

PATTERSON DRIVE WATERLINE REPLACEMENT PROJECT

Bids were received by the Authority on June 14, 2021 for the Patterson Drive Waterline Replacement project. At their monthly meeting on June 16, 2021, the Board of Directors accepted the proposal from the lowest responsible Bidder, Stefanik's Next Generation Contracting Company, Inc. in the amount of \$319,032.50.

The project consists of the installation of 1,250 linear feet of 6-inch diameter ductile iron replacement waterline, 350 linear feet of 2-inch diameter waterline, fire hydrant assembly, connections to the existing water system, valves, and all necessary appurtenances, Township roadway and other restoration for said construction. The new waterline will replace an existing line that has deteriorated to the point where line breaks are frequent.

Construction is expected to begin in August. It is anticipated that all construction activities will be completed by the end of November. During construction, those traveling in the area should expect traffic restrictions weekdays from 7am until 5pm.

Patterson Drive Waterline Replacement

Contract No. 21-07

Situate In
Hopewell Township
Beaver County, Pennsylvania

Prepared For

Municipal Water Authority of Aliquippa
140 Bet Tech Drive
Aliquippa, Pennsylvania 15001

EXISTING CONDITION NOTES:

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED BY FIELD SURVEY OF MARKINGS MADE IN THE FIELD BY THE RESPECTIVE UTILITY COMPANY OR TAKEN FROM DRAWINGS OF THE EXISTING UTILITIES PROVIDED BY THE UTILITY COMPANIES. ALL EXISTING SUBSURFACE UTILITY INFORMATION PRESENTED ON THE CONTRACT DRAWINGS IS CHARACTERIZED AS UTILITY QUALITY LEVEL C OR D PER "CIASCE 38-02 - STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" UNLESS SPECIFICALLY NOTED OTHERWISE.
2. THE ENGINEER OR SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.
3. FURTHERMORE, THE ENGINEER OR SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, THEY ARE LOCATED USING ORDINARY STANDARDS OF CARE AND PRACTICE AND SHOWN HEREON BASED UPON AVAILABLE INFORMATION.
4. THE ENGINEER OR SURVEYOR HAS NOT PHYSICALLY LOCATED ANY OF THE UNDERGROUND UTILITIES.
5. PROPERTY LINES SHOWN HEREIN ARE PREPARED FROM DEED PLOTS AND/OR FROM TAX MAP INFORMATION. NO FIELD PROPERTY SURVEYS WERE PERFORMED, PROPERTY LINES NOT FIELD VERIFIED.

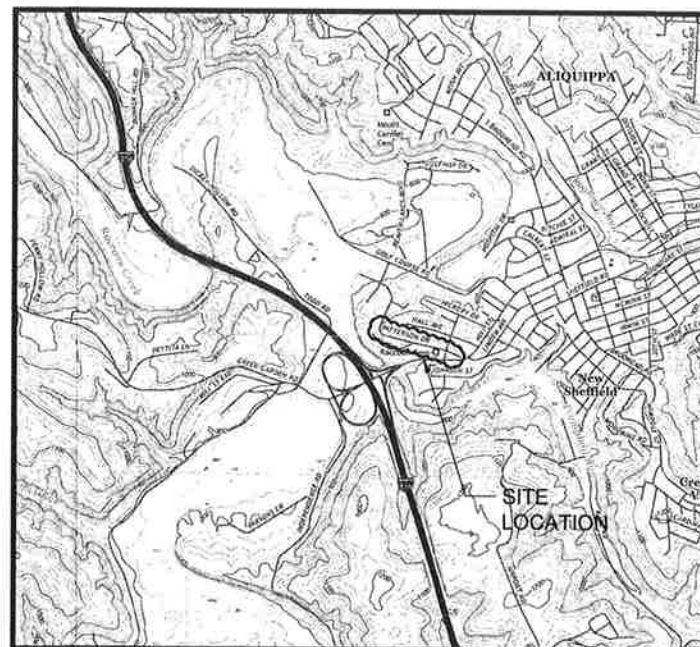
ONE CALL RESPONDENTS

Information as to the location and type of underground utilities and structures shown are approximate. Contractor(s) shall verify all such information in the field. Prior to any excavation, the Contractor(s) shall notify the Pennsylvania One Call System by calling 811. Locations of the utilities shown on the drawings or within the construction area are based on information provided through the Pennsylvania One Call System, Inc, Serial No. 20211450985. The respondents to the One Call notification were:

