US Army Corps
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Pittsburgh District

Planning and Environmental Branch
William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Public Notice Date: 27 August 2019
Expiration Date: 10 September 2019

NOTICE OF AVAILABILITY

Draft Environmental Assessment

Johnstown Redevelopment Authority
Fairfield Avenue Interceptor and Stormwater Separation Project
in Cambria County, Pennsylvania

The U.S. Army Corps of Engineers, Pittsburgh District (USACE) is evaluating a Federal funding request for a proposed sanitary sewer interceptor system replacement in the City of Johnstown, Cambria County, Pennsylvania.

The USACE invites submission of comments on the environmental impact of the approval of the request. The USACE will consider all submissions received before the expiration date of the public comment period. The nature or scope of the proposal may be changed upon consideration of the comments received.

The draft Environmental Assessment and draft Finding of No Significant Impact are available electronically at:

http://www.lrp.usace.army.mil/Missions/Planning-Programs-Project-Management/

Comments can be submitted to the address posted at the top of this notice or to Erin.Stuart@usace.army.mil. Comments must be received by 10 September 2019 to ensure consideration.

TETRA TECH

ENVIRONMENTAL ASSESSMENT REPORT

Johnstown Redevelopment Authority
Fairfield Avenue Interceptor and
Stormwater Separation Project
Cambria County, Pennsylvania

July 2019

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Environmental Assessment

Johnstown Redevelopment Authority/City of Johnstown Fairfield Ave. Interceptor and Stormwater Separation Project Cambria County, Pennsylvania

July 2019

PREPARED FOR

Johnstown Redevelopment Authority

& US Army Corps of Engineers

PREPARED BY

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EXECUTIVE SUMMARY

Tetra Tech, Inc. (Tetra Tech), has prepared an Environmental Assessment (EA) for the Johnstown Redevelopment Authority (JRA) to meet the United States Army Corps of Engineers (Corps) requirements to secure Federal funding for the Fairfield Avenue Interceptor and Stormwater Separation Project (referred to as the "Project" herein). The Project is located primarily in the City of Johnstown (COJ), Cambria County, Pennsylvania. Section 313 of the Water Resource Development Act of 1992 (Public Law 102-580), as amended, authorizes the Corps to provide funding for design and construction to non-Federal interests for water-related environmental infrastructure and resource development and protection projects.

The JRA owns and operates interceptor sewers that collect sanitary sewage from twenty municipalities, including the COJ, which is conveyed to the Dornick Point Wastewater Treatment Plant (WWTP) owned by the JRA. The JRA is currently under a Pennsylvania Department of Environmental Protection (PADEP) issued Consent Order and Agreement (COA) requiring the implementation of a 10-year plan for rehabilitation of their system, with the goal of eliminating the discharge of sewage to waters of the Commonwealth through wet weather overflows. The JRA owns approximately twenty-seven miles of interceptor sewer.

The obligations outlined in the COA apply to the entire conveyance system, however, the replacement/rehabilitation of the system as a single project is not economically feasible. Therefore, JRA and the COJ are completing improvements on a project by project basis. This funding from the Corps will assist with completion of the Fairfield Avenue portion of the overall program required by the COA.

This EA is prepared in accordance with the National Environmental Policy Act of 1969 (NEPA). The alternatives identified for this Project are the two design alternatives which were eliminated from further consideration, the Proposed Action and the No-Action. The Proposed Action is funding by the Corps, under the Section 313 program, of the federal share of the design and construction costs associated with the rehabilitation and/or replacement of the existing interceptor sewer system. The proposed project includes excavation in the Pennsylvania Department of Transportation (PennDOT) right-of-way (ROW) of Fairfield Avenue to allow for the replacement/rehabilitation of the sewers. Following sewer installation, the excavations will be backfilled, and the pavement restored.

The No-Action alternative relates to whether the project will proceed if the Corps funding is not provided. JRA has indicated the Project (i.e., Proposed Action) will be completed if the Corps funding is not secured because the work is required by the PADEP COA.

Social and environmental factors are considered in accordance with NEPA, including the cumulative effects thereof. The EA includes a summary of the effects both by the Proposed Action and No-Action alternatives for the categories required by NEPA. The potential short-term, minor adverse impacts from the proposed project include soils and topography, air quality, noise, aesthetics, utilities, and child health and safety. The results of the EA indicate there may be minor short-term impacts that occur during the actual construction activities (e.g., noise from construction, localized air quality impacts from construction, etc.) The short-term benefit to the socioeconomic conditions is employing local workers to assist with construction. Long-term

benefits include reduction and/or elimination of sewage discharge to waters of the Commonwealth through wet weather overflows.

Based on the evaluation of the environmental effects, there are no significant impacts from the Proposed Action and a Finding of No Significant Impact (FONSI) is recommended.

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1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) has prepared an Environmental Assessment (EA) for the City of Johnstown Redevelopment Authority (JRA) to secure Federal funding for the Fairfield Avenue Interceptor and Stormwater Separation Project (referred to as the "Project" herein). The Project location is shown on the Figure in Appendix A. The Project consists of design and construction of an 8,150 linear foot sanitary sewer interceptor within Pennsylvania Department of Transportation (PennDOT) right-of-way (ROW) and forty-eight associated manholes along Fairfield Avenue in Johnstown, Cambria County, Pennsylvania. The Project design documents are included in Appendix B.

Tetra Tech has prepared this EA under contract to the City of Johnstown (COJ) as part of their Brownfield Assessment Program funded by a US EPA Community Wide Brownfield Assessment Grant. The information presented in this EA was provided by JRA and it includes information from the Uniform Environmental Report (UER) dated November 2018 prepared by the EADS Group, Inc. in support of obtaining funding from the State; the Project Cooperation Agreement (PCA) between the Department of the Army and the JRA, dated 13 June 2019; a site visit on April 15, 2019, and; other publicly available information included herein as appendices.

1.1 PROJECT AUTHORITY

Section 313 of the Water Resources Development Act of 1992 (Public Law 102-580), as amended, authorizes the U.S. Army Corps of Engineers (Corps) to identify and provide design and construction assistance to non-Federal interests for water-related environmental infrastructure and water resources development and protection projects in select counties in Pennsylvania (hereafter the "Section 313 Program").

Prior to providing design and construction assistance for a project, the Corps requires a Project Partnership Agreement (PPA), which is executed by the Corps and the non-Federal sponsor. The Section 313 Program is a reimbursement program, which provides for a Federal contribution of 75 percent of the total project cost and 25 percent contribution from the non-Federal sponsor. The non-Federal interest receives credit for lands, easements, right-of-way, and relocation towards its share of Project cost, but not to exceed 25 percent of the total project cost. The non-Federal sponsor is responsible for operation and maintenance costs at 100 percent.

1.2 PROJECT BACKGROUND

Records indicate the sanitary sewage collection and interceptor systems within the COJ were installed throughout the 1920s and 1930s with some portions pre-dating 1920. With the exception to portions of the system that were replaced due to flood damage in 1936 and 1977, few portions of the system have been comprehensively rehabilitated or improved.

The COJ sanitary sewer collection system is a section of gravity sewer that is mostly situated on hillsides, and then flows to flat areas where it connects to the JRA system. The reduced slope of these lines creates a limitation of the conveyance of flows within the JRA interceptor, which are received at generally higher velocities from the steeper sections on the hillside. These transitions

to lower slopes create hydraulic problems in the system, particularly during periods of wet weather. During wet weather events, sections of lines have been known to surcharge and cause backups. These hydraulic overloads result in the response by emergency personnel to manually pump the sewage flows from customers' basements and properties. There are also several sanitary sewer overflows (SSOs) downstream of the Project area.

The existing collection and interceptor system located along Fairfield Avenue primarily consists of two separate parallel sanitary sewer lines. Most of the system is comprised of vitrified clay pipe and reinforced concrete pipe ranging in sizes from 8 inches to 12 inches in diameter. Closed circuit television (CCTV) efforts on both systems have identified numerous structural and maintenance defects.

JRA and COJ propose to begin corrective action in areas of high priority (i.e., most significant defects). Pipe runs will be replaced to eliminate these defects, along with leaking lateral connections. The Project area also has various structures with down spouts connected to the sanitary sewer system. These connections will be eliminated.

The proposed Project consists of the installation of approximately 8,150 linear feet of sanitary/storm sewer collection system, manholes and appurtenances, and separating private storm sewer lines from the sanitary sewer system. JRA and COJ have determined the best course of action to eliminate wet weather overflow is to reduce infiltration and inflow by separating the private storm sewer flows from the sanitary sewer systems and replacing the existing vitrified clay pipe.

1.3 PURPOSE AND NEED

The JRA owns and operates approximately 27 miles of interceptor sewers, which collect sanitary sewage from 20 municipalities, and convey it to the Dornick Point Wastewater Treatment Plant (WWTP), which is also owned by the JRA. The JRA is currently under a Pennsylvania Department of Environmental Protection (PADEP) issued Consent Order and Agreement (COA) requiring the implementation of a 10-year plan for rehabilitation of their systems, with the goal of eliminating the discharge SSO's of sewage to waters of the Commonwealth through wet weather overflows. SSOs have been identified throughout the JRA's interceptor system.

The obligations outlined in the COA apply to the entire conveyance system, however, the replacement of the system in a single project is not economically feasible. Additionally, JRA is responsible for the conveyance and treatment of all flows into the interceptor system but has no ownership or authority on the operation of the collection systems serving the individual customers within each municipality. The COJ is included with those municipalities. Therefore, both JRA and the COJ are completing improvements on a project by project basis. Despite the efforts of both parties to improve their sanitary sewer system, the WWTP remains subject to high wet weather flows as a result of inflow and infiltration from throughout the Johnstown Regional Sewage System.

1.4 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

Authorized by the Section 313 Program, JRA has requested the Corps to fund the Federal share of the design and construction cost of the Project. The proposed funding constitutes a major Federal action; therefore, an EA is required. This EA presents the results of the evaluation of the potential environmental and socioeconomic impacts from design, construction, and operation of the Proposed Alternative associated with the funding action.

1.5 PUBLIC INVOLVEMENT

The Corps will provide the public, local and state agencies the opportunity to review and comment on this draft EA. JRA has also applied to the Commonwealth of Pennsylvania to fund certain portions of this Project. That application process included a public notice and 30-day public comment period. The public notice was published in the Johnstown Tribune Democrat on January 18, 2019 (Appendix B). JRA indicated that no public comments were received.

2.0 PROPOSED ACTION

The Project consists of design and construction of an 8,150 linear foot sanitary sewer interceptor within the PennDOT ROW and 48 associated manholes along Fairfield Avenue in Johnstown, Cambria County, Pennsylvania (Appendix A). The design documents are presented in Appendix B. The Proposed Action is funding to be provided by the Corps, under the Section 313 Program. The area surrounding the Project consists of mixed-use development consisting primarily of residential properties and a fewer number of commercial businesses.

Two other design alternatives were evaluated as described in Section 3.2, however, the preferred alternative was selected because it has the lowest construction and future operation and maintenance costs. This alternative also allows the elimination of the three SSOs by increasing carrying capacity while also eliminating cross connections and parallel lines. This alternative will use both open-cut and trenchless construction methods. Open-cut construction will consist of the replacement and removal of one of the two Fairfield Avenue interceptor lines. The parallel interceptor line will be abandoned, therefore eliminating operation and maintenance costs associated with its operation. In addition, open-cut and trenchless construction will also take place along D Street, rerouting preexisting interceptor to reduce line length and alleviate problems in the existing line while additional construction will be completed to rehabilitate the interceptor on D Street, Grass Avenue, Graining Place, Apodel Alley, and Flounder Place.

The total cost for the project is $2,800,000; whereas at a 75/25 percent cost sharing, the Federal share is $2,100,000 and the non-Federal sponsor share is $700,000. Note that these amounts are estimates and subject to change.

3.0 ALTERNATIVES TO THE PROPOSED ACTION

NEPA requires that the EA evaluate all reasonable alternatives to the Proposed Action, including the No-Action alternative. The alternatives identified for this EA are the Proposed Action (federal funding under the Section 313 program) and No-Action (no federal funding). The Proposed Action is described in Section 2.0.

3.1 NO-ACTION ALTERNATIVE

Under the No-Action alternative, non-Federal Sponsor (JRA) would design and construct the Project without Corps Section 313 Program funding. The Corps would not reimburse the (JRA) for the Federal share of the proposed project. In the event Federal funding is not secured, the JRA would be required to secure funding from other sources to complete the project in accordance with the terms of the PADEP COA.

3.2 DESIGN ALTERNATIVES

As described in the UER, three alternatives were evaluated to adequately design and construct this Project in the most economical and effective way. The alternatives are discussed below.

Three alternatives were evaluated to adequately design and construct this project in the most economical and effective way. The alternatives considered include: rehabilitate the existing two (2) Interceptor system and the interceptor along D Street, install two (2) new larger diameter parallel inceptors and upstream interceptor lines, and install one (1) new larger diameter interceptor and accommodate all projected flows. These alternatives are discussed further below:

A. Rehabilitate the existing two (2) Interceptor system and the interceptor along D Street

This alternative was considered because it is the least costly option. Although rehabilitating the existing interceptor would be a great undertaking, it has been determined that the existing interceptor system does not have the required carrying capacity at design flows, and therefore would result in continued SSO discharges. This alternative is not feasible, because it does not address the removal of SSOs as required by the Consent Order and Agreement and would continue to result in system overloading and potential backups.

B. Install two (2) new larger diameter parallel interceptors and upstream interceptor lines

As previously noted, in order to comply with the PADEP CO&A all overflows must be eliminated by December 31, 2022. While the construction of two larger diameter parallel interceptors on Fairfield Avenue would allow the elimination of the three (3) SSOs by providing additional carrying capacity, the installation of two (2) new separate interceptors would most likely double construction costs. In addition to doubling construction costs, keeping parallel interceptor sewer lines would result in additional operation and maintenance costs. Cleaning and televising efforts have determined that the structure of the upstream interceptor is in tolerable condition; however, these interceptor lines would require rehabilitation. Therefore, replacing two larger diameter parallel interceptor lines is not feasible due to increased construction costs and future operation.

C. Install one (1) new larger diameter interceptor and to accommodate all projected flows

This alternative was considered to reduce the amount of construction cost and future operation and maintenance costs. This alternative also allows the elimination of the three (3) SSOs by increasing carrying capacity while also eliminating cross connections and parallel lines. This option is similar to the second option; however, this alternative will use both open-cut and trenchless construction methods. Open-cut construction will consist of the replacement and removal of one (1) of the two (2) Fairfield Avenue Interceptor lines. The parallel interceptor line will be abandoned, therefore eliminating operation and maintenance costs associated with its operation. In addition, open cut and trenchless construction will also take place along D Street rerouting, preexisting interceptor to reduce line length and alleviate problems in the existing line, while additional construction will be completed to rehabilitate the interceptor on D Street, Grass Avenue, Graining Place, Apodel Alley, and Flounder Place.

Alternative 3 was selected for the reasons stated in Section 2.0. There are no other alternatives eliminated from study during this EA.

4.0 EXISTING CONDITIONS

This section describes the existing conditions and the potential effects of the Project on the NEPA defined natural and socioeconomic resource categories associated with the Project.

Resource categories not applicable to the alternatives were screened from further evaluation, whereas, those potentially affected resources are discussed further in Section 5.0, Environmental Effects. To describe existing conditions and environmental effects, the Project is identified as the areas directly affected by the project design and construction.

Table 1 below is a matrix for baseline conditions.

Table 1 – Project Baseline Conditions

Resource Category	Affected by Proposed Project?	Reason for Non-Applicability Determination
Land Use	No	Land use along Fairfield Avenue is mixed-use consisting primarily of commercial/residential properties. The Project is located primarily in the ROW and surrounding land use will not be affected.
Geology	No	Given the relatively shallow depths of the excavation work, no changes to the geology will occur.
Soils and Topography	Yes	See Section 4.1, 5.1
Prime and Unique Farmlands	No	There are no prime or unique farmlands in the Project area.
Groundwater	No	There are no anticipated impacts to groundwater.
Surface Water Resources	No	The existing interceptor system is permitted to cross two piped tributaries to the Conemaugh River. The existing interceptor piping at those crossings go beneath the tributary piping. During the Proposed Action, these sections of pipe will be rehabilitated in place and will not affect the piped surface water resources.
Wetlands	No	No wetlands were identified within the Project area on the U.S. Fish and Wildlife Service National Wetlands Inventory (**Appendix C**). It is not anticipated that any wetlands will be impacted during the course of the Project.
Floodplains	Yes	See Section 4.2, 5.2
Terrestrial Resources	No	The Project is located in an urban area within the Fairfield Avenue ROW. Therefore, potential impact to terrestrial resources (e.g., wildlife and habitat) is considered de minimis.

Resource Category	Affected by Proposed Project?	Reason for Non-Applicability Determination
Threatened and Endangered species	No	Pennsylvania Natural Diversity Inventory (PNDI) records indicate there will be no impacts to species and resources protected by the PA Game Commission, PA Department of Conservation and Natural Resources, PA Fish and Boat Commission, and U/S. Fish and Wildlife Service. The PNDI Project Search ID is PNDI-683605 and the report is dated May 6, 2019 (**Appendix D**).
Designated Natural Areas	No	There are no Wild or Scenic Rivers, National Parks or National Forests within the Project area.
Climate	No	No climate impacts are expected.
Air Quality	Yes	See Sections 4.3, 5.3
Noise	Yes	See Sections 4.4 5.4
Cultural Resources	No	Correspondence between COJ and the Pennsylvania Historical and Museum Commission (PHMC) indicates there are no historical/cultural designations within the Project area (**Appendix E**). The Pennsylvania Cultural Resource GIS was reviewed and there are no recorded archeological sites in the Project area.
Aesthetics	Yes	See Sections 4.5, 5.5
Recreation	No	None present in the Project area.
Utilities	Yes	See Sections 4.6, 5.6
Transportation	Yes	See Sections 4.7, 5.7
Socioeconomic Conditions	Yes	See Sections 4.8, 5.8
Hazardous, Toxic, and Radioactive Substances	No	No hazardous, toxic or radioactive substances/materials are known or expected to be present in the Project area. De minimis amounts of maintenance type chemicals may be used during construction and will be properly managed.
Child Health and Safety	Yes	See Sections 4.9, 5.9
Environmental Justice	Yes	See Sections 4.10, 5.10
Aquatic Habitat/Water Quality	Yes	See Sections 4.11 and 5.11

The affected categories identified as “Yes” above are discussed further below.

4.1 SOILS AND TOPOGRAPHY

The soil survey map and descriptions were obtained from the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey online mapping tool. The primary soil type in the Project area is Urban land-Udorthents complex. These soils are typical of developed areas, are moderately well-drained, and have a relatively low water storage capacity. The Custom Soil Resource Report is included in Appendix F.

4.2 FLOODPLAINS

There are two permitted stream crossings within the Project area that are tributaries to the Conemaugh River. Those tributaries are piped, and the Project will not impact them. The FEMA flood map for the area (Appendix C) indicates that a portion of the Project lies within the 100-year flood plain of the Conemaugh River. Any alteration to the flood plain during construction will be minimal and temporary. No long-term change to the flood plain will occur.

There will be no permanent effects to the floodplain or any waterway. Erosion and sedimentation control measures will be implemented during construction in the form of an approved erosion and sedimentation control plan (prepared in accordance with PA Code Title 25, Chapter 102) will minimize surface water quality impacts during construction. No structures will be built in the floodplain and the ground will be restored to the same elevation as pre-construction. No major impact to the naturel function of the floodplain will occur.

4.3 AIR QUALITY

Air emissions produced by this Project will be limited to typical dust from subsurface excavations and minimal emissions from construction equipment. Emissions will be short-term and will be controlled using standard practices.

4.4 NOISE

Fairfield avenue is part of state Route 56, a heavily traveled commercial/residential corridor through Johnstown. During construction, additional noise will be generated in the immediate area of the machinery and equipment. The contractor will be required to take ordinary measures to minimize noise pollution and will only work during daylight hours.

4.5 AESTHETICS

The project is located in an urban setting consisting of residential and commercial uses. Short-term visual impacts to aesthetics may include the presence of construction equipment and appropriate traffic control measures.

4.6 UTILITIES

As presented on the design drawings in Appendix B, there are currently underground gas, water, sanitary sewers and storm sewers. Except for the sewer replacement, other utilities will not be

impacted. The improvement of the sanitary sewer system will benefit the overall community, particularly during wet weather events, and will promote economic development in the area.

4.7 TRANSPORTATION

Traffic will be disrupted during installation of the sewer lines. As such, traffic control measures will be employed in accordance with PennDOT requirements to ensure the flow of vehicular and pedestrian traffic. Traffic impacts will be short-term and will cease following Project completion.

4.8 SOCIOECONOMIC CONDITIONS

From recent census data, the population along Fairfield Avenue is 1,661 with a total of 956 households (rental and owned); the median household income is $31,058 and the per capita income is $18,860. The Project Area is within a PADEP Environmental Justice Area (Appendix G). Resident relocation is not required and the Project will not limit employment opportunities for any individual. The improvements to the sewer system will help enhance the economic development potential of the neighborhood.

