

PROJECT #20WA17

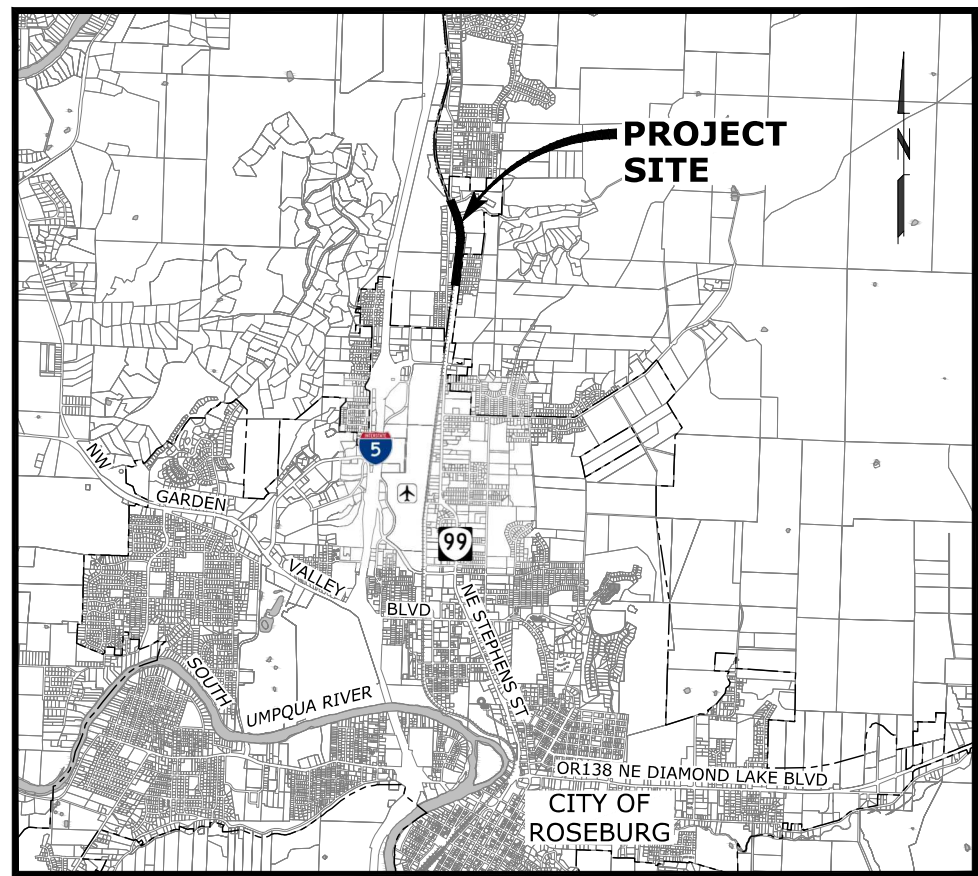
24-INCH TRANSMISSION MAIN

HOOKER ROAD TO ISABELL AVENUE

CITY OF ROSEBURG, OREGON

VOLUME 2 OF 2 DRAWINGS

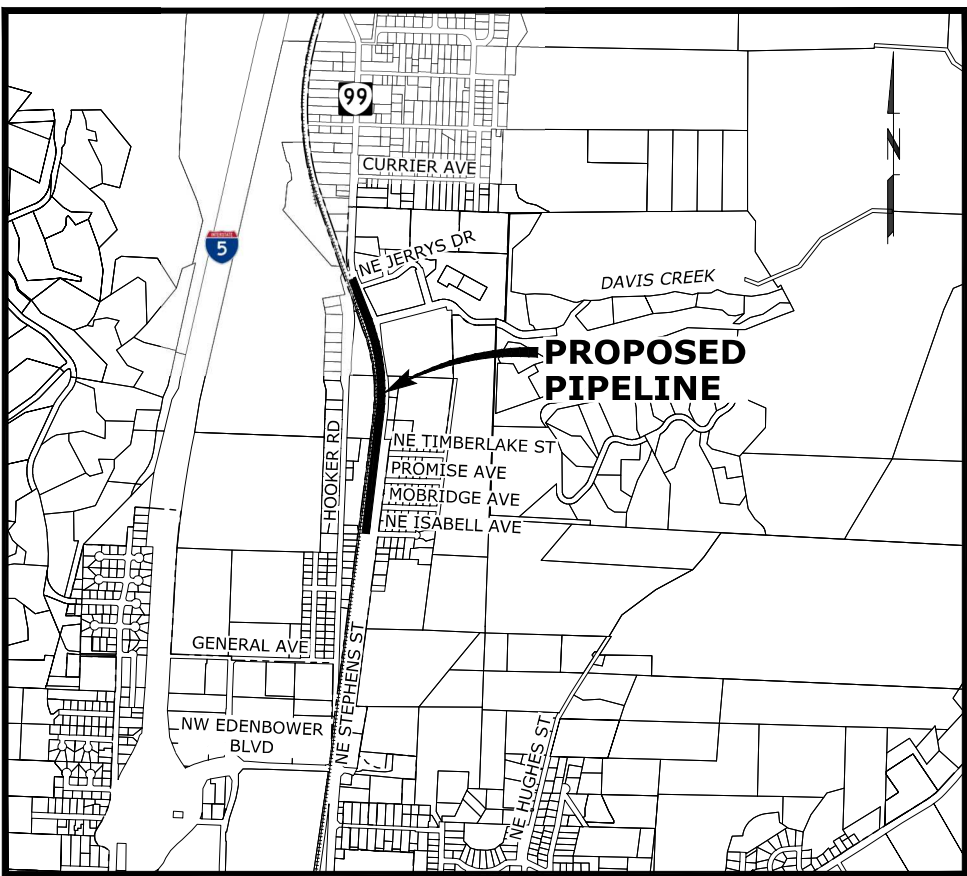
MAY 2021



VICINITY MAP
SCALE: 1"=3,000'

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LOCATION MAP
SCALE: 1"=1,000'

murraysmith

888 SW 5TH AVENUE, SUITE 1170
PORTLAND, OREGON 97204
P 503.225.9010

ATTENTION: OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE UTILITY NOTIFICATION CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-246-6699.)



Know what's below.
Call before you dig.

G:\PDX_Projects\20\2938 - 24-Inch, Hooker Rd To Isabell Ave\CAD\Sheets\20-2938-OR-G.dwg G-2 4/28/2021 1:55 PM MATT. ESTEP 23.0s (LMS Tech)

GENERAL NOTES

1. THE CONTRACTOR SHALL POTHOLE AND VERIFY LOCATIONS, ELEVATIONS, TYPES AND SIZES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTING NEW PIPING FAR ENOUGH IN ADVANCE TO ALLOW NECESSARY ADJUSTMENTS IN GRADE AND SHALL NOTIFY ENGINEER OF NEED TO ADJUST PIPING INSTALLATION ACCORDINGLY. POTHOLING SHALL SUFFICIENTLY PRECEDE LAYING OF PIPE TO ALLOW REQUIRED ELEVATION ADJUSTMENTS TO BE ACCOMPLISHED WITHOUT REWORK. ELEVATION ADJUSTMENTS SHALL BE EXPECTED AND ARE INCIDENTAL TO THE WORK. DEFLECT PIPE AS REQUIRED AND WITHIN MANUFACTURER'S TOLERANCES TO AVOID EXISTING UTILITIES AND COMPLETE TIE-INS.
2. EXCEPT WHERE OTHERWISE ALLOWED, ALL PROPOSED PRESSURE PIPING SHALL BE RESTRAINED WITH AN APPROVED JOINT RESTRAINT SYSTEM. SEE SPECIFICATIONS FOR APPROVED TYPES OF PIPE RESTRAINT FOR PRESSURE PIPE.
3. SEE SPECIFICATION SECTIONS 01 10 00 – SUMMARY OF WORK AND 01 12 16 – WORK SEQUENCE AND SCHEDULE CONSTRAINTS FOR SPECIAL CONSTRUCTION SCHEDULING AND EXISTING TRANSMISSION MAIN SHUTDOWN REQUIREMENTS.
4. ALL CONCRETE SHALL BE A MINIMUM OF 3000 PSI STRENGTH.
5. LOCATIONS OF EXISTING UTILITIES ARE BASED ON INFORMATION SUPPLIED BY THE UTILITIES AND SHALL BE CONSIDERED AS APPROXIMATE ONLY. AS REQUIRED BY STATE LAW, THE CONTRACTOR SHALL OBTAIN UTILITY LOCATES PRIOR TO COMMENCING CONSTRUCTION.
6. ALL PRESSURE PIPING SHALL BE TESTED UNDER A HYDROSTATIC TEST PRESSURE OF 150 PERCENT THE DESIGN PRESSURE, BUT NOT LESS THAN 150 PSI (± 5 PSI), MEASURED FROM THE LOWEST POINT ALONG THE TEST SECTION OR AS SHOWN ON THE PLANS. SEE SPECIFICATIONS.
7. ALL EXISTING FEATURES INCLUDING BUT NOT LIMITED TO ROADWAYS, STRUCTURES, LOTS, CURBS, SIDEWALKS, FENCES, WALLS, PLANTING, DITCHES, MAILBOXES, SIGNS, PIPING AND UTILITIES DISTURBED DURING CONSTRUCTION SHALL BE REMOVED AND RESTORED TO AS GOOD OR BETTER THAN EXISTING CONDITION AS DETERMINED BY THE OWNER. CONTRACTOR SHALL REPAIR ALL UTILITY SERVICES DAMAGED DURING CONSTRUCTION AND SUCH REPAIR SHALL BE CONSIDERED INCIDENTAL UNLESS PROVIDED FOR OTHERWISE IN THE SPECIFICATIONS.
8. COMPLY WITH OAR CHAPTER 333 RULES FOR REQUIRED WATERLINE-SEWERLINE SEPARATION AND CROSSING REQUIREMENTS. IN SPECIFIC LOCATIONS WHERE WATER PIPELINE IS TO BE INSTALLED CROSSING UNDERNEATH EXISTING SANITARY SEWERS, CONTRACTOR TO EXPOSE EXISTING SEWERS TO NEAREST JOINTS TO EXAMINE CONDITION AND THEN CONCRETE ENCASE OR REPLACE SECTION OF SEWER PER THE REQUIREMENTS OF OAR 333-061-0050(9)(c)(C) IF IT IS FOUND TO BE LEAKING OR ITS CONDITION IS DETERMINED TO BE UNFAVORABLE BY THE CITY'S INSPECTOR. IF EXISTING SEWER'S CONDITION IS DETERMINED TO BE FAVORABLE, CENTER A FULL STICK OF WATER PIPING AT THE CROSSING, ASSURE THAT SEWER IS PROPERLY SUPPORTED DURING AND AFTER BACKFILLING, AND PREPARE A WRITTEN REPORT, ALL PER THE REQUIREMENT'S OF OAR 333. WITH THE CITY AND RUSA'S APPROVAL, THE CONTRACTOR MAY ALSO ELECT TO CUT AND REPLACE A FULL STICK OF SEWER LATERAL PIPING AT CROSSING REGARDLESS OF PIPING CONDITION TO FACILITATE SHORING PROGRESSION AND WATERLINE INSTALLATION. CONTRACTOR SHALL PROVIDE SEWER BYPASS AS REQUIRED TO FACILITATE THE WORK.
9. WITH THE CITY'S APPROVAL, THE CONTRACTOR MAY ELECT TO CUT AND REPLACE A FULL STICK OF STORM DRAIN PIPING AT CROSSING REGARDLESS OF PIPING CONDITION TO FACILITATE SHORING PROGRESSION AND WATERLINE INSTALLATION. CONTRACTOR TO REPLACE ALL CUT PIPING MATERIAL IN-KIND, ALL JOINTS INCLUDED IN REPAIR SHALL BE WATER-TIGHT, AND ALL WORK SHALL BE APPROVED BY OWNER'S REPRESENTATIVE.
10. FINAL LOCATIONS OF ALL NEW FACILITIES SHALL BE FIELD VERIFIED WITH THE CITY'S INSPECTOR AND ENGINEER PRIOR TO CONSTRUCTION.
11. PROVIDE "AS CONSTRUCTED" DRAWINGS TO THE ENGINEER INDICATING ALL CHANGES IN GRADE, ALIGNMENT, FITTINGS AND MATERIALS INSTALLED AND ANY OTHER UTILITIES OR OBSTACLES NOT SO INDICATED ON THESE PLANS.
12. AT THE END OF EACH WORK DAY ALL OPEN TRENCHES SHALL BE BACKFILLED OR COVERED TO THE SATISFACTION OF THE ENGINEER.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING CONSTRUCTION SURVEYS. PRIOR TO CONSTRUCTION, FIELD LAYOUT SHALL BE APPROVED BY ENGINEER. SEE CONTRACT DOCUMENTS FOR SURVEY REQUIREMENTS.
14. ATTENTION: OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE UTILITY NOTIFICATION CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 1-800-332-2344).
15. CONTRACTOR SHALL PROVIDE ENGINEER WITH MINIMUM 24 HOURS NOTICE WHEN POTHOLING WILL BE COMPLETE. THE CITY'S INSPECTOR OR ENGINEER WILL BE ON SITE DURING POTHOLING TO COORDINATE WITH CONTRACTOR TO REVIEW UTILITY INVESTIGATIONS AND ASSIST CONTRACTOR IN MAKING APPROPRIATE ADJUSTMENTS FOR ANY ALIGNMENT CONFLICTS WHERE CONNECTING TO EXISTING UTILITIES.
16. CONTRACTOR SHALL SUPPORT AND PROTECT AS NECESSARY ANY PIPE OR CONDUIT EXPOSED AS PART OF THE NEW PIPE TRENCH EXCAVATION. CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE AT ALL TIMES AND SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES TO MAINTAIN AND PROTECT SERVICES.

17. THE CONTRACTOR SHALL CONSTRUCT THE WATER MAIN TO THE MINIMUM DEPTHS OF COVER INDICATED ON THE DRAWINGS FOLLOWING THE EXISTING GROUND CONTOURS. WHERE PIPING INVERTS ARE SHOWN ON THE PIPELINE PROFILES, THE PIPELINE SHALL BE CONSTRUCTED TO THOSE INVERTS WITH A UNIFORM SLOPE BETWEEN INVERTS, UNLESS OTHERWISE SPECIFIED OR APPROVED BY ENGINEER.
18. CORROSION MONITORING FACILITIES SHALL BE INSTALLED ON ALL NEW DUCTILE IRON PIPE. JOINT BOND ALL DUCTILE IRON PIPE, VALVES AND FITTINGS BETWEEN ISOLATION JOINTS (INSULATED FLEXIBLE COUPLINGS OR INSULATED FLANGES) UNLESS NOTED OTHERWISE ON THE DRAWINGS. TEST ALL ISOLATION JOINTS AND JUMPER BONDS PRIOR TO BURYING. SEE SPECIFICATION SECTION 26 42 01 FOR DETAILED REQUIREMENTS. SEE SHEET G-3 FOR CORROSION MONITORING LEGEND AND ABBREVIATIONS AND SHEETS C-16 AND C-17 FOR CORROSION MONITORING SYSTEM DETAILS.
19. NO CONNECTION TO EXISTING MAIN LINES WILL BE ALLOWED, EXCEPT BY MEANS OF AN APPROVED BACKFLOW PREVENTION DEVICE, PRIOR TO SATISFACTORY FLUSHING, TESTING, DISINFECTION, AND RECEIPT OF SATISFACTORY BACTERIOLOGICAL TESTS. CONTRACTOR TO PROVIDE TEMPORARY BLOW-OFF ASSEMBLIES AT ALL CONNECTIONS TO EXISTING PIPING AS REQUIRED TO FACILITATE TESTING AND DISINFECTION OF NEW PIPELINES. SEE DETAIL 2, SHEET C-11.
20. POLYETHYLENE ENCASEMENT SHALL BE INSTALLED ON ALL BURIED DUCTILE IRON PIPES PER THE REQUIREMENTS OF AWWA C105-18 SECTION 4.4.
21. INSTALL WAX TAPE COATING SYSTEM ON BURIED DUCTILE IRON PIPE FITTINGS AND VALVES, AND THEIR FASTENERS AND RESTRAINTS. INSTALL POLYETHYLENE ENCASEMENT OVER WAX TAPE AS NOTED ABOVE. SEE SPECIFICATIONS.
22. CONTRACTOR TO PROVIDE 2" THICK TEMPORARY HOT MIX TRENCH PATCH ASPHALT CONCRETE (AC) PAVEMENT AT END OF EACH WORK SHIFT AND PRIOR TO OPENING TO TRAFFIC. COLD MIX MAY BE USED AS REQUIRED WHERE APPROVED BY OWNER'S REPRESENTATIVE ON A CASE BY CASE BASIS, AND SHALL BE MAINTAINED BY CONTRACTOR UNTIL HOT MIX AC CAN BE PROVIDED TO REPLACE IT.
23. REMOVE AND REPLACE CURB AND GUTTER TO EXISTING JOINTS WHERE SHOWN ON PLANS AND IF DAMAGED DURING CONSTRUCTION. SEE CURB AND GUTTER DETAIL 1, SHEET C-15.
24. INSTALL MARKER BALLS IN TRENCH BACKFILL AT ALL FITTINGS (BENDS - BOTH HORIZONTAL AND VERTICAL), TEES, LONG SLEEVES, ETC.), BRANCH TAPS AND PER REQUIRED MAXIMUM SPACING ALONG STRAIGHT AND CURVED RUNS AS SPECIFIED IN SECTION 31 23 17 - TRENCHING. CONTRACTOR TO DOCUMENT ASBUILT LOCATIONS OF BURIED MARKER BALLS DURING INSTALLATION PER GENERAL NOTE 11.
25. EXISTING 20" STL/24" DI PIPELINE TO BE ABANDONED IN PLACE AND FILLED WITH CLSM AFTER NEW 24" TRANSMISSION MAIN HAS BEEN TIED IN AND PLACED IN SERVICE. SEE RECOMMENDED CONSTRUCTION SEQUENCING INCLUDED ON SHEET C-1 FOR FURTHER INFO REGARDING PIPE ABANDONMENT SEQUENCING, AND SPECIFICATION SECTION 33 11 50 - EXISTING PIPE ABANDONMENT, FOR REQUIREMENTS FOR FILLING PIPE WITH CLSM AND ABANDONING IN PLACE. LOCATIONS OF INTERMEDIATE CUT-INS TO EXISTING PIPELINE TO COMPLETELY FILL ABANDONED PIPING WITH CLSM NOT SHOWN ON PLANS.
26. COAL TAR COATING WRAP ON EXISTING 20" STEEL PIPELINE CONTAINS ASBESTOS THAT MAY BECOME FRIABLE WHEN DISTURBED. ALL WORK THAT WILL DISTURB EXISTING PIPELINE OR RELATES TO ITS REMOVAL SHALL BE COMPLETED IN COORDINATION WITH A LICENSED ASBESTOS ABATEMENT CONTRACTOR ACCORDING TO DEQ REGULATIONS, OSHA REQUIREMENTS AND OREGON ADMINISTRATIVE RULES. SEE SPECIFICATIONS SECTION 33 11 50 - EXISTING PIPE ABANDONMENT.
27. DAYTIME WORK HOURS FOR "DAY WORK" SHALL BE CONDUCTED BETWEEN 7 AM AND 7 PM. NIGHTTIME WORK HOURS FOR "NIGHT WORK" SHALL BE CONDUCTED BETWEEN 7 PM AND 7 AM. SEE TRAFFIC CONTROL SHEETS, TC-1 THRU TC-5, FOR LOCATIONS WHERE DAY WORK AND NIGHT WORK ARE REQUIRED.
28. HIGH GROUNDWATER LEVELS OBSERVED DURING EXPLORATORY POTHOLING AND GEOTECHNICAL BOREHOLE WORK LOCATED NEAR DAVIS CREEK. CONTRACTOR SHALL ANTICIPATE CONSTANT DEWATERING PUMPING WILL BE REQUIRED TO MAINTAIN DEWATERED EXCAVATIONS LOCATED NEAR DAVIS CREEK (LIMITS APPROXIMATELY AS SHOWN ON SHEET C-2).
29. REPLACE EXISTING TRAFFIC DETECTOR LOOPS TO J-BOXES. SEE DETAIL 3, SHEET C-15. COORDINATE WITH CITY OF ROSEBURG PUBLIC WORKS DEPT. PRIOR TO CUTTING EXISTING LOOPS. PROVIDE 48-HOURS ADVANCE NOTICE.

SURVEY CONTROL POINTS *

NO.	NORTHING	EASTING	ELEVATION	RAW DESCRIPTION
CPT 1	56457.375	158926.074	541.382	CPT IR IE
CPT 2	56098.334	159110.129	545.222	CPT IR IE
CPT 3	55724.758	159139.501	549.208	CPT IR IE
CPT 4	55278.391	159199.440	561.027	CPT IR IE
CPT 5	54939.905	159189.377	569.885	CPT IR IE
CPT 6	54382.422	159134.104	573.907	CPT SPK
CPT 7	53953.564	159164.014	577.125	CPT IR IE
CPT 100	56504.845	158845.464	542.884	FBC GERRY
CPT 101	55693.893	159174.659	551.142	FBC COSTCO-2
CPT 102	56028.031	159162.202	545.881	FBC KF-1 RESET

* SEE SHEET C-1 FOR APPROXIMATE LOCATIONS.

SURVEY CONTROL

BASIS OF BEARING:

BASIS: O.C.R.S. (OREGON COORDINATE REFERENCE SYSTEM)
METHOD: O.R.G.N. (OREGON REAL-TIME GNSS NETWORK)
ZONE: COTTAGE GROVE - CANYONVILLE
UNITS: INTERNATIONAL FEET
DATUM: NAD 83 (2011)
EPOCH: 2010

VERTICAL DATUM:

NAVD 88

NO.	DATE	BY	REVISION

NOTICE

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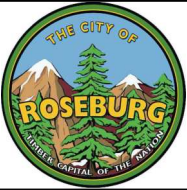
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IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTH
DESIGNED
DKH
DRAWN
JRL
CHECKED

REGISTERED PROFESSIONAL
ENGINEER
80898
Justin R. Luce
MAY 23, 2019
JUSTIN RUSSELL LUCE
RENEWS 12-31-22



PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

GENERAL NOTES AND SURVEY CONTROL POINTS			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

SHEET

G-2

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TOPOGRAPHIC LEGEND

	EXISTING	PROPOSED
WATERLINE	--- 10"W ---	— 24" W —
ELECTRICITY	--- E ---	— E —
GAS	--- 4"G ---	— 4"G —
TELEPHONE/TELEMETRY	--- T ---	— T —
SANITARY SEWER LINE	--- 8"SS ---	— 8"SS —
SANITARY SEWER FORCE MAIN	--- 6"FM ---	— 6"FM —
STORM DRAIN	--- 8"SD ---	— 8"SD —
CULVERT	>--- 12"CMP ---<	>--- 18"D ---<
ABANDON PIPE		+++++
DRAINAGE DITCH
FENCE	x x x	x x x
CHAIN LINK FENCE	o o o o	o o o o
GUARDRAIL
TREE/BUSH LINE	~~~~~	~~~~~
CENTERLINE	- - - - -	- - - - -
PROPERTY LINE	- - - - -	- - - - -
RIGHT-OF-WAY	- - - - -	- - - - -
EDGE OF PAVEMENT/AC
EDGE OF GRAVEL
CURB	=====	=====
SIDEWALK	===== S/W	===== S/W
STRUCTURE OR FACILITY	=====	=====
CONTOUR MINOR	- - - - -	- - - - -
CONTOUR MAJOR	426	426
MANHOLE	○	●
CLEAN-OUT	○	○
CATCH BASIN/FIELD INLET	□	□
THRUST BLOCK	△	▲
VALVE	⊗	⊗
BLOW-OFF ASSEMBLY	—○—	—●—
AIR RELEASE ASSEMBLY	—○—	—●—
FIRE HYDRANT ASSEMBLY	—○—	—●—
WATER METER	⊞	⊞
HOT TAP		—○—
COMMUNICATION RISER	⊞	⊞
PULL BOX/JUNCTION BOX	⊞	⊞
UTILITY POLE	—○—	—○—
GUY WIRE	—	—
PEDESTRIAN POLE	—○—	—○—
SIGNAL POLE	—	—
GAS METER	⊞	⊞
LIGHT POST	☆	☆
MAILBOX	□	□
SIGN	—	—
SURVEY CONTROL POINT	△	△
TREE DECIDUOUS	~~~~~	~~~~~
TREE CONIFEROUS	~~~~~	~~~~~
TREE TO BE REMOVED	~~~~~	~~~~~

PIPE SYMBOLS

PLANT	SCHEMATIC	
		WELDED JOINT
		FLANGED JOINT
		GROOVED END JOINT
		MECHANICAL JOINT
		PUSH-ON JOINT (RUBBER GASKET)
		FLANGED COUPLING ADAPTER
		DOUBLE BALL FLEXIBLE EXTENSION COUPLING
		FLEXIBLE COUPLING W/THRUST RING
		ELBOW UP
		ELBOW DOWN
		TEE UP
		TEE DOWN
		LATERAL UP
		LATERAL DOWN
		CONCENTRIC REDUCER
		ECCENTRIC REDUCER
		UNION
		BLIND FLANGE
		CAP
		LONG SLEEVE
		FLEXIBLE JOINT
		CAPPED END OR PLUGGED END
		FITTING
		FLEX/TRANS CPLG

VALVE SYMBOLS

PLANT	SCHEMATIC	
		BUTTERFLY VALVE
		GATE VALVE
		GLOBE VALVE
		BALL VALVE
		BALANCING VALVE
		DIAPHRAGM VALVE
		PLUG VALVE (TOP)
		PLUG VALVE (SIDE)
		3-WAY PLUG VALVE
		SWING CHECK VALVE
		DOUBLE CHECK ASSEMBLY
		BALL SWING CHECK
		SILENT CHECK VALVE
		PRESSURE REDUCING VALVE
		ALTITUDE CONTROL VALVE
		SOLENOID VALVE
		RELIEF VALVE
		NEEDLE VALVE
		HOSE VALVE
		REDUCED PRESSURE BACKFLOW PREVENTER W/GATE VALVES
		HOSE BIBB

MISCELLANEOUS PIPING SYMBOLS

	STRAINER
	SIGHT GLASS
	PRESSURE GAUGE W/COCK
	PRESSURE SWITCH W/COCK
	METER
	SLIP-ON JOINT PIPE
	RESTRAINED JOINT PIPE

LEGEND AND ABBREVIATIONS FOR CORROSION MONITORING FACILITIES FOR DI PIPE

	EXISTING TEST STATION
	PROPOSED TEST STATION
CP	CATHODIC PROTECTION
IFC	INSULATED FLEXIBLE COUPLING
IFL	INSULATED FLANGE
TS	TEST STATION

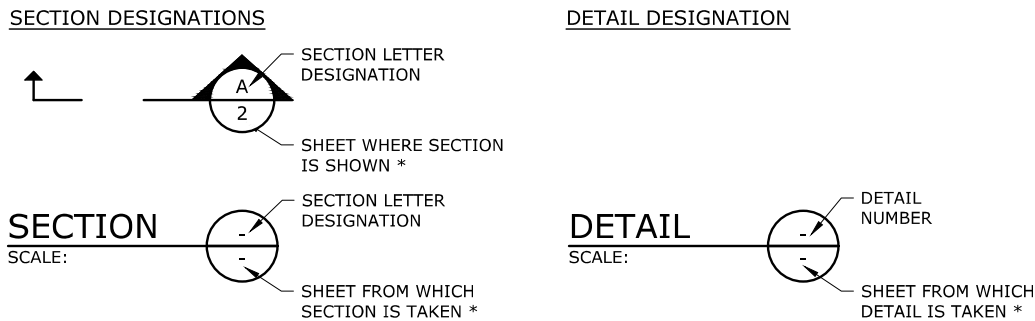
PLAN AND PROFILE SYMBOLS

COMPACTED GRANULAR TRENCH BACKFILL (CLASS B) AND AC SURFACE RESTORATION	AC
COMPACTED NATIVE TRENCH BACKFILL (CLASS A)	N
COMPACTED GRANULAR TRENCH BACKFILL (CLASS B) - GRAVEL ROADWAYS	GR
COMPACTED GRANULAR TRENCH BACKFILL (CLASS B) AND NATIVE SURFACE RESTORATION	GRN
TRENCH CHECK DAMS (AT 500' SPACING UNLESS NOTED OTHERWISE AND AS DIRECTED BY ENGINEER)	CD
1½" GRAVEL OVERLAY (¾"-0") - FULL ROADWAY WIDTH (SEE SPEC SECTION 32 11 23)	GRO
CONTROLLED LOW STRENGTH MATERIAL TRENCH BACKFILL AND AC SURFACE RESTORATION	CLSM

NOTE:

SEE SHEET C-10 FOR SPECIFIC BACKFILL AND SURFACE RESTORATION REQUIREMENTS.

SECTION AND DETAIL DESIGNATIONS



* NOTE: IF PLAN AND SECTION FOR DETAIL CALL-OUT AND DETAIL ARE SHOWN ON THE SAME DRAWING, DRAWING NUMBER IS REPLACED WITH A DASH.

