECT NO.	SHEET 1 OF 10

6/23/26 14:40 K:\CARNES X:\ASHLEY\ROSS.WATERLINE.REPLACEMENT_2026\DRAWINGS\W1-W6.ROSSSPRWATERLINE.DWG;





RED CANYON WATER LINE - STA. 0+00 TO 13+00

VERTICAL SCALE: 1" = 20'

HORIZONTAL SCALE: 1" = 100'

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NO.	REVISION / ISSUE	DATE
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3		
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PROJECT NAME

ROSS SPRINGS-RED CANYON WATERLINE REPLACEMENT

ASHLEY NATIONAL FOREST

FLAMING GORGE DISTRICT

DRAWING TITLE

WATERLINE PLAN AND PROFILE STA. 0+00 - 13+00

DATE	ARCHIVE NO.
DESIGNER: K CARNES	DRAWING SHEET NO. W-2
DRAWN: K CARNES	
CHECKED: R ANDERSON	
PROJECT NO.	SHEET 3 OF 10

7/1/26 15:53 KCARNES X:\ASHLEY\ROSS.WATERLINE.REPLACEMENT 2026\DRAWINGS\W1-W6.ROSSSPRWATERLINE.DWG;

EXIST 2" HDPE WATER TO CAMPGROUND

INSTALL 2"x1.5" TEE, 1.5" VALVE AND PUMPOUT DRAIN (SEE SHEET D-3)

STA. 16+12.1 (SEE INSET) INSTALL 4"x2" TEE, 4" VALVE (N) AND BOX, AND 2" VALVE (E) AND BOX (SEE SHEET D-2)

NOTE: SET NEW PIPELINE APPROXIMATELY 4' OFF EXISTING PIPELINE UTILIZING EXISTING ROCK PILE FILL TO CONTAIN NEW COVER FILL OVER NEW PIPELINE ON THE ADJACENT SIDE.

NEW 4" HDPE WATER

INSTALL 23 LF± 2" HDPE, CONNECT TO EXIST 2" HDPE

REMOVE EXISTING VALVE, DRAIN VALVE, AND BOXES

EXIST 4" ACP WATER (ABANDON IN PLACE)

NATIVE SURFACE ACCESS ROAD

REMOVE EXISTING AIR/VAC VALVE AND BOX

STA. 16+45± (SEE INSET) INSTALL NEW COMBINATION AIR-VAC VALVE AND UTILITY BOX (SEE SHEET D-1)

CAUTION! LOW O/H POWER AND TELEPHONE CROSSINGS

INSET - STA 16+12.1 / 16+45 (1"=20'±)

CONNECT TO EXIST 2" HDPE

1.5" VALVE AND P/O DRAIN

2x1.5 TEE

2" VALVE

INSTALL COMBO A/V

4" VALVE

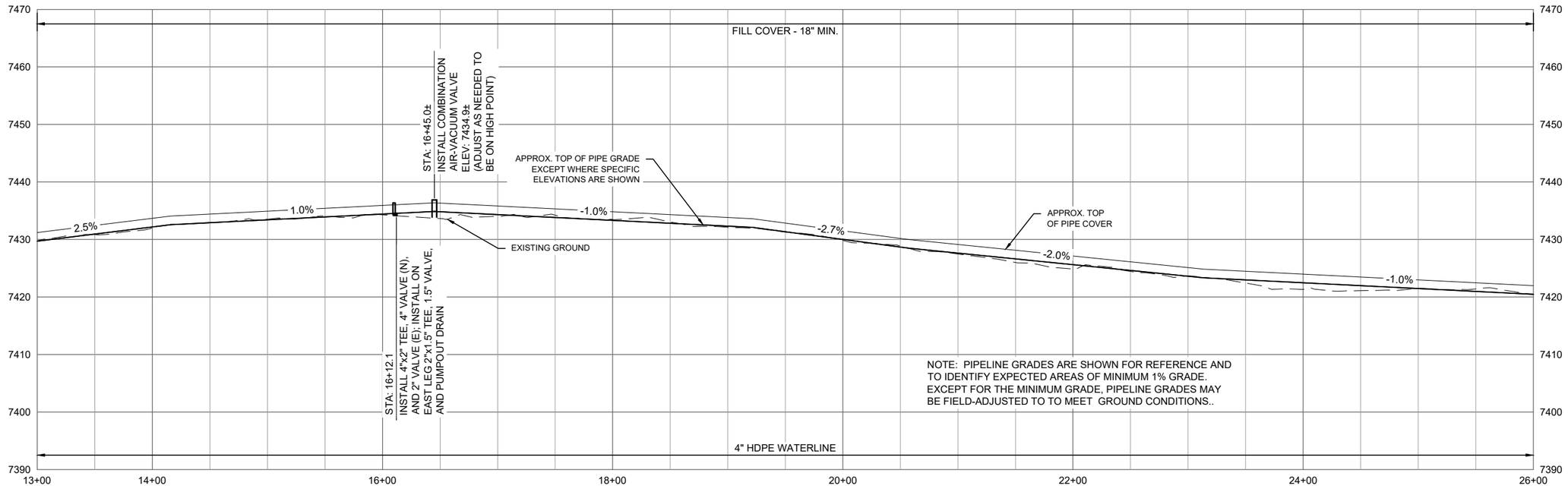
4x2 TEE

REMOVE VALVE AND DRAIN

REMOVE AIR VALVE

50' 0 50' 100'

SCALE IN FEET



RED CANYON WATER LINE - STA. 13+00 TO 26+00

VERTICAL SCALE: 1" = 20'

HORIZONTAL SCALE: 1" = 100'

