

CONSTRUCTION NOTES

Obtain Construction Plans from Designer prior to starting job. Coordinate with Contractor / Engineering Firm for exact locations of proposed structures and facilities prior to installation of gas facilities. Install new main as shown or as directed in field at time of installation. All test points should be installed in the boulevard or other acceptable locations and avoid placement in driving lanes. Verify Coating test results if required prior to abandoning main.

CONSTRUCTION PROCEDURES

- 1. INSTALL 4" PE CL-6 MAIN ON HILLON RD, SOUTH OF THOMAS DR
2. INSTALL NEW REG STATION AND PIPING
3. TEST ALL STEEL MAIN TO CL-6 MAOP
4. TAKE TBS ON 123 OUT OF SERVICE
5. MAKE ABANDONMENTS

Install, Clean and Test, and Put in Service Proposed new main per CenterPoint Energy Construction and Services Manual.

Purge new main until essentially 100% reading is obtained on Combustible Gas Indicator. See CenterPoint Energy Construction and Service Manual Section CS-B-1.230 for purging mains into service.

Cut and Abandon existing main as shown. Purge abandoned mains until essentially 0% gas reading is obtained on Combustible Gas Indicator. See CenterPoint Energy Construction and Service Manual Section CS-B-1.110 and Section CS-B-1.230 for purging mains out of service using air movers.

Install a marker ball at a new end of main, at a valve, at each ell of a horizontal offset, at road crossings and at any fitting or pressure control identified as needing to be located in the future. Refer to CenterPoint Energy Construction and Service Manual section CS-B-1.310 for installation procedures.

NOTE: BORE ALL PAVED STREETS AND DRIVEWAYS Minimum depth requirements for crossings of state highways and county roads is 60". Minimum depth requirements for crossings of city streets and township roads is 48". Minimum depth for parallel installations on state highways and county roads is 30". Minimum depth for parallel installations on city streets and township roads is 30". All steel pipe welds to be coated with 2 part epoxy.

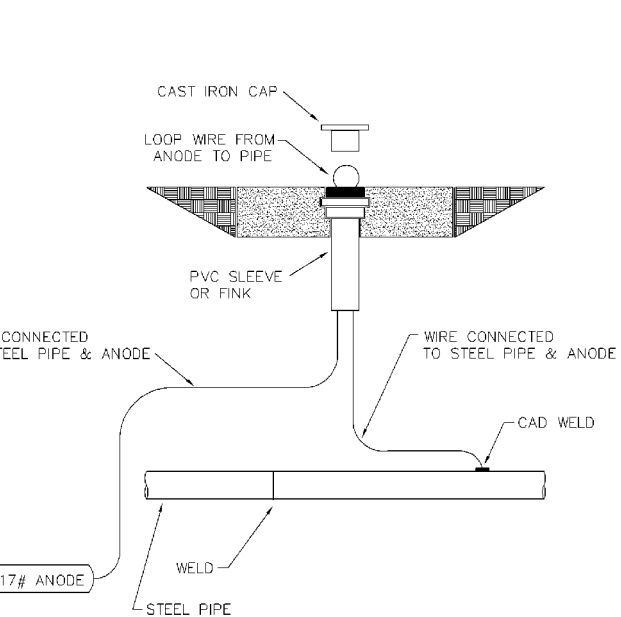
AT DENOTES COATING SAMPLE LOCATION CONTACT CHRISTOPHER LANASA (612-321-5448) IN ENVIRONMENTAL PROGRAMS TO SCHEDULE SAMPLING OF PIPE COATING. GIVE 48 HOURS NOTICE WHEN POSSIBLE TO ARRANGE FOR A LICENSED INSPECTOR.

Project area cleared for internal impacts. Pipe being removed is unregulated for disposal if coating does not exist or is non-asbestos. Refer to CNP Construction and Service Manual CS-B-1.110, CS-B-1.330, and CS-B-1.100, for pipe to be abandoned.

