

GENERAL NOTES:

# PIPELINE 13A (4.05 Miles)

## NATIONAL GRID GAS ENGINEERING

PIPE SIZE	WALL THICKNESS	TYPE
12"	.375	X-52
10"	.365	X-42
6"	.280	TBD
4"	.237	GRADE B

### CLEARING AND SLASH DISPOSAL

**Clearing**

Type I - The cutting and physical removal, either by hand or mechanical means, of all vegetation that would hinder pipeline construction.

**Slash Disposal**

Type A - Type A slash disposal consists of hauling all wood or logs off site. Merchantable timber will be separated and marketed where site conditions allow. Considerations regarding merchantable timber include:

a) Sufficient merchantable volume exists on a given site to make doing so cost-effective; and

b) Adequate log-hauling access roads exist between the nearest public road and the yarding area or yarding directly to a highway is desirable and economically feasible. (The load-bearing capacity of the access road or potential restoration costs may become limiting factors on merchantability.)

Type E - Type E slash disposal consists of chipping all slash on site. All chips will be hauled off of the ROW unless otherwise directed by the Forester or the Environmental Monitor. No chips shall be stored or disposed of in wetlands, active agricultural fields, or in close proximity (typically not within 25 feet) of streams. Chips will not be mixed with trench backfill materials or spoils and will not be used as mulch over the trench.

Type G - Type G slash disposal consists of removing all slash from the ROW. Type G will be used where it is necessary to move slash to another portion of the ROW where Type E (chipping) will then be utilized as the ultimate disposal method. No Type G slash shall be moved to wetlands or to areas in close proximity (typically not within 25 feet) of streams

**Stumps**

Stumps may be ground via a horizontal grinder or, as approved by the Environmental Inspector, hauled off ROW to a suitable disposal facility or landowner approved offsite location. No stumps are to be disposed of on the ROW.

### PIPE COATING:

LINE PIPE: FBE 3M 6233 (16mils)

DIRECTIONAL DRILL (HDD): FBE 3M 6233 (16mils), POWERCRETE (40mils)

CONCRETE WEIGHTED PIPE: FBE 3M 6233 (16mils), SCOTCHCOAT 207R ROUGHCOAT

**Steel HDD Pipe: (GD030030-TI)**

40 mils min. OF R95 POWERCRETE KITS SHALL BE APPLIED TO POWERCRETE COATED PIPE WELD JOINTS/FITTINGS AND HOLIDAYS.

THE CONTRACTOR SHALL SANDBLAST PIPE TO A SSPC10 LEVEL OF CLEANLINESS. PREHEAT PIPE SUCH THAT A MINIMUM TEMPERATURE OF 140° F IS MAINTAINED AT START OF APPLICATION. MIX PARTS A & B MANUALLY OR WITH DRILL PADDLE AT LOW SPEED. PARTS A & B SHALL BE STORED AT 72° F PRIOR TO APPLICATION.

**TEST PRESSURES:**

PL-E13A: 735psig min. (HYDRO TEST)

**NORMAL OPERATING PRESSURE:**

PL-E13A: 300psig

**DESIGN PRESSURE:**

PL-E13A: 490psig

**NMPC CONTACTS**

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JASON BUCZEK	GAS SUPPLY	518-466-5997
MIKE TENEYCK	CP	518-433-3037
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### ACCOUNT NUMBERS

WORK ORDER 0008446553 (PL 13A)  
 WORK ORDER 0012344604 (PL 13 VALVE SITE)  
 (PROJECT FUNDING: C34854)

WORK ORDER 0008530398 (STONEBREAK RD GRS 741)