4.9 CHILD HEALTH AND SAFETY

The Project is located in an urban commercial/residential area. As such children may come in proximity to the work area. There are no schools or day care facilities in the immediate vicinity of the Project work area. Proper safety measures such as construction fencing will be in place to prohibit entrance to the work area by the public.

4.10 ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice to Minority Populations and Low-Income Populations, signed in 1994 directs Federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of Federal projects on the health and environment of minority and low-income populations to the greatest extent practicable and permitted by law. Minority populations, as defined by the "Environmental Justice Guidance Under NEPA," includes; persons who identify themselves as Asian or Pacific Islander, Native American or Alaskan Native, black or Hispanic.

According to the PADEP Office of Environmental Justice, the Project is located within an Environmental Justice Area (EJA) or associated Buffer Area (**Appendix G**). The EJA designation is applied to areas where 20% or more of the population is at or below the poverty level or, 30% or more of the population is non-white. This designation has implications when PADEP is reviewing/issuing major individual permits (e.g., for air, industrial discharges, etc.). The EJA designation does not have any implication for this Project. The proposed Project will not have disproportionately adverse effects on minority or low-income populations and will benefit all individuals in the surrounding area. In addition, consumer sewer cost rates are not anticipated to be affected by the Project.

4.11 AQUATIC HABITAT/WATER QUALITY

The Fairfield Avenue Interceptor Project is one of several similar projects the City and JRA have and will complete to comply with the 2009 PADEP COA and subsequent 2015 Abatement Plan. The COA was issued because sanitary sewer overflows (SSO's) as defined by 25 PA Code 94.1 were occurring at approximately 27 locations throughout JRA's entire collection system during high precipitation events. Of those 27 locations, three occur along Fairfield Avenue.

The SSO's represent an unpermitted discharge to the waters of the Commonwealth in violation of the Clean Stream Law. The cause of the SSO's is that infiltration and inflow into the sanitary sewer system overwhelmed the ability to convey the water to the POTW. The cause of infiltration and inflow is the due to the age of the conveyance system (early 1900's) and the direct connections of storm water discharges to the sanitary sewers that have occurred over the years.

Until this project is completed, the SSO's along Fairfield Avenue will remain in violation of the Clean Streams Law because the SSO ultimately flows to the Conemaugh River.

5.0 ENVIRONMENTAL EFFECTS

The EA of the Proposed Action was based on an evaluation of the impacts from design, construction, and operation of the proposed Project. The No-Action Alternative assumed that the JRA and COJ will still proceed with the Project if no Section 313 Program funding was available. Therefore, the environmental effects are the same as those for either the Proposed Action or No-Action Alternative. Below details mitigation measures for the specific resource effected by the Project, whereas, all mitigation is the responsibility of JRA.

5.1 SOILS AND TOPOGRAPHY

The Proposed Action will have short-term adverse impacts to soils in the Project area due to construction and excavation activities. The Project area was previously disturbed with construction of the existing utilities and roadway. Excavated areas in the roadway will be backfilled, compacted and repaved in accordance with PennDOT specifications. Areas disturbed outside of the roadway will be restored to their pre-project condition. The work will be sequenced such that the area is restored as the sewer is replaced to minimize the amount of open excavation at any given time.

5.2 FLOOD PLAINS

As stated in Section 4.2, any impacts to the waterway or floodplain will be minimal, short-term and will cease once the Project is complete. Excavated areas in the roadway will be backfilled, compacted and repaved in accordance with PennDOT specifications. Areas disturbed outside of the roadway will be restored to their pre-project condition. The work will be sequenced such that the area is restored as the sewer is replaced to minimize the amount of open excavation at any given time.

5.3 AIR QUALITY

No air permits are required for this Project and the Project area is outside of any non-attainment area. The Project Action may have short-term localized impacts on air quality due to dust from subsurface excavations and emissions from construction equipment. No long-term effects are expected.

5.4 NOISE

Fairfield Avenue is part of State Route 56, a heavily traveled corridor through the City. There may be minor short-term effects relative to noise from the construction equipment during the course of the Project. These effects will cease upon Project completion and there will be no long-term effects.

5.5 AESTHETICS

There may be temporary minor adverse impacts to aesthetics from construction and excavation equipment present during the Project. These effects will cease upon Project completion and there will be no long-term effects.

5.6 UTILITIES

There will be overall improvement to sewer utilities for the surrounding area.

5.7 TRANSPORTATION

Any short-term disruption to vehicular and pedestrian traffic flow during construction will cease upon Project completion.

5.8 SOCIOECONOMIC CONDITIONS

There are no adverse socioeconomic environmental consequences associated with the Project. The sewer utility improvements will benefit the community and customer cost rates are not expected to be impacted.

5.9 CHILD HEALTH AND SAFETY

There will not be any adverse impacts to children following completion of the Project. Following completion of the Project, child health and safety will improve due to the elimination of SSO's.

5.10 ENVIRONMENTAL JUSTICE

As discussed in Section 4.10, the Project area is located within a PADEP defined Environmental Justice Area defined in Section 4.10. The Proposed Action will benefit the community and will not cause adverse effects on any minority or low-income populations. No further Environmental Justice analysis is needed.

5.11 AQUATIC HABITAT/WATER QUALITY

As described in Section 4.11, there are currently three SSO's on Fairfield Avenue during times of high precipitation. These SSO's are a direct violation of the Clean Streams Law because they ultimately flow to the Conemaugh River. With the completion of this project, the SSO's will be eliminated so the unpermitted discharges will cease resulting in improved water quality in the Conemaugh River.

5.12 CUMULATIVE IMPACTS

The definition of cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency or person undertakes such other actions."

The work proposed under the Section 313 Funding is to allow JRA and COJ implement improvements to the sewer system along Fairfield Avenue to improve functionality and water quality during wet weather events. This Project is one many JRA has implemented throughout its service area. At the completion of these various activities, overall environmental and socioeconomic conditions are improved. No other projects impacting the neighborhood are being completed at the same time as this Project. Therefore, there are no adverse cumulative impacts.

5.13 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

An irreversible or irretrievable commitment of sources refers to impacts on or losses to resources that cannot be recovered or reversed. Irreversible is a term that describes the loss of future options. It applies primarily to the impacts of use of nonrenewable resources, such as minerals or cultural resources, soil productivity, which are renewable over long periods of time. Irretrievable is a term that applies to the loss of production, harvest, or use of natural resources. For example, if farm land is used for a non-agricultural event, some or all of the agricultural production from an area of farmland is lost irretrievable while the area is temporarily used for another purpose.

Based on the Proposed Action by JRA and COJ, the short-term irreversible commitments of resources include planning and engineering costs, material and supplies cost, and labor cost. No irretrievable commitment of resources would result in the Proposed Action.

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6.0 CONCLUSION

Tetra Tech, Inc. has prepared this EA as required to secure federal funding for the JRA's Fairfield Avenue Interceptor Project in the City of Johnstown, Cambria County, Pennsylvania as authorized under Section 313 of the Water Resources Development Act.

The total cost for the project is $2,800,000; whereas at a 75/25 percent cost sharing, the Federal share is $2,100,000 and the non-Federal sponsor share is $700,000. Note that these amounts are estimates and subject to change.

Short-term minor adverse impacts for the Project would be expected to include; dust, air emissions, aesthetics, and noise during construction from earth moving equipment. Required permits will be secured prior to construction and possible environmental, health and safety impacts during construction will be mitigated following appropriate regulations and best management practices.

The short-term socioeconomic conditions relative to the Project would be positive as a result of employment for local workers during construction. Long term benefits include improved functionality of the sewer system for the community and improved water quality during wet weather events.

Table 2 – Summary of Effects for Proposed Action and No-Action Alternative

Resource Category	Proposed Action	Proposed No-Action Alternative
Land Use	No Effect	No Effect
Geology	No Effect	No Effect
Soils and Topography	Short-term minor impact	Short-term minor impact
Prime and Unique Farmlands	No Effect	No Effect
Groundwater	No Effect	No Effect
Surface Water Resources	No Effect	No Effect
Wetlands	No Effect	No Effect
Floodplains	Short-term minor impact	Short-term minor impact
Terrestrial Resources	Short-term minor impact	Short-term minor impact
Threatened and Endangered species	No Effect based on PNDI	No Effect based on PNDI
Designated Natural Areas	No Effect	No Effect
Climate	No Effect	No Effect

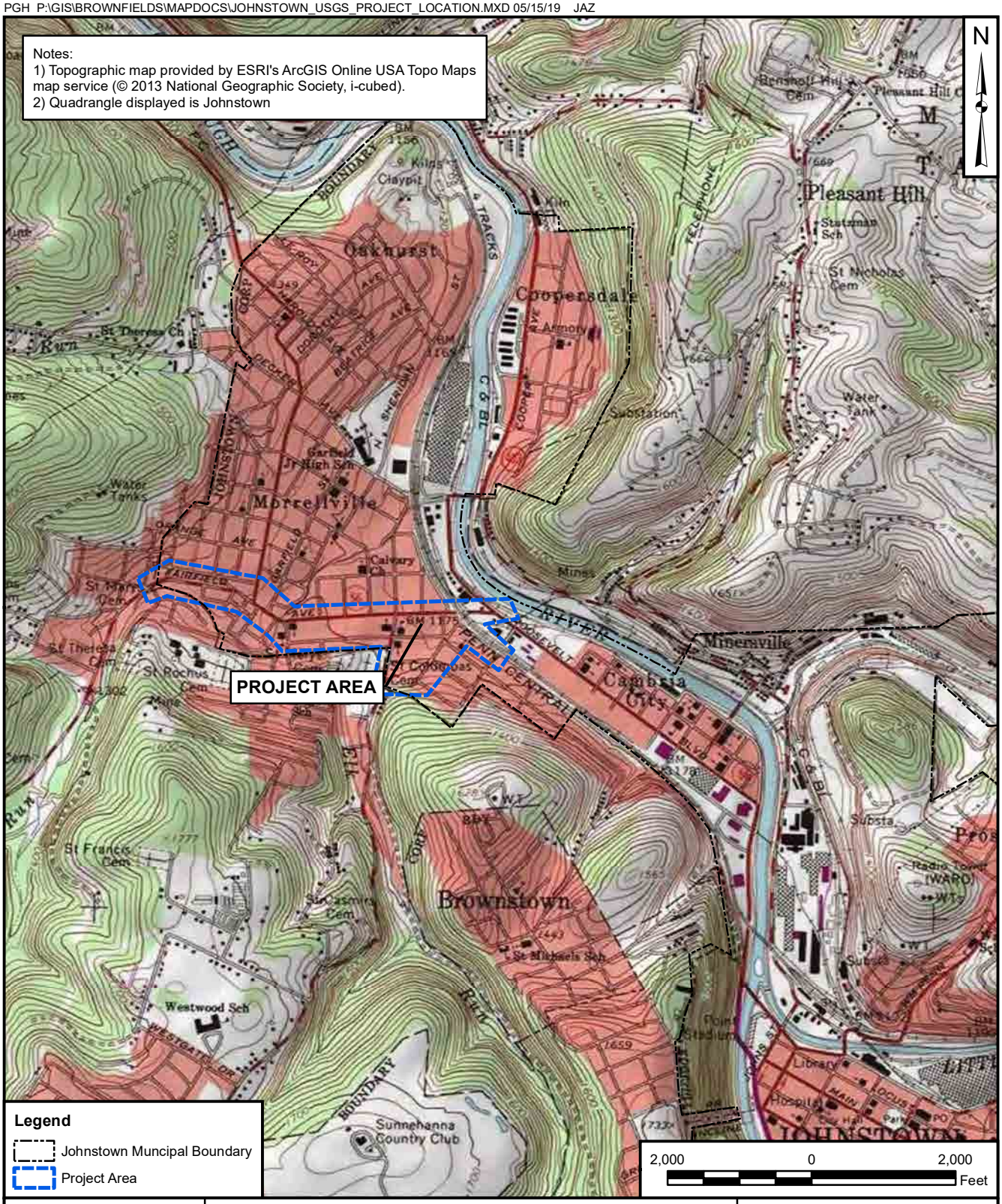
Resource Category	Proposed Action	Proposed No-Action Alternative
Air Quality	Short-term minor impact	Short-term minor impact
Noise	Short-term minor impact	Short-term minor impact
Cultural Resources	No Effect based on PHMC	No Effect based on PHMC
Aesthetics	Short-term minor impact	Short-term minor impact
Recreation	No Effect	No Effect
Utilities	Short-term minor impact	Short-term minor impact
Transportation	Short-term minor impact	Short-term minor impact
Socioeconomic Conditions	Short-term minor impact	Short-term minor impact
Hazardous, Toxic, and Radioactive Substances	No Effect	No Effect
Child Health and Safety	Short-term minor impact	Short-term minor impact
Environmental Justice	No Effect	No Effect
Aquatic Habitat/Water Quality	Long-term benefit	Long-term benefit

Based on the analysis and evaluation of the environmental effects described in Section 5.0, there are no significant impacts from the Proposed Action and a Finding of No Significant Impact (FONSI) should be prepared.

APPENDIX A

SITE LOCATION MAP

PGH P:\GIS\BROWNFIELDS\MAPDOCS\JOHNSTOWN_USGS_PROJECT_LOCATION.MXD 05/15/19 JAZ



TETRA TECH

LOCATION MAP
JOHNSTOWN REDEVELOPMENT AUTHORITY AND
THE CITY OF JOHNSTOWN
FAIRFIELD AVENUE INTERCEPTOR AND
STORM WATER SEPARATION PROJECT
JOHNSTOWN, PENNSYLVANIA

DRAWN BY: J. ZAMUDIO 05/15/19
CHECKED BY: L. ADAMS 05/15/19
APPROVED BY:

CONTRACT NUMBER: 112C08300

FIGURE NUMBER	REV
1	0

APPENDIX B

PROJECT DESIGN DOCUMENTS AND PUBLIC NOTICE

THE EADS GROUP
ENGINEERING ARCHITECTURE AND DESIGN SERVICES
227 Franklin Street, Suite 300 Johnstown, PA 15901
814-535-5388 (phone)
814-535-7654 (fax)
Altoona - Clarion - Johnstown - Lewistown
Pittsburgh - Somerset - Cumberland
www.eadsgroup.com

JOHNSTOWN REDEVELOPMENT AUTHORITY / CITY OF JOHNSTOWN

FAIRFIELD AVENUE INTERCEPTOR & STORM WATER SEPARATION PROJECT

JRA CONTRACT 2018-INT-01
COJ CONTRACT 2018-03

CITY OF JOHNSTOWN

Cambria County, Pennsylvania

AUGUST 2018

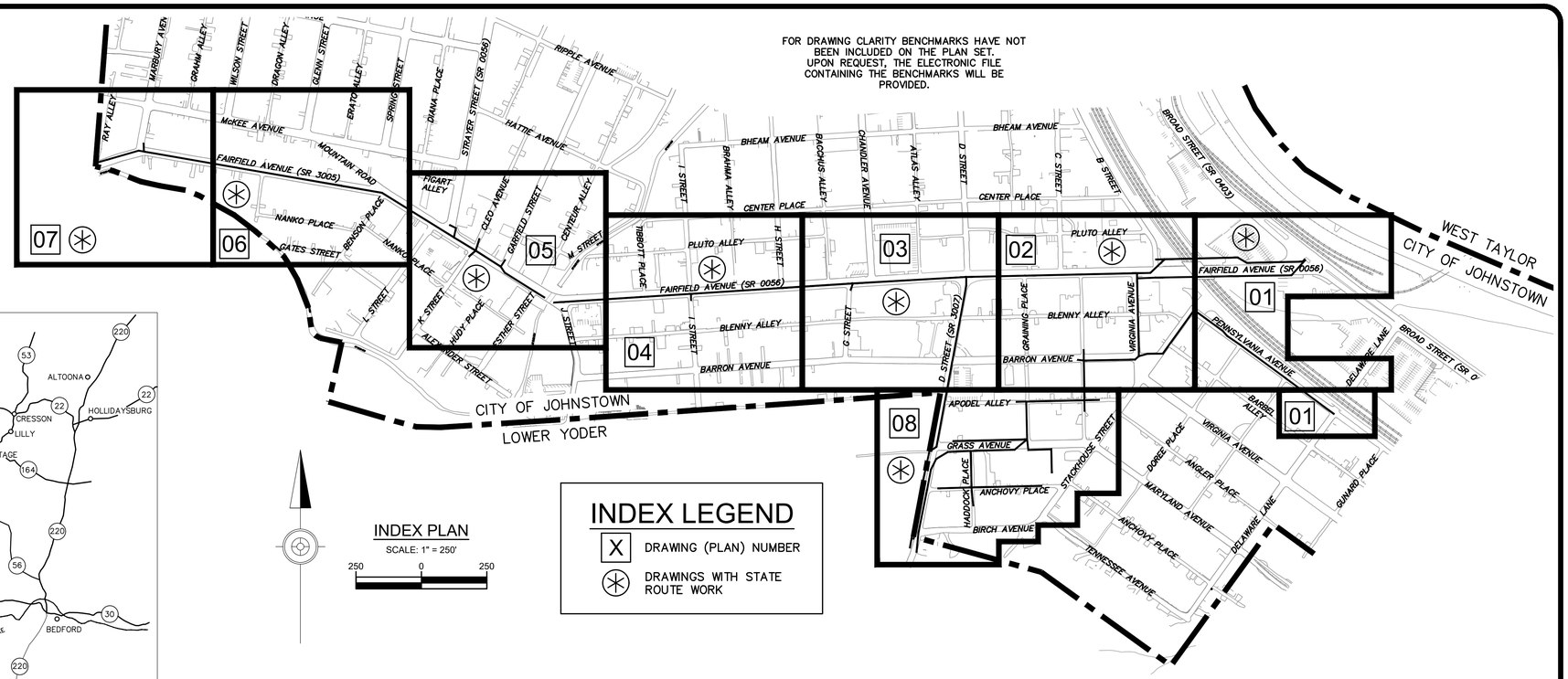
FILE NUMBER: 4426

SEAL

Stephen M. Sewalk, PE
Department Manager

R:\4426 – JOHNSTOWN REDEVELOPMENT AUTHORITY\15590 Fairfield Ave Inter\06 CADD\20 MS\Cover Sht & Gen Notes Fairfield Ave.dwg 8/28/2018 8:50 AM

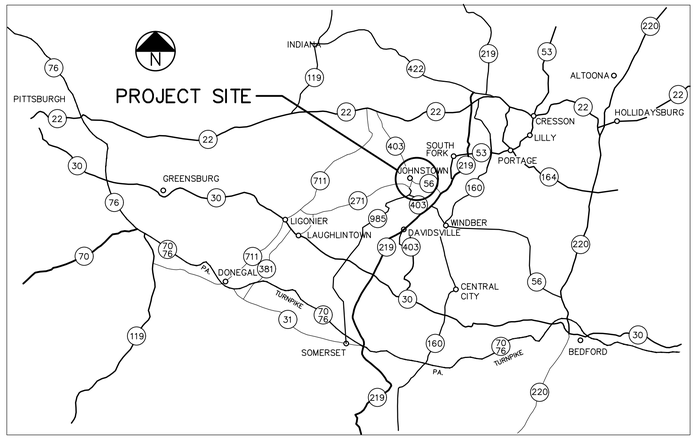
FOR DRAWING CLARITY BENCHMARKS HAVE NOT BEEN INCLUDED ON THE PLAN SET. UPON REQUEST, THE ELECTRONIC FILE CONTAINING THE BENCHMARKS WILL BE PROVIDED.