PA One Call Contacts			
Utility	Company	Address	Email
OWNER/WATER/SEWER	ALIQUIPPA MUNICIPAL WATER AUTHORITY CONTACT: COREY CURENTON	140 BET-TECH DR ALIQUIPPA, PA. 15001	maintenance@aliquippawater.com
GAS	PEOPLES GAS COMPANY LLC CONTACT: MICHAEL DENNY	375 NORTH SHORE DRIVE PITTSBURGH, PA. 15212	michael.denny@peoples-gas.com
WATER	AMBRIDGE WATER AUTHORITY CONTACT: JEFF ALLEN	19TH & MERCHANT ST EXT PO BOX C PO BOX 257 AMBRIDGE, PA. 15003	jallen@ambwater.org
TELEPHONE	VERIZON PENNSYLVANIA LLC CONTACT: DEBORAH BARUM	1026 HAY ST PITTSBURGH, PA. 15221	deborah.d.dello@verizon.com
ELECTRIC	DUQUESNE LIGHT COMPANY CONTACT: KYLIE PARISON	2645 NEW BEAVER AVE PA-7D PITTSBURGH, PA. 15233	kparison@duqlight.com
MUNICIPAL	HOPWELL TOWNSHIP CONTACT: CHRIS THOMPSON	1700 CLARK BLVD ALIQUIPPA, PA. 15001	wpcs@hopewellwp.com

ALL EXISTING SUBSURFACE UTILITY INFORMATION PRESENTED ON THE CONTRACT DRAWINGS IS CHARACTERIZED AS UTILITY QUALITY LEVEL C OR D PER "CIASCE 38-02 - STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" UNLESS SPECIFICALLY NOTED OTHERWISE.

January 2021
June 1, 2021 (Issued for Bidding)



Base Map taken from the U.S.G.S. Quadrangle: Aliquippa, PA

Location Map
N. T. S.

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Sheet No.	Sheet Description	Drawing No.
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2 of 5	Waterline Plan	474-057-2
3 of 5	Waterline Plan	474-057-3
4 of 5	Standard Details	474-057-4
5 of 5	Standard Details	474-057-5



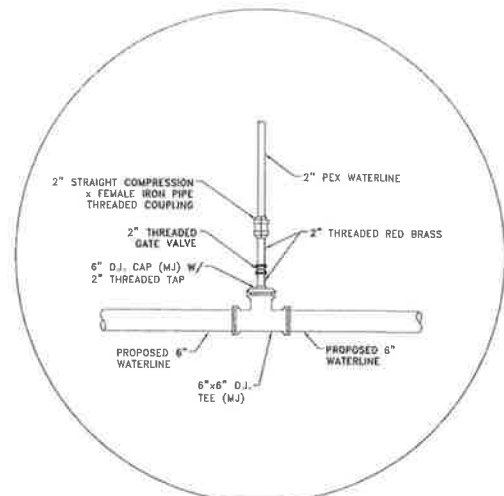
CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL
Pennsylvania One Call System, Inc.

CALL 811
Serial #20211450985

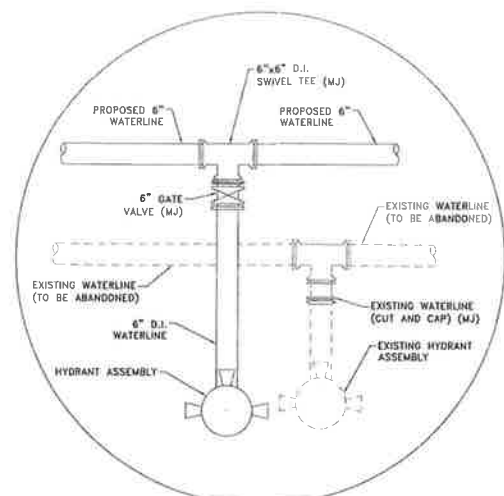


LSSE
Civil Engineers and Surveyors

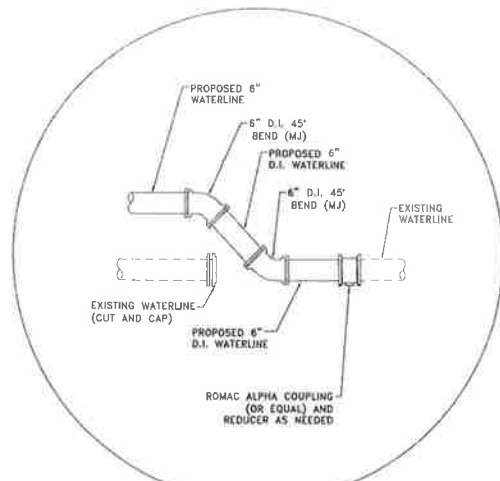
846 4th Avenue
Corbopolis, Pennsylvania 15108
Phone: 412-264-4400
Fax: 412-264-1200
email: info@lsse.com



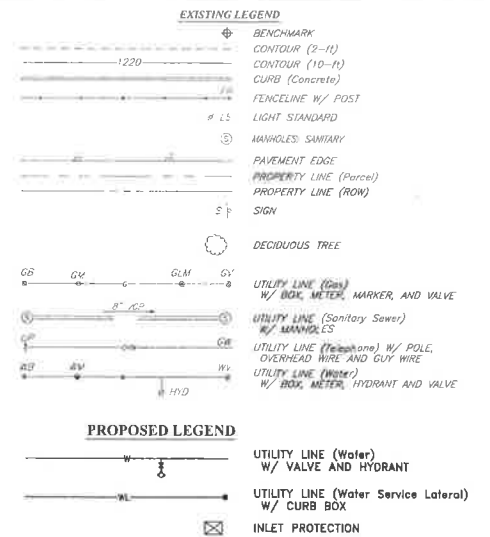
DETAIL "2A"
N. T. S.



