

**NPDES Stormwater Discharges from MS4
Pollutant Reduction Plan
City of Jeannette
Westmoreland County, Pennsylvania**

August 2, 2017

Prepared For:

**City of Jeannette
110 South Second Street
Jeannette, PA 15644
724-527-4000**

Prepared By:

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**MS4 Pollutant Reduction Plan
City of Jeannette
Westmoreland County, Pennsylvania**

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A. Public Participation

As part of the preparation of the MS4, Pollution Reduction Plan (PRP), public participation is required. The City of Jeannette shall complete the following public participation measures listed below, and report in the PRP that each was completed.

- The City shall make a complete copy of the PRP available for public review.
- The City shall publish, in a newspaper of general circulation in the area, a public notice containing a statement describing the plan, where it may be reviewed by the public, and the length of time the City will provide for the receipt of comments. The public notice must be published at least 45 days prior to the deadline for submission of the PRP to DEP.
- The City shall accept written comments for a minimum of 30 days from the date of public notice.
- The City shall accept comments from any interested member of the public at a public meeting or hearing, which may include a regularly-scheduled meeting of the governing body of the municipality or municipal authority that is the permittee.
- The City shall consider and make a record of the consideration of each timely comment received from the public during the public comment period concerning the plan, identifying any changes made to the plan in response to the comment.

City of Jeannette has completed the above-listed Public Participation measures and all required documentation of public participation is included as Appendix A.

- PRP public notice was published in: Tribune Review
- Date PRP public notice was published in newspaper: August 2, 2017
- End date for receipt of written comments (30 days from the date of public notice): September 1, 2017
- Date PRP comments were accepted at a public meeting: August 9, 2017

B. Map

Attach maps that identify land uses and the storm sewershed boundaries associated with the MS4 that discharge to impaired surface waters, and calculate the storm sewershed area. In addition, the proposed location(s) of structural BMP(s) that will be implemented to achieve the required pollutant load reductions must be identified on a map.

The map may be the same as that used to satisfy MCM #3 of the PAG-13 General or Individual Permit, with the addition of land use, the storm sewershed boundary, and locations of proposed BMPs, or may be a different map.

The map must be sufficiently detailed to identify the PRP Planning Area relevant to satisfying the requirements of sedimentation reduction and to demonstrate that BMPs will be located in appropriate storm sewersheds to meet the requirements.

NOTE – Delineation of storm sewersheds associated with individual MS4 outfalls is typically necessary in order to determine the PRP Planning Area. The MS4 may display the storm sewershed for each MS4 outfall.

This map is located in Appendix B.

C. Pollutants of Concern

Identify the pollutants of concern for each storm sewershed or the overall PRP Planning Area.

For all PRPs, MS4s shall calculate existing loading of the pollutant(s) of concern in lb/year; calculate the minimum reduction in loading in lb/year; select Best Management Practice(s) (BMP(s)) to reduce loading; and demonstrate that the selected BMPs will achieve the minimum reductions.

The impaired downstream water is Brush Creek, which has an impairment of Siltation. Since the impairment is siltation, a minimum 10% reduction is required. This MS4 PRP presents the minimum reduction in loading for siltation as pounds per year (lbs/yr).

D. Determine Existing Loading for Pollutants of Concern

Calculate the existing loading, in pounds per year, for the pollutant(s) of concern in the PRP Planning Area.

There are several possible methods to estimate existing loading, ranging from simplistic to complex. The DEP simplified method was used to estimate existing loading that is acceptable to the DEP is to determine the percent impervious and pervious surface within the urbanized area of the storm sewershed and calculate existing loading by multiplying the developed impervious and developed pervious land area (acres) by pollutant loading rates (lb/acre/year).

Where structural BMPs are currently in place and are functioning, the existing loading estimate may be reduced to account for pollutant reductions from those BMPs.

Table 1 indicates the ten percent sediment loading required to be removed from the streams located within the City.

TABLE 1

**DEVELOPED LAND SEDIMENTS LOADING RATES FOR PA COUNTIES
REFERENCE PAGE 10 PERMIT SECTION**

CATEGORY	Sediment Load Rate	LB/Acre/Year
Impervious Developed	1839.0	
Pervious Developed	264.96	
City of Jeannette Urban Area Acres	1537.9	

LAND TYPES			
Land Cover	Percentage	Jeannette Urban Acres	Acres
Pervious (48%)	0.48	1537.9	738.19
Impervious (52%)	0.52	1537.9	799.71

The Existing Loading using DEP's Simplified Method			
Land Types	Acres	Sediment Load Rate Lbs/Acre/Year	Total Sediment Lbs/Year
Pervious	738.19	264.96	195590.82
Impervious	799.71	1839.0	1470666.69
TOTAL SEDIMENT LOAD			1666257.51
10% Sediment Reduction Required			166625.75

MS4s may claim “credit” for structural BMPs implemented prior to development of the PRP to reduce existing loading estimates. In order to claim credit, identify all such structural BMPs in Section D of the PRP along with the Lbs/Year of each BMP that can be deducted.

Table 2 identified and summarized the pounds of sediment per year for each BMP that was deducted from the City's total sediment load requirement.

TABLE 2

SEDIMENT LOAD REDUCTION USING EXISTING BMPs

<u>Existing BMPs</u>	<u>Lbs/Sediment/Year</u>
Westmoreland County Landbank Pond	2288.17
Larbon LLC Pond	4452.07
Total	6740.51

Total Sediment Load Less Existing BMPs	$1666257.51 - 6740.24 = 1659517.27$
10% Sediment Reduction Required	165951.73 Lbs/Year

LARBON LL Pond (Formerly Jeannette Hospital)			
Address	Impervious Area Acres	Impervious Sediment Load LBS/Year (1839)	BMP Effectiveness Values (60%)
600 Jefferson Avenue	3.849	7078.311	4246.9866
	Pervious Area Acres	Load LBS/Year	BMP Effectiveness Values (60%)
	1.29	341.7984	205.07904
	Total Area Acres	Total Sediment Load LBS/Year	BMP Effectiveness Values (60%)
OVERALL TOTAL	5.139	7420.1094	4452.06564

Westmoreland County Landbank Pond (Formerly Monsour Hospital)			
Address	Impervious Area Acres	Impervious Sediment Load LBS/Year (1839)	BMP Effectiveness Values (60%)
6437 Route 30	1.8	3310.2	1986.12
	Pervious Area Acres	Pervious Sediment Load LBS/Year (264.96)	BMP Effectiveness Values (60%)
	1.9	503.424	302.0544
	Total Area Acres	Total Sediment Load LBS/Year	BMP Effectiveness Values (60%)
OVERALL TOTAL	3.7	3813.624	2288.1744

TABLE 3
EXISTING BMP LOCATIONS

<u>Existing BMP</u>	<u>Latitude</u>	<u>Longitude</u>
Larcon LLC Pond	46°19'13.52"N	79°36'36.85"W
Westmoreland County Landbank Pond	40°18'40.46"N	79°36'45.57"W

E. Select BMPs to Achieve the Minimum Required Reductions in Pollutant Loading

Identify the minimum required reductions in pollutant loading. The City proposes the implementation of BMP(s) or land use changes within the PRP Planning Area that will result in meeting the minimum required reductions in pollutant loading within the Planning Area. These BMP(s) must be implemented within 5 years of DEP's approval coverage under the PAG-13 General Permit or an individual permit, and may be located on either public or private property. If the applicant is aware of BMPs that will be implemented by others (either in cooperation with the applicant or otherwise) within the Planning Area that will result in net pollutant loading reductions, the applicant may include those BMPs within its PRP.

The following future BMPs will be implemented to reduce sediment loading to Brush Creek.

TABLE 4

SUMMARY OF ALTERNATIVES AND SELECTION OF BMPs

<u>Selected BMP</u>	<u>Estimated Sediment Loading Reduction</u> <u>(Lbs/Year)</u>
Street Sweeping	1839
Brush Creek Streambank Stabilization	164963.63
Demolition of Structures	21044.92
Total Sediment Reduction	187847.55
Minimum Required	165951.73

Proposed BMPs exceed minimum required.

City of Jeannette

Street Sweeping Sediment Reduction

Name of Street	Linear Feet (ft)	Width of Street (ft)	Area of Street (ft²)
Magee Avenue	2532	36	91152
Clay Avenue	2178	39	84942
Bullitt Avenue	1727	30	51810
S. 9th Street	690	24	16560
S. 8th Street	524	31	16244
S. 7th Street	666	30	19980
S. 6th Street	1052	36	37872
S. 5th Street	1052	36	37872
S. 4th Street	1052	35	36820
S. 3rd Street	829	36	29844
S. 2nd Street	611	39	23829
S. 1st Street	285	24	6840
Cuyler Place	1424	30	42720
Chambers Avenue	852	24	20448
Total Square Feet			516933
Total Acres			11.87

Total Acres	Sediment Load Rate (lbs/acre/yr)	BMP Effectiveness Value
11.87	1839	0.09
ESTIMATED SEDIMENT REDUCTION (lbs/yr)		
1964.60		

DEMOLITION OF STRUCTURES

<u>Sediment Load</u>		<u>Pre-Demolition</u>	
<u>Land Cover</u>	<u>Sediment Load Rate</u> <u>Lbs/Acre/Year</u>	<u>Acres</u>	<u>Total</u>
Pervious	264.96	3.02	800.18
Impervious	1839	13.37	24587.43
Total Sediment Load			25387.61

<u>Sediment Load</u>		<u>Post Demolition</u>	
<u>Landcover</u>	<u>Sediment Load Rate</u> <u>Lbs/Acre/Year</u>	<u>Acre</u>	<u>Total</u>
Pervious	264.96	16.39	4342.69

ESTIMATED SEDIMENT REDUCTION

<u>Pre-Demolition Sediment Load</u>	<u>Post Sediment Load</u>	<u>Net Reduction in Sediment Load</u>
25387.61	4342.69	21044.92

