

APPENDIX B

MANNING'S ANALYSIS –
FINLEYVILLE-ELRAMA ROAD
CONNECTION

Finleyville El-Rama Road Sewer Line Extension
Lift Station Improvements
Manning's Analysis

Pipe ID	SMH (Upstream)	SMH (Downstream)	Invert Elev. (Upstream)	Invert Elev. (Downstream)	Length (ft)	Slope (%)	Diameter (in)	n Value	Full Flow Cap. (GFS)	Full Flow Velocity (FPS)	Full Flow Cap. (MGD)	Full Flow Cap. (GPD)	Anticipated Flow (GPD)	Remaining Capacity (GPD)
FINLEYVILLE-ELRAMA RD TO COAL BLUFF RD														
2350	39-71 (*)	39-69 (*)	1162.17	1150.98	189	5.92	8	0.013	2.9	8.4	1.9	1,899,005	121,600	1,777,405
2349	39-69 (**)	39-68 (**)	1149.50	1140.00	150	6.33	8	0.013	3.0	8.7	2.0	1,964,076	123,200	1,840,876
2348	39-67 (**)	39-66 (**)	1130.72	1125.39	145	6.40	8	0.013	3.1	8.8	2.0	1,974,386	124,800	1,849,586
2347	39-66 (**)	39-65 (**)	1125.39	1120.39	80	6.66	8	0.013	3.1	8.9	2.0	2,014,469	126,400	1,888,069
2346	39-65 (**)	39-64 (**)	1120.39	1116.61	45	11.11	8	0.013	4.0	11.5	2.6	2,601,482	129,600	2,471,882
2341	39-64 (**)	39-63 (**)	1116.61	1099.86	100	3.78	8	0.013	2.3	6.7	1.5	1,517,358	136,000	1,381,358
381	39-63 (**)	39-62 (**)	1099.86	1081.03	193.98	8.63	8	0.013	3.5	10.2	2.3	2,293,353	137,600	2,155,753
380	39-62 (**)	39-61 (**)	1077.53	1054.79	230.30	7.94	8	0.013	3.4	9.8	2.2	2,199,061	139,200	2,059,861
377	39-61 (**)	39-59 (**)	1054.79	1031.38	393.17	5.95	8	0.013	2.9	8.4	1.9	1,904,375	148,800	2,053,507
	39-59 (**)	39-58 (**)	1031.38	1015.62	157.17	10.03	8	0.013	3.8	11.0	2.5	2,471,356	331,200	2,140,156
FINLEYVILLE-ELRAMA RD TO PCSA INTERCEPTOR														
383	39-58 (**)	39-57 (**)	1010.82	1001.14	358.58	2.70	8	0.013	2.0	5.7	1.3	1,282,291	331,200	951,091
384	39-57 (**)	39-56 (**)	999.64	991.24	248.94	3.37	8	0.013	2.2	6.4	1.4	1,433,621	332,800	1,100,821
385	39-56 (**)	39-55 (**)	986.74	976.99	275.90	3.53	8	0.013	2.3	6.5	1.5	1,467,130	334,400	1,132,730
386	39-55 (**)	39-54 (**)	976.99	972.47	130.68	3.46	8	0.013	2.2	6.4	1.5	1,451,465	336,000	1,115,465
387	39-54 (**)	39-53 (**)	972.47	962.01	271.91	3.85	8	0.013	2.4	6.8	1.5	1,530,718	337,600	1,193,118
388	39-53 (**)	39-52 (**)	962.01	952.50	337.79	2.82	8	0.013	2.0	5.8	1.3	1,309,510	337,600	971,910
389	39-52 (**)	39-51 (**)	952.50	943.98	371.20	2.30	8	0.013	1.8	5.2	1.2	1,182,382	337,600	844,782
390	39-51 (**)	39-50 (**)	943.98	941.16	250.01	1.13	8	0.013	1.3	3.7	0.8	828,873	337,600	491,273
391	39-49 (**)	39-48 (**)	941.16	933.04	291.83	2.78	8	0.013	2.0	5.8	1.3	1,301,832	337,600	964,232
392	39-48 (**)	39-47 (**)	933.04	926.77	178.86	3.50	8	0.013	2.3	6.5	1.5	1,460,824	337,600	1,123,224
	39-2 (**)	39-2 (**)	926.77	917.06	184.91	5.25	8	0.013	2.8	7.9	1.8	1,788,428	337,600	1,450,828
	(**)	(**)	917.06	913.41	175	2.09	8	0.013	1.7	5.0	1.1	1,127,118	337,600	789,518
	(**)	(**)	913.41	905.87	246	3.07	8	0.013	2.1	6.1	1.4	1,366,344	337,600	1,028,744
	(**)	39 (**)	905.87	900.00	306	1.92	8	0.013	1.7	4.8	1.1	1,080,937	337,600	743,337

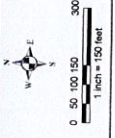
NOTES
 Assuming EDU = 400 GPD x 4 Peaking Factor (1600 GPD)
 Anticipated LS Flow = 110400 GPD, Pleasant View LS = 96000 GPD
 * Manhole Elevations based on Surveyed Data
 ** Manhole Elevations based on Record Drawings
 MH 39-87 on Survey is actually MH 39-86
 MH 39-70 Removed
 MH 39-87, 39-60, and 39-58A missing
 Extra MH between 39-2 and 39 (interceptor)

Preliminary

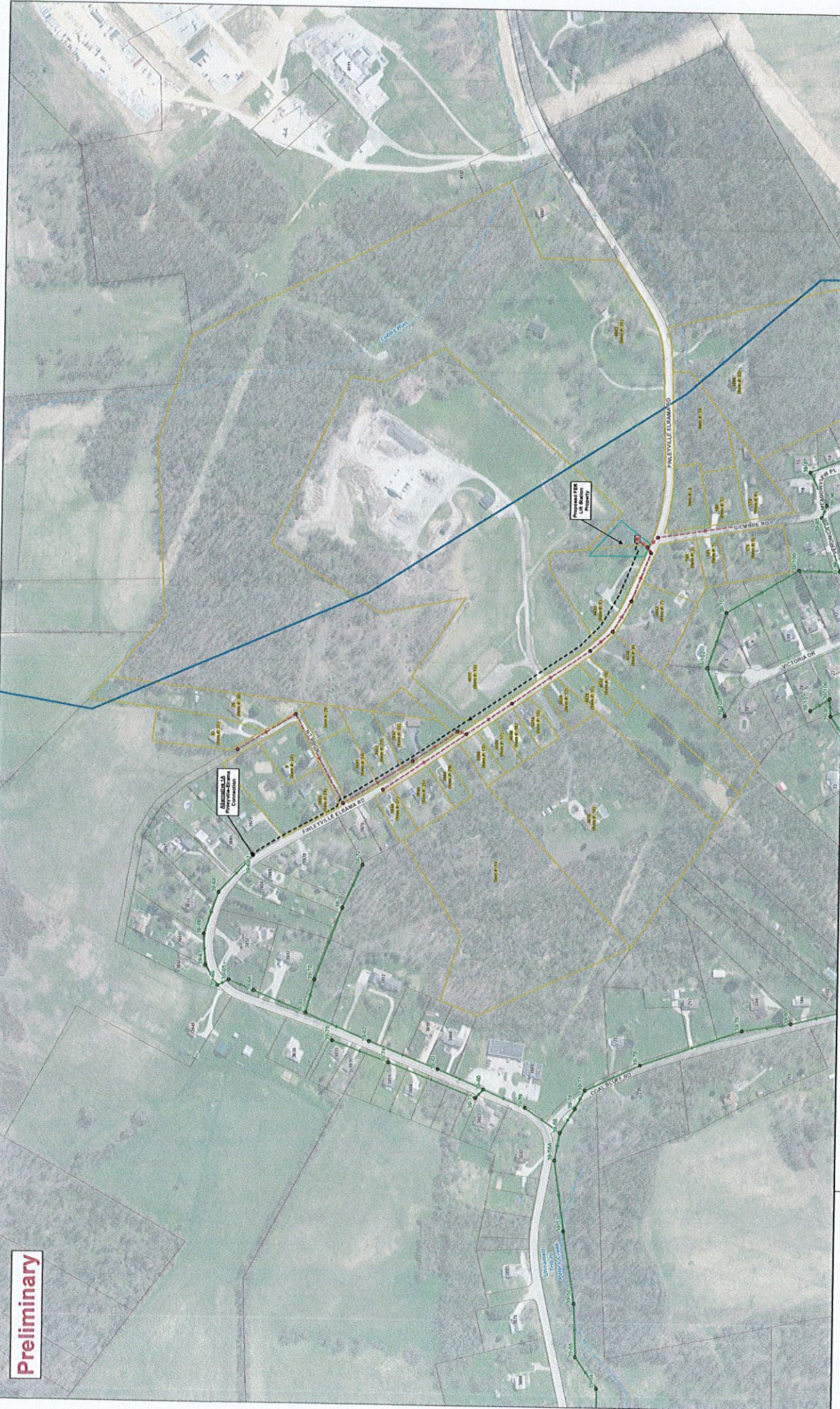


246 4th Avenue
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email: info@lsse.com

- Proposed FER
- Sanitary Manhole
- Proposed FER
- Sanitary Sewer
- UR Station
- Proposed FER
- Sanitary Sewer
- Stream
- Municipal Boundary
- Parcel Boundary
- Proposed PCSA Service
- Sanitary Sewer
- PCSA Sewer Parcel Boundary
- Area Boundary
- Proposed FER
- Sanitary Sewer
- Stream
- Municipal Boundary
- Parcel Boundary
- Proposed PCSA Service
- Sanitary Sewer
- PCSA Sewer Parcel Boundary
- Area Boundary



Finleyville-Eirama Road Sewer Line Extension
Finleyville-Eirama Road Connection
 Peters Creek Sanitary Authority
 3502 Lincoln Avenue
 Finleyville, PA 15332



APPENDIX C

MANNING'S ANALYSIS – VICTORIA
DRIVE CONNECTION

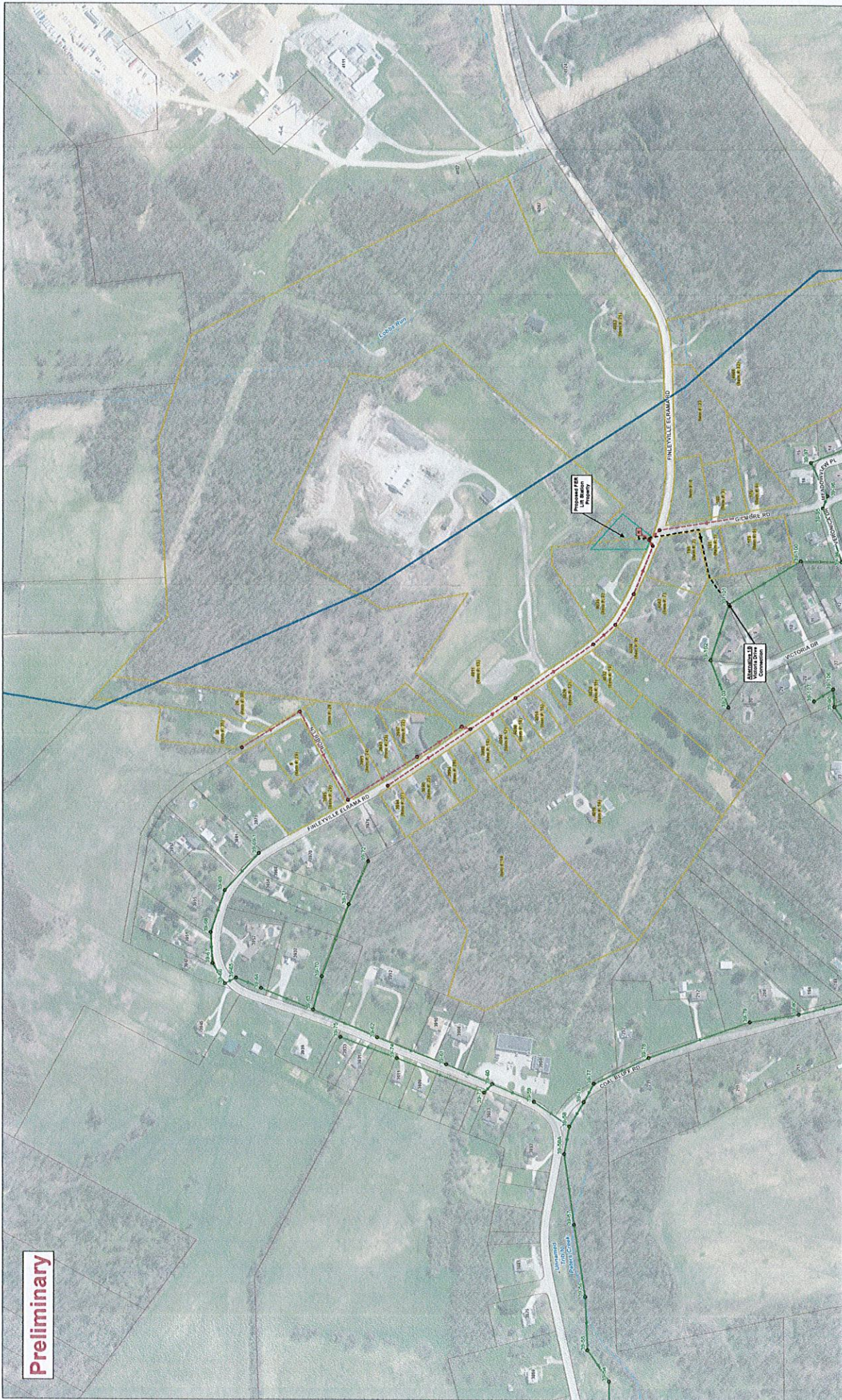
**Finleyville El-Rama Road Sewer Line Extension
Lift Station Improvements
Manning's Analysis**

Pipe ID	SMH (Upstream)	SMH (Downstream)	Invert Elev. (Upstream)	Invert Elev. (Downstream)	Length (ft)	Slope (%)	Diameter (in)	n Value	Full Flow Cap. (CFS)	Full Flow Velocity (FPS)	Full Flow Cap. (MGD)	Full Flow Cap. (GPD)	Anticipated Flow (GPD)	Remaining Capacity (GPD)
GILMORE RD TO COAL BLUFF RD														
356	39-103 (*)	39-102 (*)	1170.81	1163.72	190	3.73	8	0.013	2.33	6.7	1.5	1,507,608	3,200	1,504,408
355	39-102 (*)	39-101 (*)	1163.58	1148.88	221	6.65	8	0.013	3.11	8.9	2.0	2,012,818	4,800	2,008,018
354	39-101 (*)	39-100 (*)	1148.78	1147.75	315	0.33	8	0.013	0.69	2.0	0.4	446,278	121,600	324,678
353	39-100 (*)	39-94 (*)	1147.58	1146.67	152	0.60	8	0.013	0.93	2.7	0.6	603,867	123,200	480,667
357	39-94 (*)	39-93 (*)	1146.65	1145.96	242	0.29	8	0.013	0.64	1.8	0.4	416,734	153,600	263,134
358	39-93 (*)	39-92 (*)	1145.96	1145.65	102	0.30	8	0.013	0.67	1.9	0.4	430,252	155,200	275,052
359	39-92 (*)	39-91 (*)	1145.56	1144.09	267	0.55	8	0.013	0.90	2.6	0.6	579,089	156,800	422,289
360	39-91 (*)	39-90 (*)	1144.02	1142.47	366	0.42	8	0.013	0.79	2.3	0.5	507,887	158,400	349,487
2352	39-90 (*)	39-89 (*)	1142.37	1142.09	109	0.26	8	0.013	0.61	1.8	0.4	395,556	161,600	233,956
363	39-89 (*)	39-88 (*)	1141.96	1124.75	151	11.40	8	0.013	4.08	11.7	2.6	2,634,778	163,200	2,471,578
364	39-88 (*)	39-87	1124.00	1115.00	187	4.81	8	0.013	2.65	7.6	1.7	1,712,153	164,800	1,547,353
365	39-87	39-86 (*)	1115.00	1108.65	100	6.35	8	0.013	3.04	8.7	2.0	1,966,658	168,000	1,798,658
366	39-86 (*)	39-85 (*)	1108.32	1106.89	370	0.39	8	0.013	0.75	2.2	0.5	485,167	174,400	310,787
367	39-85 (*)	39-84 (*)	1106.76	1105.95	178	0.46	8	0.013	0.81	2.3	0.5	526,471	270,400	256,071
COAL BLUFF RD TO FINLEYVILLE-ELRAMA RD														
368	39-84 (*)	39-83 (*)	1105.70	1104.68	199	0.51	8	0.013	0.86	2.5	0.6	558,748	273,600	285,148
369	39-83 (*)	39-82 (*)	1104.50	1080.71	200	11.90	8	0.013	4.16	11.9	2.7	2,691,685	276,800	2,414,885
370	39-82 (*)	39-81 (*)	1080.61	1064.13	206	8.00	8	0.013	3.42	9.8	2.2	2,207,431	280,000	1,927,431
371	39-81 (*)	39-80 (*)	1064.01	1053.27	189	5.68	8	0.013	2.88	8.3	1.9	1,860,430	283,200	1,577,230
372	39-80 (*)	39-79 (*)	1053.18	1041.85	184	6.16	8	0.013	3.00	8.6	1.9	1,936,636	284,800	1,651,836
373	39-79 (*)	39-78 (*)	1041.78	1023.60	403	4.51	8	0.013	2.56	7.4	1.7	1,857,626	288,000	1,369,626
374	39-78 (*)	39-77 (*)	1022.33	1017.69	227	2.04	8	0.013	1.73	4.9	1.1	1,115,805	291,200	824,605
375	39-77 (*)	39-76 (*)	1017.51	1013.99	78	4.51	8	0.013	2.57	7.4	1.7	1,657,930	291,200	1,366,730
376	39-76 (*)	39-58 (*)	1011.92	1010.89	106	0.97	8	0.013	1.19	3.4	0.8	769,321	291,200	478,121
382	39-58 (*)	39-56A (*)	1010.29	1006.97	105.39	3.15	8	0.013	2.1	6.1	1.4	1,385,197	331,200	1,053,997

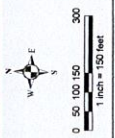
NOTES

- Assuming EDU = 400 GPD x 4 Peaking Factor (1600 GPD)
- Anticipated LS Flow = 110400 GPD, Pleasant View LS = 96000 GPD
- * Manhole Elevations based on Surveyed Data ONLY AS NOTED
- ** Manhole Elevations based on record drawings ONLY AS NOTED
- MH 39-87 on Survey is actually MH 39-86, Actual MH 39-87 is missing
- Elevations are estimates unless noted (* below Google Earth Ground Elevation)

Preliminary



Finleyville-Elrama Road Sewer Line Extension
Victoria Drive Connection
 Peters Creek Sanitary Authority
 3502 Lincoln Avenue
 Finleyville, PA 15332



- Proposed PER
- Sanitary Manhole
- Proposed PCSA Service
- Customer Parcel Boundary
- Proposed PER
- Sanitary Sewer
- PCSA Service Area Boundary
- Stream
- Municipal Boundary
- Proposed PER
- Sanitary Sewer
- Proposed PER
- Force Main Sewer
- Parcel Boundary

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 Email: info@lsse.com

APPENDIX D

CUSTOMER LIST

PETERS CREEK SANITARY AUTHORITY

UNION TOWNSHIP ACT 537 SEWAGE FACILITIES PLAN UPDATE

FINLEYVILLE-ELRAMA ROAD PLANNING AREA

AUGUST 15, 2023

AUGUST 29, 2023 (Revised)

CUSTOMER LIST

Item No.	Owner	Street Address	Comments
1	CHARLES A. CRAMER	181 GILMORE RD FINLEYVILLE PA 15332 (Parcel ID: 640-008-02-01-0001-00)	Physical Connection Proposed
2	MICHAEL B. & KIMBERLY A. BARNA	185 GILMORE ROAD FINLEYVILLE PA 15332 (Parcel ID: 640-008-00-00-0079-02)	Existing PCSA Customer, currently served by dual grinder pump system. Physical connection to gravity system is proposed as part of the project.
3	THOMAS & CARRIE SMITH	180 GILMORE RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-00-00-0021-01)	Physical Connection Proposed
4	THOMAS & CARRIE SMITH	GILMORE RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-00-00-0021-00)	Per Board, wye connection and lateral extension will be provided.
5	SANDRA M. CROUCH	175 GILMORE RD FINLEYVILLE PA 15332 (Parcel ID: 640-008-02-01-0002-00)	Physical Connection Proposed
6	MARK A. LUTA	174 GILMORE RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-00-00-0036-00)	Physical Connection Proposed
7	MICHAEL B. & KIMBERLY A. BARNA	4042 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-008-00-00-0079-01)	Existing PCSA Customer, currently served by dual grinder pump system. Physical connection to gravity system is proposed as part of the project.
8	EDWARD & VICKIE BURNWORTH	4035 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-008-00-00-0080-00)	Physical Connection Proposed
9	TRACY & PAMELA J. MILLER	4038 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-008-00-00-0079-00)	Physical Connection Proposed
10	BETH A. HENDERSON	4032 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-008-00-00-0078-00)	Physical Connection Proposed
11	ZACHARY J. ROBB	4028 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-008-00-00-0077-00)	Physical Connection Proposed
12	JENNIFER L. RIEGER	4026 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-02-00-0015-00)	Physical Connection Proposed

PETERS CREEK SANITARY AUTHORITY

UNION TOWNSHIP ACT 537 SEWAGE FACILITIES PLAN UPDATE

FINLEYVILLE-ELRAMA ROAD PLANNING AREA

AUGUST 15, 2023

AUGUST 29, 2023 (Revised)

CUSTOMER LIST

Item No.	Owner	Street Address	Comments
13	UNION TOWNSHIP	4011 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-00-00-0022-01)	Physical Connection Not Proposed.
14	DENNIR R. & ANTOINETTE M. BRAIN	4016 FINLEY ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-00-00-0026-07)	Physical Connection Proposed
15	ALBERT JOSEPH III LIPPERT & TAMMIE & JASON ALBERT & DAVID SHANE & EDWARD MAK SIN HEATH	4014 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-02-00-0014-00)	Physical Connection Proposed
16	BAYNHAM FAMILY IRR TRUST	4008 FINLEYVILLE RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-02-00-0013-00)	Physical Connection Proposed
17	PATRICIA A. KALVESMAKI	4004 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-02-00-0012-00)	Physical Connection Proposed
18	DAVID & DONNA R. SIGLER	3998 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-02-00-0011-00)	Physical Connection Proposed
19	SHARON PALONIS	FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-00-00-0026-00)	Per Board, wye connection and lateral extension will be provided.
20	MICHAEL D. BERES	3994 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-02-00-0009-00)	Physical Connection Proposed
21	WILLIAM EDWARD & HOLLY KAY WALTON	4083 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-00-00-0022-00)	Per Board, wye connection and lateral extension will be provided.
22	PATRICIA L. BLAKEWAY & DOUGLAS S. HERAZO	3997 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-01-00-0015-00)	Physical Connection Proposed
23	CLYDE H. WILLIAMS	3993 FINLEYVILLE ELRAMA RD FINLEYVILLE PA (Parcel ID: 640-005-01-00-0014-00)	Physical Connection Proposed
24	GLENN MOORE & CYNTHIA CURRY & SANDRA RAE BRANDES	3991 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-01-00-0013-00)	Physical Connection Proposed

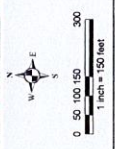
PETERS CREEK SANITARY AUTHORITY**UNION TOWNSHIP ACT 537 SEWAGE FACILITIES PLAN UPDATE****FINLEYVILLE-ELRAMA ROAD PLANNING AREA****AUGUST 15, 2023****AUGUST 29, 2023 (Revised)****CUSTOMER LIST**

Item No.	Owner	Street Address	Comments
25	JAMIE TODD IHRIG	3990 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-02-00-0008-00)	Physical Connection Proposed
26	JOHN E. SHAFFER	3985 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-01-00-0009-01)	Physical Connection Proposed.
27	RICHARD N. & KATHLEEN BRONDER	3984 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-02-00-0007-00)	Physical Connection Proposed
28	STEPHEN M. & CONCETTA A. HOYGA	9 ROBB LN FINLEYVILLE PA 15332 (Parcel ID: 640-005-01-00-0009-00)	Physical Connection Proposed
29	GLENN MOORE & CYNTHIA CURRY & SANDRA RAE BRANDES	ROBB LN FINLEYVILLE PA 15332 (Parcel ID: 640-005-01-00-0012-00)	Undeveloped parcel adjacent to 3991 Finleyville Elrama Road. Per board, weye connection and lateral extension will be provided.
30	ROBERT C. JR. & ASHLEY M. NEBEL	26 ROBB LN FINLEYVILLE PA 15332 (Parcel ID: 640-005-01-00-0011-00)	Physical Connection Proposed
31	DONALD MAGGS	30 ROBB LN FINLEYVILLE PA 15332 (Parcel ID: 640-005-01-00-0010-00)	Physical Connection Proposed
32	KRISTA J. RICE	4086 FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-005-07-00-0017-00)	Per Board, Physical connection will not be provided. Owner will be given option to tie in at their expense.
33	RICHARD W. JR. GLASS	FINLEYVILLE ELRAMA RD FINLEYVILLE PA 15332 (Parcel ID: 640-006-00-00-0001-00)	Undeveloped property adjacent to 4086 Finleyville Elrama Road. Per Board, Physical connection will not be provided. Owner will be given option to tie in at their expense.

Preliminary



Finleyville-Eirama Road Sewer Line Extension
Proposed Customer Exhibit
 Peters Creek Sanitary Authority
 3502 Lincoln Avenue
 Finleyville, PA 15332



- Proposed FFR Sanitary Manhole
- Proposed FFR Life Service
- Proposed FFR Sanitary Sewer
- Sanitary Manhole
- Sanitary Sewer
- Stream
- Municipal Boundary
- Parcel Boundary
- Proposed PCSA Service Customer Parcel Boundary
- PCSA Service Area Boundary

LSSE
 Civil Engineers and Surveyors

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 Coopersburg, PA 17908
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 Email: info@lsse.com

APPENDIX E

PENNSYLVANIA NATURAL
DIVERSITY INVENTORY REPORT

1. PROJECT INFORMATION

APPENDIX E

Project Name: **Finleyville-Elrama Road Act 537 Plan Update**

Date of Review: **5/10/2023 12:41:23 PM**

Project Category: **Waste Transfer, Treatment, and Disposal, Liquid waste/Effluent, Sewage module/Act 537 plan**

Project Area: **16.53 acres**

County(s): **Washington**

Township/Municipality(s): **UNION TOWNSHIP**

ZIP Code:

Quadrangle Name(s): **GLASSPORT**

Watersheds HUC 8: **Lower Monongahela**

Watersheds HUC 12: **Fallen Timber Run-Monongahela River; Piney Fork-Peters Creek**

Decimal Degrees: **40.253490, -79.969305**

Degrees Minutes Seconds: **40° 15' 12.5651" N, 79° 58' 9.4975" W**



2. SEARCH RESULTS

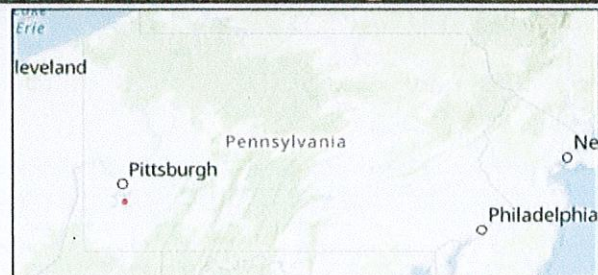
Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Finleyville-Elrama Road Act 537 Plan Update

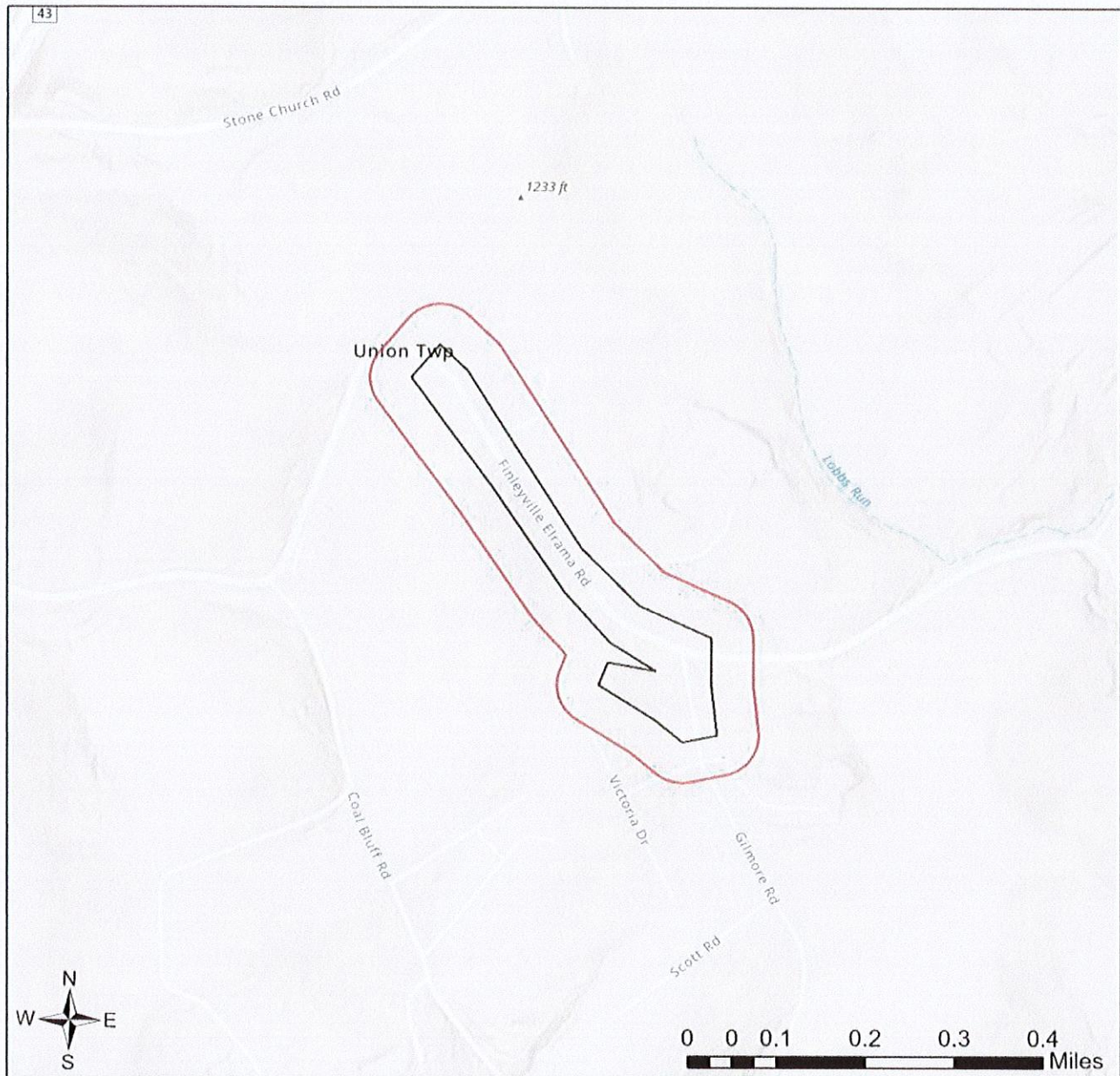




-  Buffered Project Boundary
-  Project Boundary

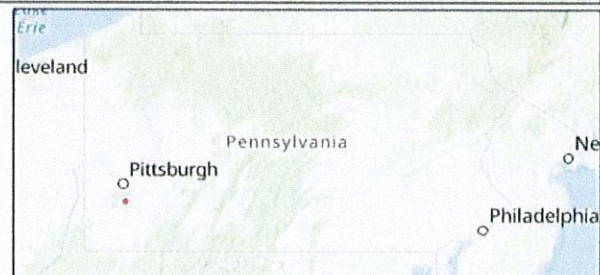


Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Finleyville-Elrama Road Act 537 Plan Update



-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodataslyreisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission

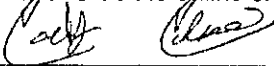
Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Cody Colarusso
Company/Business Name: Lennon, Smith, Sauter Engineering Inc.
Address: 846 4th Avenue
City, State, Zip: Coraopolis, PA 15108
Phone: (412) 264-9400 Fax: ()
Email: ccolarusso@LSSE.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.