INDEX PLAN
SCALE: 1" = 250'
250 0 250

INDEX LEGEND

- X — DRAWING (PLAN) NUMBER
- ⊛ — DRAWINGS WITH STATE ROUTE WORK



VICINITY MAP
SCALE: 1" = 9 MILES
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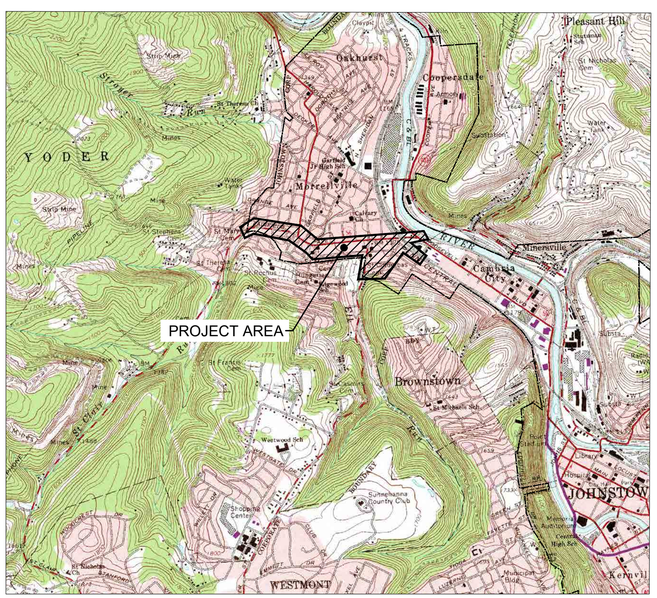

LOCATION MAP
SCALE: 1" = 2,000'
2,000 0 2,000

SYMBOL LEGEND

SLANT TEXT	EXISTING CONDITIONS		FENCE		MUNICIPAL BOUNDARY
VERTICAL TEXT	PROPOSED CONDITIONS	EU	EXISTING UNDERGROUND ELECTRIC		CONTRACT BOUNDARY
	WATER VALVE	G	EXISTING GASLINE	G	LOCATE & RAISE MH FRAME & COVER TO MATCH EX GRADE
	GAS VALVE	ST	EXISTING STORM SEWER < 12"		
SIGN	SIGN		EXISTING STORM SEWER ≥ 12"	T	LATERAL INSTALLED USING TRENCHLESS TECHNOLOGY
	INLET PROTECTION	W	EXISTING WATERLINE < 12"		RAILROAD CROSSING SIGN
POST	POST		EXISTING WATERLINE ≥ 12"	TP	TEST PIT LOCATION
CITY MON 194	BENCHMARK	S	EXISTING SAN SEWER & MANHOLE	SPEC	SPECIAL CONDITION
	GUY POLE & WIRE		EXISTING SAN SEWER & MANHOLE ≥ 12"		SENDING PIT
	UTILITY POLE/POWER POLE		PROPOSED STORM SEWER W/ MANHOLE		RECEIVING PIT
	TREE		PROPOSED COJ SAN SEWER W/ MANHOLE AND LATERAL (OPEN CUT)		STORM SEWER OUTFALL
	BUSH OR SHRUB		PROPOSED JRA SAN SEWER W/ MANHOLE AND LATERAL (OPEN CUT)	#123	STRUCTURE VIOLATION
FP	FLAG POLE		PROPOSED COJ SAN SEWER W/ MANHOLE AND LATERAL (TRENCHLESS)	#123	COJ STRUCTURE PRESSURE TESTED
	FIRE HYDRANT		PROPOSED JRA SAN SEWER W/ MANHOLE AND LATERAL (TRENCHLESS)	#123	STONYCREEK TOWNSHIP CUSTOMER
	EX CATCH BASIN/INLET				PROPOSED ADA CURB RAMP (COJ)
	PROPOSED CATCH BASIN/INLET				PROPOSED ADA CURB RAMP (JRA)
MB	MAILBOX		STREAM		UPDATED ADA CURB RAMP
LS	LIGHT POLE		PROPERTY LINE		PADOT PAVING RESTORATION (JRA)
CP	CLOTHES POLE	2370	EXISTING CONTOUR		MUNICIPAL PAVING RESTORATION (JRA)
	EX LAMPHOLE		TEMPORARY RIGHT-OF-WAY		MUNICIPAL PAVING RESTORATION (COJ)
	PROPOSED LAMPHOLE		PERMANENT RIGHT-OF-WAY		MUNICIPAL SIDEWALK RESTORATION (COJ)
	EX MANHOLE		100 YEAR FLOOD BOUNDARY		MUNICIPAL SIDEWALK RESTORATION (JRA)
	COJ REHABILITATE MANHOLE		GUIDERAIL		PADOT SIDEWALK RESTORATION
	JRA REHABILITATE MANHOLE		CENTERLINE		
VP	EX VIEWPORT		TREE LINE		
	WATER SHUT OFF		RAILROAD		
	GAS SHUT OFF		BIT WEDGE CURB		
	TRAFFIC SIGNAL				

Seal

No.	Revisions	Date

Date

Scale: AS NOTED
Date: AUGUST 2018
Drawn By: B.L.M.
Checked By: T.J.K.
Project No.: 0620-15-590
File No.: 4426

THE EADS GROUP
ENGINEERING ARCHITECTURE AND DESIGN SERVICES
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CLARION, PA.
JOHNSTOWN, PA.
PITTSBURGH, PA.
SOMERSET, PA.
CUMBERLAND, MD.

JOHNSTOWN REDEVELOPMENT AUTHORITY / CITY OF JOHNSTOWN
FAIRFIELD AVENUE INTERCEPTOR
& STORM WATER SEPARATION PROJECT
CONTRACTS 2018-INT-01 / 2018-03
CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

INDEX PLAN, LOCATION MAP, VICINITY MAP & SYMBOL LEGEND

Drawing No.
G1

R:\4426 - JOHNSTOWN REDEVELOPMENT AUTHORITY\15590 Fairfield Ave Inter\06 CADD\20 MS\Index Map Fairfield Ave.dwg 8/28/2018 1:16 PM

GENERAL NOTES

1. CONTRACTOR SHALL REFER TO CONTRACT SPECIFICATIONS AND DRAWINGS FOR SOIL EROSION & SEDIMENTATION CONTROL PLAN REQUIREMENTS.
2. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
3. THE CONTRACTOR MUST PERFORM AN ENVIRONMENTAL DUE DILIGENCE WHICH IS DEFINED AS INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF OWNERSHIP AND USE HISTORY OF PROPERTY, SANDBORNE MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ENVIRONMENTAL ASSESSMENTS AND AUDITS.
4. ALL DISTURBED AREAS NOT RECEIVING OTHER SURFACE TREATMENT SHALL BE GRADED, SEEDED, AND MULCHED.
5. UTILITY LINE LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. FIELD VERIFICATION IS REQUIRED PRIOR TO ANY CONSTRUCTION. REFER TO THE PROJECT MANUAL FOR ACT 287 & 172 AS AMENDED, UNDERGROUND UTILITY INFORMATION. UNDERGROUND TELEPHONE, ELECTRIC, GAS AND DRAINAGE LINES MAY BE PRESENT AT SOME WORK LOCATIONS.
6. EXISTING PIPE LOCATIONS SHOWN ARE APPROXIMATE, CONTRACTOR SHALL FIELD VERIFY.
7. EXISTING DRAINAGE FACILITIES MUST REMAIN INTACT DURING CONSTRUCTION, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
8. EXISTING SEWERS SHALL REMAIN IN OPERATION DURING CONSTRUCTION. ALL TEMPORARY PIPING AND PUMPING NECESSARY SHALL BE PROVIDED BY CONTRACTOR.
9. CONTRACTOR SHALL SUPPORT AND STABILIZE THE EXISTING MANHOLES, INLETS AND OTHER UNDERGROUND STRUCTURES WHILE EXCAVATING FOR THE SEWER INSTALLATION.
10. ANY DAMAGE TO THE EXISTING MANHOLES DESIGNATED TO REMAIN SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE. IF THE CONTRACTOR CAUSES MAJOR STRUCTURAL DAMAGE AND/OR CRACKS IN THE MANHOLE, THE DAMAGED SECTIONS SHALL BE REPLACED.
11. TEST PITS SHALL BE EXCAVATED TO FIND EXISTING UTILITIES BEFORE THE INSTALLATION OF PROPOSED SEWERS. ONCE UTILITIES HAVE BEEN LOCATED HORIZONTALLY AND VERTICALLY, THEY SHALL BE MARKED AND CARE SHALL BE TAKEN TO NOT DAMAGE THE UTILITIES DURING CONSTRUCTION. ANY UTILITIES DAMAGED DURING THE EXCAVATION OF THE TEST PIT OR CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
12. ALL UTILITY CROSSINGS ARE SHOWN WITH APPROXIMATE DEPTH AND LOCATION.
13. CONTRACTOR SHALL NOTIFY UTILITY COMPANY IN THE EVENT ITEMS SUCH AS POLE SHORING IS REQUIRED. THESE ITEMS TO BE COMPLETED AT NO ADDITIONAL COST TO THE OWNER.
14. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED SEWER.
15. A PEOPLES NATURAL GAS PIPELINE INSPECTOR MUST BE PRESENT AT THE TIME THAT ANY WORK IS DONE WITHIN PEOPLES NATURAL GAS PIPELINE RIGHT-OF-WAY. (CALL MIN. 5 DAYS PRIOR TO START OF WORK IN THIS AREA)
16. MAINTAIN A MINIMUM OF 1.5' CLEARANCE OF VERTICAL SEPARATION BETWEEN THE PROPOSED SEWER LINES AND EXISTING WATERLINES. WHEN 1.5' CLEARANCE CANNOT BE MAINTAINED, THE SEWER PIPE SHALL BE ENCASED IN CONCRETE.
17. MANHOLES TO BE REMOVED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR OFF SITE. UNLESS NOTED OTHERWISE, SEWER LINES TO BE ABANDONED SHALL BE LEFT IN PLACE. SEWER LINES TO BE REMOVED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
18. ALL EXISTING SANITARY AND STORM MANHOLES TO REMAIN UNLESS NOTED OTHERWISE.
19. CONTRACTOR SHALL LOCATE ALL BURIED MANHOLES PRIOR TO ANY PROPOSED SEWER INSTALLATION.
20. THE CONTRACTOR SHALL FURNISH, ERECT, PLACE AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES AND MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS INDICATED IN THE CONTRACT DOCUMENTS AND PA CODE, TITLE 67 CHAPTER 212, OFFICIAL TRAFFIC CONTROL DEVICES (PENNDOT PUBLICATION 212); PENNDOT PUBLICATION NO. 35, APPROVED CONSTRUCTION MATERIALS (BULLETIN 15); PENNDOT PUBLICATION 213, WORK ZONE TRAFFIC CONTROL GUIDELINES; PENNDOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS; PENNDOT PUBLICATION NO. 408 LATEST REVISION, SPECIFICATIONS. IMMEDIATELY UPON COMPLETION OF THE WORK, REMOVE THE DEVICES.
21. ALL PENNDOT ADVANCED WORK ZONE SIGNING SHALL BE ON PENNDOT TYPE III BARRICADES AND BE ON PENNDOT TYPE III SHEETING.
22. RIM ELEVATIONS SHOWN ON DRAWINGS ARE FOR REFERENCE PURPOSES ONLY. ACTUAL RIM ELEVATIONS ARE TO BE SET IN THE FIELD PER FIELD CONDITIONS.
23. SLOPES INDICATED ON THE DRAWINGS ARE SHOWN IN FT/FT.
24. SLOPES AND DISTANCES FOR MANHOLES ARE CALCULATED FROM INSIDE WALL TO INSIDE WALL.
25. SLOPES AND DISTANCES FOR SLCPP ARE CALCULATED FROM C.L. OF STRUCTURE TO C.L. OF STRUCTURE (INVERTS ARE LABELED IN/OUT).
26. ALL AREAS DISTURBED BY THE CONSTRUCTION WORK SHALL BE RESTORED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS AND DRAWINGS TO THEIR ORIGINAL CONDITION OR BETTER.
27. MILL PAVEMENT AT <u>ALL</u> EXISTING DRIVEWAYS TO MATCH EXISTING DRIVEWAY ELEVATIONS. MILLING SHALL BE INCIDENTAL TO THE CONTRACT.
28. IF GARDENS ARE TO BE DISTURBED, THE CONTRACTOR IS TO REMOVE TOPSOIL FROM GARDEN AREA, STORE MATERIAL AND REPLACE AFTER CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
29. IF NECESSARY FOR CONSTRUCTION, SMALL TREES AND SHRUBS 3" OR LESS IN DIAMETER AT THE BASE OF THE TRUNK SHALL BE REMOVED AND REPLANTED. IF THE TREE OR SHRUB CAN NOT BE REPLANTED IMMEDIATELY AFTER THE SEWER IS INSTALLED, THE TREE OR SHRUB SHALL BE PLACED ASIDE AND BEDDED IN SOIL AT A LOCATION CHOSEN BY THE PROPERTY OWNER UNTIL IT CAN BE REPLANTED BY THE CONTRACTOR. THE PROPERTY OWNER IS RESPONSIBLE FOR WATERING THE TREE OR SHRUB AND RESTORING THE BEDDING SITE. THE REMOVAL AND REPLANTING PROCESS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND IS TO BE PERFORMED ON PROPERTIES THAT VOLUNTARILY SIGNED EASEMENTS. THIS PROCESS IS NOT NECESSARY FOR PROPERTIES THAT WERE CONDEMNED.
30. INSTALLATION OF CURB RAMPS AND SIDEWALKS SHALL CONFORM TO PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION RC-67M (PUB.72) UNLESS MODIFIED BY PENNDOT REPRESENTATIVE.
31. THE PROPERTY LINES SHOWN ON THE CONTRACT DRAWINGS ARE APPROXIMATE AND WERE DERIVED FROM TAX MAP RECORDS OBTAINED FROM THE CAMBRIA COUNTY COURTHOUSE AND REFLECTS THE ACCURACY AND/OR INACCURACY OF THE TAX MAP INFORMATION.
32. ALL GROUND LINES AND ELEVATIONS SHOWN ARE FINISHED GRADES.
33. ALL WORK WITHIN THE CITY SHALL BE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY AND THE CONTRACT DOCUMENTS.
34. REFER TO REAR OF PROJECT MANUAL FOR TYPICAL DETAILS.
35. ALL WORK WITHIN PENNDOT'S LEGAL RIGHT-OF-WAY SHALL BE CONDUCTED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 LATEST EDITION.
36. PROPOSED SEWER LATERAL LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD LOCATE THE ACTIVE LATERALS AND RECORD THEIR LOCATIONS.
37. SANITARY SEWER LATERALS SHALL BE REPLACED OR RECONSTRUCTED FROM THE SEWER MAIN TO THE PROPERTY LINE OF THE STRUCTURE BEING SERVED, UNLESS SHOWN OTHERWISE.
38. CONTRACTOR SHALL FIELD VERIFY ALL SERVICE LATERAL CONNECTIONS WITH ASSISTANCE OF THE INSPECTOR. CONTRACTOR TO VERIFY BASEMENTS WITH HELP FROM INSPECTOR. HOUSES SHOWN IN PROFILES ARE ASSUMED TO HAVE A 10 FT BASEMENT UNLESS NOTED OTHERWISE.
39. ALL LATERAL TRENCHES NOT LABELED ARE PROPOSED AS OPEN CUT.
40. ELECTROFUSION SADDLE CONNECTIONS SHALL BE USED TO CONNECT ACTIVE SERVICE LATERALS TO HDPE PIPE.
41. CIPP SADDLE CONNECTIONS SHALL BE USED TO CONNECT ACTIVE SERVICE LATERALS TO CIPP.
42. CONTRACTOR TO RE-ESTABLISH SEWER SERVICE TO EACH CUSTOMER IMMEDIATELY AFTER INSTALLING PROPOSED SEWER WHERE INDICATED.
43. THE TRENCH MUST BE BACKFILLED AT THE END OF THE WORKING DAY.
44. GRAVITY SANITARY SEWERS SHALL BE PVC (SDR 35), HDPE SDR-17 SHALL BE USED FOR LINES THAT ARE TO BE PIPE SLIP LINED UNLESS SPECIFIED OTHERWISE.
45. CONNECTIONS MADE FROM EXISTING SDR 35 TO NEW SDR 35 PIPE SHALL BE MADE USING SOLID SLEEVE COUPLINGS. CONNECTIONS TO OTHER PIPE MATERIALS SHALL BE MADE USING FLEXIBLE COUPLINGS WITH A STAINLESS STEEL SHEAR RING (ALSO REFERRED TO AS A SHEAR RING FERNCO).
46. ALL STORM PIPE AND STORM MANHOLES / INLETS FOR STORM CONVERSIONS SHALL BE INSTALLED AFTER THE SANITARY SEWER SYSTEM IS INSTALLED.
47. ALL MANHOLE DROP CONNECTIONS SHALL BE INSIDE DROP CONNECTIONS UNLESS NOTED OTHERWISE.
48. PROPOSED INLET RIM ELEVATION, INVERT ELEVATION AND PIPE SIZES SHALL MATCH EXISTING, UNLESS DIRECTED OTHERWISE.
49. ALL NEW INLETS NOT ADJACENT TO CONCRETE CURB SHALL HAVE TYPE M FRAME, SEE DETAIL 68.
50. ALL NEW INLETS ADJACENT TO CONCRETE CURB SHALL HAVE TYPE C FRAME, SEE DETAIL 69.
51. PRIOR TO SETTING A MANHOLE/INLET OVER AN EXISTING PIPE, THE CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF ANY FACILITY UPSTREAM AND DOWNSTREAM OF THIS CONNECTION POINT. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
52. SENDING AND RECEIVING PITS SHALL NOT ENCROACH ON STATE RIGHT-OF-WAY, UNLESS SHOWN ON PLANS.
53. IF A STRUCTURE OR FACILITY IS DAMAGED DURING CONSTRUCTION WITHIN PENNDOT OR MUNICIPAL RIGHT-OF-WAY, THE CONTRACTOR SHALL REPLACE THE DAMAGED ITEMS AND NECESSARY RESTORATION AT NO ADDITIONAL COST TO THE OWNER.
54. CONTRACTOR SHALL REMOVE, PROTECT AND REPLACE ALL SIGNS WITHIN THE PERMANENT AND TEMPORARY RIGHTS-OF-WAY.
55. ALL TIMBER 8" AND LARGER AT THE BASE TO REMAIN THE PROPERTY OF THE PROPERTY OWNER, UNLESS A SIGNED RELEASE IS OBTAINED FROM THE PROPERTY OWNER NOT WANTING THE TIMBER. TIMBER SHALL BE LIMBED, TOPPED AND CUT INTO 16' LENGTHS. THE LIMBS AND TOPS SHALL BE DISPOSED OF PROPERLY. THE LOGS SHALL BE PLACED WITHIN THE EASEMENT AT A LOCATION DIRECTED BY THE PROPERTY OWNER.

SHEET INDEX

SHT #	SHEET TITLE
CS	COVER SHEET
G1	INDEX PLAN, LOCATION MAP, VICINITY MAP & SYMBOL LEGEND
G2	GENERAL NOTES, ABBREVIATIONS & UTILITY LIST
01	PLAN
02	PLAN
03	PLAN
04	PLAN
05	PLAN
06	PLAN
07	PLAN
08	PLAN
09	PROFILES
10	PROFILES
11	PROFILES
12	PROFILES
13	PROFILES
14	PROFILES
14A	D STREET SIPHON PLAN AND PROFILE
15	PROFILES
16	PROFILES
17	PROFILES
18	PROFILES
ES-1	EROSION & SEDIMENTATION CONTROL PLAN
ES-2	EROSION & SEDIMENTATION CONTROL NOTES
ES-3	EROSION & SEDIMENTATION CONTROL DETAILS

ABBREVIATIONS

ACI	AMERICAN CONCRETE INSTITUTE	MAX	MAXIMUM
AGGR	AGGREGATE	MB	MAILBOX
ALT	ALTERNATE	MH	MANHOLE
ALUM	ALUMINUM	MIN	MINIMUM
APPROX	APPROXIMATE	MTL	MATERIAL
ASPH	ASPHALT	NB	NO BASEMENT
ASTM	AMERICAN SOCIETY TESTING MATERIALS	NO	NUMBER
		OD	OUTSIDE DIAMETER
AVE	AVENUE	OFF	OFFSET
B/EL	BASEMENT ELEVATION	PB	PIPE BURST
BIT	BITUMINOUS	PG	PAGE
BLH	BURIED LAMP HOLE	PL	PLACE
BLK	BLOCK	PP	POWER POLE
BLVD	BOULEVARD	PROP	PROPOSED
BM	BENCH MARK	PSF	POUNDS PER SQUARE FOOT, PLASTIC SLAT FENCE
BMH	BURIED MANHOLE		
BRK	BRICK	PSI	POUNDS PER SQUARE INCH
CB	CURB BOX, CATCH BASIN	PT	POINT
CC	CONCRETE CURB, CENTER TO CENTER	PVC	POLYVINYL CHLORIDE
CL	CENTER LINE	RCP	REINFORCED CONCRETE PIPE
CLF	CHAINLINK FENCE	RD	ROAD, RECORD DOCUMENT
CLR	CLEAR	REF	REFERENCE
CI	CAST IRON PIPE	RFD	ROOF DRAIN
CIPP	CURED IN PLACE PIPE	ROW,R/W	RIGHT OF WAY
COLL	COLLECTION LINE	RRT	RAILROAD TIES
CONC	CONCRETE	RW	RETAINING WALL
CONT	CONTINUATION	SAN	SANITARY
CP	CLOTHES POLE	SEW	SEWER
CPP	CORRUGATED PLASTIC PIPE	SHT	SHEET
CT	COURT	SL	SLIP LINE
D	DEEP	SLCPP	SMOOTH LINED CORRUGATED PLASTIC PIPE
DBV	DEED BOOK VOLUME		
DI	DUCTILE IRON	SPEC	SPECIAL CONDITION (SECTION 1A SPECIFICATION)
DIA	DIAMETER		
DR	DRIVE, DRIVEWAY	SR	STATE ROUTE
DWG	DRAWING	SRF	SPLIT RAIL FENCE
EL	ELEVATION	ST	STREET, STORM
EOP	EDGE OF PAVEMENT	STA	STATION
EX	EXISTING	STL	STEEL
EXT	EXTENSION	STM	STORM
FEN	FENCE	SW	SIDEWALK
F/F EL	FIRST FLOOR ELEVATION	T	TOP
FH	FIRE HYDRANT	TCP	TERRACOTTA PIPE
FP	FLAG POLE	TP	TELEPHONE POLE
FR	FROM	TYP	TYPICAL
GAR	GARAGE	UNK	UNKNOWN
GPM	GALLONS PER MINUTE	UP	UTILITY POLE
GRAV	GRAVEL	VERT	VERTICAL
HDPE	HIGH DENSITY POLYETHYLENE	W	WIDE
HI	HIGH	W/	WITH
HORIZ	HORIZONTAL	WD	WOOD
HR	HANDRAIL	WK	WALK
HT	HEIGHT	WL	WATER LEVEL
ID	INSIDE DIAMETER	WSF	WOOD SLAT FENCE
INT	INTERCEPTOR	WSRF	WOOD SPLIT RAIL FENCE
INV	INVERT	WT	WATER TIGHT
LAT	LATERAL	WV	WATER VALVE
LF	LINEAR FEET	VCP	VITRIFIED CLAY PIPE
LH	LAMP HOLE	VP	VIEWPORT
LP	LIGHT POLE	VSF	VINYL SLAT FENCE
LSA	LANDSCAPED AREA		
LS	LIGHT STANDARD		