WHEN BUTT FUSING TO EXISTING IN-SERVICE POLYETHYLENE, VISUALLY INSPECT FOR THE PRESENCE OF HYDROCARBON PERMEATION IMMEDIATELY AFTER REMOVING FUSION IRON. IF ANY SUBSILING IS IDENTIFIED ON THE HEATED SURFACE, DO NOT JOIN TO NEW PE PIPE. ALLOW TO COOL AND CUT THIS END OFF (12" LENGTH) AND SEND TO THE GOLDEN VALLEY LAB WITH STREET LOCATION AND W.O. #. COMPLETE TIE-IN EXTENSION USING AN ELECTROFUSION COUPLING(S). DOCUMENT IN FIELD NOTES.

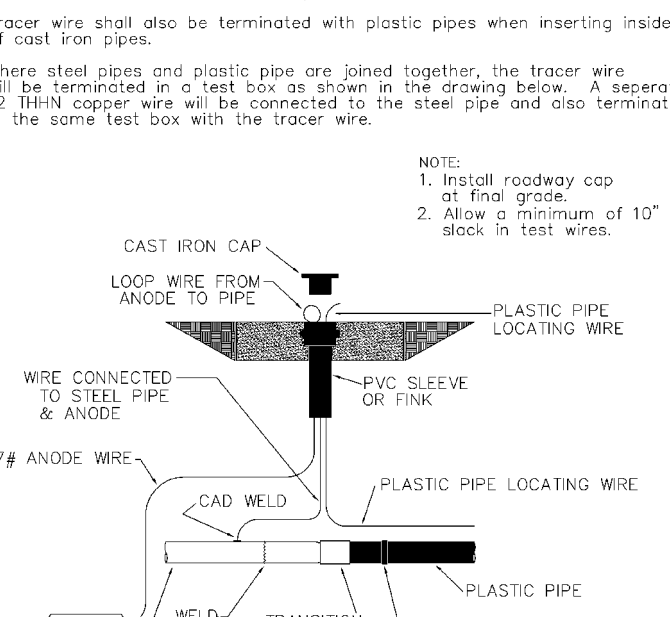
CP TEST POINT WITH ANODE ROADWAY INSTALLATION

- NOTE: 1. Install roadway cap at final grade. 2. Allow a minimum of 10" of slack in test wires.



CP TEST POINT WITH ANODE AND PLASTIC PIPE LOCATING STATION ROADWAY INSTALLATION

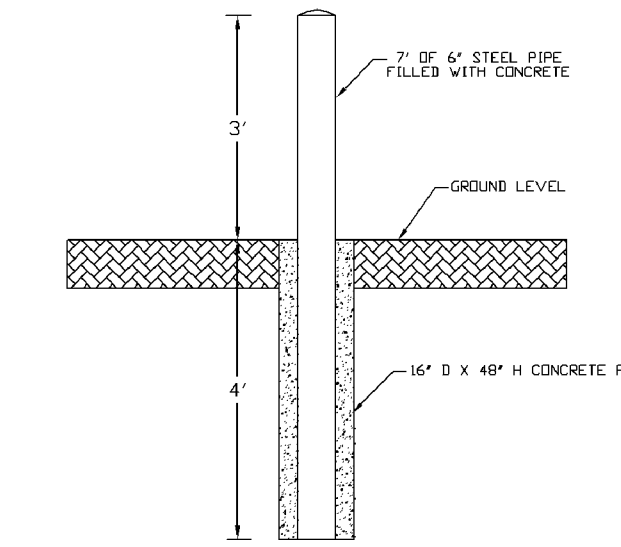
- NOTE: 1. Install roadway cap at final grade. 2. Allow a minimum of 10" of slack in test wires.