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PROJECT NAME

ROSS SPRINGS-RED CANYON WATERLINE REPLACEMENT

ASHLEY NATIONAL FOREST

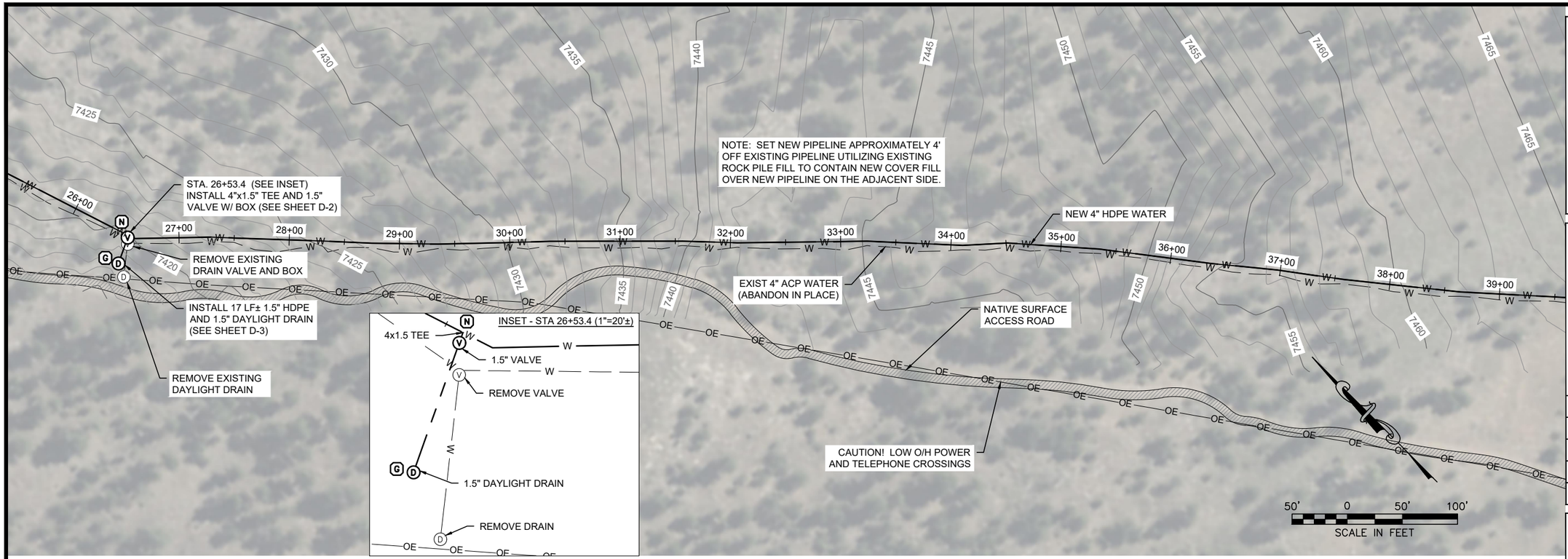
FLAMING GORGE DISTRICT

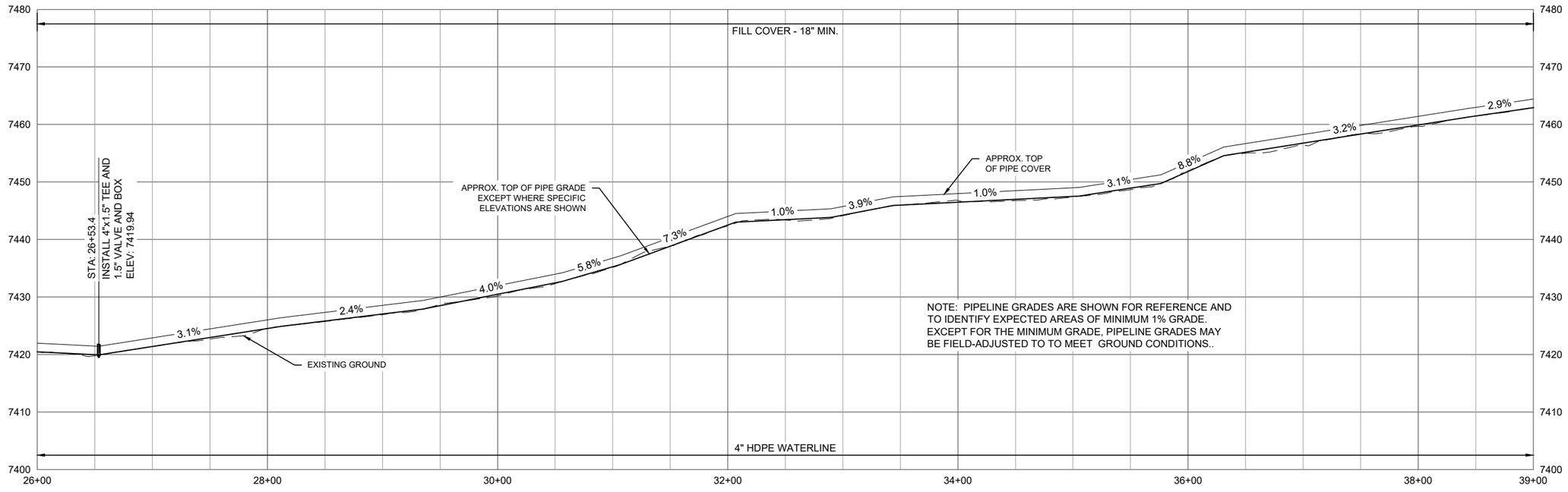
DRAWING TITLE

WATERLINE PLAN AND PROFILE STA. 13+00 - 26+00

DATE	ARCHIVE NO.
DESIGNER: K CARNES	DRAWING SHEET NO. W-3
DRAWN: K CARNES	
CHECKED: R ANDERSON	
PROJECT NO.	SHEET 4 OF 10

7/1/26 16:53 KCARNES X:\ASHLEY\ROSS.WATERLINE.REPLACEMENT 2026\DRAWINGS\W1-W6.ROSSSPRWATERLINE.DWG;





RED CANYON WATER LINE - STA. 26+00 TO 39+00

VERTICAL SCALE: 1" = 20'

HORIZONTAL SCALE: 1" = 100'

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PROJECT NAME

ROSS SPRINGS-RED CANYON WATERLINE REPLACEMENT

ASHLEY NATIONAL FOREST

FLAMING GORGE DISTRICT

DRAWING TITLE

WATERLINE PLAN AND PROFILE STA. 26+00 - 39+00

DATE	ARCHIVE NO.
DESIGNER: K CARNES	DRAWING SHEET NO. W-4
DRAWN: K CARNES	
CHECKED: R ANDERSON	
PROJECT NO.	SHEET 5 OF 10

7/1/26 16:55 KCARNES X:\ASHLEY\ROSS\.WATERLINE.REPLACEMENT_2026\DRAWINGS\W1-W6.ROSSSPRWATERLINE.DWG;

NOTE: SET NEW PIPELINE APPROXIMATELY 4' OFF EXISTING PIPELINE UTILIZING EXISTING ROCK PILE FILL TO CONTAIN NEW COVER FILL OVER NEW PIPELINE ON THE ADJACENT SIDE.