UTILITY/CONTACT LIST

GREATER JOHNSTOWN WATER AUTHORITY
640 FRANKLIN STREET
P.O. BOX 1407
JOHNSTOWN, PA 15901
CONTACT: BRAD FLOWERS
(814) 533-4300 (OFFICE)
(814) 421-3301 (CELL)

JOHNSTOWN REDEVELOPMENT AUTHORITY
401 WASHINGTON STREET
JOHNSTOWN, PA 15901
CONTACT: WILLIAM MESKE
(814) 535-6564 (OFFICE)

PENELEC & FIRST ENERGY
311 INDUSTRIAL PARK ROAD
JOHNSTOWN, PA 15904
CONTACT: BOB BUTLER
(814) 269-6616 (OFFICE)
(814) 241-3648 (CELL)

AT&T
1100 3RD AVENUE
ALTOONA, PA 16602
CONTACT: IZZY BLAKE
(814) 207-1926

ATLANTIC BROADBAND LLC
120 SOUTHMONT BOULEVARD
JOHNSTOWN, PA 15905
CONTACT: JERRY ADAMS
(814) 534-8409

CAMBRIA-SOMERSET AUTHORITY
244 WALNUT ST., SUITE 201
JOHNSTOWN, PA 15901
CONTACT: RICK MAUST
(814) 532-8851 (OFFICE)
(814) 659-2917 (CELL)

PEOPLES NATURAL GAS
3115 ELTON ROAD
JOHNSTOWN, PA 15904
CONTACT: WILLIAM WRIGHT, JR.
(814) 269-6349 (OFFICE)

VERIZON NORTH
20 EAST 10TH STREET
1ST FLOOR
ERIE, PA 16501
CONTACT: ERIC RODRIGUES
(814) 871-2317 (OFFICE)
(814) 490-0176 (CELL)

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CONTACT: MIKE CALPIN
(814) 533-2061 (OFFICE)
(814) 341-4779 (CELL)

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EBENSBURG, PA 15931
(814) 472-2120 (OFFICE)

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION DISTRICT 9-0
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4595 ADMIRAL PEARY HIGHWAY
(ROUTE 22 WEST OF EBENSBURG)
EBENSBURG, PA 15931
CONTACT: JESSE THEYS
(814) 935-1901 (OFFICE)
(814) 419-1157 (CELL)

CENTURYLINK (FORMERLY QWEST)
P.O. BOX 245
NEWTON HAMILTON, PA 17075
CONTACT: MATT SOUNDERS
(814) 935-5365

LEVEL 3 COMMUNICATIONS LLC
200 TECHNOLOGY DRIVE
PITTSBURGH, PA 15219
(814) 232-7484

WINDSTREAM ELANTIC NETWORKS
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JOHNSTOWN, PA 15904
(814) 738-8360

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Drawn By: B.L.M.
Checked By: T.J.K.
Project No.: 0620-15-590
File No.: 4426

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FAIRFIELD AVENUE INTERCEPTOR
& STORM WATER SEPARATION PROJECT
CONTRACTS 2018-INT-01 / 2018-03
CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

GENERAL NOTES, ABBREVIATIONS & UTILITY LIST

Drawing No.
G2

R:\4426 – JOHNSTOWN REDEVELOPMENT AUTHORITY\15590 Fairfield Ave Inter\06 CADD\20 MS\Cover Sht & Gen Notes Fairfield Ave.dwg 8/28/2018 8:51 AM

PLAN

SCALE: 1"=30'

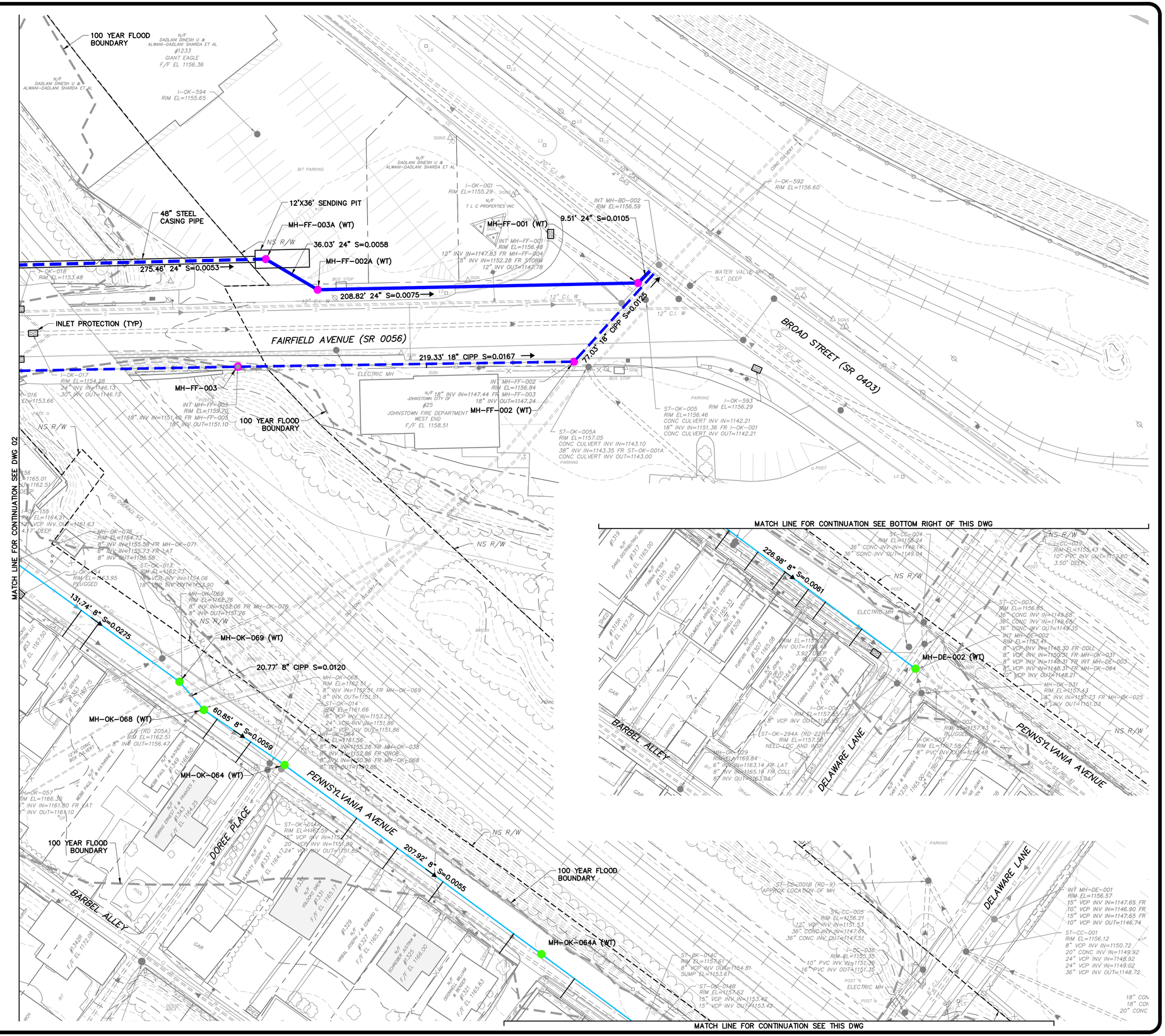
30 0 30

JRA CONTRACT NO. 2018–INT–01

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
FAIRFIELD AVENUE		
SIPHON VAULT	MH–FF–001 (WT)	01/09
MH–FF–001 (WT)	MH–FF–002A (WT)	01/09
MH–FF–002A (WT)	MH–FF–003A (WT)	01/09
MH–FF–003A (WT)	MH–FF–004	01/09
SIPHON VAULT	MH–FF–002 (WT)	02/12
MH–FF–002 (WT)	MH–FF–003	02/12
MH–FF–003	MH–FF–005 (WT)	02/12

COJ CONTRACT NO. 2018–03

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
PENNSYLVANIA AVENUE		
MH–DE–002 (WT)	MH–OK–064A (WT)	01/16
MH–OK–064A (WT)	MH–OK–064 (WT)	01/16
MH–OK–064 (WT)	MH–OK–068 (WT)	01/16
MH–OK–068 (WT)	MH–OK–069 (WT)	01/16
MH–OK–069 (WT)	MH–OK–076 (WT)	01/16



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Date

No.	Revisions	Date

Scale	AS NOTED
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Project No.	0620-15-590
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CITY OF JOHNSTOWN

CAMBRIA COUNTY, PENNSYLVANIA

PLAN

Drawing No.

01

PLAN

SCALE: 1"=30'

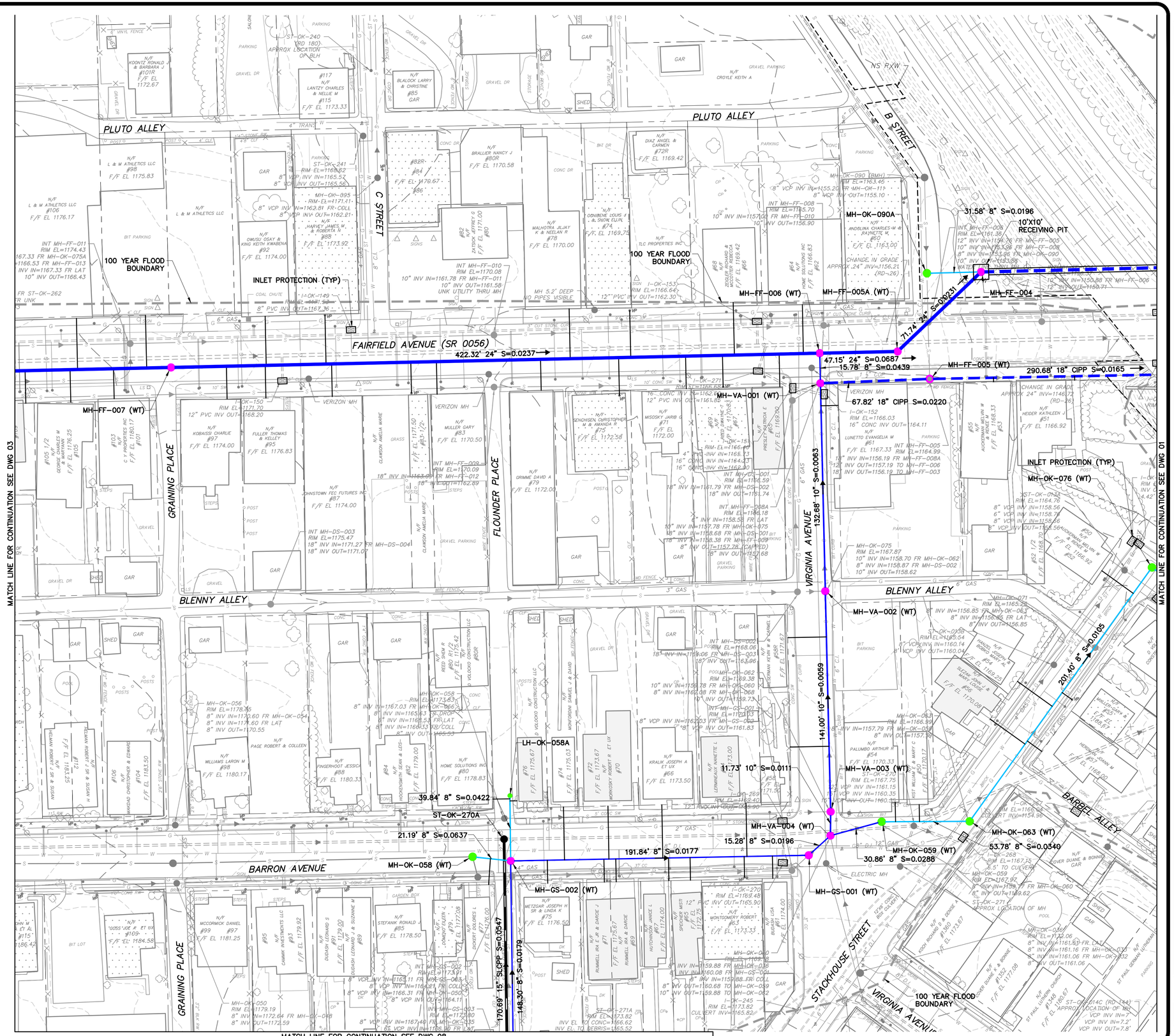
30 0 30

JRA CONTRACT NO. 2018-INT-01

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
FAIRFIELD AVENUE		
MH-FF-003A (WT)	MH-FF-004	01/09
MH-FF-004	MH-FF-005A (WT)	01/09
MH-FF-005A (WT)	MH-FF-006 (WT)	01/09
MH-FF-006 (WT)	MH-FF-007 (WT)	02/09
MH-FF-007 (WT)	MH-FF-008 (WT)	02/09
MH-FF-003	MH-FF-005 (WT)	02/12
MH-FF-005 (WT)	MH-VA-001 (WT)	01/13
VIRGINIA AVENUE		
MH-VA-001 (WT)	MH-VA-002 (WT)	01/13
MH-VA-002 (WT)	MH-VA-003 (WT)	01/13
MH-VA-003 (WT)	MH-VA-004 (WT)	01/13
MH-VA-004 (WT)	MH-GS-001 (WT)	01/13
BARRON AVENUE		
MH-GS-001 (WT)	MH-GS-002 (WT)	01/13
MH-OK-059 (WT)	MH-VA-004 (WT)	02/16
FLOUNDER PLACE		
MH-GS-002 (WT)	MH-GS-003 (WT)	01/13

COJ CONTRACT NO. 2018-03

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
B STREET		
MH-FF-004	MH-OK-090A	01/15
PENNSYLVANIA AVENUE		
MH-OK-069 (WT)	MH-OK-076 (WT)	01/16
STACKHOUSE STREET		
MH-OK-076 (WT)	MH-OK-063 (WT)	02/16
MH-OK-063 (WT)	MH-OK-059 (WT)	02/16
BARRON AVENUE		
MH-GS-002 (WT)	LH-OK-058A	03/16
MH-GS-002 (WT)	MH-OK-058 (WT)	04/16



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PLAN

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02

PLAN

SCALE: 1"=30'

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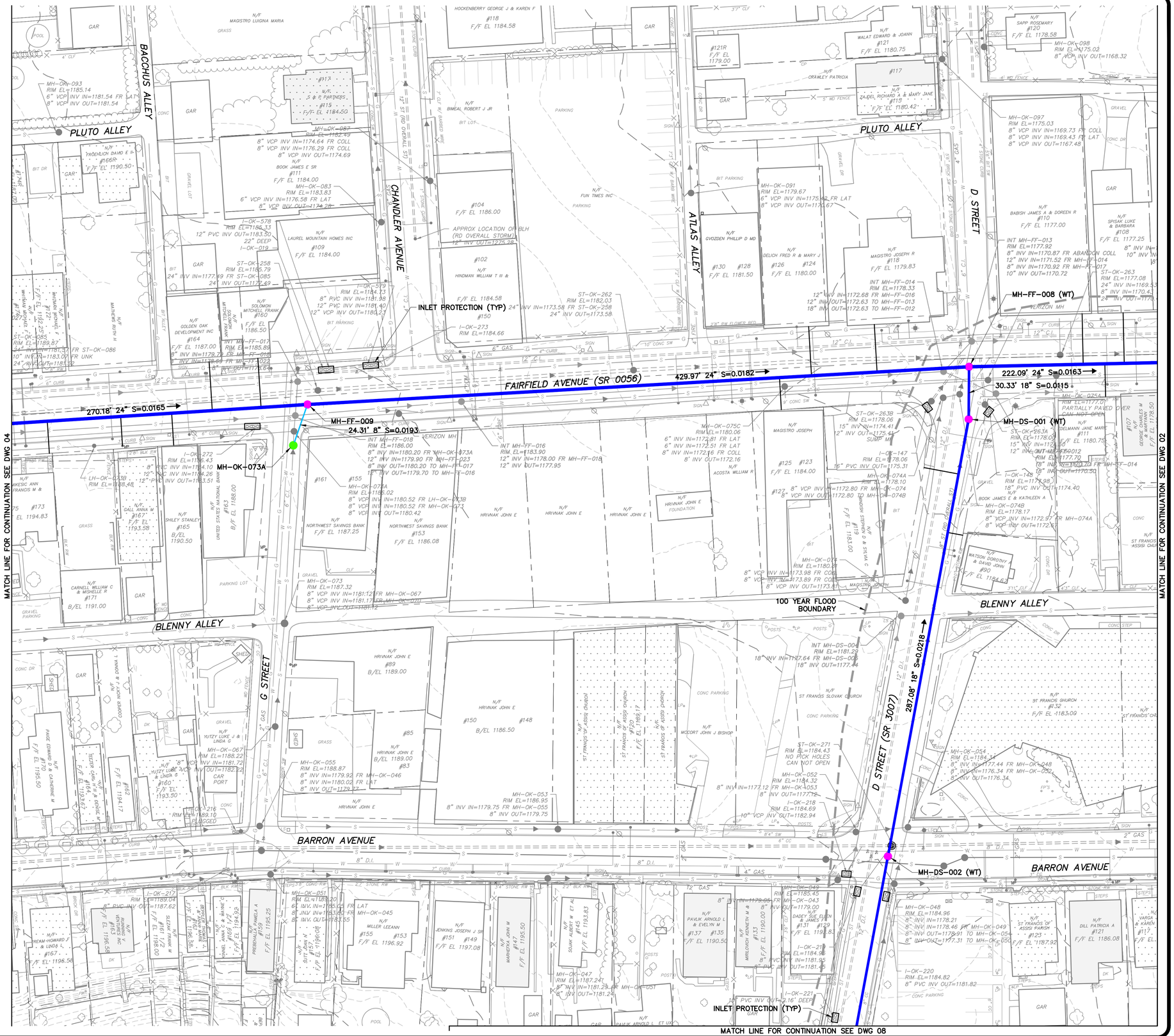
JRA CONTRACT NO. 2018–INT–01

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
FAIRFIELD AVENUE		
MH–FF–007 (WT)	MH–FF–008 (WT)	02/09
MH–FF–008 (WT)	MH–FF–009	01/10
MH–FF–009	MH–FF–010	01/10
D STREET		
MH–FF–008 (WT)	MH–DS–001 (WT)	02/14
MH–DS–001 (WT)	MH–DS–002 (WT)	02/14
MH–DS–002 (WT)	MH–DS–003 (WT)	03/14

COJ CONTRACT NO. 2018–03

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
G STREET		
MH–FF–009	MH–OK–073A	02/15



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Drawing No.
03

PLAN

SCALE: 1"=30'