DETAIL "2B"
N. T. S.

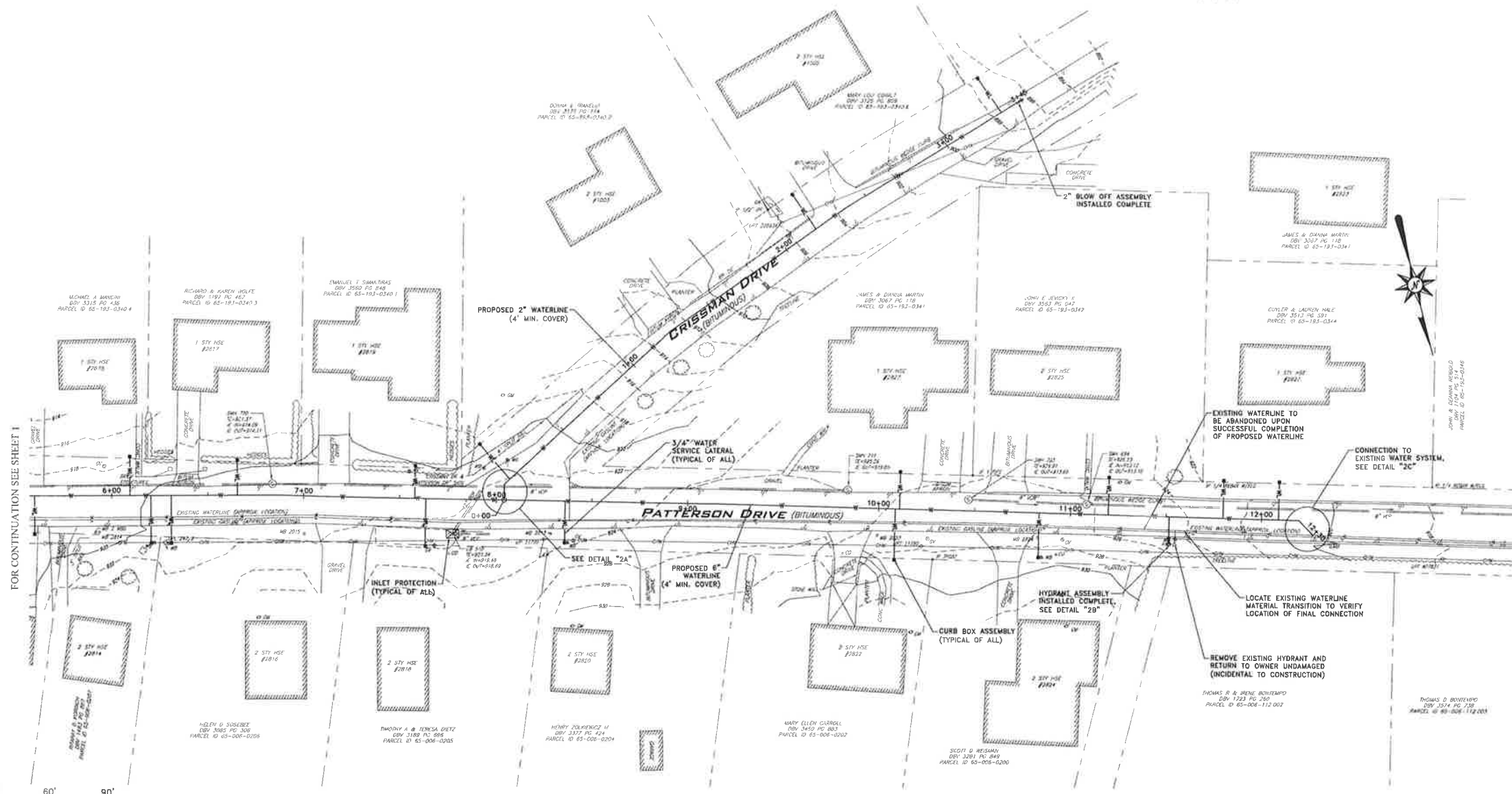


DETAIL "2C"
N. T. S.



NOTES:

1. COMPLETELY REMOVE EXISTING VALVE BOXES TO BE ABANDONED TO A MINIMUM 18-INCH DEPTH (PAY ITEM). REFER TO STANDARD DETAILS FOR RESTORATION REQUIREMENTS.
2. FOR ALL CONNECTIONS TO EXISTING WATERLINE, PROVIDE ALL NECESSARY PIPE, FITTINGS AND/OR ADAPTORS TO MAKE A COMPLETE WATERTIGHT CONNECTION. ALL PIPING, FITTINGS, VALVES, ETC. SHOWN ON THE DETAIL ARE INCIDENTAL TO THAT DETAILS PAY ITEM.