NEW 4" HDPE WATER

BED AND BACKFILL 30 LF EXIST SERVICE LINE FROM MAIN TO INCLUDE P/O DRAIN, LEAVE REMAINING SERVICE EXPOSED

INSTALL 1" PUMPOUT DRAIN OFF EXISTING METAL CURB STOP VALVE, INSTALL VALVE BOX (SEE SHEETS D-2 AND D-3)

EXISTING 2" METAL CURB STOP, INSTALL NEW VALVE BOX (SEE SHEET D-2)

EXISTING DR-17 4" HDPE WATER

EXIST 4" ACP WATER (ABANDON IN PLACE)

STA. 45+36.5± (SEE INSET) CONNECT TO EXISTING 4" FLANGE GATE VALVE, INSTALL VALVE BOX (SEE SHEET D-2)

CAUTION! LOW O/H POWER AND TELEPHONE CROSSINGS

STA 46+51.3± REMOVE EXISTING AIR-VAC VALVE AND BOX, INSTALL NEW COMBINATION AIR-VAC VALVE AND UTILITY BOX (SEE SHEET D-1)

NATIVE SURFACE ACCESS ROAD

INSET - STA 45+36.5 (1"=20'±)

EX 2x1 TEE AND 1" BRASS CORP STOP, INSTALL VALVE BOX

NEW 1" P/O DRAIN CONNECTED TO EX CORP STOP

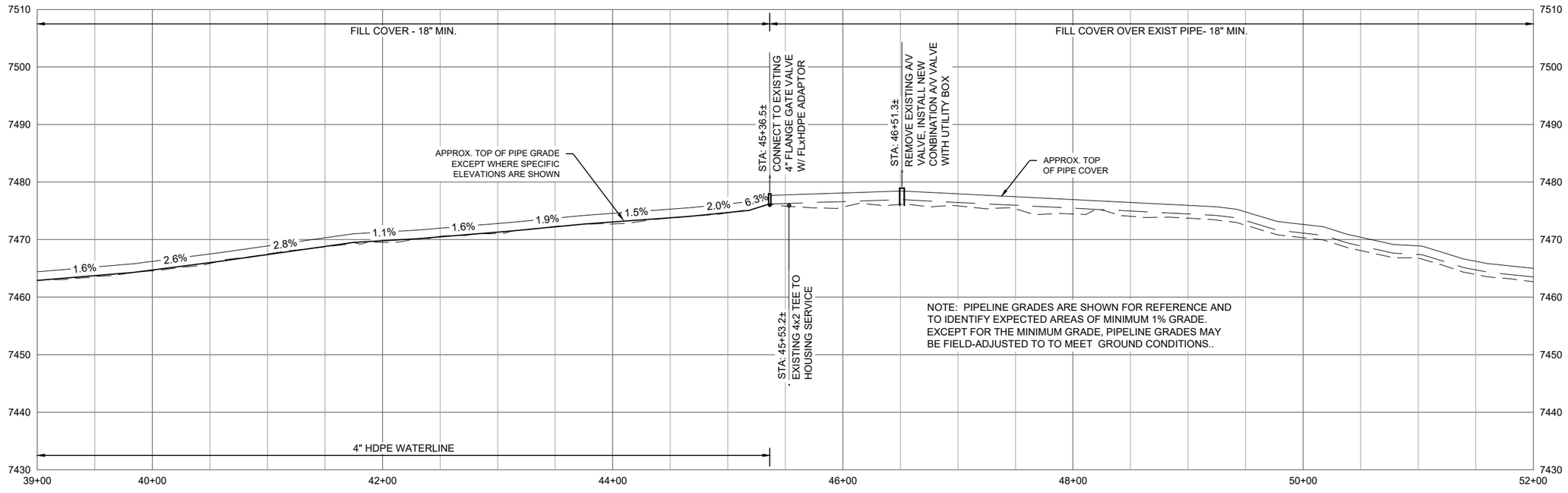
EX 2" VALVE, INSTALL BOX

CONNECT TO EX. 4" VALVE, INSTALL BOX

EX. 4x2 TEE

50' 0 50' 100'

SCALE IN FEET



RED CANYON WATER LINE - STA. 39+00 TO 52+00

VERTICAL SCALE: 1" = 20'

HORIZONTAL SCALE: 1" = 100'