**CITY OF JEANNETTE
DEMOLITION PROPERTIES**

Name	Address	Tax #	Lot Size - Length x Width	Lot Size - Square Feet	Building Size - Length x Width	Building Size - Square Feet
Alliance Professional Management	506 Western Avenue	1401160399	51' x 83'	4,233	36' x 32'	1,152
Cook, Robert	214 N. 4th Street	1402090085	22' x 120'	2,640	20' x 35'	700
Dye, Timothy	419 Division Street	1401160587	40' x 100'	4,000	20' x 55'	1,100
Gantt, Asenath	507 Lavelle Street	1401160661	38' x 40'	1,520	39' x 36'	1,404
Gantt, Rose	1720 Penn Avenue	1401110137	90' x 200'	18,000	40' x 55'	2,776
Heminger, Conway	426 S. 5th Street	1401163026	16' x 100'	1,600	16' x 50'	800
Herring, Sherran	420 Division Street	1401160556	40' x 61' 3"	2,460	39' x 61'	2,379
McKissock, George	707 Zimmerman Street	1402050082	60' x 100'	6,000	20' x 50'	1,400
O'Bradovich, Michael	507-509 Clay Avenue	1401160094	40' x 122' 6"	4,900	40' x 110'	4,880
Payne, Peter	808 1/2 Western Avenue	1403040014	16' x 110'	1,760	15' x 52'	780
Rhame, Minnie	226 Lafferty Street	1402130147	36' x 131'	4,716	32' x 30'	960
City Of Jeannette	1207 Penn Avenue	1401110121	28'6" x 100'	2,850	24' x 40'	960
City Of Jeannette	1209 Penn Avenue	1401110120	24' x 100'	2,400	20' x 32'	640
City Of Jeannette	317 Clay Avenue	1401160242	20' x 122'6"	2,450	20' x 120'	2,400
City Of Jeannette	304 S. 5th Street	1401162063	24' x 100'	2,400	18' x 65'	1,170
City Of Jeannette	306 S. 5th Street	1401162062	24' x 100'	2,400	18' x 65'	1,170
City Of Jeannette	4 S. 14th Street	1401110080	21'6" x 90'	1,935	20' 40'	800
City Of Jeannette	1504 Penn Avenue	1401110181	37' x 100'	3,700	33' x 65'	2,145
City Of Jeannette	203 N. 8th Street	1401120087	22' x 75'	1,650	20' x 45'	900
Frye, William	709 Bullitt Avenue	1401160009	20' x 58'	1,160	20' x 43'	860
Mckinley, Allen	305 S. 3rd Street	1401162091	20' x 70'	1,400	20' x 52'	1,040
Foote, Monica	129 N. 3rd Street	1402090130	40' x 125'	5,000	32' X 50'	1,600
Creative Reality Solutions	112 Good St	14021320117	38' x 121'	4,598	22' X 45'	990
Payne, Peter	806 1/2 Western Avenue	1403040012	20' x 110'	2,200	20' x 45'	900
Day, Edward	205 N. 2nd Street	1402090250	30' x 100'	3,000	28' x 65'	1,820
Ruggiero, Daniel	716 Chambers Avenue	1401160380	40' x 73'6"	2,940	40' x 55'	2,200
Jones, James	7 12th Street	1401120487	40' x 110'	4,400	38' x 55'	2,090
Jones, James	9 12th Street	1401120488	40' x 110'	4,400	Empty Lot	
Frederick, Martin	501 Cowan Avenue	1401120371	92' x 92' / 2	4,232	38' x 45'	1,710
Losten, Ronald	826 Scott Avenue	1401120075	40' x 150'	6,000	38' x 50'	1,900
Truong, Minh	531 S. 5th Street	1401160517	25' x 100'	2,500	24' x 54'	1,296
Hubish, Neal	252 S. 8th Street	1401120546	16'6" x 100'	1,650	16' x 60'	960
Ruoff, Daniel	414 Magee Avenue	1401160162	122'6" x 140'	17,150	120' x 45'	5,400
			86'6" x 80'	6,920	120' x 25'	3,000
Westmoreland County Ind Dev	600 Bullitt Avenue	1401160085	13.2 Acres	574,992		527,947
	718 Bullitt Avenue	1401160085				
GRAND TOTAL ACRES				16.39		13.37

URBAN STREAMBANK RESTORATION

CITY OF JEANNETTE

Sheet Number #	Linear Feet	BMP Effectiveness Values Lbs/ft/yr (44.88)
P-1	267.66	12012.58
	330	14810.4
	320	14361.6
P-2	1138	51073.44
P-3	988	44341.44
P-4	632	28364.16
	Total Linear Feet	Total BMP Effectiveness Value
	3675.66	164963.62

F. Identify Funding Mechanism(s)

Prior to approving coverage DEP will evaluate the feasibility of implementation for an applicant's PRP. Part of this analysis includes a review of the applicant's proposed method(s) by which BMPs will be funded. Applicants must identify all project sponsors and partners and probable funding sources for each BMP.

Funding sources for the proposed BMP projects outlined in this PRP include the following:

- MS4 General Fund
- Developer Cooperation
- Grant Funding through Growing Greener

- Partnership with Commonwealth of Pennsylvania – Department of Environmental Resources
- Partnership with Commonwealth of Pennsylvania – Department of General Services
- DCED Hazard Mitigation Grant
- Partnership with Westmoreland Industrial Development Corporation

G. Identify Responsible Parties for Operation and Maintenance (O&M) of BMPs

Once implemented, the BMPs must be maintained in order to continue producing the expected pollutant reductions. Applicants must identify the following for each selected BMP:

- The party(ies) responsible for ongoing O&M;
- The activities involved with O&M for each BMP; and
- The frequency at which O&M activities will occur.

MS4 permittees will need to identify actual O&M activities in Annual MS4 Status Reports submitted under the General Permit.

RESPONSIBLE PARTIES FOR OPERATION AND MAINTENANCE OF BMPs

<u>BMP</u>	<u>BMP Responsible Party</u>	<u>BMP O&M Activities</u>
Street Sweeping	City of Jeannette	Per BMP Effectiveness Values
Demolition	City of Jeannette	Per PA BMP Manual
Brush Creek Streambank Restoration	City of Jeannette	Per PA BMP Manual
Westmoreland County Landbank Dry Extended Detention Pond	Westmoreland County	Per PA BMP Manual
Larbon LLC Dry Extended Detention Basin	Developer	Per PA BMP Manual

APPENDIX A

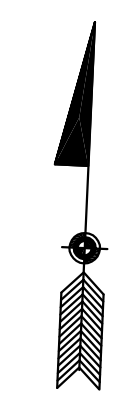
PUBLIC NOTICE AND PUBLIC COMMENTS

PUBLIC NOTICE

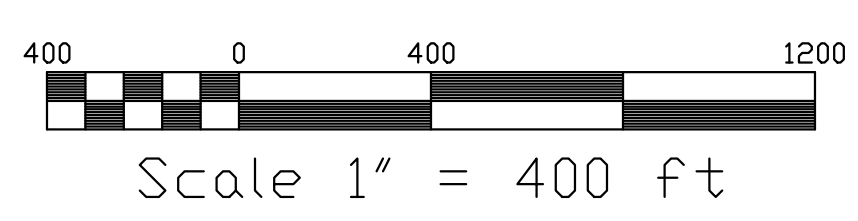
As part of compliance with the City of Jeannette's Municipal Separate Storm Sewer System (MS4) Permit, a Pollutant Reduction Plan (PRP) has been developed for submission to the Pennsylvania Department of Environmental Protection. The PRP proposes implementation of Best Management Practices to reduce discharge of sediment and/or nutrients to impaired surface waters within the municipality. The PRP will be available for public review and comment from August 2, 2017 to September 1, 2017. A copy of the plan will be available on the City's website at cityofjeannette.com. A hardcopy can be reviewed in person during normal business hours at the City of Jeannette's Municipal Building, 110 South Second Street, Jeannette. Written comments may be submitted to the City Manager at this address during the comment period. The plan will be discussed, and the public will have the opportunity to comment at the August 9, 2017 City of Jeannette Council meeting at 6:00 PM.

APPENDIX B

STORMSHED MAP



LEGEND	
---	CITY OF JEANNETTE CORPORATE BOUNDARY
---	BLOCK LINES
---	STREAMS
---	WATERSHED LINES
⑦	WATERSHED DESIGNATION NUMBER
---	STORMSHED LINES
⑫	STORMSHED DESIGNATION NUMBER
---	DIRECTIONAL STORM SEWER LINES
■	INLETS
○	MANHOLES
○	HEADWALLS
BC #001	OUTFALL DESIGNATION NUMBER BRUSH CREEK
BCT #001	OUTFALL DESIGNATION NUMBER BRUSH CREEK TRIBUTARY
BCTT #001	OUTFALL DESIGNATION NUMBER BRUSH CREEK TRIBUTARY TUNNEL
BR #001	OUTFALL DESIGNATION NUMBER BULL RUN
BRT #001	OUTFALL DESIGNATION NUMBER BULL RUN TUNNEL
DR #001	OUTFALL DESIGNATION NUMBER DRY RUN
DRT #001	OUTFALL DESIGNATION NUMBER DRY RUN TRIBUTARY