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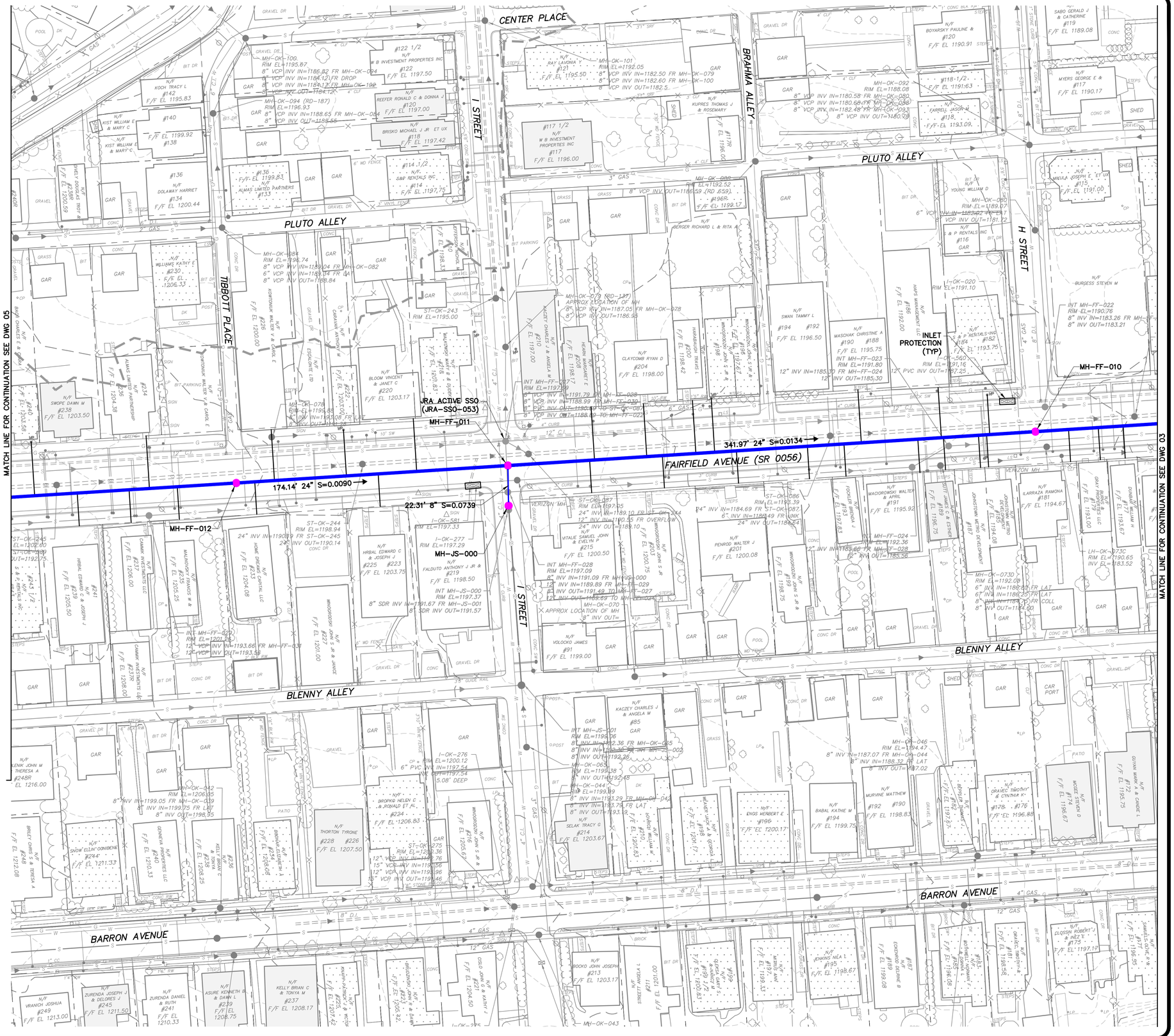
JRA CONTRACT NO. 2018-INT-01

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
FAIRFIELD AVENUE		
MH-FF-009	MH-FF-010	01/10
MH-FF-010	MH-FF-011	02/10
MH-FF-011	MH-FF-012	02/10
MH-FF-012	MH-FF-013	02/10
I STREET		
MH-FF-011	MH-JS-000	03/10



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04

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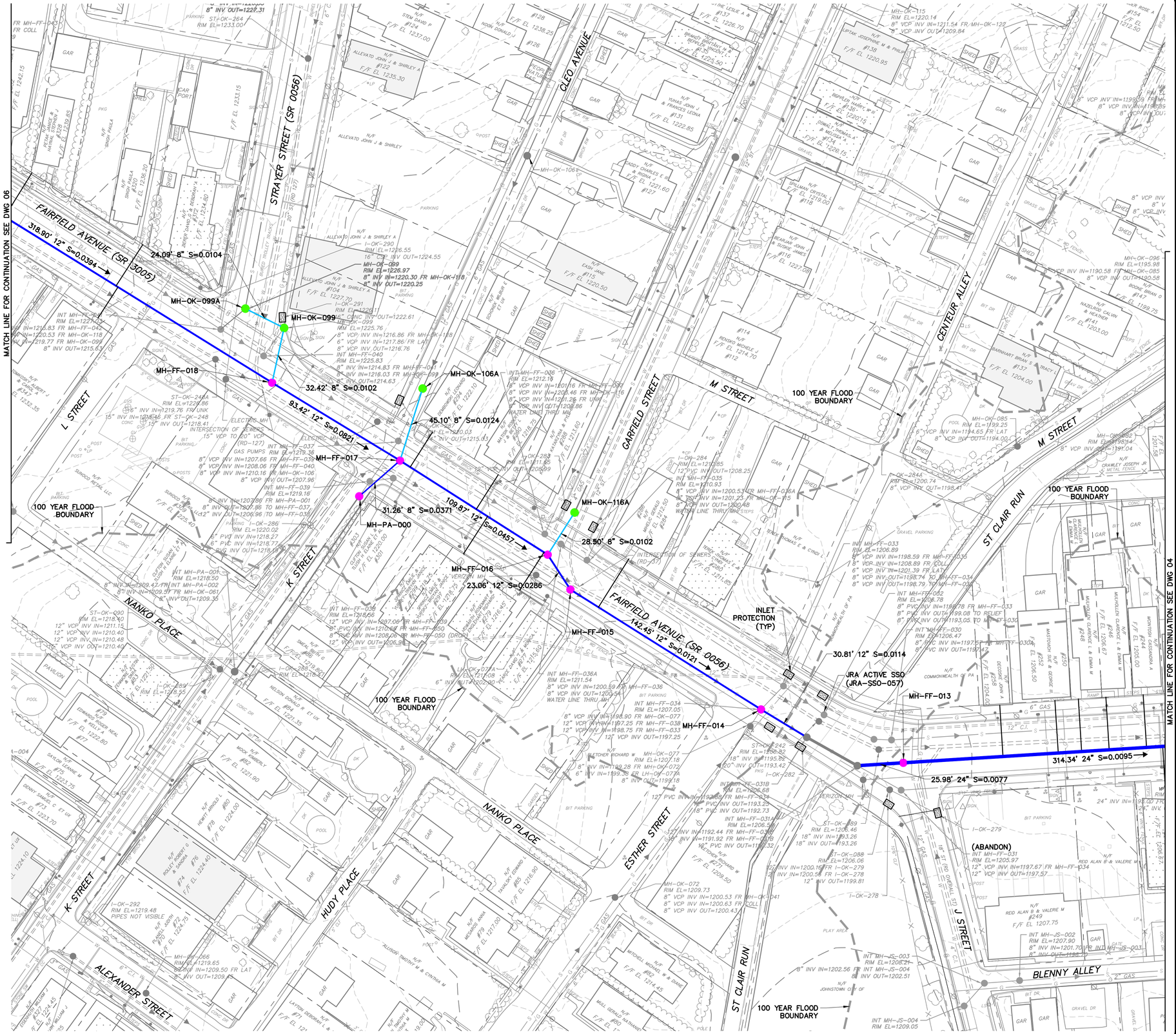
JRA CONTRACT NO. 2018-INT-01

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
FAIRFIELD AVENUE		
MH-FF-012	MH-FF-013	02/10
MH-FF-013	MH-FF-031A	01/11
MH-FF-031A	MH-FF-031B	01/11
MH-FF-031B	MH-FF-014	01/11
MH-FF-014	MH-FF-015	01/11
MH-FF-015	MH-FF-016	01/11
MH-FF-016	MH-FF-017	01/11
MH-FF-017	MH-FF-018	01/11
MH-FF-018	MH-FF-019	01/11
K STREET		
MH-FF-017	MH-PA-000	03/11

COJ CONTRACT NO. 2018-03

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
GAIRFIELD STREET		
MH-FF-016	MH-OK-116A	03/15
CLEO AVENUE		
MH-FF-017	MH-OK-106A	04/15
STRAYER STREET		
MH-FF-018	MH-OK-099	05/15
MH-OK-099	MH-OK-099A	05/15



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05

PLAN

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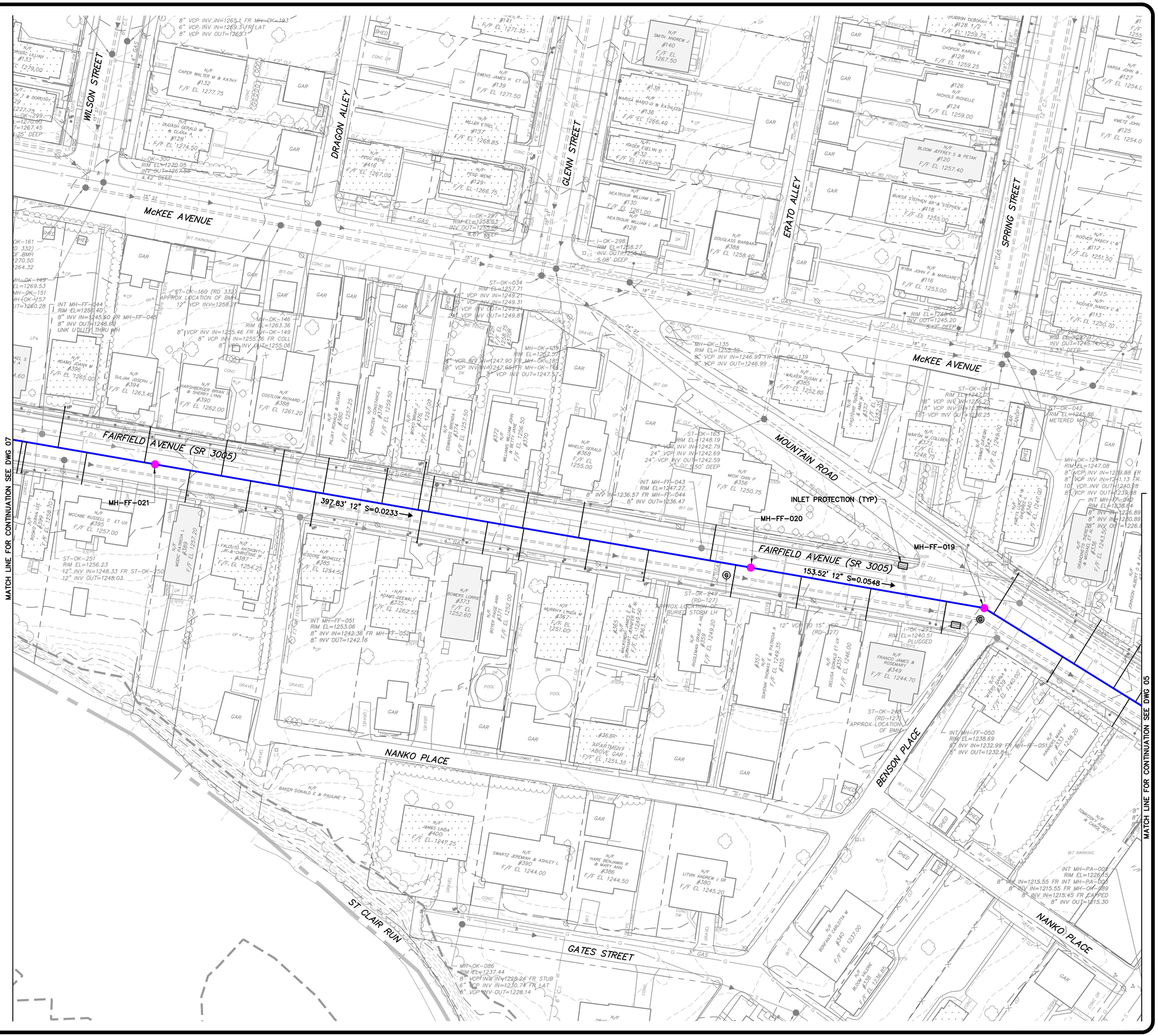
JRA CONTRACT NO. 2018-INT-01

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
FAIRFIELD AVENUE		
MH-FF-018	MH-FF-019	01/11
MH-FF-019	MH-FF-020	02/11
MH-FF-020	MH-FF-021	02/11
MH-FF-021	MH-FF-022	01/12



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Seal: STEPHEN MICHAEL SEWALK, REGISTERED PROFESSIONAL ENGINEER, PENNSYLVANIA, No. PE-076031-E

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06

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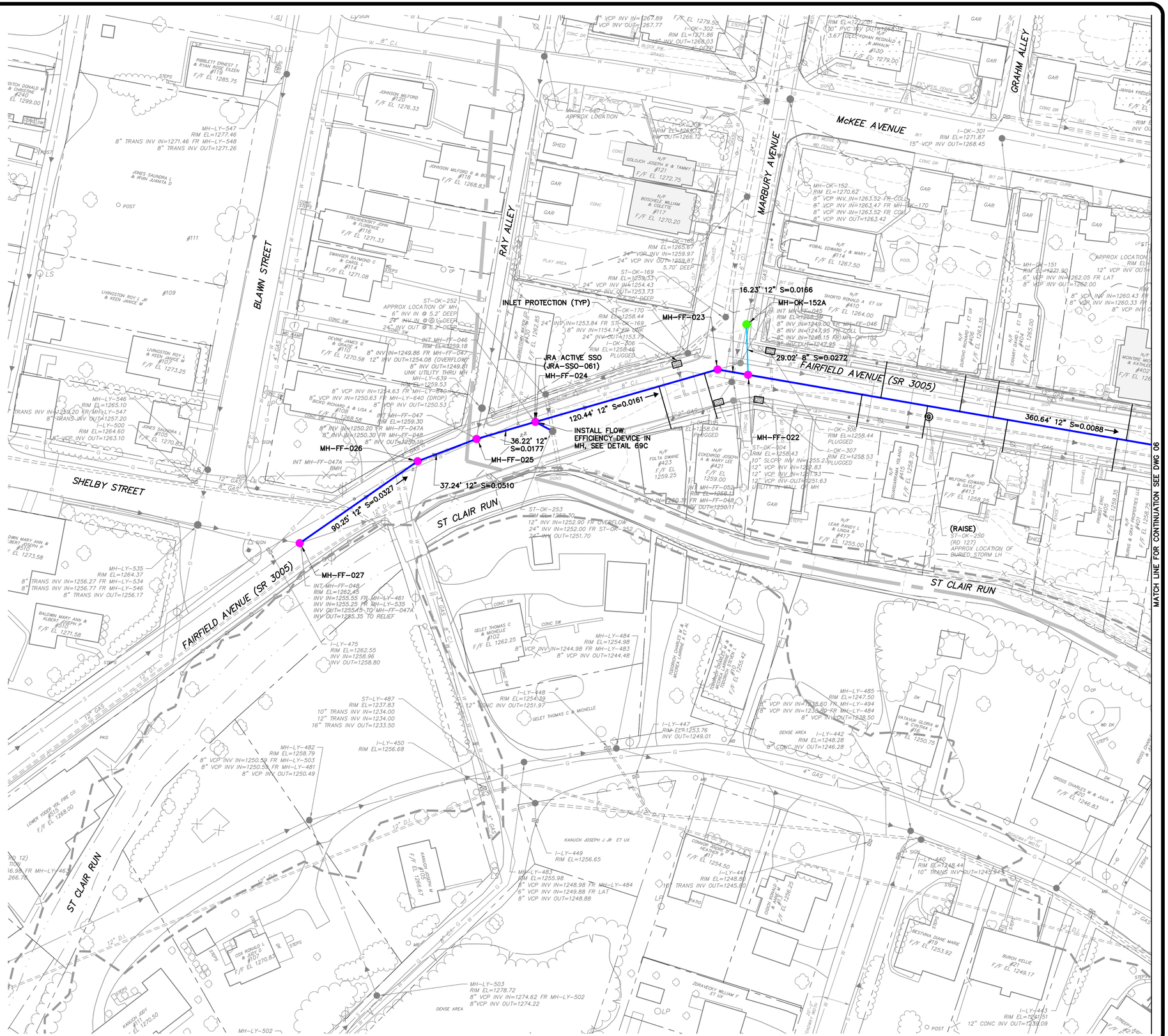
JRA CONTRACT NO. 2018-INT-01

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
FAIRFIELD AVENUE		
MH-FF-021	MH-FF-022	01/12
MH-FF-022	MH-FF-023	01/12
MH-FF-023	MH-FF-024	01/12
MH-FF-024	MH-FF-025	01/12
MH-FF-025	MH-FF-026	01/12
MH-FF-026	MH-FF-027	01/12

COJ CONTRACT NO. 2018-03

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
MARBURY AVENUE		
MH-FF-022	MH-OK-152A	06/15



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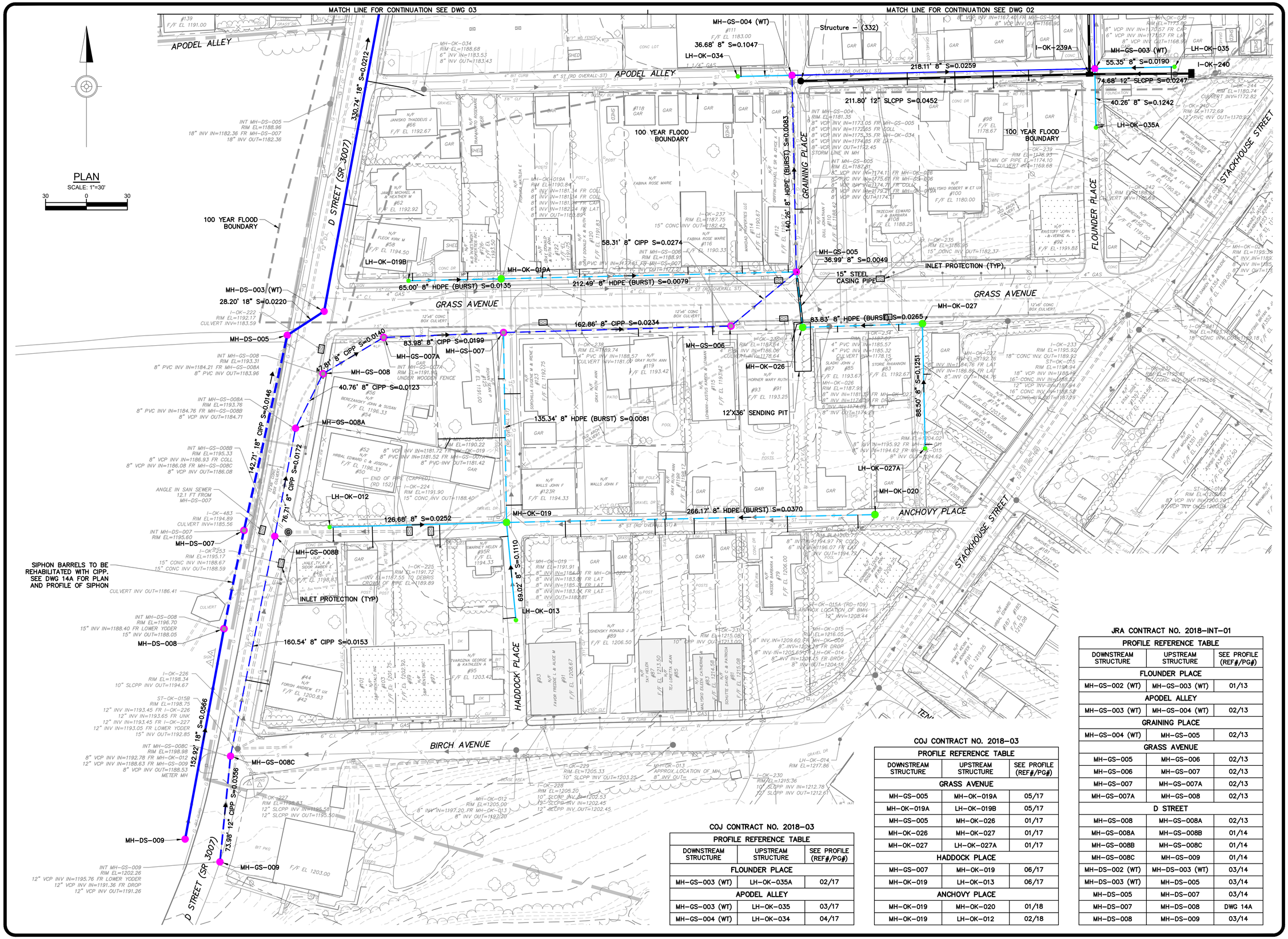
07



COJ CONTRACT NO. 2018-03

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
FLOUNDER PLACE		
MH-GS-003 (WT)	LH-OK-035A	02/17
APODEL ALLEY		
MH-GS-003 (WT)	LH-OK-035	03/17
MH-GS-004 (WT)	LH-OK-034	04/17

COJ CONTRACT NO. 2018-03

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
GRASS AVENUE		
MH-GS-005	MH-OK-019A	05/17
MH-OK-019A	LH-OK-019B	05/17
MH-GS-005	MH-OK-026	01/17
MH-OK-026	MH-OK-027	01/17
MH-OK-027	LH-OK-027A	01/17
HADDOCK PLACE		
MH-GS-007	MH-OK-019	06/17
MH-OK-019	LH-OK-013	06/17
ANCHOVY PLACE		
MH-OK-019	MH-OK-020	01/18
MH-OK-019	LH-OK-012	02/18