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PROJECT NAME

ROSS SPRINGS-RED CANYON WATERLINE REPLACEMENT

ASHLEY NATIONAL FOREST

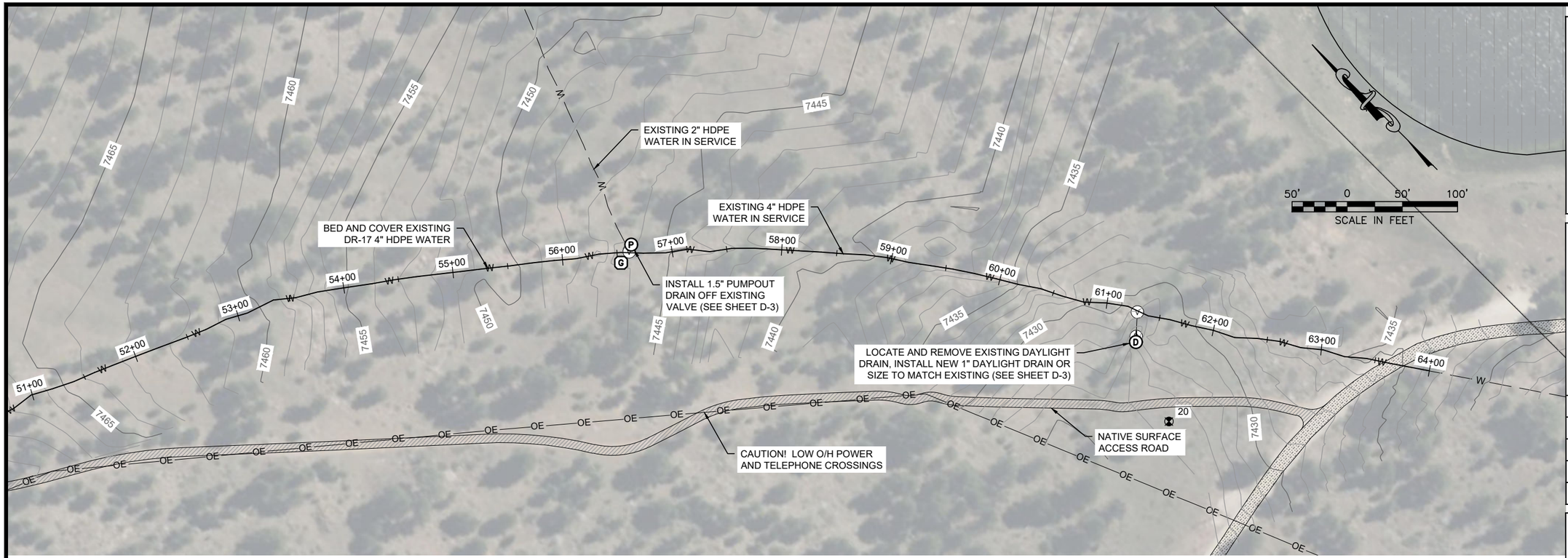
FLAMING GORGE DISTRICT

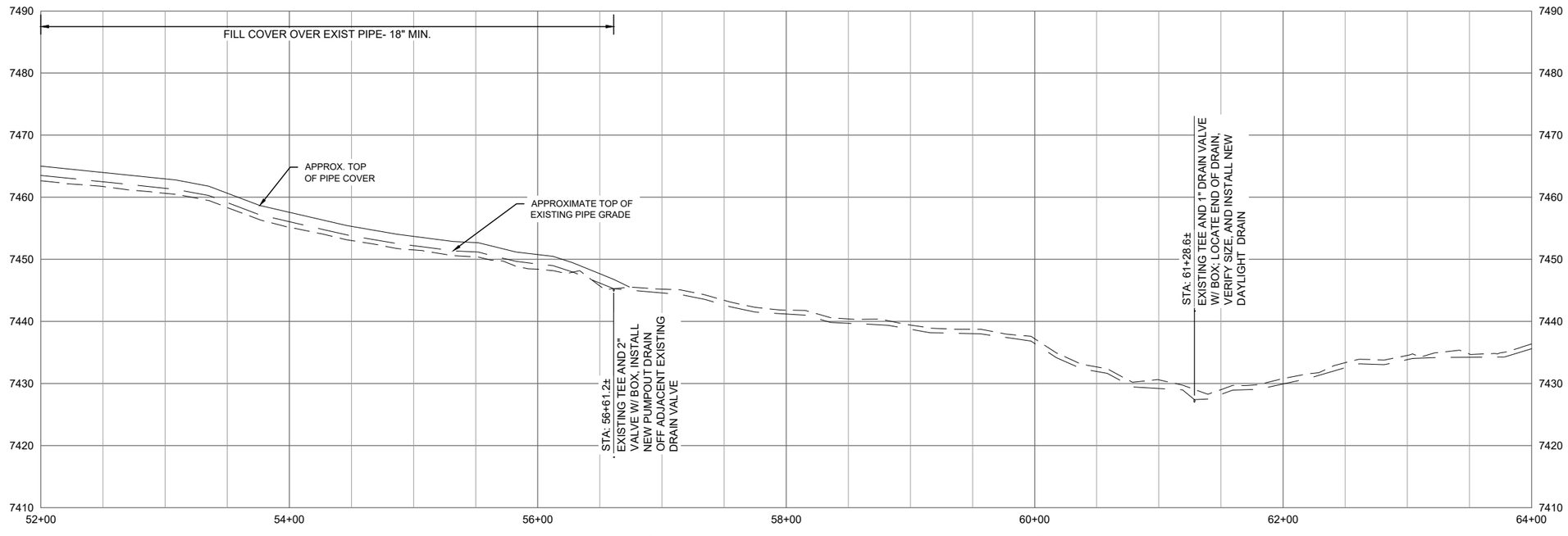
DRAWING TITLE

WATERLINE PLAN AND PROFILE STA. 39+00 - 52+00

DATE	ARCHIVE NO.
DESIGNER: K CARNES	DRAWING SHEET NO. **W-5**
DRAWN: K CARNES	
CHECKED: R ANDERSON	
PROJECT NO.	SHEET 6 OF 10

7/1/26 16:55 K:\CARNES K:\ASHLEY\ROSS.WATERLINE.REPLACEMENT_2026\DRAWINGS\W1-W6.ROSSSPRWATERLINE.DWG





RED CANYON WATER LINE - STA. 52+00 TO 64+00

VERTICAL SCALE: 1" = 20'

HORIZONTAL SCALE: 1" = 100'

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PROJECT NAME

ROSS SPRINGS-RED CANYON WATERLINE REPLACEMENT

ASHLEY
NATIONAL FOREST

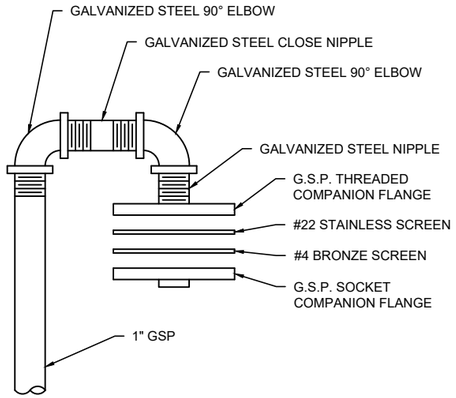
FLAMING GORGE DISTRICT

DRAWING TITLE

WATERLINE PLAN AND PROFILE STA. 52+00 - 64+00

DATE	ARCHIVE NO.
DESIGNER: K CARNES	DRAWING SHEET NO. W-6
DRAWN: K CARNES	
CHECKED: R ANDERSON	
PROJECT NO.	SHEET 7 OF 10

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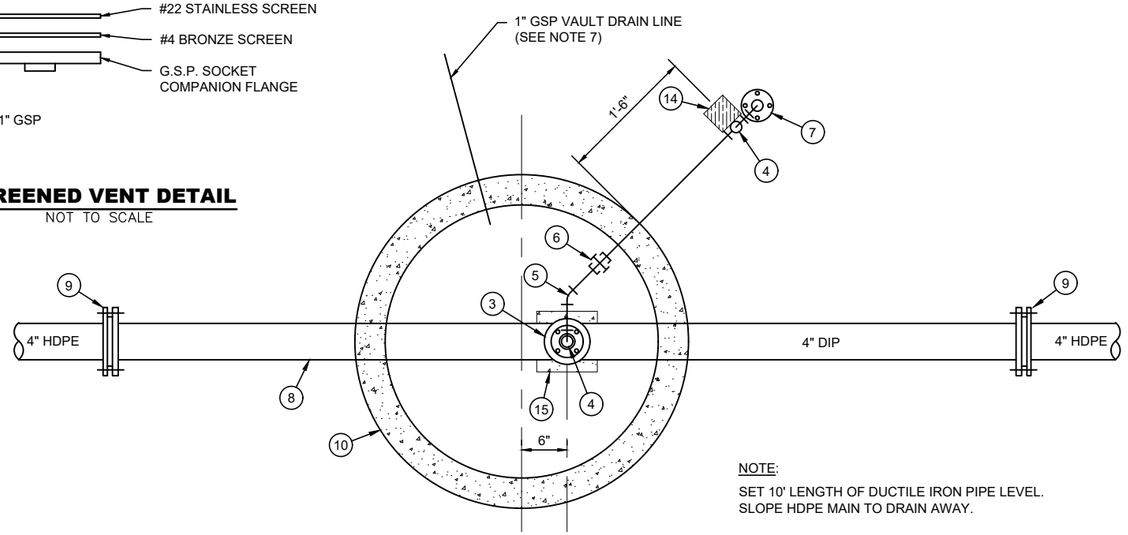


SCREENED VENT DETAIL

NOT TO SCALE

NOTES:

PROVIDE CADMIUM PLATED BOLTS (OR STAINLESS STEEL) FOR INSECT SCREEN ASSEMBLY.