ANTONACCI DESIGN ASSOCIATES, INC.
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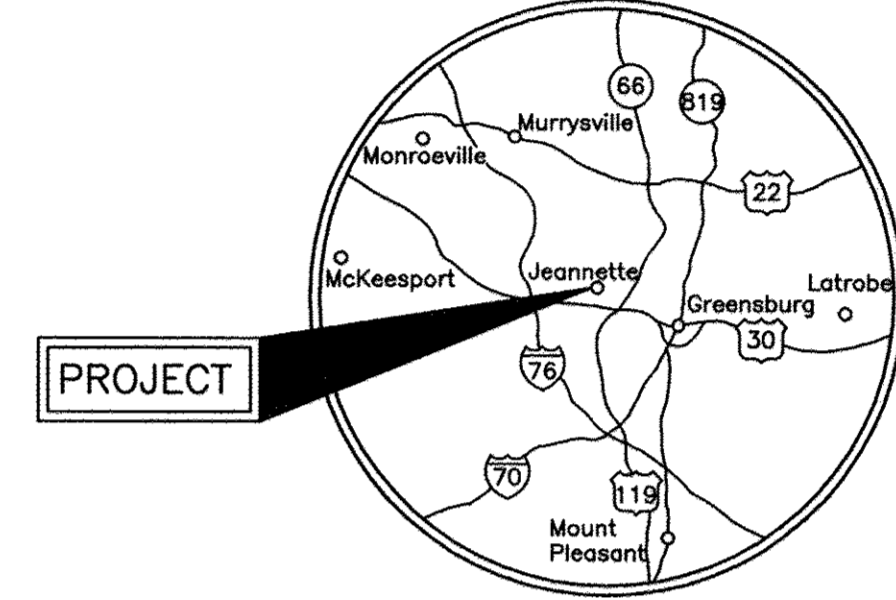
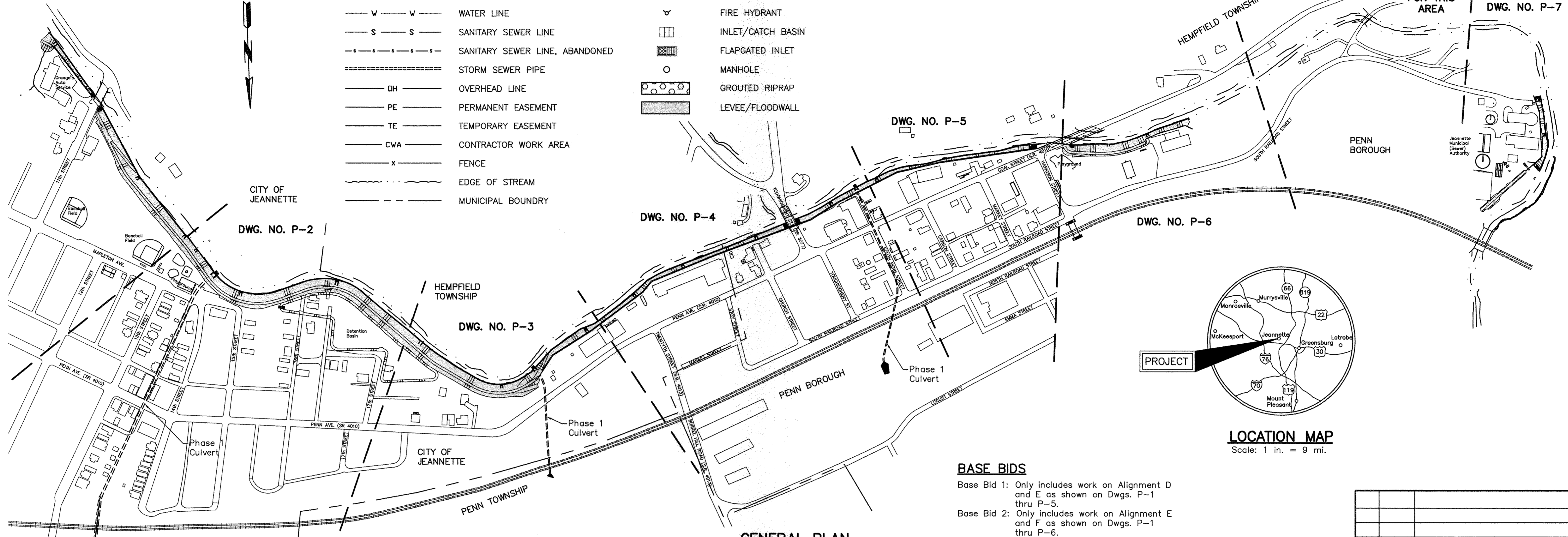
APPENDIX C

***DEP BRUSH CREEK FLOOD
PROTECTION PROJECT***

DWG. NO. P-1

LEGEND

- G — G — GAS LINE
- W — W — WATER LINE
- S — S — SANITARY SEWER LINE
- - - - - SANITARY SEWER LINE, ABANDONED
- ==== STORM SEWER PIPE
- OH — OVERHEAD LINE
- PE — PERMANENT EASEMENT
- TE — TEMPORARY EASEMENT
- CWA — CONTRACTOR WORK AREA
- X — FENCE
- — — — — EDGE OF STREAM
- - - - - MUNICIPAL BOUNDARY
- ○ ○ ○ ○ UTILITY POLE
- ▽ FIRE HYDRANT
- INLET/CATCH BASIN
- ▩ FLAPGATED INLET
- MANHOLE
- ▨ GROUTED RIPRAP
- ▬ LEVEE/FLOODWALL



LOCATION MAP
Scale: 1 in. = 9 mi.

GENERAL NOTES

1. The topography shown on the drawings is based on a survey conducted Summer 1991 and field checked through November 2009.
2. All elevations are based on N.G.V.D. 29. Elevations of features are to be taken from bench marks (B.M.) listed on the drawings.
3. Existing contours and existing ground lines are intended to show the general ground configuration. Payment for excavation and fill items will be based upon survey cross sections made by the Department immediately prior to commencement of work.
4. Data concerning utilities has been obtained from available information. Accuracy or completeness of this data is not guaranteed. See Utility Listing on this drawing.
5. The Contractor's attention is drawn to the "Sponsor Adjustment" tables. The items listed are not part of the Contract. See General Requirement, Special Provision - Sponsor Adjustments.
6. Rights-of-Way Acquisition drawings which show more detailed dimensions for rights-of-way and Contractor's working area limits are on file at the Office of Water Management, Department of Environmental Protection, Harrisburg, Pennsylvania. These drawings will be furnished to the successful bidder.
7. Minor adjustments in alignment and grade may be made to facilitate construction with the approval of the Department.
8. Clearing and grubbing is not shown on the drawings but it shall extend to the permanent easement line unless directed otherwise by the Department.
9. Indiscriminate cutting of trees will not be permitted. Approval of the Department will be required prior to cutting any trees. See Technical Specifications 8 - Clearing and Grubbing.
10. The Contractor shall fill and/or grade areas adjacent to the new construction for positive drainage as directed by the Department.
11. All seeding shall be Type 1 unless otherwise noted.
12. Spoil and/or borrow areas are to be secured by the Contractor at his cost. See General Requirement, Special Provision - Securing Borrow and/or Spoil Areas.
13. (No.) indicates pay item numbers which correspond to those in the Bid Form.
14. Concrete Notes are shown on Drawing No. D-1.
15. The upstream end of the project ties into high ground at Sta. 2+00D on property owned by the Redevelopment Authority of the County of Westmoreland. This property is a former manufacturing site and excavation may expose an inert waste material known as cullet monofill. Exposed material must be contained onsite with a 2 foot thick layer of cover soil. The Contractor shall contact the DEP-Southwest Regional Office (Attn: Ed Bates 724-925-5405) at least 30 days prior to excavation in this area. A DEP Regional Representative must be onsite during excavation in this area.

GENERAL PLAN

Scale: 1 in. = 200 ft.
Scale: 0 100 200 Feet

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL

PA ONE CALL SYSTEM, INC. 1-800-242-1776	POCS SERIAL NUMBERS	
	20092250649	20092250958
	20092250650	20092291966
	20092250956	20092291967
	20092250957	20092291968

UTILITY LISTINGS

COMPANY	TYPE OF UTILITY	ADDRESS
Allegheny Power Company	Electricity	143 West Penn Drive Jeannette, PA 15644-3098
Columbia Gas Transmission LLC	Gas Transmission	Rt. 1, Box 136 Smithfield, WV 26437
Comcast	Communication	201 N. Tremont Ave. Greensburg, PA 15601
City of Jeannette	Sanitary Sewer	110 S. Second St. Jeannette, PA 15644
Dominion Transmission Inc. Murrysville	Gas Transmission	P.O. Box 2450 Clarksburg, WV 26302-2450
Jeannette City Municipal Authority	Sanitary Sewer	1000 S. Railroad St. P.O. Box 294 Penn, PA 15675-0294
Verizon Pennsylvania Inc.	Communication	201 Stanwix St. 4th Floor Pittsburgh, PA 15222
Municipal Authority of Westmoreland County	Sanitary Sewer	124 Park & Pool Rd. New Stanton, PA 15672
Hempfield Township	Sanitary Sewer	1132 Woodward Dr. Suite A Greensburg, PA 15601
Penn Borough	Sanitary Sewer	Harrison Ave. Penn, PA 15675

Note: The Contractor shall comply with Act 287 as amended by Act 187 of 1996 of the General Assembly which defines the procedures for notification to Public Utilities prior to excavation, drilling or demolition work using power equipment or explosives.

BASE BIDS

- Base Bid 1: Only includes work on Alignment D and E as shown on Dwg. P-1 thru P-5.
- Base Bid 2: Only includes work on Alignment E and F as shown on Dwg. P-1 thru P-6.
- Base Bid 3: Includes work on all Alignments as shown on Dwg. P-1 thru P-7.

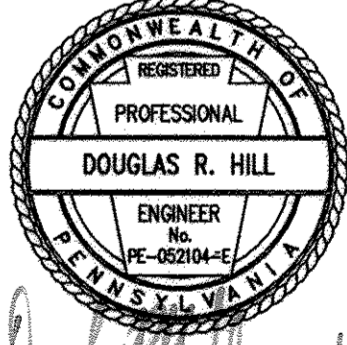
HYDROLOGY DATA

- Reach 1: RR Culvert at Treatment Plant to Tributary above Youghiogheny Street Bridge. Drainage Area = 18.9 square miles. Q design = Q100 = 4235 cfs.
 - Reach 2: Tributary above Yough Street Bridge to 14th Street Run. Drainage Area = 16.6 square miles. Q design = Q100 = 3840 cfs.
 - Reach 3: 14th Street Run to above 11th Street Bridge. Drainage Area = 15.5 square miles. Q design = Q100 = 3600 cfs.
- Freeboard = 4.0 ft. (min.)

Water Surface at Bridges

- Coal Street Bridge: The design Q water surface elevation 966.5 is against the bridge low chord (966.1)
- Youghiogheny Street Bridge: The design Q water surface elevation 968.1 is below the bridge low chord (969.0)
- 11th Street Bridge: The design Q water surface elevation 974.8 is below the bridge low chord (976.9)

NO.	DATE	REVISION	APPR.
SUBMITTED			
APPROVED			
APPROVED			



PROFESSIONAL'S SIGNATURE: [Signature] DATE: 3/25/14 PROFESSIONAL'S SIGNATURE: DATE:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF WATER MANAGEMENT