applicant/project proponent signature

5/16/2023
date

APPENDIX F

PENNSYLVANIA HISTORICAL &
MUSEUM COMMISSION REPORT



PROJECT REVIEW FORM
Request to Initiate SHPO Consultation on
State and Federal Undertakings

APPENDIX F

SHPO USE ONLY		Reviewers: <u> / / </u>
DATE RECEIVED: <u>8/30/19</u>	DATE DUE: <u>9/13/19</u>	
ER NUMBER: <u>2019-2232-125-A</u>	HRSP: <u> </u>	

REV: 06/2018

SECTION A: PROJECT NAME & LOCATION

Is this a new submittal? YES NO OR This is additional information for ER Number:

Project Name Finleyville-Elrama Road Planning Area County Washington Municipality Union Township

Project Address 1/4m N of Union Twp Bldg, Finleyville-Elrama Rd City/State/ Zip Union Township PA 15332

SECTION B: CONTACT INFORMATION & MAILING ADDRESS

Name Shane Michael Phone (412) 826-5454

Company Senate Engineering Company Fax (412) 826-5458

Street/PO Box 420 William Pitt Way Email sdrmichael@senateengineering.com

City/State/Zip Pittsburgh PA 15238

SECTION C: PROJECT DESCRIPTION

This project is located on: (check all that apply) Federal property State property Municipal property Private property

List all federal and state agencies and programs providing funds, permits, licenses.	Agency Type	Agency/Program/Permit Name	Project/Permit/Tracking Number (if applicable)

Proposed Work – Attach project description, scope of work, site plans, and/or drawings

Project Includes (check all that apply): Construction Demolition Rehabilitation Disposition

Total acres of project area: 2.50 Total acres of earth disturbance: 1.5

Are there any buildings or structures within the project area? Yes No Approximate age of buildings: 50

Does this project involve properties listed in or eligible for the National Register of Historic Places, or designated as historic by a local government?	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Unsure <input type="radio"/>	Name of historic property or historic districts
---	---------------------------	-------------------------------------	------------------------------	---

Please print and mail completed form and all attachments to: PHMC State Historic Preservation Office 400 North St. Commonwealth Keystone Building, 2nd Floor Harrisburg, PA 17120-0093	Attachments – Please include the following information with this form	
	<input checked="" type="checkbox"/>	Map – 7.5' USGS quad showing project boundary and Area of Potential Effect
	<input checked="" type="checkbox"/>	Description/Scope – Describe the project, including any ground disturbance and previous land use
	<input checked="" type="checkbox"/>	Site Plans/Drawings – Indicate past and present land use, location and dates of buildings, and proposed improvements
<input checked="" type="checkbox"/>	Photographs – Attach prints or digital photographs showing the project site, including images of all buildings and structures keyed to a site plan	

SHPO DETERMINATION (SHPO USE ONLY)

There are NO HISTORIC PROPERTIES in the Area of Potential Effect The project will have NO ADVERSE EFFECTS WITH CONDITIONS (see attached)

The project will have NO EFFECT on historic properties SHPO REQUESTS ADDITIONAL INFORMATION (see attached)

The project will have NO ADVERSE EFFECTS on historic properties:

SHPO REVIEWER: B. Sedewell DATE: 9/5/19

APPENDIX G

DETAILED COST ESTIMATES FOR
EACH ALTERNATIVE

ALTERNATIVE 1

OPINION OF PROBABLE COST
PETERS CREEK SANITARY AUTHORITY
FINLEYVILLE ELRAMA ROAD SEWER LINE EXTENSION
LIFT STATION IMPROVEMENTS

Prepared by:
 Lennon, Smith, Souleret Engineering, Inc.
 Dated: August 11, 2023

PART I: LIFT STATION					
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ITEM COST
1	6' Diameter Precast Wet Well (Complete Less Mechanical Items)	1	LS	\$80,000.00	\$80,000.00
2	4' Diameter Precast Valve Pit (Complete Less Mechanical Items)	1	LS	\$45,000.00	\$45,000.00
3	4' Diameter Meter Pit (Complete Less Mechanical Items)	1	LS	\$20,000.00	\$20,000.00
4	Submersible Pumping System Including Control Panel	1	LS	\$225,000.00	\$225,000.00
5	Electrical Work / Control Wiring	1	LS	\$75,000.00	\$75,000.00
6	Hoist	1	LS	\$7,500.00	\$7,500.00
7	Inside Piping and Valves	1	LS	\$50,000.00	\$50,000.00
8	Mag Meter	1	LS	\$7,500.00	\$7,500.00
9	Emergency Power System Diesel Engine Driven Generator with Slab	1	LS	\$75,000.00	\$75,000.00
10	6" D.I. Forcemain Piping	1	LS	\$7,500.00	\$7,500.00
11	Chainlink Fence	210	LF	\$75.00	\$15,750.00
12	Double Swing Gate	1	LS	\$5,000.00	\$5,000.00
13	Pavement/Lot	325	SY	\$75.00	\$24,375.00
14	Grading	250	CY	\$35.00	\$8,750.00
15	Painting	1	LS	\$20,000.00	\$20,000.00
16	Erosion and Sedimentation Control	1	LS	\$15,000.00	\$15,000.00
17	Detour Plan, Maintenance and Protection of traffic	1	LS	\$10,000.00	\$10,000.00
18	Location of Existing Underground Utilities	1	LS	\$7,625.00	\$7,625.00
19	Field Engineering (Section 01050)	1	LS	\$10,000.00	\$10,000.00
20	Permit Compliance	1	LS	\$15,000.00	\$15,000.00
SUB TOTAL					\$724,000.00
25% CONTINGENCY AND SOFT COSTS					\$181,000.00
TOTAL (PART I)					\$905,000.00
PART II: SANITARY SEWER IMPROVEMENTS					
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
1	8" SDR 35 PVC Sanitary Sewer (0'-8' deep)	772	LF	\$85.00	\$65,620.00
2	8" SDR 35 PVC Sanitary Sewer (8.1'-10' deep)	1,007	LF	\$90.00	\$90,630.00
3	8" SDR 35 PVC Sanitary Sewer (10.1'-12' deep)	900	LF	\$110.00	\$99,000.00
4	8" SDR 35 PVC Sanitary Sewer (12.1'-14' deep)	400	LF	\$120.00	\$48,000.00
5	16" Steel Casing with 8" Class 52 SRJ D.I. Sanitary	100	LF	\$225.00	\$22,500.00
6	6" C900 (DR14) PVC Force Main	2,200	LF	\$70.00	\$154,000.00
7	Connection to Existing Manhole	1	EA	\$1,500.00	\$1,500.00
8	Manhole Frame / Cover (Standard)	18	EA	\$750.00	\$13,500.00
9	4' Diameter Sanitary Manhole Bottom	18	EA	\$2,500.00	\$45,000.00
10	4' Diameter Sanitary Manhole Barrel	150	VF	\$250.00	\$37,500.00
11	6" PVC SDR 26 Service Sewer (All Depths)	600	LF	\$70.00	\$42,000.00
12	Wye Branch (All Diameters)	30	EA	\$350.00	\$10,500.00
13	Site Tee And Stub for Future Sewer	30	EA	\$1,000.00	\$30,000.00
14	Concrete Sidewalk Restoration	100	SF	\$15.00	\$1,500.00
15	Concrete Driveway Restoration	150	SF	\$20.00	\$3,000.00
16	Bituminous Pavement Trench Restoration (Township Roadway)	450	LF	\$50.00	\$22,500.00
17	Bituminous Pavement Trench Restoration (State Roadway)	1,600	LF	\$50.00	\$80,000.00
18	State Roadway Mill and Overlay (Single Lane)	2,125	SY	\$25.00	\$53,125.00
20	Erosion and Sedimentation Control Plan	1	LS	\$25,000.00	\$25,000.00
21	Location of Existing Underground Utilities	1	LS	\$25,000.00	\$25,000.00
22	Maintenance and Protection of Traffic	1	LS	\$25,000.00	\$25,000.00
23	Permit Compliance	1	LS	\$25,000.00	\$25,000.00
24	Field Engineering (Section 01050)	1	LS	\$25,000.00	\$25,000.00
SUB TOTAL					\$944,875.00
25% CONTINGENCY AND SOFT COSTS					\$236,000.00
TOTAL (PART II)					\$1,180,875.00
PROJECT TOTAL (PARTS I & II)					\$2,085,875.00
USE					\$2,086,000.00
FULL LANE WIDTH ADD					
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
1	State Roadway Mill and Overlay (Single Lane)	1,400	SY	\$25.00	\$35,000.00
SUB TOTAL					\$35,000.00
25% CONTINGENCY AND SOFT COSTS					\$9,000.00
TOTAL					\$44,000.00
USE					\$2,130,000.00

ALTERNATIVE 2OPINION OF PROBABLE COST

PETERS CREEK SANITARY AUTHORITY
 FINLEYVILLE ELRAMA ROAD SEWER LINE EXTENSION
 GRINDER PUMP CONCEPT

Prepared by:
 Lennon, Smith, Souleret Engineering, Inc.
 Dated: August 15, 2023

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ITEM COST
1	2" DR 11 HDPE Forcemain (Open Cut & Directionally Drilled - All Depths)	4,000	LF	\$60.00	\$240,000.00
2	1-1/4" SDR 11 HDPE Service (Open Cut & Directionally Drilled - All Depths)	1,350	LF	\$50.00	\$67,500.00
3	Simplex Grinder Pump Units	30	EA	\$12,000.00	\$360,000.00
4	Wye Connection	30	EA	\$750.00	\$22,500.00
5	Curb Box Assembly	30	EA	\$1,500.00	\$45,000.00
6	Terminal Cleanout	4	EA	\$1,500.00	\$6,000.00
7	Inline Cleanout	1	EA	\$1,500.00	\$1,500.00
8	Air/Vacuum Release Valve Assembly	1	EA	\$4,500.00	\$4,500.00
9	Connection to Existing Manhole	1	EA	\$4,000.00	\$4,000.00
10	Bituminous Trench Restoration (Local Roadway)	500	LF	\$50.00	\$25,000.00
11	Bituminous Trench Restoration (State Roadway)	25	LF	\$100.00	\$2,500.00
12	Erosion and Sedimentation Control	1	LS	\$18,000.00	\$18,000.00
13	Detour Plan, Maintenance and Protection of traffic	1	LS	\$15,000.00	\$15,000.00
14	Location of Existing Underground Utilities	1	LS	\$10,000.00	\$10,000.00
15	Field Engineering (Section 01050)	1	LS	\$12,500.00	\$12,500.00
16	Permit Compliance	1	LS	\$17,750.00	\$17,750.00
				SUB TOTAL	\$851,750.00
				25% CONTINGENCY AND SOFT COSTS	\$213,000.00
				TOTAL	\$1,064,750.00

*Quantities Approximated based on HOP Submittal Drawings Provided by Harshman CE Group Previously

APPENDIX H

MEMORANDUM OF UNDERSTANDING

**MEMORANDUM OF UNDERSTANDING BETWEEN
PETERS CREEK SANITARY AUTHORITY AND UNION TOWNSHIP
ON FINLEYVILLE-ELRAMA ROAD SEWER LINE EXTENSION PROJECT**

MARCH 1, 2023

THIS MEMORANDUM OF UNDERSTANDING is made and entered into as of the 14 day of MARCH 2023 by and between the **PETERS CREEK SANITARY AUTHORITY** (“PCSA”) and **UNION TOWNSHIP** (“Township”) pertaining to the scope of work for a sanitary sewer line extension along a certain area along Finleyville-Elrama Road situate in Union Township, Washington County as defined herein, (“Finleyville – Elrama Road Project” or the “Project”)

RECITALS:

WHEREAS, PCSA on behalf of its incorporating municipalities prepared an Act 537 Plan in 2012 (“2012 PCSA Act 537 Plan”); and

WHEREAS, the 2012 PCSA Act 537 Plan was adopted by the PCSA incorporating municipalities and approved by the Pennsylvania Department of Environmental Protection (PaDEP) by letter dated October 4, 2012; and

WHEREAS, the 2012 PCSA Act 537 Plan identified areas that were then served by sewage On-Lot Disposal Systems (“OLDS”); and

WHEREAS, Figure 4 of the 2012 PCSA Act 537 Plan is attached hereto as **Exhibit 1**; and

WHEREAS, one of the areas identified as having OLDS service in the 2012 PCSA Act 537 Plan is the Finleyville-Elrama Road area as shown on **Exhibit 1**; and

WHEREAS, Union Township submitted an Act 537 Plan Task/Activity Report for the Finleyville-Elrama Road Sewage Planning Area on September 13, 2016 to PaDEP as prepared by Harshman CE Group (Harshman); and

WHEREAS, Union Township received approval of the Act 537 Plan Task/Activity Report for the Finleyville-Elrama Sewage Planning Area by PaDEP letter dated October 5, 2016 as shown on **Exhibit 2**; and

WHEREAS, Senate Engineering prepared an Act 537 Report dated January 2020 as shown by the cover page noted as **Exhibit 3**; and

WHEREAS, the Act 537 Plan Summary identifies that a “*Conventional gravity collection system with a lift station and force main for conveyance to the PCSA system*” (Alternative 1) or “*Collection system consisting of individual grinder pumps per EDU for conveyance to the PCSA system*” (Alternative 2) “*from 19 connections would be collected*” as shown on **Exhibit 4**; and

WHEREAS, PaDEP approved the Act 537 Plan by letter dated January 20, 2021 utilizing nineteen (19) grinder pumps for collection as shown on **Exhibit 5**, noting that “*It is now the responsibility of Union Township to implement the 537 Plan in accordance with the schedules contained within the Plan*”; and

WHEREAS, Union Township engaged Harshman to file for a PaDEP Water Quality Management (WQM) Part 2 permit to construct, own and operate an individual grinder pump collection system; and

WHEREAS, Union Township received a PaDEP Water Quality Management (WQM) Part 2 permit to construct, own and operate an individual grinder pump collection system dated November 5, 2021 (**Exhibit 6**); and

WHEREAS, Union Township received a PaDEP letter dated November 4, 2022 (**Exhibit 7**) acknowledging that Act 537 Plan approval and WQM approval has been obtained and advising that “.....*any deviation from the approved At 537 Plan Update will require an additional Plan Update Revision approval.*”; and

WHEREAS, WQM Part 2 permit drawings dated July 6, 2021, revised on August 10, 2021 prepared by Harshman were received by PCSA and Lennon, Smith, Souleret, Engineering (LSSE – PCSA Consulting Engineer) on December 9, 2022; and

WHEREAS, PennDOT Highway Occupancy Permit (HOP) drawings dated October 4, 2021 prepared by Harshman were received by PCSA and LSSE on March 17, 2022; and

WHEREAS, PCSA engaged LSSE to prepare an Opinion of Probable (Project) Cost (OPC) for an individual grinder pump alternative, a submersible lift station alternative and a pre-fabricated, fiber reinforced lift station alternatives; and

WHEREAS, LSSE provided OPCs for these alternatives on April 7, 2022, April 4, 2022 and April 18, 2022 as shown on **Exhibits 8, 9 and 10** respectively; and

WHEREAS, PCSA engaged LSSE to prepare an Opinion of Life Cycle Costs (OLCC) to include operation and maintenance considerations; and

WHEREAS, LSSE provided a Draft Life Cycle Cost Analysis by memorandum dated August 22, 2022 (**Exhibit 11**) which concluded “...*the Grinder Pump and Lift Stations alternatives are essentially equivalent on a Total Present Worth Value basis over a 30-year planning period.*”; and

WHEREAS, PCSA filed an action against Union Township in the Court of Common Pleas of Washington County at No. 2022-0046, seeking to enjoin Union Township from proceeding with the Finleyville-Elrama Road Project unless it entered into a Developer’s Agreement with PCSA, and seeking to enjoin it from attempting to establish its own municipal authority in competition with PCSA, and in violation of the Pennsylvania Municipal Authorities Act; and

WHEREAS, said action was duly settled by the parties on or about September 29, 2022 as the result of the parties entering into a Developer’s Agreement dated September 28, 2022 for the Finleyville - Elrama Road Project in which Union Township would only agree to complete the Project with the installation of 19 non-gravity grinder pumps, at its sole cost and expense, and after Union Township refused to consider the lift station option for the Project, despite the strong preference from PCSA that this option be used and its submitted present worth value basis over a 30 year period showing the costs to be substantially equivalent; and

WHEREAS, thereafter, four of the five members of the Union Township Board of Supervisors resigned from their positions and four new Supervisors were duly appointed; and;

WHEREAS, both parties have now decided to review again the feasibility of using a gravity lift station option for the Project, in lieu of grinder pumps, for the benefit of the residents and future development; and

WHEREAS, PCSA engaged LSSE to further review the planning and permitting documents to ascertain differences in the Finleyville-Elrama service area in terms of probable connections, to develop a reasonable implementation schedule and to request a meeting with Union Township; and

WHEREAS, LSSE issued a letter dated January 12, 2023 to Union Township (**Exhibit 12**) identifying that reconciling PaDEP planning and permitting are required, establishes a reasonable time line to implement the Finleyville-Elrama Road project and requests a meeting between PCSA and Union Township; and

WHEREAS, an advertised public meeting was held on February 2, 2023 at the Union Township Municipal Building a discussion was had that it is desired by Union Township, PCSA, and the impacted property owners that spoke at the meeting that the selected and preferred alternative for the Project should be a gravity collection system with a central lift station to be owned, operated and maintained by PCSA in accordance with PCSA Rules and Regulations and policies subject to PCSA (and Clairton Municipal Authority) tapping fees and uniform user rates established by PCSA; and

WHEREAS, at the February 2, 2023 meeting, Union Township and PCSA authorized their respective engineers (Bankson Engineering, Inc. (Bankson) and LSSE, respectively) to meet and review the existing information available and provide recommendations as to the final service area including actual connections to be serviced within the Finleyville-Elrama Road area; and

WHEREAS, this meeting was held remotely on February 24, 2023 and the recommendations pertaining to the PCSA service area by Bankson and LSSE is to proceed with the Project with the use of a gravity collection system with a central lift station to be owned and operated by PCSA; and

WHEREAS, the parties desire to execute a Memorandum of Understanding (MOU) setting forth the terms and conditions under which PCSA and the Township will proceed to complete the Project for the mutual benefit of all concerned and especially the affected residents.

NOW, THEREFORE, intending to be legally bound hereby, the parties hereto mutually agree as follows:

ARTICLE I DEFINITION OF TERMS

Whenever the following terms are used in this MOU they shall have the following meaning unless otherwise specifically indicated by the context in which they appear:

- A. Host Municipality means the municipality where the PROJECT or a portion of the PROJECT is geographically located (i.e., Union Township).
- B. Lead Entity means PCSA.
- C. Total Cost means the total of all costs associated with the design, financing, development, engineering, capital construction, inspection, permitting, legal, and land or Right-of-Way (ROW) acquisition of / for the Project.
- D. PROJECT means the complete work required to provide the gravity collection system with a central lift station and sewer line extension for Finleyville-Elrama Road service area will be listed on **Exhibit 13**, once the list of customers to be served is determined.

ARTICLE II RESPONSIBILITIES & DUTIES

- A. The purpose of this MOU is for the Lead Entity to coordinate with the Host Municipality to, permit, bid, construct and operate a sewer line extension for the Finleyville-Elrama Road Project.
- B. The division of responsibilities shall be as follows:
 - (i) The Lead Entity will be responsible for the scope of work modification,

development, coordination, surveying, design, mapping, revised planning, revised permitting, bidding, and construction phase for the Project. The Lead Entity will provide a draft Act 537 Plan Amendment to the Host Municipality for adoption as required by the Pennsylvania Sewage Facilities Planning Act. The Lead Entity will also draft an amended Court Order for consideration by the Washington County Court of Common Pleas requesting the approval of the lift station option and vacating the pending Order of Court which approved the grinder pump option. The Motion and Order will be a joint motion with the consent of all parties. The Lead Entity will also draft an amendment to the proposed alternative as well as assignment documents from the Washington County Local Share Account (LSA) assigning existing funding obtained by the Host Municipality to Lead Entity. The Lead Entity will also draft an appropriate amendment canceling the parties September 28, 2022 Developer's Agreement.

- (ii) The Host Municipality will adopt the draft Act 537 Plan Amendment in accordance with the Pennsylvania Sewage Facilities Planning Act. The Host Municipality will also participate with the Lead Entity in amending an Order for consideration by the Washington County Court of Common Pleas. The Host Municipality will also participate on the assignment documents and amendment from the Washington County Local Share Account (LSA) to Lead Entity. The Host Municipality shall be responsible for obtaining any and all ROWs, and easements from residents, and the parcel of land required for the lift station for the Project, all of which shall be conveyed to the Lead Entity.

ARTICLE III DESIGN

- A. The PROJECT consists of gravity collection system with a central lift station and sewer line extension for Finleyville-Elrama Road PCSA service area as defined will be listed on Exhibit 13, once the list of customers to be served is determined.
- B. It is agreed that the design of the PROJECT, responsibility for construction, and the details of the construction contract(s) will be determined by the Lead Entity.

ARTICLE IV FINANCING OF PROJECT AND TENTATIVE SCHEDULE

- A. For the purpose of this MOU, the parties agree that the preliminary estimated Total Cost to be expended on the PROJECT is **\$1,092,500.00** as of the effective date of the MOU utilizing the larger or more expensive lift station option.
- B. For the purposes of this MOU, it is agreed that the Host Municipality will contribute a capped value of the existing Washington County Local Share Account (LSA Financing) obtained by the Host Municipality in the amount of \$200,000 as well as the balance of project funding (\$300,000) required to implement the currently permitted individual grinder pump alternative, for a total Union Township contribution of **\$500,000.00**. Payment shall be made to PCSA within 90 days after execution of this MOU. The Lead Entity shall contribute the estimated difference over and above said contribution, or the sum of **\$592,500.00** for the Project. Additionally, the parties agree that if the total cost for the Project exceeds the above estimate that they will share equally in any costs over and above the same.
- C. The tentative schedule is defined in the timeline contained in Exhibit 12 of this MOU starting on the effective date of this MOU.

ARTICLE V OPERATION AND MAINTENANCE

- A. For the purpose of this MOU, it is agreed that the Lead Entity will own, operate and maintain the facilities constructed as part of the PROJECT by the Lead Entity.

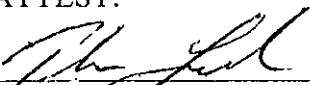
ARTICLE VI MISCELLANEOUS

- A. It is understood and agreed that, except as otherwise expressly provided in this MOU, nothing in this MOU shall be construed so as to in any way alter or affect existing responsibilities and/or maintenance responsibilities of the parties for any streets, roads, alleys, vehicular bridges, pedestrian bridges, sewer and water facilities or other public ways or utilities.
- B. Any notice, request, demand, approval or consent given or required to be given under this MOU shall, except as otherwise expressly provided herein, be in writing and shall be deemed to have been given when mailed by United States registered or certified mail, postage prepaid, to the other Parties at their respective principal offices, directed to the chief executive officer of each Party.
- C. This MOU shall be subject to and governed by the laws of the Commonwealth of Pennsylvania.
- D. This MOU may not be amended except by writing executed by each of the Parties.
- E. If any section of this MOU or any part of any section of this MOU shall be held unlawful, invalid, or unenforceable, that section or part shall be deemed deleted and without prejudice to the lawfulness, validity and enforceability of the remaining sections and parts of this MOU.
- F. This MOU may be executed in several counterparts, each of which shall be deemed an original, and all such counterparts together constitute one and the same instrument

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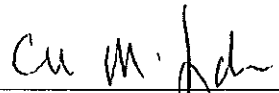
IN WITNESS WHEREOF, the parties have hereunto set their hands and seals the day and year first above written.

ATTEST:

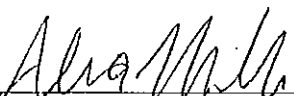


Thomas Lumsden, Secretary

THE PETERS CREEK SANITARY AUTHORITY




Christopher M. Labe, Chairman

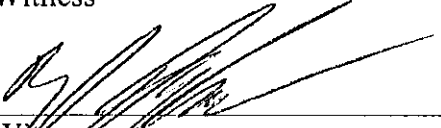


Witness

UNION TOWNSHIP



Michalle Dupree, Chairperson



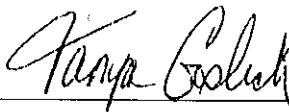
Witness

ACKNOWLEDGEMENT

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF WASHINGTON)

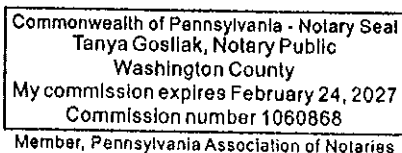
On this, the 17 day of MARCH 2023, before me, a Notary Public,
the undersigned officer, personally appeared, Michalle Dupree, of Union Township known to
me (or satisfactorily proven) to be the Chairperson of Union Township and the person
whose name is subscribed to the within instrument and acknowledged that he/she has been
authorized to execute the same for the purposes herein contained.

In Witness Whereof, I hereunto set my hand and official seal.



Notary Public

My Commission Expires:



ACKNOWLEDGEMENT

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF WASHINGTON)

On this, the 14 day of MARCH, 2023, before me, a Notary

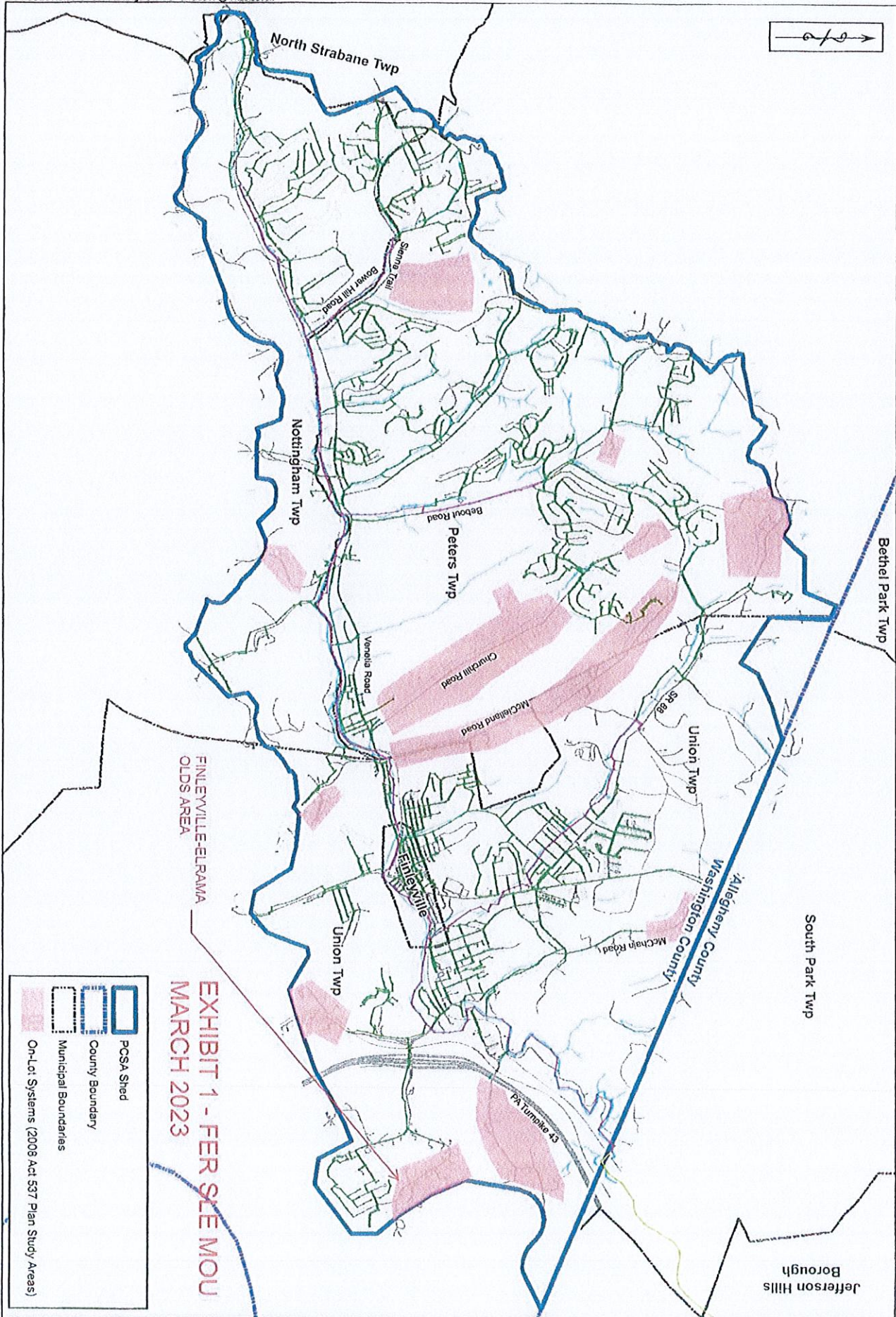
Public, the undersigned officer, personally appeared Christopher M. Labee, Chairman, known to me (or satisfactorily proven) to be the Chairman of Peters Creek Sanitary Authority and the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purposes herein contained and has been authorized to sign the same.

In Witness Whereof, I hereunto set my hand and official seal.


_____)
Notary Public

My Commission Expires:

Commonwealth of Pennsylvania - Notary Seal
Tanya Gosilak, Notary Public
Washington County
My commission expires February 24, 2027
Commission number 1060868
Member, Pennsylvania Association of Notaries



**EXHIBIT 1 - FER SLE MOU
MARCH 2023**

FINLEYVILLE-ELRAMA
OLDS AREA

	PCSA Shed
	County Boundary
	Municipal Boundaries
	On-Lot Systems (2008 Act 537 Plan Study Areas)

Scale: N.T.S.
Date: April 5, 2011
Drawn By:
Checked By:
Approved By:
Sheet No. 1 of 1
Figure No. 4

Existing On-Lot Disposal System Areas
Peters Creek Sanitary Authority
Washington County, Pennsylvania
Act 537 Plan Update

**Lennon, Smith, Souleret
Engineering, Inc.**
2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023

Date	Revisions	Date	Revisions
8/18/2011	Original revisions		



EXHIBIT 2 - FER SLE MOU March 2023

October 5, 2016

Debra A. Nigon, Secretary
Union Township
3904 Finleyville-Elrama Road
Finleyville, PA 15332

Re: Act 537 Official Plan Revision
Plan of Study and Task/Activity Report
Finleyville-Elrama Sewage Planning Area
Union Township
Washington County

Dear Ms. Nigon:

The Department of Environmental Protection (DEP) has received a Plan of Study and Task/Activity Report for preparation of an Act 537 Official Plan Update, submitted by the Harshman CE Group, LLC. The plan proposes to extend sewer lines to the Finleyville-Elrama area of Union Township.

Your Plan of Study has been approved by DEP for an estimated total cost off \$27,435.00. The resulting Act 537 Update Revision, must be consistent with Act 537, Chapter 71, Sections 71.21 and 71.31 of the Department's regulations, and with information contained in both "A Guide for Preparing Act 537 Update Revisions (February 1998)", and "Sewage Disposal needs Identification Guidance (March 1996)".

These two documents are important. Appendix I in the first guide contains a comprehensive "Plan Content and Environmental Assessment Checklist" that details information required for a successful Act 537 Plan submission. This checklist is critical. Strictly following it will minimize the chance of submitting an incomplete plan and incurring untimely project delay. The second guide provides valuable insight about proper sewage disposal needs identification and documentation procedures. This "needs" information is not only used to determine whether a project is required, but it is also used when rating projects for priority based funding such as PENNVEST. Copies of either document can be obtained from the Department.

Following Act 537 plan approval, the Department administers grants for up to 50 percent of planning costs to municipalities with approved Task/Activity Reports. Costs for completion of any planning activities outside the scope of the originally proposed plan, or costs in excess of those previously approved, are not automatically eligible for grant participation. These additional activities must be within the scope of Act 537. Costs must be submitted as revised Task/Activity Reports and receive Departmental approval.

October 5, 2016

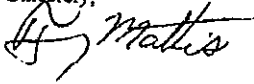
You may apply for the reimbursement grant only after DEP approves your completed Act 537 Plan. At that time, as part of your Grant application, you will need to submit cost invoices that clearly identify the task in the approved Task/Activity Report to which they apply along with proof of payment for each invoice claimed.