Scale:	No.	Date	Description	By	No.	Date	Description	By	No.	Date	Description	By
1"=30'	1	6/1/21	Issued for Bidding	TJS								
Drawn By:	Checked By:	Approved By:										

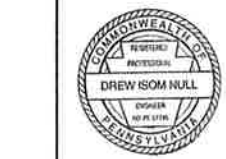


845 4th Avenue
Cresskill, Pennsylvania 10706
Phone: 412-264-4400
Fax: 412-264-1200
Email: info@lsse.com

Project: 474057sp.dwg
Date: January 2021

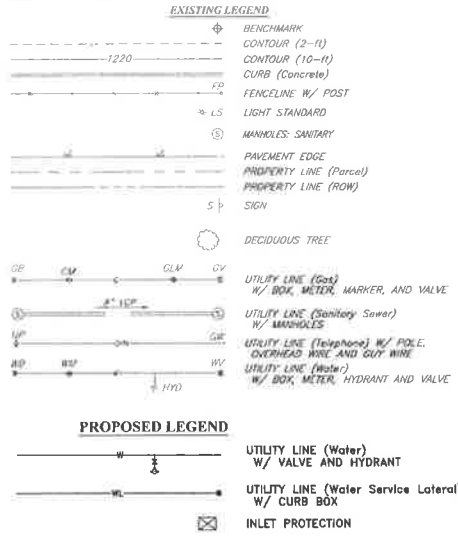
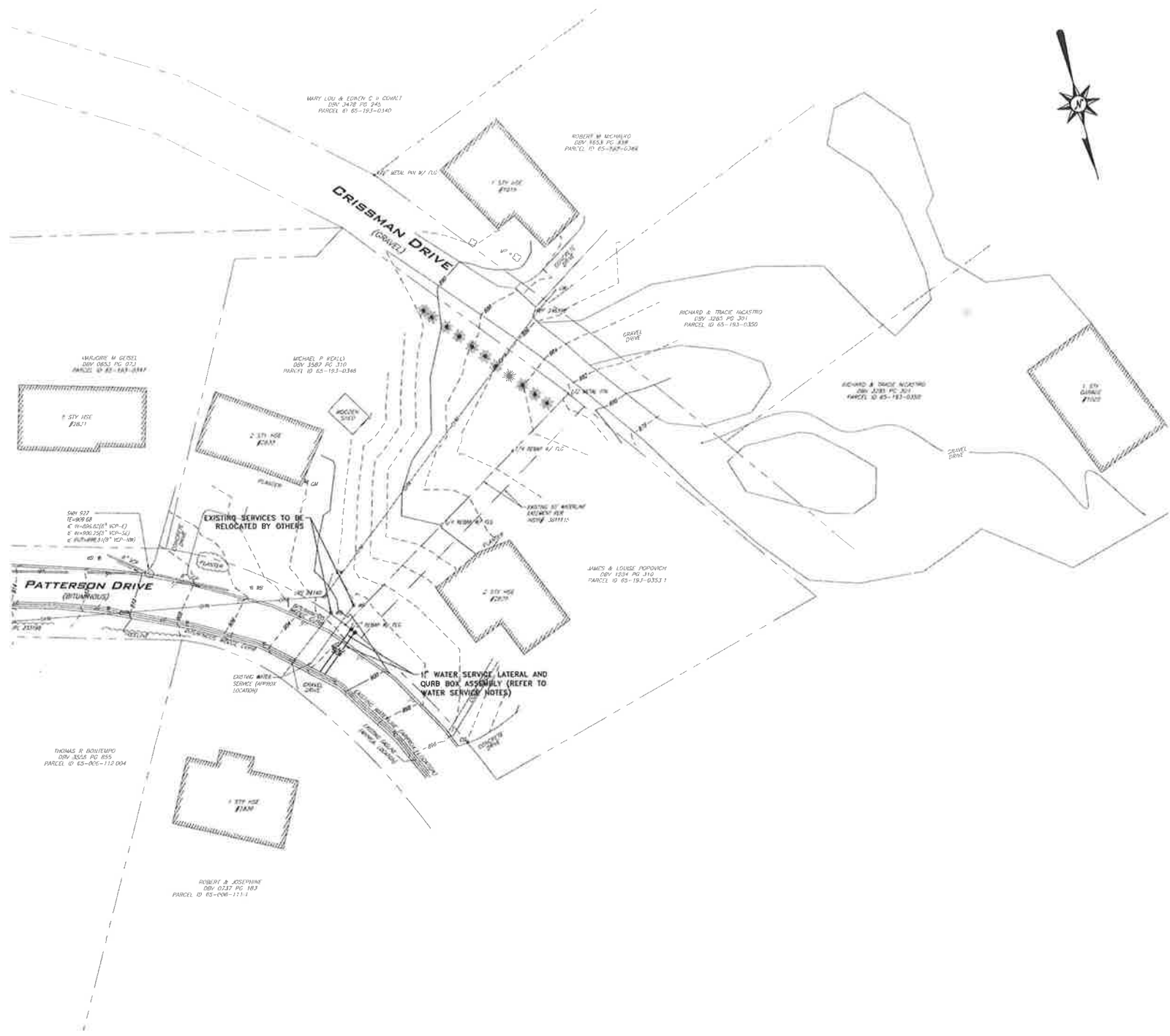
Municipal Water Authority of Aliquippa
140 Bet Tech Drive
Aliquippa, Pennsylvania 15001