NO.	DATE	BY	REVISION

NOTICE

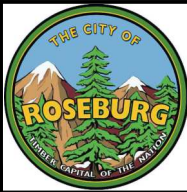
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KTH
DESIGNED
DKH
DRAWN
JRL
CHECKED



murraysmith



PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

SYMBOLS AND LEGEND			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
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SHEET

G-3

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G:\PDX_Projects\20\2938 - 24-Inch, Hooker Rd To Isabell Ave\CAD\Sheets\20-2938-OR-G.dwg G-4 4/28/2021 1:55 PM MATT.ESTEP 23.0s (LMS Tech)

@ AASHTO AB ABAN(D) ABS ABV AC ACP ADJ ADJC ADPTR AFF AFG AHR AL ALT AMP ANSI APPROX APPVD APWA ARCH ARV ASCE ASSN ASSY ASTM ATM AUTO AUX AVE AVG AWWA B&S BC BD BETW BF BFD BFILL BFV BHP BKGD BLDG BLK BLVD BM BMP BO BOC BS BSMT BTF BTU BV BW C C TO C CALTRANS CARV CATV CB CCP CCW CDOT CFM CFS CHAN CHEM CHFR CHKV CI CIP CIPC CISP CJ CL OR C/L CL2 CLG CLJ CLR	AT AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS ANCHOR BOLT ABANDON(ED) ACRYLONITRILE BUTADIENE STYRENE ABOVE / ALCOHOL BY VOLUME ASPHALTIC CONCRETE ASPHALTIC CONCRETE PAVING ADJUSTABLE ADJACENT ADAPTOR ABOVE FINISHED FLOOR ABOVE FINISHED GRADE ANCHOR ALUMINUM ALTERNATE AMPERE AMERICAN NATIONAL STANDARDS INSTITUTE APPROXIMATE APPROVED AMERICAN PUBLIC WORKS ASSOCIATION ARCHITECTURAL AIR RELEASE VALVE AMERICAN SOCIETY OF CIVIL ENGINEERS ASSOCIATION ASSEMBLY AMERICAN SOCIETY FOR TESTING & MATERIALS ATMOSPHERE AUTOMATIC AUXILIARY AVENUE AVERAGE AMERICAN WATER WORKS ASSOCIATION BELL & SPIGOT BOLT CIRCLE BOARD BETWEEN BOTH FACE BACKFLOW PREVENTION DEVICE BACKFILL BUTTERFLY VALVE BRAKE HORSEPOWER BACKGROUND BUILDING BLOCK BOULEVARD BENCHMARK / BEAM BEST MANAGEMENT PRACTICES BLOW-OFF BACK OF CURB BOTH SIDES BASEMENT BOTTOM FACE BRITISH THERMAL UNIT BALL VALVE BOTH WAYS CELSIUS CENTER TO CENTER CALIFORNIA DEPARTMENT OF TRANSPORTATION COMBINATION AIR RELEASE VALVE CABLE TELEVISION CATCH BASIN CONCRETE CYLINDER PIPE COUNTER CLOCKWISE COLORADO DEPARTMENT OF TRANSPORTATION CUBIC FEET PER MINUTE CUBIC FEET PER SECOND CHANNEL CHEMICAL CHAMFER CHECK VALVE CAST IRON CAST IRON PIPE CAST IN PLACE CONCRETE CAST IRON SOIL PIPE CONSTRUCTION JOINT CENTER LINE CHLORINE CEILING CONTROL JOINT CLEAR	CLSM CMP CMU CND CO COL COMB CONC CONN CONST CONT CONTR COORD COP CORP CORR CP CPLG CPT CPVC CR CS CSP CT CTR CU CULV CV CW CY CYL D DC DEFL DEQ DET DI DIA DIM DIR DIST DN DR DS DWG DWL DWV DWY E / ELEC EA ECC EF EL ELB ENCL EOP EQ EQL SP EQUIP ESMT EW EXC EXIST EXP EXP BT EXP JT EXT F F TO F FAB FB FBC FCA FCO FD FDN FEXT FF FGL FH FIN FIPT FITG FL FLEX FLG	CONTROLLED LOW STRENGTH MATERIAL CORRUGATED METAL PIPE CONCRETE MASONRY UNIT CONDUIT CLEANOUT COLUMN COMBINATION CONCRETE CONNECTION CONSTRUCTION CONTINUOUS / CONTINUATION CONTRACT(OR) COORDINATE COPPER CORPORATION CORRUGATED CATHODIC PROTECTION COUPLING CONTROL POINT CHLORINATED POLYVINYL CHLORIDE CRUSHED ROCK COMBINED SEWER CONCRETE SEWER PIPE COURT CENTER CUBIC CULVERT CONTROL VALVE CLOCKWISE / COLD WATER CUBIC YARDS CYLINDER LOCK DRAIN DIRECT CURRENT DEFLECTION DEPARTMENT OF ENVIRONMENTAL QUALITY DETAIL DUCTILE IRON DIAMETER DIMENSION DIRECTION DISTANCE DOWN DRIVE DOWNSPOUT DRAWING DOWEL DRAIN WASTE AND VENT DRIVEWAY ELECTRICAL EACH ECCENTRIC EACH FACE ELEVATION ELBOW ENCLOSURE EDGE OF PAVEMENT EQUAL EQUALLY SPACED EQUIPMENT EASEMENT EACH WAY EXCAVATE EXISTING EXPANSION EXPANSION BOLT EXPANSION JOINT EXTERIOR FAHRENHEIT FACE TO FACE FABRICATE FLAT BAR FOUND BRASS CAP FLANGED COUPLING ADAPTER FLOOR CLEANOUT FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FAR FACE FIBERGLASS FIRE HYDRANT FINISH(ED) FEMALE IRON PIPE THREAD FITTING FLOOR LINE FLEXIBLE FLANGE	FLL FLR FM FO FOC FOF FOM FOS FPM FPS FRP FT FTG FUT FXTR G GA GAL GALV GC GEN GFA GI GIP GJ GL GLV GND GPD GPH GPM GPS GR GR LN GRTG GV GRVL GYP HB HC HDD HDPE HDR HDWE HGR HGT HH HM HMAC HNDRL HOA HOR HORIZ HP HPG HPT HR HSB HV HVAC HWL HWY HYD HYDR I&C IAW ID IE IF IMPVT IN INCC INFL INJ INSTL INSUL INTER INTR INV IP IPT IR IRRG ITD	FLOW LINE FLOOR FORCE MAIN FIBER OPTIC FACE OF CONCRETE FACE OF FINISH FACE OF MASONRY FACE OF STUDS FEET PER MINUTE FEET PER SECOND FIBERGLASS REINFORCED PLASTIC FEET / FOOT FOOTING FUTURE FIXTURE GAS GAUGE GALLON GALVANIZED GROOVED COUPLING GENERAL GROOVED FLANGE ADAPTER GALVANIZED IRON GALVANIZED IRON PIPE GRIP JOINT GLASS GLOBE VALVE GROUND GALLONS PER DAY GALLONS PER HOUR GALLONS PER MINUTE GALLONS PER SECOND GRADE GRADE LINE GRATING GATE VALVE GRAVEL GYPSUM HOSE BIBB HOLLOW CORE HORIZONTAL DIRECTIONAL DRILL HIGH DENSITY POLYETHYLENE HEADER HARDWARE HANGER HEIGHT HANDHOLD HOLLOW METAL HOT MIX ASPHALT CONCRETE HANDRAIL HAND-OFF-AUTO HAND-OFF-REMOTE HORIZONTAL HIGH PRESSURE / HORSEPOWER HIGH PRESSURE GAS HIGH POINT HOUR HIGH STRENGTH BOLT HOSE VALVE HEATING, VENTILATION, AIR CONDITIONING HIGH WATER LINE HIGHWAY HYDRANT HYDRAULIC INSTRUMENTATION & CONTROL IN ACCORDANCE WITH INSIDE DIAMETER INVERT ELEVATION INSIDE FACE IMPROVEMENT INCH INCLUDE(D)(ING) INFLUENT INJECTION INSTALLATION / INSTALL INSULATION INTERCEPTOR INTERIOR INVERT IRON PIPE IRON PIPE THREAD IRON ROD IRRIGATION IDAHO TRANSPORTATION DEPARTMENT	JT JUNC KPL KVA KW KWY L LAB LAV LB LF LIN LN LOC LONG LP LPT LRG LS LT LVL LWL MAN MAT MAX MCC MCP MECH MET MFR MGD MH MIN MIPT MISC MJ MON MOT MP MSL MTD NA NAVD NC NF NIC NO / NO. NOM NORM NRS NTS O TO O OAR OC OD ODOT OF OPNG OPP ORIG OSHA OVHD P&ID PC PCC PCVC PE PERF PERM PERP PG PH PI PIVC PL OR P/L PLBG PNL POC	JOINT JUNCTION KICK PLATE KILOVOLT AMPERE KILOWATT KEYWAY LENGTH LABORATORY LAVATORY POUND LINEAR FOOT LINEAL LANE LOCATION LONGITUDINAL LOW PRESSURE LOW POINT LARGE LONG SLEEVE / LUMP SUM LEFT LEVEL LOW WATER LINE MANUAL MATERIAL MAXIMUM MOTOR CONTROL CENTER MASTER CONTROL PANEL MECHANICAL METAL MANUFACTURER MILLION GALLONS PER DAY MANHOLE MINIMUM MALE IRON PIPE THREAD MISCELLANEOUS MECHANICAL JOINT MONUMENT / MONOLITHIC MOTOR MILEPOST MEAN SEAL LEVEL MOUNTED NOT APPLICABLE NORTH AMERICAN VERTICAL DATUM NORMALLY CLOSED NEAR FACE NOT IN CONTRACT NORMALLY OPEN / NUMBER NOMINAL NORMAL NON-RISING STEM NOT TO SCALE OUT TO OUT OREGON ADMINISTRATIVE RULES ON CENTER OUTSIDE DIAMETER OREGON DEPARTMENT OF TRANSPORTATION OVERFLOW / OUTSIDE FACE OPENING OPPOSITE ORIGINAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION OVERHEAD PROCESS & INSTRUMENTATION DIAGRAM POINT OF CURVE POINT OF COMPOUND CURVE POINT OF CURVATURE ON VERTICAL CURVE PLAIN END PERFORATED PERMANENT PERPENDICULAR PRESSURE GAUGE PIPE HANGER POINT OF INTERSECTION POINT OF INTERSECTION ON VERTICAL CURVE PROPERTY LINE / PLATE / PLASTIC PLUMBING PANEL POINT OF CURVATURE	POLY PP PRC PRCST PREP PRESS PRKG PROP PRV PS PSIG PSL PSP PT PTVC PV PVC PVM PWR QTY RAD RC RCP RD RDCR REF REINF REQ'D RESTR RFCA RM RND RO R/W RPBPD RPM RR RST RT SALV SAN SC SCHED SD SDL SDR SECT SHULDR SHT SIM SLP SLV SOLN SP SPCL SPEC(S) SPG SPL SPRT SQ SQ FT SQ IN SQ YD SS SST ST STA STD STL STOR STR STRUCT SUBMG SUCTION SV S/W SWD SWGR SYMM SYS T OR TEL T&B	POLYETHYLENE POWER POLE POINT OF REVERSE CURVATURE PRECAST PREPARATION PRESSURE PARKING PROPERTY PRESSURE REDUCING VALVE PUMP STATION POUNDS PER SQUARE INCH GAUGE PIPE SLEEVE PIPE SUPPORT POINT OF TANGENCY POINT OF TANGENCY ON VERTICAL CURVE PLUG VALVE POLYVINYL CHLORIDE PAVEMENT POWER QUANTITY RADIUS REINFORCED CONCRETE REINFORCED CONCRETE PIPE ROAD / ROOF DRAIN REDUCER REFERENCE REINFORCE(D)(ING)(MENT) REQUIRED RESTRAINED RESTRAINED FLANGE COUPLING ADAPTER ROOM ROUND ROUGH OPENING RIGHT-OF-WAY REDUCED PRESSURE BACKFLOW PREVENTION DEVICE REVOLUTIONS PER MINUTE RAILROAD REINFORCED STEEL RIGHT SALVAGE SANITARY SOLID CORE SCHEDULE STORM DRAIN SADDLE STANDARD DIMENSION RATIO SECTION SHOULDER SHEET SIMILAR SLOPE SLEEVE SOLUTION SOIL PIPE / SEWER PIPE SPECIAL SPECIFICATION(S) SPACING SPOOL SUPPORT SQUARE SQUARE FOOT SQUARE INCH SQUARE YARD SANITARY SEWER STAINLESS STEEL STREET STATION STANDARD STEEL STORAGE STRAIGHT STRUCTURE / STRUCTURAL SUBMERGED SUCTION SOLENOID VALVE SIDEWALK SIDEWATER DEPTH SWITCH GEAR SYMMETRICAL SYSTEM TELEPHONE TOP & BOTTOM	TAN TB TBD TBM TC TCE TDH TEMP T&G THK THRD THRU TP TRANS TSP TST TW TYP UG UH UN UON USGS V VAC VB VBOX VC VERT VFD VOL VCP VTR W W/ W/IN W/O W/W WD WF WH WI WM WP WS WT WTP WTRT WWF WWTF WWTP X SECT XFMR YD YH YR ZN	TANGENCY THRUST BLOCK TO BE DETERMINED TEMPORARY BENCHMARK TOP OF CONCRETE / TOP OF CURB TEMPORARY CONSTRUCTION EASEMENT TOTAL DYNAMIC HEAD TEMPERATURE / TEMPORARY TONGUE & GROOVE THICK / THICKNESS THREAD (ED) THROUGH TEST PIT / TOP OF PAVEMENT / TURNING POINT TRANSITION TRI-SODIUM PHOSPHATE TOP OF STEEL TOP OF WALL TYPICAL UNDERGROUND UNIT HEATER UNION UNLESS OTHERWISE NOTED UNITED STATES GEOLOGIC SURVEY VENT / VOLT VACUUM VACUUM BREAKER VALVE BOX VERTICAL CURVE VERTICAL VARIABLE FREQUENCY DRIVE VOLUME VITRIFIED CLAY PIPE VENT THROUGH ROOF WATER WITH WITHIN WITHOUT WALL TO WALL WOOD WIDE FLANGE WATER HEATER WROUGHT IRON WATER METER WORKING POINT / WATERPROOFING WATER SERVICE WEIGHT WATER TREATMENT PLANT WATERTIGHT WELDED WIRE FABRIC WASTEWATER TREATMENT FACILITY WASTEWATER TREATMENT PLANT CROSS SECTION TRANSFORMER YARD DRAIN / YARD YARD HYDRANT YEAR ZINC
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NO.	DATE	BY	REVISION

NOTICE

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IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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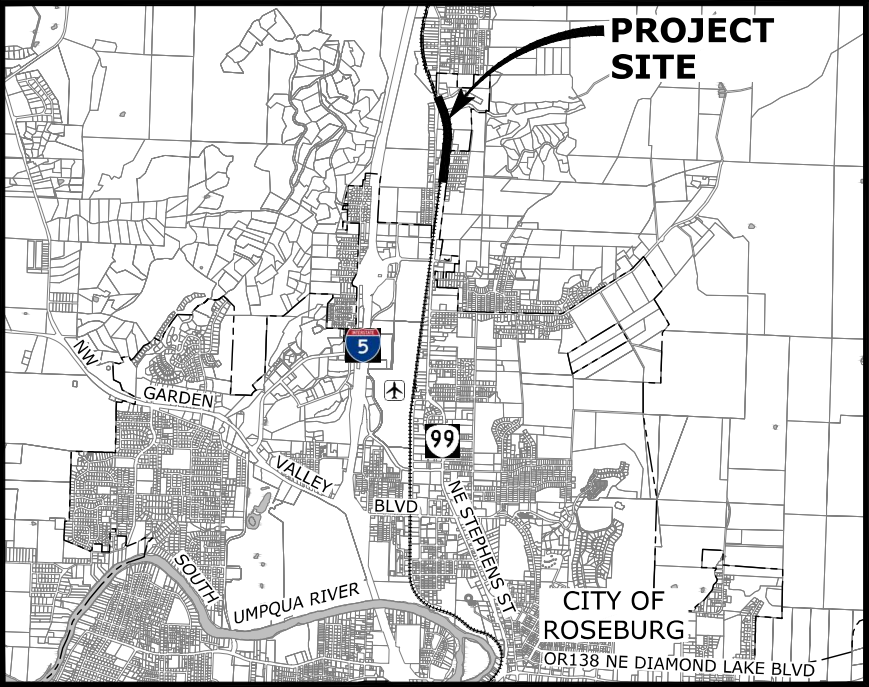
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PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

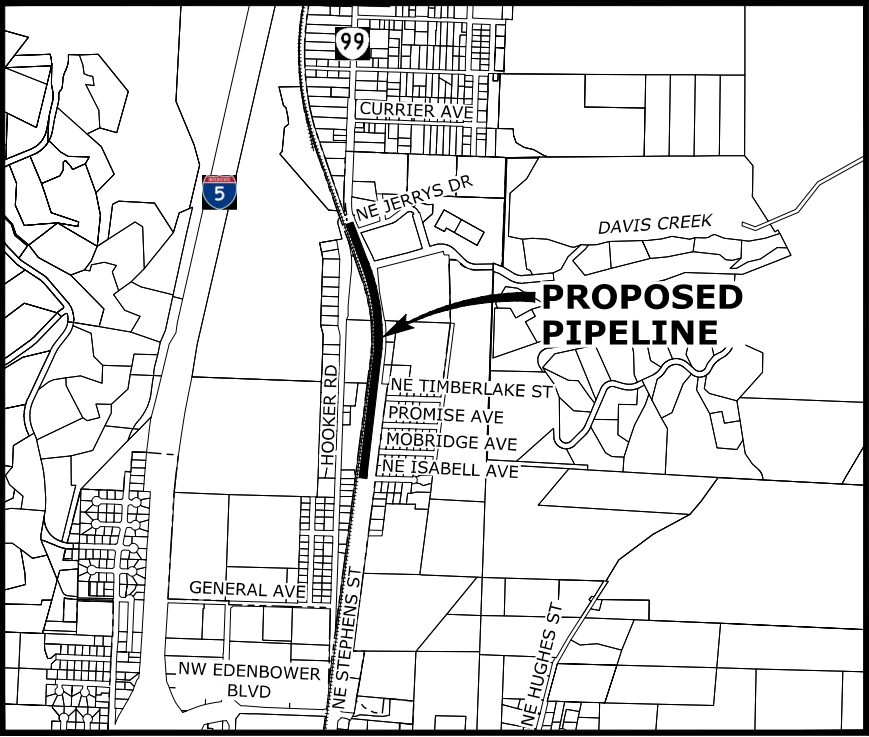
ABBREVIATIONS			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

EROSION AND SEDIMENT CONTROL PLANS



VICINITY MAP

SCALE: 1"=3,000'



LOCATION MAP

SCALE: 1"=1,000'

PROJECT LOCATION:

NE STEPHENS STREET AND HOOKER ROAD @ LAT, LONG:
43°15'46"N, 123°21'10"W

PROPERTY DESCRIPTION:

CITY OF ROSEBURG ROADWAYS AND RIGHTS-OF-WAY

DEVELOPER NAME

CITY OF ROSEBURG
CONTACT: DARYN ANDERSON
900 SE DOUGLAS AVENUE
ROSEBURG, OR 97470
PHONE: (541) 492-6730

PLANNING / ENGINEERING
SURVEYING FIRM

MURRAYSMITH, INC.
CONTACT: JUSTIN LUCE, P.E.
888 SW 6TH AVE, SUITE 1170
PORTLAND, OR 97204
PHONE: (503) 225-9010

NARRATIVE DESCRIPTIONS

EXISTING SITE CONDITIONS

* CITY OF ROSEBURG ROADWAYS AND UNIMPROVED RIGHTS-OF-WAY

DEVELOPED CONDITIONS

* BURIED 24" DIAMETER DUCTILE IRON WATER PIPELINE APPROX. 2,900 FT LONG

NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE

* UTILITY INSTALLATION & FINAL RESTORATION (JULY 2021 - NOVEMBER 2021)

TOTAL SITE AREA = 354,000 SF = 8.13 ACRES

TOTAL DISTURBED AREA = 38,500 SF = 0.89 ACRES

SITE SOIL CLASSIFICATION:

CURTIN CLAY

PHILOMATH-DIXONVILLE COMPLEX

RECEIVING WATER BODIES:

SOUTH UMPQUA RIVER

BMP MATRIX FOR CONSTRUCTION
PHASES

REFER TO DEQ GUIDANCE MANUAL FOR A
COMPREHENSIVE LIST OF AVAILABLE BMP'S

	UTILITY INSTALLATION	STREET CONSTRUCTION/ RESTORATION	FINAL STABILIZATION	WET WEATHER (OCT. 1-MAY 31ST)
EROSION PREVENTION				
PRESERVE NATURAL VEGETATION	X	X	X	X
GROUND COVER	X	X	X	X
HYDRAULIC APPLICATIONS				
PLASTIC SHEETING				X
MATting			X	X
DUST CONTROL	X	X	X	X
TEMPORARY/ PERMANENT SEEDING	X		X	X
BUFFER ZONE	X		X	X
OTHER:				
SEDIMENT CONTROL				
SEDIMENT FENCE (PERIMETER)	X	X	X	X
SEDIMENT FENCE (INTERIOR)			X	X
BIO BAGS	X	X	X	X
STRAW WATTLES	X	X	X	X
FILTER BERM	X	X	X	X
INLET PROTECTION	X	X	X	X
DEWATERING (GENERAL)	X	X	X	
DEWATERING (BORE PITS)	X			X
SEDIMENT TRAP				
OTHER:				
RUN-OFF CONTROL				
CONSTRUCTION ENTRANCE	X	X	X	X
PIPE SLOPE DRAIN				
OUTLET PROTECTION				
SURFACE ROUGHENING			X	
CHECK DAMS	X	X	X	X
OTHER:				
POLLUTION PREVENTION				
PROPER SIGNAGE	X	X	X	X
HAZ WASTE MGMT	X	X	X	X
SPILL KIT ON-SITE	X	X	X	X
CONCRETE WASHOUT AREA				
OTHER:				

ALL BMP'S WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY,
UNLESS OTHERWISE APPROVED.

RATIONALE STATEMENT

A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON
DEQ'S GUIDANCE MANUAL HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT
CONTROL PLAN. SOME OF THE ABOVE LISTED BMP'S WERE NOT CHOSEN BECAUSE THEY WERE
DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR
THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS,
TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS
THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN
WILL BE SUBMITTED.

JRL
INITIAL

SHEET INDEX

EROSION AND SEDIMENT CONTROL PLANS

ESC-1 EROSION AND SEDIMENT CONTROL COVER SHEET
ESC-2 EROSION AND SEDIMENT CONTROL NOTES AND LEGEND
ESC-3 EROSION AND SEDIMENT CONTROL MEASURES
ESC-4 EROSION AND SEDIMENT CONTROL DETAILS-1
ESC-5 EROSION AND SEDIMENT CONTROL DETAILS-2

ATTENTION EXCAVATORS:

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE
RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF
THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES,
YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE
COMMENCING AN EXCAVATION. CALL 1-800-332-2344.

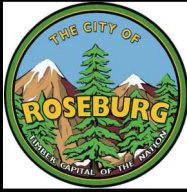
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NOTICE
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IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE

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murraysmith



**PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE**

**EROSION AND SEDIMENT CONTROL
COVER SHEET**

PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

SHEET

ESC-1

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PRE-CONSTRUCTION EROSION & GLOBAL:
SEDIMENTATION CONTROL NOTES:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.
3. CONSTRUCTION ENTRANCES/ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
4. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.
5. LIMIT SPEED OF VEHICLES ON SITE AND MOISTEN HAUL ROADS AS NECESSARY TO CONTROL DUST.

GRADING, STREET AND UTILITY EROSION AND
SEDIMENT CONTROL NOTES:

1. EFFECTIVE EROSION, DUST, SEDIMENTATION AND DRAINAGE CONTROL SHALL BE INSTALLED AND MAINTAINED BY CONTRACTOR PER REQUIREMENTS OF DOUGLAS COUNTY, CITY OF ROSEBURG, OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ), AND ALL OTHER AGENCIES WITH JURISDICTION OVER THE PROJECT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTION OF ALL WORK, ADJACENT PROPERTIES AND DOWNSTREAM FACILITIES FROM EROSION AND SILTATION DURING THE COURSE OF THE WORK. ANY DAMAGE RESULTING FROM SUCH EROSION AND SILTATION SHALL BE CORRECTED AT THE SOLE EXPENSE OF THE CONTRACTOR.
2. THESE PLANS DO NOT RELIEVE THE CONTRACTOR FROM ALL OTHER PERMITTING REQUIREMENTS. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, ALL OTHER NECESSARY APPROVALS SHALL BE OBTAINED.
3. APPROVAL OF THIS EROSION AND SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G.: SIZE AND LOCATION OF ROADS, PIPES, RESTRICTIONS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
4. THE IMPLEMENTATION OF THESE EROSION/SEDIMENT CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
5. IN THE EVENT THE FACILITIES ARE NOT FUNCTIONING PROPERLY, THE CONTRACTOR IS RESPONSIBLE FOR IMMEDIATELY IMPLEMENTING CHANGES AS DIRECTED BY THE ENGINEER OR INSPECTOR. THE ENGINEER, INSPECTOR OR THE CITY MAY STOP ALL CONSTRUCTION ACTIVITY ON SITE UNTIL THE EROSION PROBLEM IS CORRECTED AND ALL EROSION AND SEDIMENT CONTROL (ESC) FACILITIES ARE FUNCTIONING PROPERLY. IF THE CONTRACTOR DOES NOT IMMEDIATELY IMPLEMENT CHANGES TO THE EROSION AND SEDIMENT CONTROL (ESC) IDENTIFIED BY THE ENGINEER OR INSPECTOR, THE CITY MAY IMPLEMENT THE NECESSARY CHANGES AND REQUIRE PAYMENT FROM THE CONTRACTOR PRIOR TO PROJECT ACCEPTANCE BY THE CITY.
6. THE ESC FACILITIES SHOWN ON THESE PLANS MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL EARTHWORK ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT- LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS
7. THE ESC FACILITIES SHOWN ON THESE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
8. THE EROSION AND SEDIMENT CONTROL MEASURES ON ACTIVE SITES SHALL BE INSPECTED AND MAINTAINED DAILY AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF RAIN PER 24 HOUR PERIOD. MEASURES SHALL BE INSPECTED BY THE PERMIT HOLDER AND OR THE CONTRACTOR AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS OR ADJUSTMENTS SHALL BE MADE IMMEDIATELY. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCTOBER 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPTEMBER 30).
9. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
10. SLOPES AND DISTURBED AREAS TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
11. LONG TERM SLOPE AND DISTURBED AREAS STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE. SEE SPECIFICATIONS.

GRADING, STREET AND UTILITY EROSION AND
SEDIMENT CONTROL NOTES (CONTINUED):

12. TEMPORARY SLOPE AND DISTURBED AREAS STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.
13. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
14. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
15. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
16. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
17. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
18. NO HAZARDOUS SUBSTANCES, SUCH AS PAINTS, THINNERS, FUELS AND OTHER CHEMICALS SHALL BE RELEASED ONTO THE SITE, ADJACENT PROPERTIES, OR INTO WATER FEATURES, THE CITY'S STORM WATER SYSTEM, OR RELATED NATURAL RESOURCES.
19. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
20. EXTRACTED GROUND WATER FROM EXCAVATED TRENCHES SHALL BE DISPOSED OF IN A SUITABLE MANNER WITHOUT DAMAGE TO ADJACENT PROPERTY, PUBLIC STORM WATER SYSTEM, WATER FEATURES, AND RELATED NATURAL RESOURCES.
21. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
22. USE BMPs SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
23. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.
24. INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.
25. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
26. PAVEMENT SURFACES AND VEGETATION ARE TO BE PLACED AS RAPIDLY AS POSSIBLE.
27. SEEDING SHALL BE PERFORMED NO LATER THAN SEPTEMBER 1 FOR EACH PHASE OF CONSTRUCTION. SEE SPECIFICATIONS FOR SEED MIX REQUIREMENTS.
28. ESC MEASURES SHALL BE REMOVED BY THE CONTRACTOR WHEN VEGETATION IS FULLY ESTABLISHED.
29. NOTIFY ENGINEER 24 HOURS PRIOR TO ANY WORK ON SITE.

SEDIMENT FENCE NOTES:

1. CONTRACTOR SHALL PROVIDE SEDIMENT FENCING AS REQUIRED BY ACTUAL SITE CONDITIONS DURING CONSTRUCTION. SEDIMENT FENCES SHALL BE INSPECTED BY CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. EROSION, SEDIMENT AND POLLUTION CONTROL PLAN MEASURES SHALL BE REMOVED BY THE CONTRACTOR UPON SUBSTANTIAL COMPLETION. EROSION AND SEDIMENT CONTROLS MUST REMAIN IN-PLACE UNTIL GROUNDCOVERS HAVE MATURED ENOUGH TO PREVENT NORMAL EROSION FROM OCCURRING.
3. TRENCHED SLOPES SHALL BE SEEDED AND/OR PLANTED IMMEDIATELY AFTER EXCAVATION AND WATERLINE INSTALLATION. DISTURBED SLOPES GREATER THAN 20 PERCENT SHALL BE STABILIZED WITH A STAKED COCONUT MAT FOLLOWING EXCAVATION, BACKFILL, AND SEEDING WITH NATIVE MIX TO PREVENT SOIL RUNOFF.






SEDIMENT FENCE NOTES (CONTINUED):

4. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP AND BOTH ENDS SECURELY FASTENED TO THE POST.
5. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS WHERE FEASIBLE. THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 18 INCHES.
6. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRE OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 4 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 12 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
8. WHEN EXTRA-STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF THE ABOVE STANDARD NOTE FOR STANDARD STRENGTH FILTER FABRIC APPLYING.
9. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
10. SEDIMENT FENCES SHALL BE INSPECTED BY CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
11. SEDIMENT FENCES SHALL BE INSTALLED AT THE TOE OF FILL SLOPES AND OTHER AREAS IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.

BIO-FILTER BAG NOTES:

1. BIO-FILTER BAGS SHOULD BE CLEAN 100% RECYCLED WOOD PRODUCT WASTE.
2. BIO-FILTER BAGS SHALL BE STANDARD SIZE 10" x 8" x 30", WEIGHING APPROXIMATELY 45 POUNDS WITH ½" PLASTIC NETTING.
3. USE 2 - 1" x 2" STAKES PER BAG, DRIVEN 12-INCHES INTO GROUND.
4. OVERLAP ENDS OF ADJACENT BAGS 6-INCHES TO PREVENT PIPING BETWEEN JOINTS.
5. ROUTINELY INSPECT BAGS. CHECK THAT STAKES ARE SECURE, ENDS OF BAGS ARE OVERLAPPED AND PLASTIC MESH BAGS HAVE NO TEARS.
6. REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO ½ HEIGHT OF BAG.