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

PROJECT NO. D.G.S. 182-7, PHASE 2

CITY OF JEANNETTE AND
PENN BOROUGH
FLOOD PROTECTION PROJECT

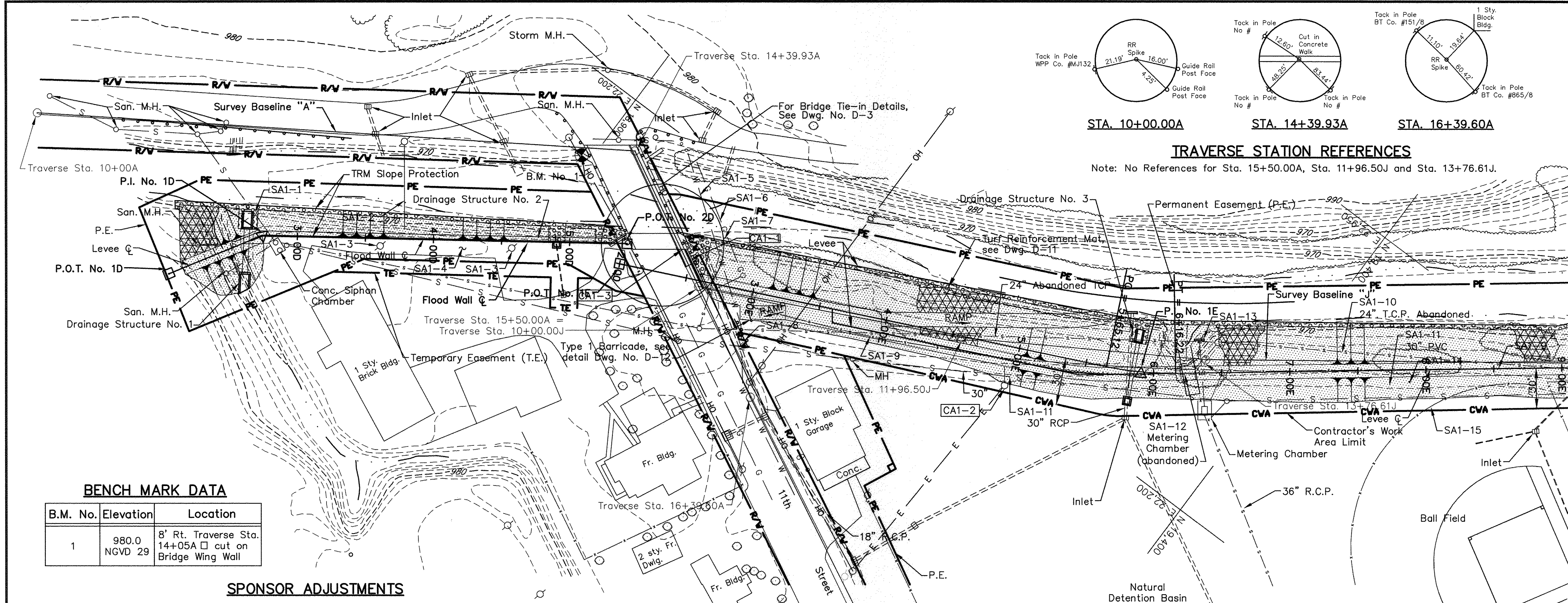
CITY OF JEANNETTE
AND PENN BOROUGH WESTMORELAND CO., PA

GENERAL PLAN

DRAWN BY	W.G.F.	DATE	3/25/14	DRAWING NO.	
CHECKED BY		SCALE	As Shown		

GP-1

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY CONTRACTOR AT THE SITE.



P.O.T. NO. 1D
 N 18,702.50
 E 22,508.50
 Sta. 2+00D

P.I. NO. 1D
 N 18,741.00
 E 22,444.50
 $\Delta = 23'-19"-15"$
 Sta. 2+74.69D

P.O.T. NO. 2D
 N 18,958.50
 E 22,288.50
 Sta. 5+42.35D

P.O.T. NO. 1E
 N 18,963.00
 E 22,303.50
 Sta. 2+00E

CURVE NO. 1
 P.I. No. 1E { N 19,317.00
 E 22,138.00
 $\Delta = 12'-46"-34"$
 D = 25'
 R = 229.18 ft.
 T = 25.66 ft.
 L = 51.10 ft.
 P.C. Sta. 5+65.12E
 P.T. Sta. 6+16.22E

TRAVERSE STATION REFERENCES
 Note: No References for Sta. 15+50.00A, Sta. 11+96.50J and Sta. 13+76.61J.

BENCH MARK DATA

B.M. No.	Elevation	Location
1	980.0 NGVD 29	8' Rt. Traverse Sta. 14+05A cut on Bridge Wing Wall

SPONSOR ADJUSTMENTS

No.	Description	Location	Offset	Adjustments Required
SA1-1	24" TCP	2+80D	Lt.	Encase in concrete under levee
SA1-2	Guy Wire across stream	3+80D	Lt.	Relocate
SA1-3	Utility Poles	3+65D to 4+50D	Rt.	Relocate
SA1-4	Gravel Parking Area	3+50D to 5+30D	Rt.	Replace as necessary
SA1-5	Water Line	2+85E	Varies	Encase in concrete under levee
SA1-6	Gas Line and Marker	2+70E	Varies	Encase in concrete under levee, relocate marker
SA1-7	24" CMP	2+70E	Varies	Encase in concrete under levee
SA1-8	Guide Rail	3+00E	Rt.	Relocate
SA1-9	Chain Link Fence	3+00E to 9+12E	Varies	Remove
SA1-10	24" TCP Sewer Line (abandoned) and Manholes	3+70E to 9+12E	Varies	Slurry fill or remove under levee. See Note 4
SA1-11	30" PVC Sewer Line and Manhole	4+50E to 9+12E	Varies	Relocate or raise manhole and encase pipe in concrete under levee. See Note 5
SA1-12	Metering Chamber (abandoned)			Slurry fill or remove
SA1-13	36" RCP and Headwall	6+35E	Varies	Encase pipe in concrete under levee, extend pipe, and relocate headwall to match levee slope.
SA1-14	Flagpole Monument	7+85E	Rt.	Relocate
SA1-15	Ball Field Fence	7+90E to 8+20E	Rt.	Remove within 10' of levee toe
SA1-16	Chain Link Fence	8+98E to 9+12E	Rt.	Remove within 10' of levee toe
SA1-17	Floor and Roof Drains	3+00D to 5+30D	Varies	Install flap gates or check valves. Extend pipes if necessary.

TRAVERSE DATA

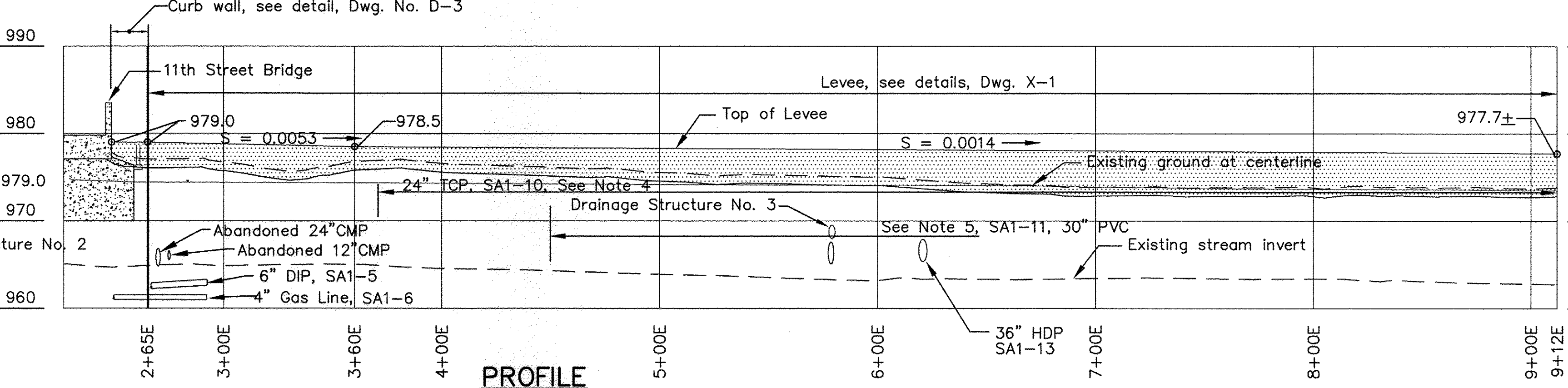
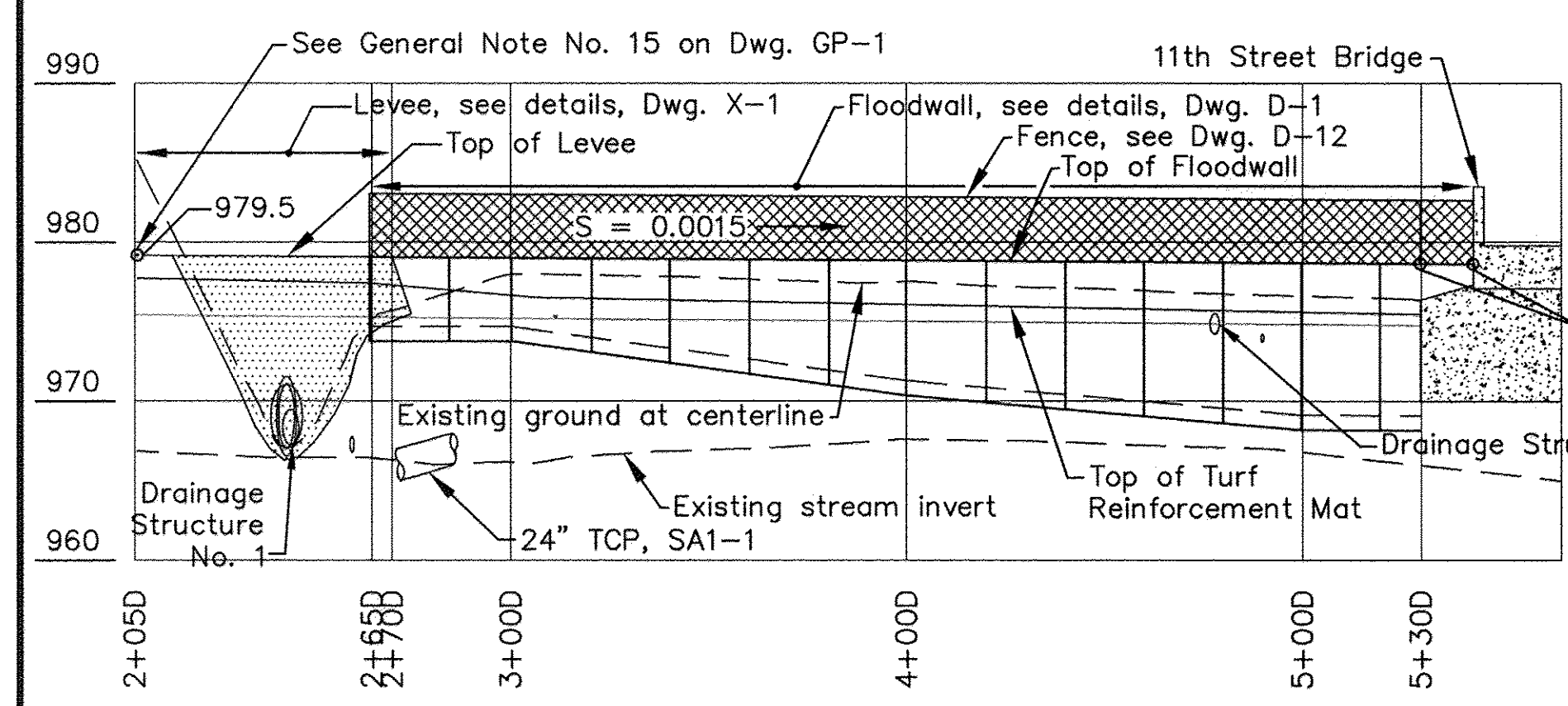
Traverse Station	Coordinates	
	North	East
10+00A	18,554.43	22,471.90
14+39.93A	18,922.06	22,230.26
15+50.00A	19,019.24	22,281.94
16+39.60A	19,098.35	22,324.01
11+96.50J	19,195.86	22,195.81
13+76.61J	19,348.92	22,100.89