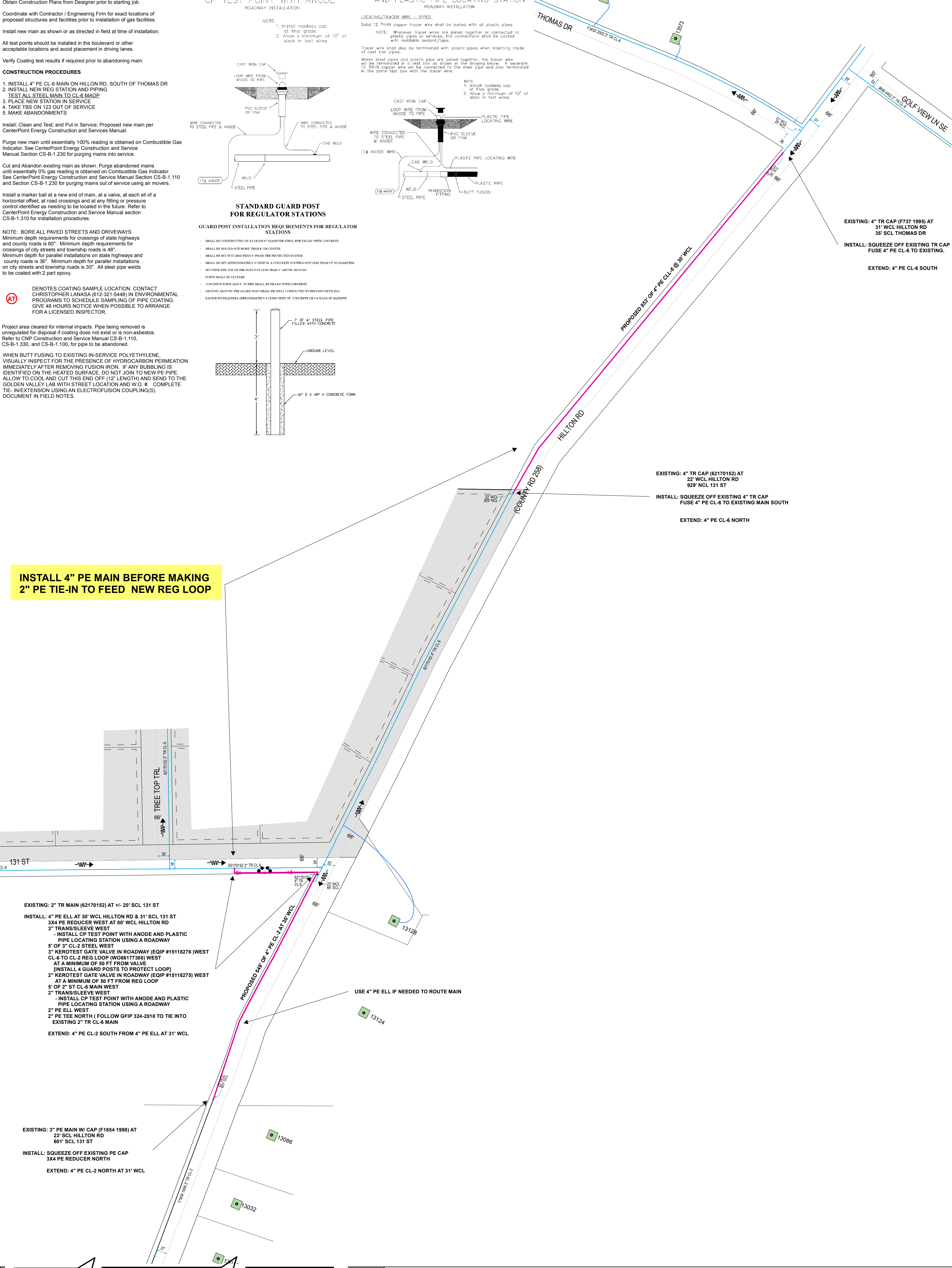
STANDARD GUARD POST FOR REGULATOR STATIONS

GUARD POST INSTALLATION REQUIREMENTS FOR REGULATOR STATIONS

- SHALL BE CONSTRUCTED OF AT LEAST 6" DIAMETER STEEL PIPE FILLED WITH CONCRETE. SHALL BE SPACED NOT MORE THAN 4' ON CENTER. SHALL BE SET NOT LESS THAN 2' FROM THE PROTECTED SYSTEM. SHALL BE SET APPROXIMATELY 4" BELOW A CONCRETE FOOTING NOT LESS THAN 4" IN DIAMETER. SET WITH THE TOP OF THE POST NOT LESS THAN 3" ABOVE GROUND. POSTS SHALL BE LEVELED. CONCRETE FORM AND 4" ST PIPE SHALL BE FILLED WITH CONCRETE. GROUND AROUND THE GUARD POST SHALL BE WELL COMPACTED TO PREVENT SETTling. EACH POST REQUIRED APPROXIMATELY A CUBIC FOOT OF CONCRETE OR 4 BAGS OF SACKITE.