LEGEND

EXISTING CONTOURS (1')	- - - - -
EXISTING CONTOURS (5')	————— 425 —————
INLET PROTECTION-TYPES 1, 2, 3	
INLET PROTECTION-TYPE 4	
DRAINAGE FLOW DIRECTION	
SEDIMENT BARRIER	
CHECK DAM	
PROPOSED WATERLINE	———— 24"W ————

NO.	DATE	BY	REVISION

NOTICE

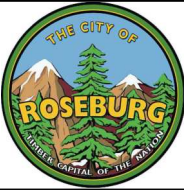
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PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

EROSION AND SEDIMENT CONTROL
NOTES AND LEGEND

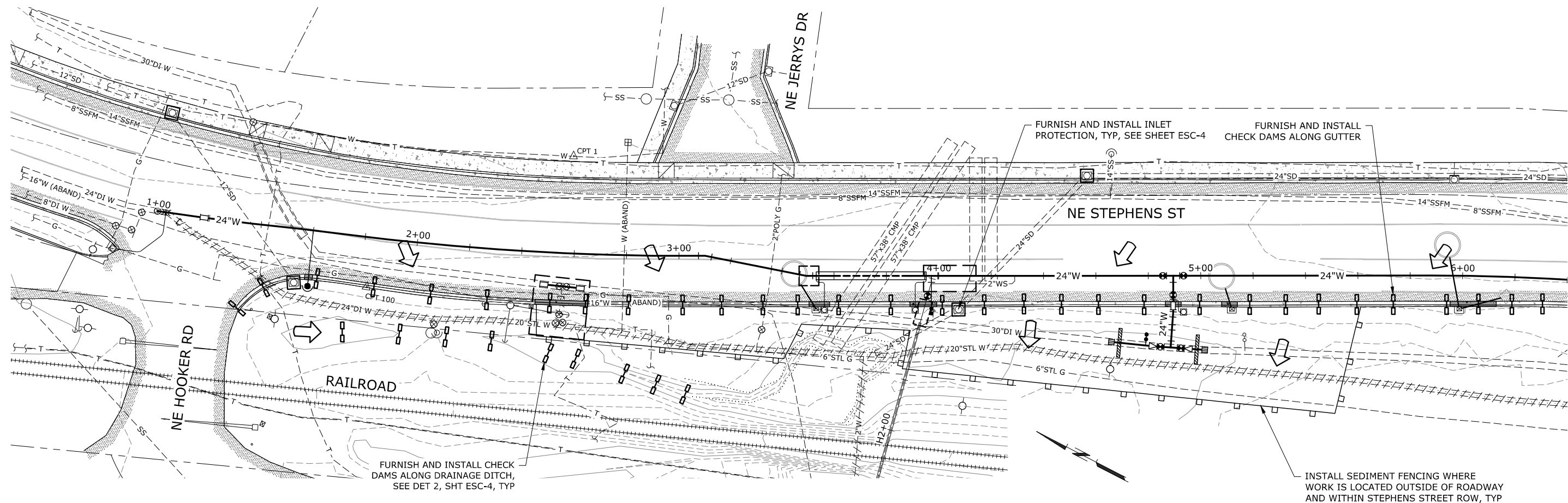
PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

SHEET

ESC-2

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TYPICAL EROSION CONTROL MEASURES WITH CURB AND GUTTER - NE STEPHENS STREET

SCALE: 1"=20'

*NOTE:
THIS SHEET SHOWS TYPICAL EROSION CONTROL MEASURES. CONTRACTOR TO IMPLEMENT
SIMILAR MEASURES ELSEWHERE WITHIN PROJECT DISTURBANCE LIMITS.

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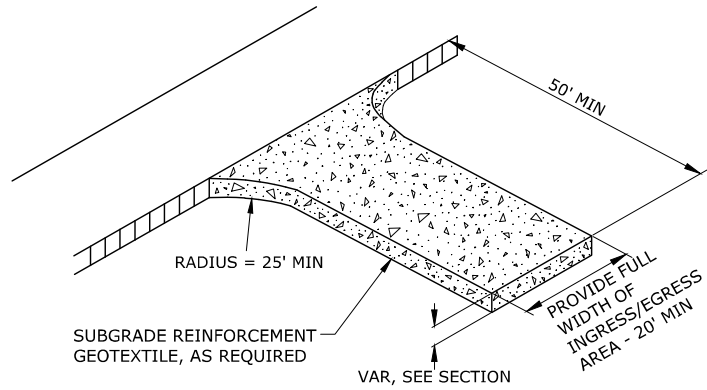


PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

EROSION CONTROL MEASURES			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

SHEET
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LEVELING COURSE 3/4" MINUS AGGREGATE, 2"-4" THK

BASE COURSE 4" MINUS, 10" THK

SUBGRADE

WOVEN GEOTEXTILE

SECTION - OPTION 1

LEVELING COURSE 3/4" MINUS AGGREGATE, 2"-4" THK

BASE COURSE 4" MINUS, 20" THICK

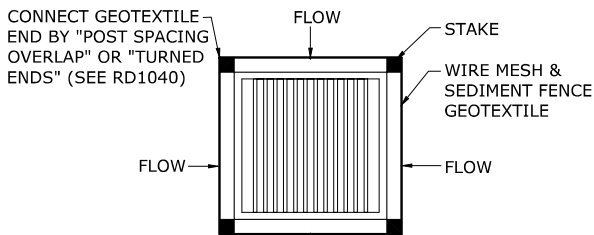
SUBGRADE

SECTION - OPTION 2

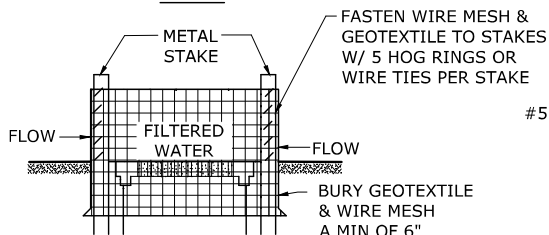
CONSTRUCTION ENTRANCE/ROAD

SCALE: NTS

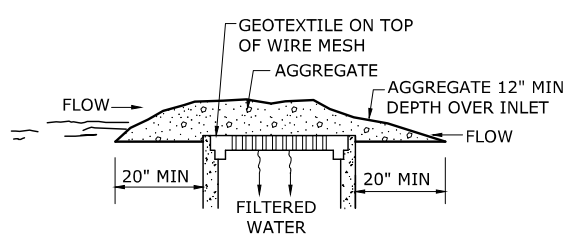
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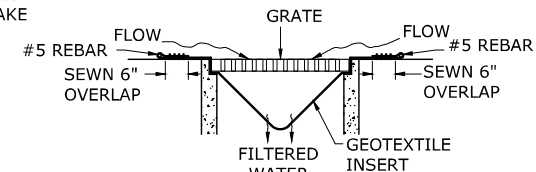
PLAN



SEDIMENT FENCE
TYPE 1



GEOTEXTILE/WIREMESH/AGGREGATE
TYPE 2



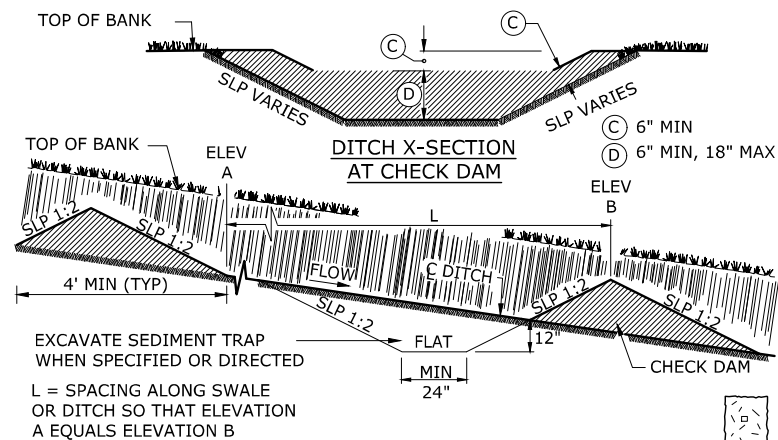
PREFABRICATED FILTER INSERT
TYPE 3

NOTES:
TYPE 1 SEDIMENT FENCE
TYPE 2 GEOTEXTILE/WIRE MESH/AGGREGATE
TYPE 3 PREFABRICATED FILTER INSERT
TYPE 4 BIOFILTER BAGS

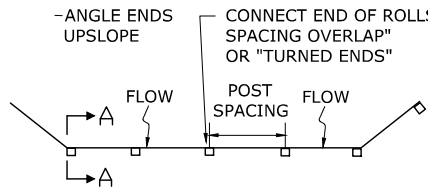
INLET PROTECTION (TYPES 1, 2, AND 3)

SCALE: NTS

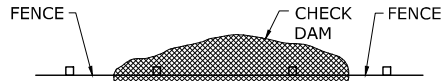
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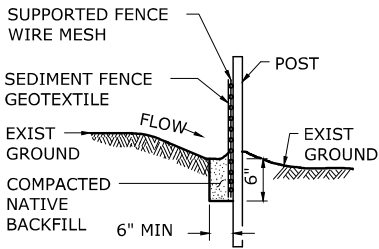
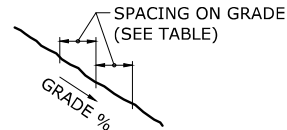
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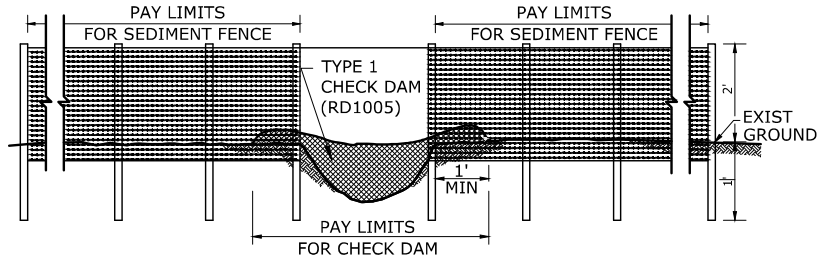
PLAN



PLAN VIEW AT DITCH SECTION



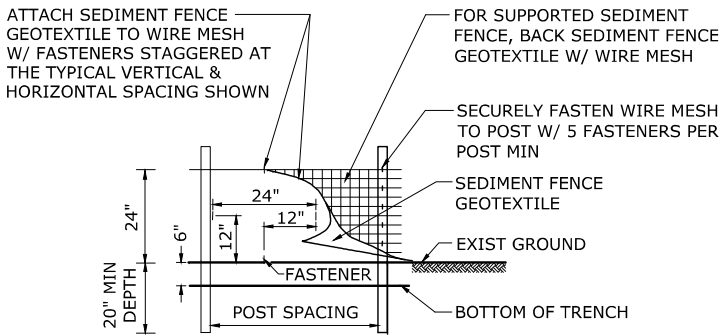
SECTION A-A



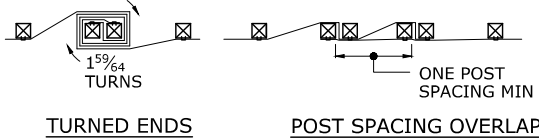
ELEVATION VIEW AT DITCH SECTION
OR LOW AREAS

TABLE 1
SEDIMENT BARRIER SPACING FOR
GENERAL APPLICATION

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS	
GRADE	MAX SPACING ON GRADE
GRADE <10%	300'
10% ≤ GRADE <15%	150'
15% ≤ GRADE <20%	100'
20% ≤ GRADE <30%	50'
30% ≤ GRADE	25'



ELEVATION



GEOTEXTILE END CONNECTIONS

TABLE 2

POST SPACING	
4'	SUPPORTED SEDIMENT FENCE
6'	UNSUPPORTED SEDIMENT FENCE WITH GEOTEXTILE ELONGATION *LESS THAN 50%
4'	UNSUPPORTED SEDIMENT FENCE WITH GEOTEXTILE ELONGATION *MORE THAN 50%

* GEOTEXTILE GRAB ELONGATION VALUE
AS DOCUMENTED BY "LEVEL B"
MANUFACTURER'S DOCUMENTATION (SEE
STANDARD SPECIFICATIONS).

SEDIMENT FENCE, SUPPORTED SEDIMENT FENCE, UNSUPPORTED
SCALE: NTS



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NOTICE

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DKH
DRAWN
JRL
CHECKED

REGISTERED PROFESSIONAL
ENGINEER
80898
Justin R. Luce
May 23, 2019
RENEWALS 12-31-22

murraysmith



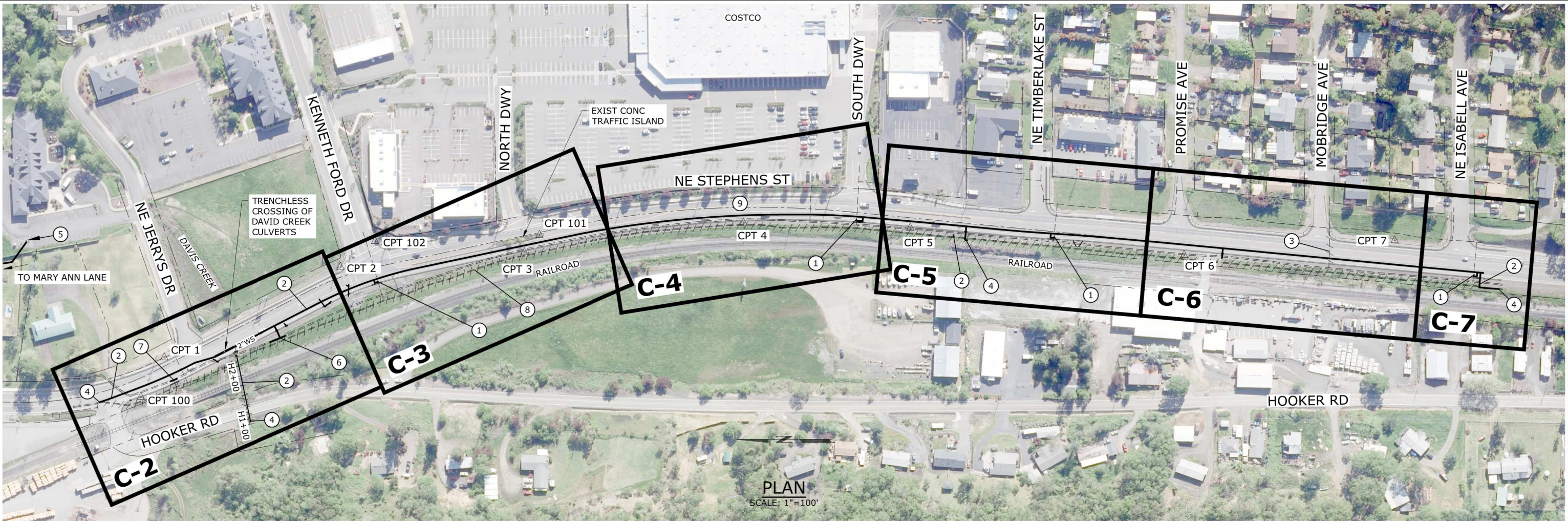
PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

EROSION AND SEDIMENT CONTROL
DETAILS - 2

PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

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RECOMMENDED CONSTRUCTION SEQUENCING:

1. 12" DISTRIBUTION MAIN HOT TAPS - INSTALL HOT TAPS ON EXISTING 12" DISTRIBUTION MAINS IN ADVANCE OF INSTALLING CONNECTIONS TO NEW 24" TRANSMISSION MAIN AT KENNETH FORD DRIVE, COSTCO'S SOUTH DRIVEWAY, TIMBERLAKE STREET AND ISABELL AVENUE (4 LOCATIONS). ALLOW CONCRETE THRUST BLOCKS TO CURE TO DESIGN STRENGTH PRIOR TO PRESSURING UP CONNECTION PIPING.
2. INSTALL 24" TRANSMISSION MAIN, DISTRIBUTION CONNECTIONS AND APPURTENANCES - INSTALL, PRESSURE TEST, AND DISINFECT ISOLATED 24" DI TRANSMISSION MAIN, APPURTENANCES, (INCLUDING HDD WATER SERVICE REPLACEMENT), AND CONNECTIONS TO 12" DISTRIBUTION MAIN HOT TAPS PRIOR TO COMPLETING FINAL TIE-INS TO EXISTING 24" DI AND 20" STL MAINS NEAR HOOKER ROAD AND ISABELL AVENUE, RESPECTIVELY. EXISTING GAS DISTRIBUTION PIPELINE AND STORM SEWER CONFLICTS SHOWN ON SHEETS C-5 AND C-6 AT TIMBERLAKE STREET AND PROMISE AVENUE TO BE MITIGATED FOR PRIOR TO INSTALLING 24" DI WATER THROUGH THESE AREAS. CONTRACTOR TO ALSO PERFORM ALL PRELIMINARY TESTING OF CORROSION MONITORING SYSTEM AS ALLOWED PRIOR TO PERFORMING HYDROTESTING.
3. EXISTING 6" WATER CROSSING AT MOBRIDGE - ISOLATE EXISTING 6" WATERLINE CROSSING AT MOBRIDGE PRIOR TO ABANDONING EXISTING 20" MAIN. FINAL ABANDONMENT OF CROSSING AT MOBRIDGE MAY BE PERFORMED AS PART OF THIS TASK OR AFTER OTHER LISTED TASKS.
4. TIE-IN NEW 24" TRANSMISSION MAIN - SHUT DOWN EXISTING 20"/24" TRANSMISSION MAIN, AND TIE-IN NEW 24" DI MAIN AT EITHER END TO PLACE INTO SERVICE. TIE-IN WATER METER BANK ON HOOKER ROAD AND WATER SERVICE TO 4073 HOOKER RD (SHT C-5) IMMEDIATELY FOLLOWING PLACING 24" MAIN INTO SERVICE (SAME DAY). PLUG ENDS OF EXISTING 24" AND 20" MAINS ADJACENT TO TIE-IN LOCATIONS AND IN PREPARATION FOR FILLING AND ABANDONMENT OF OUT OF SERVICE 20"/24" PIPING BETWEEN HOOKER ROAD AND ISABELL AVENUE. COMPLETE FULL DEPTH T-CUT AND FINAL TRENCH PATCH PAVING ON STEPHENS AFTER PERFORMING FINAL TESTING OF CORROSION MONITORING SYSTEM.
NOTE - WATER SERVICE FED OFF OF EXISTING 20" MAIN SOUTH OF PROJECT LIMITS AT 3791 NE STEPHENS STREET WILL ALSO BE OUT OF SERVICE DURING 24"/20" TRANSMISSION MAIN SHUTDOWN UNTIL NEW 24" MAIN IS PLACED INTO SERVICE.

5. INSTALL TEMPORARY FEEDER TO NE MARY ANN LANE - INSTALL ABOVE GRADE TEMPORARY HDPE MAIN FROM EXISTING FIRE HYDRANT OFF OF JERRY'S DRIVE TO FEED WATER SERVICES ALONG NE MARY ANN LANE PRIOR TO SHUTTING DOWN EXISTING 30" WATER AND CONDUCTING INTERTIE RELATED WORK. SEE DETAIL 3, SHEET C-8 FOR TEMPORARY FEEDER INSTALL PLAN.
6. INSTALL NEW TRANSMISSION MAINS INTERTIE - SHUT DOWN EXISTING 30" WATER AND INSTALL NEW TRANSMISSION MAINS INTERTIE. USE NEW 24" TRANSMISSION MAIN TO SUPPLY SERVICES WITHIN PROJECT LIMITS DURING SHUTDOWN OF 30", TYPICAL. ALLOW PROPER CURING FOR CONCRETE ANCHOR WALLS PRIOR TO PLACING 30" WATER BACK IN SERVICE.
7. ABANDON EXISTING TRANSMISSION MAINS INTERTIE - CONTINUE SHUT DOWN EXISTING 30" WATER AND ABANDON EXISTING TRANSMISSION MAINS INTERTIE.
8. FILL AND ABANDON EXISTING 20"/24" PIPING IN PLACE - REMOVE CAPS. DRAIN REMAINING WATER AS REQUIRED, AND FILL REMAINING BURIED OUT OF SERVICE 20"/24" PIPING PER REQUIREMENTS OF SPECIFICATION SECTION 33 11 50 - EXISTING PIPE ABANDONMENT.
9. FINAL SURFACE RESTORATION - COMPLETE FINAL SURFACE RESTORATION ITEMS, INCLUDING 2" COLD PLANE PAVEMENT REMOVAL AND ASPHALT INLAY OF SB LANE ON STEPHENS WHEN WEATHER PERMITS.

NOTES:

1. ALL WORK ON THE NE STEPHENS STREET AFFECTING TRAFFIC THROUGH THE KENNETH FORD DRIVE AND HOOKER ROAD INTERSECTIONS AS SHOWN ON SHEETS TC-1 THRU TC-5 SHALL BE PERFORMED AS NIGHT WORK. SEE GENERAL NOTE 27 ON SHEET G-02, AND TRAFFIC CONTROL SHEETS (TC-1 THRU TC-5) FOR FURTHER DETAILS.

NO.	DATE	BY	REVISION

NOTICE

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DESIGNED

DKH
DRAWN

JRL
CHECKED

REGISTERED PROFESSIONAL ENGINEER 80998

Justin R Luce

MAY 23, 2019

JUSTIN RUSSELL LUCE

RENEWS 12-31-22

murraysmith

THE CITY OF ROSEBURG

OFFICIAL SEAL OF THE CITY

PROJECT #20WA17

24-INCH TRANSMISSION MAIN

HOOKER ROAD TO ISABELL AVENUE

SITE LAYOUT AND CONSTRUCTION SEQUENCING PLAN

PROJECT NO.: 20-2938

SCALE: AS SHOWN

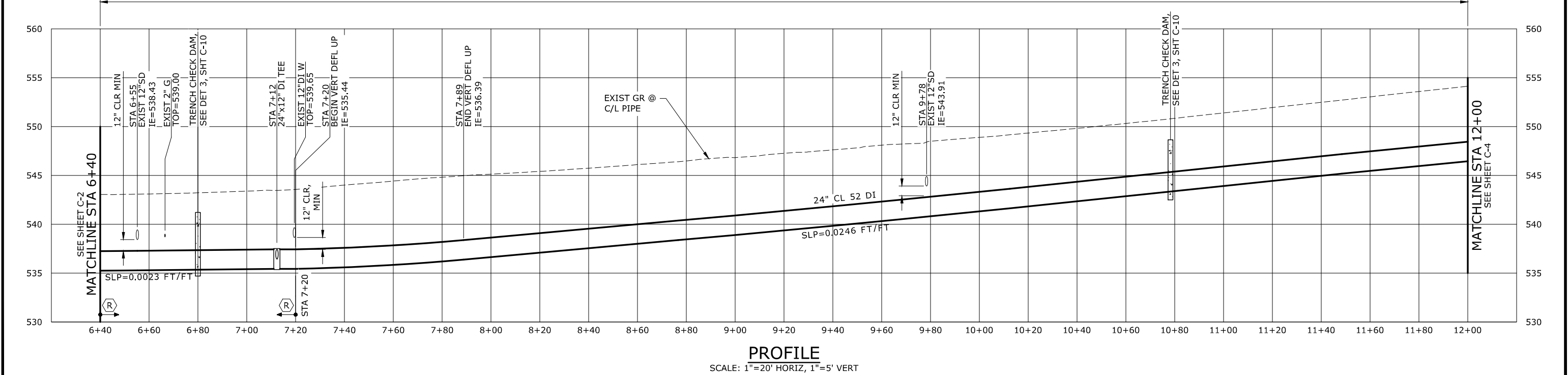
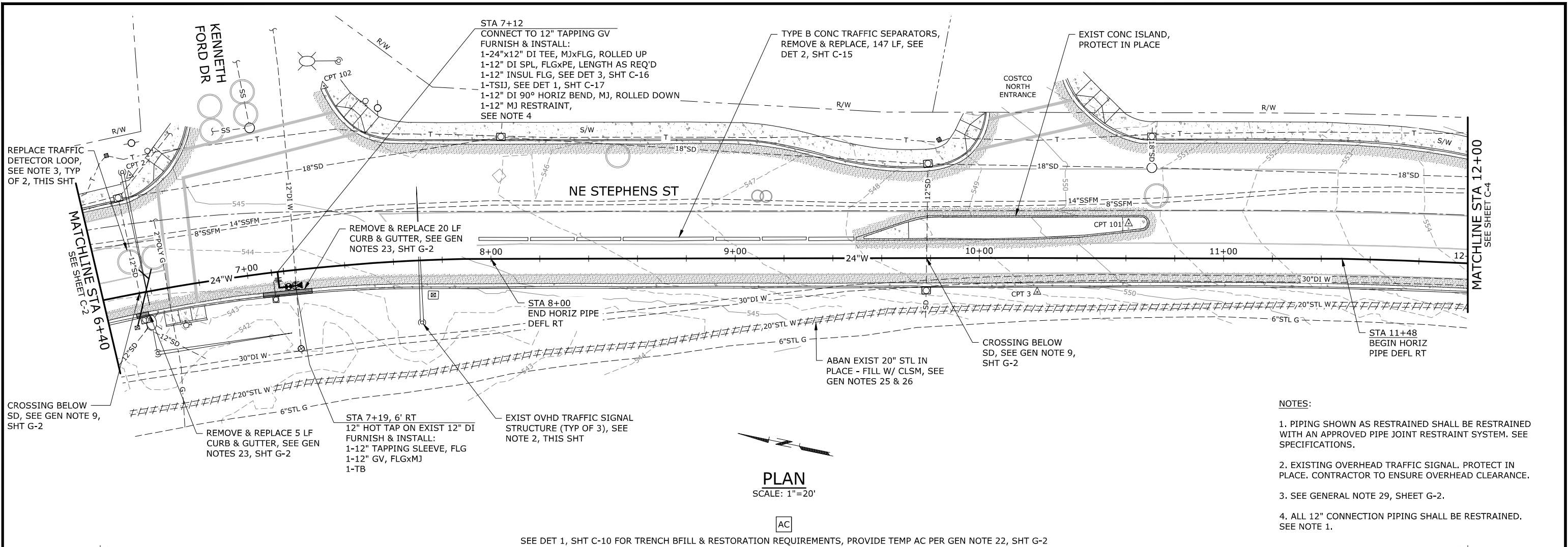
DATE: MAY 2021

SHEET

C-1

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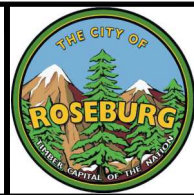
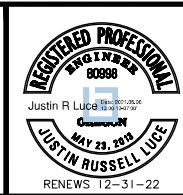
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PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

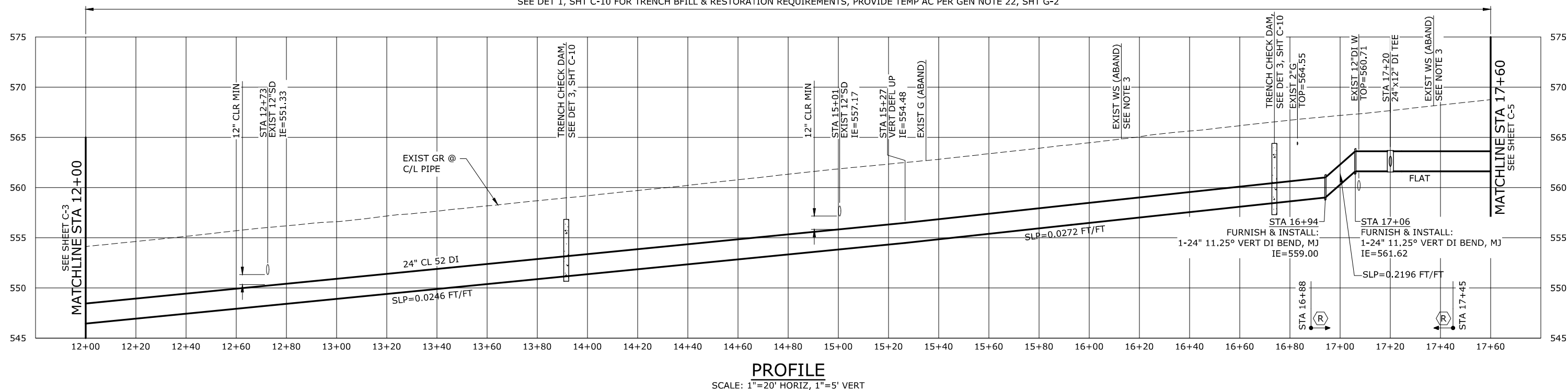
TRANSMISSION MAIN PLAN AND PROFILE STA 6+40 TO STA 12+00				SHEET C-3	
PROJECT NO.:	20-2938	SCALE:	AS SHOWN	DATE:	MAY 2021
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NOTES:

1. PIPING SHOWN AS RESTRAINED SHALL BE RESTRAINED WITH AN APPROVED PIPE JOINT RESTRAINT SYSTEM. SEE SPECIFICATIONS.
2. ALL 12" CONNECTION PIPING SHALL BE RESTRAINED. SEE NOTE 1.
3. EXISTING WATER SERVICE IS ABANDONED BUT MAY STILL BE PRESSURIZED, PROTECT IN PLACE AND CONTACT CITY TO CRIMP ONCE EXPOSED DURING 24-INCH MAIN'S TRENCH EXCAVATION.