Patterson Drive Waterline Replacement
Contract No. 21-07
Shade In
Hopewell Township, Beaver County, Pennsylvania



Waterline Plan

Sheet Title	Waterline Plan
Drawing No.	474-057-2
Sheet No.	2 of 5



- NOTES:**
1. COMPLETELY REMOVE EXISTING VALVE BOXES TO BE ABANDONED TO A MINIMUM 18-INCH DEPTH (PAY ITEM). REFER TO STANDARD DETAILS FOR RESTORATION REQUIREMENTS.
 2. FOR ALL CONNECTIONS TO EXISTING WATERLINE, PROVIDE ALL NECESSARY PIPE, FITTINGS AND/OR ADAPTORS TO MAKE A COMPLETE WATERTIGHT CONNECTION. ALL PIPING, FITTINGS, VALVES, ETC. SHOWN ON THE DETAIL ARE INCIDENTAL TO THAT DETAILS PAY ITEM.

- WATER SERVICE NOTES:**
1. CONSTRUCT WATER SERVICE CONNECTIONS FOR HSE #1019 AND HSE #1025 AS NECESSARY FOR SERVICE RELOCATION BY OTHERS WITHIN EXISTING WATERLINE EASEMENT.
 2. CONTRACTOR TO COORDINATE WITH HOMEOWNERS AND CONFIRM FINAL LOCATION FOR RECONNECTION WITHIN EXISTING WATERLINE EASEMENT.



Scale: 1"=30'		No.	Date	Description	By	No.	Date	Description	By	No.	Date	Description	By	No.	Date	Description	By	No.	Date	Description	By
1		1	6/1/21	Issued for Bidding	LS																
Drawn By	Checked By	Approved By																			



LSSE
Civil Engineers and Surveyors

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Coraopolis, Pennsylvania 15108
Phone: 412-264-4400
Fax: 412-264-1200
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Filename: 474057sp.dwg
Date: January 2021