JRA CONTRACT NO. 2018-INT-01

PROFILE REFERENCE TABLE		
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SEE PROFILE (REF#/PG#)
FLOUNDER PLACE		
MH-GS-002 (WT)	MH-GS-003 (WT)	01/13
APODEL ALLEY		
MH-GS-003 (WT)	MH-GS-004 (WT)	02/13
GRAINING PLACE		
MH-GS-004 (WT)	MH-GS-005	02/13
GRASS AVENUE		
MH-GS-005	MH-GS-006	02/13
MH-GS-006	MH-GS-007	02/13
MH-GS-007	MH-GS-007A	02/13
MH-GS-007A	MH-GS-008	02/13
D STREET		
MH-GS-008	MH-GS-008A	02/13
MH-GS-008A	MH-GS-008B	01/14
MH-GS-008B	MH-GS-008C	01/14
MH-GS-008C	MH-GS-009	01/14
MH-DS-002 (WT)	MH-DS-003 (WT)	03/14
MH-DS-003 (WT)	MH-DS-005	03/14
MH-DS-005	MH-DS-007	03/14
MH-DS-007	MH-DS-008	DWG 14A
MH-DS-008	MH-DS-009	03/14

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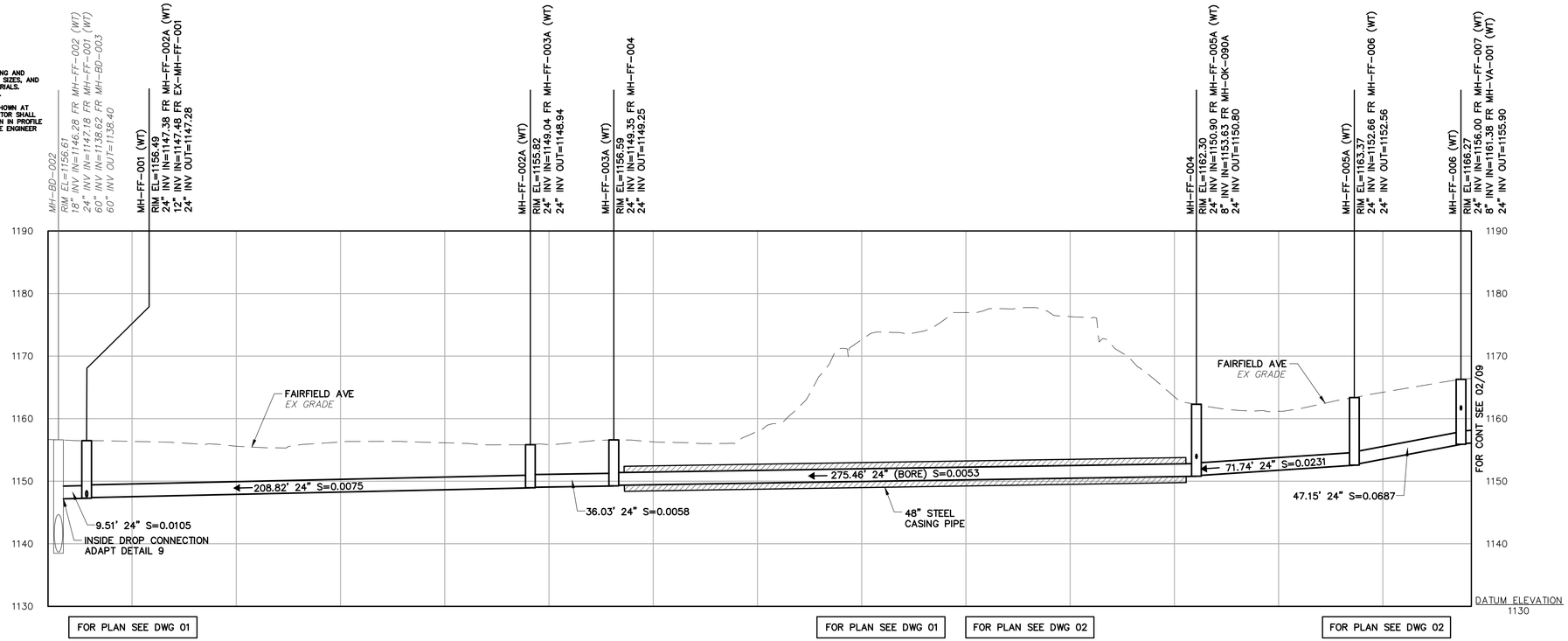
08

PROFILE GENERAL NOTES:

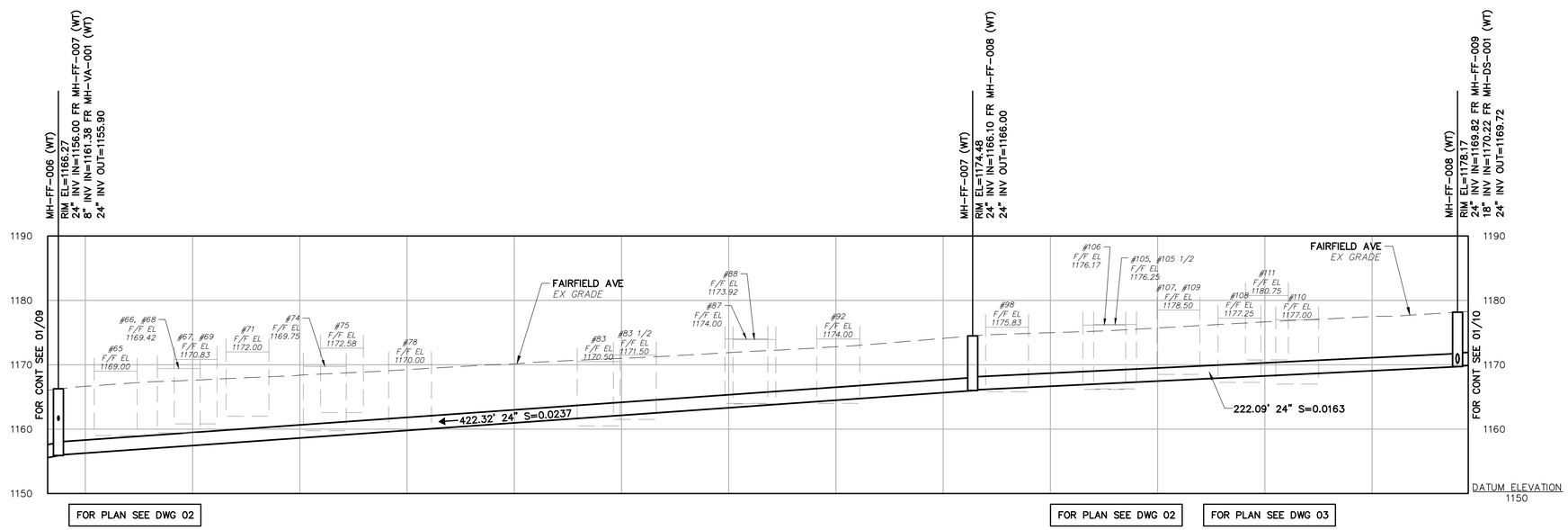
CONTRACTOR SHALL FIELD VERIFY BOTH EXISTING AND PROPOSED MANHOLE INVERT ELEVATIONS, PIPE SIZES, AND PIPE MATERIAL PRIOR TO ORDERING ANY MATERIALS. REPORT ALL DISCREPANCIES TO THE ENGINEER.

ALL PIPE CROSSINGS IN PROFILE VIEWS ARE SHOWN AT APPROXIMATE LOCATION AND DEPTH. CONTRACTOR SHALL PERFORM TEST PITS ON ALL CROSSINGS SHOWN IN PROFILE VIEW AND AS MUTUALLY AGREED UPON BY THE ENGINEER OR INSPECTOR IN CHARGE.



PROFILE 01/09

CONTRACT 2018-INT-01



PROFILE 02/09

CONTRACT 2018-INT-01

PROFILE SCALE

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VERTICAL : 10 0 10

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PROFILES

Drawing No.
09

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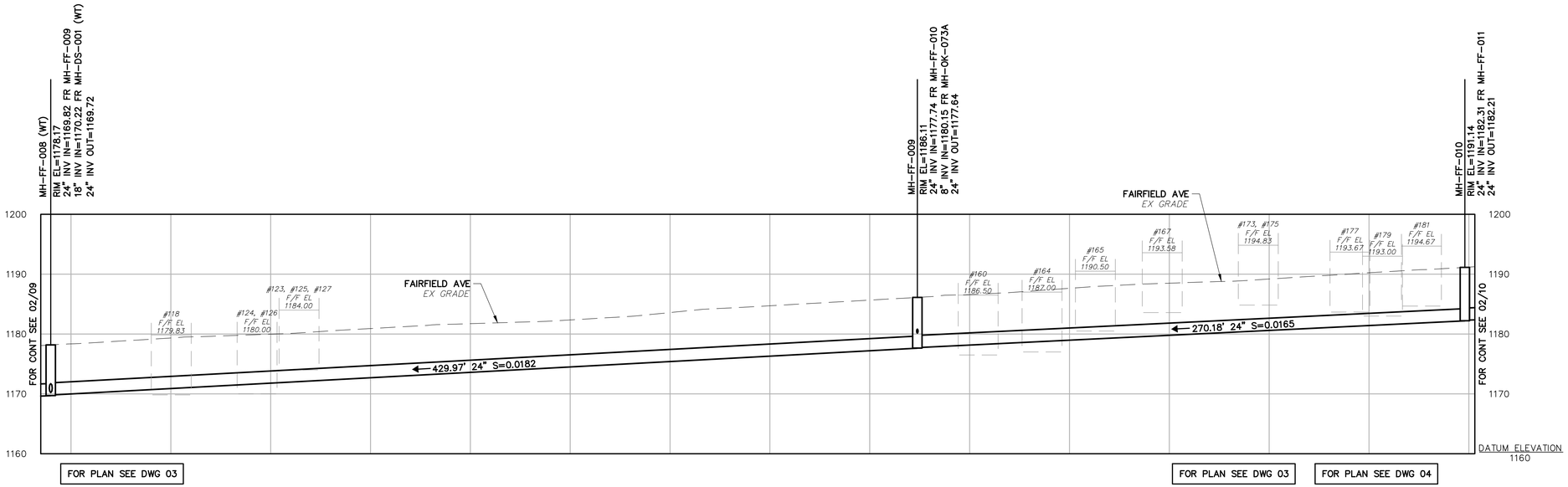
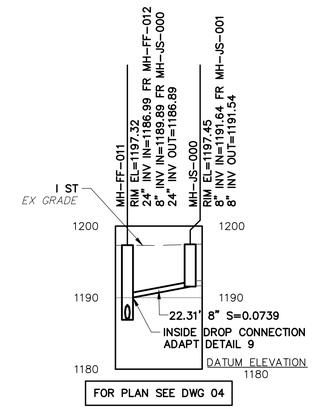


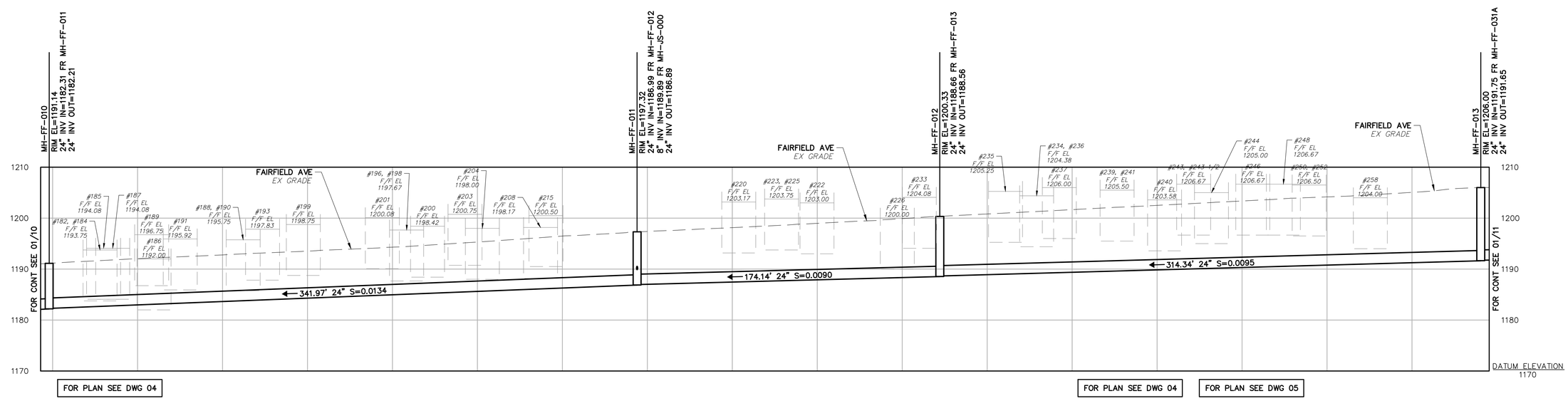
PROFILE 01/10

CONTRACT 2018-INT-01



PROFILE 03/10

CONTRACT 2018-INT-01



PROFILE 02/10

CONTRACT 2018-INT-01

PROFILE GENERAL NOTES:

CONTRACTOR SHALL FIELD VERIFY BOTH EXISTING AND PROPOSED MANHOLE INVERT ELEVATIONS, PIPE SIZES, AND PIPE MATERIAL PRIOR TO ORDERING ANY MATERIALS. REPORT ALL DISCREPANCIES TO THE ENGINEER.

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PROFILE SCALE

HORIZONTAL : 30 0 30

VERTICAL : 10 0 10

Seal

Date

No.	Revisions	Date

Scale AS NOTED
Date JANUARY 2019
Drawn By B.L.M.
Checked By T.J.K.
Project No. 0620-15-590
File No. 4426

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227 FRANKLIN ST., SUITE 300
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& STORM WATER SEPARATION PROJECT
CONTRACTS 2018-INT-01 / 2018-03
CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

PROFILES

Drawing No.
10

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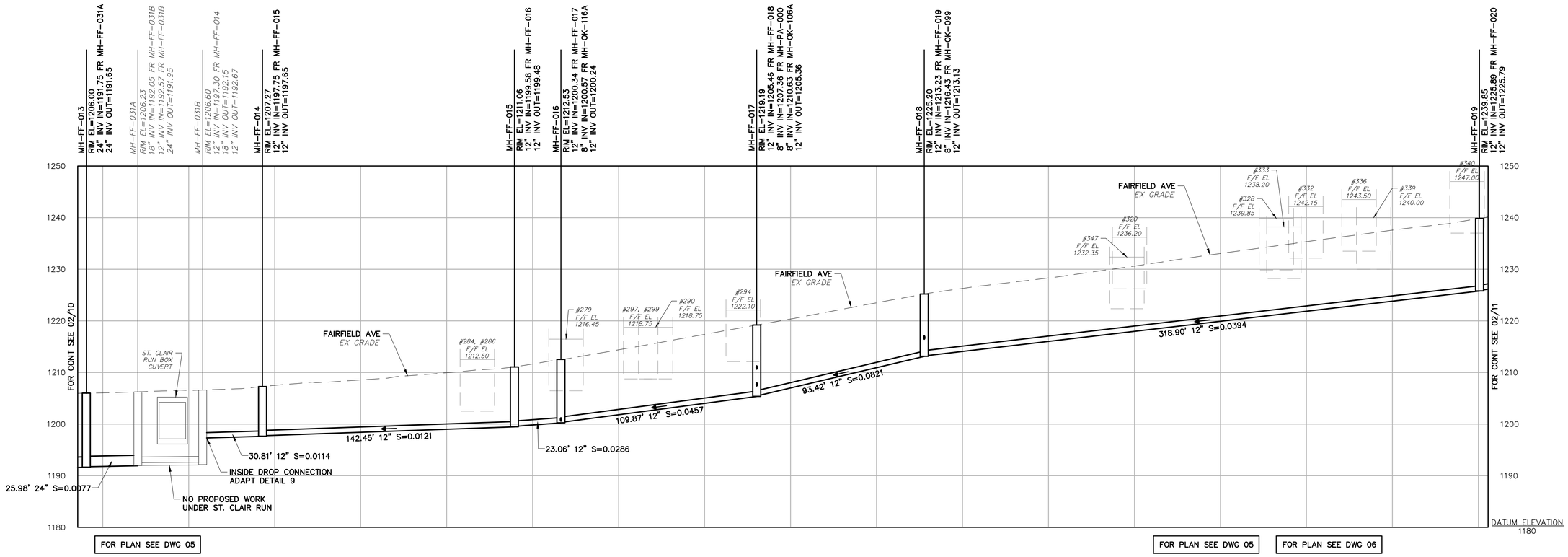
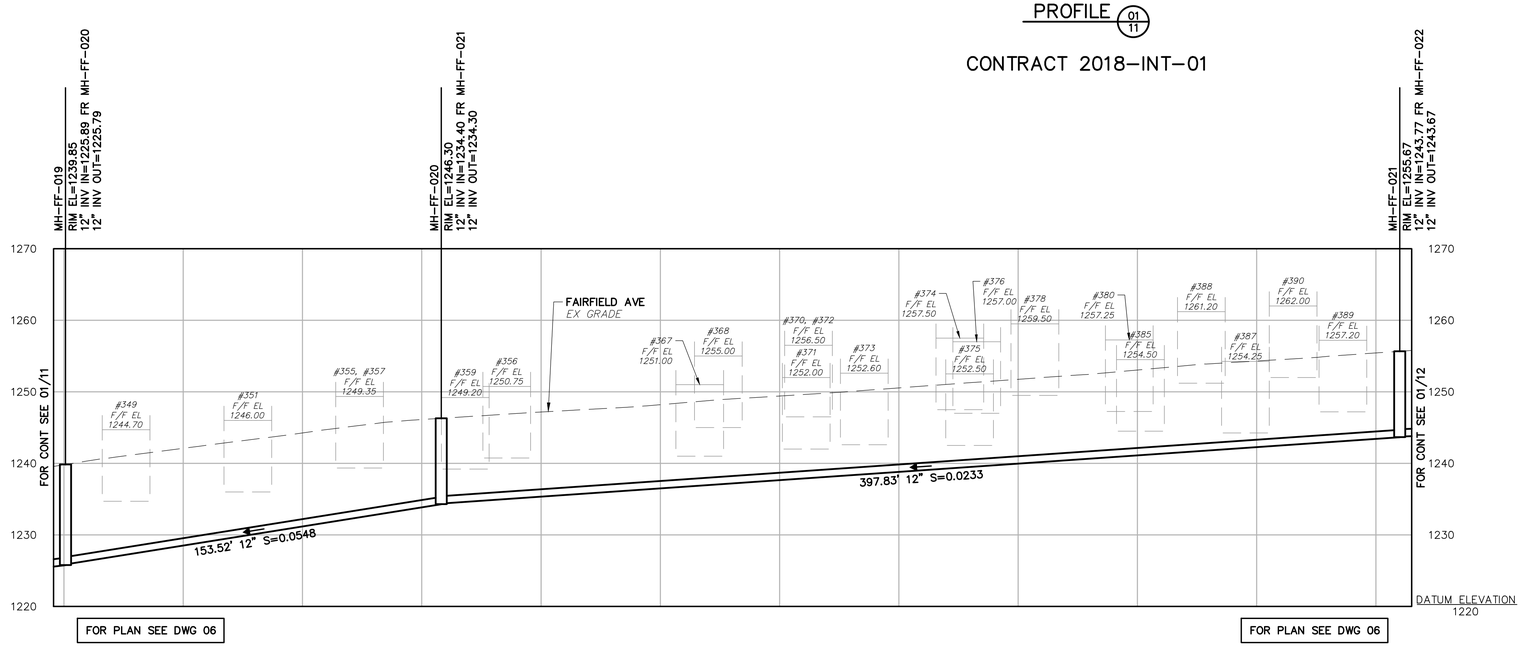


PROFILE 01/11

CONTRACT 2018-INT-01



PROFILE 02/11

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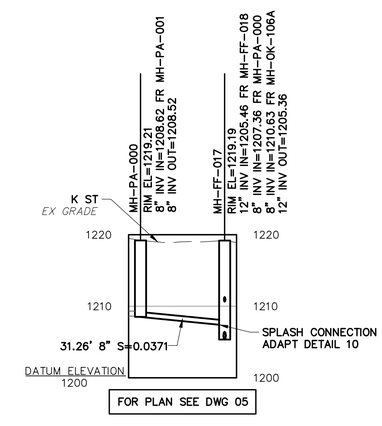

PROFILE 03/11

CONTRACT 2018-INT-01

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PROFILE SCALE

HORIZONTAL : 30 0 30

VERTICAL : 10 0 10

Seal

Date

No.	Revisions	Date

Scale: AS NOTED
Date: JANUARY 2019
Drawn By: B.L.M.
Checked By: T.J.K.
Project No.: 0620-15-590
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CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

PROFILES

Drawing No.
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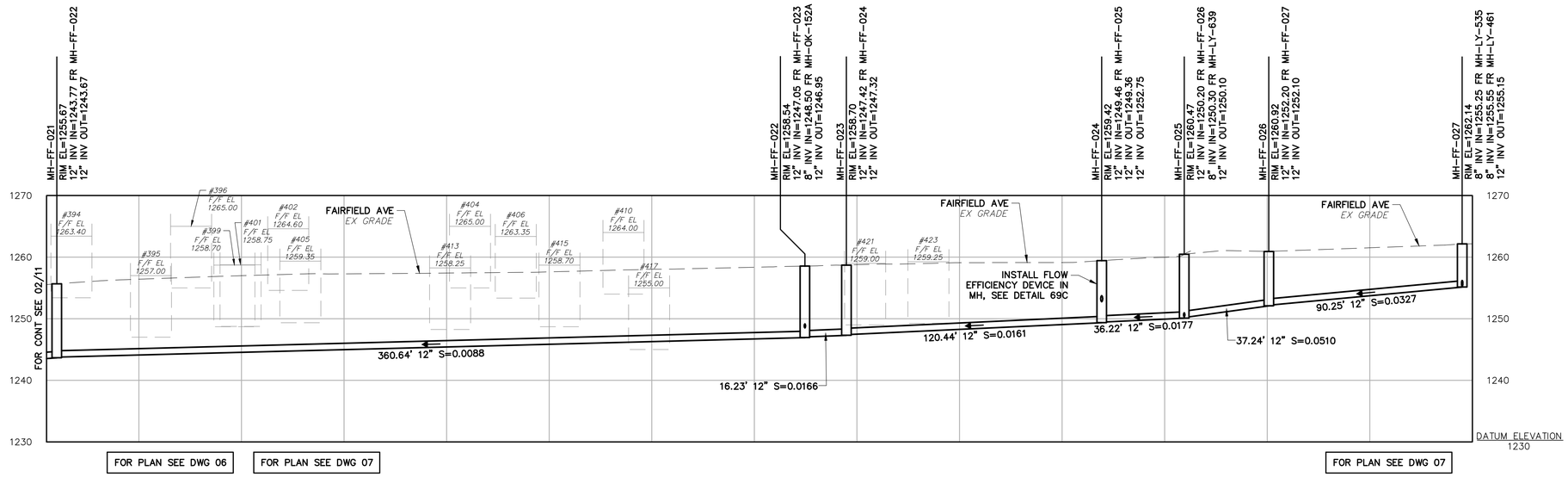

PROFILE 01/12

CONTRACT 2018-INT-01

PROFILE GENERAL NOTES:

CONTRACTOR SHALL FIELD VERIFY BOTH EXISTING AND PROPOSED MANHOLE INVERT ELEVATIONS, PIPE SIZES, AND PIPE MATERIAL PRIOR TO ORDERING ANY MATERIALS. REPORT ALL DISCREPANCIES TO THE ENGINEER.