PLAN VIEW (INTERIOR)

NOTE:

SET 10' LENGTH OF DUCTILE IRON PIPE LEVEL. SLOPE HDPE MAIN TO DRAIN AWAY.

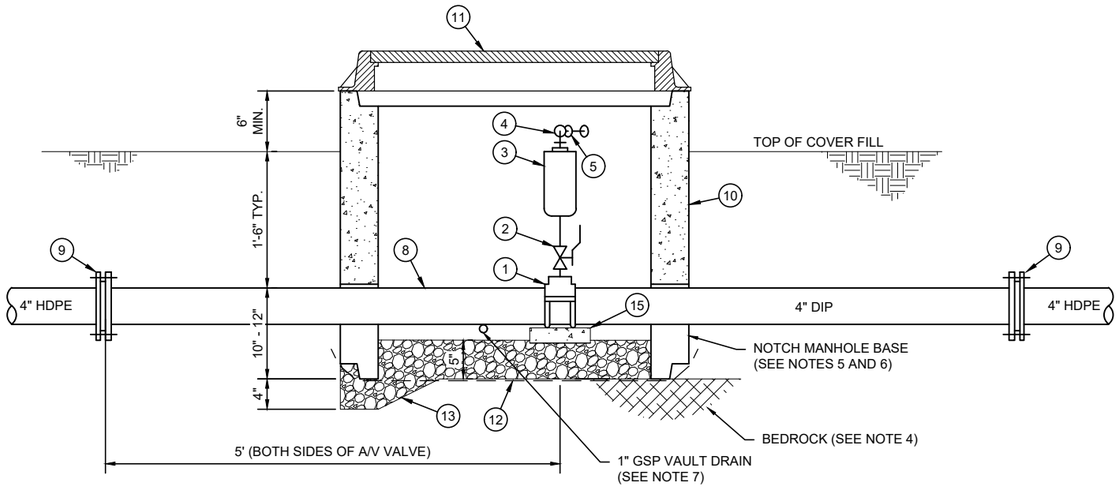
UTILITY BOX KEY NOTES

ALL PIPE AND FITTINGS OTHER THAN MAIN LINE SHALL BE GALVANIZED STEEL (GSP), UNLESS OTHERWISE NOTED.

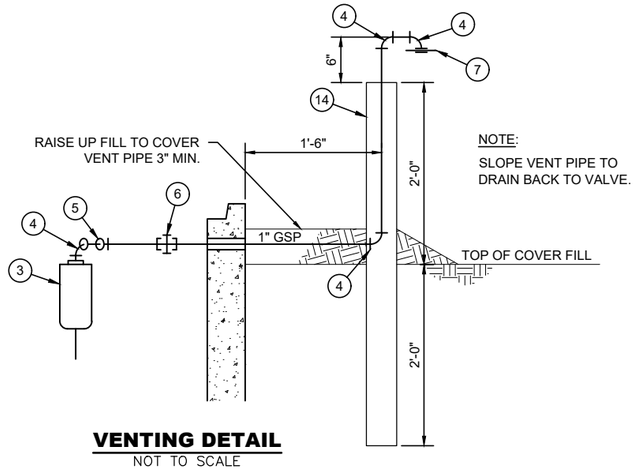
1. 1" SERVICE SADDLE WITH DOUBLE U-BOLT
2. 1" BALL VALVE
3. 1" AIR-VACUUM RELEASE VALVE
4. 1" 90-DEG ELBOW
5. 1" 45-DEG ELBOW
6. 1" UNION
7. COMPANION FLANGE AND SCREEN ASSEMBLY (SEE SCREENED VENT DETAIL THIS SHEET)
8. 4" DUCTILE IRON PIPE, 10' LONG, WITH FLANGED ENDS.
9. 4" WELDED HDPE FLANGE ADAPTOR WITH FLANGE BACKING PLATE
10. 36" Ø CONCRETE MANHOLE SECTION (36" HIGH OR AS REQUIRED)
11. COMPOSITE MANHOLE FRAME AND COVER, 36" CLEAR OPENING, MARKED "WATER" (MODEL 3800 BY EJ COMPANY OR APPROVED EQUAL)
12. 1/2-INCH MESH GALVANIZED WELDED WIRE FABRIC RODENT-PROOFING LAID FLUSH AGAINST BOTTOM OF MANHOLE RING
13. 1/2" MINUS CRUSHED AGGREGATE DRAIN ROCK
14. 4" X 4" REDWOOD POST. LOCATE WOOD POST SO THAT IT DOES NOT INTERFERE WITH OPERATION OF LID OR BLOCK ACCESS TO VAULT, AND SET ON OPPOSITE SIDE OF MANHOLE FROM ROAD.
15. 8" SQUARE CONCRETE BLOCK PAVER. STACK A MAXIMUM OF 3 PAVERS TO ACHIEVE REQUIRED HEIGHT.

UTILITY BOX GENERAL NOTES

1. ENSURE ALL APPURTENANCES CAN BE ACCESSED FOR OPERATION / MAINTENANCE.
2. SET BALL VALVE TO ENSURE FREE OPERATION WITHOUT THE HANDLE COMING IN CONTACT WITH MANHOLE WALLS, ADJACENT PLUMBING, OR OTHER OBSTRUCTIONS. ARRANGE VALVE SO THAT HANDLE POINTS UP WHEN OPEN.
3. ENSURE AIR VALVE IS SUPPORTED TO PREVENT MOVEMENT IN THREE DIMENSIONS. IN ADDITION TO THE PIPE SUPPORT BLOCKS SHOWN, ATTACH VALVE AND/OR OUTLET PIPE TO SUPPORT BRACKET MOUNTED ON THE UTILITY BOX WALL.
4. MANHOLE SHALL BE SET UPON 4" MIN. CRUSHED DRAIN ROCK EXCEPT THAT LESSER DRAIN ROCK IS ALLOWED IF BEDROCK IS LESS THAN 4" BELOW THE MANHOLE. MANHOLE MAY BE SET DIRECTLY ON BEDROCK WITH LEVELING COURSE OF BEDDING SAND OR DRAIN ROCK UNDER LOW AREAS.
5. NOTCH OR CORE MANHOLE WALL FOR WATER MAIN. CORE MANHOLE WALL FOR VENT PIPE.
6. FILL ANNULAR SPACE UP TO 1" BETWEEN WATER PIPES AND MANHOLE WALLS WITH "FOAM FILL" OR APPROVED EQUAL. USE NON-SHRINK GROUT TO FOR GAPS OVER 1"
7. INSTALL VAULT DRAIN LINE AT 2% SLOPE TO NEAREST DAYLIGHT POINT WTIHIN 10 FEET. SET 1" ABOVE THE GRAVEL BED IN THE MANHOLE, OR TO THE LOWEST PRACTICAL ELEVATION TO ACHIEVE THE DAYLIGHT WITHIN 10 FEET. COVER THE INLET END WITH #4 SCREEN.. VAULT DRAINS DO NOT REQUIRE SANITARY SCREENING ON THE OUTLET END.