SEE DET 1, SHT C-10 FOR TRENCH BFILL & RESTORATION REQUIREMENTS, PROVIDE TEMP AC PER GEN NOTE 22, SHT G-2



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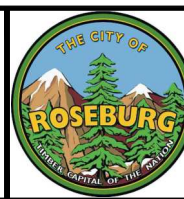
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**PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE**

TRANSMISSION MAIN PLAN AND PROFILE STA 12+00 TO STA 17+60

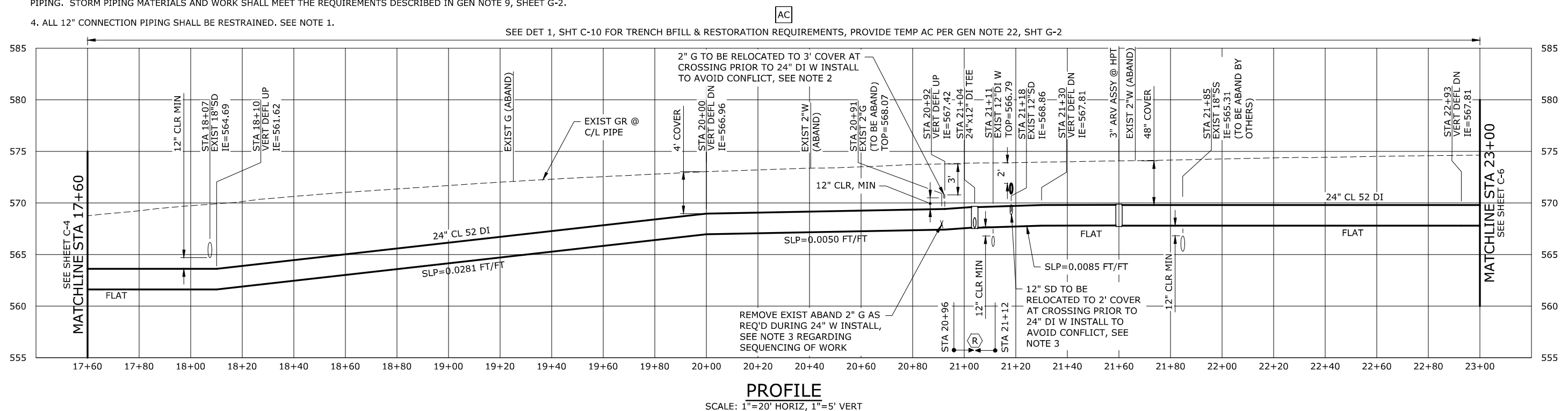
PROJECT NO.:	20-2938	SCALE:	AS SHOWN	DATE:	MAY 2021
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SHEET

C-4




1. PIPING SHOWN AS RESTRAINED SHALL BE RESTRAINED WITH AN APPROVED PIPE JOINT RESTRAINT SYSTEM. SEE SPECIFICATIONS.
2. CONTRACTOR TO COORDINATE WITH AND ASSIST AVISTA TO RELOCATE A SECTION OF EXISTING 2" GAS LINE APPROXIMATELY TO LIMITS SHOWN IN ADVANCE OF INSTALLING 24" WATER TRANSMISSION MAIN. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, EXCAVATE AND SHORE TRENCH TO DEPTHS REQUIRED TO EXPOSE EXISTING GAS LINE AT EITHER END FOR AVISTA TO PERFORM TIE-INS, AND IN BETWEEN TO INSTALL VERTICAL OFFSETS AND RAISE GRADE OF GAS LINE AT CROSSING WITH 24" WATER MAIN AS SHOWN AND REQUIRED. AFTER AVISTA CREW INSTALLS VERTICAL OFFSETS, TIES IN RELOCATED GAS LINE, AND ABANDON EXISTING GAS LINE IN PLACE, CONTRACTOR TO BACKFILL TRENCH AND RESTORE SURFACING APPROXIMATELY PER DETAIL 1, SHEET C-10.
3. CONTRACTOR TO RELOCATE EXISTING STORM UTILITY ITEMS AS REQUIRED PRIOR TO INSTALLING 24" WATER TRANSMISSION MAIN. EXISTING CONCRETE CURB INLET SHALL BE REMOVED AND REPLACED NEW PER DETAIL 3 ON SHEET C-14, WITH IE OUT SET AS REQUIRED TO PROVIDE 2' COVER FOR RELOCATED 12" STORM PIPE AT WATERLINE CROSSING, AND MINIMUM SLOPE TO DRAIN PROVIDED FOR 12" PIPING IN BETWEEN. VERTICAL OFFSET TO BE INSTALLED EAST OF 24" WATERLINE TRENCH EXTENTS TO TIE NEW RELOCATED STORM DRAIN PIPING INTO EXISTING PIPING. STORM PIPING MATERIALS AND WORK SHALL MEET THE REQUIREMENTS DESCRIBED IN GEN NOTE 9, SHEET G-2.
4. ALL 12" CONNECTION PIPING SHALL BE RESTRAINED. SEE NOTE 1.



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NOTICE

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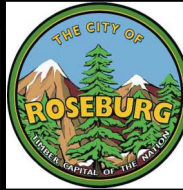


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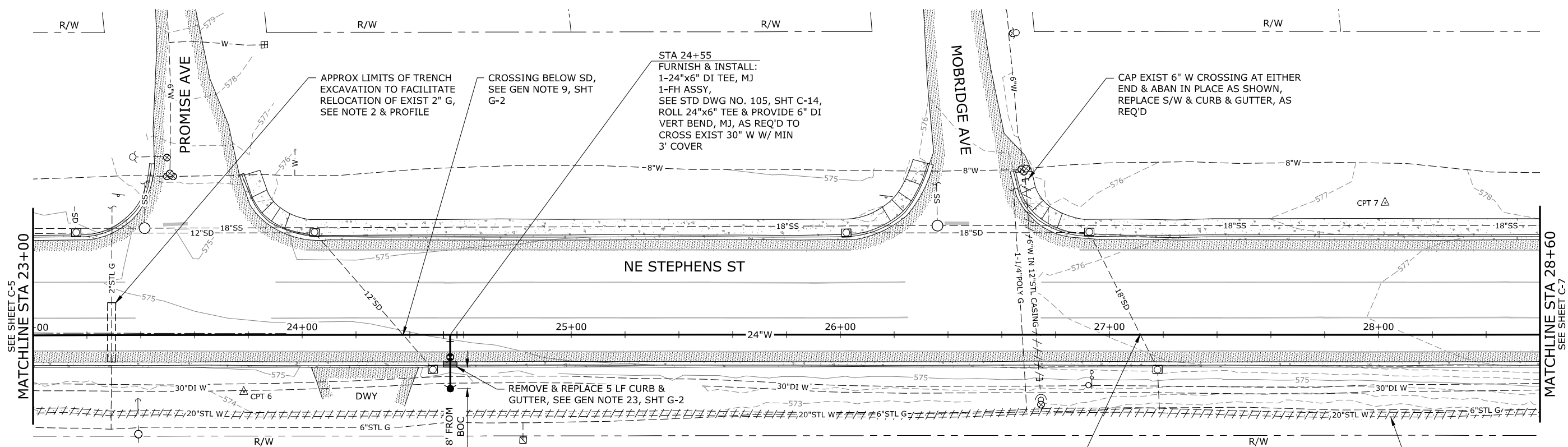


**PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE**

**TRANSMISSION MAIN
PLAN AND PROFILE
STA 17+60 TO STA 23+00**

PROJECT NO.:	20-2938	SCALE:	AS SHOWN	DATE:	MAY 2021
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NOTES:

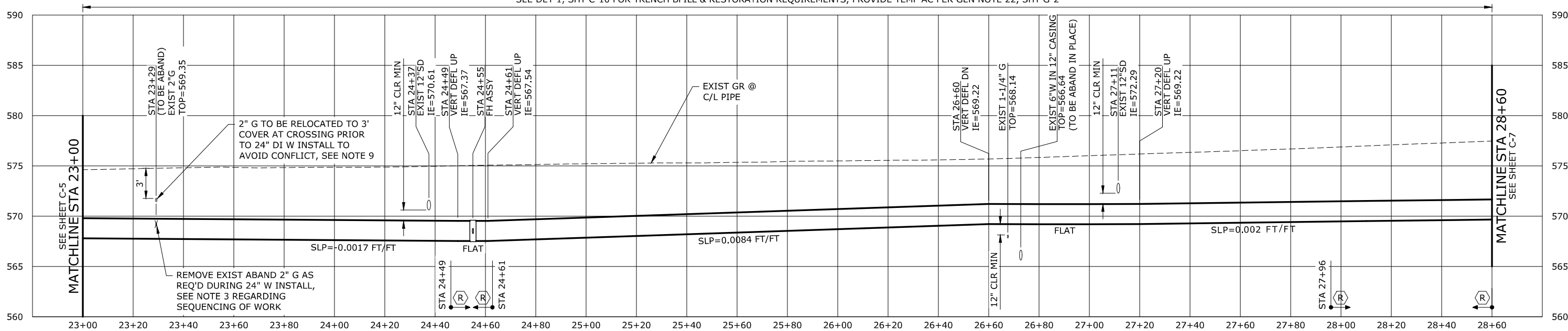
1. PIPING SHOWN AS RESTRAINED SHALL BE RESTRAINED WITH AN APPROVED PIPE JOINT RESTRAINT SYSTEM. SEE SPECIFICATIONS.
2. INSTALL 10-FT LONG x 4-FT WIDE GEOMEMBRANE IN TRENCH, CENTERED BETWEEN STEEL GAS PIPE AND 24-INCH DI WATER MAIN. SEE SPECIFICATIONS FOR MATERIAL REQUIREMENTS FOR GEOMEMBRANE.
3. CONTRACTOR TO COORDINATE WITH AND ASSIST AVISTA TO RELOCATE A SECTION OF EXISTING 2" GAS LINE APPROXIMATELY TO LIMITS SHOWN IN ADVANCE OF INSTALLING 24" WATER TRANSMISSION MAIN. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, EXCAVATE AND SHORE TRENCH TO DEPTHS REQUIRED TO EXPOSE EXISTING GAS LINE AT EITHER END FOR AVISTA TO PERFORM TIE-INS, AND IN BETWEEN TO INSTALL VERTICAL OFFSETS AND RAISE GRADE OF GAS LINE AT CROSSING WITH 24" WATER MAIN AS SHOWN AND REQUIRED. AFTER AVISTA CREW INSTALLS VERTICAL OFFSETS, TIES IN RELOCATED GAS LINE, AND ABANDON EXISTING GAS LINE IN PLACE, CONTRACTOR TO BACKFILL TRENCH AND RESTORE SURFACING APPROXIMATELY PER DETAIL 1, SHEET C-10.

PLAN

SCALE: 1"=20'

AC

SEE DET 1, SHT C-10 FOR TRENCH BFILL & RESTORATION REQUIREMENTS, PROVIDE TEMP AC PER GEN NOTE 22, SHT G-2

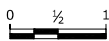


PROFILE

SCALE: 1"=20' HORIZ, 1"=5' VERT

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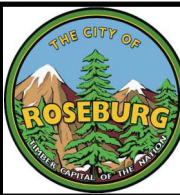


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PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

TRANSMISSION MAIN
PLAN AND PROFILE
STA 23+00 TO STA 28+60

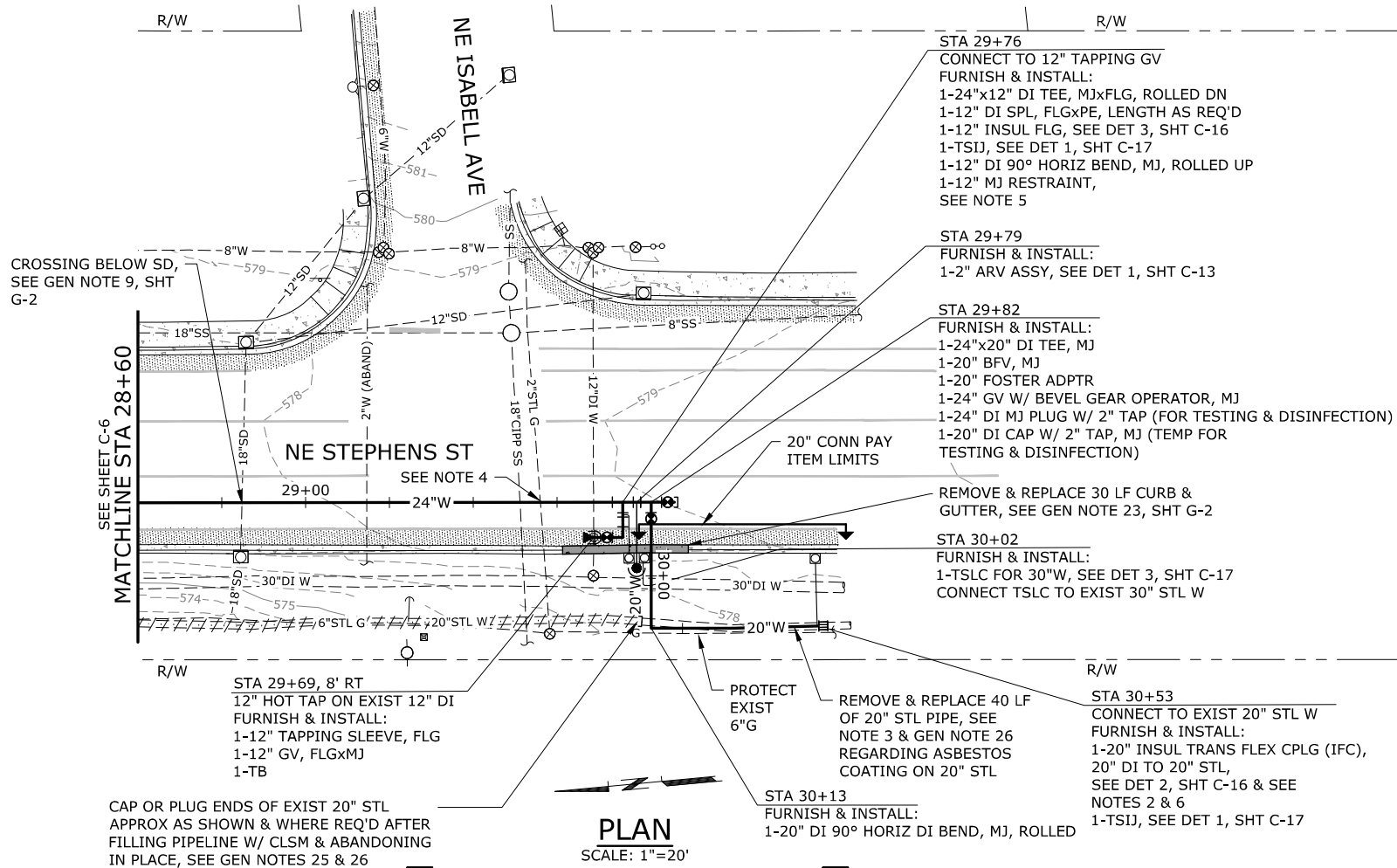
PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

SHEET

C-6

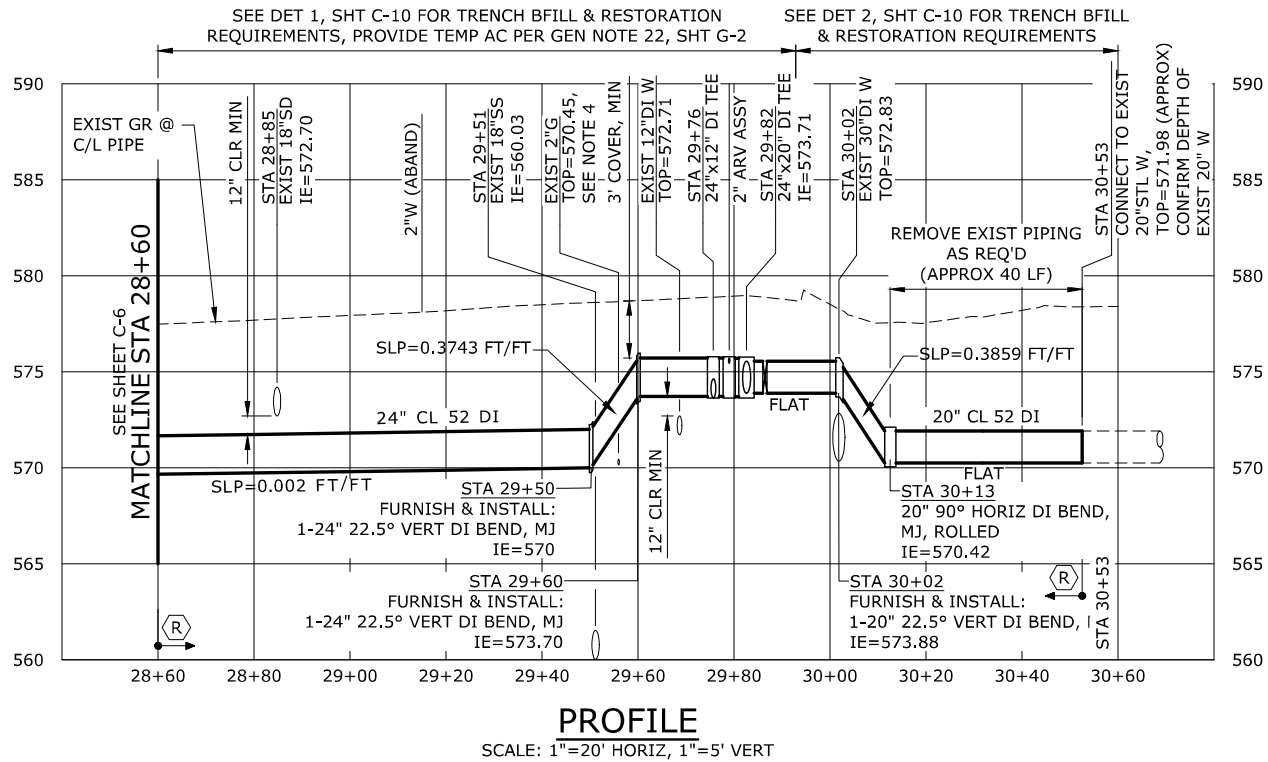
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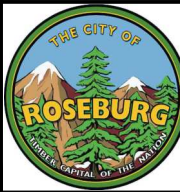
1. PIPING SHOWN AS RESTRAINED SHALL BE RESTRAINED WITH AN APPROVED PIPE JOINT RESTRAINT SYSTEM. SEE SPECIFICATIONS.
2. CONFIRM OD OF EXISTING STEEL PIPE PRIOR TO ORDERING 20" TRANSITION COUPLING.
3. CONTRACTOR TO REMOVE 40 LF OF EXISTING STEEL PIPE AND REPLACE WITH 40 LF NEW DI PIPE. REPLACEMENT PIPING SHALL BE FULLY RESTRAINED FROM 90° ELBOW AT STA 30+13 TO TIE-IN LOCATION AT STA 30+53.
4. INSTALL 10-FT LONG x 4-FT WIDE GEOMEMBRANE IN TRENCH, BETWEEN STEEL GAS PIPE AND 24-INCH DI WATER MAIN AT BOTTOM OF TRENCH. SEE SPECIFICATIONS FOR MATERIAL REQUIREMENTS FOR GEOMEMBRANE MATERIAL.
5. ALL 12" CONNECTION PIPING SHALL BE RESTRAINED. SEE NOTE 1.
6. PREPARE STEEL SURFACES AND REPAIR COATING AND LINING OF CUT END OF EXISTING 20" STEEL PIPE WITH NSF 61 APPROVED SURFACE TOLERANT EPOXY COATING SYSTEM PRIOR TO ASSEMBLING FLEXIBLE COUPLING. EPOXY REPAIR SYSTEM SHALL CONSIST OF A PRIMER COAT OF PRE PRIME 167 SEALER AND A TOP COAT OF BAR RUST 233H, OR EQUAL. TOTAL SYSTEM MINIMUM THICKNESS SHALL BE 12 MILS DFT. CONTRACTOR SHALL FOLLOW ALL COATING MANUFACTURER'S RECOMMENDATIONS INCLUDING THOSE PERTAINING TO PROPER SURFACE PREPARATION, AND CURE TIME PRIOR TO ASSEMBLING COUPLING AND PLACING WATERLINE BACK INTO SERVICE.



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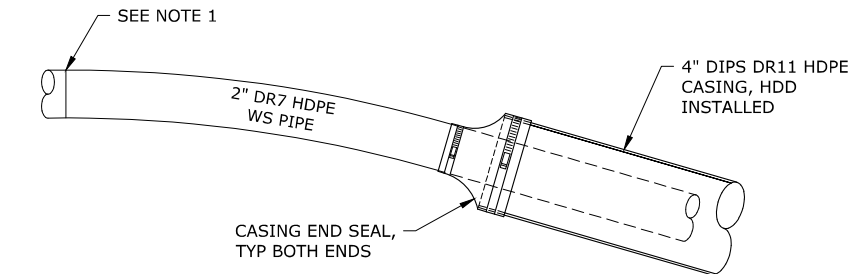
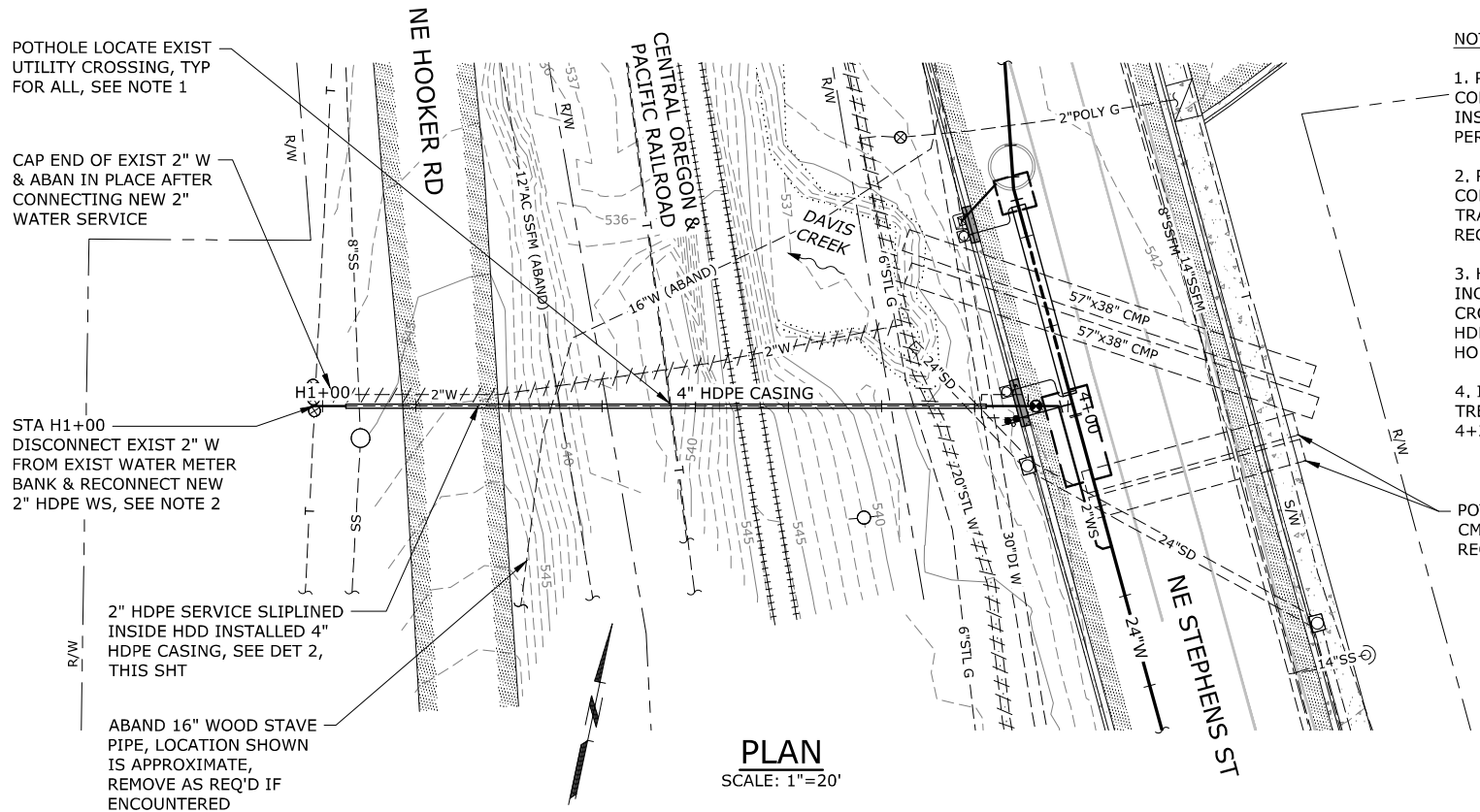


PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

TRANSMISSION MAIN PLAN AND PROFILE STA 28+60 TO STA 30+53			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

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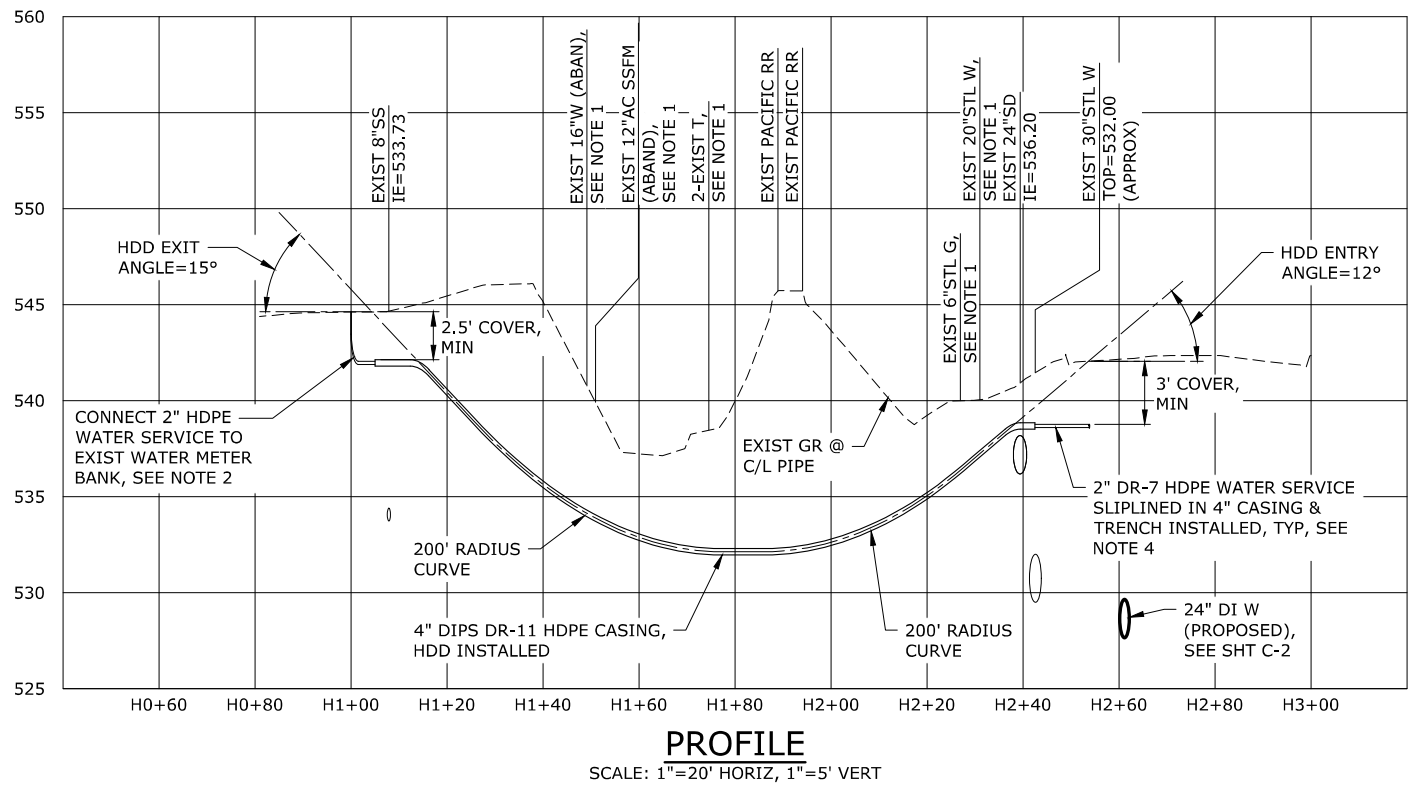
NOTE:

1. JOINTS IN HPDE SERVICE, AS APPROVED BY OWNER'S REPRESENTATIVE, SHALL BE BUTT FUSED.

2" HDPE SERVICE SLIPLINED INSIDE HDD INSTALLED 4" HDPE CASING

SCALE: NTS

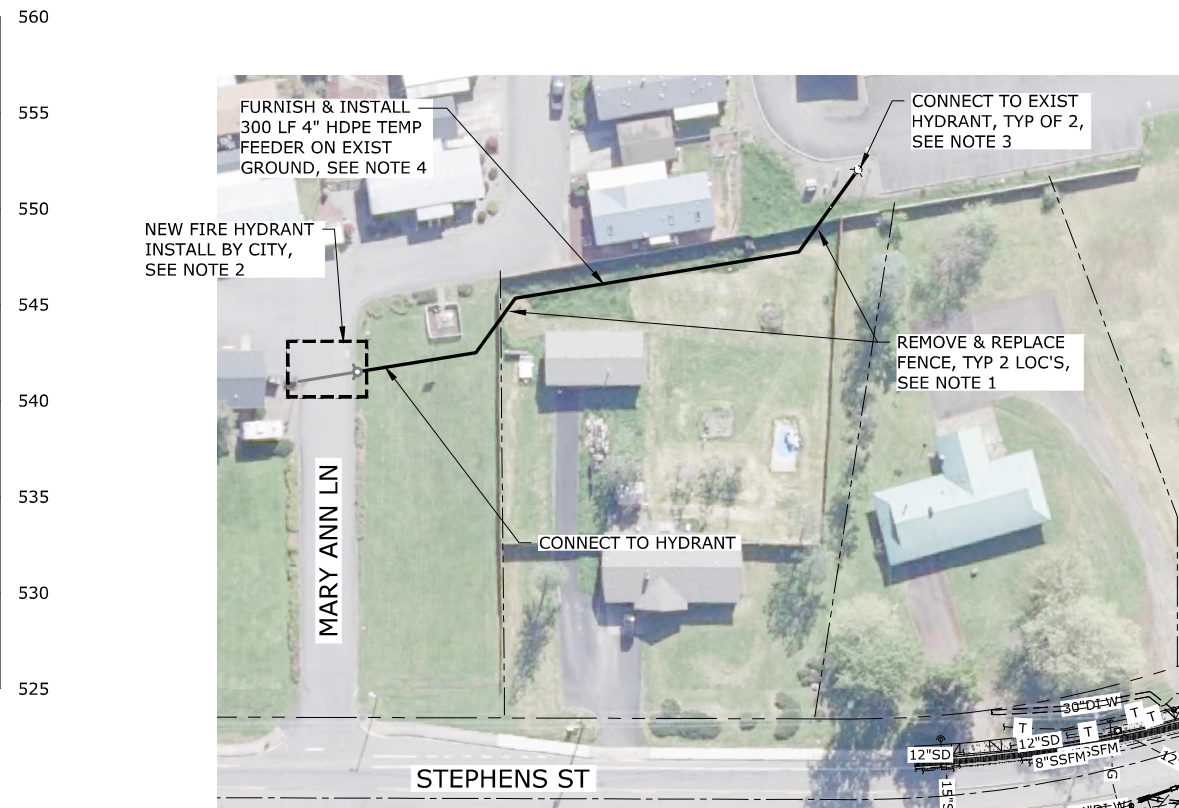
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HDD WATER SERVICE REPLACEMENT PLAN AND PROFILE