Please note that, due to Commonwealth budget constraints, future reimbursements may be delayed or otherwise restricted. Meeting all of the aforementioned criteria does not guarantee that a reimbursement request will be processed. Reimbursements will only be made on the availability of funding.

If your Authority or County intends to be the applicant for the Act 537 Sewage Facilities Planning Assistance Grant, Chapter 71 of the Department's regulations requires that the application submission be accompanied by written proof that the municipality (ies) has/have authorized the Authority or County to receive the grant.

If you have any questions or concerns, please contact me at either 724.769.1056 or tmattis@pa.gov.

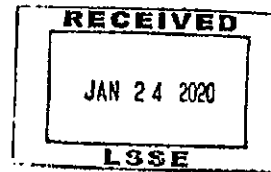
Sincerely,



Terry Mattis
Sewage Planning Specialist II
Clean Water Program

cc: Bryan Lowe, P.E., Harshman CE Group, LLC ✓

UNION TOWNSHIP
WASHINGTON COUNTY, PA



ACT 537 SEWAGE FACILITIES PLAN UPDATE
FINLEYVILLE – ELRAMA ROAD PLANNING AREA

January 2020

EXHIBIT 3 - FER SLE MOU
MARCH 2023 MOU

Prepared by:



Senate Engineering
420 William Pitt Way
Pittsburgh, PA 15238

EXHIBIT 4 - FER SLE MOU MARCH 2023

January 2020

Union Township
Act 537 Sewage Facilities Plan Update – Finleyville-Elrama Planning Area

Act 537 Plan Update Summary

Union Township (Township) is in the northeast corner of Washington County, PA. The Borough of Finleyville lies within the Township and the Township borders the Boroughs of Upper St. Clair and Bethel Park as well as the Township of South Park to the north in Allegheny County, PA. Most of the Township sewer service is provided by onlot disposal systems (OLDS) with some limited areas served by municipal sewage authorities. The Peters Creek Sanitary Authority (PCSA) has a sanitary line termination at the northern side of the Finleyville-Elrama Road Planning Area (FEPA).

This Act 537 Sewage Facilities Plan Update (Act 537 Plan Update) focuses on the area in the vicinity of Finleyville-Elrama Road approximately ½ mile northeast along Finleyville-Elrama Road from the Union Township Municipal Building. None of FEPA is currently served by the PCSA. The Pennsylvania Department of Environmental Protection (PADEP) has approved a Task and Activity Report (T/AR) for the FEPA. The T/AR approves examining further the use of a lift station and/or grinder pumps. A survey within the FEPA indicates OLDS failures. The continued use of current OLDS pose a threat to the health and safety of the Township residents.

The Union Township Zoning Map indicates an 'R1' Low Density Single Family Residential District for the FEPA. Any Act 537 Plan Update needs to consider alternatives that meet the economic growth potential in the area and the goals of the existing zoning ordinance. The FEPA consists of an estimated 19 connections resulting in 19 equivalent dwelling units (EDU). This Act 537 Plan Update for the FEPA considered various alternatives of;

1. Conventional gravity collection system with a lift station and force main for conveyance to the PCSA system.
2. Collection system consisting of individual grinder pumps per EDU for conveyance to the PCSA system.

The "Custom Soil Resource Report for Greene and Washington Counties, Pennsylvania – Act 537 Finleyville – Elrama Road Area" report indicates that the soils in the FEPA provided a 'very limited' ability for conventional type subsurface OLDS such as septic tank and/or sewage lagoon effluent absorption. Therefore, the use OLDS, Small Flow Treatment Facilities (SFTF), community land disposal alternatives and/or use of retaining tanks within the FEPA generally do not meet the health and safety, land use planning and/or environmental goals. These alternatives are not feasible solutions to the FEPA. It may be possible that more specific soil analysis of specific parcels would identify locations within an individual parcel that use of individual and alternative OLDS such as a drip irrigation and/or spray irrigation septic system would be feasible.

This Act 537 Plan Update considers mutually exclusive alternatives to provide the same remedial solution for currently failing onlot systems within the FEPA. The alternatives generally include connection to the regional sewage authority systems for conventional collection and conveyance of residential wastewater. The PCSA provides a feasible alternative to sewage remediation for the FEPA. The uniform topology in the FEPA allows for use of wastewater lifting devices to convey the sanitary wastewater from the point of discharge of the EDU to the PCSA conveyance system. Through the utilization of either a lifting station, Alternative 1, or a grinder pumps, Alternative 2, sanitary wastewater from 19 connections would be collected.

After approval of the Act 537 Plan Update, the Township expects to complete the design, permitting, and funding acquisition within 1 year followed by an estimated 6-month construction period.



EXHIBIT 5 - FER SLE MOU MARCH 2023

January 20, 2021

Roberta J. Singer
Union Township
3904 Finleyville-Elrama Rd
Finleyville, PA 15332

RE: Approval Letter 537 UR-Revision
Act 537 Planning
Finleyville-Elrama Road Planning Area
19 EDU or 7,600 GPD
DEP Code No. 63960-20-537
Union Township
Washington County

Dear Ms. Singer:

The Department of Environmental Protection (DEP) has reviewed the proposed Official Plan Update – prepared by the Senate Engineering Company and entitled “Finleyville-Elrama Road Planning Area”. The proposal is located along the Finleyville-Elrama Road in Union Township, Washington County. The plan proposes to extend public sewage to 19-dwellings utilizing grinder pumps. The submission is consistent with the planning requirements in Chapter 71 of DEP’s regulations. The plan provides for an expansion of the sewer service area.

The plan revision is approved.

The project will connect to the Peters Creek Sanitary Authority’s collection system and will generate 7,600 gallons per day of sewage to be treated at the Clairton Municipal Authority Wastewater Treatment Facility.

It is approved, however, from the planning standpoint only. Since the project involves the installation of 19-grinder pumps, a Water Quality Management (Part II) permit from this Department is required prior to start of construction.

The Water Quality Management (Part II) permit for the construction and operation of the proposed sewerage facilities must be submitted in the name of the municipality or authority, as appropriate. Approval of this Act 537 Plan Update Revision is only approval of the preliminary concept of the proposed project and does not assure that the Department will act upon a permit application favorably. Issuance of a Part II Permit will be based upon a technical evaluation of the permit application and supporting information. Starting construction prior to obtaining a permit is a violation of The Clean Streams Law.

This Plan Update Revision approval does not include approval of the system design. The system design will be evaluated and approved as part of the Part II permit application review.

Please include in your annual Municipal Wasteload Management Reports the progress of the above-mentioned Act 537 Plan Update Revision. Provide a detailed list, in this report, of the sewer lines or line segments installed, existing structure connected, sewer permits issued, and the name and number of equivalent dwelling units approved for any planning modules/ planning exemptions proposing flows to the

Instructions and permit applications may be obtained from the Clean Water Program at 400 Waterfront Drive, Pittsburgh, PA 15222; Telephone Number (412)-442- 4038.

This sewer extension qualifies as an exception under 25 Pa. Code Chapter 94 – Municipal Wasteload Management – to the restrictions of connections to the Peters Creek sewer system and no Taps need to be allocated from the Peter Creek Sanitary Authority's 2021 Connection Control Plan.

Other Departmental permits may be required for construction if encroachment to streams or wetlands will result. Information regarding the requirements for such permits or approvals can be obtained from the Department's Waterways and Wetlands Program at 500 Waterfront Drive, Pittsburgh, PA 15222; Telephone Number (412)-442- 4314.

It is now the responsibility of Union Township to implement the 537 Plan in accordance with the schedules contained within the Plan.

Since the Department has approved your Plan, you are now eligible to receive a 50 percent planning cost reimbursement as provided under Section 6 of the Sewage Facilities Act (Act 537). A copy of the reimbursement application is available on the Department's website. You are reminded that reimbursement applications must show detailed cost breakdowns of tasks completed or you will place your reimbursement in jeopardy. Please note that re-imburement will be made on the availability of funding.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board), pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800-654-5984.

Friday, February 19, 2021

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <http://ehb.courtapps.com> or by contacting the Secretary to the Board at 717-787-3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions or concerns, please contact Terry Mattis of my staff at either 724-769-1056 or tmattis@pa.gov and refer to DEP Code No. 63960-20-537.

Sincerely,



Donald Leone, P.E.
Environmental Group Manager
Clean Water Program

CC: Shane Michael, Senate Engineering Company
Jessica Stiner, PE, Harshman Group CE, LLC
Brian Secrest, Clairton Municipal Authority
Ryan A. Contestabile, P.E, Lennon, Smith, Souleret
Jason Theakston, Washington County Planning Commission
Rick Kovach, Peters Creek Sanitary Authority
Regional Office File

BCC:

Regional Act 537 File
Thomas Flanagan
Brian Schlauderaff
Terry Mattis

Addresses

Roberta J. Singer
Union Township
3904 Finleyville-Elrama Rd
Finleyville, PA 15332

Shane Michael
Senate Engineering Company
U-PARC, 420 William Pitt Highway
Pittsburgh, PA 15238

Jessica Stiner, PE
Harshman Group CE, LLC
100 Courson Hill Road,
Washington, PA 15301

Brian Secrest
Clairton Municipal Authority
One North State Street
Clairton, PA 15025

Ryan A. Contestabile, P.E.
Lennon, Smith, Souleret
Engineering, Inc.
Civil Engineers and Surveyors
846 Fourth Avenue
Coraopolis, PA 15108

Jason Theakston
Washington County Planning Commission
100 West Beau Street, Suite 701
Washington, PA 15301

Rick Kovach
Peters Creek Sanitary Authority
PO Box 3
Finleyville, PA 15332



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

**EXHIBIT 6 - FER
SLE MOU
MARCH 2023**

**WQG-02
WATER QUALITY MANAGEMENT
GENERAL PERMIT FOR SEWER EXTENSIONS AND PUMP STATIONS
PERMIT NUMBER WQG02632101**

<p>A. PERMITTEE (Name and Address): Union Township 3904 Finleyville-Elrama Road Finleyville, PA 15332 CLIENT ID# 45153</p>	<p>B. PROJECT/FACILITY (Name): Finleyville-Elrama Road Planning Area</p> <p>C. LOCATION (County, Municipality): Washington County, Union Township</p>
<p>D. This General Permit approves the construction and operation of:</p> <p><input checked="" type="checkbox"/> SEWER EXTENSION to serve 19 existing EDUs served by individual grinder pumps.</p> <p><input type="checkbox"/> PUMP STATION</p>	
<p>E. APPROVAL GRANTED BY THIS GENERAL PERMIT IS SUBJECT TO THE FOLLOWING:</p> <p>1. All construction, operations and procedures shall be in accordance with the <i>Domestic Wastewater Facilities Manual</i>.</p> <p>Transfers: In the event the permittee plans to transfer ownership of the facility to another entity, the permittee and the transferee shall submit an application for such transfer to DEP. If the transfer is approved by DEP, the transferee is subject to the terms and conditions of this General Permit.</p> <p>2. The attached conditions apply to this General Permit and are hereby made part of same.</p>	
<p>F. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS:</p> <p>1. If there is a conflict between the NOI or its supporting documents and amendments and the attached conditions, the attached conditions shall apply.</p> <p>2. Failure to comply with the rules and regulations of DEP or with the terms or conditions of this General Permit shall void the authority given to the permittee by the issuance of this General Permit.</p> <p>3. This General Permit is issued pursuant to the Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended 35 P.S. §691.1 <i>et seq.</i> Issuance of this General Permit shall not relieve the permittee of any responsibility under any other law.</p>	
<p>PERMIT ISSUED: <u>November 5, 2021</u></p>	<p>BY: <u>Christopher Kriley, P.E. /s/</u></p> <p>TITLE: <u>Clean Water Program Manager</u></p>



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

**WQG-02
WATER QUALITY MANAGEMENT
GENERAL PERMIT FOR SEWER EXTENSIONS AND PUMP STATIONS
PERMIT CONDITIONS**

General

1. DEP considers the licensed professional engineer whose seal is affixed to the design documents to be fully responsible for the adequacy of all aspects of the facility's design.
2. The approval is specifically made contingent on the permittee acquiring all necessary property rights, by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures in, along or across private property with full rights of ingress, egress and regress.
3. If, at any time, the sewer extension and/or pump station covered by this General Permit creates a public nuisance, including but not limited to, causing malodors or causing environmental harm to waters of the Commonwealth, DEP may require the permittee to adopt appropriate remedial measures to abate the nuisance or harm.
4. The approval of the plans, and the authority granted in this permit, if not specifically extended, shall cease and be null and void 2 years from the issuance date of this permit unless construction or modification of the facilities covered by this permit has begun on or before the second anniversary of the permit date.
5. This permit does not relieve the permittee of its obligations to comply with all federal, interstate, state or local laws, ordinances and regulations applicable to the facilities.
6. This General Permit does not give any real or personal property rights or grant any exclusive privileges, nor shall it be construed to grant or confirm any right, easement or interest in, on, to, or over any lands which belong to the Commonwealth.
7. No discharge is authorized from these facilities unless approved by an NPDES Permit.

Construction

8. A permit or approval is required under Chapter 102 for most earth disturbance activities. A permit or registration under Chapter 105 is required for stream obstructions, crossings, etc. The permittee must secure the necessary permits, approvals or registrations under Chapters 102 and 105 prior to beginning construction.
9. Prior to beginning any construction or excavation, the locations of all utility lines must be identified through notification to the PA One Call system (www.paonecall.org). The notification shall not be less than three nor more than 10 working days in advance of beginning the construction or excavation.
10. The local waterways conservation officer of the Pennsylvania Fish and Boat Commission (PFBC) shall be notified when the construction of any stream crossing and/or outfall is started and completed. A written permit must be secured from the PFBC if there is any use of explosives in any waterways and the permittee shall notify the local waterways conservation officer when explosives are to be used.
11. Manhole inverts shall be formed to facilitate the flow of the sewage and to prevent the stranding of sewage solids. The whole manhole structure shall be built to prevent undue infiltration, entrance of street wash or grit and provide safe access to facilitate manhole maintenance activities.
12. The facilities shall be constructed under the supervision of a Pennsylvania licensed Professional Engineer in accordance with the approved reports, plans and specifications.

13. A Pennsylvania licensed Professional Engineer shall certify that construction of the permitted facilities was completed in accordance with the application and design plans submitted to DEP, using "Post Construction Certification" (3800-PM-WSFR0179a). It is the permittee's responsibility to ensure that a Professional Engineer is on-site to provide the necessary oversight and/or inspections to certify the facilities. The certification must be submitted to DEP before the facility is placed in operation. If requested, "as-built" drawings, photographs (if available) and a description of any DEP-approved deviations from the application and design plans must be submitted to DEP within 30 days of certification. Construction must be completed within two years of permit issue date.

Operation and Maintenance

14. The permittee shall maintain sewer extension and/or pump station operation and maintenance (O&M) manuals at the facility and ensure proper O&M of the permitted facility. The permittee shall file the O&M manuals with DEP upon request.
15. Stormwater from roofs, foundation drains, basement drains or other sources shall not be admitted directly to the sewer extension or pump station.
16. The sewer extension shall have adequate foundation support as soil conditions require. Trenches shall be back-filled to ensure that sewers will have proper structural stability, with minimal settling and adequate protection against breakage. Concrete used in connection with these sewers shall be protected from damage by water, freezing, drying or other harmful conditions until cured.
17. The approved sewer extensions and/or pump stations shall be maintained in good condition, kept free of deposits by flushing or other cleaning methods and repaired when necessary.
18. The sewer extension and/or pump station shall be properly operated and maintained so that the facility will perform as designed.
19. The attention of the permittee is called to the highly explosive nature of certain gases generated by the digestion of sewage solids when these gases are mixed in proper proportions with air and to the highly toxic character of certain gases arising from such digestion or from sewage in poorly ventilated compartments or sewers. Therefore, at all places throughout the facilities where hazard of fire, explosion or danger from toxic gases may occur, the permittee shall post conspicuous permanent and legible warnings. The permittee shall instruct all employees concerning the aforesaid hazards, first aid and emergency methods of meeting such hazards and shall make all necessary equipment and material accessible.
20. There shall be no physical connection between a public water supply system and a sewer or appurtenance to it which would permit the passage of any sewage or polluted water into the potable water supply. No water pipe shall pass through or come in contact with any part of the sewer extension and/or pump station.
21. Collected screenings, slurries, sludge and other solids shall be handled and disposed of in compliance with Title 25 Pa. Code, Chapters 271, 273, 275, 283 and 285 (related to permits and requirements for land filling, land application, incineration and storage of sewage sludge), Federal Regulations 40 CFR Part 257 and the Federal Clean Water Act and its amendments.



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF WATER STANDARDS AND FACILITY REGULATION

**WATER QUALITY MANAGEMENT
 POST CONSTRUCTION CERTIFICATION**

PERMITTEE IDENTIFIER

Permittee	Union Township
Municipality	Union Township
County	Washington
WQM Permit No.	WQG02632101
Facility Type	Sewage

All of the above information should be taken directly from the Water Quality Management Permit.

DEFINITION

This certification must be completed and returned to the permits section of the DEP's regional office issuing the WQM permit within 30 days of completion of the project and received by DEP prior to operation, and if requested, as-built drawings, photographs (if available) and a discussion of any DEP-approved deviations from the design plans during construction.

I, being a Registered Professional Engineer in Pennsylvania, do hereby certify to the best of my knowledge and belief, based upon personal observation and interviews, that the above facility approved under the Water Quality Management Permit has been constructed in accordance with the plans, specifications and modifications approved by DEP.

Construction Completion Date (MM/DD/YYYY): _____

<p>Engineer's Seal</p>	Professional Engineer
	Name _____ (Please Print or Type)
	Signature _____
	Date _____
	License Expiration Date _____
	Firm or Agency _____
	Telephone _____
	Permittee or Authorized Representative
	Name _____ (Please Print or Type)
	Signature _____
	Title _____
	Telephone _____



RECEIVED

NOV 10 2022

PETERS CREEK
SANITARY AUTHORITY

EXHIBIT 7 - FER SLE MOU
MARCH 2023

November 4, 2022

CERTIFIED MAIL NO. 7021 0950 0001 8853 7921

Roberta J. Singer, Secretary
Union Township
3904 Finleyville-Elrama Road
Finleyville, PA 15332

Re: Act 537 Plan Update Status
Finleyville-Elrama Road Planning Area
Union Township
Washington County

Dear Ms. Singer:

On January 20, 2021, the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department") issued an approval letter to Union Township for the Act 537 Plan Update for the Finleyville-Elrama Planning Area to extend public sewage to nineteen dwellings utilizing grinder pumps ("Approval Letter"). A copy of the Approval Letter is attached for reference.

Union Township subsequently submitted an application for a Water Quality Management Part II Permit ("Part II Permit") for the construction and operation of the proposed sewerage facilities in accordance with the approved Act 537 Plan Update for the Finleyville-Elrama Planning Area. The Part II Permit was issued on November 5, 2021.

As stated in the Approval Letter, it is the responsibility of Union Township to implement the Act 537 Plan Update in accordance with the schedules contained therein. As of the date of this letter, Union Township has not commenced construction in accordance with the approved Act 537 Plan Update.

The Department requests that Union Township respond to this letter, in writing, by **November 18, 2022** and identify what has been done, and will be done, to comply with the approved Act 537 Plan Update. As a reminder, any deviation from the approved Act 537 Plan Update will require an additional Plan Update Revision approval. If Union Township plans to deviate from the approved Plan, your response should include an estimated schedule for submitting a Plan Update Revision.

Ms. Roberta Singer

-2-

November 4, 2022

Please contact Terry Mattis of my staff at either 724-769-1056 or tmattis@pa.gov if you have any questions.

Sincerely,

Thomas E. Flanagan

Thomas E. Flanagan
Sewage Planning Specialist Supervisor
Clean Water Program

Cc: Christopher Kriley, P.E. (PADEP)
Mahbuba Iasmin, P.E. (PADEP)
Terry Mattis (PADEP)
Stacey Greenwald (PADEP)
Amanda Schmidt (PADEP)
Sean O'Dell, P.E. (Harshman Group CE, LLC)
Rick Kovach (Peters Creek Sanitary Authority.)

OPINION OF PROBABLE COST

Peters Creek Sanitary Authority
 Finleyville Elrama Road Grinder Pump Concept
 Conceptual Layout

Prepared by:
 Lennon, Smith, Souleret Engineering, Inc.
 Dated: April 7, 2022

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ITEM COST
1	3" SDR 11 HDPE (Directionally Drilled - All	2,145	LF	\$40.00	\$85,800.00
2	1-1/4" SDR 11 HDPE Service (Directionally Drilled - All Depths)	795	LF	\$35.00	\$27,825.00
3	Grinder Pump Units	19	EA	\$9,000.00	\$171,000.00
4	Wye Connection	19	EA	\$750.00	\$14,250.00
5	Curb Box Assembly	19	EA	\$1,500.00	\$28,500.00
6	Terminal Cleanout	1	EA	\$1,500.00	\$1,500.00
7	Inline Cleanout	1	EA	\$1,500.00	\$1,500.00
8	Air/Vacuum Release Valve Assembly	1	EA	\$4,500.00	\$4,500.00
9	Connection to Existing Manhole	1	EA	\$4,000.00	\$4,000.00
10	Erosion and Sedimentation Control	1	LS	\$15,000.00	\$15,000.00
11	Detour Plan, Maintenance and Protection of traffic	1	LS	\$10,000.00	\$10,000.00
12	Location of Existing Underground Utilities	1	LS	\$7,500.00	\$7,500.00
13	Field Engineering (Section 01050)	1	LS	\$10,000.00	\$10,000.00
14	Permit Compliance	1	LS	\$15,000.00	\$15,000.00
	SUB TOTAL				\$396,375.00
	2% ADMINISTRATIVE/LEGAL				\$8,000.00
	15% ENGINEERING				\$59,000.00
	10% CONTINGENCY				\$40,000.00
	TOTAL				\$503,375.00

*Quantities Approximated based on HOP Submittal Drawings Provided by Harshman CE Group Previously

**EXHIBIT 8 - FER SLE MOU
 MARCH 2023**

OPINION OF PROBABLE COST

Peters Creek Sanitary Authority
 Finleyville Elrama Road Lift Station Concept
 Conceptual Layout - Option A

Prepared by:
 Lennon, Smith, Souleret Engineering, Inc.
 Dated: April 4, 2022

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ITEM COST
1	8" PVC Gravity Sanitary Sewer (Assumes all out of Roadway)	1,100	LF	\$110.00	\$121,000.00
2	4' Diameter Sanitary Manhole Barrel	30	VF	\$300.00	\$9,000.00
3	4' Diameter Sanitary Manhole Bottom	3	EA	\$3,000.00	\$9,000.00
4	Manhole Frame and Cover	3	EA	\$1,000.00	\$3,000.00
5	Wye Connection	19	EA	\$500.00	\$9,500.00
6	Site tee	19	EA	\$750.00	\$14,250.00
7	6" PVC Service Sewer (Short Side)	80	LF	\$75.00	\$6,000.00
8	6" PVC Service Sewer (Long Side) (Assumes No Road Restoration - Drill/Bore Services)	550	LF	\$95.00	\$52,250.00
9	6' Diameter Precast Wet Well (Complete Less Mechanical Items)	1	LS	\$80,000.00	\$80,000.00
10	5' Diameter Precast Valve Pit (Complete Less Mechanical Items)	1	LS	\$35,000.00	\$35,000.00
11	5' Diameter Meter Pit (Complete Less Mechanical Items)	1	LS	\$20,000.00	\$20,000.00
12	DIP Forcemain	50	LF	\$125.00	\$6,250.00
13	4" C900 PVC Forcemain	1,500	LF	\$75.00	\$112,500.00
14	Submersible Pumping System Including Control Panel	1	LS	\$175,000.00	\$175,000.00
15	Electrical Work / Control Wiring	1	LS	\$35,000.00	\$35,000.00
16	Hoist	1	LS	\$7,500.00	\$7,500.00
17	Inside Piping and Valves	1	LS	\$35,000.00	\$35,000.00
18	Mag Meter	1	LS	\$7,500.00	\$7,500.00
19	Emergency Power System Diesel Engine Driven Generator with Slab	1	LS	\$45,000.00	\$45,000.00
20	Forcemain Connection to Existing Sanitary Sewer	1	LS	\$4,000.00	\$4,000.00
21	Chainlink Fence	150	LF	\$75.00	\$11,250.00
22	Double Swing Gate	1	LS	\$5,000.00	\$5,000.00
23	Erosion and Sedimentation Control	1	LS	\$15,000.00	\$15,000.00
24	Detour Plan, Maintenance and Protection of traffic	1	LS	\$10,000.00	\$10,000.00
25	Location of Existing Underground Utilities	1	LS	\$7,500.00	\$7,500.00
26	Field Engineering (Section 01050)	1	LS	\$10,000.00	\$10,000.00
27	Permit Compliance	1	LS	\$15,000.00	\$15,000.00
	SUB TOTAL				\$860,500.00
	2% ADMINISTRATIVE/LEGAL				\$17,000.00
	15% ENGINEERING				\$129,000.00
	10% CONTINGENCY				\$86,000.00
	TOTAL				\$1,092,500.00

*Quantities Approximated based on Exhibit Drawings for Lift Station Alternative included in FER 517 Plan by Senate Engineering

EXHIBIT 9 - FER SLE MOU MARCH 2023

OPINION OF PROBABLE COST

Peters Creek Sanitary Authority
Finleyville Elrama Road Lift Station Concept
Conceptual Layout - Option B

Prepared by:
Lennon, Smith, Souleret Engineering, Inc.
Dated: April 18, 2022

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ITEM COST
1	8" PVC Gravity Sanitary Sewer (Assumes all out of Roadway)	1,100	LF	\$110.00	\$121,000.00
2	4' Diameter Sanitary Manhole Barrel	30	VF	\$300.00	\$9,000.00
3	4' Diameter Sanitary Manhole Bottom	3	EA	\$3,000.00	\$9,000.00
4	Manhole Frame and Cover	3	EA	\$1,000.00	\$3,000.00
5	Wye Connection	19	EA	\$500.00	\$9,500.00
6	Site tee	19	EA	\$750.00	\$14,250.00
7	6" PVC Service Sewer (Short Side)	80	LF	\$75.00	\$6,000.00
8	6" PVC Service Sewer (Long Side) (Assumes No Road Restoration - Drill/Bore Services)	550	LF	\$95.00	\$52,250.00
9	5' Diameter Meter Pit (Complete Less Mechanical Items)	1	LS	\$20,000.00	\$20,000.00
10	DIP Foremain	50	LF	\$125.00	\$6,250.00
11	4" C900 PVC Foremain	1,500	LF	\$75.00	\$112,500.00
12	Pre-Fab FRP Pumping System Including Controls	1	LS	\$75,000.00	\$75,000.00
13	Electrical Work / Control Wiring	1	LS	\$35,000.00	\$35,000.00
14	Hoist	1	LS	\$7,500.00	\$7,500.00
15	Mag Meter	1	LS	\$7,500.00	\$7,500.00
16	Emergency Power System Diesel Engine Driven Generator with Slab	1	LS	\$45,000.00	\$45,000.00
17	Foremain Connection to Existing Sanitary Sewer	1	LS	\$4,000.00	\$4,000.00
18	Chainlink Fence	150	LF	\$75.00	\$11,250.00
19	Double Swing Gate	1	LS	\$5,000.00	\$5,000.00
20	Erosion and Sedimentation Control	1	LS	\$15,000.00	\$15,000.00
21	Detour Plan, Maintenance and Protection of traffic	1	LS	\$10,000.00	\$10,000.00
22	Location of Existing Underground Utilities	1	LS	\$7,500.00	\$7,500.00
23	Field Engineering (Section 01050)	1	LS	\$10,000.00	\$10,000.00
24	Permit Compliance	1	LS	\$15,000.00	\$15,000.00
				SUB TOTAL	\$610,500.00
				2% ADMINISTRATIVE/LEGAL	\$12,000.00
				15% ENGINEERING	\$92,000.00
				10% CONTINGENCY	\$61,000.00
				TOTAL	\$775,500.00

*Quantities Approximated based on Exhibit Drawings for Lift Station Alternative included in FER 537 Plan by Seate Engineering

EXHIBIT 10 - FER SLE MOU MARCH 2023

MEMO

**EXHIBIT 11 - FER SLE MOU
MARCH 2023**

TO: Chris Labee, Chairman
COMPANY: Peters Creek Sanitary Authority
FROM: Ryan A. Contestabile, P.E.
SUBJECT: Finleyville-Elrama Road Sanitary Sewer Extension – Life Cycle Cost Alternatives Analysis

DATE: August 22, 2022
S. O. NO.: 351-002-028
cc: PCSA Authority Board
Rick Kovach, Manager
Phillip Binotto, Solicitor

BACKGROUND

Two alternatives are under consideration for a sanitary sewer extension proposed to service 19 existing homes along Finleyville-Elrama Road (FER) in Union Township:

- A low-pressure sanitary sewer system with 19 individual grinder pumps (Grinder Pump Alternative) as compared to
- A gravity sanitary sewer collection system with sanitary sewer lift station (Lift Station Alternative).

Capital costs estimates for each alternative have been previously identified, however these estimates do not include long term Operations and Maintenance Costs (equipment maintenance/replacement, electricity usage, repair, etc.).

The purpose of this memorandum is to summarize and compare a life cycle cost analysis (in terms of a Present Worth Value) of these two alternatives after consideration of annual operating costs associated with each alternative over a given planning period.

ANALYSIS

The economic analysis for the two sanitary sewer extension alternatives is presented below in terms of the Present Worth Value representing a life cycle cost over a recommended 30-year planning period.

Present worth calculations were performed using the federal discount rate from Appendix C of OMB Circular A-94 (March 15, 2022) for establishing the present worth of the uniform series in today's dollars.

The Present Worth Analysis was carried out to evaluate the present and future costs of each alternative (Grinder Pump Alternative vs. Lift Station Alternative).

The total Present Worth Value (Net Present Value) is comprised of Capital Costs, Operations and Maintenance (O&M) costs, and Salvage Value. The Present Worth of Operations and Maintenance (O&M), Salvage Value were determined as discussed in the subsequent sections.

Capital Costs

The Opinion of Probable Cost (OPC) for the capital costs associated with each alternative were previously developed and are summarized in Table 1 and is attached. The OPC were computed based on conceptual layout of each alternative.

Annual O&M Costs

Equation 1 provides a Uniform Series Present Worth (PW) calculation to determine the present-day O&M cost of the alternatives by utilizing a chosen planning period ($n = 30$ years), annual O&M budget (A), and an assumed O&M yearly inflation rate (i) of 0.5 percent (Real Discount Rate published in OMB Circular No. A-94 revised March 2022 for a 30-year planning period). The annual O&M budgets were estimated for the alternatives as summarized in the following paragraphs, with the results provided in Table 1. Discussion on O&M costs utilized is also included below.

Equation 1

$$PW = A \left[\frac{(1+i)^n - 1}{(1+i)^n} \right]$$

Annual O&M costs were estimated for each alternative as follows:

- **Grinder Pump Alternative**
 - **Electricity Costs** – Annual electric use costs for individual grinder pump operation were computed based on literature published by Environment One (EOne Grinder Pump Manufacturer). EOne states that an average grinder pump utilizes approximately 16 kwh per month. An electricity price of \$0.185 per Kwh was used to compute annual electricity costs.
 - **Equipment Maintenance Costs** – EOne literature states that the average time per service calls for grinder pumps is 8-10 years. For this analysis it was assumed that grinder pump service would be required every 8 years, or three times over a 30-year period. A service cost of \$1,500 per occurrence was assumed. For the purposes of this analysis, maintenance cost (\$4,500) was annualized by taking the total cost and dividing by the planning period (30-years).
 - **Equipment Repair/Replacement Costs** – EOne literature states that the average need for major rebuild/replacement of the pump core is 15-20 years. For this analysis it was assumed that two grinder pump service rebuilds/replacements would be required over a 30-year period. A rebuild/replacement cost of \$8,000 per occurrence was assumed. For the purposes of this analysis, the rebuild/replacement cost was annualized by taking the total cost (\$16,000) and dividing by the planning period (30-years).