PROFILE



VENTING DETAIL

NOT TO SCALE

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1		

PROJECT NAME

ROSS SPRING-RED CANYON WATERLINE REPLACEMENT

ASHLEY NATIONAL FOREST

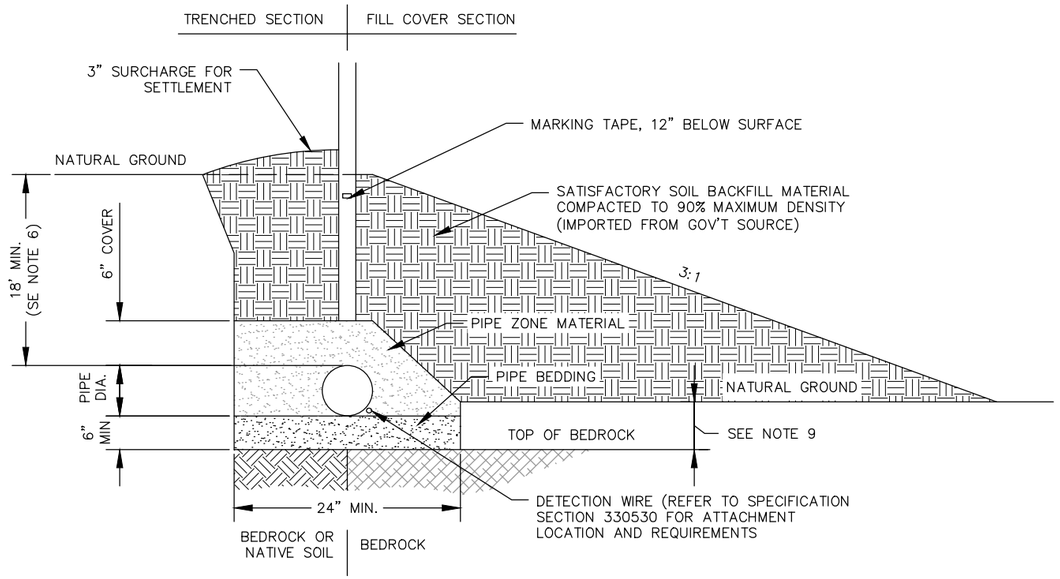
FLAMING GORGE DISTRICT

DRAWING TITLE

AIR-VACUUM RELIEF VALVE DETAILS

DATE	ARCHIVE NO.
DESIGNER: K CARNES	DRAWING SHEET NO.: D-1
DRAWN: K CARNES	
CHECKED: R ANDERSON	
PROJECT NO.	SHEET 8 OF 10

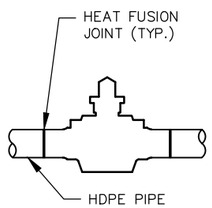
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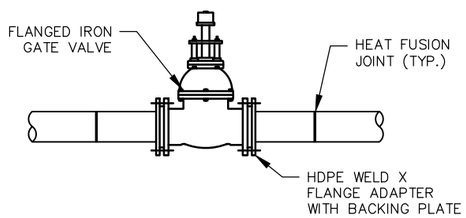
TYPICAL TRENCH/COVER DETAILS

TRENCHING NOTES:

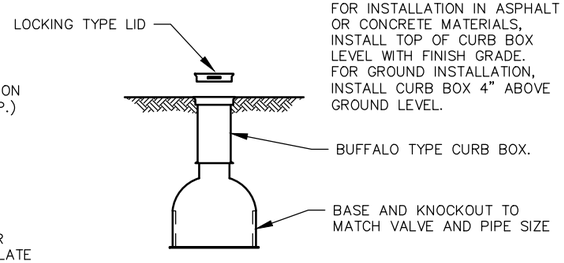
1. WALLS SHALL BE VERTICAL FOR TRENCHES LESS THAN 5'–0" DEEP AT CENTERLINE. FOR DEPTHS GREATER THAN 5'–0", THE WALLS SHALL BE LAID BACK TO MEET APPLICABLE SAFETY STANDARDS.
2. PIPE BEDDING: IF BOTTOM OF TRENCH IS UNSATISFACTORY BEDDING MATERIAL OR BEDROCK, A MINIMUM OF 6" OF PIPE–ZONE MATERIAL OR IMPORTED SPECIAL BEDDING SHALL BE USED DEPENDING ON MATERIAL ENCOUNTERED. IF SOIL IS OF A UNIFORM TEXTURE MEETING PIPE–ZONE MATERIAL SPECIFICATIONS, THIS NEED NOT BE EXCAVATED.
3. IN COVER–FILL SECTIONS, EXCAVATE DOWN TO BEDROCK AS OFTEN AS PRACTICAL TO ACHIEVE AS MUCH BURY AS POSSIBLE. IF PIPE GRADE REQUIRES A SECTION IN FILL, EXCAVATE TO UNDISTURBED NATIVE SOIL OR 6" BELOW PIPE GRADE, WHICHEVER IS DEEPER. ADD SOIL BACKFILL AND COMPACT TO 90% AS NEEDED TO BRING SUBGRADE UP TO 6" BELOW PIPE GRADE.
4. IN COVER–FILL SECTIONS, PIPE ZONE MATERIAL MAY SLOPE DOWN AROUND THE PIPE ENSURING COVERAGE OF 6" ALL AROUND. COMPACTION OF PIPE ZONE MATERIAL WILL BE ALLOWED FOLLOWING PLACEMENT OF SURROUNDING BACKFILL IN ORDER TO CONTAIN PIPE ZONE MATERIAL DURING COMPACTION.
5. WATER LINES SHALL BE BURIED A MINIMUM OF 18 INCHES UNLESS OTHERWISE NOTED.
6. IN TRENCHED SECTIONS, THE INTENT IS TO UTILIZE EXISTING TRENCH TO ACHIEVE BURIAL DEPTH IN AREAS WHERE COVER FILL WOULD BE UNSIGHTLY IN HIGH–USE PUBLIC SPACES. LAY PIPE AS DEEP AS PRACTICAL IN THE ORIGINAL TRENCH WITHOUT DISTURBING EXISTING ASBESTOS CEMENT PIPE AND POWER LINE..IF FULL 18" COVER CANNOT BE ACHIEVED, ADD COVER FILL SLOPED AWAY AT 10:1. LEAVE IN A ROUGHSTATE FOR A NATURAL APPEARANCE.
7. ATTACH TRACER WIRE TO ALL NON–METALLIC PIPE. (SEE SPECIFICATION SECTION 330530 FOR UTILITY LOCATING SYSTEM).
8. EVERY EFFORT HAS BEEN MADE TO AVOID ROCK EXCAVATION AND FIELD ADJUSTMENT OF GRADES WILL BE ALLOWED TO FURTHER AVOID ROCK EXCAVATION. HOWEVER, MINOR AMOUNTS OF ROCK EXCAVATION ARE EXPECTED FOR UTILITY BOXES, DRAINS, AND SIMILAR FEATURES. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH ROCK EXCAVATION.
9. THE CONTRACTOR SHALL MAKE EVERY REASONABLE EFFORT TO SET PIPE BELOW NATURAL GRADE BY REMOVING SOIL AND FRACTURED ROCK TO SOLID BEDROCK IN ORDER TO CONTROL VOLUME OF IMPORTED COVER FILL. ALL PREPARED SUBGRADE SHALL BE APPROVED BY THE CONTRACTING OFFICER PRIOR TO PLACEMENT OF PIPE AND PIPE BEDDING.