CONTRACTOR ADJUSTMENTS (12)

No.	Description	Location		Adjustment Required
		Station	Offset	
CA1-1	Guide Rail	2+63E		Remove and replace after construction
CA1-2	Light Pole	5+00E	Rt.	Protect pole and guy wire during construction
CA1-3	Sign	2+46E	Lt.	Remove and replace after construction

NOTES:

- For General Notes, see Dwg. GP-1.
- For Drainage Structure Details, see Dwg. D-6.
- For Concrete Notes, see Dwg. No. D-1.
- An abandoned sewer line, manholes and metering chamber runs parallel to centerline from Sta. 3+70E to Sta. 9+12E and is not shown on the Profile. See Plan and Cross Sections.
- An active sewer line, manholes and metering chamber runs parallel to centerline from Sta. 4+50E to Sta. 9+12E and is not shown on the Profile. See Plan and Cross Sections.
- Construct ramps at Sta. 3+00E and Sta. 4+00E with 10% slope.



PROFILE
 Scale { 1 in. = 40 ft. Horiz.
 1 in. = 10 ft. Vert.

NO.	DATE	REVISION	APPR.

SUBMITTED _____
 PROJECT COORDINATOR - D.E.P.

APPROVED _____
 CHIEF - DIVISION OF PROJECT DEVELOPMENT - D.E.P.

APPROVED _____
 DIRECTOR - BUREAU OF WATERWAYS ENGINEERING AND WETLANDS - D.E.P.

DOUGLAS R. HILL
 REGISTERED PROFESSIONAL ENGINEER
 No. PE-02204-E
 PENNSYLVANIA

PROFESSIONAL'S SIGNATURE _____ DATE 3/25/14 PROFESSIONAL'S SIGNATURE _____ DATE _____

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OFFICE OF WATER MANAGEMENT

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

PROJECT NO. D.G.S. 182-7, PHASE 2

CITY OF JEANNETTE AND PENN BOROUGH FLOOD PROTECTION PROJECT
 CITY OF JEANNETTE AND PENN BOROUGH WESTMORELAND CO., PA

PLAN AND PROFILE
STA. 2+00D TO STA. 5+32D AND STA. 2+60E TO STA. 9+12E

DRAWN BY W.G.F. DATE 3/25/14 DRAWING NO. P-1
 CHECKED BY 443 SCALE As Shown

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY CONTRACTOR AT THE SITE.

CURVE NO. 2

P.I. No. 2E { N 19,599.00
E 21,919.00
Δ = 04°35'55"
D = 25°00'00"
R = 229.18'
T = 9.20'
L = 18.39'
P.C. Sta. 9+38.41E
P.T. Sta. 9+56.80E

CURVE NO. 3

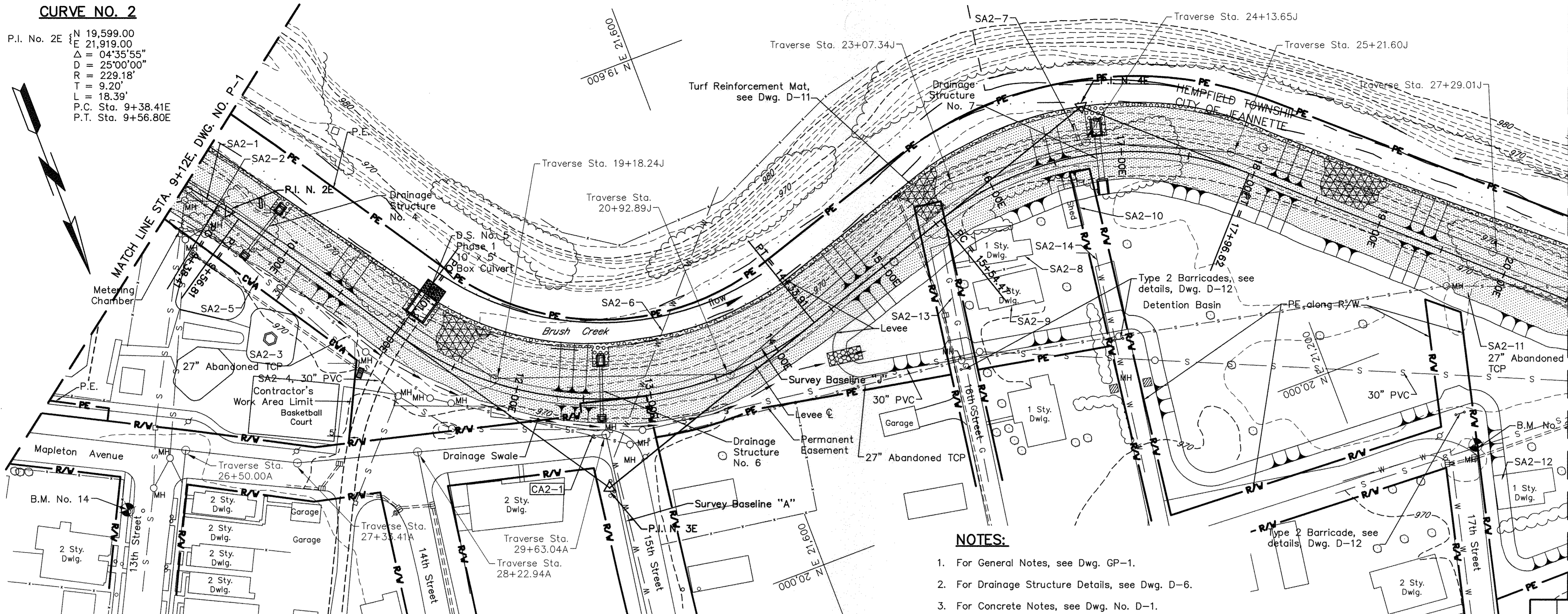
P.I. No. 3E { N 19,890.50
E 21,728.00
Δ = 74°51'29"
D = 22°30'00"
R = 254.65'
T = 194.90'
L = 332.70'
P.C. Sta. 11+01.20E
P.T. Sta. 14+33.90E

CURVE NO. 4

P.I. No. 4E { N 19,751.00
E 21,301.00
Δ = 60°32'14"
D = 25°00'00"
R = 229.18'
T = 133.75'
L = 242.15'
P.C. Sta. 15+54.46E
P.T. Sta. 17+96.61E

TRAVERSE DATA

Traverse Station	Coordinates	
	North	East
26+50.00A	19,752.78	22,011.84
27+33.41A	19,791.00	21,937.71
28+22.94A	19,815.02	21,851.46
29+63.04A	19,852.61	21,716.50
19+18.24J	19,784.39	21,778.81
20+92.89J	19,843.56	21,614.49
23+07.34J	19,769.93	21,413.08
24+13.65J	19,776.70	21,306.99
25+21.60J	19,821.97	21,208.99
27+29.01J	19,959.69	21,053.89



- NOTES:**
- For General Notes, see Dwg. GP-1.
 - For Drainage Structure Details, see Dwg. D-6.
 - For Concrete Notes, see Dwg. No. D-1.
 - Remove existing pipe at Sta. 9+75, Sta. 12+60 and Sta. 16+79. See detail, Dwg. D-12.

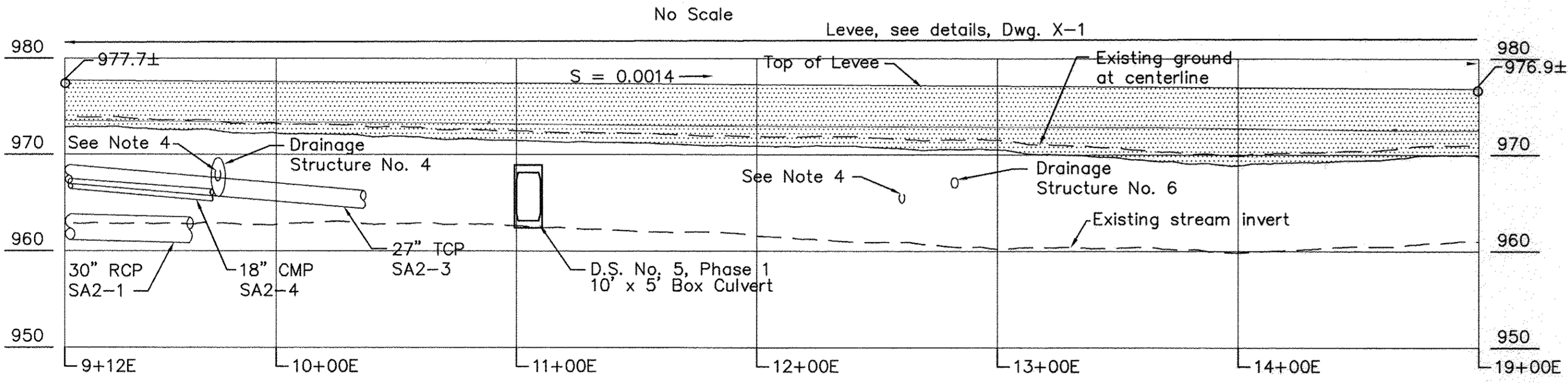
PLAN

Scale: 1 in. = 40 ft.
Scale 0 40 Feet

SPONSOR ADJUSTMENTS

No.	Description	Location		Adjustment Required
		Station	Offset	
SA2-1	18" VCP, Manhole and Endwall	9+15E to 9+70E		Encase pipe in concrete under levee, raise manhole, extend pipe and relocate endwall to match levee slope
SA2-2	Sewer Manhole	9+60E	Rt.	Raise or relocate
SA2-3	27" TCP Sewer Line and Manholes (Abandoned)	9+12E to 10+40E	Rt.	Slurry fill under levee
SA2-4	18" CMP Sewer Line	9+12E to 9+80E	Rt.	Relocate or encase in concrete under levee
SA2-5	Chain Link Fence	9+12E to 10+70E	Rt.	Remove
SA2-6	Water Line	12+75E to 13+40E		Encase in concrete
SA2-7	8" TCP	16+70E	Lt.	Remove or encase in concrete under levee and install flapgate
SA2-8	1 Story Dwelling	15+75E	Rt.	Remove
SA2-9	1 Story Dwelling	15+50E	Rt.	Remove
SA2-10	Shed	16+50E	Rt.	Remove
SA2-11	Sewer Line and Manholes (Abandoned)	19+60E to 20+50E	Rt.	Slurry fill under levee
SA2-12	1 Story Dwelling	20+75E	Rt.	Remove
SA2-13	Gas Line	15+30E	Rt.	Remove within ponding area
SA2-14	Water Line	16+70E	Rt.	Remove within ponding area

TRAVERSE STATION REFERENCES



CONTRACTOR ADJUSTMENTS

No.	Description	Location		Adjustment Required
		Station	Offset	
CA2-1	Mapleton Avenue Pavement	12+00E to 13+00E	Rt.	Protect

BENCH MARK DATA

BM No.	Elevation	Location	BM No.	Elevation	Location
2	967.64 NGVD 29	Manhole Cover at end of 17th Street	14	972.67 NGVD 29	RR Spike in WPP Co. Pole #J9269, 36' left of Traverse Sta. 35+00B

PROFILE

Scale 1 in. = 40 ft. Horiz.
1 in. = 10 ft. Vert.