- The computed Present Worth O&M Cost for each grinder pump was multiplied by 19 proposed grinder pumps to compute the total Present Worth O&M Cost of the proposed lower pressure system.
- Based on the parameters identified above, the total annual O&M Costs for the grinder pump alternative used for analysis are approximately \$720/year/pump (or \$60/month/pump), for a total annual O&M Cost of approximately \$13,680 for a low-pressure system comprised of 19 grinder pumps).
- **Lift Station Alternative:**
 - **Utility/Maintenance Costs** – Annual utility and routine maintenance costs for the proposed lift station were projected using existing PCSA budgeted costs for the PCSA Pleasant View Lift Station. Based on an average of three years budgeted costs, an annual value of \$1,650 was used for utility costs. An annual allowance of \$5,000 was used for routine maintenance (as compared to actual of approximately \$3,200 per the PCSA Budget). Total annual Utility/Maintenance Cost utilized was \$6,650.
 - **Equipment Replacement/Repair Costs** – Based on experience with similar lift stations, it was assumed that major equipment replacement/repair would be required approximately every 7 years, or a total of 4 times over a 30-year planning period. A major equipment replacement/repair cost of \$15,000 per occurrence was utilized. For the purposes of this analysis, the total equipment replacement/repair cost (\$60,000) was annualized by taking the total cost and dividing by the planning period (30-years).
 - Based on the parameters identified above, the total annual O&M Costs for the lift station alternative used for this analysis are approximately \$8,650/year (or \$720/month).

Salvage Value

Salvage Value of each alternative also typically considered in a life cycle cost analysis. A design life of 50 years for each proposed alternative is assumed based on PaDEP Guidance for planning level present worth analysis. The planning period utilized for the analysis is 30-years, therefore a salvage value (remaining value between years 31 and 50) is computed using the straight-line depreciation method where it is estimated that the pumping/sewer infrastructure will have zero value at year 50. Annual Depreciation (D_n) is calculated using the Opinion of Probable Capital Cost (C) of the alternative, estimated salvage value at the end of the useful life (F) and the design life of the asset (N).

Equation 2

$$D_n = \frac{C - F}{N}$$

Equation 3 then calculates the Salvage Value for any year within the useful life of the asset, where “n” is again the planning period.

Equation 3

$$SV_n = C - nD_n$$

Net Present Value

The Net Present Value (NPV) can then be calculated for each alternative as the sum of the Opinion of Probable Capital Cost (C) and Present Worth (PW) of annual O&M costs minus the Salvage Value (SV), as shown in Equation 4.

Equation 4

$$NPV = C + PW(O&M) - SV$$

SUMMARY

The capital costs, O&M costs, and salvage values were computed on a present worth basis as described above. Table 1 summarizes the results of the analysis when applied to the considered alternatives.

Table 1 - Life Cycle Cost Analysis, 30 Year Planning Period

	Grinder Pump Alternative	Lift Station Alternative
Opinion of Probable Capital Construction Project Cost (Appended)	\$ 503,375	\$ 775,500
Present Worth Value of O&M ⁽¹⁾	\$ 379,500	\$ 240,500
Subtotal	\$ 882,875	\$ 1,016,000
Less Salvage Value	(\$ 201,350)	(\$ 310,200)
TOTAL PRESENT WORTH VALUE	\$ 681,525	\$ 705,800

(1) Based upon $r=0.5\%$ and $n=30$ years

As identified in Table 1, the estimated Total Present Worth Value for the Grinder Pump Alternative is approximately 3.5% less than the Total Present Worth Value for the Lift Station Alternative on a Present Worth Basis over a 30-year planning period.

In terms of alternative evaluation on a planning level, a rule of thumb generally accepted by Pennsylvania regulatory and funding agencies suggests that any alternative within 15% of another alternative can be considered as an equivalent alternative from a cost-based perspective.

Therefore, the Grinder Pump and Lift Stations alternatives are essentially equivalent on a Total Present Worth Value basis over a 30-year planning period.



LSSE

Civil Engineers and Surveyors

HEADQUARTERS IN CORAOPOLIS, PENNSYLVANIA

MANAGING PRINCIPALS

Kevin A. Brett, P.E.

Ned Mitrovich, P.E.

Jason E. Stanton, P.E.

January 12, 2023

S.O. No. 351-02-28

VIA EMAIL ONLY
(secretary@uniontwp.com)

Union Township Board of Supervisors
3904 Finleyville-Elrama Road
Finleyville, Pennsylvania 15332

EXHIBIT 12 - FER SLE MOU MARCH 2023

**Subject: Finleyville-Elrama Road
Sanitary Sewer Line Extension (SLE) Project**

Ladies and Gentlemen:

This letter is being sent on behalf of and as directed by the Peters Creek Sanitary Authority (PCSA) Board and follows discussion at the November 21, 2022 special joint meeting between PCSA and Union Township and the December 19, 2022 PCSA Board Meeting and regarding the subject sanitary sewer line extension (SLE) proposed along Finleyville-Elrama Road in Union Township. PCSA recommends that Union Township schedule a meeting with PCSA to discuss the current status of the project and/or options to move forward.

Following the November 21, 2022 special joint meeting between PCSA and Union Township, PCSA requested that their consulting engineer, LSSE, evaluate a potential implementation schedule for both alternatives of the subject sanitary sewer extension project which includes 19 individual grinder pump units or a gravity sewer and central lift station. As part of that evaluation, LSSE requested and received the following from Union Township's Engineer, Harshman CE Group, LLC (see email enclosed):

1. Information regarding the Local Share Account (LSA) Grant obtained by Union Township for this project;
2. The Water Quality Management Part II Permit issued by Pa DEP for this project and plans prepared for same;
3. Correspondence with Pa DEP regarding revision of the project scope from the scope approved as part of the Act 537 Plan Approval; and
4. Information and latest comments issued by PennDOT regarding the Highway Occupancy Permit.

OFFICES IN: Allegheny, Beaver, Erie and Westmoreland Counties Pennsylvania; Franklin County, Ohio

846 Fourth Avenue Coraopolis, PA 15108 (412) 264-4400 Fax: (412) 264-1200	150 Pleasant Drive, Suite 204 Aliquippa, PA 15001 (412) 264-4400 Fax: (412) 264-1200	10560 Walnut Street Albion, PA 16401 (814) 756-4384 Fax: (814) 756-5638	4534 Route 136, Suite 9 Greensburg, PA 15601 (724) 837-1057 Fax: (412) 264-1200	5980 Wilcox Place, Suite J Dublin, OH 43016 (614) 395-1661
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Based on review of the information provided, the previously received Act 537 Plan prepared by Senate Engineering, and other available information LSSE has identified the following:

1. Union Township was awarded a \$200,000.00 grant from the Redevelopment Authority of the County of Washington (RACW) Local Share Account (LSA) grant program. Based on the application materials provided, the grant submitted identifies that the Finleyville-Elrama Road area is proposed to be served via all grinder pumps. It also appears that this grant included design/engineering costs in addition to construction costs. The current balance of grant funding available is unknown at this time. However, based on discussion with RACW, it may be possible for Union Township, if so desired, to revise the implemented technology proposed to serve this subject area without jeopardizing the grant funding. Per RACW, a letter request would be required to be provided to RACW for consideration by the LSA Grant Selection Committee identifying the proposed changes. The LSA Grant Selection Committee would then determine if the proposed change is acceptable and provide response.
2. Based on review of the documents available, there appears to be a discrepancy between the properties to be served by the proposed extension. Various documents propose to serve differing properties. LSSE has compiled a table (enclosed) identifying the properties proposed to be served by the subject sewer line extension as identified in:
 - a. The Act 537 Plan prepared by Senate Engineering dated January 2020;
 - b. The Part II Permit Drawings provided by Harshman via email Dated December 9, 2022,
 - c. The HOP drawings provided by Harshman via email dated March 17, 2022.

The enclosed table also identifies the discrepancies via colored highlights.

3. Based on the discrepancies in the properties noted above, adequate Sewage Facilities Planning may not have been completed/approved for this project. As noted on the enclosed table, the Act 537 Plan identifies 19 properties to be served. The Part II Permit drawings identify 19 properties largely consistent with the Act 537 Plan; however, includes the addition of a property along Robb Lane not previously included in the Act 537 Plan. Lastly, the HOP Drawings identify 19 properties largely consistent with the Part II Permit drawings however included the addition of 2 additional properties along Robb Lane not previously included in the Act 537 Plan. Based on this review, it is not clear what properties are intended to be serviced. Also, it is LSSE's opinion that sewage facilities planning has not been completed / approved if the additional 3 properties along Robb Lane and the removal of other properties from the project scope was intended.


As discussed at the November 21, 2022 special joint meeting between PCSA and Union Township, LSSE has reached out to Pa DEP regarding the steps required, if Union Township so desires, to modify the existing approved sewage facilities planning efforts to document the proposed potential revision to a lift station alternative.

In consideration of the findings identified in Item No. 3 above, it is LSSE's opinion that the sewage facilities planning efforts performed for this project require revision irrespective of the selected alternative. To that end, LSSE has prepared the enclosed projected timeline for project implementation for discussion purposes.

Union Township Board of Supervisors
January 12, 2023
Page 3

PCSA requests for Union Township Board of Supervisors to review this letter at their next scheduled regular meeting and respond thereafter to PCSA with a proposed date/time for a meeting regarding the subject sewer line extension. PCSA Board will discuss proposed date/time at PCSA's January 23, 2023 regular meeting. Please contact Rick Kovach, Authority Manager – PCSA to coordinate a meeting.

Sincerely,



Jason E. Stanton, P.E.




JES/ven

Enclosures

cc/enc: Rick Kovach, Authority Manager – PCSA (rickkovach.pcsa@verizon.net)
Christopher Labee, Chairman – PCSA (labeefamily@verizon.net)
PCSA Board of Directors
Phil Binotto, Solicitor – PCSA (pjbino@vorys.com)
TJ Stevens, P.E. – Bankson Engineers, Inc. (tstephens@banksonengineers.com)
Dennis Makel, Solicitor – Union Township (dennis@makelandassociates.com)

Finleyville-Elrama Road Sanitary Sewer Extension
Properties to Be Served Indicated on Various Drawings/Documents As Noted

GP No.	January 2020 Act 537 Plan prepared by Senate Engineering (Act 537 Plan Scope)	Part II Permit Drawings Dated 7/6/21, Revised 8/10/21 received from Harshmant CE Group, LLC 12/9/22	HOP Drawings Dated October 4, 2021 received from Harshmant CE Group, LLC 3/17/22
1	3985 Finleyville-Elrama Road	3985 Finleyville-Elrama Road	3985 Finleyville-Elrama Road
2		9 Robb Lane	9 Robb Lane
3		3991 Finleyville-Elrama Road	
4	3991 Finleyville-Elrama Road	3976 Finleyville-Elrama Road	
5	3984 Finleyville-Elrama Road	3984 Finleyville-Elrama Road	3991 Finleyville-Elrama Road
6	3993 Finleyville-Elrama Road	3993 Finleyville-Elrama Road	3984 Finleyville-Elrama Road
7	3997 Finleyville-Elrama Road	3990 Finleyville-Elrama Road	3993 Finleyville-Elrama Road
8	3990 Finleyville-Elrama Road	3997 Finleyville-Elrama Road	3990 Finleyville-Elrama Road
9	3994 Finleyville-Elrama Road	3994 Finleyville-Elrama Road	3997 Finleyville-Elrama Road
10	3998 Finleyville-Elrama Road	3998 Finleyville-Elrama Road	3994 Finleyville-Elrama Road
11	4004 Finleyville-Elrama Road	4004 Finleyville-Elrama Road	3998 Finleyville-Elrama Road
12	4008 Finleyville-Elrama Road	Nike Site	4004 Finleyville-Elrama Road
13		4008 Finleyville-Elrama Road	4008 Finleyville-Elrama Road
14	4014 Finleyville-Elrama Road	4014 Finleyville-Elrama Road	4014 Finleyville-Elrama Road
15	4026 Finleyville-Elrama Road	4026 Finleyville-Elrama Road	4026 Finleyville-Elrama Road
16	4028 Finleyville-Elrama Road	4028 Finleyville-Elrama Road	4028 Finleyville-Elrama Road
17	4032 Finleyville-Elrama Road	4032 Finleyville-Elrama Road	4032 Finleyville-Elrama Road
18	4038 Finleyville-Elrama Road	4038 Finleyville-Elrama Road	4038 Finleyville-Elrama Road
19	4035 Finleyville-Elrama Road	4035 Finleyville-Elrama Road	4035 Finleyville-Elrama Road

 Indicates Property Included in Part II Scope But Not Included in Act 537 Plan Scope
 Indicates Property Included in HOP Drawing Scope But Not Included in Act 537 Plan Scope or Part II Permit Scope
 Indicates Property Included in Act 537 Plan Scope and Removed

PETERS CREEK SANITARY AUTHORITY
Finleyville-Elrama Road Sanitary Sewer Extension
Lift Station AND Grinder Pump Alternative Projected Timeline

Task No.	Task Description	Projected Duration	Total Elapsed Time From Time	Notes
1	Finalize Agreement between Union Township and PCSA	30 Days	Zero	
2	Draft Act 537 Planning Revision via Special Study	60 Days	90 Days	
3	Initiate/Advertise 30 Day Public Comment Period	30 Days	120 Days	
4	Municipal Adoption of Act 537 Plan Special Study	30 Days	150 Days	
5	Submit Act 537 Plan Special Study to PaDEP	---	---	To be Submitted Immediately Following Adoption by Township
6	-Prepare Final Construction Docs and PCSA Review/Approval of Final Docs (Grinder Pump Alternative) -Survey/Design (Lift Station Alternative)	120 Days	---	Completed Concurrently with PaDEP Review of Act 537 Plan Revision (Below)
7	Receive Act 537 Plan Special Study Approval from PaDEP	120 Days	270 Days	Assume 120 Day Review Period (May be More or Less)
8	Submit Part II Permit Application	---	---	To Be Submitted Immediately Following PaDEP Approval of Act 537 Plan Revision
9	Receive Part II Permit Approval	120 Days	390 Days	Assume 120 Day PaDEP Review Period (May be More or Less)
10	Complete Right-of-way Acquisition	---	---	Completed Concurrently with PaDEP Part II Permit Review (Above)
11	Advertise/Issue Contract for Bid	30 Days	420 Days	
12	Open Bids	---	---	
13	Pre-Construction Meeting	30 Days	450 Days	
14	Construction	180 Days	630 Days	

APPENDIX I

LIFE CYCLE COST ANALYSIS MEMO
UPDATE



LSSE
Civil Engineers and Surveyors

MEMO

846 Fourth Avenue, Coraopolis, PA 15108
(412) 264-4400 • (412) 264-1200 Fax

TO: Chris Labee, Chairman
COMPANY: Peters Creek Sanitary Authority
FROM: Jason E. Stanton, P.E.
Cody A. Colarusso, E.I.T.
SUBJECT: Finleyville-Elrama Road
Sanitary Sewer Extension –
Life Cycle Cost Alternatives
Analysis - Updated

DATE: January 8, 2024
S. O. NO.: 351-051
cc: PCSA Authority Board
Rick Kovach, Manager
Phillip Binotto, Solicitor

BACKGROUND

Two alternatives are under consideration for a sanitary sewer extension proposed to service 30 existing homes along Finleyville-Elrama Road (FER) in Union Township:

- A gravity sanitary sewer collection system with sanitary sewer lift station (Lift Station Alternative).
- A low-pressure sanitary sewer system with 30 individual grinder pumps (Grinder Pump Alternative) as compared to

Capital costs estimates for each alternative have been previously identified, however these estimates do not include long term Operations and Maintenance Costs (equipment maintenance/replacement, electricity usage, repair, etc.).

The purpose of this memorandum is to summarize and compare a life cycle cost analysis (in terms of a Present Worth Value) of these two alternatives after consideration of annual operating costs associated with each alternative over a given planning period.

ANALYSIS

The economic analysis for the two sanitary sewer extension alternatives is presented below in terms of the Present Worth Value representing a life cycle cost over a recommended 30-year planning period.

Present worth calculations were performed using the federal discount rate from Appendix C of OMB Circular A-94 (December 12, 2022) for establishing the present worth of the uniform series in today's dollars.

The Present Worth Analysis was carried out to evaluate the present and future costs of each alternative (Grinder Pump Alternative vs. Lift Station Alternative).

The total Present Worth Value (Net Present Value) is comprised of Capital Costs, Operations and Maintenance (O&M) costs, and Salvage Value. The Present Worth of Operations and Maintenance (O&M), Salvage Value were determined as discussed in the subsequent sections.

Capital Costs

The Opinion of Probable Cost (OPC) for the capital costs associated with each alternative were previously developed and are summarized in Table 1 and is attached. The OPC were computed based on conceptual layout of each alternative.

Annual O&M Costs

Equation 1 provides a Uniform Series Present Worth (PW) calculation to determine the present-day O&M cost of the alternatives by utilizing a chosen planning period ($n = 30$ years), annual O&M budget (A), and an assumed O&M yearly inflation rate (i) of 2.0 percent (Real Discount Rate published in OMB Circular No. A-94 revised December 2022 for a 30-year planning period). The annual O&M budgets were estimated for the alternatives as summarized in the following paragraphs, with the results provided in Table 1. Discussion on O&M costs utilized is also included below.

Equation 1

$$PW = A \left[\frac{(1+i)^n - 1}{i(1+i)^n} \right]$$

Annual O&M costs were estimated for each alternative as follows:

- **Grinder Pump Alternative:**
 - **Electricity Costs** – Annual electric use costs for individual grinder pump operation were computed based on literature published by Environment One (E-One Grinder Pump Manufacturer). E-One states that an average grinder pump utilizes approximately 16 kwh per month. An electricity price of \$0.256 per Kwh was used to compute annual electricity costs.
 - **Equipment Maintenance Costs** – E-One literature states that the average time per service calls for grinder pumps is 8-10 years. For this analysis it was assumed that grinder pump service would be required every 8 years, or three times over a 30-year period. A service cost of \$1,750 per occurrence was assumed. For the purposes of this analysis, maintenance cost (\$5,250) was annualized by taking the total cost and dividing by the planning period (30-years).
 - **Equipment Repair/Replacement Costs** – E-One literature states that the average need for major rebuild/replacement of the pump core is 15-20 years. For this analysis it was assumed that two grinder pump service rebuilds/replacements would be required over a 30-year period. A rebuild/replacement cost of \$12,000 per occurrence was assumed. For the purposes of this analysis, the rebuild/replacement cost was annualized by taking the total cost (\$24,000) and dividing by the planning period (30-years).

- The computed Present Worth O&M Cost for each grinder pump was multiplied by 30 proposed grinder pumps to compute the total Present Worth O&M Cost of the proposed lower pressure system.
- Based on the parameters identified above, the total annual O&M Costs for the grinder pump alternative used for analysis are approximately \$1,025/year/pump (or \$86/month/pump), for a total annual O&M Cost or approximately \$30,727 for a low-pressure system comprised of 30 grinder pumps).
- Lift Station Alternative:
 - Utility/Maintenance Costs – Annual utility and routine maintenance costs for the proposed lift station were projected using existing PCSA budgeted costs for the PCSA Pleasant View Lift Station. Based on an average of three years budgeted costs, an annual value of \$1,685 was used for utility costs. An annual allowance of \$4,000 was used for routine maintenance (as compared to actual of approximately \$9,000 per the PCSA Budget). Total annual Utility/Maintenance Cost utilized was \$5,685.
 - Equipment Replacement/Repair Costs – Based on experience with similar lift stations, it was assumed that major equipment replacement/repair would be required approximately every 7 years, or a total of 4 times over a 30-year planning period. A major equipment replacement/repair cost of \$15,000 per occurrence was utilized. For the purposes of this analysis, the total equipment replacement/repair cost (\$60,000) was annualized by taking the total cost and dividing by the planning period (30-years).
 - Based on the parameters identified above, the total annual O&M Costs for the lift station alternative used for this analysis are approximately \$7,685/year (or \$641/month).

Salvage Value

Salvage Value of each alternative also typically considered in a life cycle cost analysis. A design life of 50 years for each proposed alternative is assumed based on PaDEP Guidance for planning level present worth analysis. The planning period utilized for the analysis is 30-years, therefore a salvage value (remaining value between years 31 and 50) is computed using the straight-line depreciation method where it is estimated that the pumping/sewer infrastructure will have zero value at year 50. Annual Depreciation (D_n) is calculated using the Opinion of Probable Capital Cost (C) of the alternative, estimated salvage value at the end of the useful life (F) and the design life of the asset (N).

Equation 2

$$D_n = \frac{C - F}{N}$$

Equation 3 then calculates the Salvage Value for any year within the useful life of the asset, where “ n ” is again the planning period.

Equation 3

$$SV_n = C - nD_n$$

Net Present Value

The Net Present Value (NPV) can then be calculated for each alternative as the sum of the Opinion of Probable Capital Cost (C) and Present Worth (PW) of annual O&M costs minus the Salvage Value (SV), as shown in Equation 4.

Equation 4

$$NPV = C + PW(O\&M) - SV$$

SUMMARY

The capital costs, O&M costs, and salvage values were computed on a present worth basis as described above. Table 1 summarizes the results of the analysis when applied to the considered alternatives.

Table 1 - Life Cycle Cost Analysis, 30 Year Planning Period

	Lift Station Alternative	Grinder Pump Alternative
Opinion of Probable Capital Construction Project Cost (Appended)	\$ 2,130,000	\$ 1,064,750
Present Worth Value of O&M ⁽¹⁾	\$ 172,117	\$ 688,183
Subtotal	\$ 2,302,117	\$ 1,752,933
Less Salvage Value	(\$ 852,000)	(\$ 425,900)
TOTAL PRESENT WORTH VALUE	\$ 1,450,117	\$ 1,327,033

(1) Based upon *i*= 2.0% and *n*= 30 years

As identified in Table 1, the estimated Total Present Worth Value for the Lift Station Alternative is approximately 9.28% greater than the Total Present Worth Value for the Grinder Pump Alternative on a Present Worth Basis over a 30-year planning period.

In terms of alternative evaluation on a planning level, a rule of thumb generally accepted by Pennsylvania regulatory and funding agencies suggests that any alternative within 15% of another alternative can be considered as an equivalent alternative from a cost-based perspective.

Therefore, the Lift Station and Grinder Pump alternatives are essentially equivalent on a Total Present Worth Value basis over a 30-year planning period.



APPENDIX J

CLARITON MUNICIPAL
AUTHORITY LETTER

APPENDIX J

Chairman
James Cerqua

Vice Chairman
Nick Nickolich

Secretary
Sue Vigliotti

Treasurer
Doug Ozvath

**Assistant Secretary/
Treasurer**
John Vitullo

Clairton Municipal Authority
1 North State Street
Clairton, PA 15025

Telephone (412)-233-3246
Fax: (412) 233-3249

Superintendent
Brian Secrest

Finance Director
Jim Hannan

Engineer
KLH Engineers

Solicitor
Dodaro, Matta
& Cambest, P.C.

May 27, 2020

Mr. Shane Michael, P.E.
Senate Engineering Company
U-PARC, 420 William Pitt Way
Pittsburgh, PA 15238

Re: CMA Comments – Union Township Act 537 Plan Update

Dear Mr. Michael

Please allow this letter to serve as a response to your request for comments regarding the Union Township Act 537 Plan Update for the PADEP Finleyville-Elrama Road Planning Area involving the connecting of 19 residential properties to the Peter's Creek Sanitary Authority conveyance system. Please be advised that at this time the Clairton Municipal Authority cannot support or approve this amendment of the 19 additional taps due to the lack of capacity at its treatment plant. Once the second phase of the expansion project is complete, the Authority will be able to reconsider this request.

Thank you,

Brian S. Secrest

Brian S. Secrest
Superintendent
Clairton Municipal Authority

Cc: Chris Kriley, DEP
Rick Kovack, PCSA

APPENDIX K

**PETERS CREEK SANITARY
AUTHORITY LETTER**

PETERS CREEK SANITARY AUTHORITY
3502 LINCOLN AVENUE
P.O. BOX 3
FINLEYVILLE, PENNSYLVANIA 15332
TELEPHONE: (724) 348-6860
FAX: (724) 348-6630

APPENDIX K

May 21, 2020

Union Township Board of Supervisors
3904 Finleyville-Elrama Road
Finleyville, PA 15332

**Subject: Finleyville-Elrama Road
Sanitary Sewer Line Extension Project**

Dear Board of Supervisors:

This letter follows a May 5, 2020 email request by Senate Engineering to the Peters Creek Sanitary Authority (PCSA) regarding the potential sanitary sewer line extension (SLE) along Finleyville-Elrama Road in Union Township.

In the email request, Senate Engineering has advised that the Pennsylvania Department of Environmental Protection (PaDEP) has requested a letter from PCSA accepting flows from the Finleyville Elrama Road SLE and certifying that PCSA has the capacity to accept the flows.

Based on the Act 537 Plan prepared by Senate Engineering for the Finleyville-Elrama Road Planning Area, the flow contribution is estimated at 8,000 gpd. This equates to the addition of 20 EDUs based on the PaDEP planning criteria of 400 gpd / EDU. It is noted that the Act 537 Plan prepared by Senate Engineering for the Finleyville-Elrama Road Planning Area identifies 19 EDUs to be served by the proposed extension.

The additional connected population (approximately 55 people based on an estimated person per household value of 2.87 pph) associated with this development and the existing connected population (approximately 11,600) does not exceed the design population of 34,200 people.

Based on the computations and the existing connected population, the additional flow will not create a hydraulic overload in the PCSA collection and conveyance system during dry weather conditions per current Chapter 94 Wasteload Management criteria, nor is a hydraulic overload projected within the next five years.

However, PaDEP has placed PCSA in a Corrective Action Plan (CAP) associated with wet weather conditions. The PaDEP CAP places tap restrictions on PCSA. PCSA and the other tributary communities to the Clairton Municipal Authority Waste Water Treatment Plant (CMA WWTP) have completed sewage facilities planning to address the wet weather conditions. Implementation of the PaDEP approved Plan is on-going.

PETERS CREEK SANITARY AUTHORITY

Union Township Board of Supervisors
May 21, 2020
Page 2

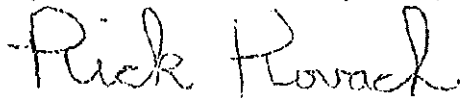
PaDEP has approved 150 taps for PCSA by letter dated December 30, 2019 for the 2020 calendar year. Please be aware that the 2020 tap allocation will expire on December 31, 2020 with no guarantee that additional taps will be allocated by PaDEP in 2021.

This capacity availability is provided for the PCSA sewer system only. It is noted that capacity availability from the other municipalities (Jefferson Hills Borough and South Park Township) on the Peters Creek Interceptor (PCI) and the Clairton Municipal Authority (CMA) are required and need to be evaluated.

The Act 537 Plan prepared by Senate Engineering for the Finleyville-Elrama Road Planning Area provides capital financing alternatives for the Township including Township Funds and low interest PENNVEST or RUS loans. Further, the PaDEP approved Task Activity Report cites that the project is proposed to be financed by *"a combination of contributions from Union Township and the residents, along with anticipated grants, loans, and federal funding."*

At the May 18, 2020 PCSA Board Meeting, PCSA approved a motion to accept the flow from this proposed SLE with the understanding that Union Township would be funding the extension.

By Direction of the Authority Board,



Rick Kovach
Authority Manager

RAK/tg

cc: Christopher Labee, Chairman, Peters Creek Sanitary Authority
Board of Directors, Peters Creek Sanitary Authority
Jason Stanton, P.E., Lennon, Smith, Souleret Engineering
Ryan Contestabile, P.E., Lennon, Smith, Souleret Engineering
Phillip J. Binotto, Steptoe & Johnson, PLLC, Attorney at Law
Shane Michael, P.E. Senate Engineering Company

RECEIVED MAY 26 2020

RECEIVED MAY 26 2020

APPENDIX L

TASK AND ACTIVITY REPORT
APPROVAL LETTER

October 5, 2016

Debra A. Nigon, Secretary
Union Township
3904 Finleyville-Elrama Road
Finleyville, PA 15332

Re: Act 537 Official Plan Revision
Plan of Study and Task/Activity Report
Finleyville-Elrama Sewage Planning Area
Union Township
Washington County

Dear Ms. Nigon:

The Department of Environmental Protection (DEP) has received a Plan of Study and Task/Activity Report for preparation of an Act 537 Official Plan Update, submitted by the Harshman CE Group, LLC. The plan proposes to extend sewer lines to the Finleyville-Elrama area of Union Township.

Your Plan of Study has been approved by DEP for an estimated total cost off \$27,435.00. The resulting Act 537 Update Revision, must be consistent with Act 537, Chapter 71, Sections 71.21 and 71.31 of the Department's regulations, and with information contained in both "A Guide for Preparing Act 537 Update Revisions (February 1998)", and "Sewage Disposal needs Identification Guidance (March 1996)".

These two documents are important. Appendix I in the first guide contains a comprehensive "Plan Content and Environmental Assessment Checklist" that details information required for a successful Act 537 Plan submission. This checklist is critical. Strictly following it will minimize the chance of submitting an incomplete plan and incurring untimely project delay. The second guide provides valuable insight about proper sewage disposal needs identification and documentation procedures. This "needs" information is not only used to determine whether a project is required, but it is also used when rating projects for priority based funding such as PENNVEST. Copies of either document can be obtained from the Department.

Following Act 537 plan approval, the Department administers grants for up to 50 percent of planning costs to municipalities with approved Task/Activity Reports. Costs for completion of any planning activities outside the scope of the originally proposed plan, or costs in excess of those previously approved, are not automatically eligible for grant participation. These additional activities must be within the scope of Act 537. Costs must be submitted as revised Task/Activity Reports and receive Departmental approval.

October 5, 2016

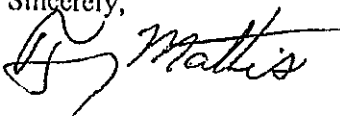
You may apply for the reimbursement grant only after DEP approves your completed Act 537 Plan. At that time, as part of your Grant application, you will need to submit cost invoices that clearly identify the task in the approved Task/Activity Report to which they apply along with proof of payment for each invoice claimed.

Please note that, due to Commonwealth budget constraints, future reimbursements may be delayed or otherwise restricted. Meeting all of the aforementioned criteria does not guarantee that a reimbursement request will be processed. Reimbursements will only be made on the availability of funding.

If your Authority or County intends to be the applicant for the Act 537 Sewage Facilities Planning Assistance Grant, Chapter 71 of the Department's regulations requires that the application submission be accompanied by written proof that the municipality (ies) has/have authorized the Authority or County to receive the grant.

If you have any questions or concerns, please contact me at either 724.769.1056 or tmattis@pa.gov.

Sincerely,



Terry Mattis
Sewage Planning Specialist II
Clean Water Program

cc: Bryan Lowe, P.E., Harshman CE Group, LLC ✓

APPENDIX M

APPROVED ACT 537 PLAN –
AUGUST 2020



APPENDIX M

SENATE ENGINEERING COMPANY
U-PARC, 420 William Pitt Way
Pittsburgh, PA 15238-1330

P (412) 826-5454 • F (412) 826-5458
senate@senateengineering.com
www.senateengineering.com

RECEIVED

OCT 18 2020

Department of Environmental Protection
California District Office

RECEIVED

SEP 25 2020

Clean Water
DEP, Southwest Regional Office

September 21st, 2020

Pennsylvania Department of Environmental Protection
Southwest Regional Office
Attn: Mr. Tom Flanagan
400 Waterfront Drive
Pittsburgh, PA 15222

RE: ACT 537 SEWAGE FACILITIES PLAN UPDATE
FINLEYVILLE-ELRAMA ROAD PLANNING AREA
UNION TOWNSHIP, WASHINGTON COUNTY, PA

Mr. Flanagan;

Please find enclosed one (1) copy of the Final Act 537 Sewage Facilities Plan Update for the Finleyville-Elrama Road Planning Area in Union Township, Washington County, PA for your review.