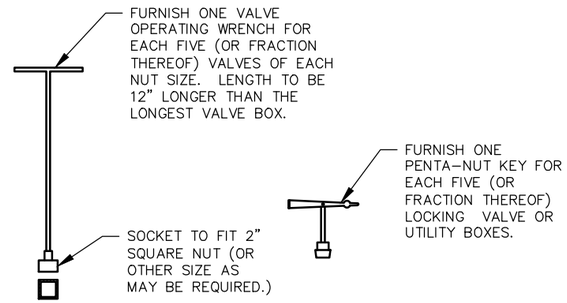
POLY VALVE
3" AND UNDER



AWWA GATE VALVE
LARGER THAN 3"



ADJUSTABLE
VALVE BOX



VALVE OPERATING
WRENCH

PENTAGON
KEY

VALVES, CURB BOXES, AND WRENCH DETAILS

United States Department of Agriculture
Forest Service

R4
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

FINAL: SIGNED 6/30/2026

NO.	REVISION / ISSUE	DATE
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3		
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PROJECT NAME

ROSS SPRINGS-RED CANYON WATERLINE REPLACEMENT

ASHLEY NATIONAL FOREST

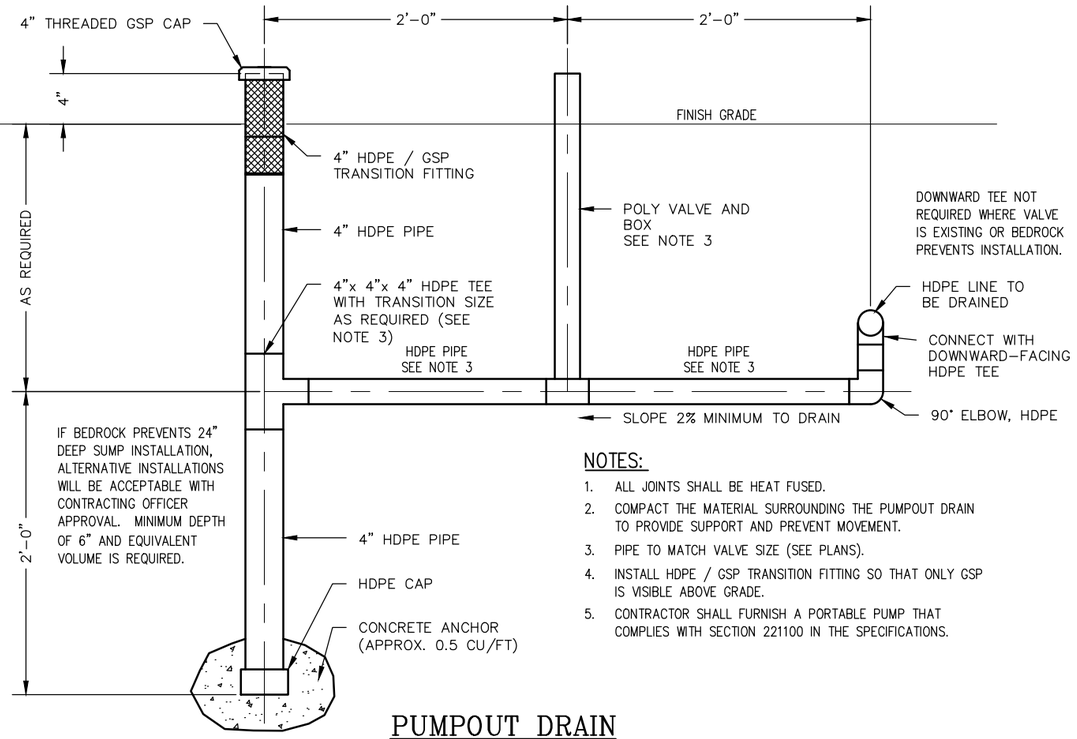
FLAMING GORGE DISTRICT

DRAWING TITLE

TRENCH/COVER, VALVES, AND VALVE BOXES DETAILS

DATE	ARCHIVE NO.
DESIGNER: K CARNES	DRAWING SHEET NO.: D-2
DRAWN: K CARNES	
CHECKED: R ANDERSON	
PROJECT NO.	SHEET 9 OF 10