NO.	DATE	REVISION	APPR.

PROJECT COORDINATOR - D.E.P.
APPROVED: *[Signature]*
CHIEF - DIVISION OF PROJECT DEVELOPMENT - D.E.P.
APPROVED: *[Signature]*
DIRECTOR - BUREAU OF WATERWAYS ENGINEERING AND WETLANDS - D.E.P.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
DOUGLAS R. HILL
PE-022046
3/25/14
PROFESSIONAL'S SIGNATURE DATE PROFESSIONAL'S SIGNATURE DATE

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF WATER MANAGEMENT

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

PROJECT NO. D.G.S. 182-7, PHASE 2
CITY OF JEANNETTE AND PENN BOROUGH
FLOOD PROTECTION PROJECT
CITY OF JEANNETTE AND PENN BOROUGH WESTMORELAND CO., PA

PLAN AND PROFILE
STA. 9+12E TO STA. 20+50E

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY CONTRACTOR AT THE SITE.

SPONSOR ADJUSTMENTS

No.	Description	Location		Adjustment Required
		Station	Offset	
SA3-1	Sewer Line and Manholes (Abandoned)	20+50E to 30+38E	Varies	Slurry fill or remove under levee / floodwall.
SA3-2	30" PVC Sewer Line and Manholes	25+00E to 26+75E	Varies	Encase sewer in concrete under levee and raise manholes
SA3-3	Shed	23+50E	0	Remove
SA3-4	24" H.P. Gas Line	25+68E	0	Encase in concrete under levee
SA3-5	16" H.P. Gas Line	25+90E	0	Encase in concrete under levee
SA3-6	Gas Station Frame Addition	27+50E to 28+00E	0	Remove
SA3-7	Block Wall and Underground Tanks	28+15E to 28+85E	0	Remove
SA3-8	Chain Link Fence	29+92E to 30+38E	0	Remove
SA3-9	Floor drains and roof drains	27+00E to 30+38E	0	Install flapgates or check valves. Extend pipe if necessary.
SA3-10	24" H.P. Gas Line	25+44E	0	Encase in concrete under levee

BENCH MARK DATA

BM No.	Elevation	Location
3	971.18 NGVD 29	RR Spike in WPP Co. Pole #MJ94, 1.5' Lt. Traverse Sta. 46+07A

TRAVERSE DATA

Traverse Station	Coordinates	
	North	East
45+15.14A	20,403.71	20,699.89
46+16.85A	20,383.31	20,600.25
29+70.06J	20,117.58	20,871.75
31+60.54J	20,218.18	20,710.01
33+33.03J	20,234.27	20,538.27
35+37.24J	20,087.69	20,396.08
36+18.06J	20,044.97	20,327.48
37+15.76J	20,003.66	20,238.94

CURVE NO. 5

P.I. No. 5E {
 N 20,115.00
 E 20,903.00
 $\Delta = 10^{\circ}08'32''$
 D = 25^{\circ}00'00"
 R = 229.18'
 T = 20.34'
 L = 40.57'
 P.C. Sta. 21+81.87E
 P.T. Sta. 22+22.44E

CURVE NO. 6

P.I. No. 6E {
 N 20,289.50
 E 20,627.00
 $\Delta = 63^{\circ}20'41''$
 D = 25^{\circ}48'32"
 R = 222.00'
 T = 136.96'
 L = 245.55'
 P.C. Sta. 23+91.68E
 P.T. Sta. 26+37.12E

P.I. NO. 7E

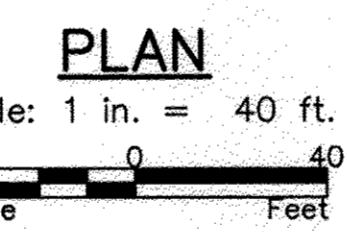
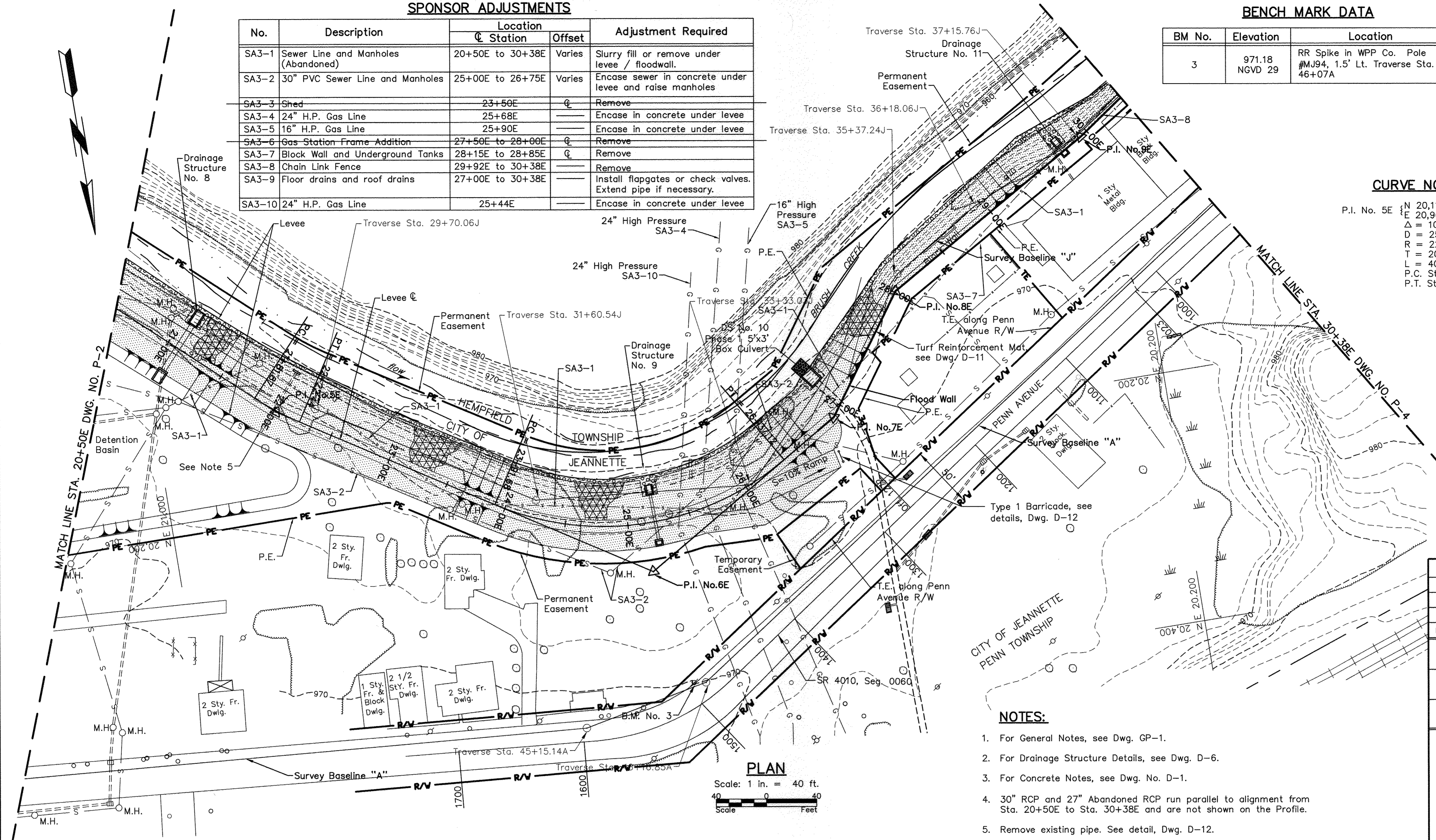
N 20,192.00
 E 20,465.00
 $\Delta = 23^{\circ}-23'-14''$
 Sta. 26+89.24F

P.I. NO. 8E

N 20,101.00
 E 20,400.00
 $\Delta = 24^{\circ}-02'-04''$
 Sta. 28+01.07E

P.I. NO. 9E

N 20,003.50
 E 20,234.00
 $\Delta = 04^{\circ}-28'-36''$
 Sta. 29+93.59E



NOTES:

- For General Notes, see Dwg. GP-1.
- For Drainage Structure Details, see Dwg. D-6.
- For Concrete Notes, see Dwg. No. D-1.
- 30" RCP and 27" Abandoned RCP run parallel to alignment from Sta. 20+50E to Sta. 30+38E and are not shown on the Profile.
- Remove existing pipe. See detail, Dwg. D-12.

NO.	DATE	REVISION	APPR.

SUBMITTED _____
 PROJECT COORDINATOR - D.E.P.
 APPROVED: *[Signature]*
 CHIEF - DIVISION OF PROJECT DEVELOPMENT - D.E.P.
 APPROVED: *[Signature]*
 DIRECTOR - BUREAU OF WATERWAYS ENGINEERING AND WETLANDS - D.E.P.