SCALE: 1"=20'

1
C-2



TEMPORARY FEEDER MAIN FOR MARY ANN AND LANE

SCALE: 1"=50'

3
-

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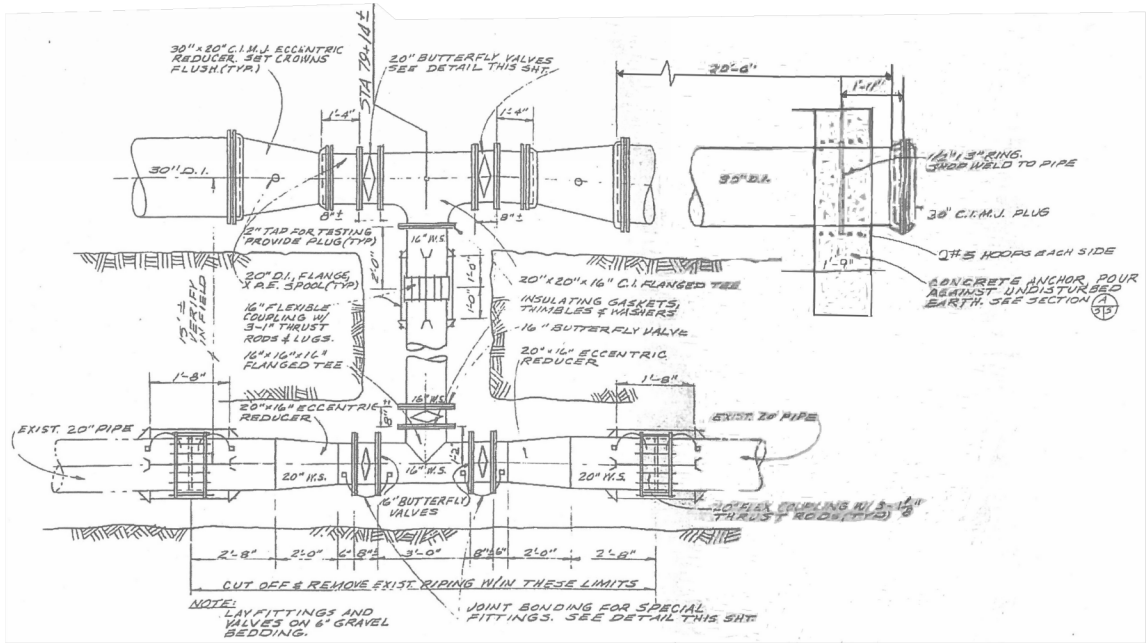
PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKE ROAD TO
ISABELL AVENUE

PROJECT NO.:	20-2938
SCALE:	AS SHOWN
DATE:	MAY 2021

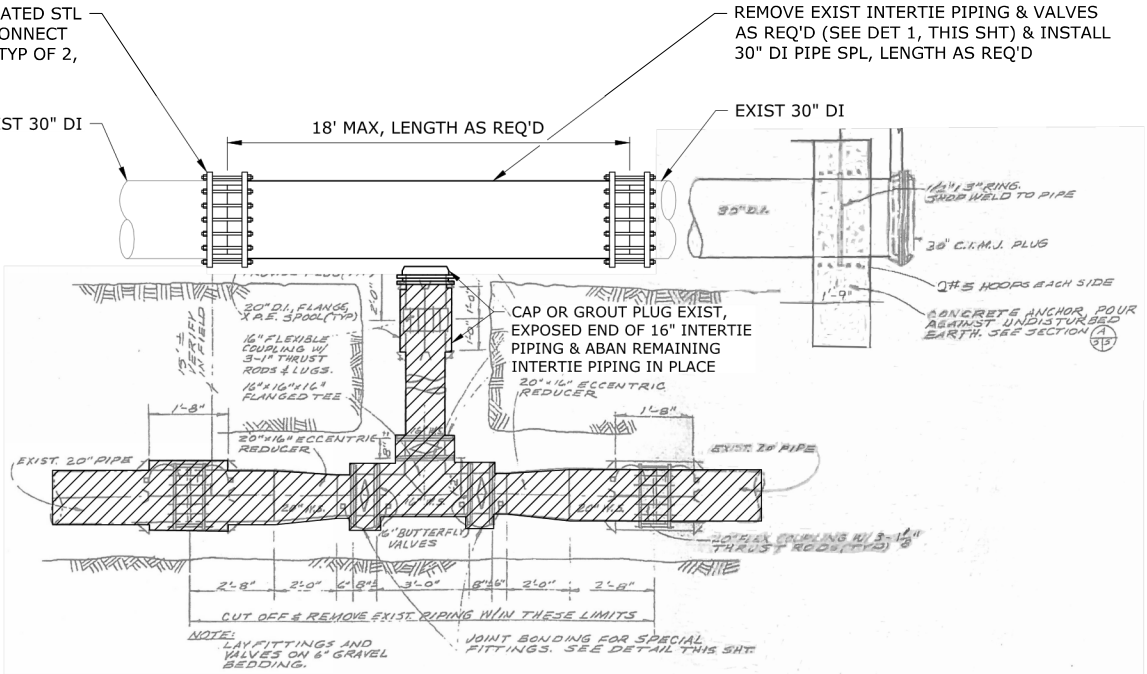
CONNECTION DETAILS - 1

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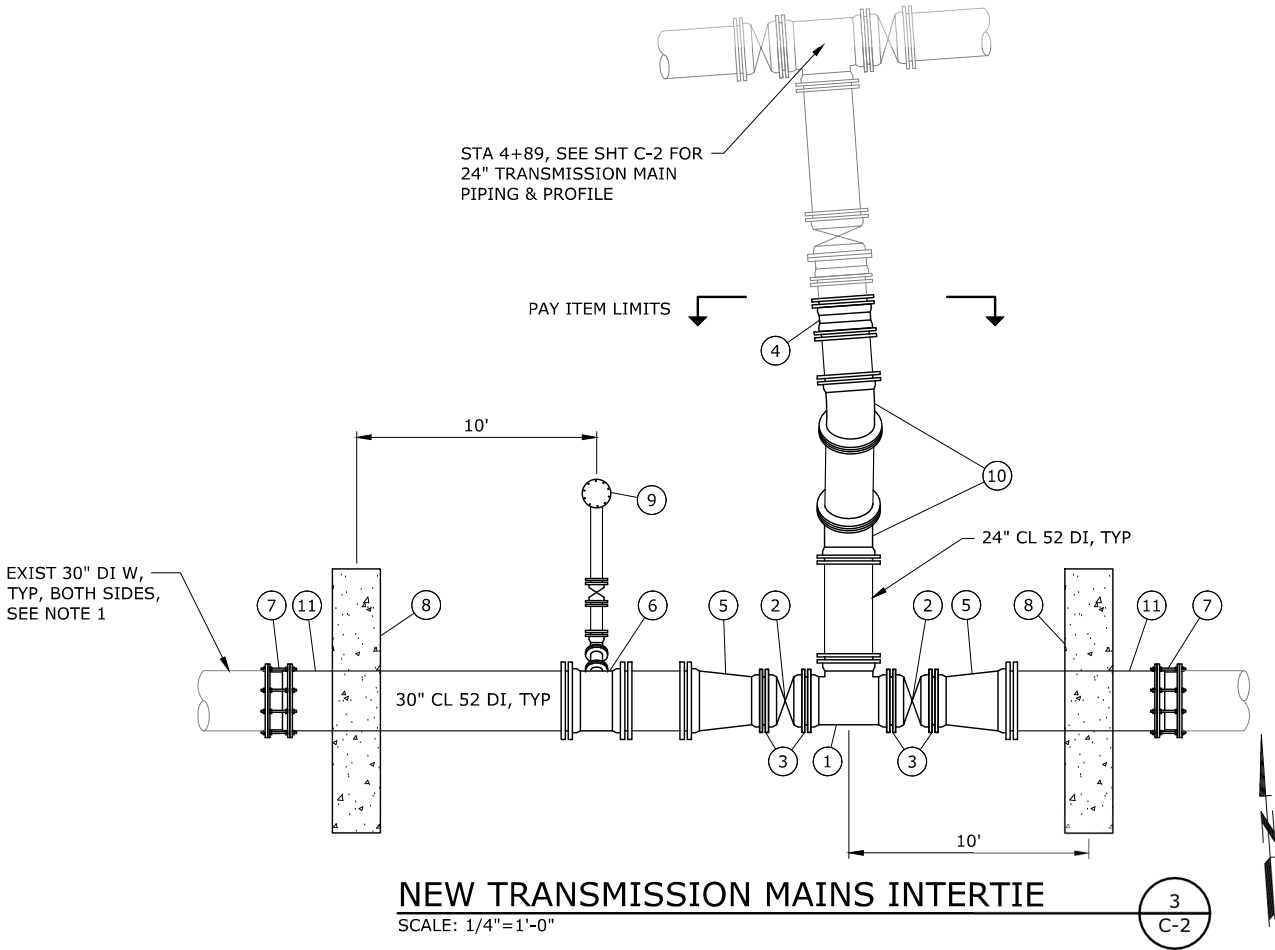
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EXISTING TRANSMISSION MAINS INTERTIE 1 C-2
SCALE: NTS



EXISTING TRANSMISSION MAINS INTERTIE, ABANDONMENT 2 C-2
SCALE: NTS



NEW TRANSMISSION MAINS INTERTIE 3 C-2
SCALE: 1/4"=1'-0"

NOTES:

- 30" TRANSMISSION MAIN PIPING AT EXISTING INTERTIE HAS APPROXIMATELY 11' COVER WITHIN ROADWAY.
- CONTRACTOR TO EXPOSE EXISTING 30" DI AND CONFIRM PIPE OD FOR ORDERING FLEX COUPLINGS AHEAD OF PERFORMING ABANDONMENT WORK.
- CONTRACTOR TO ADEQUATELY SHORE EXCAVATION FOR PERFORMING WORK SHOWN TO LIMIT DAMAGE TO EXISTING ROADWAY SECTION AND NEARBY STRUCTURES AND UTILITIES.
- CONTRACTOR SHALL LIMIT EXTENTS OF DISTURBANCE TO EXISTING ROADWAY TO ALLOW TWO LANES OF TRAFFIC TO REMAIN OPEN DURING NON-WORK HOURS. IF EXCAVATION MUST BE LEFT OPEN DURING NON-WORK HOURS, TRAFFIC CONTROL SIMILAR TO THAT SHOWN FOR DAVIS CREEK TRENCHLESS CROSSING SHALL BE DEPLOYED AS SHOWN ON SHEET TC-3.
- CONTRACTOR TO REBUILD ROADWAY AND REPLACE CURB AND GUTTER AS REQUIRED AFTER COMPLETING PIPING ABANDONMENT AND INSTALL WORK SHOWN.

KEY NOTES

- 24" DI TEE, MJ
- 24" GV, MJ
- 24" FOSTER ADPTR
- 24" DI LS, MJ, SEE NOTE 3
- 30"x24" DI RDCR, MJ
- 30"x6" DI TEE, MJxFLG, ROLLED DOWN PER DET 3, SHT C-12
- 30" FLEX CPLG, SEE NOTE 1
- CONC ANCHOR WALL, SEE DET 3 SHT C-11
- 6" BO ASSY, SEE DET 3, SHT C-12
- 24" 45° VERT DI BEND, MJ, ROLLED AS SHOWN
- 30" DI SPL, LENGTH AS REQ'D

NOTES:

- CONFIRM OD OF EXISTING 30" DI PIPE PRIOR TO ORDERING FLEXIBLE COUPLINGS.
- APPROXIMATE 9' COVER OVER EXIST 30" WATER AT TIE-IN LOCATIONS
- REMOVE 24" MJ CAP AFTER PRESSURE TESTING 24" TRANSMISSION MAIN PIPING AND INSTALL LONG SLEEVE TO CONNECT TRANSMISSION MAINS. SEE RECOMMENDED CONSTRUCTION SEQUENCING ON SHEET C-1.
- ALL NEW PIPING SHALL BE INSTALLED WITH APPROVED JOINT RESTRAINT SYSTEMS, EXCEPT FOR FLEXIBLE COUPLINGS FOR TIE-IN TO EXISTING 30" WATER MAIN.

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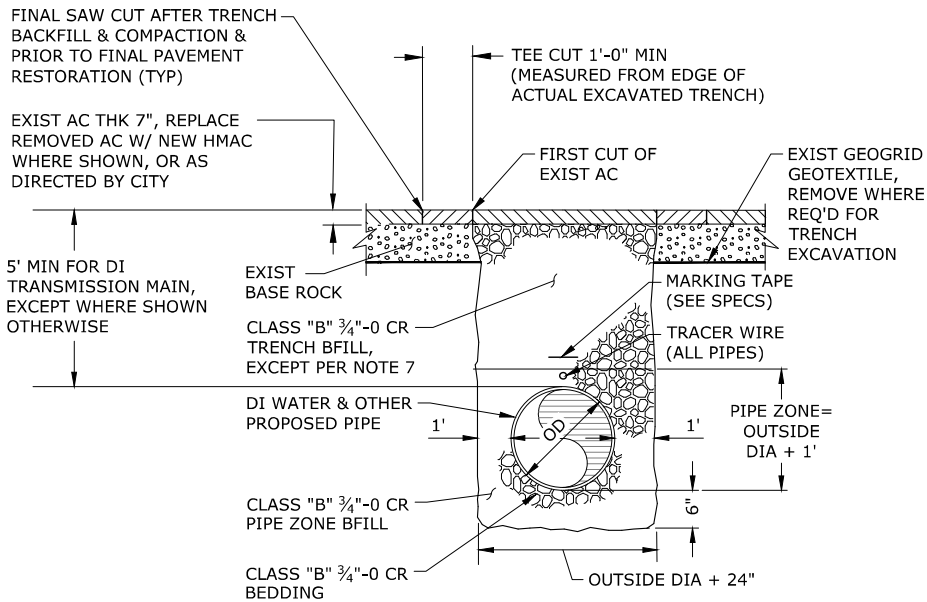


PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

CONNECTION DETAILS - 2			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

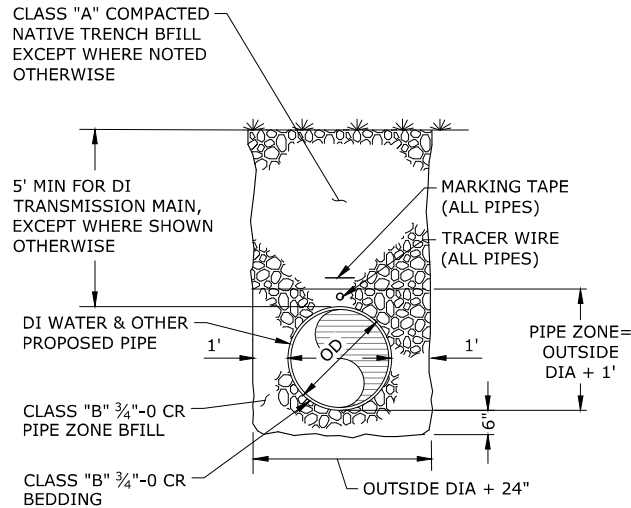
SHEET
C-9
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NOTES:

1. USE $\frac{3}{4}$ "-0" CRUSHED ROCK BEDDING AND PIPE ZONE BACKFILL AT ALL LOCATIONS. COMPACT TO ACHIEVE 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-99.
2. FURNISH AND INSTALL $\frac{3}{4}$ "-0" CR TRENCH BACKFILL TO PAVEMENT BASE OR EXISTING GRADE. COMPACT ALL $\frac{3}{4}$ "-0" BACKFILL IN LIFTS TO ACHIEVE 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-99.
3. REFER TO SPECIFICATIONS FOR OTHER BACKFILL/ BEDDING REQUIREMENTS.
4. REPLACE REMOVED ASPHALT WITH LEVEL 3, $\frac{1}{2}$ " DENSE HMA. MATCH EXISTING AC THICKNESS OR 7", WHICHEVER IS THICKER, MAXIMUM AC BASE COURSE LIFTS SHALL BE 3"; MAX WEARING COURSE LIFT SHALL BE 2". FOR NON-AC (GRAVEL) SURFACES BRING $\frac{3}{4}$ "-0" BACKFILL TO GRADE.
5. AT THE END OF EACH WORKDAY, ALL OPEN TRENCHES SHALL BE BACKFILLED TO THE TOP OF THE TRENCH. PRIOR TO OPENING TO TRAFFIC ALL TRENCHES WITHIN THE ROADWAY SHALL BE TEMPORARILY OR PERMANENTLY PAVED TO MATCH THE ADJACENT PAVEMENT GRADE. PER GENERAL NOTE 22, SHEET G-2.
6. REPLACE EXISTING BASE ROCK DISTURBED BY THE TRENCHING OPERATIONS.
7. BETWEEN STA 1+48 AND STA 1+80 WHERE COVER OVER THE PIPE IS MINIMAL, BACKFILL TRENCH WITH CLSM. PLATE TRENCH AS REQUIRED TO ALLOW CLSM TO CURE PRIOR TO EXPOSING TO TRAFFIC. SEE SPECIFICATIONS AND SHEETS C-2 AND G-3.
8. INSTALL MARKER BALLS IN TRENCH BACKFILL IN REQUIRED LOCATIONS. SEE GENERAL NOTE 24, SHEET G-2.



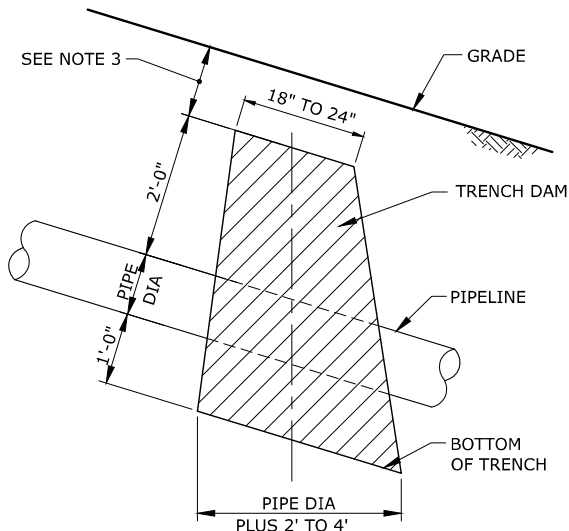
NOTES:

1. FURNISH AND INSTALL CLASS "B" $\frac{3}{4}$ "-0" CRUSHED ROCK BEDDING AND PIPE ZONE BACKFILL COMPACTED TO 95% OF MAXIMUM DENSITY PER AASHTO T-99. FURNISH AND INSTALL CLASS "A" NATIVE TRENCH BACKFILL COMPACTED TO 95% MAXIMUM DENSITY PER AASHTO T-99.
2. FINISH TRENCH SURFACE TO MATCH ORIGINAL CONTOURS. REPLACE EXISTING LANDSCAPE WITH GRASS SEED PER SPECIFICATIONS.
3. INSTALL MARKER BALLS IN TRENCH BACKFILL IN REQUIRED LOCATIONS. SEE GENERAL NOTE 24, SHEET G-2.

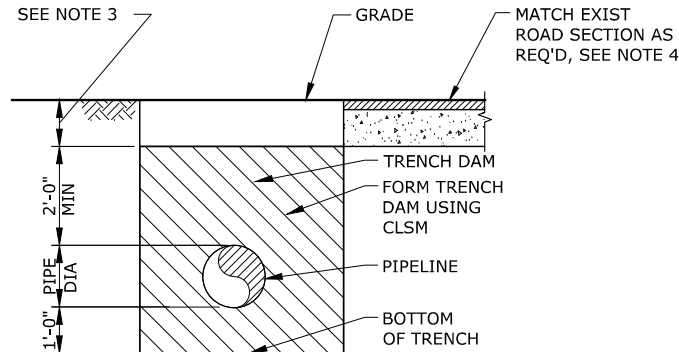
SINGLE PIPE TRENCH DETAIL - ROADWAYS AND DRIVEWAYS

SCALE: NTS

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ELEVATION



SECTION

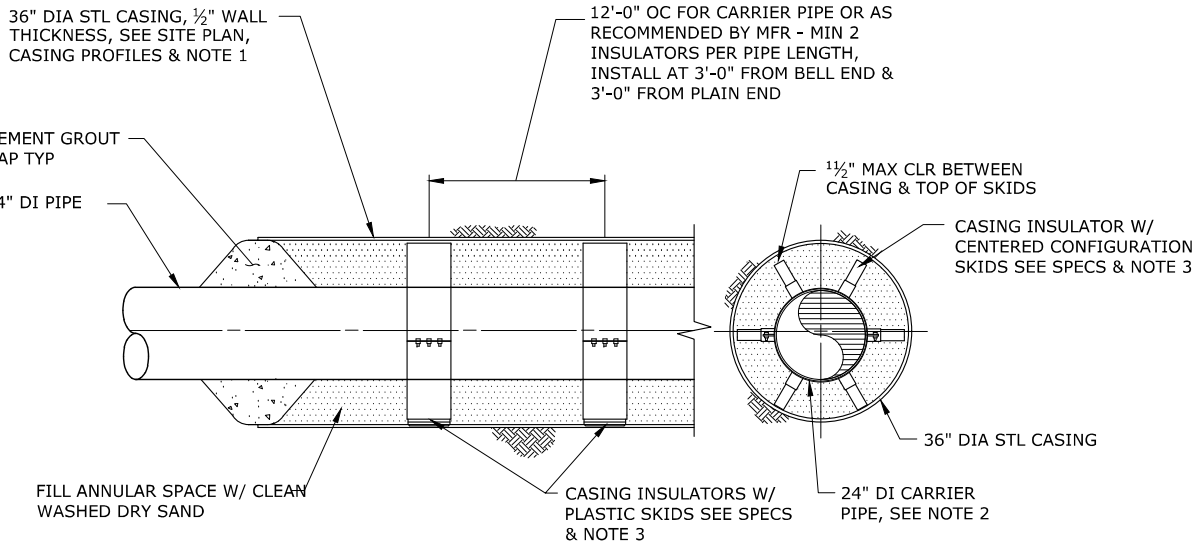
NOTES:

1. CONSTRUCT TRENCH DAMS WITH CSLM.
2. APPROXIMATE LOCATION OF TRENCH DAMS ARE SHOWN ON PLAN SHEETS. COORDINATE EXACT LOCATION WITH FIELD ENGINEER.
3. FORM AND POUR CLSM UP TO BOTTOM OF EXIST ROAD BASE ELEVATION.
4. ALLOW CLSM TO CURE SUFFICIENTLY BEFORE RE-OPENING ROAD TO TRAFFIC. WHERE SUFFICIENT CURE TIME IS NOT POSSIBLE, PROVIDE STEEL SHEETING OVERNIGHT TO PLATE AFFECTED ROAD/TRENCH SECTION, AS APPROVED BY CITY INSPECTOR.

TRENCH CHECK DAM

SCALE: NTS

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END DETAIL

SECTION

NOTES:

1. NEW 36" ASTM A252 STEEL CASING. SEE SPECIFICATIONS.
2. PROVIDE 4" MINIMUM CLEARANCE BETWEEN CASING AND CARRIER PIPE BELLS AND APPURTENANCES.
3. CONTRACTOR TO VERIFY CASING SIZE PRIOR TO ORDERING AND SIZING CASING INSULATORS.
4. ALL CARRIER PIPE TO BE RESTRAINED, DUCTILE IRON.

CASING DETAIL

SCALE: NTS

4
C-2

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PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

MISCELLANEOUS DETAILS - 1

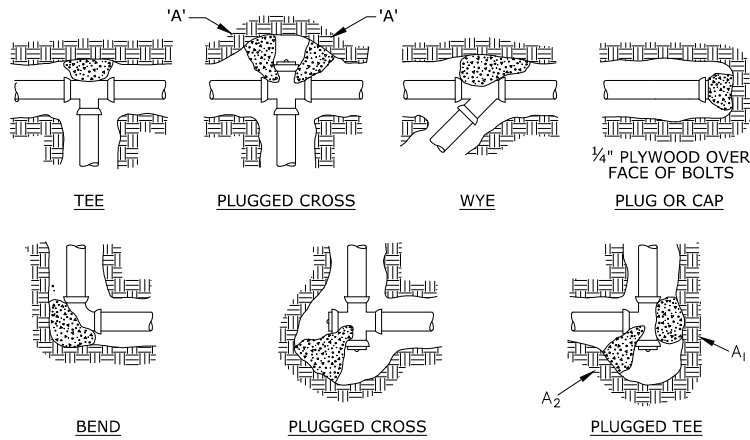
PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

SHEET

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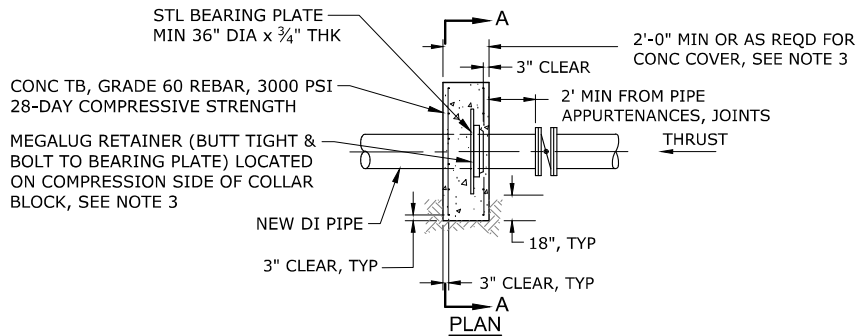


BEARING AREA, 'A', OF THRUST BLOCKS IN SQUARE FEET *							
FITTING SIZE	TEE, WYE, PLUG OR CAP	90°BEND, PLUGGED CROSS	TEE PLUGGED ON RUN		45° BEND	22 ° BEND	11½° BEND
	A	A	A ₁	A ₂	A	A	A
4	1.4	1.9	2.7	1.9	1.0	-	-
6	2.8	4.0	5.6	4.0	2.1	1.1	-
8	4.8	6.8	9.6	6.8	3.7	1.9	0.9
10	7.3	10.3	14.5	10.3	5.6	2.8	1.4
12	10.3	14.5	20.4	14.5	7.9	4.0	2.0
14	13.8	19.5	27.5	19.5	10.6	5.4	2.7
16	17.8	25.2	35.5	25.2	13.6	7.0	3.5
18	22.4	31.7	44.7	31.7	17.1	8.7	4.4
20	27.5	38.9	54.8	38.9	21.0	10.7	5.4
24	39.2	55.5	78.3	55.5	30.0	15.3	7.7

*ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA=(TEST PRESSURE/150) X (2000/SOIL BEARING STRESS) X (TABLE VALUE).

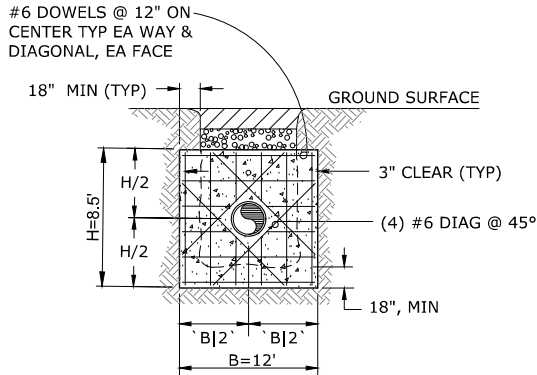
STANDARD THRUST BLOCK DETAILS

SCALE: NTS



NOTES:

1. ALL CONCRETE SHALL BE COMMERCIAL GRADE CONCRETE, 3,000 PSI COMPRESSIVE STRENGTH OR GREATER.
2. CONCRETE BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH ON SIDES AND BOTTOM OR 95% COMPACTED GRANULAR BACKFILL.
3. PROVIDE POLYETHYLENE (PE) ENCASEMENT FOR ALL PIPING AND RESTRAINT DEVICES IN CONTACT WITH CONCRETE AND WITHIN 1 FOOT OF ANCHOR WALL. PROVIDE MINIMUM OF 3" CONCRETE COVER OVER RESTRAINT DEVICES WITHIN ANCHOR WALL.



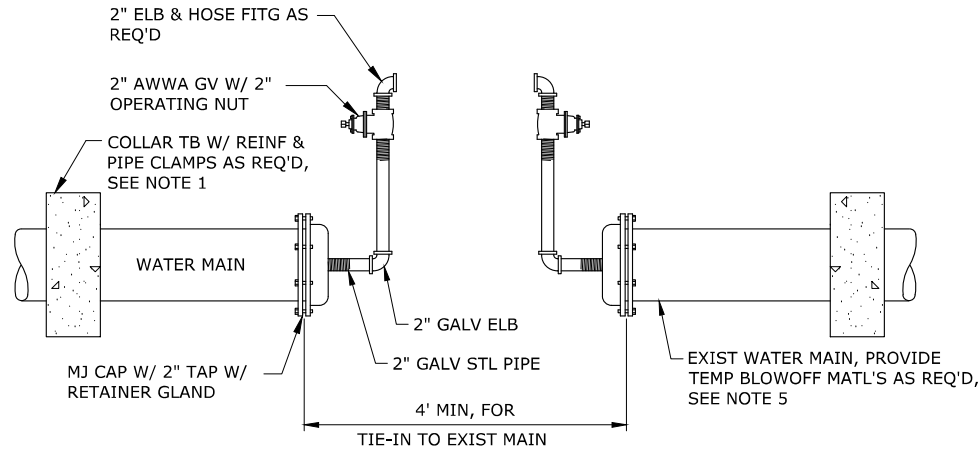
SECTION A-A

CONCRETE ANCHOR WALL

SCALE: NTS

NOTES:

1. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES. INSTALL ISOLATION MATERIAL BETWEEN PIPE AND/OR FITTINGS BEFORE POURING BLOCKING.
3. THE REQUIRED THRUST BEARING AREAS FOR SPECIAL CONNECTIONS ARE SHOWN ENCIRCLED ON THE PLANS; e.g. 15 INDICATES 15 SQUARE FEET BEARING AREA REQUIRED
4. IF NOT SHOWN ON PLANS, REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED IN TABLE, ADJUSTED IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES) STATED IN THE SPECIFICATIONS.
5. BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS DETAIL.
6. CONCRETE SHALL BE 3000 PSI MINIMUM 28 DAY COMPRESSIVE STRENGTH.
7. BEARING AREAS WHERE EXISTING PIPE WILL BE ABANDONED IN PLACE, AS SHOWN ON PLAN, SHALL INCLUDE ½" STEEL PLATE AT THE BASE OF THE THRUST BLOCK. THE MINIMUM BEARING AREA OF THE STEEL PLATE SHALL BE BASED ON DATA FROM THE TABLE.