Sincerely,

SENATE ENGINEERING COMPANY

Shane Michael

Shane Michael, P.E.
Project Engineer

Attachments: Act 537 Sewage Facilities Plan Update – Finleyville-Elrama Road Planning Area

500 Fifth Avenue, Suite 502
McKeesport, PA 15132
(412) 664-7125

250 South Jefferson Street
Kittanning, PA 16201
(724) 548-1770

529 Morgantown Street
Uniontown, PA 15401
(724) 550-4286

30 S. Main Street,
Washington, PA 15301
(724) 228-6446

UNION TOWNSHIP
WASHINGTON COUNTY, PA

RECEIVED

SEP 25 2020

Clean Water
DEP, Southwest Regional Office

ACT 537 SEWAGE FACILITIES PLAN UPDATE
FINLEYVILLE – ELRAMA ROAD PLANNING AREA

August 2020

RECEIVED

OCT 13 2020

Department of Environmental Protection
California District Office

Prepared by:



Senate Engineering
420 William Pitt Way
Pittsburgh, PA 15238

**UNION TOWNSHIP
ACT 537 SEWAGE FACILITIES PLAN UPDATE
FINLEYVILLE – ELRAMA ROAD PLANNING AREA**

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Act 537 Plan Update Summary

Union Township (Township) is in the northeast corner of Washington County, PA. The Borough of Finleyville lies within the Township and the Township borders the Boroughs of Upper St. Clair and Bethel Park as well as the Township of South Park to the north in Allegheny County, PA. Most of the Township sewer service is provided by onlot disposal systems (OLDS) with some limited areas served by municipal sewage authorities. The Peters Creek Sanitary Authority (PCSA) has a sanitary line termination at the northern side of the Finleyville-Elrama Road Planning Area (FEPA).

This Act 537 Sewage Facilities Plan Update (Act 537 Plan Update) focuses on the area in the vicinity of Finleyville-Elrama Road approximately ½ mile northeast along Finleyville-Elrama Road from the Union Township Municipal Building. None of FEPA is currently served by the PCSA. The Pennsylvania Department of Environmental Protection (PADEP) has approved a Task and Activity Report (T/AR) for the FEPA. The T/AR approves examining further the use of a lift station and/or grinder pumps. A survey within the FEPA indicates OLDS failures. The continued use of current OLDS pose a threat to the health and safety of the Township residents.

The Union Township Zoning Map indicates an 'R1' Low Density Single Family Residential District for the FEPA. Any Act 537 Plan Update needs to consider alternatives that meet the economic growth potential in the area and the goals of the existing zoning ordinance. The FEPA consists of an estimated 19 connections resulting in 19 equivalent dwelling units (EDU). This Act 537 Plan Update for the FEPA considered various alternatives of;

1. Conventional gravity collection system with a lift station and force main for conveyance to the PCSA system.
2. Collection system consisting of individual grinder pumps per EDU for conveyance to the PCSA system.

The "Custom Soil Resource Report for Greene and Washington Counties, Pennsylvania – Act 537 Finleyville – Elrama Road Area" report indicates that the soils in the FEPA provided a 'very limited' ability for conventional type subsurface OLDS such as septic tank and/or sewage lagoon effluent absorption. Therefore, the use OLDS, Small Flow Treatment Facilities (SFTF), community land disposal alternatives and/or use of retaining tanks within the FEPA generally do not meet the health and safety, land use planning and/or environmental goals. These alternatives are not feasible solutions to the FEPA. It may be possible that more specific soil analysis of specific parcels would identify locations within an individual parcel that use of individual and alternative OLDS such as a drip irrigation and/or spray irrigation septic system would be feasible.

This Act 537 Plan Update considers mutually exclusive alternatives to provide the same remedial solution for currently failing onlot systems within the FEPA. The alternatives generally include connection to the regional sewage authority systems for conventional collection and conveyance of residential wastewater. The PCSA provides a feasible alternative to sewage remediation for the FEPA. The uniform topology in the FEPA allows for use of wastewater lifting devices to convey the sanitary wastewater from the point of discharge of the EDU to the PCSA conveyance system. Through the utilization of either a lifting station, Alternative 1, or a grinder pumps, Alternative 2, sanitary wastewater from 19 connections would be collected.

The chosen alternative, Alternative 2, utilizes grinder pumps which will be owned and maintained by the municipal authority. The Total Project Cost of Alternative 2 is estimated to be \$508K. Through funding from the United States Department of Agriculture Rural Development Rural Utilities Services (RUS) program, the estimated monthly user fee of Alternative 2 is \$98 per month.

After approval of the Act 537 Plan Update, completion of the design, permitting, and funding acquisition occurs by April 30, 2021, selection of a construction firm by June 30, 2021 and construction completion by September 30, 2021.

1.0 Previous Wastewater Planning

1.1. Previous Wastewater Planning

"The Washington County Sewerage Facilities Plan and Technical Report" was prepared in January 1972 by the Washington County Planning Commission. This plan was financed by a planning grant from the Pennsylvania Department of Environmental Resources (DER) under the Pennsylvania Sewage Facilities Act. The study divided Washington County into sewerage district planning areas.

The Township Updated the Official Act 537 Sewage Facilities Plan for the Township on March 2000. This update sets forth findings, data, conclusions and recommendations for a 455-acre watershed of Union Township Washington County called "Elrama and Surrounding Area". In 2009, a \$4.1 million project was constructed providing sewage to 226 residential and 14 businesses. The project involved building a sewage conveyance system in the Village of Elrama. This system conveys sewage to the West Elizabeth Sewage Treatment Plant.

The Township adopted the "On-Lot Sewage Administration Ordinance" on February 9, 2009. This Ordinance reaffirms the Township's delegation to the Washington County Sewage Council (WCSC) to administer the requirements of Act 537 and the Union Township ordinances governing all aspects of on-lot sewage collection, treatment and discharge.

In 2014, Washington County developed the 'Sewage Provider Inventory and Assessment' document. This document was created to better prepare for short- and long-term plans of the authority and municipal sewage providers in the county. This document provides a guide for development of wastewater facilities in the County.

1.2 Previous Wastewater Planning that has not been implemented

The Pennsylvania Department of Environmental Protection approved a T/AR for Union Townships' 'Finleyville-Elrama Sewage Planning area'. The T/AR was prepared on September 13, 2016. This Act 537 Update Plan recommends extension of the PCSA system into the planning area.

1.3 Anticipated or Planned Wastewater Planning

The Township is examining an area in the northwest portion of the Township, Piney Fork/Overlook, for potential sewage mitigation planning.

The WCSC Sewage Enforcement Officer (SEO) has identified additional potential planning areas within the Township.

1.4 Planning and Land Development

The FEPA is zoned 'R1 – Low Density Single Family Residential District' as per the Union Township Zoning Map. Union Township adopted the 'Township of Union Subdivision and Land Development Ordinance'. The WCSC indicates that all subdivisions require a sewage planning module.

2.0 Physical and Demographic Analysis

2.1 Planning Area Identification

The entirety of the FEPA considered under this Act 537 Plan Update is within Union Township, Washington County. The PCSA has sanitary sewer infrastructure that terminates near the FEPA in Union Township, Washington County. Reference Figure 5 which outlines FEPA.

2.2 Geographic Features

The geographic features in the immediate area generally lower in topographic elevation from the north west corner of the FEPA to the south east corner of the FEPA. With a total drop of roughly 60 feet over ½ mile with respect to mean sea elevation. The boundary of the Peters Creek watershed exists just outside of the FEPA. The FEPA exists at the top of a watershed that drains directly to the Monongahela River.

2.3 Soils

The USDA Web Soil Survey was utilized to create the soil maps as required by Title 25 §71.21.a.1.iii and as shown in Appendix A. Six different soil types and combination of soil types exist within the FEPA. The primary soil type is silt loam and various mixtures of silty loam. The soils in the FEPA are generally unsuitable for use with conventional in-ground and elevated mound septic systems and provide a 'very limited' ability for septic tank and/or sewage lagoon effluent absorption. It may be possible that more specific soil analysis of specific parcels would identify locations within an individual parcel that utilize spray or drip irrigation on individual OLDS.

The FEPA contains approximately 52% of soils considered to be Farmland of Statewide Importance and 28% considered Prime Farmland. A map showing properties under the agricultural security program can also be found in Appendix A.

2.4 Geologic Features

According to the 'Geologic Map of Pennsylvania' published by the DCNR, the Township is in the Appalachian plateau section of the Appalachian Plateaus physiographic province. The Waynesburg Formation and the Monongahela Group comprises the bedrock general categories in the FEPA. The bedrock lithology for the general area to include the FEPA consists of sandstone, shale and limestone. The Pittsburgh and Upper Freeport coal reserves exist in the subsurface as well as a few oil/gas wells located in the vicinity.

2.5 Topography

The FEPA contains a uniform topography from a high of 1175 feet above mean sea level (FAMSL) to a low of 1115 FAMSL. An elevation drops from northwest to southeast of approximately 60 feet. Based on the FEPA topography and location to the PCSA, Alternative 1 and Alternative 2 are feasible. Figure 10 provides a topography map.

2.6 Potable Water Supplies

Public water services provide potable water supplies in the FEPA. The Pennsylvania American Water Company (PAWC) provides public water to the FEPA and throughout the surrounding area.

2.7 Wetlands

The FEPA and the surrounding areas do not contain identified wetlands. Figure 3 provides a map of the National Wetlands Inventory for the area.

3.0 Existing Sewage Facilities

3.1 Existing Systems

There are no municipally owned treatment facilities within the FEPA. However, the PCSA has a branch of the gravity collection system that terminates on the boundary of the FEPA within the Peters Creek Watershed. These lines service the northern and western portion of the Township to include Finleyville. The PCSA collects wastewater primarily through a gravity system with two pumping stations to ultimately discharge for treatment to the Clairton Municipal Authority (CMA). Figure 4 provides maps of the PCSA collection system.

The Township maintains an Act 537 Sewage Facilities Plan. The most recent update to the plan occurred in March of 2000 when the Elrama and Surrounding Area was analyzed for sewage upgrade efforts. The alternative chosen, and ultimately implemented, was to discharge the sewage flow to an existing interceptor in Jefferson Hills Borough with treatment at an existing sewage treatment plant in West Elizabeth Borough in Allegheny County. This system resides in the northeastern most portion of the Township. Due to the distance of the Elrama collection system to the FEPA as well as the interlaying topography, connecting the properties in the FEPA to the Elrama collection system is not a feasible alternative.

3.2 Sewage Disposal Needs Identification

USDA Web Soil Survey indicates that the soils in the FEPA are generally unsuitable for use with conventional in-ground and elevated mound septic systems and provide a 'very limited' ability for conventional septic tank and/or sewage lagoon effluent absorption. The majority of the OLDS in the FEPA are in-ground conventional systems. The FEPA lacks adequate sewage facilities to meet the needs of the properties.

Eighteen properties in the FEPA contain an OLDS. Three properties have received dye testing by the Washington County Sewage Enforcement Officer because of suspected malfunctions. One property failed the dye test due to malfunctions and received a violation from the Washington County Sewage Council. This results in a failure rate of 5%. No 'wildcat' sewers have been identified to date. Table 3.2 provides for the locations of the OLDS and the testing locations.

The scope of the Sewage Disposal Needs Identification accounts for the current and future zoning designation and current and future property size divisions. Based on this property and land use architecture of the FEPA, the anticipated wastewater conveyance and treatment required is approximately 8,000 gallons per day at a Biological Oxygen Demand (BOD) of 18 mg/L.

3.3 Sludge and Septic Handling

Residential type sanitary sewage conveyance and treatment requirements from the property have been included within the scope of the Sewage Disposal Needs Identification for the FEPA.

4.0 Future Growth and Land Development

4.1 Act 247 Planning

Regional Future Growth and Land Development planning which encompasses the FEPA involves two documents created in accordance with the Pennsylvania Municipalities Planning Code – Act 247. The 'Washington County Comprehensive Plan, adopted in November 2005, and the 'Carroll Township – Union Township Joint Comprehensive Plan', adopted in November 2012. The Washington County Comprehensive Plan contains historical, social, public facilities, public infrastructure, housing characteristics, transportation, parks and recreation, economic development

and land use information, data and maps as well as a Vision Statement and Live/Work Analysis in the County as a whole. Chapter 5c. of this document outlines the Public Sewerage for the County. This document outlines 35 Sewerage Districts in the County. The PCSA services this Sewerage District with acknowledged concerns regarding overload conditions of the PCSA system. Table 5.2 of this Chapter identifies the PCSA as the service provider for Finleyville Borough as well as parts of Nottingham Township, Union Township and Peters Township.

The 'Carroll Township-Union Township Joint Comprehensive Plan' was adopted from the 'Multi-Municipal Comprehensive Plan for Carroll Township, Finleyville Borough, Union Township and Nottingham Township in Washington County, Pennsylvania' dated August 2007. These four communities belong to the same local school district and share common interests as the foundation for development of the multi-municipal plan. The 'Multi-Municipal Comprehensive Plan for Carroll Township, Finleyville Borough, Union Township and Nottingham Township in Washington County, Pennsylvania' contains regional profiles, land use, housing, historic & cultural resources, parks and recreation, natural resources, community facilities, transportation, economic development and energy conservation planning as well as a Vision Statement and maps. These documents identify lack of sewer service as a weakness and inadequate infrastructure, to include sewer, as a threat within the in the documents SWOT analysis. Section 8 of this document indicates that "...concentrating new [public sewage] service areas around the periphery of existing service areas." reduces sprawl and preserves valuable farmland. The FEPA exists at the periphery of the PCSA service area.

The current Township Zoning Map indicates a 'R1' or Low-Density Single-Family Residential District zone. This zoning designation indicates that low density single family residential development may occur where public sewers are not available. The document 'Carroll Township – Union Township Joint Comprehensive Plan' September 2012 indicates that future land use planning for the FEPA and immediate surrounding area involves 'Single Family Residential' zoning. Single Family Residential zoning allows for 1 dwelling unit per 0.25 - .5 acre with public sewer service. Generally, the existing parcels within the FEPA meet these criteria. Please refer to Figure 6 for current Township zoning and Figure 7 for future land use planning.

Washington County maintains two complementary local planning governing documents for sewage systems, 'Sewage Provider Inventory Project Summary Sheets' as well as 'Sewage Provider Inventory and Assessment' guides. These guides provide information based on active Act 537 Plans, Long Term Control Plans and Corrective Action Plans (CAP). The guides provide general information regarding the 34 Washington County Sewage Providers. This plan identifies the CAP for the PCSA. The CAP remediates Inflow/Infiltration with the PCSA and CMA system. This remediation involves pipe lining and interceptor piping rehabilitation. Projects also include sanitary sewer extensions to eliminate failing septic systems.

In addition to the Commonwealth of Pennsylvania Codes/Regulations, Union Township Code 202-12 Chapter 211 governs sewers within the Township. Article III Section 211-23 of the Code identifies sewage management districts for installation, rehabilitation or repairing on-lot sewage disposal systems with new alternative type systems, to include holding tanks. Article IV of the Code governs sewage holding tanks. Section 211-33 indicates the requirement for a permit, Section 211-39 outlines the use and maintenance of holding tanks and disposal of sewage and Section 211-44 establishes the function of the Township responsibilities.

4.2 Development, Land Use, and Zoning

As indicated in Section 4.1, current Township zoning establishes an 'R1' zone in the FEPA. Future land use planning establishes a 'Single Family Residential' zone in the FEPA. Generally, the existing parcels in the FEPA meet the current zoning and future land use planning criteria. Therefore, the 19 existing parcels determine the Equivalent

Dwelling Unit (EDU) calculation. Generally, the parcels within the FEPA comply with the established zone of low-density single family residential.

25 Pa Code Section 71.1 defines one EDU as "...that part of a family dwelling or commercial or industrial establishment with flows equal to 400 gallons per day". 25 Pa Code Section 73.17 determines that a single-family residence with three bedrooms or less establishes a 400 gallon per day of sewage flow. Therefore, for this project one parcel equals one EDU with a total EDU of 19.

The calculated GPD and BOD based on Pa Code and Township zoning is 8,000 gallons per day and 18 mg/L of BOD per day, respectively. Please refer to Table 4.1 for tabulation of GPD and BOD.

5.0 Alternative Identification

The following presents alternatives considered as outlined and required by Title 25 Pa. Code §71.21. This Act 537 Plan Update presents two alternatives; 1 – Lift station, and 2 – Grinder pumps for providing new or improved sanitary wastewater disposal for the FEPA. Figures 1 and 2 respectively provide a draft concept of each alternative.

5.1 Regional Collection, Conveyance, and Treatment

5.1.1 Regional Wastewater Treatment

The regional wastewater treatment facility within proximity of the FEPA is the CMA. The Clairton Wastewater Treatment Plant (CWWTP) is located along North State Street in Clairton and discharges to Peters Creek. The plant is owned by the CMA and operates under NPDES Permit No. PA0026824. The existing WWTP process consists of preliminary screening, grit removal, comminutor, preaeration, primary settling, activated sludge, final clarifiers and chlorine disinfection. The solids handling system consists of thickening, aerobic digestion, centrifuge dewatering, and ultimate disposal of the sludge at a landfill.

The upstream communities' conveyance systems are owned and operated by each independent community. The upstream communities consist of the Borough of Jefferson Hills, the Township of South Park and the PCSA. The PCSA service area consists of customers located within the Borough of Finleyville, Nottingham, Peters, and Union Township. All flows from the upstream communities are classified as strictly sanitary.

This Act 537 Plan Update considers utilizing the PCSA collection system to convey sanitary flows from the FEPA to the CMA CWWTP. The CMA CWWTP operates at 6 million gallons per day and 14 million during wet weather conditions. Currently the CWWTP is under expansion. The estimated treatment capacity of the plant will operate at 25 million gallons a day. The expansion will make the CMA the third largest treatment plant in Allegheny County.

5.1.2 Extension of Existing Municipal or Non-Municipal Systems

Gravity sanitary collection lines from the PCSA exist near the FEPA. Feasible alternatives for utilization of the PCSA involves installation of gravity mains, lift stations, grinder pumps and force mains.

Alternatives approved by PADEP in T/AR

Connect new sanitary sewer lines to Peters Creek Sanitary Authority (PCSA)

Alternative 1

Install one lifting station

- gravity flow to southeast portion of FEPA
 - provide 19 service connections

- 1100 linear feet of gravity line
- one lifting station at southeast portion of FEPA
 - 19 EDU's
 - 8,000 gallons per day of flow
 - 18 mg/L BOD per day
- Pressure line from lifting station to PCSA connection point at northwest portion of FEPA
- 1470 linear feet of pressure/force main line

Alternative 2

Install grinder pumps at each EDU

- 19 EDU's
 - 1550 linear feet of pressure lines
- Connect to PCSA connection point at northwest portion of FEPA
 - Approximately 8,000 gallons per day of flow
 - 18 mg/L BOD per day

Please note that connecting the FEPA to the PCSA collection/conveyance systems requires developing the collection system within the FEPA in the Township.

5.1.3 Continued Use of Existing Municipal or Non-Municipal Facilities

All the properties within the FEPA are served by OLDS and an existing Municipal or Non-Municipal Facilities do not exist within the FEPA. Therefore, the continued use of Existing Municipal or Non-Municipal Facilities was not considered a viable alternative for this Act 537 Plan Update.

5.1.4 Repair or Replace Existing Collection System

All the properties within the FEPA are served by OLDS and a sanitary collection system with the FEPA does not exist. Therefore, the repair or replacement of an existing collection and conveyance systems was not considered a viable alternative for this Act 537 Plan Update.

5.1.5 Community Sewage Systems and Treatment

Community Sewage system alternative does not seem feasible with the situation of the proximity to the PCSA conveyance system.

5.1.6 Innovative or Alternative Methods of Collection/Conveyance

The topography of the FEPA provides a relatively straight forward alternatives for connecting to an existing collection/conveyance system.

5.2 Individual Systems

Individual systems broadly include the use of OLDS, either a type of absorption field/area or holding tanks. This Act 537 Update Plan presents alternatives based on the DEP approved T/AR.

5.3 Small Flow Treatment Facilities

This Act 537 Update Plan presents alternatives based on the DEP approved T/AR.

5.4 Community Land Disposal

The USDA Web Soil Survey was utilized to create the soil maps as required by Title 25 §71.21.a.1.iii and as shown in Appendix A. Six different soil types and combination of soil types exist within the FEPA. The primary soil type is silt loam and various mixtures of silty loam. The soils in the FEPA are generally unsuitable for use with conventional in-ground and elevated mound septic systems and provide a 'very limited' ability for conventional septic tank and/or sewage lagoon effluent absorption. Based on this report finding, sewage disposal plans that relied on the use of community land disposal within the FEPA was not considered a feasible solution.

5.5 Holding Tanks

The Act 537 Update Plan presents alternatives based on the DEP approved T/AR.

5.6 Sewage Management Programs

Union Township Sewage Management Program (SMP) consists of

- Peters Creek Sanitary Authority
- West Elizabeth Sanitary Authority
- Home septic systems

PCSA maintains collection, transmission, a pump station and conveyance lines in the Township. Primarily in the north and west portions of the Township. The Township maintains a three-seat membership through five-year terms within the PCSA Board of Directors.

West Elizabeth Sanitary Authority (WESA) serves the needs of the Township in the north and east section for the community of Elrama. The Township maintains a one seat membership through a five-year term on the WESA Board of Directors.

The home septic systems are governed through the Township by the WCSC SEO. The SEO provides inspection and enforcement capabilities of the OLDS for the FEPA. Additionally, Union Township has a set of codes to govern sanitary sewers;

Union Township Code Chapter 211:

- Article I; "Union Township Dye Test Ordinance" – adopted September 1994
- Article II; "Sewer Connections" – adopted April 2008
- Article III; "On-Lot Sewage Administration Ordinance" – adopted February 2009
- Article IV; "Holding Tank and Privy Ordinance" – adopted December 2011
- Article V; "Union Township Sewage Documentation Ordinance" – adopted April 2015

SMPs and structure exist with the Township to encompass each of the proposed alternatives for the FEPA. Specific details regarding an SMP of the final selected alternative for the FEPA would need to be determined.

Union Township will oversee both the installation of the grinder pumps as well as long-term operation and maintenance of the individual grinder pumps.

5.7 Non-Structural Comprehensive Planning

Non-structural comprehensive planning alternatives can be used to meet existing and future sewage disposal needs by controlling and limiting development. In the case of Union Townships, many of these strategies exist due to the current zoning and future land use planning. Two documents outlined in Section 4.1, the Washington County Comprehensive Plan and Carroll Township – Union Township Joint Comprehensive Plan, as well as the current Township Zoning map provide planning structure for the FEPA. Township zoning is periodically reviewed by the Township Supervisors. Generally, the existing parcels within the FEPA currently comply with future land use planning. Drinking water supply occurs through Monongahela River water treatment and distribution through water mains managed by the PAWC.

5.8 No Action Alternative

The no Action Alternative involves maintaining the current status of the FEPA. The relatively straight forward process involved in providing a public sewage system to the FEPA may not support a ‘no action alternative’.

6.0 Evaluation of Alternatives

6.1 Consistency Determination

Technically feasible alternatives must be evaluated for consistency with the requirements of Pennsylvania Code Title 25, §71.21. a.5. These are discussed in the following sections.

Sections 4 and 5 of the Clean Streams Law or Section 208 of the Clean Water Act

The alternatives presented within this Act 537 Update Plan; 1 and 2, reduce the number of malfunctioning OLDS and improve the quality of the Commonwealth waters. Alternatives considered are consistent with the Clean Streams Law and Clean Water Act.

PA Code Title 25, Chapter 94

Alternatives 1 and 2 (as described in Section 5.1.2) utilizes existing facilities. These alternatives propose developing a new lifting stations or grinder pumps, force mains and gravity mains to connect to the nearby PCSA gravity system. The FEPA supplies a maximum flow rate of approximately 8,000 additional gallons per day to the PCSA system. PCSA provides conveyance infrastructure to CMA WWTP. In addition to the flow rate demand from the FEPA, the CMA WWTP capacity includes a maximum of approximately 18 mg/L of BOD per day. Since the current zoning and future land use planning align, projected flow rates and BOD values remain constant. The alternatives provide sanitary waste load consistent with applicable Municipal Waste load Management reports.

Title II of the Clean Water Act or Titles II and VI of the Water Quality Act

Alternatives reduce the number of malfunctioning OLDS and improve the quality of Commonwealth waters. These alternatives provide the best practicable waste management options for the FEPA. Alternatives are considered consistent with Title II of the Clean Water Act and Titles II and VI of the Water Quality Act.

Local and County Comprehensive Plans

Two documents outlined in Section 4.1, the Washington County Comprehensive Plan and Carroll Township – Union Township Joint Comprehensive Plan, as well as the current Township Zoning map provide planning structure for the FEPA. Township zoning is periodically reviewed by the Township Supervisors. Generally, the existing parcels within

the FEPA currently comply with future land use planning. Drinking water supply occurs through Monongahela River water treatment and distribution through water mains managed by the Pennsylvania American Water Company. The alternatives proposed within this Act 537 Update Plan are consistent with the Township and County Comprehensive Planning documents.

PA Code Title 25 Chapters 93, 95 and 102 Antidegradation Requirements

The FEPA resides near the ‘headwaters’ of the Monongahela River Watershed. The alternatives presented within this Act 537 Update Plan do not discharge waste waters into the unnamed headwater tributaries. These alternatives are consistent with the water quality criteria of the referenced Pa Code 25 Chapters.

State Water Plans

The State Water Plan protects and enhances Pennsylvania’s water resources. The State Water Plan addresses each of the six major water drainage basins¹ in Pennsylvania. Ohio Regional Water Resources Committee considers proper sewage disposal to be among the top issues to address in the Ohio River Drainage Basin². The State Water Plan indicates water resource management on a watershed scale.

The existing situation involves potable water being supplied by the Monongahela River and not by groundwater wells. Once this potable water is utilized by the residential property, this used grey and black water is discharged via OLDS to the nearby ground as wastewater. This relatively untreated wastewater enters the local water cycle. Based on wastewater planning references³, approximately 8,000 gallons per day of potable water may currently be provided to the FEPA by the PAWC. A large percentage of this potable water enters the local water cycle as wastewater. This quantity of wastewater introduces compounds/pollutants as well as the associated BOD of 18 mg/L to the watershed water cycle that are the direct result of human activity. This wastewater changes the quantity and quality of the water in the watershed water cycle. Since groundwater is not be extracted for potable water, the quantity of wastewater entering the water cycle is essentially additional water supplied by the Monongahela River. The compounds/pollutants within this wastewater may enter the subsurface groundwater, enter the nearby interment streams and/or bio accumulate in the flora and fauna of the area.

Alternatives 1 and 2 utilize connecting to the existing PCSA conveyance system. Residential wastewater is conveyed from the FEPA using sanitary gravity mains and service connections, sanitary force mains and lift stations. The PCSA conveyed wastewater enters the CMA CWWTP and discharged back into the Monongahela River. Use of the PCSA conveyance system to the CMA CWWTP does not introduce additional quantities of wastewater, additional compounds/pollutants and BOD into the watershed. Essentially the supplied potable water from the Monongahela River is conveyed by the PCSA as wastewater treated and returned to the Monongahela River. This supply/treatment and proper disposal architecture complies with the water conservation aspect of the State Water Plan. Therefore, these alternatives would be consistent with the State Water Plan.

PA Prime Agricultural Land Policy

The USDA Web Soil Survey was utilized to create the soil maps as required by Title 25 §71.21.a.1.iii and as shown in Appendix A. The FEPA contains approximately 52% of soils considered to be Farmland of Statewide Importance and 28% considered Prime Farmland. The Pennsylvania Prime Agricultural Land Policy orders and directs the prevention of the irreversible conversion of prime agricultural land to uses that result in its loss as an environmental or essential

¹ Commonwealth of Pennsylvania State Water Plan Principles – Executive Summary 2009

² Commonwealth of Pennsylvania State Water Plan Principles, Page 4 – Executive Summary 2009

³ Domestic Wastewater Facilities Manual/Title 25 Pa Code 73.17

food production resource⁴. The alternatives presented within this Act 537 Update Plan do not proposed to convert the prime agricultural land identified in the USDA Web Soil Survey to another use. Therefore, these alternatives would be consistent with the Pennsylvania Prime Agriculture Land Policy.

County and Local Stormwater Management Plans

The alternative presented within this Act 537 Update Plan comply with the existing County and Union Township Stormwater Management plans.

Wetland Protection

Reviews of Bureau of Watershed Management Division of Waterways, Wetlands and Erosion Control Maps in conjunction with the National Wetlands Inventory Maps indicates that wetlands do not exist within the FEPA or within in any areas potentially disturbed by implementing the alternatives.

Protection of rare, endangered or threatened plant and animal species

A Pennsylvania Natural Diversity Inventory (PNDI) search for the FEPA was completed. The PNDI Conservation Planning Report indicated no known impact with respect to the habitats regulated. Figure 8 provides a copy of this report.

6.2 Inconsistency Resolution

The presented alternatives do not require inconsistency resolutions.

6.3 Technical and Legislative Review

The alternatives considered in this Act 537 Update Plan reduce the number of malfunctioning onlot systems and improve the water quality within the FEPA.

Alternatives 1 and 2 utilize existing public sanitary sewer conveyance and treatment as well as new lifting stations and sanitary sewer collection lines. Technical details as well as public legislative and/or legal requirements would need to be accomplished with the PCSA and CMA for utilization of these alternatives. Public legislation and/or legal agreements with parcel owners for new lifting station locations and new sanitary sewer collection line easements would need to be accomplished.

6.4 Cost Estimate

A detailed cost estimate for each of the considered alternatives can be found in Appendix B. Section 5.1.2 describes each of the alternatives. The cost estimates provide the Total Project Costs including labor and materials. These estimated costs are summarized and tabulated below for the FEPA.

Total Project Cost estimate basis includes;

1. Previously recently awarded similar scope of work projects an annual cost escalation factor
2. Supplier quotes
3. Administrative Cost at 2% of construction cost
4. Engineering and Inspection Cost at 15% of construction cost

⁴ Pennsylvania Sewage Facilities Act, Appendix B, Section II.G page 18. – PADEP

5. Contingency Cost at 10% of construction cost
6. Construction Overhead and Profit (O&P) Cost of 15% of construction cost
7. Easements and Real Estate Transaction Costs at 7% of construction cost

Table 6.1 – Estimated Total Project Cost

ALTERNATIVE	Total Project Cost
1 – One lifting station; gravity flow along road to lifting station and pressure line to PCSA connection point	\$781,356
2 – Grinding pumps to PCSA connection point	\$508,388

6.5 Annual Operation and Maintenance Cost Estimate

A detailed cost estimate for each of the considered alternatives can be found in Appendix B. Section 5.1.2 describes each of the alternatives. The cost estimates provide the operation and maintenance costs. These estimated costs are summarized and tabulated below as the total monthly user operation and maintenance cost per EDU.

Annual operation and maintenance cost estimate basis include;

1. PCSA published rates to include usage fee at \$8.25/1000 gallons (estimated 4000 gallons/month), service usage fee and a 0-2000 gallons flat rate fee
 - a. The PCSA rate to include costs of maintenance and operation of new lifting stations and sanitary collection materials and equipment

Table 6.2 provides an estimated monthly operation and maintenance cost per EDU or parcel. The FEPA encompasses 19 parcels.

Table 6.2 – Estimated Monthly Operation and Maintenance cost per EDU

ALTERNATIVE	Total Monthly O&M Cost per EDU (parcel) for PCSA Sanitary System
1 – One lifting station; gravity flow along road to lifting station and pressure line to PCSA connection point	\$ 57
2 – Grinding pumps to PCSA connection point	\$ 54

Please note that actual total monthly O&M cost per EDU depends upon the actual gallons per month of usage.

6.6 Funding Evaluation

This Act 537 Update Plan analyzes two alternatives for remediating malfunctioning OLDS with respect to the PADEP approved T/AR. Two public funding agencies provide low cost financing possibilities for implementing the selected alternative. The Pennsylvania Infrastructure Investment Authority (PENNVEST) and United States Department of Agriculture Rural Development Rural Utilities Services (RUS) program. PENNVEST provides two separate funding

capabilities; Homeowner On-Lot Sewage Disposal and Lateral Repair Loans as well as Pennsylvania State Law⁵ provided grants and low-cost loans for sewage treatment and wastewater systems projects.

The PENNVEST Homeowner On-Lot Sewage Disposal and Lateral Repair Loans, with Pennsylvania Housing Finance Agency, provides low-cost financing to improve, replace, or repair individual OLDS or to connect, for the first time, to public sewer in order to meet public health and environmental safety standards. All privately-owned primary residences within the FEPA are eligible since there is no community wastewater collection and treatment system in place. This funding may be utilized for both Alternatives 1 and 2. First-time hook-up to community wastewater collection and treatment systems would be eligible. Loans under this program currently have an interest rate of 1.75% with a maximum loan amount of \$25K.