DOUGLAS R. HILL
 REGISTERED PROFESSIONAL ENGINEER
 No. PE-02294-E
 PENNSYLVANIA
 3/25/14

PROFESSIONAL'S SIGNATURE _____ DATE _____ PROFESSIONAL'S SIGNATURE _____ DATE _____

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OFFICE OF WATER MANAGEMENT

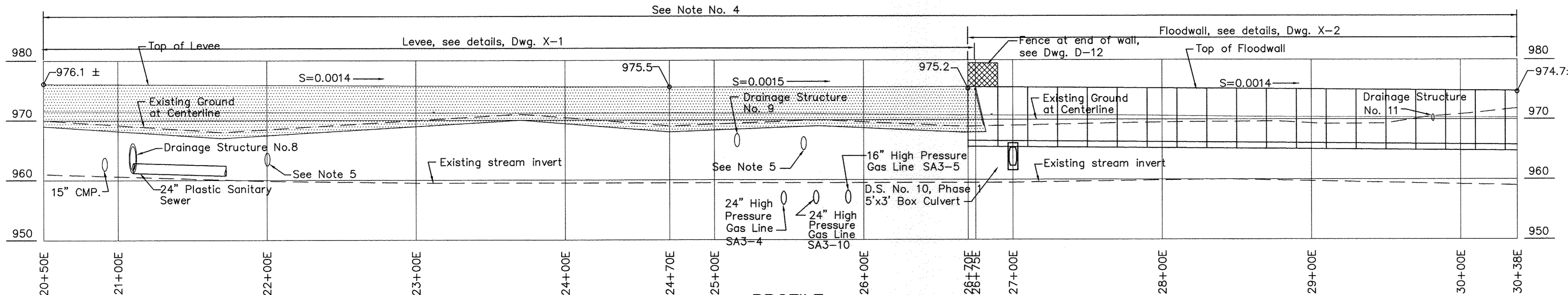
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

PROJECT NO. D.G.S. 182-7 2
CITY OF JEANNETTE AND PENN BOROUGH
FLOOD PROTECTION PROJECT
 CITY OF JEANNETTE AND PENN BOROUGH WESTMORELAND CO., PA

PLAN AND PROFILE
STA. 20+50E TO STA. 30+38E

DRAWN BY: W.G.F. DATE: 3/25/14 DRAWING NO.: P-3
 CHECKED BY: *[Signature]* SCALE: As Shown

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY CONTRACTOR AT THE SITE.

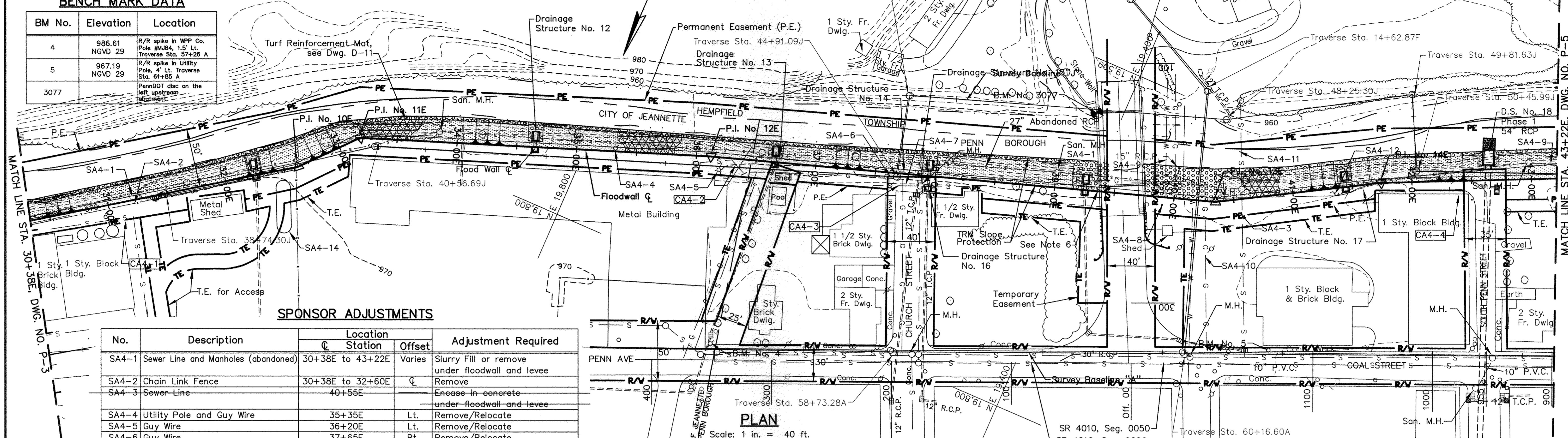


PROFILE
 Scale { 1 in. = 40 ft. Horiz.
 1 in. = 10 ft. Vert.

P.I. NO. 10E	P.I. NO. 11E	P.I. NO. 12E	P.I. NO. 13E	P.I. NO. 14E
N 19,850.00 E 20,014.00 Δ = 13°-37'-40" Sta. 32+61.85E	N 19,807.00 E 19,976.00 Δ = 28°-03'-23" Sta. 33+19.23E	N 19,704.50 E 19,701.50 Δ = 02°-03'-45" Sta. 36+12.24E	N 19,571.00 E 19,300.50 Δ = 11°-44'-22" Sta. 40+34.88E	N 19,501.00 E 19,180.00 Δ = 05°-41'-59" Sta. 41+74.24E

BENCH MARK DATA

BM No.	Elevation	Location
4	986.61 NGVD 29	R/R spike in WPP Co. Pole #MJB4, 1.5" LL. Traverse Sta. 57+26 A
5	967.19 NGVD 29	R/R spike in Utility Pole, 4" LL. Traverse Sta. 61+85 A
3077		PennDOT disc on the left upstream segment



SPONSOR ADJUSTMENTS

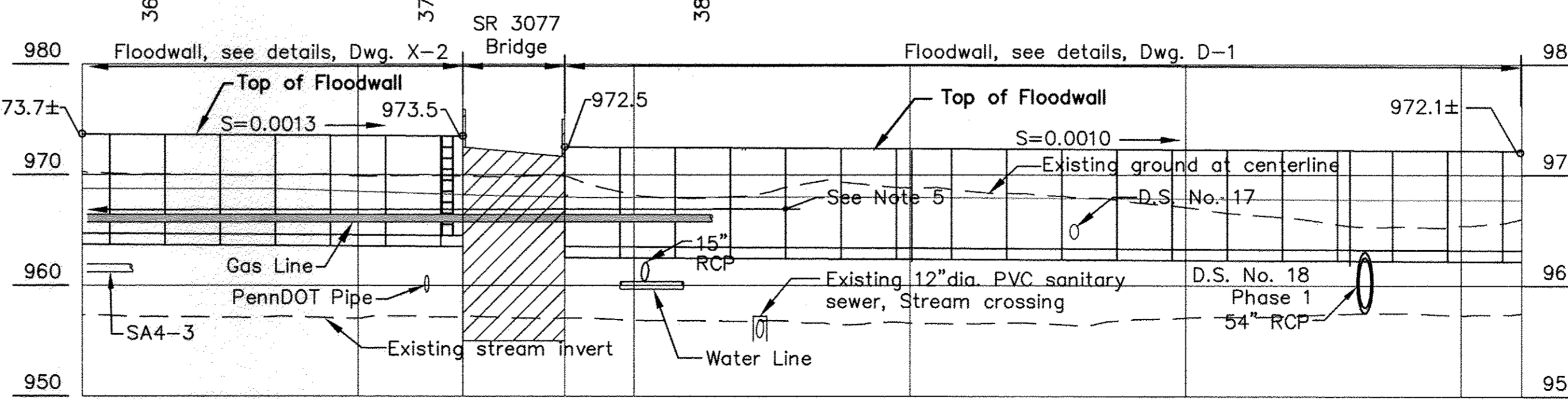
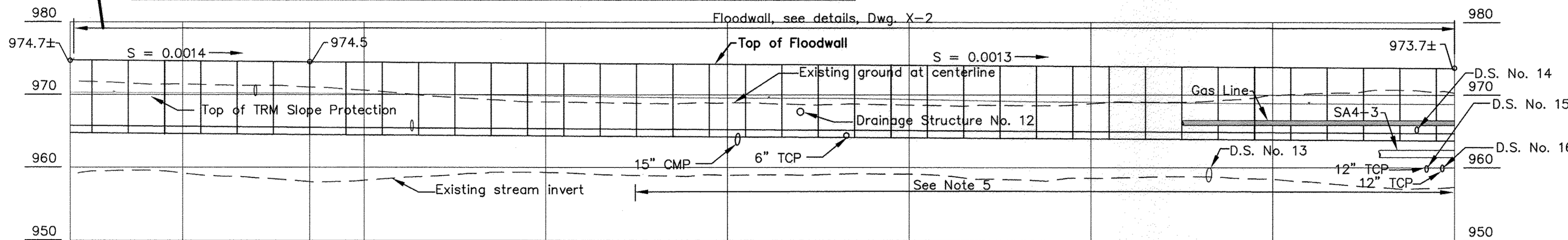
No.	Description	Location Station	Offset	Adjustment Required
SA4-1	Sewer Line and Manholes (abandoned)	30+38E to 43+22E	Varies	Slurry Fill or remove under floodwall and levee
SA4-2	Chain Link Fence	30+38E to 32+60E	℄	Remove
SA4-3	Sewer Line	40+55E		Encase in concrete under floodwall and levee
SA4-4	Utility Pole and Guy Wire	35+35E	Lt.	Remove/Relocate
SA4-5	Guy Wire	36+20E	Lt.	Remove/Relocate
SA4-6	Guy Wire	37+65E	Rt.	Remove/Relocate
SA4-7	Rock Garden, Fence, Posts, Awning	36+80E to 37+80E	Rt.	Remove
SA4-8	Gas Regulator Shed	39+90E	Rt.	Remove
SA4-9	Water Lines	40+25E		Encase in concrete under floodwall and levee
SA4-10	Gas Lines	40+15E		Encase in concrete under floodwall and levee
SA4-11	Sewer Line Stream Crossing	40+55E		Relocate
SA4-12	Gravel parking area	40+40E to 41+70E	Rt.	Replace as necessary
SA4-13	Floor drains and roof drains	30+38E to 43+22E		Install flap gates or check valves. Extend pipes if necessary.
SA4-14	Above ground C02 tank	32+55E	Rt.	Remove

CONTRACTOR ADJUSTMENTS (12)

No.	Description	Location Station	Offset	Adjustment Required
CA4-1	Sewer Connection	30+38E to 31+50E	Rt.	Protect during Construction
CA4-2	Sewer Connection	36+00E to 36+50E	Rt.	Protect during Construction
CA4-3	Sewer Connection	37+60E to 38+20E	Rt.	Protect during Construction
CA4-4	Building Foundation	41+75E to 42+50E	Rt.	Support & Protect during Construction

NOTES:

- For General Notes, see Dwg. GP-1.
- For Drainage Structure Details, see Dwg. D-6.
- For Concrete Notes, see Dwg. No. D-1.
- Existing fence not shown on Profile.
- Abandoned 27" RCP sewer line, not shown on Profile, from Sta. 33+50E to Sta. 43+22E.
- Install Water Level Gage at Sta. 39+45E±. See detail, Dwg. D-1.