NOTES:

1. CONTRACTOR SHALL PROVIDE TEMPORARY THRUST RESTRAINTS AS REQUIRED.
2. SEE SPECIFICATIONS REGARDING DISPOSAL/ DECHLORINATION FOR SUPERCHLORINATED WATER.
3. PROVIDE LARGER BLOWOFF PIPING MATERIAL AT CONTRACTOR OPTION.
4. WHERE BLOWOFF IS TO BE REMOVED, CONTRACTOR TO CONDUCT OPERATIONS SO AS TO PREVENT SUBSEQUENT CONTAMINATION OF APPROVED DISINFECTED WATER MAIN.
5. PROVIDE TEMPORARY BLOWOFF ON EXISTING WATER MAIN AS REQUIRED TO FACILITATE TESTING AND DISINFECTION OF NEW MAINS AND RESERVOIR YARD PIPING. CONTRACTOR TO PROVIDE BACKFLOW PREVENTION DEVICE FOR TEMPORARY CONNECTION TO EXISTING WATER SYSTEM PER GENERAL NOTE 19, SHEET G-2. CONTRACTOR TO DISINFECT EXISTING WATER MAIN PER REQUIREMENTS OF AWWA C651 DURING INSTALLATION OF TEMPORARY BLOWOFF ASSEMBLY.

TEMPORARY BLOWOFF ASSEMBLY

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**PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE**

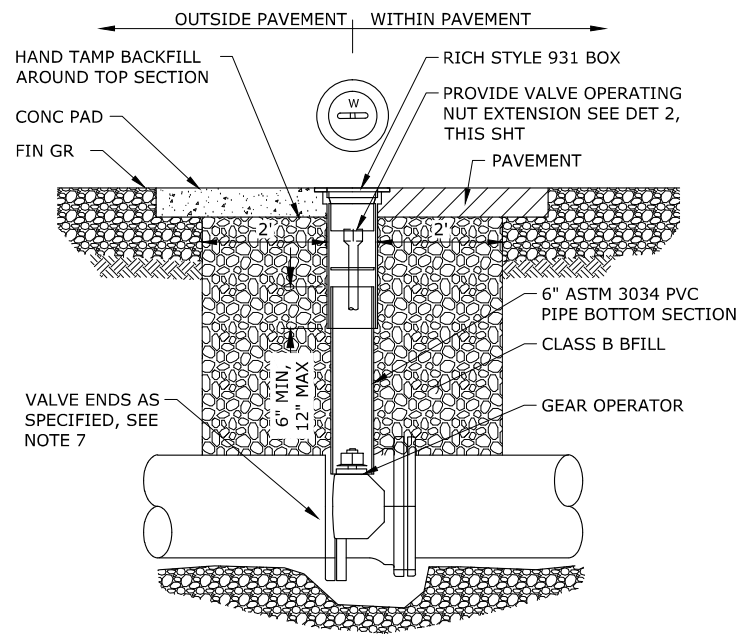
MISCELLANEOUS DETAILS - 2			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

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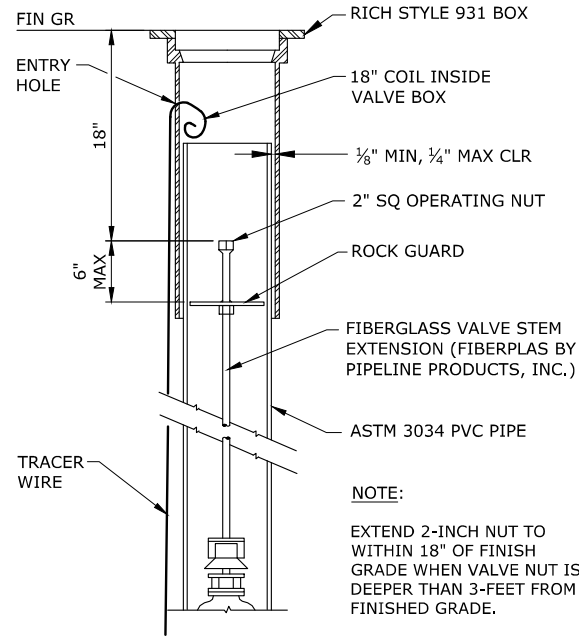


VALVE BOX DETAIL
SCALE: NTS

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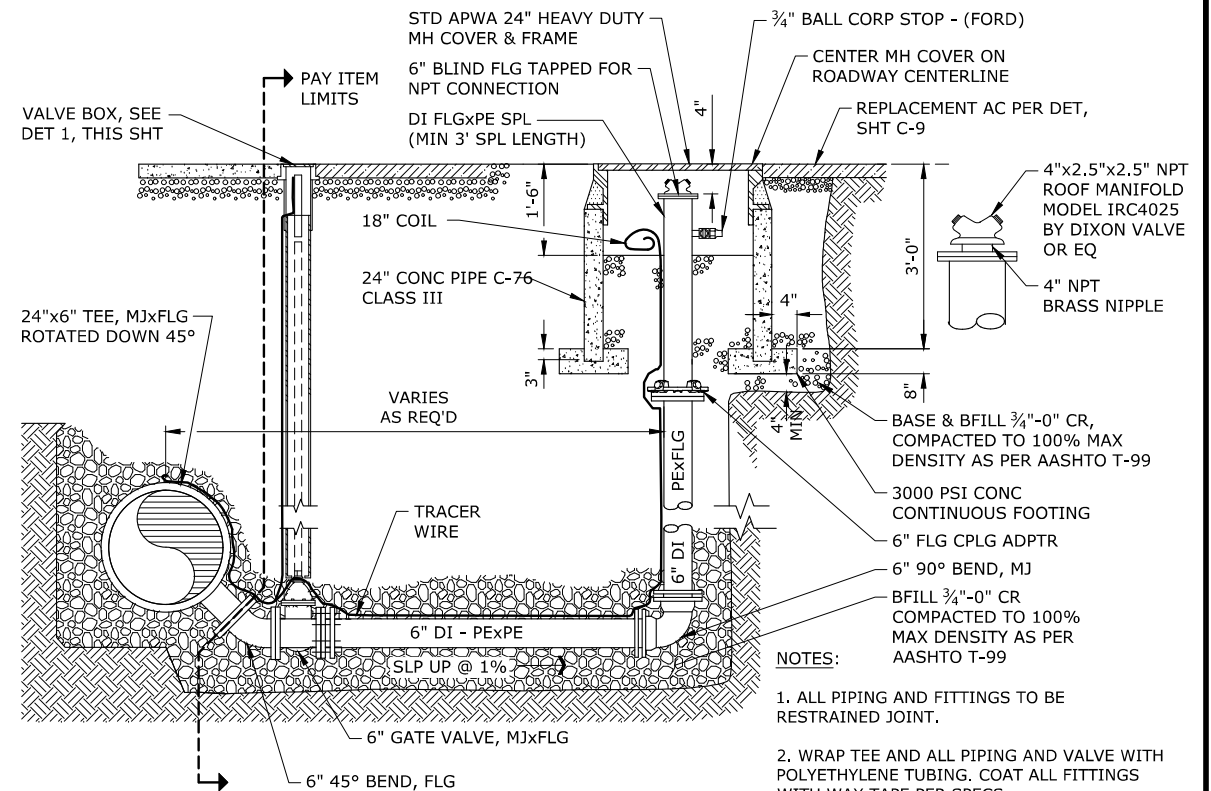
NOTES:

1. VALVE BOX NOT TO REST ON OPERATING ASSEMBLY.
2. OPERATING NUT EXTENSION REQUIRED WHEN VALVE NUT IS DEEPER THAN 3-FEET FROM FINISHED GRADE. SEE DETAIL 2, THIS SHEET.
3. CENTER VALVE BOX ON AXIS OF OPERATING NUT.
4. PROVIDE 24-INCH SQUARE BY 6-INCH THICK CONCRETE PAD AROUND VALVE BOX OUTSIDE OF PAVED AREAS AS SHOWN IN CONCRETE PAD DETAIL.
5. ORIENT GEAR OPERATOR TO CENTERLINE SIDE IN ROADWAYS.
6. USE CLASS B TRENCH BACKFILL A MINIMUM OF 2-FEET EACH SIDE OF VALVE
7. COAT VALVE ENDS WITH WAX TAPE PER SPECS. WRAP VALVE AND PIPING WITH POLYETHYLENE TUBING.



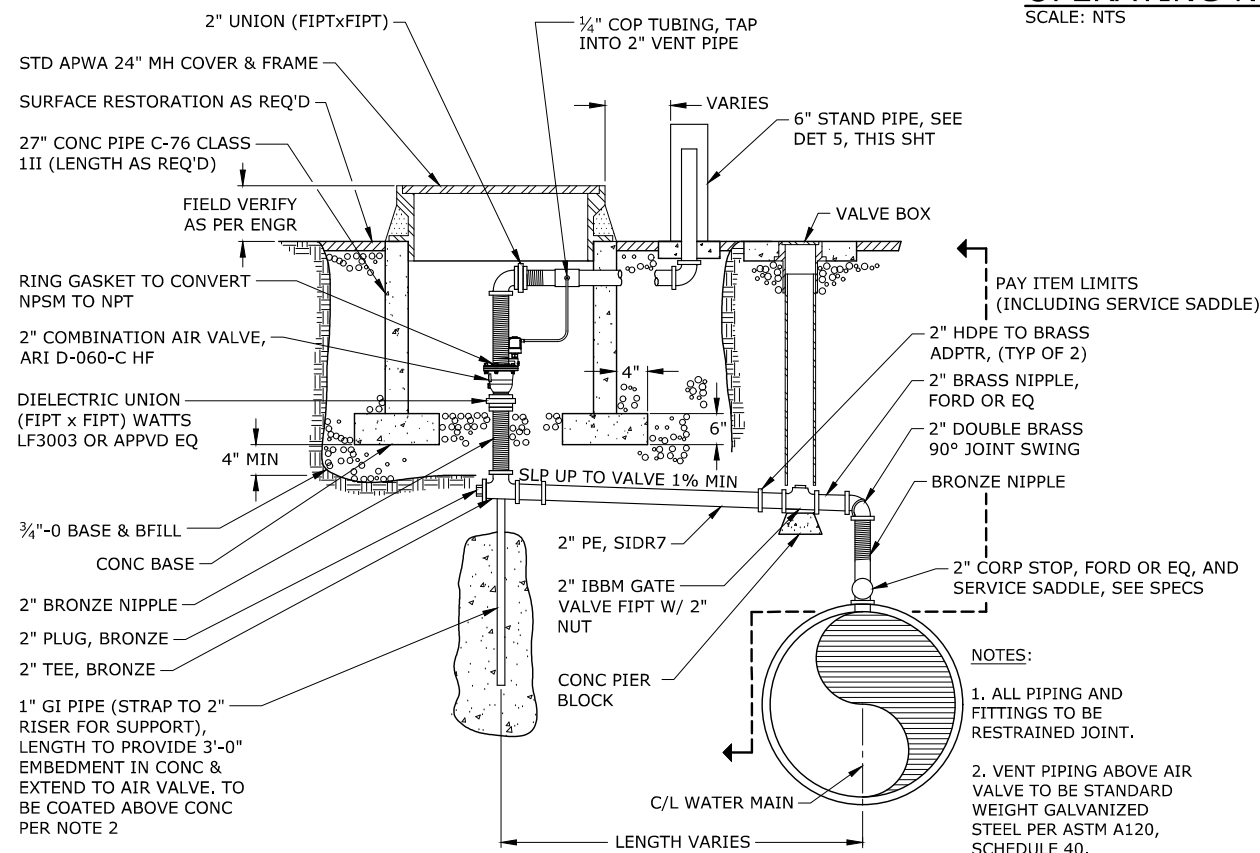
OPERATING NUT EXTENSION
SCALE: NTS

2
-



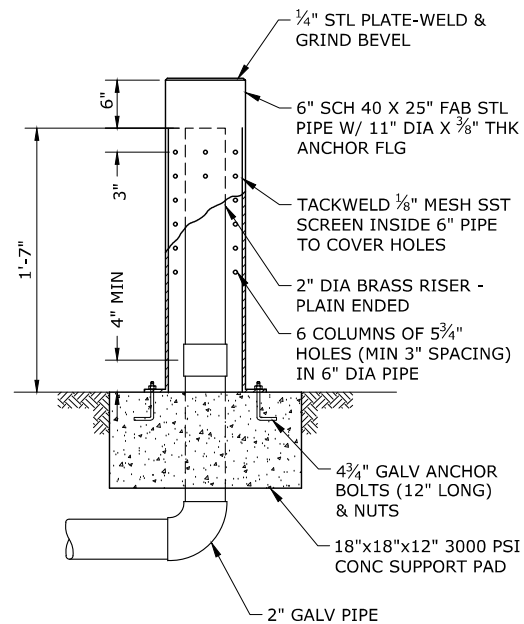
6" BLOW-OFF DETAIL
SCALE: NTS

3
-



2" AIR RELEASE VALVE DETAIL
SCALE: NTS

4
-



STANDPIPE DETAIL
SCALE: NTS

5
-

NO.	DATE	BY	REVISION

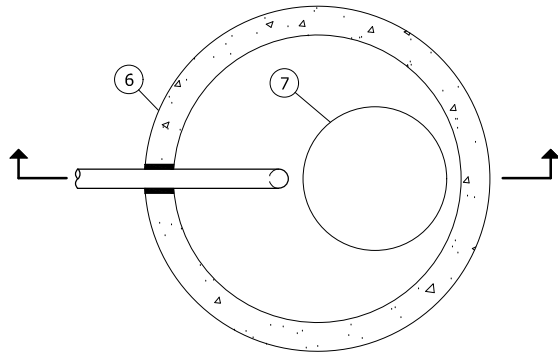
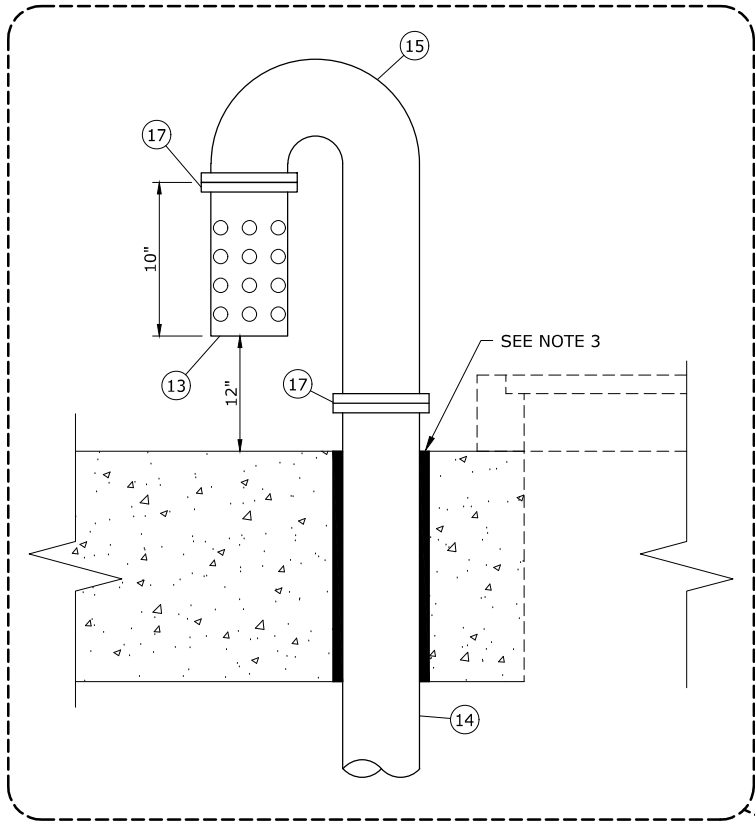
NOTICE	KTH DESIGNED
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IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	JRL CHECKED



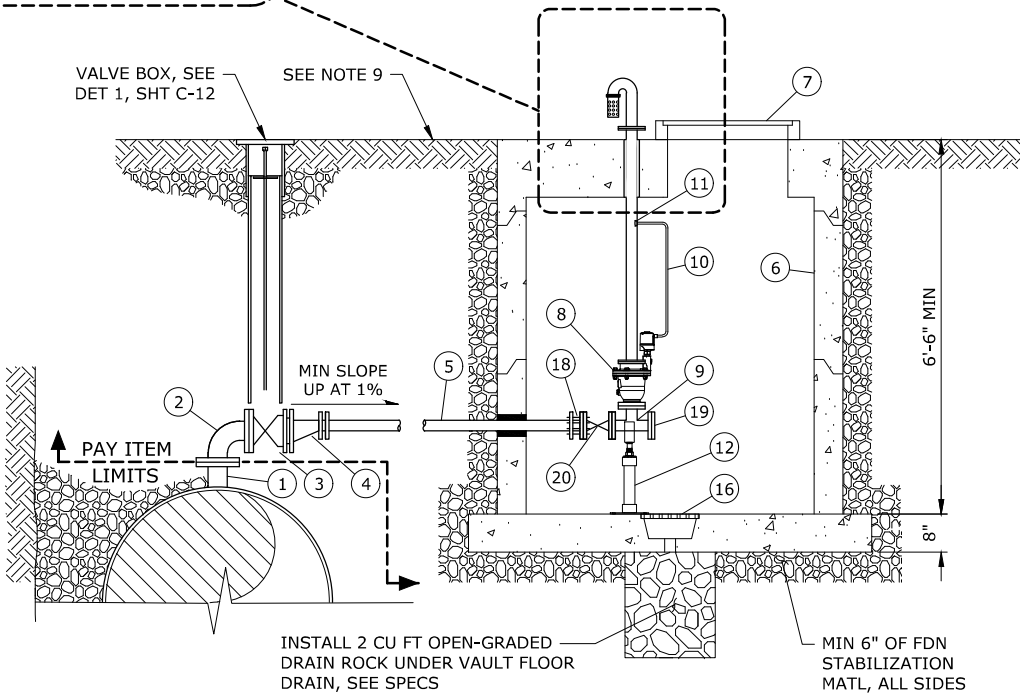
PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKE ROAD TO
ISABELL AVENUE

PROJECT NO.: 20-2938				SCALE: AS SHOWN				DATE: MAY 2021			
MISCELLANEOUS DETAILS - 3											

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PLAN



SECTION

3" AIR RELEASE VALVE DETAIL

SCALE: NTS

1
C-5

MATERIAL LIST

- ① 24"x6" DI TEE, SEE PLANS
- ② 6" DI 90° BEND, FLG
- ③ 6" GV, FLGxMJ, W/ BEVEL GEAR ACTUATOR
- ④ 6"x3" DI ECC RDCR, MJ
- ⑤ 3" DI SPL, PE, LENGTH AS REQ'D
- ⑥ 60" STD MH W/ FLAT TOP
- ⑦ STD APWA 30" MH COVER & FRAME
- ⑧ 3" COMBINATION AIR VALVE ASSY ARI D-60-P16-03
SEE NOTE 8
- ⑨ 3" DI TEE, FLG
- ⑩ 1/4" COPPER TUBING, TAP INTO 3" VENT PIPE
- ⑪ THREAD-O-LET
- ⑫ PIPE SUPPORT, STANDON MODEL S92 OR APPVD EQ
- ⑬ 3" SCHED 40 STL PIPE W/ 1/4" THK END CAP (WELDED), VENT TO INCLUDE APPROX 36 - 1" DIA HOLES AT APPROX 3/4" SPACING ON PIPE SECTION & END CAP, TACK WELD 1/8" 20 GAUGE GALV WIRE MESH INSIDE PERFORATED PIPE
- ⑭ 3" GALV SCHED 40 STL VENT PIPE, THRDxTHRD FLG, LENGTH AS REQ'D
- ⑮ 3" GALV SCHED 40 STL VENT PIPE W/ 2 SHORT RADIUS 90° BENDS, WELDED
- ⑯ FLR DRAIN W/ GRATE
- ⑰ 3" STL FLG W/ GALV BOLTS & RED RUBBER GASKET
- ⑱ 3" RESTRAINED FCA (MEGAFLANGE, OR APPVD EQ)
- ⑲ 3" DI BLIND FLG
- ⑳ 3" GV, FLG

NOTES:

1. ALL PIPE AND FITTINGS SHALL BE RESTRAINED.
2. VERIFY LOCATION OF VAULT AND STAND PIPE WITH ENGINEER.
3. ALL MANHOLE PENETRATIONS SHALL BE SEALED WITH WALL SEALS. USE LINK-SEAL IN HOLES AROUND PIPE.
4. HOT DIP GALVANIZE ALL STEEL PARTS AFTER FABRICATION.
5. JUMPER BOND BURIED AIR RELEASE VALVE PIPE AND JOINTS TO MAIN. SEE SHEET C-11 FOR CORROSION MONITORING DETAILS.
6. WRAP ALL BURIED DUCTILE IRON PIPING AND VALVE WITH POLYETHYLENE AND WAX TAPE PER SPECIFICATIONS.
7. PRECAST CONCRETE MANHOLE SHALL INCLUDE STEPS IN ACCORDANCE WITH THE SPECIFICATIONS.
8. PROVIDE RING GASKET TO CONVERT NPSM TO NPT FOR VENT OUTLET CONNECTION.
9. PROVIDE ADDITIONAL COMPACTED CLASS B FILL MATERIAL AND REVISE ADJACENT SURFACE GRADING AROUND FLAT TOP MANHOLE AS REQUIRED TO MATCH TOP OF MANHOLE TO ADJACENT SURFACE GRADE ELEVATIONS APPROXIMATELY AS SHOWN ON PLANS. SEE SHEET C-5 FOR APPROX LIMITS OF ADDITIONAL GRADING.

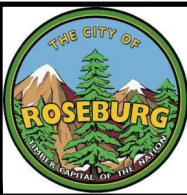
NO.	DATE	BY	REVISION

NOTICE
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KTH
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JRL
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PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

MISCELLANEOUS DETAILS - 4

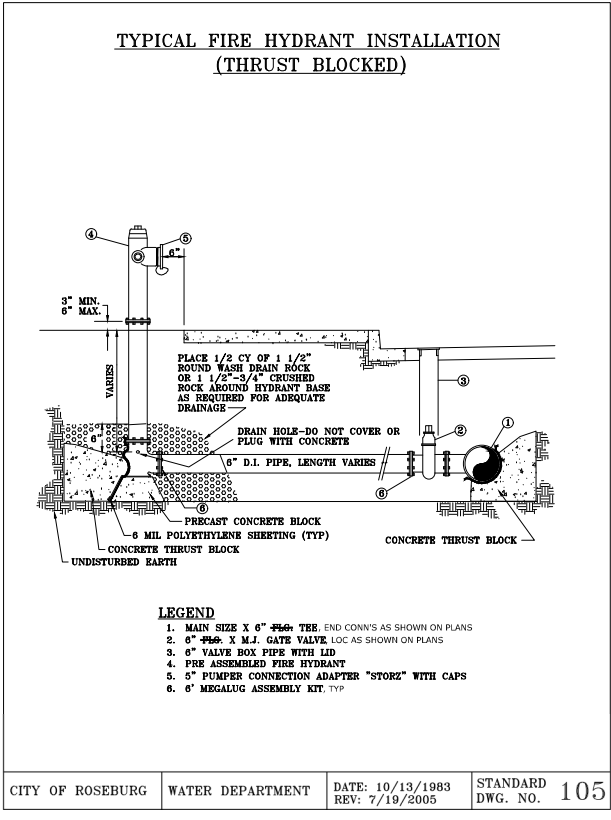
PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

SHEET

C-13

22 of 31

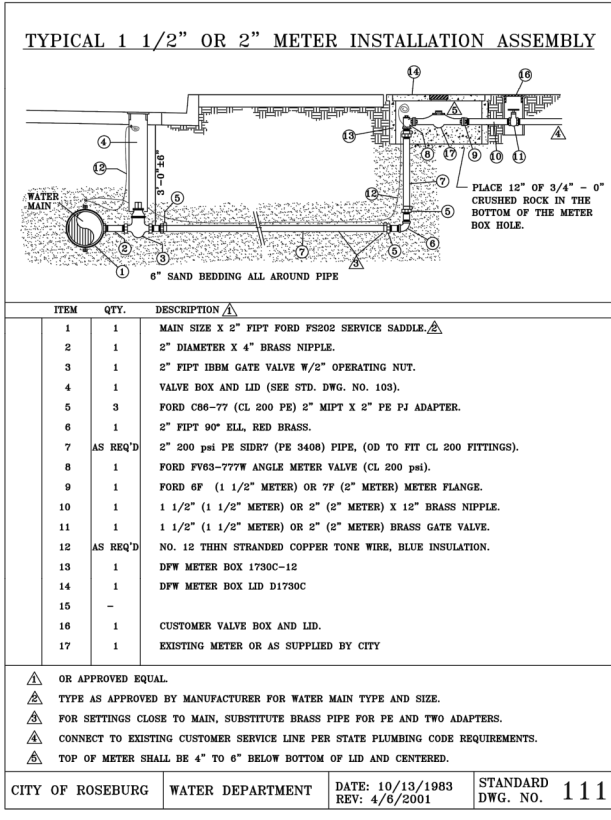
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FIRE HYDRANT

SCALE: NTS

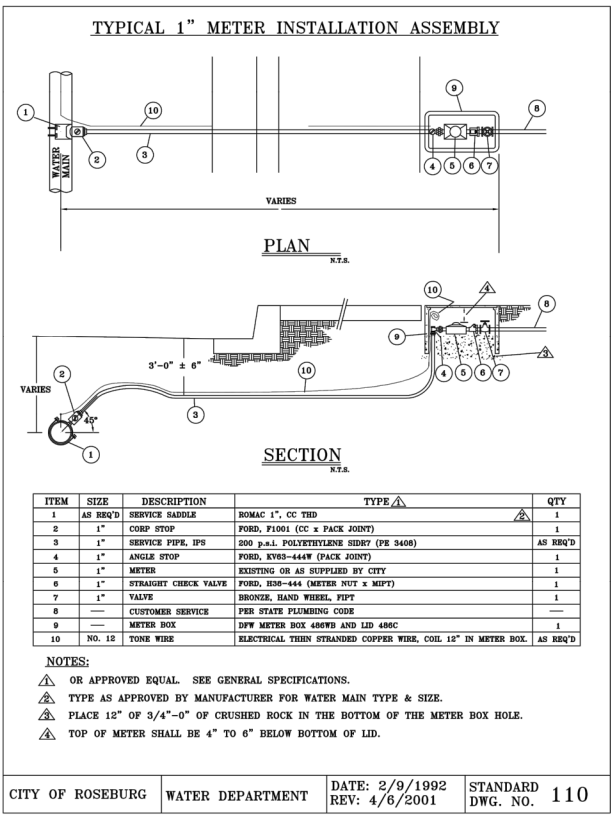
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2" WATER SERVICE