Pennsylvania State Law empowers PENNVEST finance sewage treatment projects. A major component to PENNVEST funding is realized through public approval of referendums that propose expenditures from state revenues to be specifically used to assist Commonwealth communities with the funding of infrastructure projects through loans. Revenues from the Commonwealth General Obligation bonds were approved by public vote from the 1981 Referendum for \$225.4 million, the 1988 Referendum for \$300 million, the 1992 Referendum for \$350 million, and most recently, the 2008 Referendum for \$400 million. State Regulations and special legislative acts have been issued for the purposes of providing additional funding to the PENNVEST program. Act 218 was enacted in 2004 and, among other things, provided PENNVEST with \$50 million to be used as grants for improvements to wastewater systems. In the past, other state funds have also been invested into PENNVEST through both the initial capital budget for program start up and allocations of Commonwealth general funds. The current PENNVEST loan rates are 1% for years 1 – 5 and 1.743% for years 6 – 20. This funding may be utilized for both Alternatives 1 and 2.

Information regarding PENNVEST funding programs may be accessed via <https://www.pennvest.pa.gov/Information/Funding-Programs/Pages/default.aspx>

The RUS program helps small, financially distressed rural communities extend and improve waste treatment facilities that serve local households and businesses. The program provides funding for clean and reliable drinking water systems, sanitary sewage disposal, sanitary solid waste disposal, and storm water drainage to households and businesses in eligible rural areas. The properties in the FEPA exist in eligible rural areas. Available RUS funds occur through long-term, low-interest loans with possible grant supplements. Eligible projects include sewer collection, transmission, treatment and disposal. Legal and Engineering Fees as well as land acquisition costs may also be funded through the RUS program. Recent interest rates are approximately 3.375% for 40 years. In addition, the RUS provides Grant funding, in conjunction with the loan, at 45% of the financed amount to eligible projects. The RUS funding may be utilized for both Alternatives 1 and 2.

Information regarding the United States Department of Agriculture Rural Development RUS program may be accessed via <https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program/pa> Appendix C provides a detailed presentation of the Financial Analysis for each Alternative. Table 6.3 below presents the Monthly Debt Service cost per EDU relative to each Alternative. Alternatives 1 and 2 account for financing with respect to obtaining the 45% RUS Grant as well as a 40-year loan at 3.375% interest. Please note that financed amounts are based on the Total Project Cost Estimates presented in Section 6.4.

⁵ 25 Pa Code Part VII Chapter 961 and the Pennsylvania Infrastructure Investment Authority Act

Table 6.3 – Monthly Debt Service Cost per EDU

ALTERNATIVE	Total Monthly Debt Service Cost per EDU (parcel) for PCSA System
1 – One lifting station; gravity flow along road to lifting station and pressure line to PCSA connection point	\$ 75
2 – Grinding pumps to PCSA connection point	\$ 44

In addition to funding from PennVEST and RUS, the County of Washington provides grants from the County’s Local Share Account (LSA) Program. The LSA program previously provided funds for Sanitary Sewer Improvements. Recent grants from this program have provided funds for sewage extension project. The Township and/or the PCSA may apply for the LSA grants to reduce the amount of loan required from the RUS. Reducing the amount of the loan required from RUS reduces the monthly debt service per EDU as well as the total monthly cost per EDU. The exact amount of the reduction depends upon the amount of the grant received from the LSA Program.

Table 6.4 presents the total Monthly Cost per EDU. This cost combines the Monthly Operating and Maintenance Cost presented in Table 6.2 and the Monthly Debt Service cost presented in Table 6.3.

Table 6.4 – Total Monthly Cost per EDU

ALTERNATIVE	Total Monthly Cost per EDU (parcel) for PCSA System
1 – One lifting station; gravity flow along road to lifting station and pressure line to PCSA connection point	\$ 132
2 – Grinding pumps to PCSA connection point	\$ 98

6.7 Implementation Method

The selected alternative would be constructed as in accordance with the most feasible installation method suitable for the alternative. Both Alternatives 1 and 2 will be constructed as a complete project. The existing malfunctioning OLDS present a public health risk and will continue to negatively impact water quality and health standards in the FEPA.

6.8 Administrative and Legal Authority Requirements

Union Township currently utilizes both the PCSA collection system and OLDS for sewage management. PCSA maintains collection, transmission, a pump station and conveyance lines in the Township. Primarily in the north and west portions of the Township. The Township maintains a three-seat membership through five-year terms within the PCSA Board of Directors. The OLDS are governed through the Township by the WCSC SEO. The SEO provides inspection and enforcement capabilities of the onlot systems for the FEPA. Additionally, Union Township has a set of codes to govern sewers;

Union Township Code Chapter 211:

- o Article I; “Union Township Dye Test Ordinance” – adopted September 1994
- o Article II; “Sewer Connections” – adopted April 2008
- o Article III; “On-Lot Sewage Administration Ordinance” – adopted February 2009
- o Article IV; “Holding Tank and Privy Ordinance” – adopted December 2011
- o Article V; “Union Township Sewage Documentation Ordinance” – adopted April 2015

Administrative and Legal Authority structure exist with the Township to encompass each of the proposed alternatives for the FEPA. Specific details regarding Administrative and Legal Authority requirements of the final selected alternative for the FEPA would need to be determined.

7.0 Institutional Evaluation

7.1 Existing Authority Evaluation

The Township plans to develop a Sewage Authority to own and/or operate the proposed sanitary sewerage collection system. Alternatives 1 and 2 utilize the PCSA sanitary conveyance system to the CMA CWWTP. The Township maintains a three-seat membership through five-year terms within the PCSA Board of Directors. The PCSA employs approximately five people and operates through an annual budget of roughly \$1.7M with approximately \$230K in debt.

The CWWTP is located along North State Street in Clairton and discharges to Peters Creek. The plant is owned by the CMA and operates under NPDES Permit No. PA0026824. The existing CWWTP process consists of preliminary screening, grit removal, preaeration, primary settling, activated sludge, final clarifiers and chlorine disinfection. The solids handling system consists of thickening, aerobic digestion, centrifuge dewatering, and ultimate disposal of the sludge at a landfill. The upstream communities' conveyance systems are owned and operated by each independent community. The upstream communities consist of the Borough of Jefferson Hills, the Township of South Park and the PCSA. The PCSA service area consists of customers located within the Borough of Finleyville, Nottingham, Peters, and Union Township. All flows from the upstream communities are classified as strictly sanitary.

This Act 537 Plan Update considers utilizing the PCSA collection system to convey sanitary flows from the FEPA to the CMA CWWTP. The CMA CWWTP operates at 6 million gallons per day and 14 million during wet weather conditions. Currently the CWWTP is under expansion. The estimated treatment capacity of the plant will operate at 25 million gallons a day. The expansion will make the CMA the third largest treatment plant in Allegheny County. However, currently the CMA does not have the capacity to accept the flow rates and BOD loading from the FEPA. Please refer to Appendix J for a copy of the CMA letter.

7.2 Institutional Alternatives

This Act 537 Plan Update considers utilizing the PCSA collection system to convey sanitary flows from the FEPA to the CMA CWWTP. Currently the PCSA provides sanitary collection/conveyance capabilities to the north and west areas of the Township. Connecting the FEPA to the PCSA system utilizes the existing PCSA infrastructure that services the north portion of the Township. Agreements between the Township, PCSA and possibly CMA would need to be developed to implement an alternative that utilizing the existing sanitary infrastructure as well as obtaining necessary financing, easements and right of ways, permits and retaining construction firms.

7.3 Administrative and Legal Requirements

The following outlines all required administrative and legal activities to be completed and adopted to ensure the implementation of the recommended sewer system alternative:

- Rights of way and easements would need to be secured for collection and conveyance lines and lift station for these alternatives that connect to the PCSA system.
- Service agreements with PCSA.

- Selecting an alternative that installs a new gravity sanitary lines would require each parcel owner to establish terms with the Township for parcel owner responsibility for lateral line maintenance.
- An Engineering agreement needed to begin the design and permitting processes of selected alternative.
- All required permits and environmental clearances would need to be obtained.
- Financing would need to be secured for design, permitting, construction and startup costs
- Bidding and construction would be needed.
- Labor and equipment would need to be secured for operation and maintenance of the selected sanitary sewage alternative.
- Administrative functions would need to be established for reporting and other required activities.

7.4 Proposed Institutional Alternatives

Alternatives 1 and 2 each incorporate sanitary sewer connection to the PCSA sanitary system using a lifting station or grinding pumps, gravity collection mains, pressure connection mains and lateral service connections. Each of the proposed institutional alternatives may be implanted utilizing existing administrative, organizational and legal authority capabilities.

8.0 Implementation Schedule

8.1 Proposed Alternative

Based on the PADEP approved Task and Activity Report for the FEPA and proximity of the PCSA collection system to the FEPA as well as the cost and financial evaluation, Alternative 2 provides the most feasible cost-effective solution for Union Township.

The Uniform Annual Cost of the Grinder Pumps, provided in the Present Worth Analysis in Figure 12, is roughly \$39K compared roughly \$56K for the Lifting station.

8.2 Capital Financing Plan

The proposed Alternative 2 capital cost of \$430,000 for the complete grinder pump and collection system installation. Financing options include a PennVEST loan, a RUS loan/grant, a County LSA grant, and/or Township funding. Utilizing the RUS loan/grant system creates a monthly service cost per EDU of roughly \$98. This is \$54 per month for debt service on the loan and \$44 per month operating cost. Obtaining LSA grant funding for the capital cost and/or Township provided funding for the Capital cost lowers the \$44 per month debt service cost. The exact debt service cost depends on the amount of the \$430K funded through a grant and/or Township.

8.3 Implementation Schedule

Table 8.1 – Anticipated implementation schedule

Task	Estimated Duration (Months)
Design and Permitting – concurrent with funding acquisition	2
Funding Acquisition	8
Legal Agreements – concurrent with funding acquisition	6
Uniform Environmental Review – concurrent with funding acquisition	4
Bidding	2
Construction and Start Up	2
Total	12

9.0 Referenced Documents

Washington County

- “The Washington County Sewerage Facility Plan and Technical Report” – January 1972
- “Sewage Provider Inventory & Assessment – A guide for the development of wastewater facilities and projects in Washington County, PA” – December 2014
- “Sewage Provider Inventory – Project Summary Sheets” – Washington County Planning Commission 2014
- “Washington County Comprehensive Plan” – adopted November 2005

Union Township

- “Union Township Updated Official Act 537 Sewage Facilities Plan – Elrama and Surrounding Area” – March 2000
- “Carroll Township – Union Township Joint Comprehensive Plan” – adopted September 2012
- Union Township Code Chapter 211:
 - Article I; “Union Township Dye Test Ordinance” – adopted September 1994
 - Article II; “Sewer Connections” – adopted April 2008
 - Article III; “On-Lot Sewage Administration Ordinance” – adopted February 2009
 - Article IV; “Holding Tank and Privy Ordinance” – adopted December 2011
 - Article V; “Union Township Sewage Documentation Ordinance” – adopted April 2015

Pennsylvania Department of Environmental Protection

- “Domestic Wastewater Facilities Manual” – October 1997; PADEP
- “Domestic Wastewater Facilities Manual” – August 2017 draft; PADEP
- “Act 537 Sewage Disposal Needs Identification” – January 2014; PADEP
- “Alternative Systems Guidance” – September 2003; PADEP
- “Pennsylvania Sewage Facilities Act – A Guide for Preparing Act 537 Update Revisions” – January 2003; PADEP
- State Water Plan Update of 2009 – PADEP
- “Small Flow Treatment Facilities Manual” – Technical Guidance Number 362-0300-002 – December 2006; PADEP
- Domestic Wastewater Facilities Manual – PADEP 362-0300-001

Pennsylvania Regulations

- 25 Pa Code Subpart C Article I Chapter 71 “Administration of Sewage Facilities Planning Program” – adopted August 1971 and subsequent amendments
- P.L. 1987 Act 394 of 1937 as amended (35 Pennsylvania Statute Section 691.1) “Clean Streams Law”
- 25 Pa Code Section 73.62(b)
- 25 Pa Code Article II Chapter 91; General Provisions
- 25 Pa Code Chapter 93; Water Quality Standards
- 25 Pa Code Chapter 94; Municipal Wasteload Management
- 25 Pa Code Chapter 95; Wastewater Treatment Requirements
- 25 Pa Code Chapter 102; Erosion and Sediment Control
- 25 Pa Code Part VII Chapter 961; Pennsylvania Infrastructure Investment Authority Guidelines

United States Environmental Protection Agency

- Clean Water Act; Sec. 208 [33 U.S.C. 1288] Area wide Waste Treatment Management

General

- Geologic Map of Pennsylvania – Department of Conservation and Natural Resources
- Pennsylvania Municipalities Planning Code; P.L. 805 No. 247; 23rd Edition, October 2015
- “Custom Soil Resource Report for Greene and Washington Counties, Pennsylvania – Act 537 Finleyville – Elrama Road Planning Area” – October 2018; United States Department of Agriculture
- Sump and Sewage Pump Manufacturers Association – Figure A; Fixture Unit Values
- Sump and Sewage Pump Manufacturers Association – Figure B; Pump Capacity
- Sump and Sewage Pump Manufacturers Association – Figure E; Pipe friction head
- Sump and Sewage Pump Manufacturers Association – Figure G; Basin Selection
- Sizing Guidelines for New or Replacement Sewage Pumps – Sump and Sewage Pump Manufacturers Association
- Vaughan Pump Performance Curves – Vaughan Pump quote December 2018
- Vaughan Chopper_Brochure_2014

APPENDIX N

**PUBLIC COMMENT PERIOD
DOCUMENTATION**

APPENDIX N

THIS APPENDIX WILL BE POPULATED WITH PUBLIC COMMENT DOCUMENTATION AS PART OF THIS
PLANNING EFFORT

APPENDIX O

LITIGATION SETTLEMENT

MARCH 28, 2023 COURT ORDER

APPENDIX O

**IN THE COURT OF COMMON PLEAS OF WASHINGTON COUNTY,
PENNSYLVANIA**

PETERS CREEK SANITARY AUTHORITY,
a Pennsylvania Joint Municipal Authority,

CIVIL ACTION

No.: 2022-0046

Plaintiff,

vs.

UNION TOWNSHIP,

Defendant.

FILED

MAR 28 2023

L. H. HOUGH
PROTHONOTARY

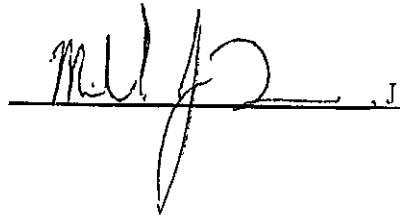
ORDER

AND NOW, on this 28th day of March 2023, upon consideration of Plaintiff's Motion for Court Approval of Modified Settlement Agreement, and upon being advised that Union Township consents to the same and joins in this Motion, it is hereby ORDERED that:

1. The modified Agreement of the parties as set forth in the Memorandum of Understanding attached to Plaintiff's Motion is approved by this Court and incorporated herein by reference as part of this Order.
2. The previous agreement and settlement of the parties, including their executed Developer's Agreement is herewith rescinded, as is this Court's previous approval of the same.
3. The parties are directed to proceed forthwith with the completion of the Finleyville-Elrama Road sewer line extension project by utilizing gravity technology and a lift station, and with the financial participation of the parties as more particularly outlined in the attached Memorandum of Understanding.

4. This Agreement of the parties may not be changed, except with approval of this Court.

BY THE COURT:

Handwritten signature in black ink, appearing to be "M. U. J.", written over a horizontal line. The signature is stylized and cursive.

APPENDIX P

AMMENDMENT TO MARCH 14, 2023
MEMORANDUM OF UNDERSTANDING
FOR THE FINLEYVILLE-ELRAMA
ROAD SEWER LINE EXTENSION
PROJECT



RECEIVED

NOV 21 2023

PETERS CREEK
SANITARY AUTHORITY

APPENDIX P

500 Grant Street, Suite 4900
Pittsburgh, Pennsylvania 15219-2502

412.904.7700 | vorys.com

Founded 1909

Phillip J. Binotto
Direct Dial (412) 904-7689
Direct Fax (412) 904-7689
Email pjbinotto@vorys.com

November 21, 2023

VIA ELECTRONIC MAIL
dennis@makelandassociates.com

Mr. Dennis M. Makel, Esquire
98 East Maiden Street
Washington, PA 15301

VIA ELECTRONIC MAIL
mdupree@uniontwp.com

Ms. Michalle Dupree, Chairperson
Union Township
3904 Finleyville-Elrama Road
Finleyville, Pennsylvania 15332

**Amendment to March 14, 2023 Memorandum of Understanding for the
Finleyville-Elrama Road Sewer Line Extension Project**

Dear Ms. Dupree and Mr. Makel:

This letter is to confirm correspondence between Union Township and PCSA regarding the financing for the subject project, and to amend the March 14, 2023 Memorandum of Understanding (hereinafter "MOU") between the parties with regard to each party's pertaining to the funding of the project. Unless specifically modified herein the terms and conditions of said MOU remain unchanged and are incorporated herein by reference and attached as **Exhibit A**.

To date, PCSA has received a \$500,000.00 cash deposit and a \$200,000.00 LSA Grant assignment from Union Township as its share for the funding of the subject project. Union Township has advised PCSA that it is no longer willing/able to commit additional funds to the subject project, other than what has already been provided, which is \$700,000.00, due to other financial obligations of the Township.

The parties agree that the current estimated cost for the project is \$2,130,000.00, and includes thirty (30) proposed connections, instead of nineteen (19) connections as originally contemplated. The MOU estimated the project cost to be \$1,092,500.00 and originally required Union Township to contribute \$500,000.00 for the subject project, and PCSA to contribute \$592,000.00 towards the project. The parties agreed to share equally any costs over and above said amounts.

Accordingly, based on the current project estimate of \$2,130,000.00, Union Township would be required to contribute a total of \$1,018,750.00 to the project, or an additional \$318,750.00 over and above the \$700,000.00 it has already contributed. PCSA would have been required to contribute the balance for the project or \$1,111,250.00.

The PCSA Board has discussed Union Township's position and is willing to fund the remainder of the estimated project costs (\$1,430,000.00) upon the following conditions which shall be deemed an Amendment to the MOU:

1. Union Township shall not charge any additional debt service, etc. to the residents in the Finleyville-Elrama Planning Area (FEPA) to finance the subject project.
2. The service area of the project shall remain unchanged from that contemplated in the Act 537 Plan prepared by LSSE, which now encompasses 30 connections.
3. The connection point to the existing PCSA collection system shall remain unchanged (Alternative 1A in the Act 537 Plan).
4. Article II, Paragraph B (ii) of the MOU shall be clarified to provide that PCSA will acquire the lift station property and Union Township shall continue to be responsible to acquire all rights-of-ways for each parcel of property that is connected to the collection system. Union Township however, shall reimburse PCSA for the cost to acquire the lift station property, and shall convey all rights-of-ways to PCSA as per the MOU. This Paragraph in the MOU shall otherwise remain unchanged.
5. Union Township shall apply to the Statewide LSA Grant Program for the lift station portion of the project.
6. PCSA shall apply to the Statewide LSA Grant Program for the collection system portion of the project.
7. Both Union Township and PCSA shall submit the completed applications on or before the November 30, 2023 deadline.
8. Any grant funding awarded from the Statewide LSA Grant Program for the subject project to either Union Township or PCSA, shall first be applied 100% to offset PCSA's share of the total project cost as estimated herein, until the respective contributions for the project by Union Township and PCSA are equalized. Any remaining grant funding after the contributions are equalized shall be utilized to equally reduce the parties' contributions for the project.
9. This amended MOU is to be executed by Union Township on or before December 31, 2023.

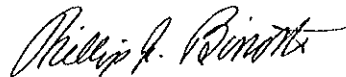
VORYS

Page 3

November 21, 2023

Please let us know if these terms and conditions are acceptable to Union Township or if you have any changes. If these terms and conditions are acceptable to Union Township, please sign and return a copy of this letter to me for execution by our Chairman, Christopher Labee.

Very truly yours,



Phillip J. Binotto

PJB/mms

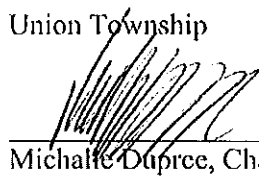
Attachment – Exhibit A

cc: Rick Kovach, Authority Manager, Peters Creek Sanitary Authority
(Via Electronic Mail rkovach@peterscreeksanitaryauthority.org)
Tanya Gosliak, Assistant Authority Manager, Peters Creek Sanitary Authority
(Via Electronic Mail tgosliak@peterscreeksanitaryauthority.org)
Christopher M. Labee, Chairman, Peters Creek Sanitary Authority
(Via Electronic Mail labeefamily@verizon.net)
Eric Fritz, Assistant Engineer, LSSE
(Via Electronic Mail efritz@lsse.com)
T.J. Stephens, P.E., Bankson Engineers, Inc., Union Township Engineer
(Via Electronic Mail tstephens@banksonengineers.com)

This Amendment to the March 14, 2023 Memorandum of Understanding is agreed and accepted to this 18 day of December, 2023.

Union Township

By:


Michelle Dupree, Chairperson

Peters Creek Sanitary Authority

By:

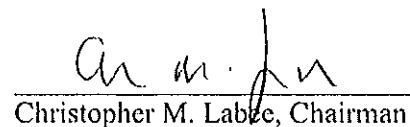

Christopher M. Labee, Chairman

EXHIBIT A

MEMORANDUM OF UNDERSTANDING BETWEEN PETERS CREEK SANITARY AUTHORITY AND UNION TOWNSHIP ON FINLEYVILLE-ELRAMA ROAD SEWER LINE EXTENSION PROJECT

MARCH 1, 2023

THIS MEMORANDUM OF UNDERSTANDING is made and entered into as of the 14 day of MARCH 2023 by and between the PETERS CREEK SANITARY AUTHORITY ("PCSA") and UNION TOWNSHIP ("Township") pertaining to the scope of work for a sanitary sewer line extension along a certain area along Finleyville-Elrama Road situate in Union Township, Washington County as defined herein, ("Finleyville -- Elrama Road Project" or the "Project")

RECITALS:

WHEREAS, PCSA on behalf of its incorporating municipalities prepared an Act 537 Plan in 2012 ("2012 PCSA Act 537 Plan"); and

WHEREAS, the 2012 PCSA Act 537 Plan was adopted by the PCSA incorporating municipalities and approved by the Pennsylvania Department of Environmental Protection (PaDEP) by letter dated October 4, 2012; and

WHEREAS, the 2012 PCSA Act 537 Plan identified areas that were then served by sewage On-Lot Disposal Systems ("OLDS"); and

WHEREAS, Figure 4 of the 2012 PCSA Act 537 Plan is attached hereto as Exhibit 1; and

WHEREAS, one of the areas identified as having OLDS service in the 2012 PCSA Act 537 Plan is the Finleyville-Elrama Road area as shown on Exhibit 1; and

WHEREAS, Union Township submitted an Act 537 Plan Task/Activity Report for the Finleyville-Elrama Road Sewage Planning Area on September 13, 2016 to PaDEP as prepared by Harshman CE Group (Harshman); and

WHEREAS, Union Township received approval of the Act 537 Plan Task/Activity Report for the Finleyville-Elrama Sewage Planning Area by PaDEP letter dated October 5, 2016 as shown on Exhibit 2; and

WHEREAS, Senate Engineering prepared an Act 537 Report dated January 2020 as shown by the cover page noted as Exhibit 3; and

WHEREAS, the Act 537 Plan Summary identifies that a "Conventional gravity collection system with a lift station and force main for conveyance to the PCSA system" (Alternative 1) or "Collection system consisting of individual grinder pumps per EDU for conveyance to the PCSA system" (Alternative 2) "from 19 connections would be collected" as shown on Exhibit 4; and

WHEREAS, PaDEP approved the Act 537 Plan by letter dated January 20, 2021 utilizing nineteen (19) grinder pumps for collection as shown on Exhibit 5, noting that "It is now the responsibility of Union Township to implement the 537 Plan in accordance with the schedules contained within the Plan"; and

WHEREAS, Union Township engaged Harshman to file for a PaDEP Water Quality Management (WQM) Part 2 permit to construct, own and operate an individual grinder pump collection system; and

WHEREAS, Union Township received a PaDEP Water Quality Management (WQM) Part 2 permit to construct, own and operate an individual grinder pump collection system dated November 5, 2021 (**Exhibit 6**); and

WHEREAS, Union Township received a PaDEP letter dated November 4, 2022 (**Exhibit 7**) acknowledging that Act 537 Plan approval and WQM approval has been obtained and advising that “.....*any deviation from the approved At 537 Plan Update will require an additional Plan Update Revision approval.*”; and

WHEREAS, WQM Part 2 permit drawings dated July 6, 2021, revised on August 10, 2021 prepared by Harshman were received by PCSA and Lennon, Smith, Souleret, Engineering (LSSE – PCSA Consulting Engineer) on December 9, 2022; and

WHEREAS, PennDOT Highway Occupancy Permit (HOP) drawings dated October 4, 2021 prepared by Harshman were received by PCSA and LSSE on March 17, 2022; and

WHEREAS, PCSA engaged LSSE to prepare an Opinion of Probable (Project) Cost (OPC) for an individual grinder pump alternative, a submersible lift station alternative and a pre-fabricated, fiber reinforced lift station alternatives; and

WHEREAS, LSSE provided OPCs for these alternatives on April 7, 2022, April 4, 2022 and April 18, 2022 as shown on **Exhibits 8, 9 and 10** respectively; and

WHEREAS, PCSA engaged LSSE to prepare an Opinion of Life Cycle Costs (OLCC) to include operation and maintenance considerations; and

WHEREAS, LSSE provided a Draft Life Cycle Cost Analysis by memorandum dated August 22, 2022 (**Exhibit 11**) which concluded “...*the Grinder Pump and Lift Stations alternatives are essentially equivalent on a Total Present Worth Value basis over a 30-year planning period.*”; and

WHEREAS, PCSA filed an action against Union Township in the Court of Common Pleas of Washington County at No. 2022-0046, seeking to enjoin Union Township from proceeding with the Finleyville-Elrama Road Project unless it entered into a Developer’s Agreement with PCSA, and seeking to enjoin it from attempting to establish its own municipal authority in competition with PCSA, and in violation of the Pennsylvania Municipal Authorities Act; and

WHEREAS, said action was duly settled by the parties on or about September 29, 2022 as the result of the parties entering into a Developer’s Agreement dated September 28, 2022 for the Finleyville - Elrama Road Project in which Union Township would only agree to complete the Project with the installation of 19 non-gravity grinder pumps, at its sole cost and expense, and after Union Township refused to consider the lift station option for the Project, despite the strong preference from PCSA that this option be used and its submitted present worth value basis over a 30 year period showing the costs to be substantially equivalent; and

WHEREAS, thereafter, four of the five members of the Union Township Board of Supervisors resigned from their positions and four new Supervisors were duly appointed; and;

WHEREAS, both parties have now decided to review again the feasibility of using a gravity lift station option for the Project, in lieu of grinder pumps, for the benefit of the residents and future development; and

WHEREAS, PCSA engaged LSSE to further review the planning and permitting documents to ascertain differences in the Finleyville-Elrama service area in terms of probable connections, to develop a reasonable implementation schedule and to request a meeting with Union Township; and

WHEREAS, LSSE issued a letter dated January 12, 2023 to Union Township (**Exhibit 12**) identifying that reconciling PaDEP planning and permitting are required, establishes a reasonable time line to implement the Finleyville-Elrama Road project and requests a meeting between PCSA and Union Township; and

WHEREAS, an advertised public meeting was held on February 2, 2023 at the Union Township Municipal Building a discussion was had that it is desired by Union Township, PCSA, and the impacted property owners that spoke at the meeting that the selected and preferred alternative for the Project should be a gravity collection system with a central lift station to be owned, operated and maintained by PCSA in accordance with PCSA Rules and Regulations and policies subject to PCSA (and Clairton Municipal Authority) tapping fees and uniform user rates established by PCSA; and

WHEREAS, at the February 2, 2023 meeting, Union Township and PCSA authorized their respective engineers (Bankson Engineering, Inc. (Bankson) and LSSE, respectively) to meet and review the existing information available and provide recommendations as to the final service area including actual connections to be serviced within the Finleyville-Elrama Road area; and

WHEREAS, this meeting was held remotely on February 24, 2023 and the recommendations pertaining to the PCSA service area by Bankson and LSSE is to proceed with the Project with the use of a gravity collection system with a central lift station to be owned and operated by PCSA; and

WHEREAS, the parties desire to execute a Memorandum of Understanding (MOU) setting forth the terms and conditions under which PCSA and the Township will proceed to complete the Project for the mutual benefit of all concerned and especially the affected residents.

NOW, THEREFORE, intending to be legally bound hereby, the parties hereto mutually agree as follows:

ARTICLE I DEFINITION OF TERMS

Whenever the following terms are used in this MOU they shall have the following meaning unless otherwise specifically indicated by the context in which they appear:

- A. Host Municipality means the municipality where the PROJECT or a portion of the PROJECT is geographically located (i.e., Union Township).
- B. Lead Entity means PCSA.
- C. Total Cost means the total of all costs associated with the design, financing, development, engineering, capital construction, inspection, permitting, legal, and land or Right-of-Way (ROW) acquisition of / for the Project.
- D. PROJECT means the complete work required to provide the gravity collection system with a central lift station and sewer line extension for Finleyville-Elrama Road service area will be listed on **Exhibit 13**, once the list of customers to be served is determined.

ARTICLE II RESPONSIBILITIES & DUTIES

- A. The purpose of this MOU is for the Lead Entity to coordinate with the Host Municipality to, permit, bid, construct and operate a sewer line extension for the Finleyville-Elrama Road Project.
- B. The division of responsibilities shall be as follows:
 - (i) The Lead Entity will be responsible for the scope of work modification,

development, coordination, surveying, design, mapping, revised planning, revised permitting, bidding, and construction phase for the Project. The Lead Entity will provide a draft Act 537 Plan Amendment to the Host Municipality for adoption as required by the Pennsylvania Sewage Facilities Planning Act. The Lead Entity will also draft an amended Court Order for consideration by the Washington County Court of Common Pleas requesting the approval of the lift station option and vacating the pending Order of Court which approved the grinder pump option. The Motion and Order will be a joint motion with the consent of all parties. The Lead Entity will also draft an amendment to the proposed alternative as well as assignment documents from the Washington County Local Share Account (LSA) assigning existing funding obtained by the Host Municipality to Lead Entity. The Lead Entity will also draft an appropriate amendment canceling the parties September 28, 2022 Developer's Agreement.

- (ii) The Host Municipality will adopt the draft Act 537 Plan Amendment in accordance with the Pennsylvania Sewage Facilities Planning Act. The Host Municipality will also participate with the Lead Entity in amending an Order for consideration by the Washington County Court of Common Pleas. The Host Municipality will also participate on the assignment documents and amendment from the Washington County Local Share Account (LSA) to Lead Entity. The Host Municipality shall be responsible for obtaining any and all ROWs, and easements from residents, and the parcel of land required for the lift station for the Project, all of which shall be conveyed to the Lead Entity.

ARTICLE III DESIGN

- A. The PROJECT consists of gravity collection system with a central lift station and sewer line extension for Finleyville-Eframa Road PCSA service area as defined will be listed on Exhibit 13, once the list of customers to be served is determined.
- B. It is agreed that the design of the PROJECT, responsibility for construction, and the details of the construction contract(s) will be determined by the Lead Entity.

ARTICLE IV FINANCING OF PROJECT AND TENTATIVE SCHEDULE

- A. For the purpose of this MOU, the parties agree that the preliminary estimated Total Cost to be expended on the PROJECT is **\$1,092,500.00** as of the effective date of the MOU utilizing the larger or more expensive lift station option.
- B. For the purposes of this MOU, it is agreed that the Host Municipality will contribute a capped value of the existing Washington County Local Share Account (LSA Financing) obtained by the Host Municipality in the amount of \$200,000 as well as the balance of project funding (\$300,000) required to implement the currently permitted individual grinder pump alternative, for a total Union Township contribution of **\$500,000.00**. Payment shall be made to PCSA within 90 days after execution of this MOU. The Lead Entity shall contribute the estimated difference over and above said contribution, or the sum of **\$592,500.00** for the Project. Additionally, the parties agree that if the total cost for the Project exceeds the above estimate that they will share equally in any costs over and above the same.
- C. The tentative schedule is defined in the timeline contained in Exhibit 12 of this MOU starting on the effective date of this MOU.