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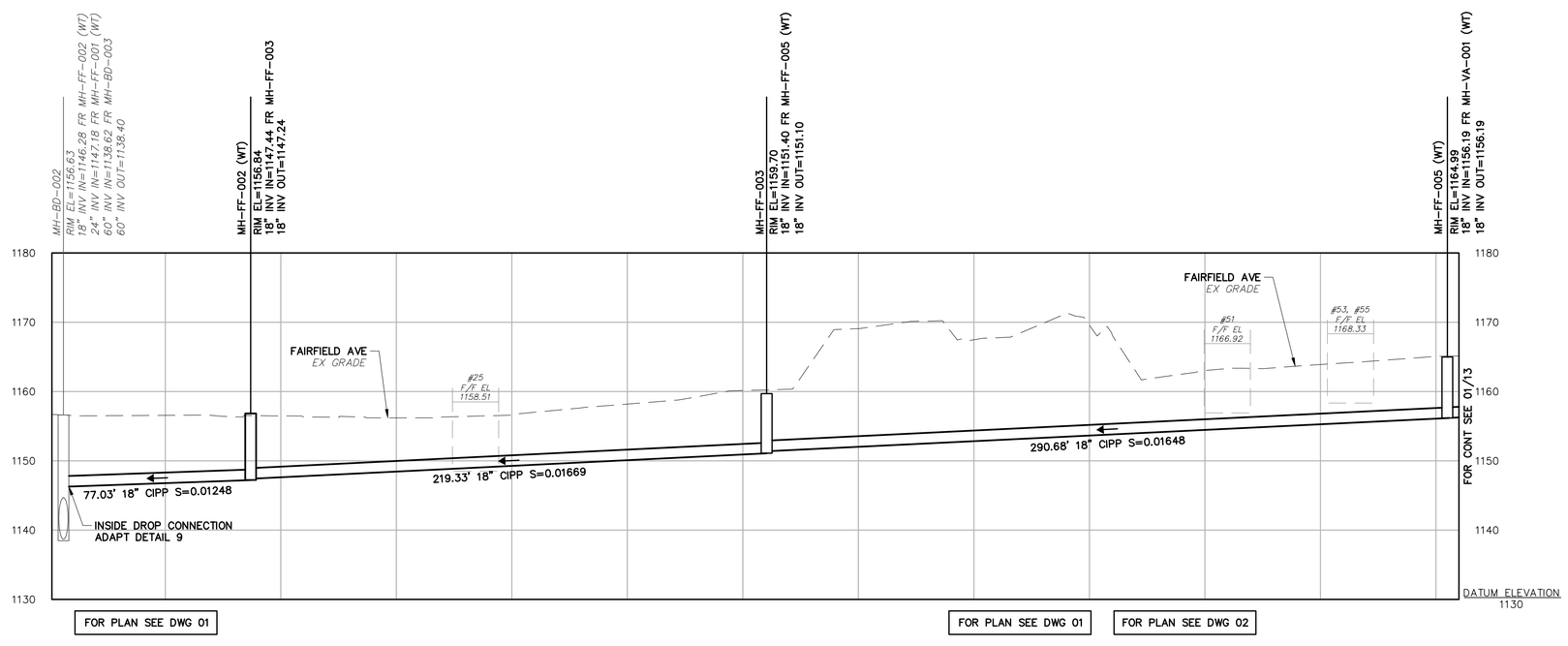

PROFILE 02/12

CONTRACT 2018-INT-01

PROFILE SCALE

HORIZONTAL : 30 0 30

VERTICAL : 10 0 10

Seal

No.	Revisions	Date

Date

Scale: AS NOTED
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CAMBRIA COUNTY, PENNSYLVANIA

PROFILES

Drawing No.
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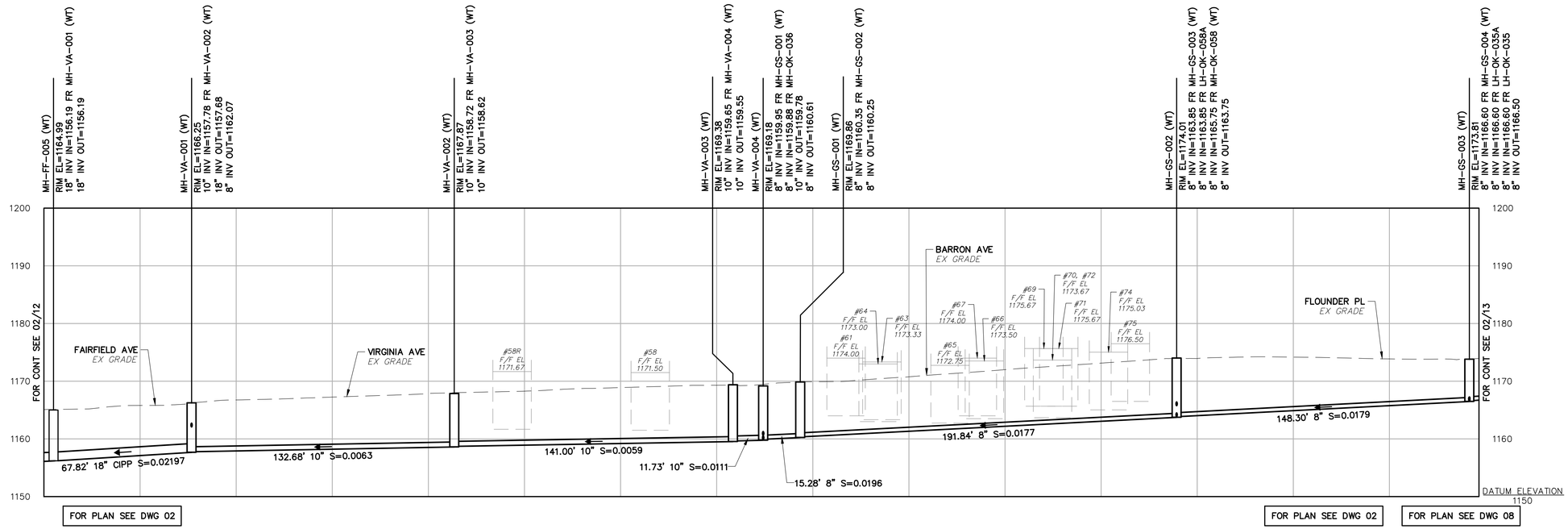
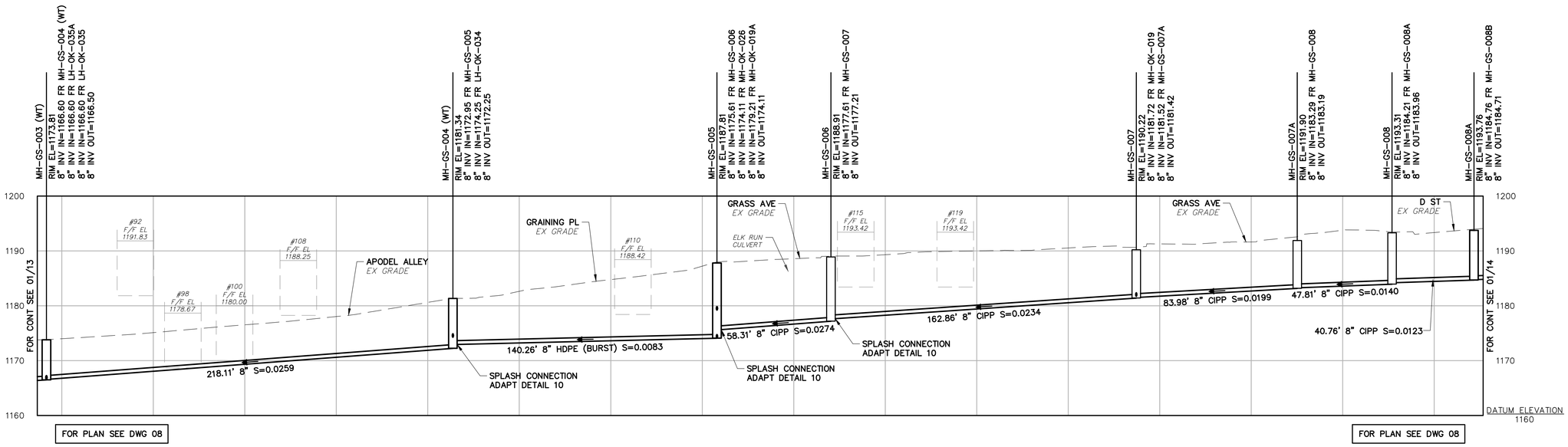


PROFILE 01/13

CONTRACT 2018-INT-01



PROFILE 02/13

CONTRACT 2018-INT-01

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PROFILE SCALE

HORIZONTAL : 30 0 30

VERTICAL : 10 0 10

Seal

Date

No.	Revisions	Date

Scale AS NOTED

Date SEPTEMBER 2018

Drawn By B.L.M.

Checked By T.J.K.

Project No. 0620-15-590

File No. 4426

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FAIRFIELD AVENUE INTERCEPTOR

& STORM WATER SEPARATION PROJECT

CONTRACTS 2018-INT-01 / 2018-03

CITY OF JOHNSTOWN

CAMBRIA COUNTY, PENNSYLVANIA

PROFILES

Drawing No.

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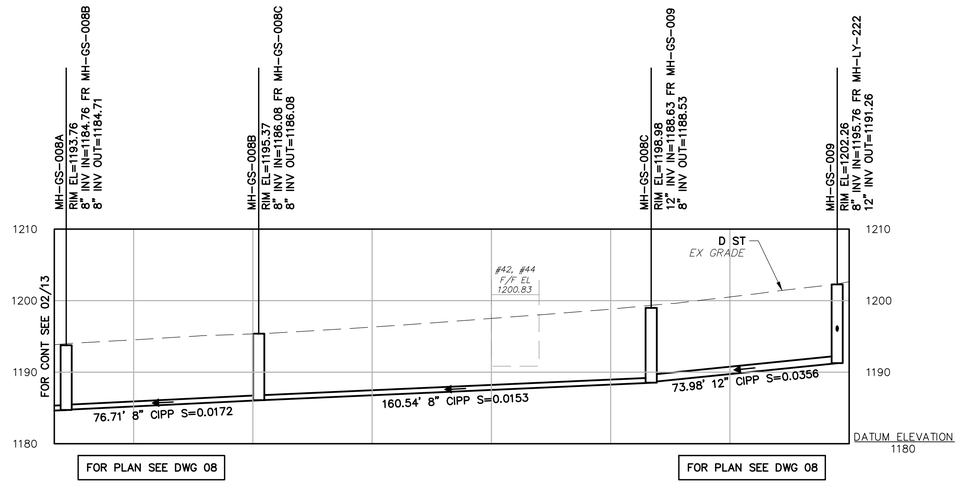
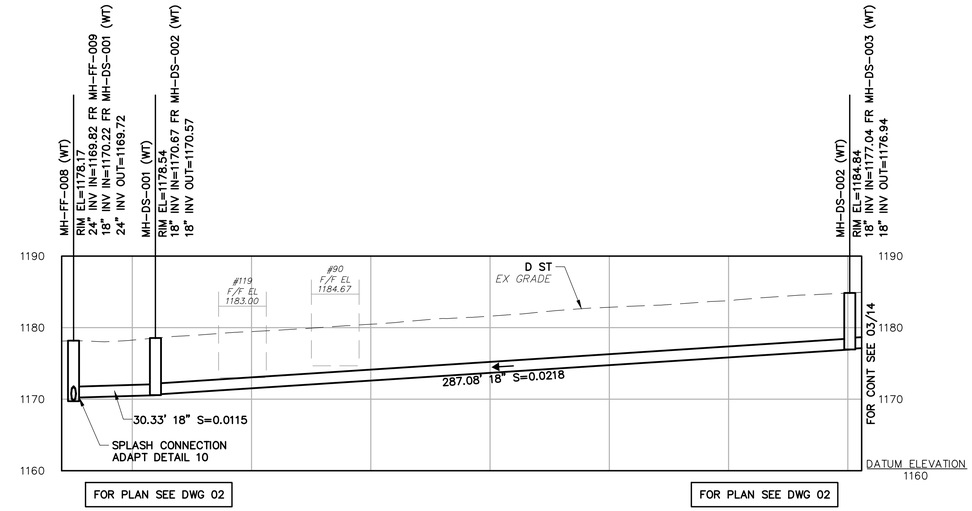


PROFILE 01/14

CONTRACT 2018-INT-01



PROFILE 02/14

CONTRACT 2018-INT-01

PROFILE GENERAL NOTES:

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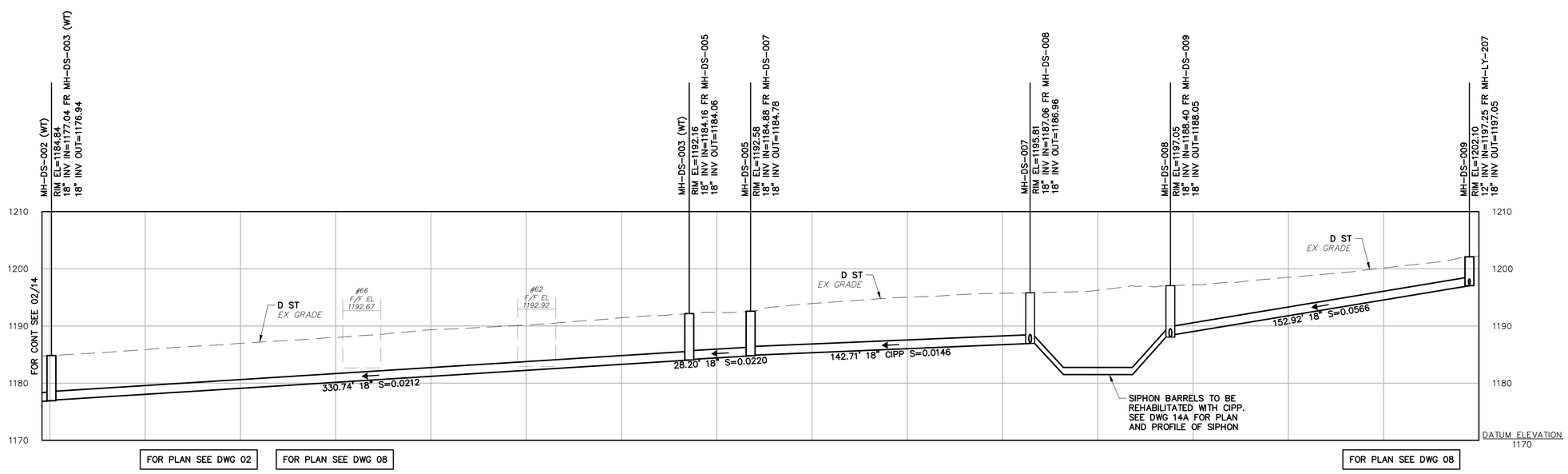

PROFILE 03/14

CONTRACT 2018-INT-01

PROFILE SCALE

HORIZONTAL : 30 0 30

VERTICAL : 10 0 10

Seal

Date

No.	Revisions	Date

Scale: AS NOTED
Date: JANUARY 2019
Drawn By: B.L.M.
Checked By: T.J.K.
Project No.: 0620-15-590
File No.: 4426

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CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

PROFILES

Drawing No.
14

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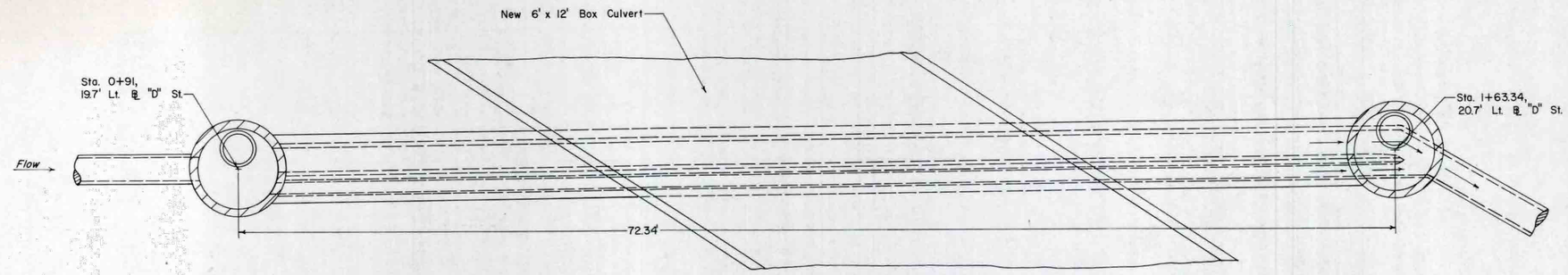

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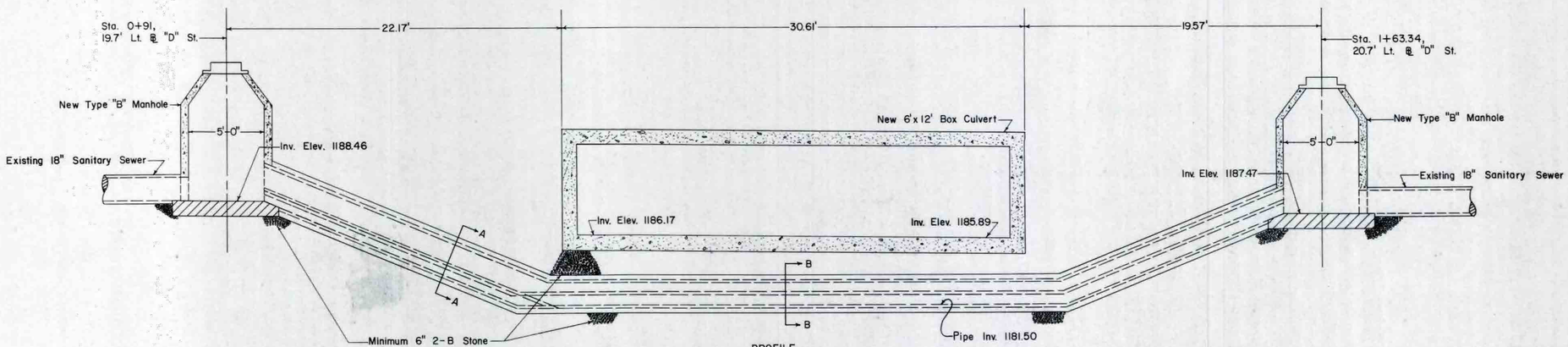
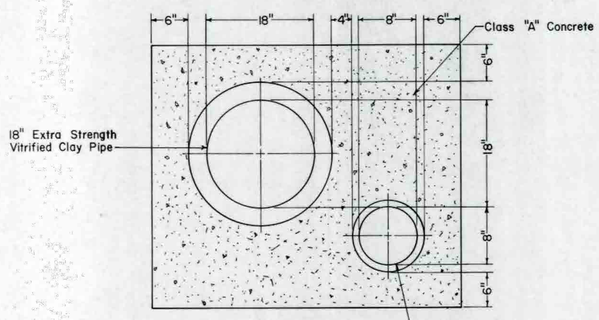
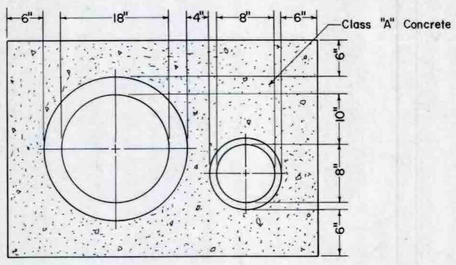
SCALE 1"=4'-0"



PROFILE
SCALE 1"=4'-0"



SECTION A-A
SCALE 1"=1'-0"



SECTION B-B
SCALE 1"=1'-0"

MARK	REVISIONS	DATE

THE CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

ELK RUN
SANITARY SEWER SIPHON

H. F. LENZ COMPANY
1732 LYTER DRIVE
JOHNSTOWN, PENNSYLVANIA 15905

SCALE NOTED	CITY CONT. NO.	H.F.L. CO. CONTRACT NO.	AUTH.
DATE 11-5-79	7943	78-183 C.D.	DWG. NO. S-9
DRW. BY J.J.H.			
CHK. BY S.J.N.			