TRAVERSE DATA

Traverse Station	Coordinates	
	North	East
52+30.62A	20,042.07	20,090.08
58+73.28A	19,793.23	19,497.55
61+16.60A	19,697.48	19,273.86
14+62.87F	19,487.73	19,343.03
13+93.73G	19,443.41	19,431.97
38+74.30J	19,915.64	20,107.08
40+56.69J	19,807.52	19,960.19
44+91.09J	19,657.94	19,552.36
45+59.70J	19,591.53	19,569.60
48+25.30J	19,504.05	19,318.82
49+81.63J	19,422.86	19,185.23
50+45.99J	19,480.66	19,156.92

TRAVERSE STATION REFERENCES

No Scale
Note: No references for stations on B J

NO.	DATE	REVISION	APPR.

PROJECT COORDINATOR - D.E.P.
 APPROVED: *Douglas R. Hill*
 CHIEF - DIVISION OF PROJECT DEVELOPMENT - D.E.P.
 APPROVED: *Allyson Means*
 DIRECTOR - BUREAU OF WATERWAYS ENGINEERING AND WETLANDS - D.E.P.

COMMONWEALTH OF PENNSYLVANIA
 REGISTERED PROFESSIONAL ENGINEER
 DOUGLAS R. HILL
 PE-02204-E
 PENNSYLVANIA
 3/25/14

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OFFICE OF WATER MANAGEMENT

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

PROJECT NO. D.G.S. 182-7
CITY OF JEANNETTE AND PENN BOROUGH FLOOD PROTECTION PROJECT
 CITY OF JEANNETTE AND PENN BOROUGH WESTMORELAND CO., PA

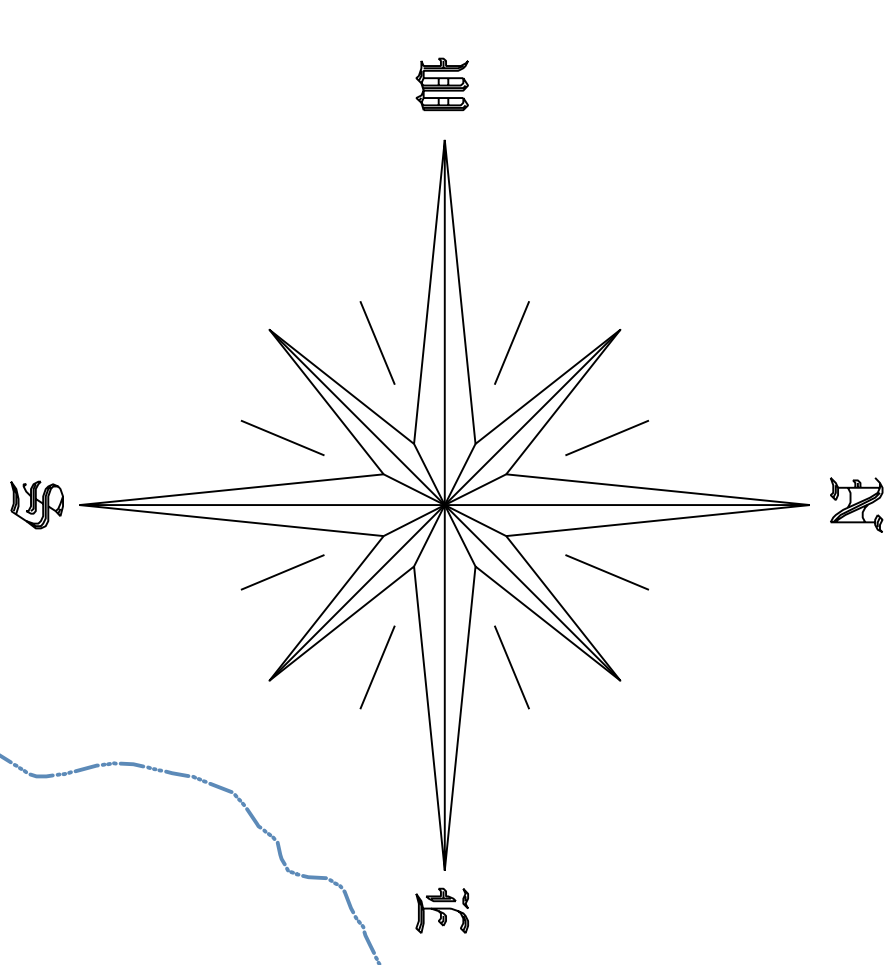
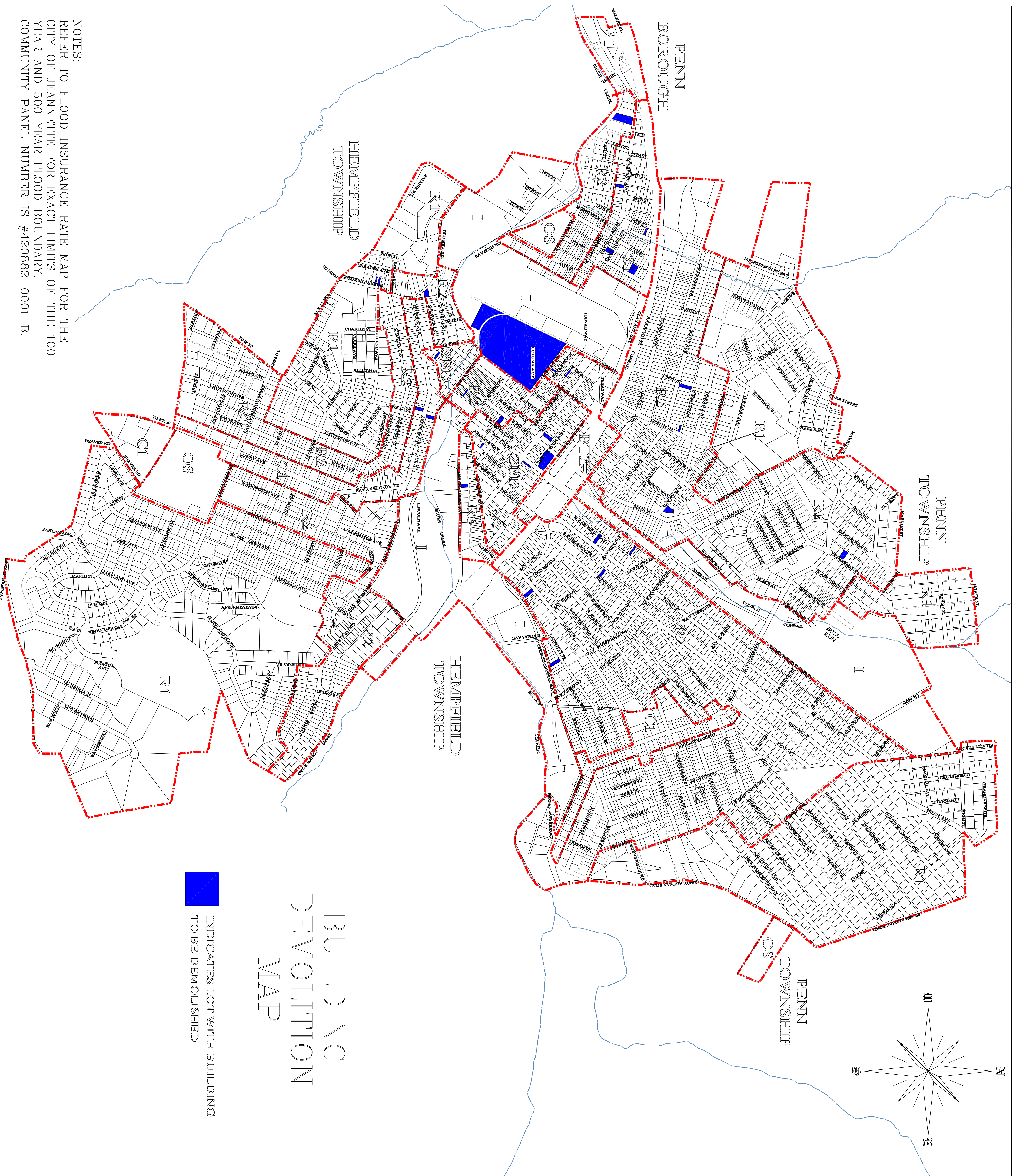
PLAN AND PROFILE
STA. 30+38E TO STA. 43+22E

DRAWN BY: W.G.F. DATE: 3/25/14 DRAWING NO.: P-4
 CHECKED BY: *W.G.F.* SCALE: As Shown

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY CONTRACTOR AT THE SITE.

APPENDIX D

BUILDING DEMOLITION MAP



BUILDING DEMOLITION MAP

 INDICATES LOT WITH BUILDING
TO BE DEMOLISHED

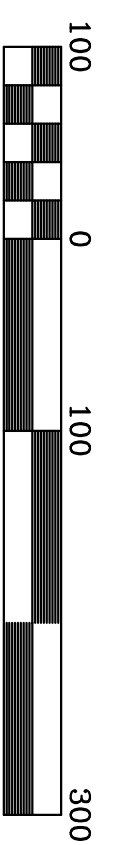
NOTES:
REFER TO FLOOD INSURANCE RATE MAP FOR THE
CITY OF JEANNETTE FOR EXACT LIMITS OF THE 100
YEAR AND 500 YEAR FLOOD BOUNDARY.
COMMUNITY PANEL NUMBER IS #420882-0001 B.

CITY OF JEANNETTE

ANTONACCI DESIGN ASSOCIATES, INC.
220 S. FIFTH STREET JEANNETTE, PA 15644
(724) 527-7771 FAX (724) 527-1599
EDWARD.ANTONACCI@VERIZON.NET

APPENDIX E

STREET SWEEPING PLAN



DRAWN BY: DENNIS V. MULVEHILL DATE: JUNE 2, 2017 DWG. NO.:	APPROVED BY: PROJ. NO.: DWG. NO.:	ANTONACCI DESIGN ASSOCIATES, INC. 220 S. FIFTH STREET JEANETTE, PA 15644 (724) 527-7771 FAX (724)527-1599 EDWARD.ANTONACCI@VERIZON.NET	PROJECT 2017 CITY OF JEANETTE MS4 POLLUTION REDUCTION PROJECT	SHEET NAME STREET SWEEPING PLAN SHEET NO. 1
--	---	--	---	---