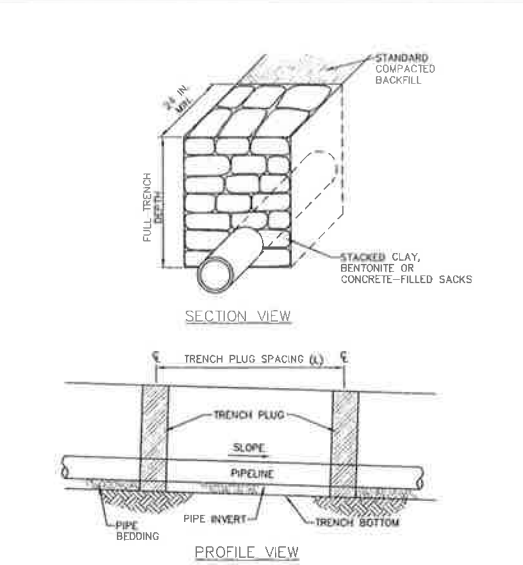
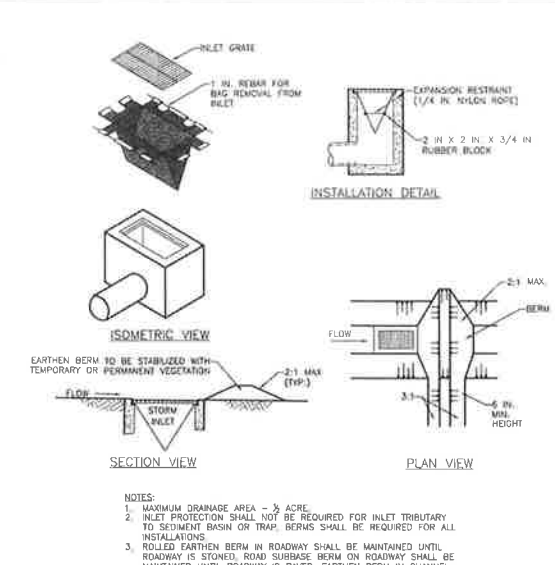
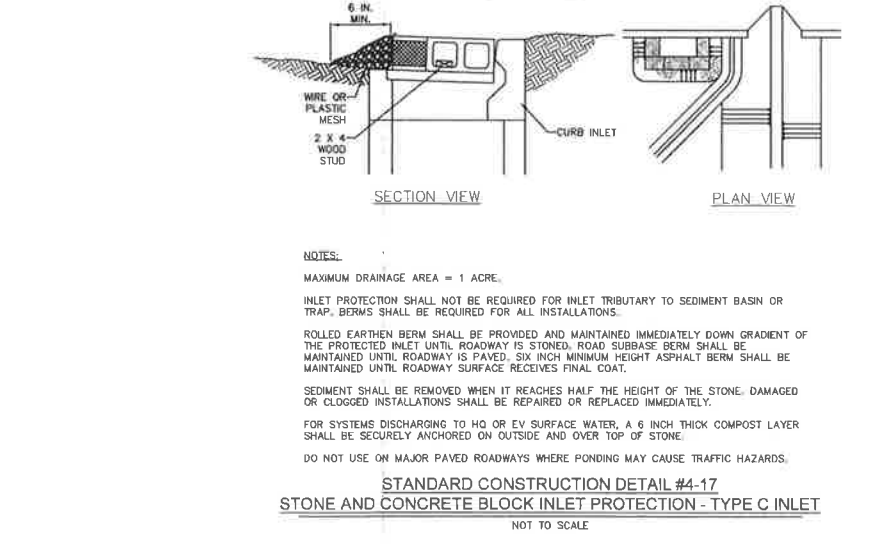
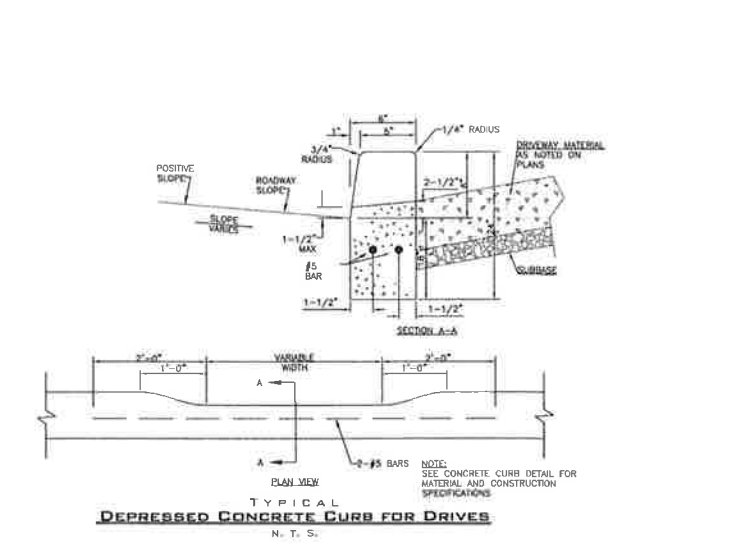
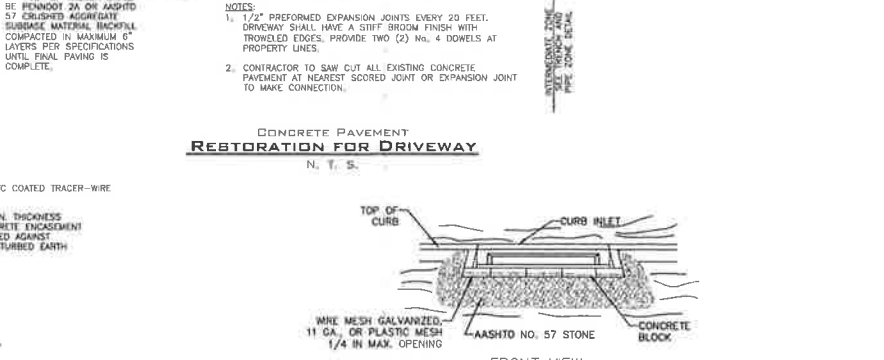
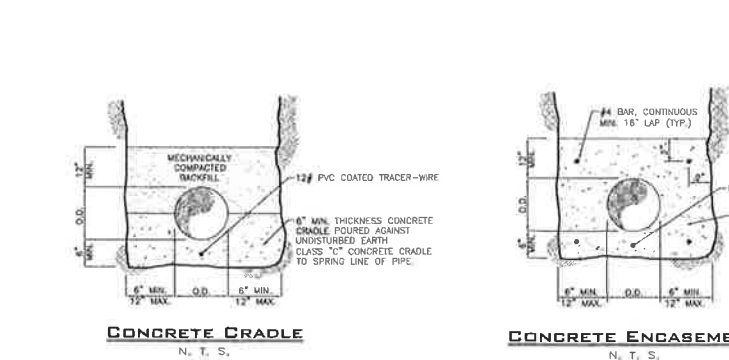