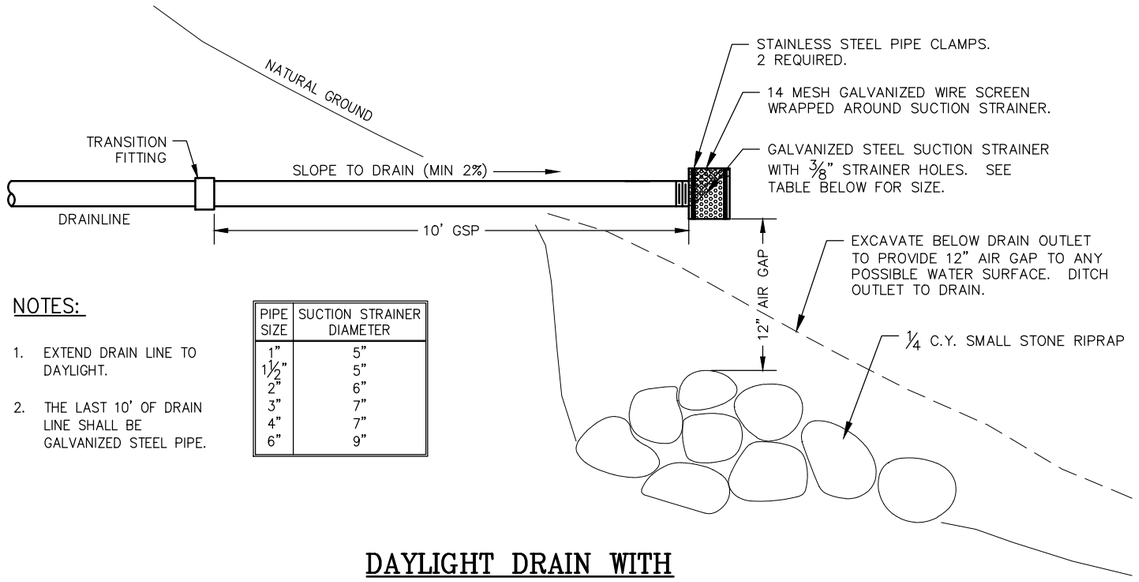
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NOTES:

1. ALL JOINTS SHALL BE HEAT FUSED.
2. COMPACT THE MATERIAL SURROUNDING THE PUMPOUT DRAIN TO PROVIDE SUPPORT AND PREVENT MOVEMENT.
3. PIPE TO MATCH VALVE SIZE (SEE PLANS).
4. INSTALL HDPE / GSP TRANSITION FITTING SO THAT ONLY GSP IS VISIBLE ABOVE GRADE.
5. CONTRACTOR SHALL FURNISH A PORTABLE PUMP THAT COMPLIES WITH SECTION 221100 IN THE SPECIFICATIONS.

PUMPOUT DRAIN

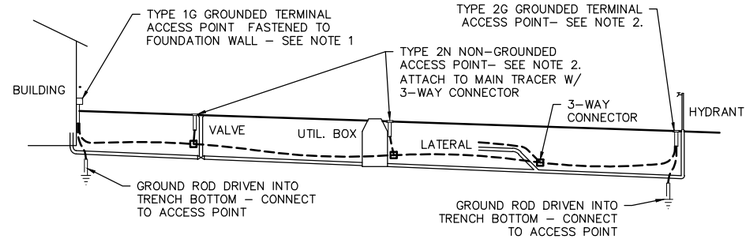


NOTES:

1. EXTEND DRAIN LINE TO DAYLIGHT.
2. THE LAST 10' OF DRAIN LINE SHALL BE GALVANIZED STEEL PIPE.

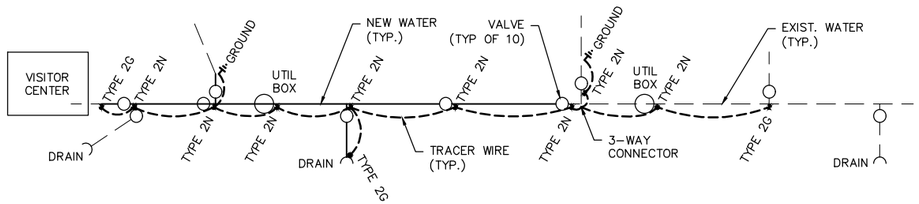
PIPE SIZE	SUCTION STRAINER DIAMETER
1"	5"
1½"	5"
2"	6"
3"	7"
4"	7"
6"	9"

DAYLIGHT DRAIN WITH RODENT PROOF DRAIN OUTLET



GENERAL WIRING CONFIGURATION

NO SCALE



SYSTEM SCHEMATIC

NO SCALE

NOTES:

1. TYPE 1G TERMINAL ACCESS POINTS AT BUILDINGS, TANKS, AND WELLS ARE TO BE COPPERHEAD T2B OR EQUAL SET 6" ABOVE GROUND ON 24" LONG PVC 1" CONDUIT SECURELY FASTENED TO FOUNDATION WALLS WITH PIPE CLAMPS, OR TO PIPES AND MANWAYS WITH STAINLESS WIRE. LEAVE 12" OF EXTRA WIRE LENGTH LOOSELY WOUND INTO CONDUIT.
2. TYPE 2 ACCESS POINTS ARE TO BE SET WITH ACCESS LIDS AT GROUND LEVEL IN TRAFFIC AREAS OR 4" ABOVE GRADE IN NON-TRAFFIC AREAS. LEAVE 12" OF LOOSE WIRE LOOPED WITHIN ACCESS RISER UNDER LID
   - 2.1. TYPE 2N ACCESS POINTS AT VALVES AND UTILITY BOXES ARE TO BE COPPERHEAD CD14BTP (NON-GROUNDED), OR EQUAL.
   - 2.2. TYPE 2G ACCESS POINTS AT RV HOOKUPS, HYDRANTS, DRAINS, AND SIMILAR END-OF-LINE FEATURES ARE TO BE COPPERHEAD LD14B2T-SW (GROUNDED), OR EQUAL.
3. DEAD END STUB OUT LINES FOR FUTURE CONNECTION ARE TO HAVE A GROUND ROD DRIVEN AT THE END OF THE LINE AND CONNECTED DIRECTLY TO THE END OF THE LOCATOR WIRE WITH A SPLICE CONNECTOR.
4. GROUND RODS ARE TO BE DRIVEN INTO UNDISTURBED TRENCH BOTTOM BELOW PIPELINE.
5. BURIED WIRE CONNECTIONS ARE TO UTILIZE WATERPROOF CONNECTORS.
6. TRACER WIRE IS TO BE #12 COPPER-CLAD STEEL. WIRE INSULATION SHALL BE HDPE COLORED BLUE FOR WATER INSTALLATIONS. ATTACH WIRE AT LOWER THIRD OF PIPE WITH TAPE OR PLASTIC TIES AT 5' INTERVALS.

UTILITY LOCATING SYSTEM

United States Department of Agriculture
Forest Service

R4
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

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ASHLEY NATIONAL FOREST

FLAMING GORGE DISTRICT

DRAWING TITLE

SYSTEM DRAINS AND LOCATING SYSTEM DETAILS

DATE	ARCHIVE NO.
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