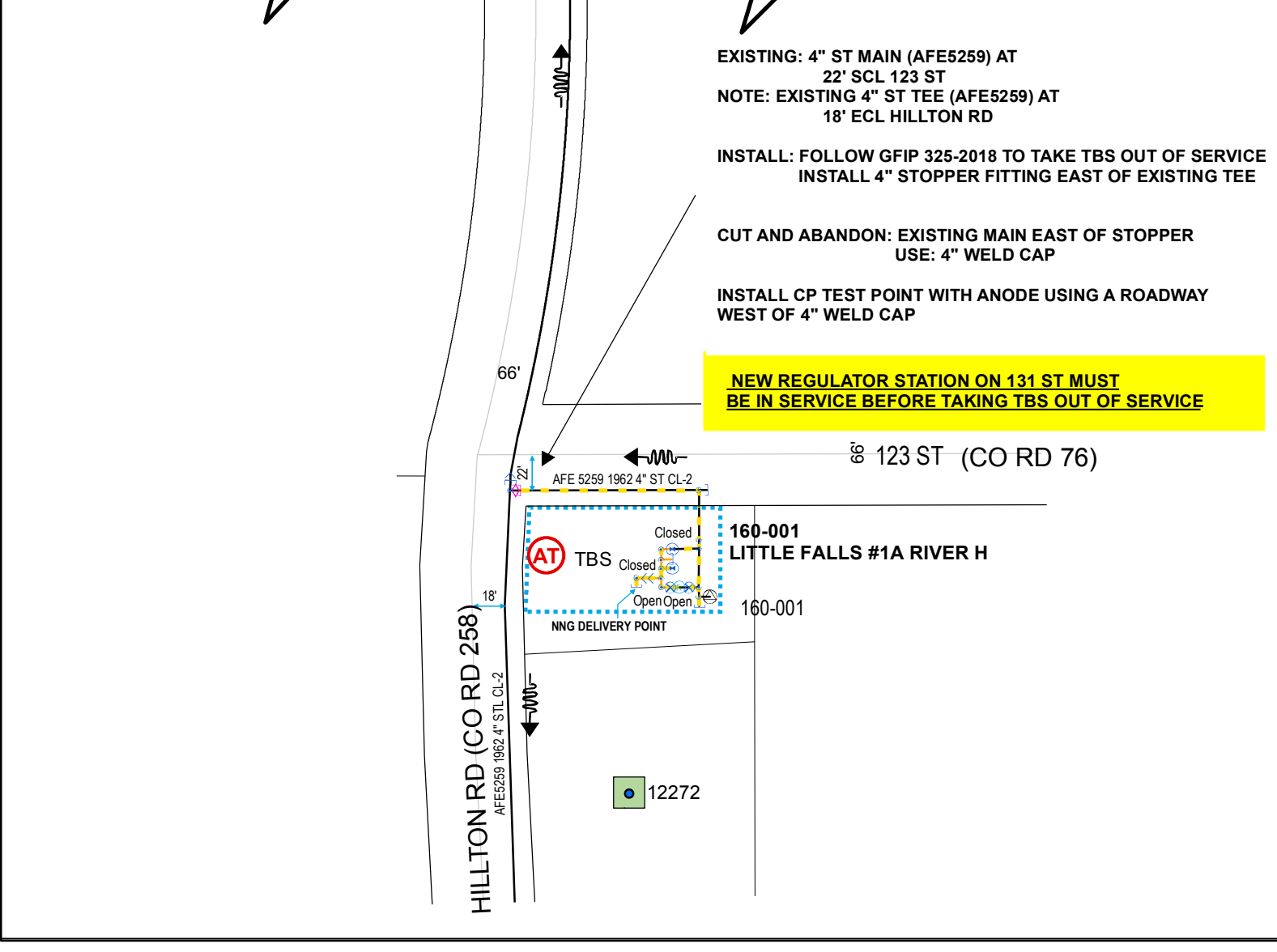


INSTALL 4" PE MAIN BEFORE MAKING 2" PE TIE-IN TO FEED NEW REG LOOP



EXISTING: 2" TR MAIN (62170152) AT +/- 20' SCL 131 ST
INSTALL: 4" PE ELL AT 30' WCL HILLON RD & 31' SCL 131 ST
3X4 PE REDUCER WEST AT 80' WCL HILLON RD
3" TRANSISLEEVE WEST
INSTALL CP TEST POINT WITH ANODE AND PLASTIC PIPE LOCATING STATION USING A ROADWAY
5' OF 3" CL-2 STEEL WEST
3" KEROTEST GATE VALVE IN ROADWAY (EQIP #15118276) WEST
CL-6 TO CL-2 REG LOOP (W086177388) WEST
AT A MINIMUM OF 50 FT FROM VALVE
(INSTALL 4 GUARD POSTS TO PROTECT LOOP)
2" KEROTEST GATE VALVE IN ROADWAY (EQIP #15118275) WEST
AT A MINIMUM OF 50 FT FROM REG LOOP
5' OF 2" ST CL-6 MAIN WEST
2" TRANSISLEEVE WEST
INSTALL CP TEST POINT WITH ANODE AND PLASTIC PIPE LOCATING STATION USING A ROADWAY
2" PE ELL WEST
2" PE TEE NORTH | FOLLOW GFIP 324-2018 TO TIE INTO EXISTING 2" TR CL-6 MAIN
EXTEND: 4" PE CL-2 SOUTH FROM 4" PE ELL AT 31' WCL

EXISTING: 3" PE MAIN W/ CAP (F1854 1998) AT 23' SCL HILLON RD 601' SCL 131 ST