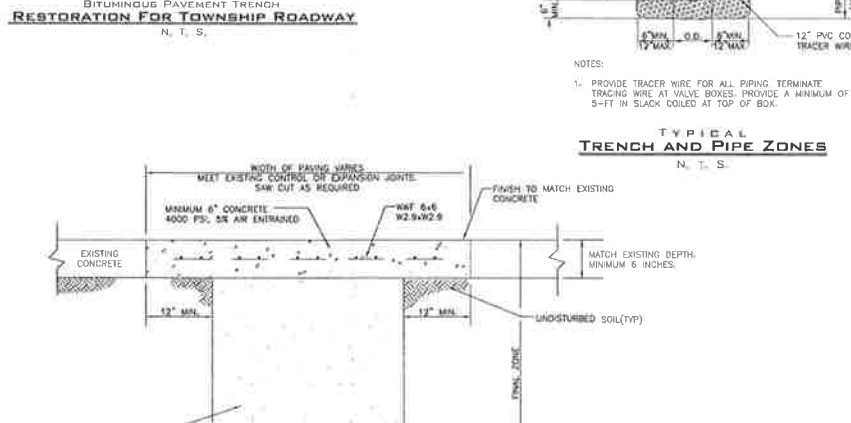
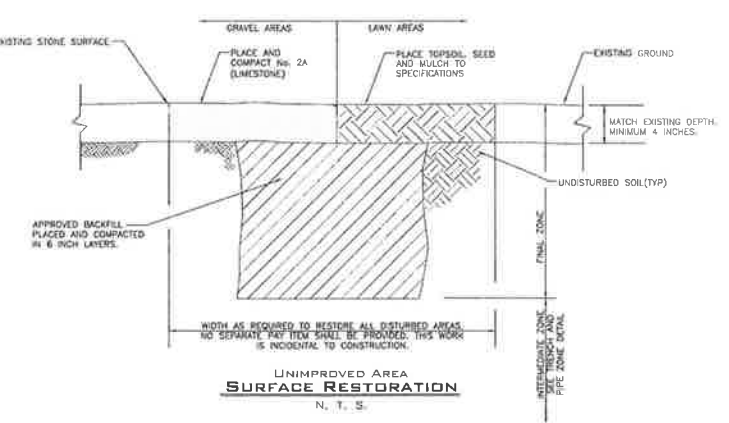
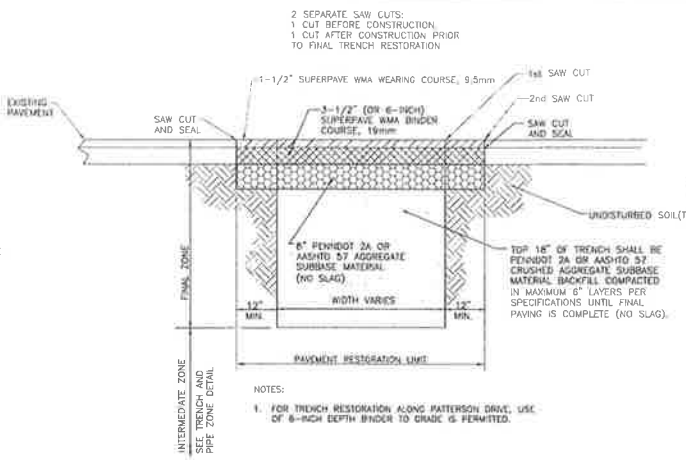
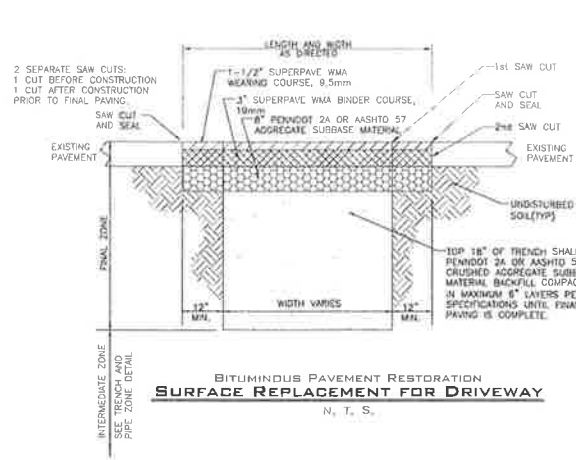
Municipal Water Authority of Aliquippa
140 Bet Tech Drive
Aliquippa, Pennsylvania 15001