ARTICLE V OPERATION AND MAINTENANCE

- A. For the purpose of this MOU, it is agreed that the Lead Entity will own, operate and maintain the facilities constructed as part of the PROJECT by the Lead Entity.

ARTICLE VI MISCELLANEOUS

- A. It is understood and agreed that, except as otherwise expressly provided in this MOU, nothing in this MOU shall be construed so as to in any way alter or affect existing responsibilities and/or maintenance responsibilities of the parties for any streets, roads, alleys, vehicular bridges, pedestrian bridges, sewer and water facilities or other public ways or utilities.
- B. Any notice, request, demand, approval or consent given or required to be given under this MOU shall, except as otherwise expressly provided herein, be in writing and shall be deemed to have been given when mailed by United States registered or certified mail, postage prepaid, to the other Parties at their respective principal offices, directed to the chief executive officer of each Party.
- C. This MOU shall be subject to and governed by the laws of the Commonwealth of Pennsylvania.
- D. This MOU may not be amended except by writing executed by each of the Parties.
- E. If any section of this MOU or any part of any section of this MOU shall be held unlawful, invalid, or unenforceable, that section or part shall be deemed deleted and without prejudice to the lawfulness, validity and enforceability of the remaining sections and parts of this MOU.
- F. This MOU may be executed in several counterparts, each of which shall be deemed an original, and all such counterparts together constitute one and the same instrument

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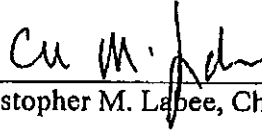
IN WITNESS WHEREOF, the parties have hereunto set their hands and seals the day and year first above written.

ATTEST:



Thomas Lumsden, Secretary

THE PETERS CREEK SANITARY AUTHORITY




Christopher M. Labe, Chairman

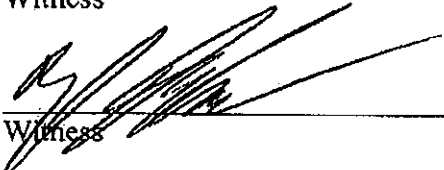


Witness

UNION TOWNSHIP



Michalle Dupree, Chairperson



Witness

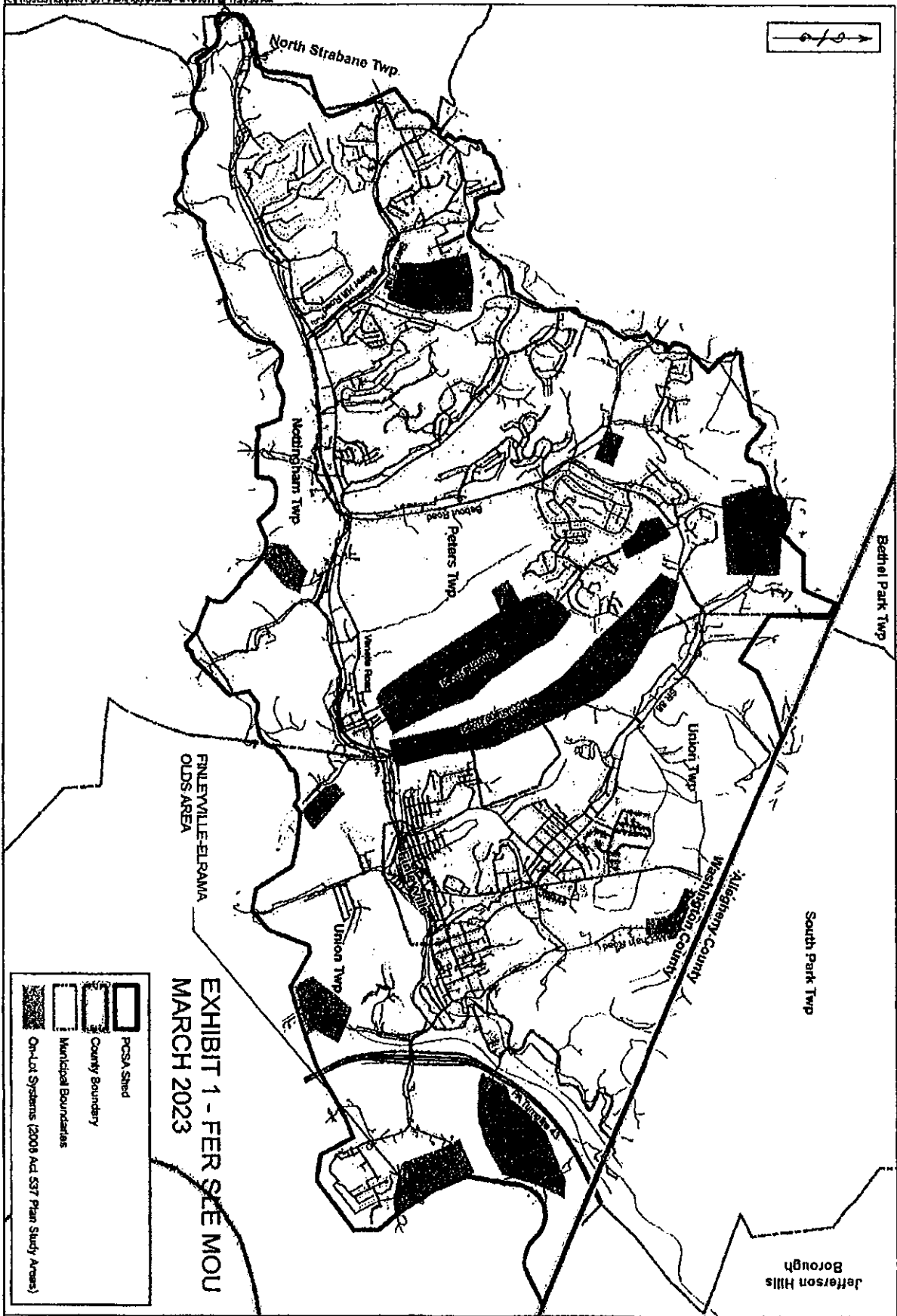


EXHIBIT 1 - FER SLE MOU
MARCH 2023

PCSA Shed
 County Boundary
 Municipal Boundaries
 On-Lot Systems (2008 Act 537 Plan Study Areas)

Scale: N.T.S.
 Date: April 5, 2011
 Drawn By:
 Checked by:
 Approved by:
 Figure No. 4
 1 of 1

Existing On-Lot Disposal System Areas
Paters Creek Sanitary Authority
 Washington County, Pennsylvania
 Act 537 Plan Update

Lenson, Smith, Soukett
 Engineering, Inc.
 201-281-1234
 4000 Old Forge Road
 Suite 200
 Washington, PA 15386

Date	Revisions	Date	Revisors



EXHIBIT 2 - FER SLE MOU March 2023

October 5, 2016

Debra A. Nigon, Secretary
Union Township
3904 Finleyville-Elrama Road
Finleyville, PA 15332

Re: Act 537 Official Plan Revision
Plan of Study and Task/Activity Report
Finleyville-Elrama Sewage Planning Area
Union Township
Washington County

Dear Ms. Nigon:

The Department of Environmental Protection (DEP) has received a Plan of Study and Task/Activity Report for preparation of an Act 537 Official Plan Update, submitted by the Harshman CE Group, LLC. The plan proposes to extend sewer lines to the Finleyville-Elrama area of Union Township.

Your Plan of Study has been approved by DEP for an estimated total cost of \$27,435.00. The resulting Act 537 Update Revision, must be consistent with Act 537, Chapter 71, Sections 71.21 and 71.31 of the Department's regulations, and with information contained in both "A Guide for Preparing Act 537 Update Revisions (February 1998)", and "Sewage Disposal needs Identification Guidance (March 1996)".

These two documents are important. Appendix I in the first guide contains a comprehensive "Plan Content and Environmental Assessment Checklist" that details information required for a successful Act 537 Plan submission. This checklist is critical. Strictly following it will minimize the chance of submitting an incomplete plan and incurring untimely project delay. The second guide provides valuable insight about proper sewage disposal needs identification and documentation procedures. This "needs" information is not only used to determine whether a project is required, but it is also used when rating projects for priority based funding such as PENNVEST. Copies of either document can be obtained from the Department.

Following Act 537 plan approval, the Department administers grants for up to 50 percent of planning costs to municipalities with approved Task/Activity Reports. Costs for completion of any planning activities outside the scope of the originally proposed plan, or costs in excess of those previously approved, are not automatically eligible for grant participation. These additional activities must be within the scope of Act 537. Costs must be submitted as revised Task/Activity Reports and receive Departmental approval.

South West Region | California District Office
California Technology Park | 25 Technology Drive | Coal Center, PA 15423 | T 724.789.1100 | F 724.789.1102
www.dep.pa.gov

Debra A. Nigoin, Secretary

-2-

October 5, 2016

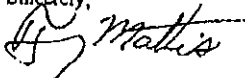
You may apply for the reimbursement grant only after DEP approves your completed Act 537 Plan. At that time, as part of your Grant application, you will need to submit cost invoices that clearly identify the task in the approved Task/Activity Report to which they apply along with proof of payment for each invoice claimed.

Please note that, due to Commonwealth budget constraints, future reimbursements may be delayed or otherwise restricted. Meeting all of the aforementioned criteria does not guarantee that a reimbursement request will be processed. Reimbursements will only be made on the availability of funding.

If your Authority or County intends to be the applicant for the Act 537 Sewage Facilities Planning Assistance Grant, Chapter 71 of the Department's regulations requires that the application submission be accompanied by written proof that the municipality (ies) has/have authorized the Authority or County to receive the grant.

If you have any questions or concerns, please contact me at either 724.769.1056 or tmattis@pa.gov.

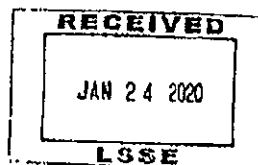
Sincerely,



Terry Mattis
Sewage Planning Specialist II
Clean Water Program

cc: Bryan Lowe, P.E., Harshman CE Group, LLC ✓

UNION TOWNSHIP
WASHINGTON COUNTY, PA



ACT 537 SEWAGE FACILITIES PLAN UPDATE
FINLEYVILLE – ELRAMA ROAD PLANNING AREA

January 2020

EXHIBIT 3 - FER SLE MOU
MARCH 2023 MOU

Prepared by:



Senate Engineering
420 William Pitt Way
Pittsburgh, PA 15238

Project # 12106

EXHIBIT 4 - FER SLE MOU

MARCH 2023

Union Township
Act 537 Sewage Facilities Plan Update – Finleyville-Elrama Planning Area

January 2020

Act 537 Plan Update Summary

Union Township (Township) is in the northeast corner of Washington County, PA. The Borough of Finleyville lies within the Township and the Township borders the Boroughs of Upper St. Clair and Bethel Park as well as the Township of South Park to the north in Allegheny County, PA. Most of the Township sewer service is provided by onlot disposal systems (OLDS) with some limited areas served by municipal sewage authorities. The Peters Creek Sanitary Authority (PCSA) has a sanitary line termination at the northern side of the Finleyville-Elrama Road Planning Area (FEPA).

This Act 537 Sewage Facilities Plan Update (Act 537 Plan Update) focuses on the area in the vicinity of Finleyville-Elrama Road approximately 1/2 mile northeast along Finleyville-Elrama Road from the Union Township Municipal Building. None of FEPA is currently served by the PCSA. The Pennsylvania Department of Environmental Protection (PADEP) has approved a Task and Activity Report (T/AR) for the FEPA. The T/AR approves examining further the use of a lift station and/or grinder pumps. A survey within the FEPA indicates OLDS failures. The continued use of current OLDS pose a threat to the health and safety of the Township residents.

The Union Township Zoning Map indicates an 'R1' Low Density Single Family Residential District for the FEPA. Any Act 537 Plan Update needs to consider alternatives that meet the economic growth potential in the area and the goals of the existing zoning ordinance. The FEPA consists of an estimated 19 connections resulting in 19 equivalent dwelling units (EDU). This Act 537 Plan Update for the FEPA considered various alternatives of;

1. Conventional gravity collection system with a lift station and force main for conveyance to the PCSA system.
2. Collection system consisting of individual grinder pumps per EDU for conveyance to the PCSA system.

The "Custom Soil Resource Report for Greene and Washington Counties, Pennsylvania – Act 537 Finleyville – Elrama Road Area" report indicates that the soils in the FEPA provided a 'very limited' ability for conventional type subsurface OLDS such as septic tank and/or sewage lagoon effluent absorption. Therefore, the use OLDS, Small Flow Treatment Facilities (SFTF), community land disposal alternatives and/or use of retaining tanks within the FEPA generally do not meet the health and safety, land use planning and/or environmental goals. These alternatives are not feasible solutions to the FEPA. It may be possible that more specific soil analysis of specific parcels would identify locations within an individual parcel that use of individual and alternative OLDS such as a drip irrigation and/or spray irrigation septic system would be feasible.

This Act 537 Plan Update considers mutually exclusive alternatives to provide the same remedial solution for currently failing onlot systems within the FEPA. The alternatives generally include connection to the regional sewage authority systems for conventional collection and conveyance of residential wastewater. The PCSA provides a feasible alternative to sewage remediation for the FEPA. The uniform topology in the FEPA allows for use of wastewater lifting devices to convey the sanitary wastewater from the point of discharge of the EDU to the PCSA conveyance system. Through the utilization of either a lifting station, Alternative 1, or a grinder pumps, Alternative 2, sanitary wastewater from 19 connections would be collected.

After approval of the Act 537 Plan Update, the Township expects to complete the design, permitting, and funding acquisition within 1 year followed by an estimated 6-month construction period.



EXHIBIT 5 - FER SLE MOU MARCH 2023

January 20, 2021

Roberta J. Singer
Union Township
3904 Finleyville-Elrama Rd
Finleyville, PA 15332

RE: Approval Letter 537 UR-Revision
Act 537 Planning
Finleyville-Elrama Road Planning Area
19 EDU or 7,600 GPD
DEP Code No. 63960-20-537
Union Township
Washington County

Dear Ms. Singer:

The Department of Environmental Protection (DEP) has reviewed the proposed Official Plan Update – prepared by the Senate Engineering Company and entitled “Finleyville-Elrama Road Planning Area”. The proposal is located along the Finleyville-Elrama Road in Union Township, Washington County. The plan proposes to extend public sewage to 19-dwellings utilizing grinder pumps. The submission is consistent with the planning requirements in Chapter 71 of DEP’s regulations. The plan provides for an expansion of the sewer service area.

The plan revision is approved.

The project will connect to the Peters Creek Sanitary Authority’s collection system and will generate 7,600 gallons per day of sewage to be treated at the Clairton Municipal Authority Wastewater Treatment Facility.

It is approved, however, from the planning standpoint only. Since the project involves the installation of 19-grinder pumps, a Water Quality Management (Part II) permit from this Department is required prior to start of construction.

The Water Quality Management (Part II) permit for the construction and operation of the proposed sewerage facilities must be submitted in the name of the municipality or authority, as appropriate. Approval of this Act 537 Plan Update Revision is only approval of the preliminary concept of the proposed project and does not assure that the Department will act upon a permit application favorably. Issuance of a Part II Permit will be based upon a technical evaluation of the permit application and supporting information. Starting construction prior to obtaining a permit is a violation of The Clean Streams Law.

This Plan Update Revision approval does not include approval of the system design. The system design will be evaluated and approved as part of the Part II permit application review.

Please include in your annual Municipal Wasteload Management Reports the progress of the above-mentioned Act 537 Plan Update Revision. Provide a detailed list, in this report, of the sewer lines or line segments installed, existing structure connected, sewer permits issued, and the name and number of equivalent dwelling units approved for any planning modules/ planning exemptions proposing flows to the

Instructions and permit applications may be obtained from the Clean Water Program at 400 Waterfront Drive, Pittsburgh, PA 15222; Telephone Number (412)-442- 4038.

This sewer extension qualifies as an exception under 25 Pa. Code Chapter 94 – Municipal Wasteload Management – to the restrictions of connections to the Peters Creek sewer system and no Taps need to be allocated from the Peter Creek Sanitary Authority's 2021 Connection Control Plan.

Other Departmental permits may be required for construction if encroachment to streams or wetlands will result. Information regarding the requirements for such permits or approvals can be obtained from the Department's Waterways and Wetlands Program at 500 Waterfront Drive, Pittsburgh, PA 15222; Telephone Number (412)-442- 4314.

It is now the responsibility of Union Township to implement the 537 Plan in accordance with the schedules contained within the Plan.

Since the Department has approved your Plan, you are now eligible to receive a 50 percent planning cost reimbursement as provided under Section 6 of the Sewage Facilities Act (Act 537). A copy of the reimbursement application is available on the Department's website. You are reminded that reimbursement applications must show detailed cost breakdowns of tasks completed or you will place your reimbursement in jeopardy. Please note that re-imburement will be made on the availability of funding.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board), pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800-654-5984.

Friday, February 19, 2021

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <http://ehb.courtapps.com> or by contacting the Secretary to the Board at 717-787-3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions or concerns, please contact Terry Mattis of my staff at either 724-769-1056 or tmattis@pa.gov and refer to DEP Code No. 63960-20-537.

Sincerely,

Donald J. Leone

Donald Leone, P.E.
Environmental Group Manager
Clean Water Program

CC: Shane Michael, Senate Engineering Company
Jessica Stiner, PE, Harshman Group CE, LLC
Brian Secrest, Clairton Municipal Authority
Ryan A. Contestabile, P.E, Lennon, Smith, Souleret
Jason Theakston, Washington County Planning Commission
Rick Kovach, Peters Creek Sanitary Authority
Regional Office File

BCC:

Regional Act 537 File
Thomas Flanagan
Brian Schlauderaff
Terry Mattis

Addresses

Roberta J. Singer
Union Township
3904 Finleyville-Elrama Rd
Finleyville, PA 15332

Shane Michael
Senate Engineering Company
U-PARC, 420 William Pitt Highway
Pittsburgh, PA 15238

Jessica Stiner, PE
Harshman Group CE, LLC
100 Courson Hill Road,
Washington, PA 15301

Brian Secrest
Clairton Municipal Authority
One North State Street
Clairton, PA 15025

Ryan A. Contestabile, P.E.
Lennon, Smith, Souleret
Engineering, Inc.
Civil Engineers and Surveyors
846 Fourth Avenue
Coraopolis, PA 15108

Jason Theakston
Washington County Planning Commission
100 West Beau Street, Suite 701
Washington, PA 15301

Rick Kovach
Peters Creek Sanitary Authority
PO Box 3
Finleyville, PA 15332



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

**EXHIBIT 6 - FER
SLE MOU
MARCH 2023**

**WQG-02
WATER QUALITY MANAGEMENT
GENERAL PERMIT FOR SEWER EXTENSIONS AND PUMP STATIONS
PERMIT NUMBER WQG02632101**

A. PERMITTEE (Name and Address): Union Township 3904 Finleyville-Elrama Road Finleyville, PA 15332 CLIENT ID# 45153	B. PROJECT/FACILITY (Name): Finleyville-Elrama Road Planning Area C. LOCATION (County, Municipality): Washington County, Union Township
D. This General Permit approves the construction and operation of: <input checked="" type="checkbox"/> SEWER EXTENSION to serve 19 existing EDUs served by individual grinder pumps. <input type="checkbox"/> PUMP STATION	
E. APPROVAL GRANTED BY THIS GENERAL PERMIT IS SUBJECT TO THE FOLLOWING: 1. All construction, operations and procedures shall be in accordance with the <i>Domestic Wastewater Facilities Manual</i> . Transfers: In the event the permittee plans to transfer ownership of the facility to another entity, the permittee and the transferee shall submit an application for such transfer to DEP. If the transfer is approved by DEP, the transferee is subject to the terms and conditions of this General Permit. 2. The attached conditions apply to this General Permit and are hereby made part of same.	
F. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS: 1. If there is a conflict between the NOI or its supporting documents and amendments and the attached conditions, the attached conditions shall apply. 2. Failure to comply with the rules and regulations of DEP or with the terms or conditions of this General Permit shall void the authority given to the permittee by the issuance of this General Permit. 3. This General Permit is issued pursuant to the Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended 35 P.S. §691.1 <i>et seq.</i> Issuance of this General Permit shall not relieve the permittee of any responsibility under any other law.	
PERMIT ISSUED: <u>November 5, 2021</u>	BY: <u>Christopher Kriley, P.E. /s/</u> TITLE: <u>Clean Water Program Manager</u>



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

**WQG-02
WATER QUALITY MANAGEMENT
GENERAL PERMIT FOR SEWER EXTENSIONS AND PUMP STATIONS
PERMIT CONDITIONS**

General

1. DEP considers the licensed professional engineer whose seal is affixed to the design documents to be fully responsible for the adequacy of all aspects of the facility's design.
2. The approval is specifically made contingent on the permittee acquiring all necessary property rights, by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures in, along or across private property with full rights of ingress, egress and regress.
3. If, at any time, the sewer extension and/or pump station covered by this General Permit creates a public nuisance, including but not limited to, causing malodors or causing environmental harm to waters of the Commonwealth, DEP may require the permittee to adopt appropriate remedial measures to abate the nuisance or harm.
4. The approval of the plans, and the authority granted in this permit, if not specifically extended, shall cease and be null and void 2 years from the issuance date of this permit unless construction or modification of the facilities covered by this permit has begun on or before the second anniversary of the permit date.
5. This permit does not relieve the permittee of its obligations to comply with all federal, interstate, state or local laws, ordinances and regulations applicable to the facilities.
6. This General Permit does not give any real or personal property rights or grant any exclusive privileges, nor shall it be construed to grant or confirm any right, easement or interest in, on, to, or over any lands which belong to the Commonwealth.
7. No discharge is authorized from these facilities unless approved by an NPDES Permit.

Construction

8. A permit or approval is required under Chapter 102 for most earth disturbance activities. A permit or registration under Chapter 105 is required for stream obstructions, crossings, etc. The permittee must secure the necessary permits, approvals or registrations under Chapters 102 and 105 prior to beginning construction.
9. Prior to beginning any construction or excavation, the locations of all utility lines must be identified through notification to the PA One Call system (www.paonecall.org). The notification shall not be less than three nor more than 10 working days in advance of beginning the construction or excavation.
10. The local waterways conservation officer of the Pennsylvania Fish and Boat Commission (PFBC) shall be notified when the construction of any stream crossing and/or outfall is started and completed. A written permit must be secured from the PFBC if there is any use of explosives in any waterways and the permittee shall notify the local waterways conservation officer when explosives are to be used.
11. Manhole inverts shall be formed to facilitate the flow of the sewage and to prevent the stranding of sewage solids. The whole manhole structure shall be built to prevent undue infiltration, entrance of street wash or grit and provide safe access to facilitate manhole maintenance activities.
12. The facilities shall be constructed under the supervision of a Pennsylvania licensed Professional Engineer in accordance with the approved reports, plans and specifications.

13. A Pennsylvania licensed Professional Engineer shall certify that construction of the permitted facilities was completed in accordance with the application and design plans submitted to DEP, using "Post Construction Certification" (3800-PM-WSFR0179a). It is the permittee's responsibility to ensure that a Professional Engineer is on-site to provide the necessary oversight and/or inspections to certify the facilities. The certification must be submitted to DEP before the facility is placed in operation. If requested, "as-built" drawings, photographs (if available) and a description of any DEP-approved deviations from the application and design plans must be submitted to DEP within 30 days of certification. Construction must be completed within two years of permit issue date.

Operation and Maintenance

14. The permittee shall maintain sewer extension and/or pump station operation and maintenance (O&M) manuals at the facility and ensure proper O&M of the permitted facility. The permittee shall file the O&M manuals with DEP upon request.
15. Stormwater from roofs, foundation drains, basement drains or other sources shall not be admitted directly to the sewer extension or pump station.
16. The sewer extension shall have adequate foundation support as soil conditions require. Trenches shall be back-filled to ensure that sewers will have proper structural stability, with minimal settling and adequate protection against breakage. Concrete used in connection with these sewers shall be protected from damage by water, freezing, drying or other harmful conditions until cured.
17. The approved sewer extensions and/or pump stations shall be maintained in good condition, kept free of deposits by flushing or other cleaning methods and repaired when necessary.
18. The sewer extension and/or pump station shall be properly operated and maintained so that the facility will perform as designed.
19. The attention of the permittee is called to the highly explosive nature of certain gases generated by the digestion of sewage solids when these gases are mixed in proper proportions with air and to the highly toxic character of certain gases arising from such digestion or from sewage in poorly ventilated compartments or sewers. Therefore, at all places throughout the facilities where hazard of fire, explosion or danger from toxic gases may occur, the permittee shall post conspicuous permanent and legible warnings. The permittee shall instruct all employees concerning the aforesaid hazards, first aid and emergency methods of meeting such hazards and shall make all necessary equipment and material accessible.
20. There shall be no physical connection between a public water supply system and a sewer or appurtenance to it which would permit the passage of any sewage or polluted water into the potable water supply. No water pipe shall pass through or come in contact with any part of the sewer extension and/or pump station.
21. Collected screenings, slurries, sludge and other solids shall be handled and disposed of in compliance with Title 25 Pa. Code, Chapters 271, 273, 275, 283 and 285 (related to permits and requirements for land filling, land application, incineration and storage of sewage sludge), Federal Regulations 40 CFR Part 257 and the Federal Clean Water Act and its amendments.



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF WATER STANDARDS AND FACILITY REGULATION

**WATER QUALITY MANAGEMENT
 POST CONSTRUCTION CERTIFICATION**

PERMITTEE IDENTIFIER

Permittee	Union Township
Municipality	Union Township
County	Washington
WQM Permit No.	WQG02632101
Facility Type	Sewage

All of the above information should be taken directly from the Water Quality Management Permit.

DESCRIPTION

This certification must be completed and returned to the permits section of the DEP's regional office issuing the WQM permit within 30 days of completion of the project and received by DEP prior to operation, and if requested, as-built drawings, photographs (if available) and a discussion of any DEP-approved deviations from the design plans during construction.

I, being a Registered Professional Engineer in Pennsylvania, do hereby certify to the best of my knowledge and belief, based upon personal observation and interviews, that the above facility approved under the Water Quality Management Permit has been constructed in accordance with the plans, specifications and modifications approved by DEP.

Construction Completion Date (MM/DD/YYYY): _____

<p>Engineer's Seal</p>	Professional Engineer
	Name _____ (Please Print or Type)
	Signature _____
	Date _____
	License Expiration Date _____
	Firm or Agency _____
	Telephone _____
	Permittee or Authorized Representative
	Name _____ (Please Print or Type)
	Signature _____
	Title _____
	Telephone _____



RECEIVED

NOV 10 2022

PETERS CREEK
SANITARY AUTHORITY

EXHIBIT 7 - FER SLE MOU
MARCH 2023

November 4, 2022

CERTIFIED MAIL NO. 7021 0950 0001 8853 7921

Roberta J. Singer, Secretary
Union Township
3904 Finleyville-Elrama Road
Finleyville, PA 15332

Re: Act 537 Plan Update Status
Finleyville-Elrama Road Planning Area
Union Township
Washington County

Dear Ms. Singer:

On January 20, 2021, the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department") issued an approval letter to Union Township for the Act 537 Plan Update for the Finleyville-Elrama Planning Area to extend public sewage to nineteen dwellings utilizing grinder pumps ("Approval Letter"). A copy of the Approval Letter is attached for reference.

Union Township subsequently submitted an application for a Water Quality Management Part II Permit ("Part II Permit") for the construction and operation of the proposed sewerage facilities in accordance with the approved Act 537 Plan Update for the Finleyville-Elrama Planning Area. The Part II Permit was issued on November 5, 2021.

As stated in the Approval Letter, it is the responsibility of Union Township to implement the Act 537 Plan Update in accordance with the schedules contained therein. As of the date of this letter, Union Township has not commenced construction in accordance with the approved Act 537 Plan Update.

The Department requests that Union Township respond to this letter, in writing, by **November 18, 2022** and identify what has been done, and will be done, to comply with the approved Act 537 Plan Update. As a reminder, any deviation from the approved Act 537 Plan Update will require an additional Plan Update Revision approval. If Union Township plans to deviate from the approved Plan, your response should include an estimated schedule for submitting a Plan Update Revision.

Ms. Roberta Singer

-2-

November 4, 2022

Please contact Terry Mattis of my staff at either 724-769-1056 or tmattis@pa.gov if you have any questions.

Sincerely,

Thomas E. Flanagan

Thomas E. Flanagan
Sewage Planning Specialist Supervisor
Clean Water Program

Cc: Christopher Kriley, P.E. (PADEP)
Mahbuba Iasmin, P.E. (PADEP)
Terry Mattis (PADEP)
Stacey Greenwald (PADEP)
Amanda Schmidt (PADEP)
Sean O'Dell, P.E. (Harshman Group CE, LLC)
Rick Kovach (Peters Creek Sanitary Authority.)