- 1) CONTRACTOR SHALL NOTIFY DIG SAFELY NEW YORK AND ALL UTILITIES WITHIN THE AREA OF EXCAVATION PRIOR TO COMMENCING WORK. ALL EXISTING UTILITIES NOTED ON DRAWING ARE APPROXIMATE LOCATIONS AND ARE TO BE LOCATED AND MARKED PRIOR TO START OF CONSTRUCTION. ANY TEST HOLES REQUIRED FOR EXACT LOCATION ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 2) CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND SUPPORTING EXISTING UTILITIES AND STRUCTURES.
- 3) CONTRACTOR SHALL DIG TEST HOLES AND LOCATE PIPING AT TIE-IN POINTS TO DETERMINE/VERIFY THE REQUIRED TIE-IN FABRICATION MATERIALS AND TO ESTABLISH PIPE ALIGNMENT.
- 4) CONTRACTOR WILL BE RESPONSIBLE FOR EXPOSING PIPE IN ORDER THAT NATIONAL GRID CAN LOCATE/INSTALL FITTINGS FOR PURPOSES OF TIE-INS/RETIREMENTS.
- 5) ALL MATERIAL UNLESS OTHERWISE SPECIFIED IS SUPPLIED BY NATIONAL GRID.
- 6) THE CONTRACTOR SHALL VERIFY THAT THE LAYOUT CAN BE CONSTRUCTED AS SHOWN ON ALL NATIONAL GRID AND VENDOR EQUIPMENT DRAWINGS. IF CONFLICTS ARE FOUND, CHANGES SHALL BE APPROVED BY A NATIONAL GRID FIELD REP. AND GAS ENGINEERING PRIOR TO CONSTRUCTION.
- 7) FABRICATE TO MEET FIELD CONDITIONS, VERIFY ALL DIMENSIONS IN FIELD.
- 8) DEFLECT GAS MAIN UNDER OR OVER EXISTING UTILITIES AS REQUIRED (IE: FITTINGS), WHILE MAINTAINING DESIGN DEPTH AND MINIMUM CLEARANCE PER STD 41.23.
- 9) VERIFY CATHODIC PROTECTION AT ALL TIE-INS TO EXISTING STEEL FACILITIES. NOTIFY METER & TEST IF PIPE TO SOIL READINGS ARE UNACCEPTABLE AND INSTALL ANODES AND/OR TEST STATIONS AS INDICATED ON DRAWINGS AND PER (GD030025-TI).
- 10) ALL UNDERGROUND PIPE AND FITTINGS (OPEN CUT) SHALL BE COATED WITH 3M-323 EPOXY BRUSH GRADE (40mils). INSTALL PER MANUFACTURERS REQUIREMENTS. THE CONTRACTOR SHALL SANDBLAST PIPE TO A SSPC10 LEVEL OF CLEANLINESS. (GD030030-TI)
- 11) PAINT ALL ABOVE GRADE STEEL PIPE WITH CARBOMATIC 15 OR APPROVED EQUAL. (GD030030-TI)
- 12) REMOVAL OR ABANDONMENT OF GAS FACILITIES SHALL BE PERFORMED IN ACCORDANCE WITH GD010001-TI.
- 13) CONTRACTOR IS RESPONSIBLE FOR RESTORATION IN KIND.
- 14) ALL CAST IN PLACE CONCRETE SHALL BE 4000 PSI PER ACI-318.
- 15) CONTRACTOR SHALL SUPPLY/INSTALL FENCING PER SYSTEM SPECIFICATION SP.03.05.001
- 16) ALL WELDING TO BE DONE IN ACCORDANCE WITH US GDx DOCUMENT MANUAL WELDING POLICY 030020-PL.
- 17) ALL WELDS ON HIGH PRESSURE (125 or greater) PIPING 2" AND LARGER SHALL BE X-RAYED DYE PENETRANT TEST SHALL BE PERFORMED FOR PIPING LESS THAN 2".
- 18) BAG, PURGE AND TEST POINTS SHALL BE INSTALLED PER (GD030016-TI)
- 19) CORROSION PROTECTION:  
 CORROSION WIRE PER (GD030027-TI)  
 TEST STATION TYPES PER (GD030035-TI)  
 ANODE INSTALLATION PER (GD030025-TI)
- 20) REMOVAL AND HANDLING OF COAL TAR WRAPPED PIPE SHALL BE DONE IN ACCORDANCE WITH GDx F-617
- 21) ALL PIPE SHALL BE HOLIDAY TESTED PER (GD040030-TI)
- 22) FINAL TUBING CONNECTIONS BY NATIONAL GRID.
- 23) - CONTRACTOR IS RESPONSIBLE TO PLAN PRESSURE TESTING AND NOTIFY NG OF ADDITIONAL PIPING, BLIND FLANGES AND FITTINGS REQUIRED.  
 - CONTRACTOR IS RESPONSIBLE TO FABRICATE SPOOL PIECES AND/OR ADD BLIND FLANGES ON REGULATION EQUIPMENT AS REQUIRED FOR STATION PRESSURE TESTING AND PURGING REQUIREMENTS.
- 24) CONTRACTOR IS RESPONSIBLE TO NOTIFY NG (FCC) 10 DAYS IN ADVANCE OF PLANNED HIGH PRESSURE PSC WITNESS PRESSURE TEST.
- 25) CONTRACTOR TO COORDINATE WITH FCC TO HAVE A NG QUALIFIED WELD INSPECTOR FOR TRANSMISSION WELDING.
- 26) CONTRACTOR TO PERFORM WELD PREP TO ACCOMMODATE DIFFERENCES IN PIPE WALL THICKNESS AS NECESSARY.
- 27) SAFETY WORKING CLEARANCES ON ELECTRIC RIGHT OF WAY, SEE SECTION 31.41 PIPELINE HIGH VOLTAGE PROTECTION DURING CONSTRUCTION, SECTION 31.3.
- 28) CONTRACTOR SHALL USE ALL NECESSARY MEANS TO ENSURE SAFE AND PROPER TRAFFIC FLOW DURING CONSTRUCTION IN ACCORDANCE WITH NATIONAL GRID AND NYS DOT STANDARDS, INCLUDING NYS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE CODE OF FEDERAL REGULATIONS TITLE 29, PART 1926 SUBPART G-SIGNS, SIGNALS AND BARRICADES. (GDx Q-1702)
- 29) WITNESS POST INSTALLATION PER SECTION 41.32.
- 30) THE AMOUNT OF CONCRETE COATED PIPE AS SHOWN ON D-37822-E SH. 1-9 MAY VARY PER FIELD CONDITIONS. (IE: WETLANDS/CHANNELS/STREAMS)
- 31) REQUIRED COVER UNLESS OTHERWISE NOTED:  
 3' MINIMUM NORMAL  
 4' MINIMUM AGRICULTURAL & VALVE NEST  
 5' MINIMUM ROAD/POND/CREEK/STREAM CROSSING AND LAUNCHER/RECEIVER SITES
- 29) FENCE: CHAIN LINK FENCE SPECIFICATION: SP.03.05.001

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										RAC DR.	APPROVED		NIAGARA MOHAWK POWER CORPORATION	12" NATURAL GAS TRANSMISSION LINE		FILE INDEX	12.3-S1.13A-G1		
										KEB CK.	APPROVED		D.B.A. nationalgrid	GENERAL NOTES		DRAWING NUMBER	C-37822-E		
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