INSTALL: SQUEEZE OFF EXISTING PE CAP 3X4 PE REDUCER NORTH
EXTEND: 4" PE CL-2 NORTH AT 31' WCL



EXISTING: 4" ST MAIN (AFE5259) AT 22' SCL 123 ST
NOTE: EXISTING 4" ST TEE (AFE5259) AT 18' ECL HILLON RD
INSTALL: FOLLOW GFIP 325-2018 TO TAKE TBS OUT OF SERVICE
INSTALL 4" STOPPER FITTING EAST OF EXISTING TEE
CUT AND ABANDON: EXISTING MAIN EAST OF STOPPER
USE: 4" WELD CAP
INSTALL CP TEST POINT WITH ANODE USING A ROADWAY WEST OF 4" WELD CAP
NEW REGULATOR STATION ON 131 ST MUST BE IN SERVICE BEFORE TAKING TBS OUT OF SERVICE

CenterPoint Energy logo, project information (PROJECT # 85186137), legend, pipe requirements, proposed abandoned pipe, and revision information.

DESIGNER EXPRESS DESIGN 6/1/2018 7:44:29 AM

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota. Signature: David Henningsgaard, Date: 6/19/2018, License Number: 22174

PROJECT DESCRIPTION: SRIM HILLON RD
DESIGNER: TJ Haider
PHONE #: 612-321-5132
DRAWN BY: TJ Haider
DESIGN DATE: 4/20/2018
REVISION INFO:
Main 299-2018 SCALE 1" = 100' SHEET 1 OF 1