OPINION OF PROBABLE COST

Peters Creek Sanitary Authority
 Finleyville Elrama Road Grinder Pump Concept
 Conceptual Layout

Prepared by:
 Lennon, Smith, Souleret Engineering, Inc.
 Dated: April 7, 2022

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ITEM COST
1	3" SDR 11 HDPE (Directionally Drilled - All	2,145	LF	\$40.00	\$85,800.00
2	1-1/4" SDR 11 HDPE Service (Directionally Drilled - All Depths)	795	LF	\$35.00	\$27,825.00
3	Grinder Pump Units	19	EA	\$9,000.00	\$171,000.00
4	Wye Connection	19	EA	\$750.00	\$14,250.00
5	Curb Box Assembly	19	EA	\$1,500.00	\$28,500.00
6	Terminal Cleanout	1	EA	\$1,500.00	\$1,500.00
7	Inline Cleanout	1	EA	\$1,500.00	\$1,500.00
8	Air/Vacuum Release Valve Assembly	1	EA	\$4,500.00	\$4,500.00
9	Connection to Existing Manhole	1	EA	\$4,000.00	\$4,000.00
10	Erosion and Sedimentation Control	1	LS	\$15,000.00	\$15,000.00
11	Detour Plan, Maintenance and Protection of traffic	1	LS	\$10,000.00	\$10,000.00
12	Location of Existing Underground Utilities	1	LS	\$7,500.00	\$7,500.00
13	Field Engineering (Section 01050)	1	LS	\$10,000.00	\$10,000.00
14	Permit Compliance	1	LS	\$15,000.00	\$15,000.00
	SUB TOTAL				\$396,375.00
	2% ADMINISTRATIVE/LEGAL				\$8,000.00
	15% ENGINEERING				\$59,000.00
	10% CONTINGENCY				\$40,000.00
	TOTAL				\$503,375.00

*Quantities Approximated based on HOP Submittal Drawings Provided by Harshman CE Group Previously

EXHIBIT 8 - FER SLE MOU
 MARCH 2023

OPINION OF PROBABLE COST

Peters Creek Sanitary Authority
 Finleyville Elrama Road Lift Station Concept
 Conceptual Layout - Option A

Prepared by:
 Lennon, Smith, Souleret Engineering, Inc.
 Dated: April 4, 2022

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ITEM COST
1	8" PVC Gravity Sanitary Sewer (Assumes all out of Roadway)	1,100	LF	\$110.00	\$121,000.00
2	4' Diameter Sanitary Manhole Barrel	30	VF	\$300.00	\$9,000.00
3	4' Diameter Sanitary Manhole Bottom	3	EA	\$3,000.00	\$9,000.00
4	Manhole Frame and Cover	3	EA	\$1,000.00	\$3,000.00
5	Wye Connection	19	EA	\$500.00	\$9,500.00
6	Site tee	19	EA	\$750.00	\$14,250.00
7	6" PVC Service Sewer (Short Side)	80	LF	\$75.00	\$6,000.00
8	6" PVC Service Sewer (Long Side) (Assumes No Road Restoration - Drill/Bore Services)	550	LF	\$95.00	\$52,250.00
9	6' Diameter Precast Wet Well (Complete Less Mechanical Items)	1	LS	\$80,000.00	\$80,000.00
10	5' Diameter Precast Valve Pit (Complete Less Mechanical Items)	1	LS	\$35,000.00	\$35,000.00
11	5' Diameter Meter Pit (Complete Less Mechanical Items)	1	LS	\$20,000.00	\$20,000.00
12	DIP Forcemain	50	LF	\$125.00	\$6,250.00
13	4" C900 PVC Forcemain	1,500	LF	\$75.00	\$112,500.00
14	Submersible Pumping System Including Control Panel	1	LS	\$175,000.00	\$175,000.00
15	Electrical Work / Control Wiring	1	LS	\$35,000.00	\$35,000.00
16	Hoist	1	LS	\$7,500.00	\$7,500.00
17	Inside Piping and Valves	1	LS	\$35,000.00	\$35,000.00
18	Mag Meter	1	LS	\$7,500.00	\$7,500.00
19	Emergency Power System Diesel Engine Driven Generator with Slab	1	LS	\$45,000.00	\$45,000.00
20	Forcemain Connection to Existing Sanitary Sewer	1	LS	\$4,000.00	\$4,000.00
21	Chainlink Fence	150	LF	\$75.00	\$11,250.00
22	Double Swing Gate	1	LS	\$5,000.00	\$5,000.00
23	Erosion and Sedimentation Control	1	LS	\$15,000.00	\$15,000.00
24	Detour Plan, Maintenance and Protection of traffic	1	LS	\$10,000.00	\$10,000.00
25	Location of Existing Underground Utilities	1	LS	\$7,500.00	\$7,500.00
26	Field Engineering (Section 01050)	1	LS	\$10,000.00	\$10,000.00
27	Permit Compliance	1	LS	\$15,000.00	\$15,000.00
				SUB TOTAL	\$860,500.00
				2% ADMINISTRATIVE/LEGAL	\$17,000.00
				15% ENGINEERING	\$129,000.00
				10% CONTINGENCY	\$86,000.00
				TOTAL	\$1,092,500.00

*Quantities Approximated based on Exhibit Drawings for Lift Station Alternative included in FER S17 Plan by Souleret Engineering

EXHIBIT 9 - FER SLE MOU MARCH 2023

OPINION OF PROBABLE COST

Peters Creek Sanitary Authority
 Finleyville Elrama Road Lift Station Concept
 Conceptual Layout - Option B

Prepared by:
 Leonon, Smith, Souleret Engineering, Inc.
 Dated: April 18, 2022

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ITEM COST
1	8" PVC Gravity Sanitary Sewer (Assumes all out of Roadway)	1,100	LF	\$110.00	\$121,000.00
2	4' Diameter Sanitary Manhole Barrel	30	VF	\$300.00	\$9,000.00
3	4' Diameter Sanitary Manhole Bottom	3	EA	\$3,000.00	\$9,000.00
4	Manhole Frame and Cover	3	EA	\$1,000.00	\$3,000.00
5	Wye Connection	19	EA	\$500.00	\$9,500.00
6	Site tee	19	EA	\$750.00	\$14,250.00
7	6" PVC Service Sewer (Short Side)	80	LF	\$75.00	\$6,000.00
8	6" PVC Service Sewer (Long Side) (Assumes No Road Restoration - Drill/Bore Services)	550	LF	\$95.00	\$52,250.00
9	5' Diameter Meter Pit (Complete Less Mechanical Items)	1	LS	\$20,000.00	\$20,000.00
10	DIP Forcemain	50	LF	\$125.00	\$6,250.00
11	4" C900 PVC Forcemain	1,500	LF	\$75.00	\$112,500.00
12	Pre-Fab FRP Pumping System Including Controls	1	LS	\$75,000.00	\$75,000.00
13	Electrical Work / Control Wiring	1	LS	\$35,000.00	\$35,000.00
14	Hoist	1	LS	\$7,500.00	\$7,500.00
15	Mag Meter	1	LS	\$7,500.00	\$7,500.00
16	Emergency Power System Diesel Engine Driven Generator with Slab	1	LS	\$45,000.00	\$45,000.00
17	Forcemain Connection to Existing Sanitary Sewer	1	LS	\$4,000.00	\$4,000.00
18	Chainlink Fence	150	LF	\$75.00	\$11,250.00
19	Double Swing Gate	1	LS	\$5,000.00	\$5,000.00
20	Erosion and Sedimentation Control	1	LS	\$15,000.00	\$15,000.00
21	Detour Plan, Maintenance and Protection of traffic	1	LS	\$10,000.00	\$10,000.00
22	Location of Existing Underground Utilities	1	LS	\$7,500.00	\$7,500.00
23	Field Engineering (Section 01050)	1	LS	\$10,000.00	\$10,000.00
24	Permit Compliance	1	LS	\$15,000.00	\$15,000.00
				SUB TOTAL	\$610,500.00
				2% ADMINISTRATIVE/LEGAL	\$12,000.00
				15% ENGINEERING	\$92,000.00
				10% CONTINGENCY	\$61,000.00
				TOTAL	\$775,500.00

*Quantities Approximated based on Exhibit Drawings for Lift Station Alternative included in FER 337 Plan by Searle Engineering

**EXHIBIT 10 - FER SLE MOU
 MARCH 2023**



MEMO

EXHIBIT 11 - FER SLE MOU MARCH 2023

TO: Chris Labee, Chairman
COMPANY: Peters Creek Sanitary Authority
FROM: Ryan A. Contestabile, P.E.
SUBJECT: Finleyville-Elrama Road Sanitary Sewer Extension – Life Cycle Cost Alternatives Analysis

DATE: August 22, 2022
S. O. NO.: 351-002-028
cc: PCSA Authority Board
Rick Kovach, Manager
Phillip Binotto, Solicitor

BACKGROUND

Two alternatives are under consideration for a sanitary sewer extension proposed to service 19 existing homes along Finleyville-Elrama Road (FER) in Union Township:

- A low-pressure sanitary sewer system with 19 individual grinder pumps (Grinder Pump Alternative) as compared to
- A gravity sanitary sewer collection system with sanitary sewer lift station (Lift Station Alternative).

Capital costs estimates for each alternative have been previously identified, however these estimates do not include long term Operations and Maintenance Costs (equipment maintenance/replacement, electricity usage, repair, etc.).

The purpose of this memorandum is to summarize and compare a life cycle cost analysis (in terms of a Present Worth Value) of these two alternatives after consideration of annual operating costs associated with each alternative over a given planning period.

ANALYSIS

The economic analysis for the two sanitary sewer extension alternatives is presented below in terms of the Present Worth Value representing a life cycle cost over a recommended 30-year planning period.

Present worth calculations were performed using the federal discount rate from Appendix C of OMB Circular A-94 (March 15, 2022) for establishing the present worth of the uniform series in today's dollars.

The Present Worth Analysis was carried out to evaluate the present and future costs of each alternative (Grinder Pump Alternative vs. Lift Station Alternative).

The total Present Worth Value (Net Present Value) is comprised of Capital Costs, Operations and Maintenance (O&M) costs, and Salvage Value. The Present Worth of Operations and Maintenance (O&M), Salvage Value were determined as discussed in the subsequent sections.

Capital Costs

The Opinion of Probable Cost (OPC) for the capital costs associated with each alternative were previously developed and are summarized in Table 1 and is attached. The OPC were computed based on conceptual layout of each alternative.

Annual O&M Costs

Equation 1 provides a Uniform Series Present Worth (PW) calculation to determine the present-day O&M cost of the alternatives by utilizing a chosen planning period ($n = 30$ years), annual O&M budget (A), and an assumed O&M yearly inflation rate (i) of 0.5 percent (Real Discount Rate published in OMB Circular No. A-94 revised March 2022 for a 30-year planning period). The annual O&M budgets were estimated for the alternatives as summarized in the following paragraphs, with the results provided in Table 1. Discussion on O&M costs utilized is also included below.

Equation 1

$$PW = A \left[\frac{(1+i)^n - 1}{i(1+i)^n} \right]$$

Annual O&M costs were estimated for each alternative as follows:

- **Grinder Pump Alternative:**
 - **Electricity Costs** – Annual electric use costs for individual grinder pump operation were computed based on literature published by Environment One (EOne Grinder Pump Manufacturer). EOne states that an average grinder pump utilizes approximately 16 kwh per month. An electricity price of \$0.135 per Kwh was used to compute annual electricity costs.
 - **Equipment Maintenance Costs** – EOne literature states that the average time per service calls for grinder pumps is 8-10 years. For this analysis it was assumed that grinder pump service would be required every 8 years, or three times over a 30-year period. A service cost of \$1,500 per occurrence was assumed. For the purposes of this analysis, maintenance cost (\$4,500) was annualized by taking the total cost and dividing by the planning period (30-years).
 - **Equipment Repair/Replacement Costs** – EOne literature states that the average need for major rebuild/replacement of the pump core is 15-20 years. For this analysis it was assumed that two grinder pump service rebuilds/replacements would be required over a 30-year period. A rebuild/replacement cost of \$8,000 per occurrence was assumed. For the purposes of this analysis, the rebuild/replacement cost was annualized by taking the total cost (\$16,000) and dividing by the planning period (30-years).

- The computed Present Worth O&M Cost for each grinder pump was multiplied by 19 proposed grinder pumps to compute the total Present Worth O&M Cost of the proposed lower pressure system.
- Based on the parameters identified above, the total annual O&M Costs for the grinder pump alternative used for analysis are approximately \$720/year/pump (or \$60/month/pump), for a total annual O&M Cost of approximately \$13,680 for a low-pressure system comprised of 19 grinder pumps).
- **Lift Station Alternative:**
 - **Utility/Maintenance Costs** – Annual utility and routine maintenance costs for the proposed lift station were projected using existing PCSA budgeted costs for the PCSA Pleasant View Lift Station. Based on an average of three years budgeted costs, an annual value of \$1,650 was used for utility costs. An annual allowance of \$5,000 was used for routine maintenance (as compared to actual of approximately \$3,200 per the PCSA Budget). Total annual Utility/Maintenance Cost utilized was \$6,650.
 - **Equipment Replacement/Repair Costs** – Based on experience with similar lift stations, it was assumed that major equipment replacement/repair would be required approximately every 7 years, or a total of 4 times over a 30-year planning period. A major equipment replacement/repair cost of \$15,000 per occurrence was utilized. For the purposes of this analysis, the total equipment replacement/repair cost (\$60,000) was annualized by taking the total cost and dividing by the planning period (30-years).
 - Based on the parameters identified above, the total annual O&M Costs for the lift station alternative used for this analysis are approximately \$8,650/year (or \$720/month).

Salvage Value

Salvage Value of each alternative also typically considered in a life cycle cost analysis. A design life of 50 years for each proposed alternative is assumed based on PaDEP Guidance for planning level present worth analysis. The planning period utilized for the analysis is 30-years, therefore a salvage value (remaining value between years 31 and 50) is computed using the straight-line depreciation method where it is estimated that the pumping/sewer infrastructure will have zero value at year 50. Annual Depreciation (D_n) is calculated using the Opinion of Probable Capital Cost (C) of the alternative, estimated salvage value at the end of the useful life (F) and the design life of the asset (N).

Equation 2

$$D_n = \frac{C - F}{N}$$

Equation 3 then calculates the Salvage Value for any year within the useful life of the asset, where "n" is again the planning period.

Equation 3

$$SV_n = C - nD_n$$

Net Present Value

The Net Present Value (NPV) can then be calculated for each alternative as the sum of the Opinion of Probable Capital Cost (C) and Present Worth (PW) of annual O&M costs minus the Salvage Value (SV), as shown in Equation 4.

Equation 4

$$NPV = C + PW(O&M) - SV$$

SUMMARY

The capital costs, O&M costs, and salvage values were computed on a present worth basis as described above. Table 1 summarizes the results of the analysis when applied to the considered alternatives.

Table 1 - Life Cycle Cost Analysis, 30 Year Planning Period

	Grinder Pump Alternative	Lift Station Alternative
Opinion of Probable Capital Construction Project Cost (Appended)	\$ 503,375	\$ 775,500
Present Worth Value of O&M ⁽¹⁾	\$ 379,500	\$ 240,500
Subtotal	\$ 882,875	\$ 1,016,000
Less Salvage Value	(\$ 201,350)	(\$ 310,200)
TOTAL PRESENT WORTH VALUE	\$ 681,525	\$ 705,800

(1) Based upon $r=0.5\%$ and $n=30$ years

As identified in Table 1, the estimated Total Present Worth Value for the Grinder Pump Alternative is approximately 3.5% less than the Total Present Worth Value for the Lift Station Alternative on a Present Worth Basis over a 30-year planning period.

In terms of alternative evaluation on a planning level, a rule of thumb generally accepted by Pennsylvania regulatory and funding agencies suggests that any alternative within 15% of another alternative can be considered as an equivalent alternative from a cost-based perspective.

Therefore, the Grinder Pump and Lift Stations alternatives are essentially equivalent on a Total Present Worth Value basis over a 30-year planning period.



LSSE

Civil Engineers and Surveyors

HEADQUARTERS IN CORAOPOLIS, PENNSYLVANIA

MANAGING PRINCIPALS

Kevin A. Brett, P.E.
Ned Mitrovich, P.E.
Jason E. Stanton, P.E.

January 12, 2023

S.O. No. 351-02-28

VIA EMAIL ONLY
(secretary@unlontwp.com)

Union Township Board of Supervisors
3904 Finleyville-Elrama Road
Finleyville, Pennsylvania 15332

EXHIBIT 12 - FER SLE MOU MARCH 2023

**Subject: Finleyville-Elrama Road
Sanitary Sewer Line Extension (SLE) Project**

Ladies and Gentlemen:

This letter is being sent on behalf of and as directed by the Peters Creek Sanitary Authority (PCSA) Board and follows discussion at the November 21, 2022 special joint meeting between PCSA and Union Township and the December 19, 2022 PCSA Board Meeting and regarding the subject sanitary sewer line extension (SLE) proposed along Finleyville-Elrama Road in Union Township. PCSA recommends that Union Township schedule a meeting with PCSA to discuss the current status of the project and/or options to move forward.

Following the November 21, 2022 special joint meeting between PCSA and Union Township, PCSA requested that their consulting engineer, LSSE, evaluate a potential implementation schedule for both alternatives of the subject sanitary sewer extension project which includes 19 individual grinder pump units or a gravity sewer and central lift station. As part of that evaluation, LSSE requested and received the following from Union Township's Engineer, Harshman CE Group, LLC (see email enclosed):

1. Information regarding the Local Share Account (LSA) Grant obtained by Union Township for this project;
2. The Water Quality Management Part II Permit issued by Pa DEP for this project and plans prepared for same;
3. Correspondence with Pa DEP regarding revision of the project scope from the scope approved as part of the Act 537 Plan Approval; and
4. Information and latest comments issued by PennDOT regarding the Highway Occupancy Permit.

OFFICES IN: Allegheny, Beaver, Erie and Westmoreland Counties Pennsylvania; Franklin County, Ohio

846 Fourth Avenue
Coraopolis, PA 15108
(412) 264-4400
Fax: (412) 264-1200

150 Pleasant Drive, Suite 204
Aliquippa, PA 15001
(412) 264-4400
Fax: (412) 264-1200

10560 Walnut Street
Albion, PA 16401
(814) 756-4384
Fax: (814) 756-5638

4534 Route 136, Suite 9
Greensburg, PA 15601
(724) 837-1057
Fax: (412) 264-1200

5980 Wilcox Place, Suite J
Dublin, OH 43016
(614) 395-1661

Based on review of the information provided, the previously received Act 537 Plan prepared by Senate Engineering, and other available information LSSE has identified the following:

1. Union Township was awarded a \$200,000.00 grant from the Redevelopment Authority of the County of Washington (RACW) Local Share Account (LSA) grant program. Based on the application materials provided, the grant submitted identifies that the Finleyville-Elrama Road area is proposed to be served via all grinder pumps. It also appears that this grant included design/engineering costs in addition to construction costs. The current balance of grant funding available is unknown at this time. However, based on discussion with RACW, it may be possible for Union Township, if so desired, to revise the implemented technology proposed to serve this subject area without jeopardizing the grant funding. Per RACW, a letter request would be required to be provided to RACW for consideration by the LSA Grant Selection Committee identifying the proposed changes. The LSA Grant Selection Committee would then determine if the proposed change is acceptable and provide response.
2. Based on review of the documents available, there appears to be a discrepancy between the properties to be served by the proposed extension. Various documents propose to serve differing properties. LSSE has compiled a table (enclosed) identifying the properties proposed to be served by the subject sewer line extension as identified in:
 - a. The Act 537 Plan prepared by Senate Engineering dated January 2020;
 - b. The Part II Permit Drawings provided by Harshman via email Dated December 9, 2022,
 - c. The HOP drawings provided by Harshman via email dated March 17, 2022.

The enclosed table also identifies the discrepancies via colored highlights.

3. Based on the discrepancies in the properties noted above, adequate Sewage Facilities Planning may not have been completed/approved for this project. As noted on the enclosed table, the Act 537 Plan identifies 19 properties to be served. The Part II Permit drawings identify 19 properties largely consistent with the Act 537 Plan; however, includes the addition of a property along Robb Lane not previously included in the Act 537 Plan. Lastly, the HOP Drawings identify 19 properties largely consistent with the Part II Permit drawings however included the addition of 2 additional properties along Robb Lane not previously included in the Act 537 Plan. Based on this review, it is not clear what properties are intended to be serviced. Also, it is LSSE's opinion that sewage facilities planning has not been completed / approved if the additional 3 properties along Robb Lane and the removal of other properties from the project scope was intended.

As discussed at the November 21, 2022 special joint meeting between PCSA and Union Township, LSSE has reached out to Pa DEP regarding the steps required, if Union Township so desires, to modify the existing approved sewage facilities planning efforts to document the proposed potential revision to a lift station alternative.

In consideration of the findings identified in Item No. 3 above, it is LSSE's opinion that the sewage facilities planning efforts performed for this project require revision irrespective of the selected alternative. To that end, LSSE has prepared the enclosed projected timeline for project implementation for discussion purposes.

Union Township Board of Supervisors
January 12, 2023
Page 3

PCSA requests for Union Township Board of Supervisors to review this letter at their next scheduled regular meeting and respond thereafter to PCSA with a proposed date/time for a meeting regarding the subject sewer line extension. PCSA Board will discuss proposed date/time at PCSA's January 23, 2023 regular meeting. Please contact Rick Kovach, Authority Manager – PCSA to coordinate a meeting.

Sincerely,



Jason E. Stanton, P.E.

JES/ven

Enclosures

cc/enc: Rick Kovach, Authority Manager – PCSA (rickkovach.pcsa@verizon.net)
Christopher Labee, Chairman – PCSA (labeefamily@verizon.net)
PCSA Board of Directors
Phil Binotto, Solicitor – PCSA (pjbimoto@vorys.com)
TJ Stevens, P.E. – Bankson Engineers, Inc. (tstephens@banksonengineers.com)
Dennis Makel, Solicitor – Union Township (dennis@makelandassociates.com)

From: Sean O'Dell
To: Ryan Contestabile; rh@harshmanllc.com
Cc: "Dennis Makel"; "Michele Dupree"
Subject: RE: [EXTERNAL] Finleyville Elrama Sewers
Date: Friday, December 9, 2022 1:20:59 PM
Attachments: [email dep 1.pdf](#)
[email dep 2.pdf](#)
[WOG02632101 LTR 20210906 Draft v1 \(1\).pdf](#)
[WOG02632101 WQM PERMIT 20210906 Draft v1.pdf](#)
[SITE PLAN SHEET 1.pdf](#)
[SITE PLAN SHEET 2.pdf](#)
[2021 LSA App - RACW Comments 110420.pdf](#)
[RE 2021 LSA Application.msg](#)
[2021 LSA App Revisions 110620.pdf](#)
[2021 LSA Application 102820.pdf](#)
[ResponseLetter.pdf](#)
[C04 PennDOT Cycle No. 4 Response Letter.pdf](#)

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Hey Ryan,

I understand that Makel and Associates replied to the letter on the Township's behalf on November 11.

Attached is correspondence I had with DEP concerning a lift station. The email's weren't too clear, due to the original submission being 537 plan and not a Component 3m. Terry Mattis did give me a call to discuss the emails eventually, he made it sound like the only major items he cared about was the allotted time for public comment. It would be beneficial to get a concrete answer as to whether a Component 3m could be utilized (because I never felt like I got one).

Attached is the Part II permit approval along with the plans.

Attached is the information from the LSA grant application.

We never got to the point where we prepared Construction Drawings or Specification. We were waiting for the Court situation to be resolved, then we were waiting on direction from the Board, then the majority of the Board resigned. The project basically got paused while Court was going on.

Concerning the HOP, which you didn't ask for, attached is the last correspondence from PennDOT. The only outstanding item is Bonding the project and the paperwork that goes along with it.

Hope that helps, please let me know if you have any questions.

Sincerely,
Sean



harshman CE GROUP, LLC

Sean O'Dell, PE

www.HarshmanLLC.com

Office: 724-503-4125 x130

Cell: 724-747-3796

From: Ryan Contestabile <rcontestabile@lsse.com>

Sent: Friday, December 9, 2022 12:48 PM

To: jh@harshmanllc.com

Cc: 'Dennis Makel' <dennis@makelandassociates.com>; 'Michelle Dupree' <mdupree@uniontp.com>; 'Sean O'Dell' <so@harshmanllc.com>

Subject: RE: [EXTERNAL] Finleyville Elrama Sewers

Jamie,

Per our discussion, if you could please send the following:

- Part II Permit approval;
- Construction drawings/specifications prepared for the project;
- Any correspondence you may have with/from DEP regarding the potential revisions to the approved sewage facilities planning regarding the selected alternative (lift station vs. grinder pump alternative);
- Any information you may have regarding the LSA grant the township received for the sewage extension construction.

Lastly, PCSA was cc'd on the attached request from PaDEP. Are you aware if the township has responded to this letter? This may dovetail into our conversation regarding scheduling a call with DEP to discuss the process to amend the approved Act 537 plan for the Finleyville-Elrama area.

Please feel free to call if you have any additional thoughts/questions.

Thanks,

Ryan

Ryan A. Contestabile, P.E.



846 Fourth Avenue

Coraopolis, PA 15108

(412) 264-4400, Ext. 281

www.lsse.com

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From: jh@harshmanllc.com <jh@harshmanllc.com>
Sent: Monday, December 5, 2022 1:05 PM
To: Ryan Contestabile <rcontestabile@jss.com>
Cc: 'Dennis Makel' <dennis@makelandassociates.com>; 'Michelle Dupree' <mdupree@uniontwp.com>; 'Sean O'Dell' <so@harshmanllc.com>
Subject: [EXTERNAL] Finleyville Elrama Sewers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender's full email address and know the content is safe.

Ryan,

Please send an email request regarding the documents that you would like us to forward to you on this project and cc the email addresses on this message. Just want to keep the Township in the loop. We are looking forward to getting this project moving!

Thanks,
Jamie



harshman CE GROUP, LLC

James Harshman, PE

www.HarshmanLLC.com




T: 724-503-4125

C: 724-825-5577

F: 724-229-8255

Finleyville-Elrama Road Sanitary Sewer Extension
Properties to Be Served Indicated on Various Drawings/Documents As Noted

GP No.	January 2020 Act 537 Plan prepared by Senate Engineering (Act 537 Plan Scope)	Part II Permit Drawings Dated 7/6/21, Revised 8/10/21 received from Harshmant CE Group, LLC 12/9/22	HOP Drawings Dated October 4, 2021 received from Harshmant CE Group, LLC 3/17/22
1	3985 Finleyville-Elrama Road	3985 Finleyville-Elrama Road	3985 Finleyville-Elrama Road
2		9 Robb Lane	9 Robb Lane
3		3991 Finleyville-Elrama Road	
4	3991 Finleyville-Elrama Road	3976 Finleyville-Elrama Road	
5	3984 Finleyville-Elrama Road	3984 Finleyville-Elrama Road	3991 Finleyville-Elrama Road
6	3993 Finleyville-Elrama Road	3993 Finleyville-Elrama Road	3984 Finleyville-Elrama Road
7	3997 Finleyville-Elrama Road	3990 Finleyville-Elrama Road	3993 Finleyville-Elrama Road
8	3990 Finleyville-Elrama Road	3997 Finleyville-Elrama Road	3990 Finleyville-Elrama Road
9	3994 Finleyville-Elrama Road	3994 Finleyville-Elrama Road	3997 Finleyville-Elrama Road
10	3998 Finleyville-Elrama Road	3998 Finleyville-Elrama Road	3994 Finleyville-Elrama Road
11	4004 Finleyville-Elrama Road	4004 Finleyville-Elrama Road	3998 Finleyville-Elrama Road
12	4008 Finleyville-Elrama Road	Nike Site	4004 Finleyville-Elrama Road
13		4008 Finleyville-Elrama Road	4008 Finleyville-Elrama Road
14	4014 Finleyville-Elrama Road	4014 Finleyville-Elrama Road	4014 Finleyville-Elrama Road
15	4026 Finleyville-Elrama Road	4026 Finleyville-Elrama Road	4026 Finleyville-Elrama Road
16	4028 Finleyville-Elrama Road	4028 Finleyville-Elrama Road	4028 Finleyville-Elrama Road
17	4032 Finleyville-Elrama Road	4032 Finleyville-Elrama Road	4032 Finleyville-Elrama Road
18	4038 Finleyville-Elrama Road	4038 Finleyville-Elrama Road	4038 Finleyville-Elrama Road
19	4035 Finleyville-Elrama Road	4035 Finleyville-Elrama Road	4035 Finleyville-Elrama Road

 Indicates Property Included in Part II Scope But Not Included in Act 537 Plan Scope
 Indicates Property Included in HOP Drawing Scope But Not Included in Act 537 Plan Scope or Part II Permit Scope
 Indicates Property Included in Act 537 Plan Scope and Removed

PETERS CREEK SANITARY AUTHORITY
Finleyville-Elrama Road Sanitary Sewer Extension
Lift Station AND Grinder Pump Alternative Projected Timeline

Task No.	Task Description	Projected Duration	Total Elapsed Time From Time Zero	Notes
1	Finalize Agreement between Union Township and PCSA	30 Days	30 Days	
2	Draft Act 537 Planning Revision via Special Study	60 Days	90 Days	
3	Initiate/Advertise 30 Day Public Comment Period	30 Days	120 Days	
4	Municipal Adoption of Act 537 Plan Special Study	30 Days	150 Days	
5	Submit Act 537 Plan Special Study to PaDEP	---	---	To be Submitted Immediately Following Adoption by Township
6	-Prepare Final Construction Docs and PCSA Review/Approval of Final Docs (Grinder Pump Alternative) -Survey/Design (Lift Station Alternative)	120 Days	---	Completed Concurrently with PaDEP Review of Act 537 Plan Revision (Below)
7	Receive Act 537 Plan Special Study Approval from PaDEP	120 Days	270 Days	Assume 120 Day Review Period (May be More or Less)
8	Submit Part I Permit Application	---	---	To Be Submitted Immediately Following PaDEP Approval of Act 537 Plan Revision
9	Receive Part II Permit Approval	120 Days	390 Days	Assume 120 Day PaDEP Review Period (May be More or Less)
10	Complete Right-of-way Acquisition	---	---	Completed Concurrently with PaDEP Part II Permit Review (Above)
11	Advertise/Issue Contract for Bid	30 Days	420 Days	
12	Open Bids	---	---	
13	Pre-Construction Meeting	30 Days	450 Days	
14	Construction	180 Days	630 Days	

From: Veronica Ninness
To: secretary@uniontpw.com
Cc: Rick Kovach; pibinotto@vovys.com; rstephens@banksonengineers.com; dennis@makefandassociates.com; Jason Stanton; Eric Fritz; Samantha Douds; Anna Mason; PCSA Board
Subject: PETERS CREEK SANITARY AUTHORITY: LSSE Letter Dated 1-12-23 - Finleyville-Elrama Road - Sanitary Sewer Line Extension (SLE) Project (351-02-28)
Date: Thursday, January 12, 2023 3:31:07 PM
Attachments: [image001.png](#)
[3510228C05 Ltr to UT re Extension Status.pdf](#)

Ladies and Gentlemen,

Please find attached LSSE's letter dated January 12, 2023 and enclosures for the subject project (sent via email only).

Please contact Rick Kovach, Authority Manager – PCSA to coordinate a meeting.

Sincerely,

Veronica (Roni) E. Ninness



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APPENDIX Q

CAPACITY AVAILABILITY LETTERS

APPENDIX P

Chairman
John Vitullo

Superintendent
Ryan Potts

Vice Chairman
Kevin Johnson

Clairton Municipal Authority
1 North State Street
Clairton, PA 15025

Finance Director
Brian Melnichak

Secretary
Douglas Ozvath

Telephone (412)-233-3246
Fax: (412) 233-3249

Engineer
KLH Engineers

Treasurer
Lawrence Wulf

Assistant Secretary/ Treasurer
Brian Koontz

info@clairtonmunicipalauthority.org

Solicitor
Tucker Arensberg, P,C

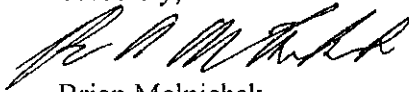
Subject: Finleyville – Elrama Road Sewer Line Extension

In regards to the above-mentioned project the Clairton Municipal Authority has Adequate capacity to treat proposed flows, provided that you have obtained the proper authorization from the appropriate regulating authorities. These flows will not create a hydraulic or organic overflow with in the next five (5) years at this facility.

Please remember that we will need advanced payment for the developmental capacity fees of \$809.00 per EDU.

**** During wet weather conditions the conveyance system is experiencing hydraulic problems

Sincerely,



Brian Melnichak

Melissa Steffey

Hilary Budd

Nicole Ruscitto

Karen Bucy
Joseph Lynch
David T. Montgomery
Keith Reynolds



BOROUGH OF JEFFERSON HILLS

925 OLD CLAIRTON ROAD · JEFFERSON HILLS, PA 15025-3133
P (412) 655-7735 · F (412) 655-3143

Mayor
Carrie McCaffrey

MUNICIPAL MANAGER
John P. Stinner

DEPUTY MANAGER
Brian Haberstock

ENGINEER
Michael S. Glistner, P.E.

SOLICITOR
Michele McPeak Cromer

October 23, 2023

Mr. Jason E. Stanton, P.E.
LSSE Civil Engineers and Surveyors
846 Fourth Avenue
Coraopolis, PA 15108

RE: Sewage Facilities Planning Module PCI Capacity
Finleyville-Elrama Road Sewer Line Extension, Union Township, Washington County

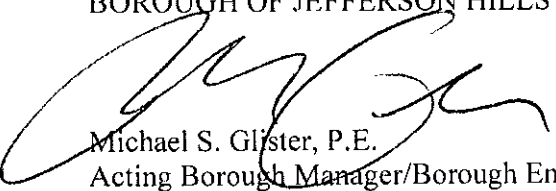
Dear Mr. Stanton:

We have reviewed the capacity of the Peters Creek Interceptor from the Clairton Pump Station to the Jefferson Hills/Peters Township border in order to determine if capacity is available for the Finleyville-Elrama Road Sewer Line Extension Project, located within Union Township. Peters Creek Sanitary Authority is applying to PADEP for planning approval for a sewer line extension project that will generate an additional 33 EDU's (13,200 gpd).

Currently, the Borough, along with all communities connected to the Clairton Municipal Authority Sewage Treatment Plant, are under a Corrective Action Plan with the PADEP to reduce or eliminate overflows on the Peters Creek Interceptor. As part of this process, the Borough of Jefferson Hills has updated its Act 537 Plan to allow for current and future capacities on the Peters Creek Interceptor. Currently, during dry weather, the Peters Creek Interceptor within the Borough of Jefferson Hills has capacity for the additional thirty-three (33) upstream connections and does not expect to be hydraulically overloaded within the next five (5) years. All wet weather issues are being addressed under the Act 537 plan update.

If you have any questions, please do not hesitate to contact me at 412-655-7760.

Sincerely,
BOROUGH OF JEFFERSON HILLS


Michael S. Glistner, P.E.
Acting Borough Manager/Borough Engineer

cc: Michele McPeak Cromer, Borough Solicitor
Richard D. Minsterman, P.E., Consulting Engineer

"PLACEHOLDER" FOR CAPACITY AVAILABILITY LETTER FROM THE TOWNSHIP OF SOUTH PARK