SCALE: NTS

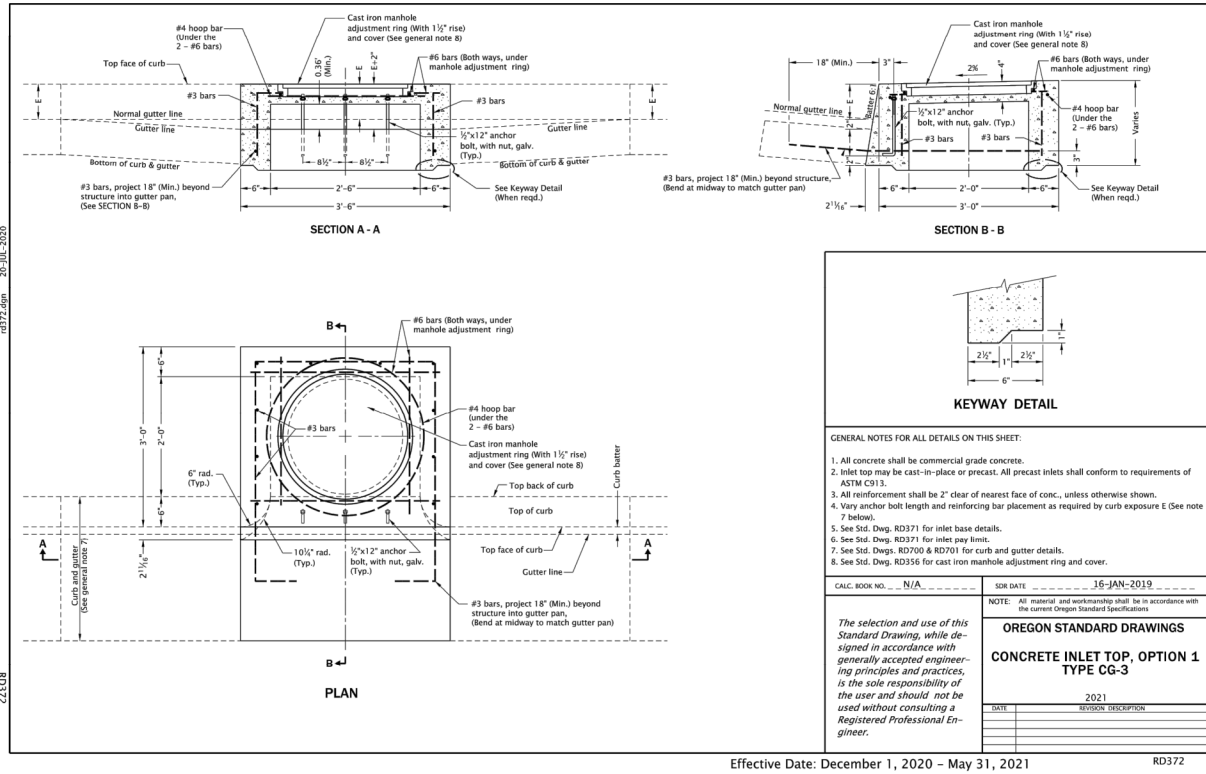
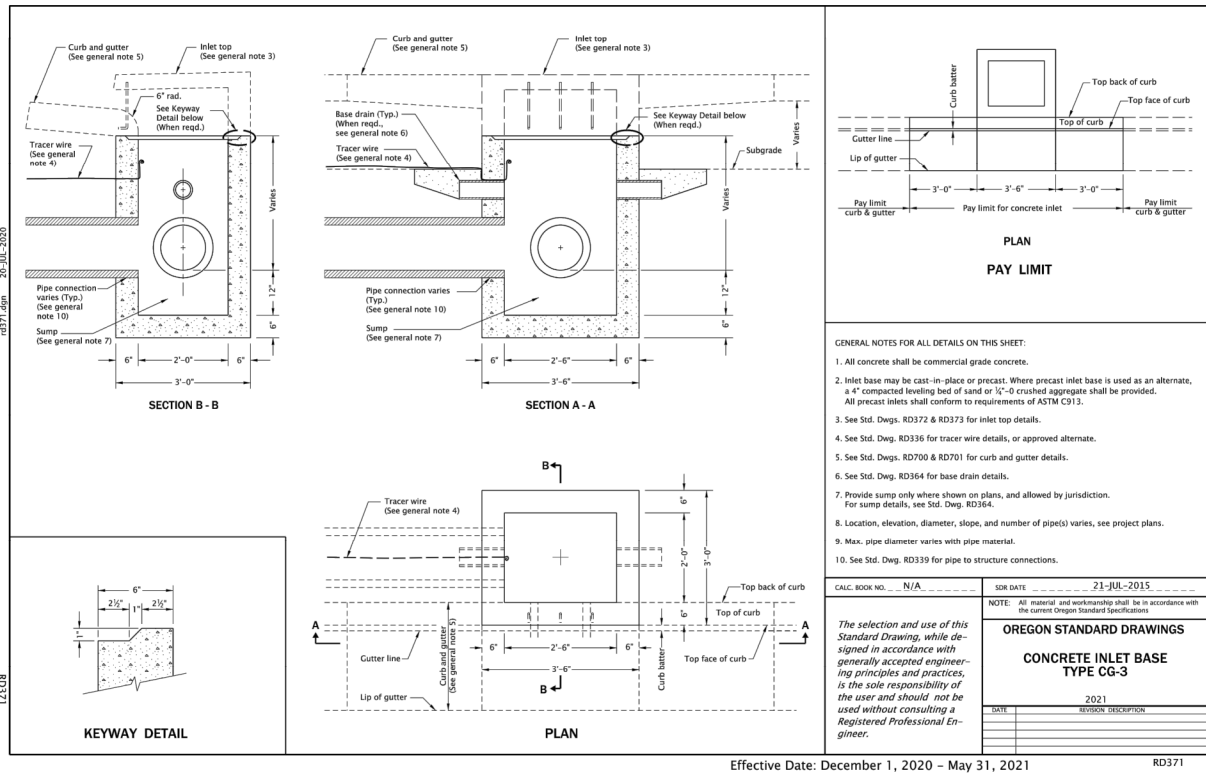
2
C-1



1" WATER SERVICE

SCALE: NTS

4
C-5



TYPICAL CURB INLET

SCALE: NTS

3
-

NO.	DATE	BY	REVISION

NOTICE

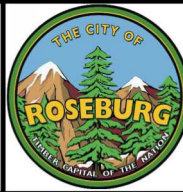
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**PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE**

MISCELLANEOUS DETAILS - 5

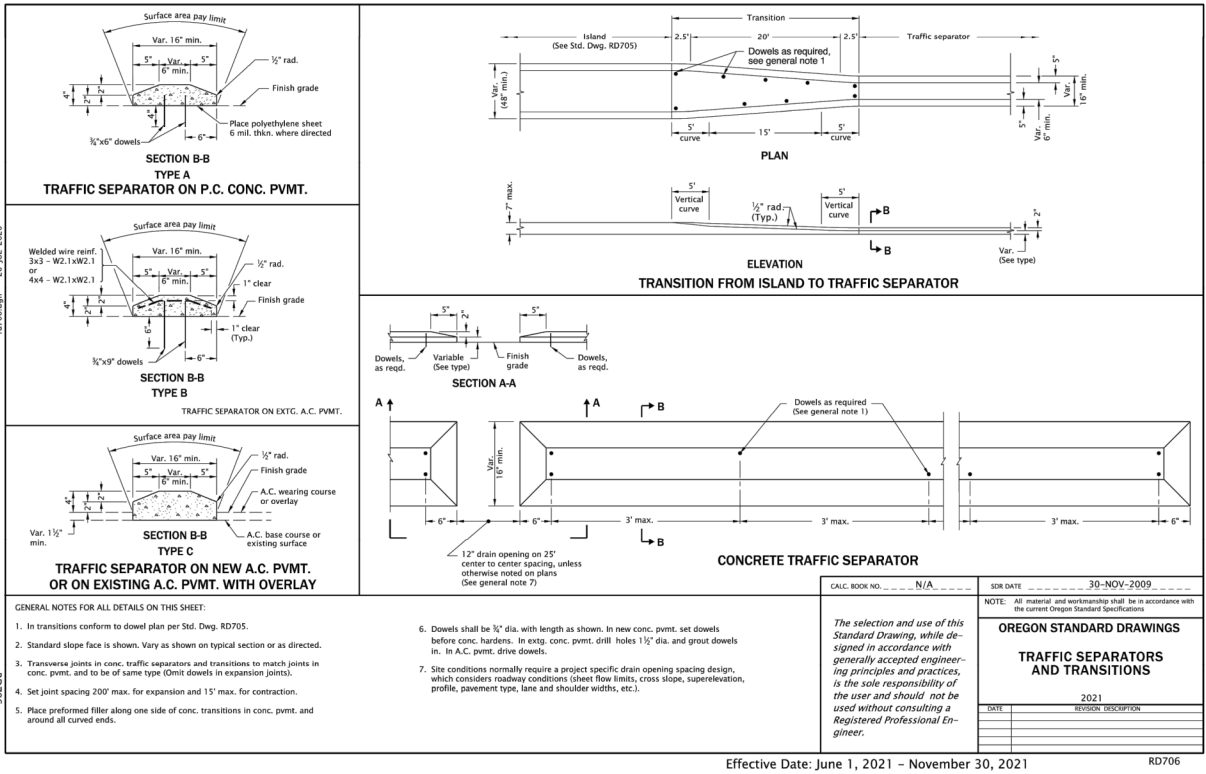
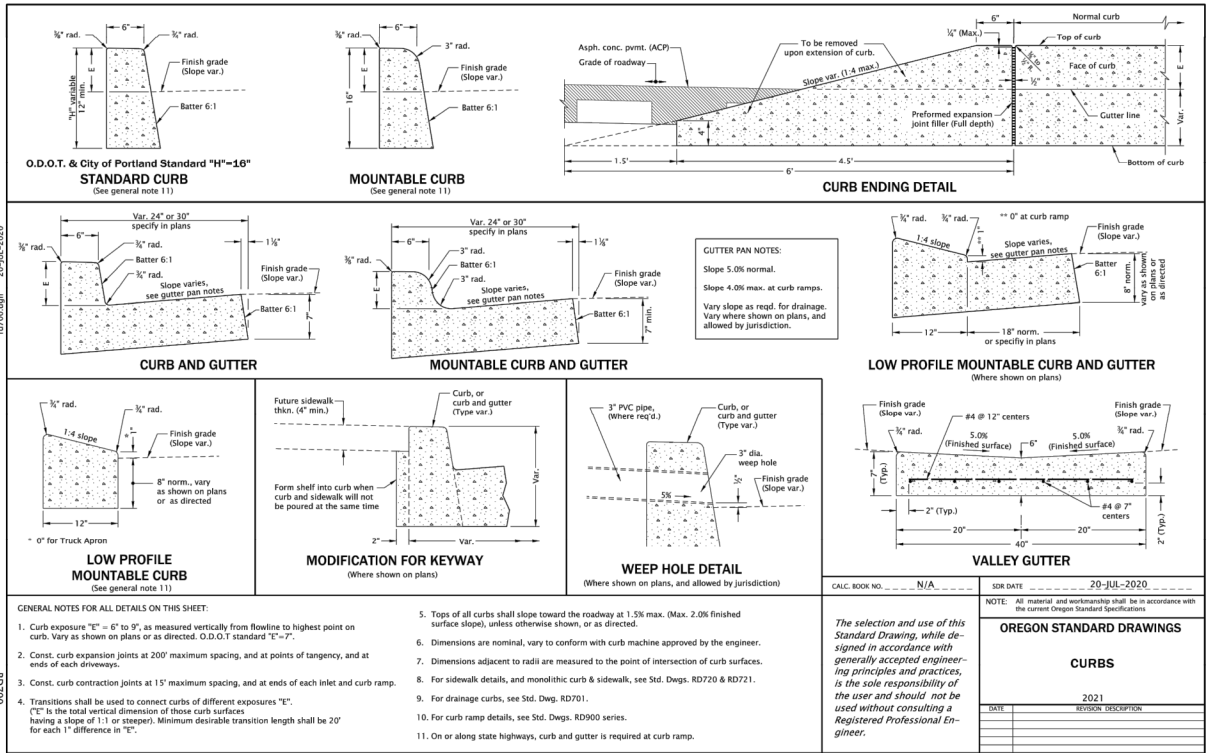
PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

SHEET

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TYPICAL CURB AND GUTTER

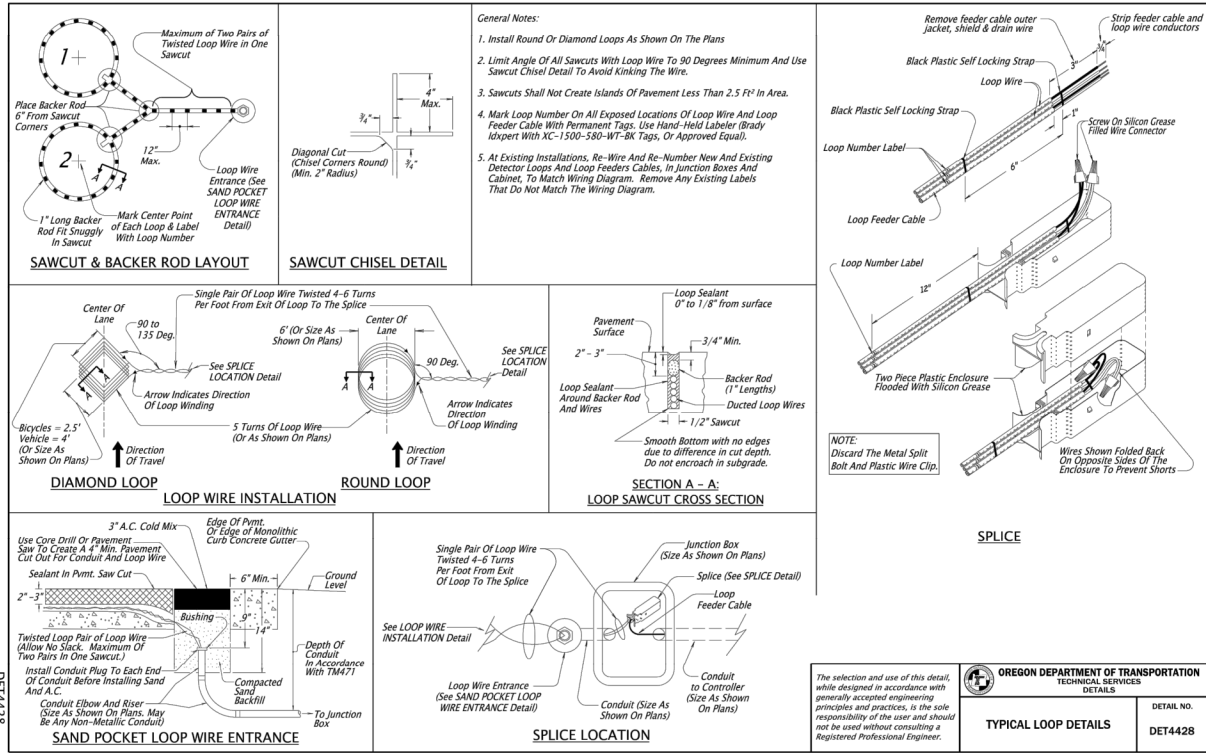
SCALE: NTS

1

TYPICAL CONCRETE TRAFFIC SEPARATOR

SCALE: NTS

2



TYPICAL ROADWAY TRAFFIC LOOP AND BIKE LANE TRAFFIC LOOP

SCALE: NTS

3

TYPICAL COLD PLANE PAVEMENT REMOVAL AND ASPHALT INLAY - SURFACE RESTORATION

SCALE: NTS

4

NO.	DATE	BY	REVISION

NOTICE

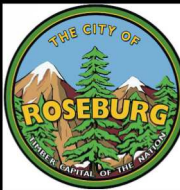
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KTH
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MBE
DRAWN
JRL
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PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKE ROAD TO
ISABELL AVENUE

SURFACE RESTORATION DETAILS

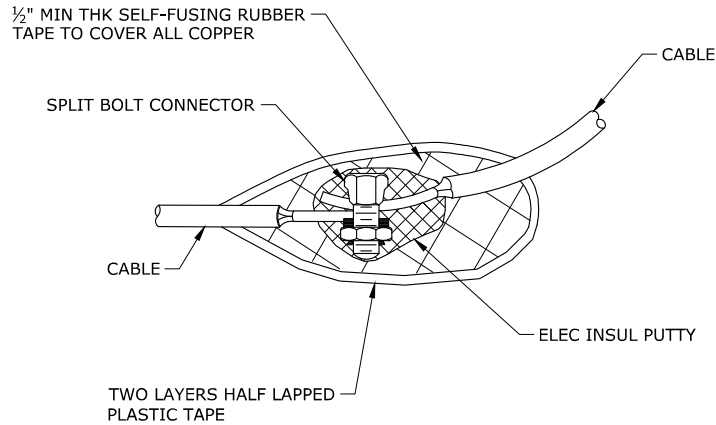
PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

SHEET

C-15

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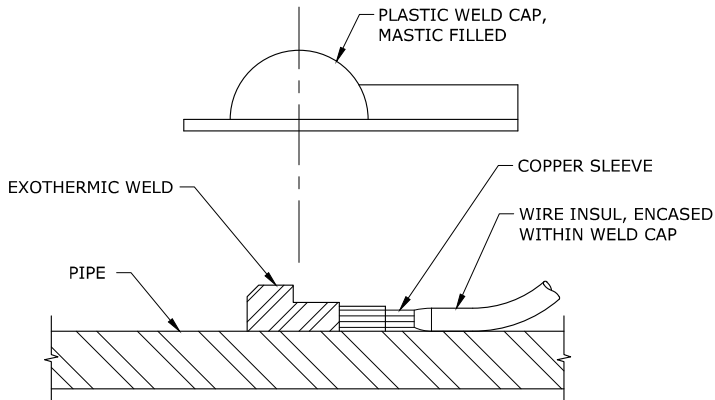


NOTES:

1. CABLE SPLICES ONLY ALLOWED WHERE APPROVED BY CITY INSPECTOR AND ENGINEER

CABLE SPLICE

SCALE: NTS

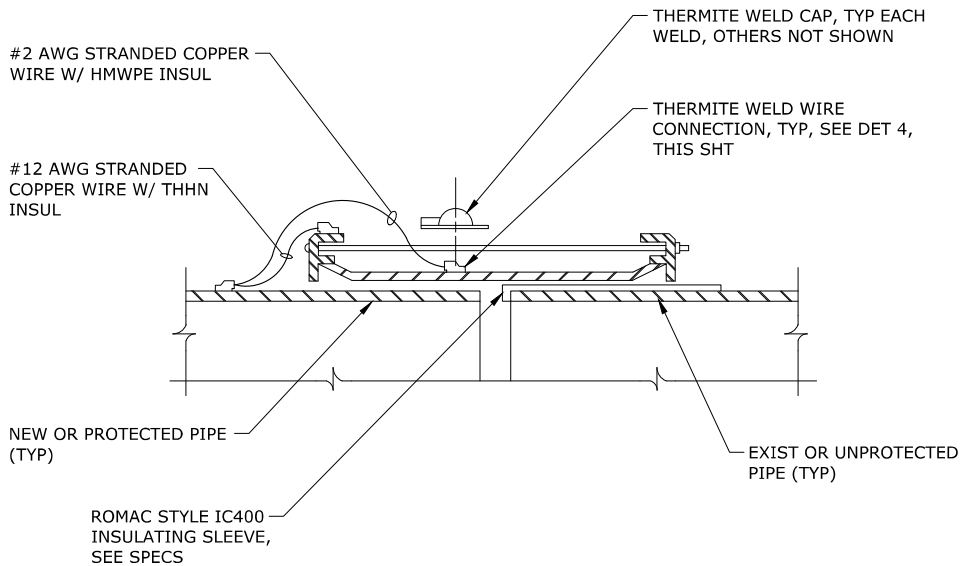


NOTES:

1. GRIND PIPE TO BRIGHT METAL BEFORE EXOTHERMIC WELDING.
2. APPLY WELD CAP DIRECTLY TO PIPE - NOT TO PIPE WRAP. USE PRIMER IF REQUIRED BY THE MANUFACTURER. COMPLETELY ENCIRCLE WIRE WITHIN MASTIC.
3. ON CONNECTIONS TO UNCOATED PIPE AND CASINGS, USE MASTIC FILLED PLASTIC WELD CAP ONLY; SECURE WITH PIPE TAPE.

WIRE CONNECTION

SCALE: NTS

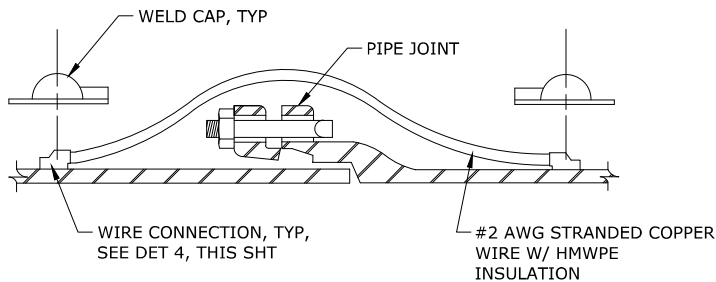


NOTES:

1. COUPLINGS SHALL BE COMPLETELY ENCASED WITH WAX TAPE PER SPECIFICATIONS.

INSULATED FLEXIBLE COUPLING

SCALE: NTS

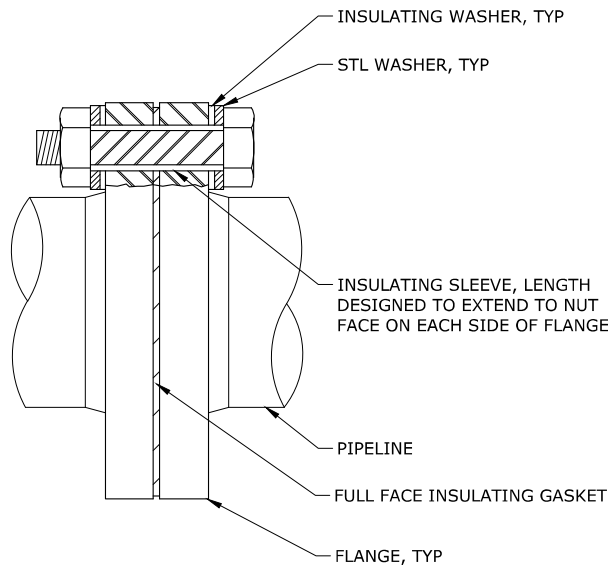


NOTES:

1. NUMBER OF JOINT BONDS AT EACH JOINT AS SPECIFIED
2. JUMPER BONDS FOR ELECTRICALLY CONNECTING NEW DI PIPING ACROSS BELL AND SPIGOT JOINTS SIMILAR TO THAT SHOWN.
3. FITTINGS SHALL BE COMPLETELY ENCASED WITH WAX TAPE PER SPECIFICATIONS.

MECHANICAL JOINT BOND

SCALE: NTS



NOTES:

1. ABOVE GRADE INSULATING FLANGE INSTALLATION SHOWN.
2. FOR BURIED OR SUBMERGED INSULATING FLANGE INSTALLATION INSTALL INSULATING WASHER ON ONE SIDE OF INSULATING FLANGE (NEW SIDE PREFERRED).
3. FOR BURIED OR SUBMERGED INSULATING FLANGES, COMPLETELY ENCASE WITH WAX TAPE PER SPECIFICATIONS.
4. TEST INSTALLATION FLANGE CONNECTION PER SPECIFICATIONS PRIOR TO BACKFILLING TRENCH.

INSULATED FLANGE

SCALE: NTS



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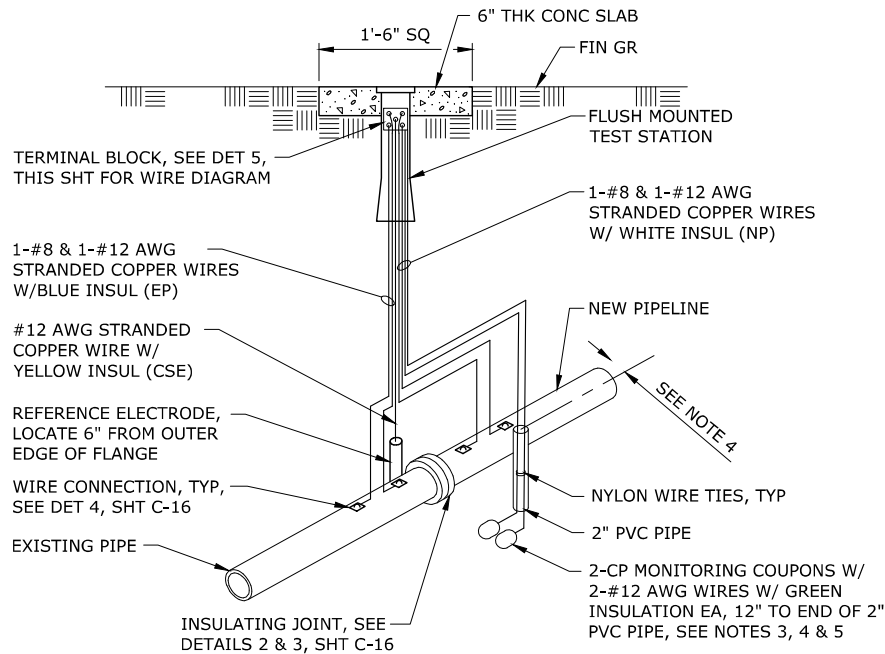


PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

DUCTILE IRON PIPE CORROSION MONITORING DETAILS - 1			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

SHEET
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NOTES:

1. PROVIDE SUFFICIENT SLACK IN TEST WIRES TO ALLOW TERMINAL BLOCK TO EXTEND 18" OUT OF TEST STATION. COIL WIRES IN TEST STATION.
2. LOCATE TEST STATIONS OFF ROADWAY APPROXIMATELY WHERE SHOWN ON PLANS. CONFIRM FINAL LOCATIONS IN FIELD WITH OWNER'S REPRESENTATIVE.
3. PUT RED TAPE ON LEADS TO ONE OF THE CD MONITORING COUPONS.
4. BED COUPONS IN SAME BACKFILL AS PIPE AND LOCATE 6" FROM OUTER EDGE OF PIPE. COMPACT BACKFILL TO ONE FOOT MINIMUM ABOVE COUPON.
5. COUPONS TO BE INSTALLED ON SAME SIDE OF PIPE AS AND 6" AWAY FROM REFERENCE ELECTRODE, CONTRARY TO HOW CURRENTLY SHOWN.

FLUSH MOUNTED TEST STATION
FOR INSULATED JOINTS (TSIJ)

SCALE: NTS

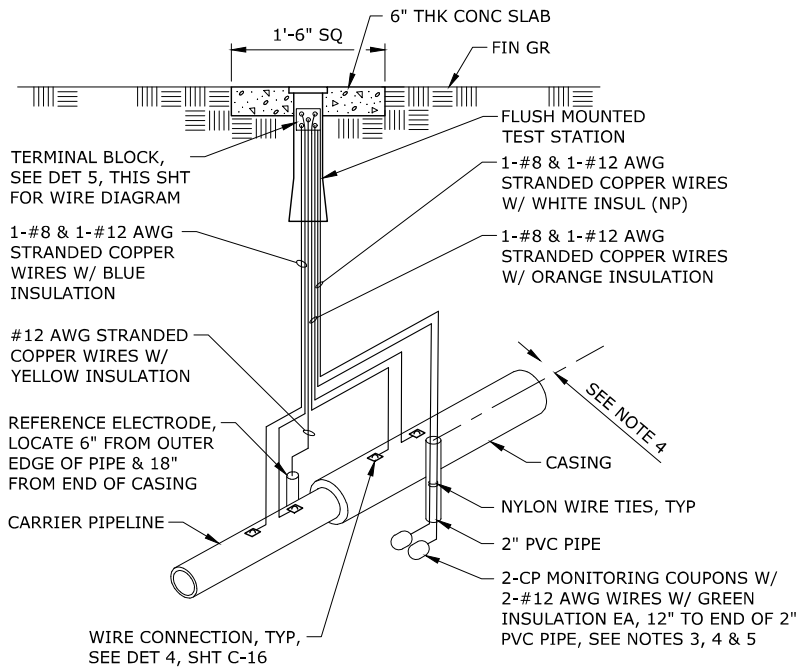
1
-

ITEM	CABLE AND NAME PLATE COLOR	CABLE	TERMINAL IDENTIFICATION ABBREVIATION
NEW PIPE	WHITE	#8 HMWPE AND #12 THWN	NP
EXISTING PIPE	BLUE	#8 HMWPE AND #12 THWN	EP
CSE REFERENCE CELL	YELLOW	#12 THWN	CSE
COUPON (NATIVE)	GREEN	#12 THHN	C-N
COUPON (CP)	GREEN (RED TAPE)	#12 THHN	C-CP
CASING	ORANGE	#8 HMWPE AND #12 THWN	C
LINE CROSSING	BLUE (WHITE TAPE)	#8 HMWPE AND #12 THWN	C-CP

CORROSION CONTROL CABLE IDENTIFICATION TABLE

SCALE: NTS

4
-



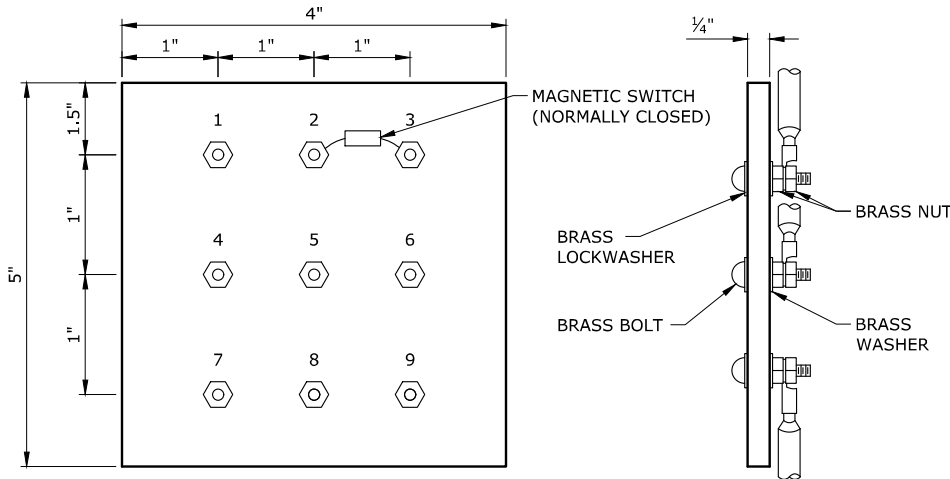
NOTES:

1. PROVIDE SUFFICIENT SLACK IN TEST WIRES TO ALLOW TERMINAL BLOCK TO EXTEND 18" OUT OF TEST STATION. COIL WIRES IN TEST STATION.
2. LOCATE TEST STATIONS OFF ROADWAY APPROXIMATELY WHERE SHOWN ON PLANS. CONFIRM FINAL LOCATIONS IN FIELD WITH OWNER'S REPRESENTATIVE.
3. PUT RED TAPE ON LEADS TO ONE OF THE CD MONITORING COUPONS.
4. BED COUPONS IN SAME BACKFILL AS PIPE AND LOCATE 6" FROM OUTER EDGE OF PIPE. COMPACT BACKFILL TO ONE FOOT MINIMUM ABOVE COUPON.
5. COUPONS TO BE INSTALLED ON SAME SIDE OF PIPE AS AND 6" AWAY FROM REFERENCE ELECTRODE, CONTRARY TO HOW CURRENTLY SHOWN.