Shade in:
Hopewell Township, Beaver County, Pennsylvania

Patterson Drive Waterline Replacement
Contract No. 21-07

Sheet Title: Waterline Plan

Sheet No.: 3 of 5



PA DEP EROSION CONTROL MANUAL TABLE 13.1
MAXIMUM SPACING AND MATERIALS FOR TRENCH PLUGS

TRENCH SLOPE (%)	SPACING (FT)	PLUG MATERIAL
< 5	1000	CLAY, BENTONITE, OR CONCRETE FILLED SACKS
5 - 15	500	CLAY, BENTONITE, OR CONCRETE FILLED SACKS
15 - 25	300	CLAY, BENTONITE, OR CONCRETE FILLED SACKS
25 - 35	200	CLAY, BENTONITE, OR CONCRETE FILLED SACKS
35 - 100	100	CLAY, BENTONITE, OR CONCRETE FILLED SACKS
> 100	50	CEMENT BAGS (NETTED) OR MORTARED STONE

* TOPSOIL MAY NOT BE USED TO FILL SACKS

TEMPORARY SEED MIXTURE (ALL AREAS)

FORMULA AND SPECIES	% BY WEIGHT	PURITY	MINIMUM % GERMINATION	MAX % WEED SEED	SEEDING RATE (LBS. PER 1000 SQ. YD.)
FORMULA E + RYEGRASS VAR. KENTUCKY	100	98	90	0.15	10.0

SPREAD SEED AS FOLLOWS:
FORMULA E - MARCH 15 TO OCTOBER 15

SEEDING FORMULA MUST COMPLY WITH PDOT FORM 408, SECTION 804

PERMANENT SEED MIXTURE (LAWN/YARD AREAS)

FORMULA AND SPECIES	% BY WEIGHT	PURITY	MINIMUM % GERMINATION	MAX % WEED SEED	SEEDING RATE (LBS. PER 1000 SQ. YD.)
FORMULA B + PERENNIAL PASTURE MIXTURE + CREEPING RED FESCUE OR CHENOPODIUM + KENTUCKY BLUEGRASS MIXTURE	100	98	90	0.15	21.0 TOTAL 6.0 11.0

SPREAD SEED AS FOLLOWS:
FORMULA B - MARCH 15 TO JUNE 1
AUGUST 1 TO OCTOBER 15

SEEDING FORMULA MUST COMPLY WITH PDOT FORM 408, SECTION 804

PERMANENT SEED MIXTURE (NON-LAWN/YARD AREAS)

FORMULA AND SPECIES	% BY WEIGHT	PURITY	MINIMUM % GERMINATION	MAX % WEED SEED	SEEDING RATE (LBS. PER 1000 SQ. YD.)
FORMULA W, MODIFIED (Slopes > 3 to 1) + ANNUAL RYEGRASS MIXTURE + TALL FESCUE (FESTUCA ARUNDINACEA) + BROMUS TETRASTACHYUS MIXTURE (LIGULUM) + CRYSTAL FESCUE (FESTUCA CRISTATA) + REDTOP (LIGULUM) + CRYSTAL FESCUE (FESTUCA CRISTATA)	100	98	90	0.15	9.0 TOTAL 1.45 5.80 1.45 15.0

SPREAD SEED AS FOLLOWS:
FORMULA W - APRIL 1 TO JUNE 15
AUGUST 15 TO SEPTEMBER 15
FORMULA D - MARCH 15 TO JUNE 1
AUGUST 1 TO OCTOBER 15

SEEDING FORMULA MUST COMPLY WITH PDOT FORM 408, SECTION 804

MULCHES

MULCH	THICKNESS	APPLY RATE
STRAW	2-4 INCHES	1000 LBS. PER ACRE
WOOD CHIPS	2-4 INCHES	1000 LBS. PER ACRE

MULCH MUST COMPLY WITH PDOT FORM 408, SECTION 805

FERTILIZER AND LIME

FERTILIZER	APPLY RATE
PERMANENT FERTILIZER	10-20 LBS. PER ACRE
TEMPORARY FERTILIZER	10-20 LBS. PER ACRE

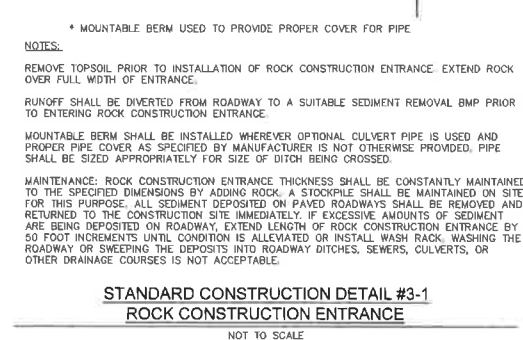
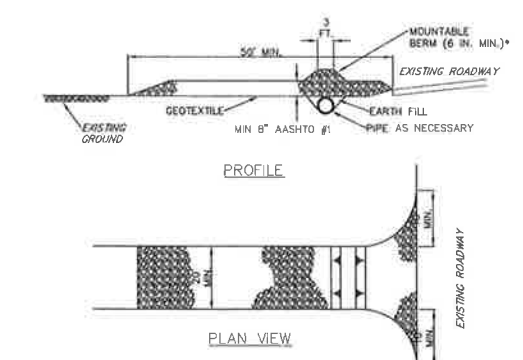
FERTILIZER AND LIME MUST COMPLY WITH PDOT FORM 408, SECTION 805

SEEDING CHART

SEEDING RATE	SEEDING RATE
10.0	10.0
21.0	21.0

STANDARD CONSTRUCTION DETAIL #13-4
TRENCH PLUG INSTALLATION

NOT TO SCALE



LSSE
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