FLUSH MOUNTED TEST STATION
FOR CASING (TSC)

SCALE: NTS

2
-



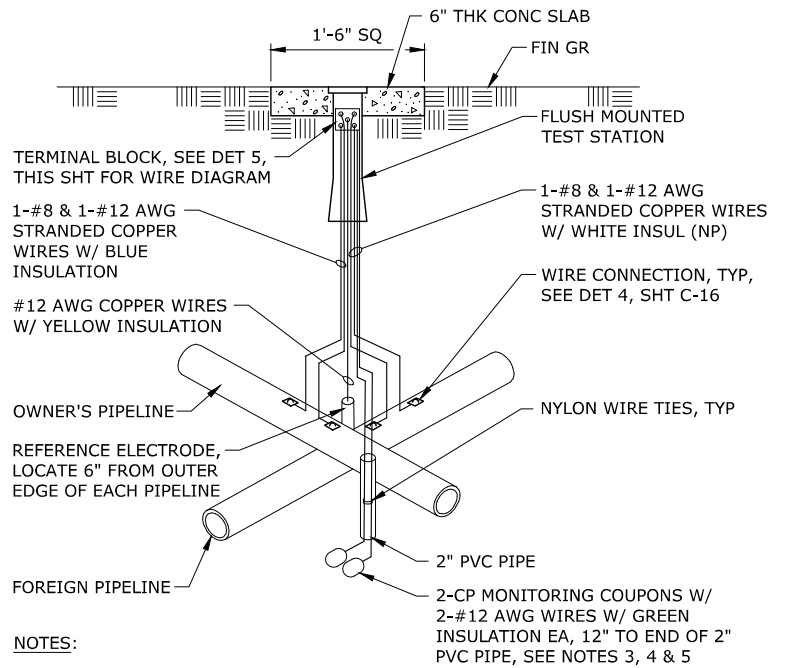
TERMINAL BOARD FRONT VIEW

TYPICAL TERMINAL BOARD SECTION

TERMINAL BOARD WIRE DIAGRAM

SCALE: NTS

5
-



NOTES:

1. PROVIDE SUFFICIENT SLACK IN TEST WIRES TO ALLOW TERMINAL BLOCK TO EXTEND 18" OUT OF TEST STATION. COIL WIRES IN TEST STATION.
2. LOCATE TEST STATIONS OFF ROADWAY APPROXIMATELY WHERE SHOWN ON PLANS. CONFIRM FINAL LOCATIONS IN FIELD WITH OWNER'S REPRESENTATIVE.
3. PUT RED TAPE ON LEADS TO ONE OF THE CD MONITORING COUPONS.
4. BED COUPONS IN SAME BACKFILL AS PIPE AND LOCATE 6" FROM OUTER EDGE OF PIPE. COMPACT BACKFILL TO ONE FOOT MINIMUM ABOVE COUPON.
5. COUPONS TO BE INSTALLED ON SAME SIDE OF PIPE AS AND 6" AWAY FROM REFERENCE ELECTRODE, CONTRARY TO HOW CURRENTLY SHOWN.
6. OBTAIN APPROVAL OF FOREIGN PIPELINE OWNER PRIOR TO EXCAVATION.
7. WIRE CONNECTIONS TO FOREIGN PIPELINE SHALL BE MADE BY FOREIGN PIPELINE REPRESENTATIVE.

FLUSH MOUNTED TEST STATION
FOR LINE CROSSING (TSLC)

SCALE: NTS

3
-

TEST STATION LOCATION AND TYPE

NUMBER	PIPE STATION	TS TYPE
1	1+00	IJ
2	3+60	C
3	3+90	C
4	4+89	IJ
5	7+22	IJ
6	17+01	IJ
7	21+04	IJ
8	24+76	IJ
9	30+00	LC

TERMINAL IDENTIFICATION FOR TEST STATION

TERMINAL NUMBER	TS TYPE IJ	TS TYPE C	TS TYPE LC	TS TYPE TS	CABLE
1	NP	NP	NP	NP	#12
2	NP	NP	NP	NP	#8
3	C-CP	C-CP	C-CP	C-CP	C-CP
4	EP	C	LC	-	#12
5	EP	C	LC	-	#8
6	C-CP	C-CP	C-CP	C-CP	#12
7	C-N	C-N	C-N	C-N	#12
8	C-N	C-N	C-N	C-N	#12
9	CSE	CSE	CSE	CSE	CSE

TEST STATION (TS) TYPES

IJ = INSULATED JOINT
C = CASING
LC = LINE CROSSING
CSE = CSE REFERENCE CELL

TERMINAL IDENTIFICATION FOR TEST STATION

SCALE: NTS

6
-

NO.	DATE	BY	REVISION

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PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

DUCTILE IRON PIPE CORROSION MONITORING DETAILS - 2			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

SHEET
C-17
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G:\PD\Projects\20\2938 - 24-Inch, Hooker Rd To Isabell Ave\CAD\Sheets\20-2938-OR-TCP.dwg TC-1 5/6/2021 10:41 AM MATT. ESTEP 23.05 (LMS Tech)



NOTES

- 1. PLACE TWO PORTABLE CHANGEABLE MESSAGE SIGNS AS FOLLOWS FOR THE DURATION OF THE PROJECT:
 - A. ON THE WEST SIDE OF STEPHENS ST (IN ADJACENT LOT), BETWEEN VAN HORN LN AND MARY ANN LN. FACING SB TRAFFIC.
 - B. ON THE EAST SIDE OF STEPHENS ST, WITHIN THE TURNOUT APPROXIMATELY 500FT SOUTH OF ISABELL AVENUE. FACING NB TRAFFIC.
- 3. PROVIDE DRIVEWAY ACCESS AT ALL TIMES.
- 4. PROVIDE A 5' GAP BETWEEN TUBULAR MARKERS AT ALL PEDESTRIAN CROSSING LOCATIONS.
- 5. SEE TM800, TM820, TM821, TM842, TM843, TM844 AND TM851 FOR STANDARD LANE CLOSURES AND TEMPORARY SIGN DETAILS NOT SHOWN ON PLANS.
- 6. SEE TM841, TM843, TM850, AND TM852 FOR INTERSECTION AND TRAVEL LANE WORK ZONE DETAILS.
- 7. PLACE CHANNELIZING DEVICES AROUND INTERSECTION RADII AND CONSTRUCTION ACCESSES AT 10' SPACING.
- 8. PERFORM GRIND AND INLAY UNDER SINGLE LANE CLOSURES WITH FLAGGERS AT NIGHT. PROVIDE PILOT CARS AS NECESSARY FOR WORK ZONES OVER 0.5 MILES.
- 9. SEE GENERAL NOTE 27, SHEET G-2 FOR DAYTIME AND NIGHTTIME WORK HOURS.
- 10. AREAS SHOWN AS "UNDER CONSTRUCTION" ON SHEETS TC-2 THRU TC-5 ARE APPROXIMATE. SEE SHEET C-2 THRU C-8 FOR SPECIFIC LOCATIONS AND REQUIREMENTS FOR CONSTRUCTION WORK.

OVERALL TRAFFIC CONTROL PLAN

SCALE: 1"=100'

NO.	DATE	BY	REVISION

NOTICE

0 1/2 1

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DESIGNED
KDL
DRAWN
CSL
CHECKED

REGISTERED PROFESSIONAL ENGINEER 74338 2021.05.03
OREGON
DECEMBER 31, 2020
CHRISTOPHER S. LINK
RENEWS 12-31-22

murraysmith



PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

OVERALL
TRAFFIC CONTROL PLAN

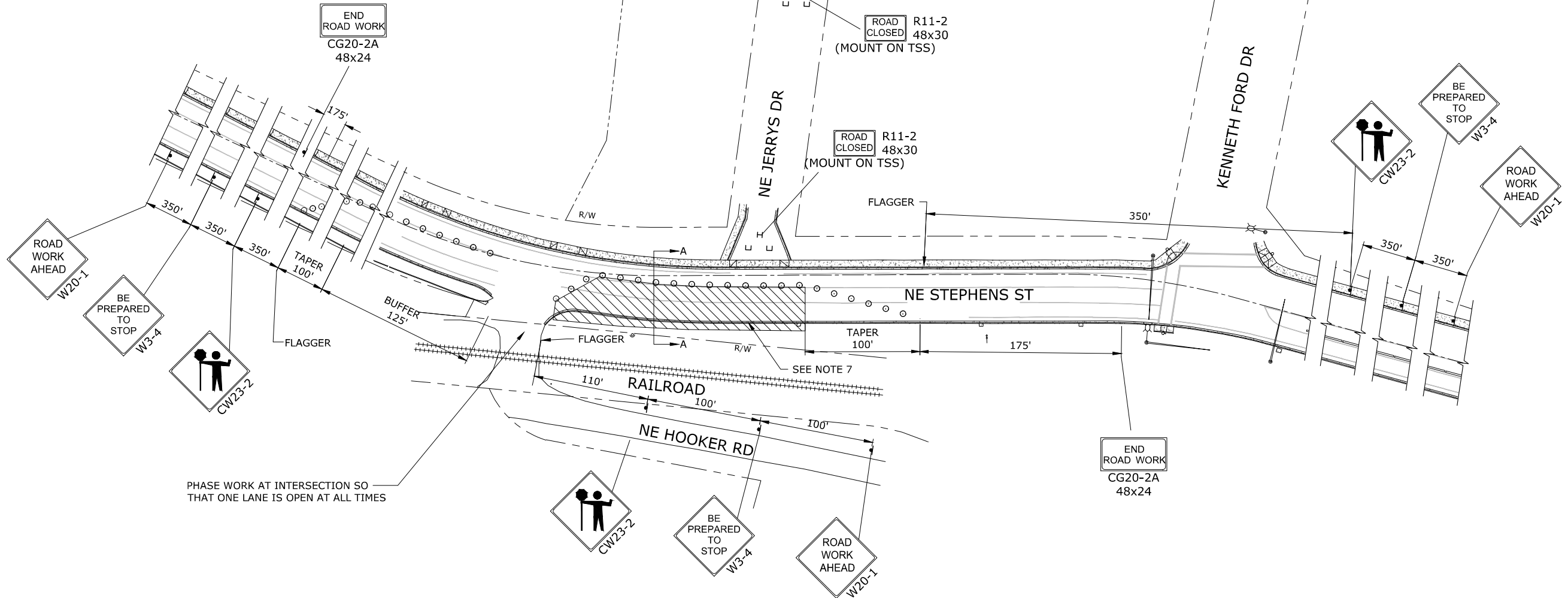
PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

SHEET

TC-1

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G:\PDX_Projects\20\2938 - 24-Inch, Hooker Rd To Isabell Ave\CAD\Sheets\20-2938-OR-TCP.dwg TC-2 5/6/2021 10:41 AM MATT. ESTEP 23.0s (LMS Tech)



NOTES

1. PROVIDE DRIVEWAY ACCESS AT ALL TIMES.
2. PROVIDE A 5' GAP BETWEEN TUBULAR MARKERS AT ALL PEDESTRIAN CROSSING LOCATIONS.
3. SEE TM800, TM820, TM821, TM842, TM843, TM844 AND TM851 FOR STANDARD LANE CLOSURES AND TEMPORARY SIGN DETAILS NOT SHOWN ON PLANS.
4. SEE TM841, TM843, TM850, AND TM852 FOR INTERSECTION AND TRAVEL LANE WORK ZONE DETAILS.
5. PLACE CHANNELIZING DEVICES AROUND INTERSECTION RADII AND CONSTRUCTION ACCESSES AT 10' SPACING.
6. WORK TO BE PERFORMED DURING THE NIGHT.
7. PROTECT EXISTING CONCRETE CURB AND GUTTER, EXCEPT WHERE SHOWN TO BE REMOVED AND REPLACED ON SHEETS C-2 THRU C-7. SEE GENERAL NOTE 23, SHEET G-2.

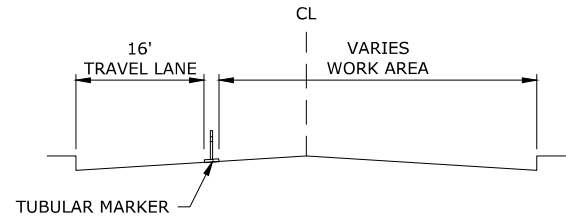
LEGEND

- ○ ○ ○ ○ ○ 28" TUBULAR MARKERS ON 20' MAX SPACING
-  UNDER CONSTRUCTION
-  TEMPORARY SIGN

TRAFFIC CONTROL PLAN (STA 01+00 TO STA 03+50)

SCALE: 1"=50'

NIGHT WORK



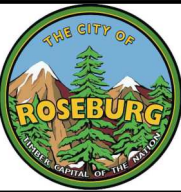
SECTION A-A

SCALE: NTS

NO.	DATE	BY	REVISION

NOTICE
0 1/2 1
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KDL
DRAWN
CSL
CHECKED



PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

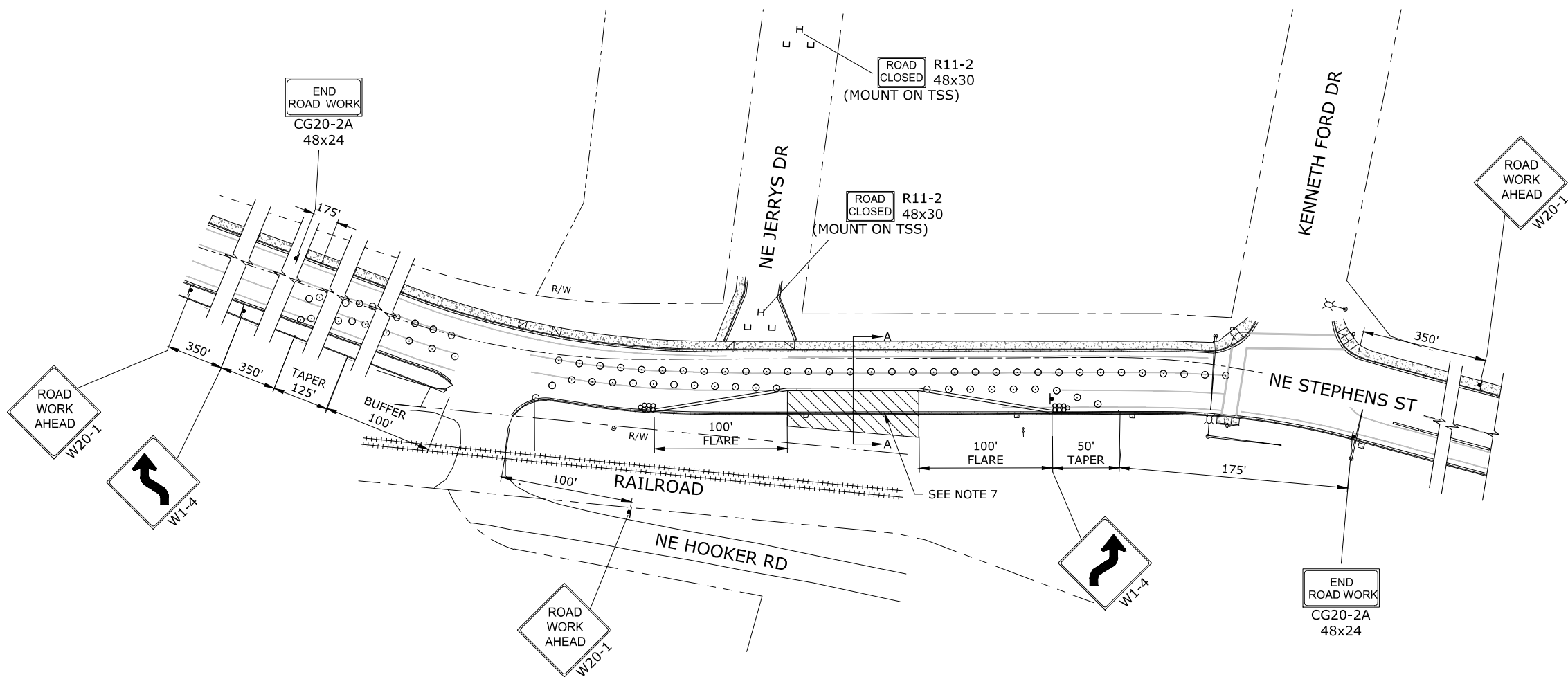
TRAFFIC CONTROL PLAN STA 01+00 TO STA 03+50			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

SHEET

TC-2

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G:\PDX_Projects\20\2938 - 24-Inch, Hooker Rd To Isabell Ave\CAD\Sheets\20-2938-OR-TCP.dwg TC-3 5/6/2021 10:41 AM MATT. ESTEP 23.0s (LMS Tech)



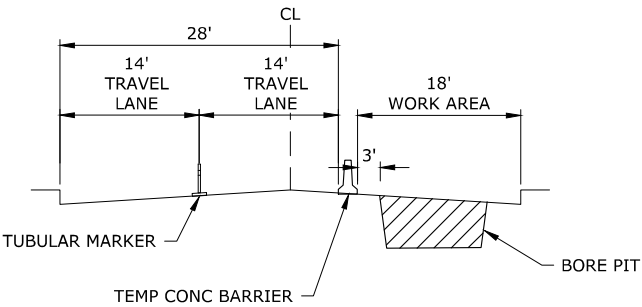
NOTES

1. PROVIDE DRIVEWAY ACCESS AT ALL TIMES.
2. PROVIDE A 5' GAP BETWEEN TUBULAR MARKERS AT ALL PEDESTRIAN CROSSING LOCATIONS.
3. SEE TM800, TM820, TM821, TM842, TM843, TM844 AND TM851 FOR STANDARD LANE CLOSURES AND TEMPORARY SIGN DETAILS NOT SHOWN ON PLANS.
4. SEE TM841, TM843, TM850, AND TM852 FOR INTERSECTION AND TRAVEL LANE WORK ZONE DETAILS.
5. PLACE CHANNELIZING DEVICES AROUND INTERSECTION RADII AND CONSTRUCTION ACCESSES AT 10' SPACING.
6. PROVIDE CONTINUOUS LANE CLOSURE AND SHIFT SOUTHBOUND TRAFFIC ONTO LEFT TURN MEDIAN FOR THE DURATION OF WORK.
7. PROTECT EXISTING CONCRETE CURB AND GUTTER. EXCEPT WHERE SHOWN TO BE REMOVED AND REPLACED ON SHEETS C-2 THRU C-7. SEE GENERAL NOTE 23, SHEET G-2.

LEGEND

- ○ ○ ○ ○ ○ 28" TUBULAR MARKERS ON 20' MAX SPACING
- ▨ UNDER CONSTRUCTION
- ⬇ TEMPORARY SIGN
- H TSS
- U BARRICADE TYPE III
- ===== TEMPORARY CONCRETE BARRIER
- ⊞ TEMPORARY IMPACT ATTENUATOR

DAVIS CREEK TRENCHLESS CROSSING
TRAFFIC CONTROL PLAN (STA 03+50 TO STA 04+25)
SCALE: 1"=50'



SECTION A-A
SCALE: NTS

NO.	DATE	BY	REVISION

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

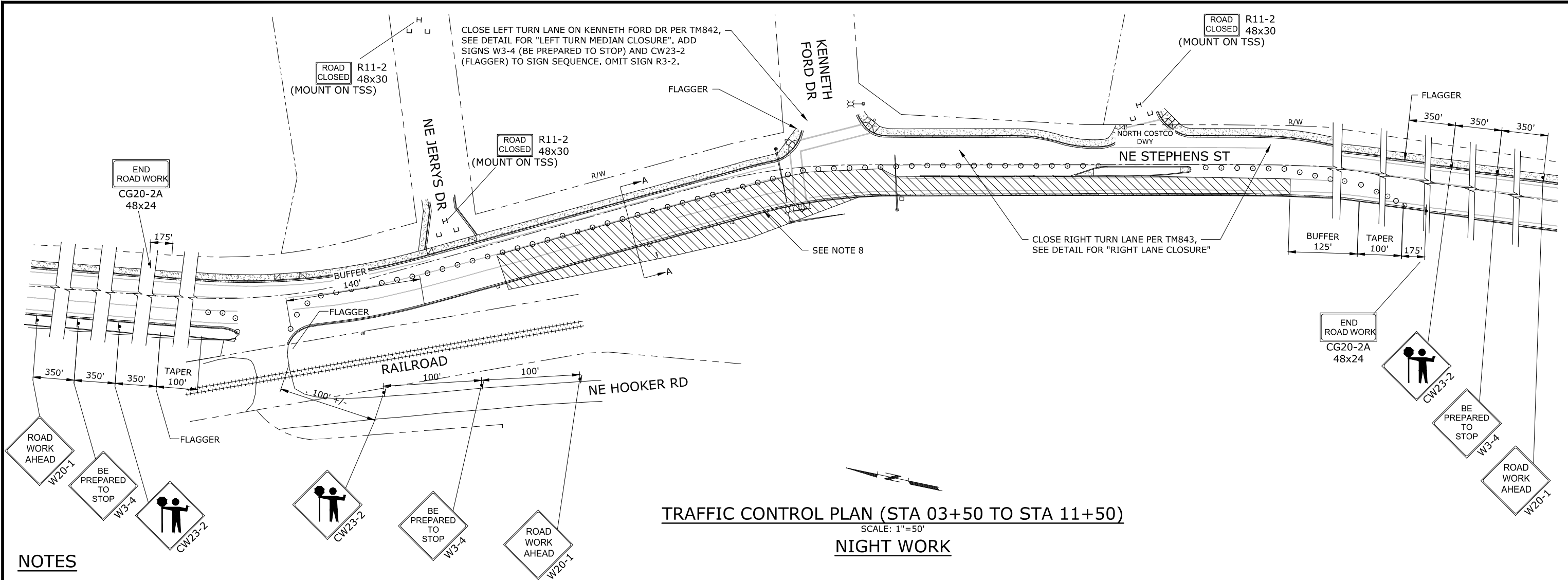
AMM
DESIGNED
KDL
DRAWN
CSL
CHECKED



PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

DAVIS CREEK TRENCHLESS CROSSING TRAFFIC CONTROL PLAN STA 03+50 TO STA 04+25			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

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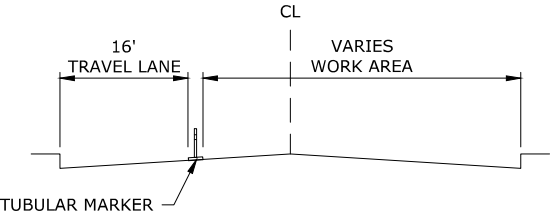


NOTES

1. PROVIDE DRIVEWAY ACCESS AT ALL TIMES.
2. PROVIDE A 5' GAP BETWEEN TUBULAR MARKERS AT ALL PEDESTRIAN CROSSING LOCATIONS.
3. SEE TM800, TM820, TM821, TM842, TM843, TM844 AND TM851 FOR STANDARD LANE CLOSURES AND TEMPORARY SIGN DETAILS NOT SHOWN ON PLANS.
4. SEE TM841, TM843, TM850, AND TM852 FOR INTERSECTION AND TRAVEL LANE WORK ZONE DETAILS.
5. PLACE CHANNELIZING DEVICES AROUND INTERSECTION RADII AND CONSTRUCTION ACCESSES AT 10' SPACING.
6. WORK TO BE PERFORMED DURING THE NIGHT.
7. COORDINATE WITH THE CITY OF ROSEBURG TO TEMPORARILY SHUT DOWN SIGNAL AND COVER SIGNAL HEADS.
8. PROTECT EXISTING CONCRETE CURB AND GUTTER. EXCEPT WHERE SHOWN TO BE REMOVED AND REPLACED ON SHEETS C-2 THRU C-7. SEE GENERAL NOTE 23, SHEET G-2.

LEGEND

- ○ ○ ○ ○ ○ 28" TUBULAR MARKERS ON 20' MAX SPACING
- ▨ UNDER CONSTRUCTION
- ⚡ TEMPORARY SIGN
- H TSS
- U BARRICADE TYPE III



NO.	DATE	BY	REVISION

NOTICE

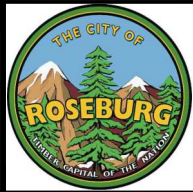
0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

AMM
DESIGNED
KDL
DRAWN
CSL
CHECKED

REGISTERED PROFESSIONAL
ENGINEER
74338
2021.05.03
DIGITALLY SIGNED 12:42:31
2021.05.03
DECEMBER 31, 2021
CHRISTOPHER S. LINK
RENEWS 12-31-22

murraysmith



PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKEE ROAD TO
ISABELL AVENUE

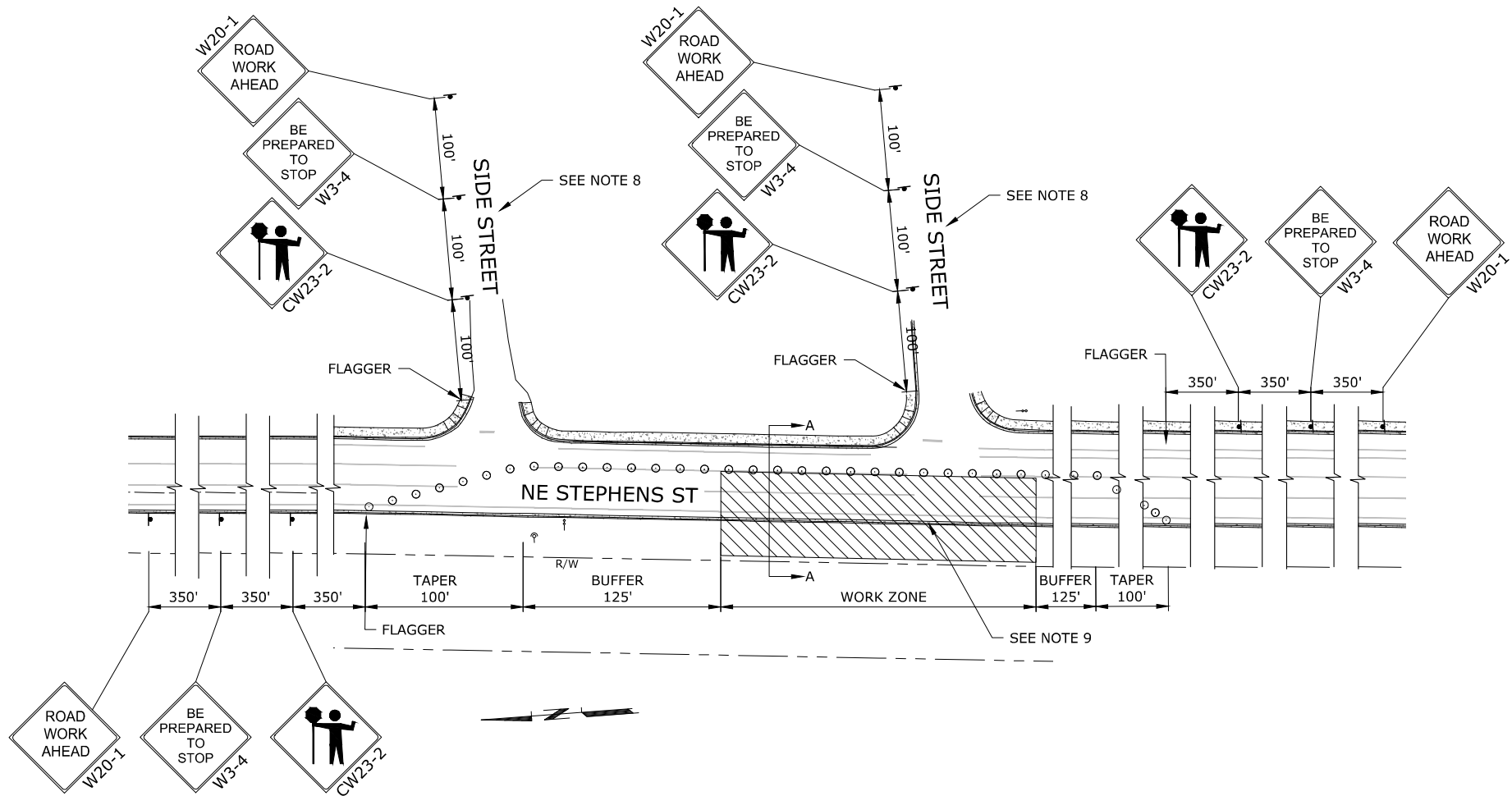
TRAFFIC CONTROL PLAN STA 04+25 TO STA 11+50			
PROJECT NO.:	20-2938	SCALE:	AS SHOWN
DATE:	MAY 2021		

SHEET

TC-4

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TYPICAL TRAFFIC CONTROL PLAN (STA 11+50 TO STA 30+00)

SCALE: 1"=50'

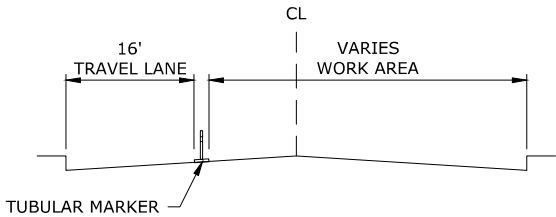
DAY WORK

NOTES

1. PROVIDE DRIVEWAY ACCESS AT ALL TIMES.
2. PROVIDE A 5' GAP BETWEEN TUBULAR MARKERS AT ALL PEDESTRIAN CROSSING LOCATIONS.
3. SEE TM800, TM820, TM821, TM842, TM843, TM844 AND TM851 FOR STANDARD LANE CLOSURES AND TEMPORARY SIGN DETAILS NOT SHOWN ON PLANS.
4. SEE TM841, TM843, TM850, AND TM852 FOR INTERSECTION AND TRAVEL LANE WORK ZONE DETAILS.
5. PLACE CHANNELIZING DEVICES AROUND INTERSECTION RADII AND CONSTRUCTION ACCESSES AT 10' SPACING.
6. WORK TO BE PERFORMED DURING THE DAY.
7. TYPICAL TRAFFIC CONTROL SETUP SHOWN. MOVE WORK ZONE AND TRAFFIC CONTROL SETUP AS REQUIRED TO COMPLETE WORK BETWEEN STATION 11+50 AND STATION 30+00.
8. ISABELL ST, MORBRIDGE AVE, PROMISE AVE, TIMBERLAKE ST, AND COSTCO SOUTH DRIVEWAY TO REMAIN OPEN DURING CONSTRUCTION. PROVIDE FLAGGERS AT SIDE STREETS WHEN IMPACTED BY WORK ZONE.
9. PROTECT EXISTING CONCRETE CURB AND GUTTER. EXCEPT WHERE SHOWN TO BE REMOVED AND REPLACED ON SHEETS C-2 THRU C-7. SEE GENERAL NOTE 23, SHEET G-2.

LEGEND

- ○ ○ ○ ○ ○ 28" TUBULAR MARKERS ON 20' MAX SPACING
- ▨ UNDER CONSTRUCTION
- ⚡ TEMPORARY SIGN



SECTION A-A

SCALE: NTS

NO.	DATE	BY	REVISION

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

AMM
DESIGNED
KDL
DRAWN
CSL
CHECKED

REGISTERED PROFESSIONAL
ENGINEER
74338
2021.05.03
DIGITALLY SIGNED 12:48:36
OCTOBER 31, 2021
CHRISTOPHER S. LINK
RENEWES 12-31-22

murraysmith

THE CITY OF
ROSEBURG
OFFICIAL SEAL OF THE CITY

PROJECT #20WA17
24-INCH
TRANSMISSION MAIN
HOOKER ROAD TO
ISABELL AVENUE

TRAFFIC CONTROL PLAN
STA 11+50 TO STA 30+00

PROJECT NO.: 20-2938 SCALE: AS SHOWN DATE: MAY 2021

SHEET

TC-5

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