Seal

Date

No.	Revisions	Date

Scale
AS NOTED
Date
AUGUST 2018
Drawn By
B.L.M.
Checked By
T.J.K.
Project No.
0620-15-590
File No.
4426

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CONTRACTS 2018-INT-01 / 2018-03
CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

D STREET SIPHON PLAN AND PROFILE

Drawing No.
14A

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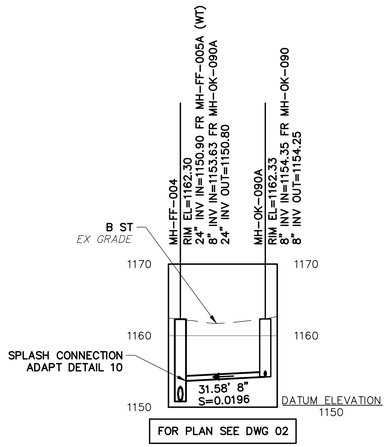
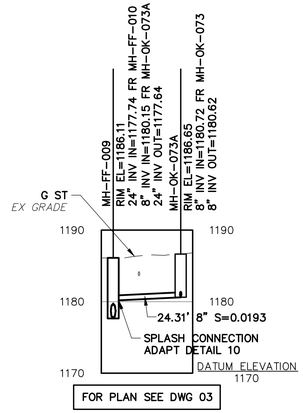


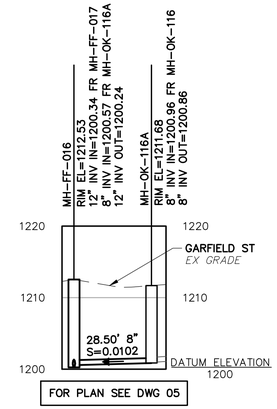
PROFILE 01/15

CONTRACT 2018-03



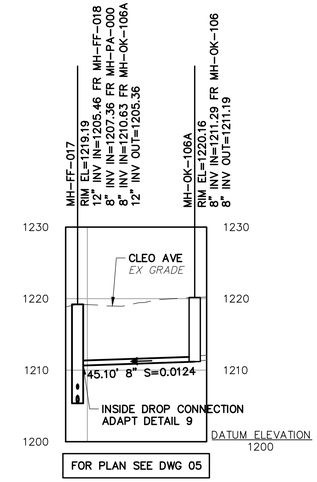
PROFILE 02/15

CONTRACT 2018-03



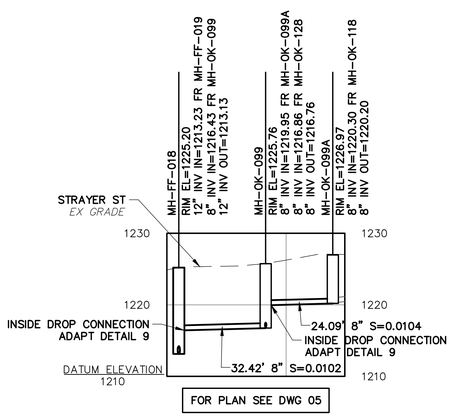
PROFILE 03/15

CONTRACT 2018-03



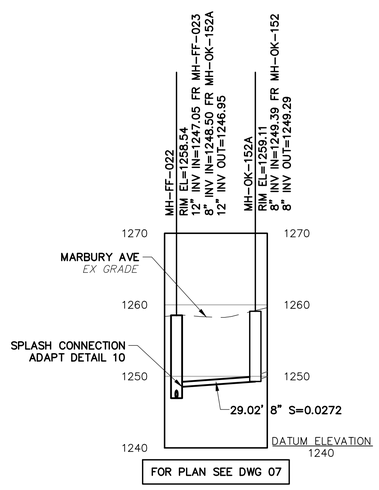
PROFILE 04/15

CONTRACT 2018-03



PROFILE 05/15

CONTRACT 2018-03



PROFILE 06/15

CONTRACT 2018-03

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PROFILE SCALE

HORIZONTAL : 30 0 30

VERTICAL : 10 0 10

Seal

Date

No.	Revisions	Date

Scale: AS NOTED
Date: AUGUST 2018
Drawn By: B.L.M.
Checked By: T.J.K.
Project No.: 0620-15-590
File No.: 4426

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CONTRACTS 2018-INT-01 / 2018-03
CITY OF JOHNSTOWN
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PROFILES

Drawing No.
15

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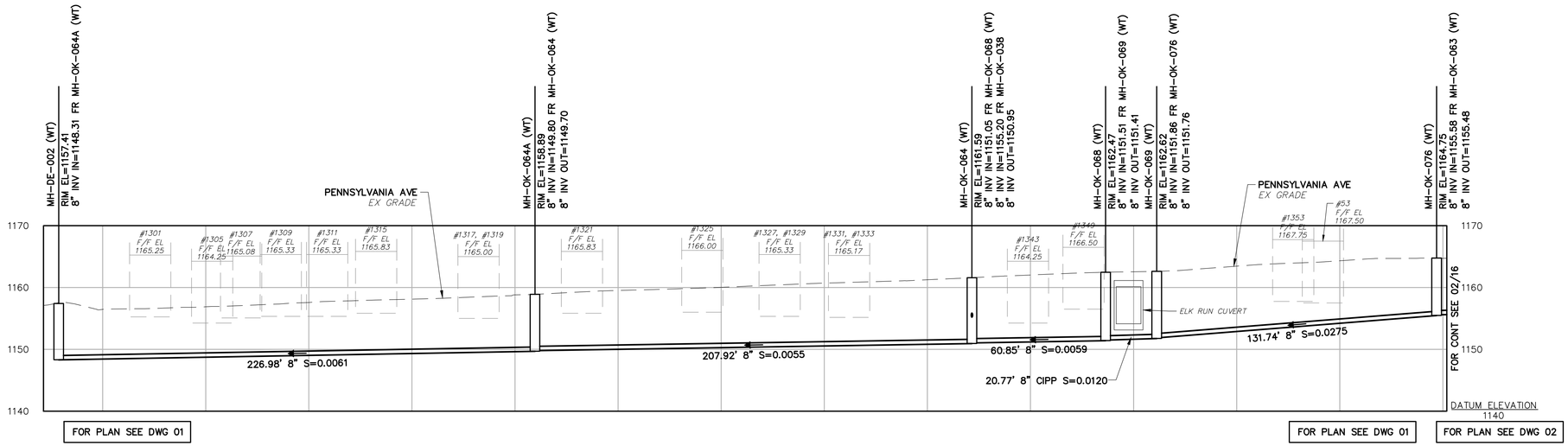
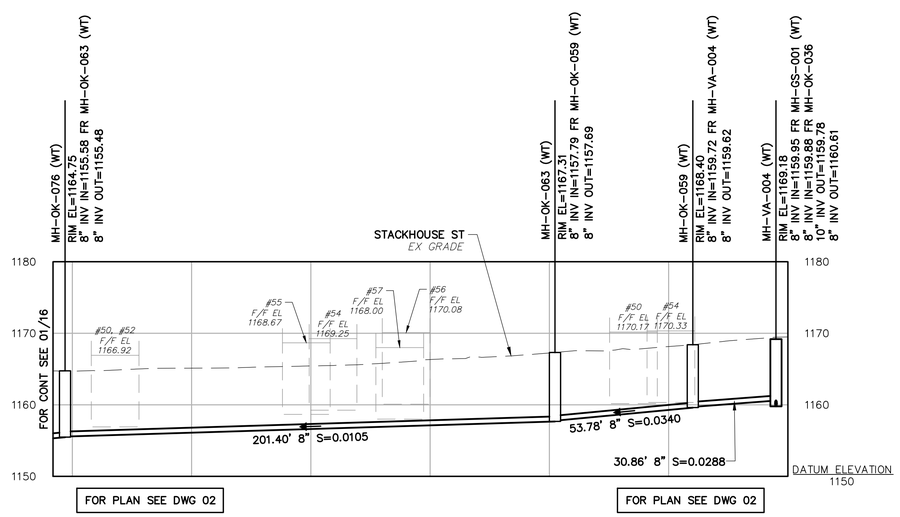


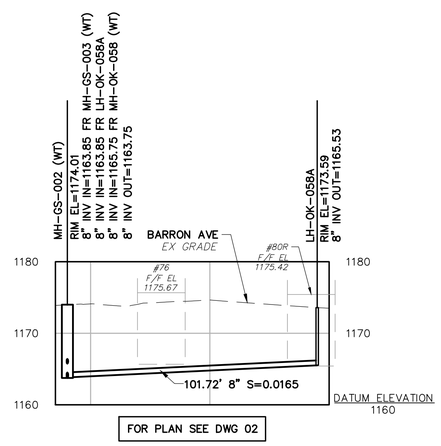
PROFILE 01/16

CONTRACT 2018-03



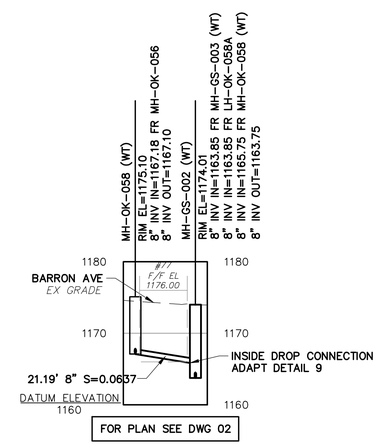
PROFILE 02/16

CONTRACT 2018-03



PROFILE 03/16

CONTRACT 2018-03



PROFILE 04/16

CONTRACT 2018-03

PROFILE SCALE

HORIZONTAL : 30 0 30

VERTICAL : 10 0 10

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CAMBRIA COUNTY, PENNSYLVANIA

PROFILES

Drawing No.
16

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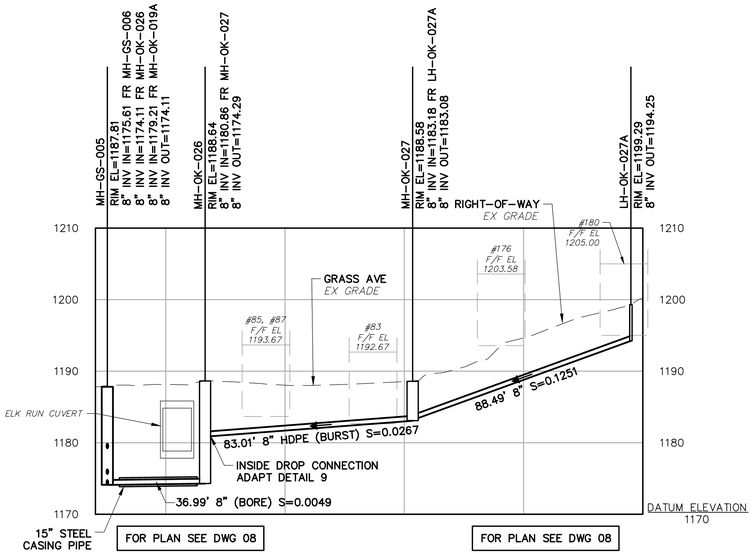
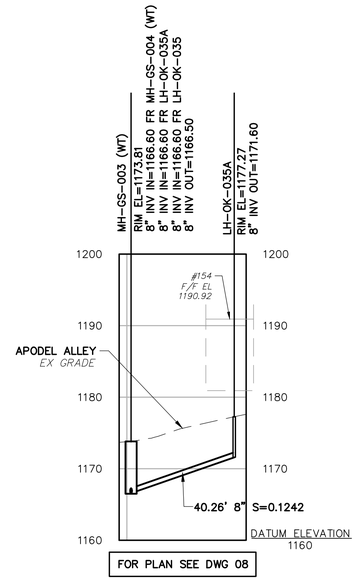


PROFILE 01/17

CONTRACT 2018-03



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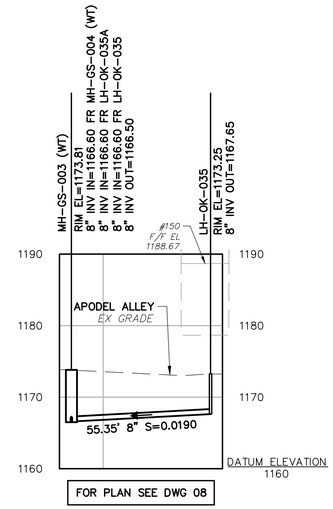

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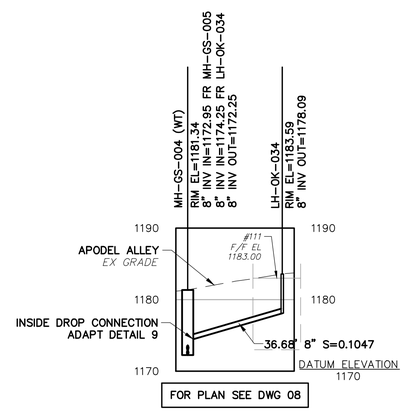

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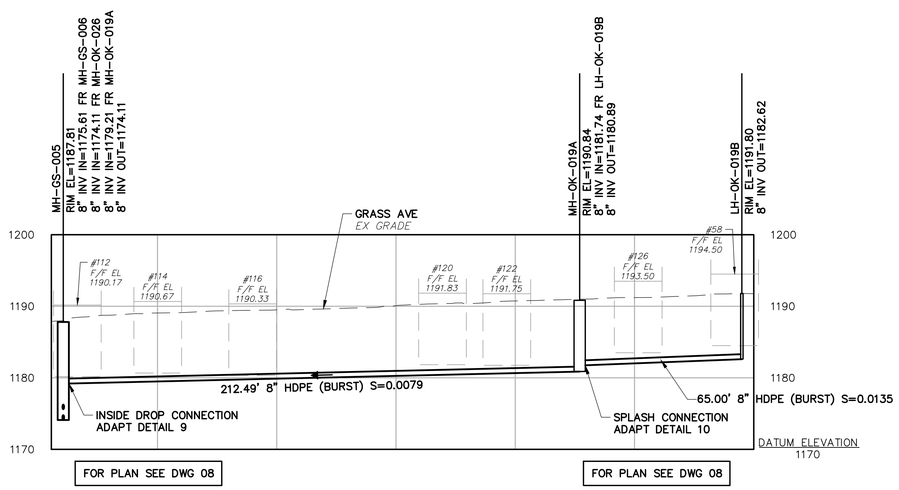

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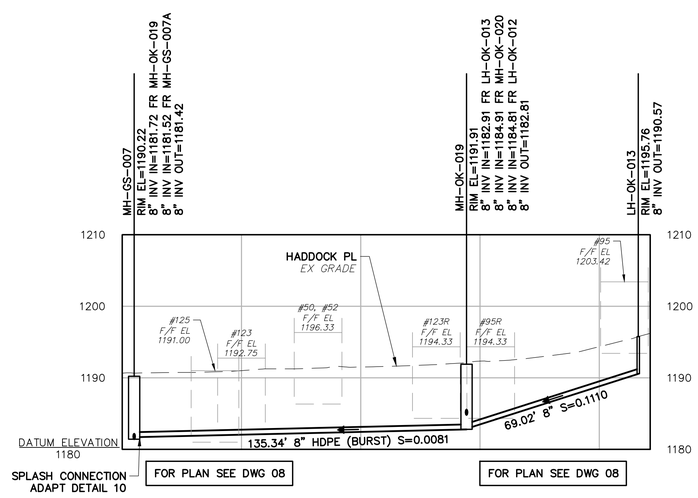
CONTRACT 2018-03



PROFILE 06/17

CONTRACT 2018-03

PROFILE GENERAL NOTES:

CONTRACTOR SHALL FIELD VERIFY BOTH EXISTING AND PROPOSED MANHOLE INVERT ELEVATIONS, PIPE SIZES, AND PIPE MATERIAL PRIOR TO ORDERING ANY MATERIALS. REPORT ALL DISCREPANCIES TO THE ENGINEER.

ALL PIPE CROSSINGS IN PROFILE VIEWS ARE SHOWN AT APPROXIMATE LOCATION AND DEPTH. CONTRACTOR SHALL PERFORM TEST PITS ON ALL CROSSINGS SHOWN IN PROFILE VIEW AND AS MUTUALLY AGREED UPON BY THE ENGINEER OR INSPECTOR IN CHARGE.

PROFILE SCALE

HORIZONTAL : 30 0 30

VERTICAL : 10 0 10

Seal

Date

No.	Revisions	Date

Scale AS NOTED
Date JANUARY 2019
Drawn By B.L.M.
Checked By T.J.K.
Project No. 0620-15-590
File No. 4426

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JOHNSTOWN REDEVELOPMENT AUTHORITY / CITY OF JOHNSTOWN
FAIRFIELD AVENUE INTERCEPTOR
& STORM WATER SEPARATION PROJECT
CONTRACTS 2018-INT-01 / 2018-03
CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

PROFILES

Drawing No.
17

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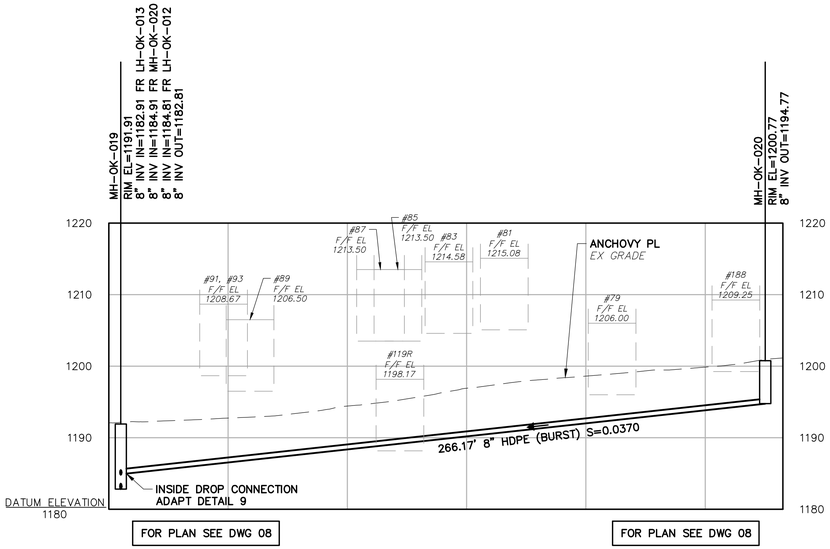
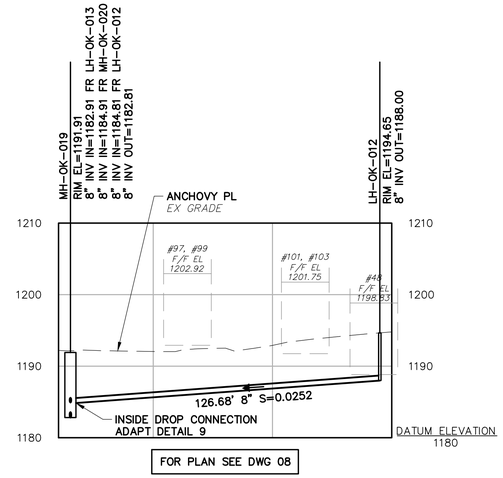


PROFILE 01/18

CONTRACT 2018-03



PROFILE 02/18

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VERTICAL : 10 0 10

Seal

Date

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Scale: AS NOTED
Date: JANUARY 2019
Drawn By: B.L.M.
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CAMBRIA COUNTY, PENNSYLVANIA

PROFILES

Drawing No.
18

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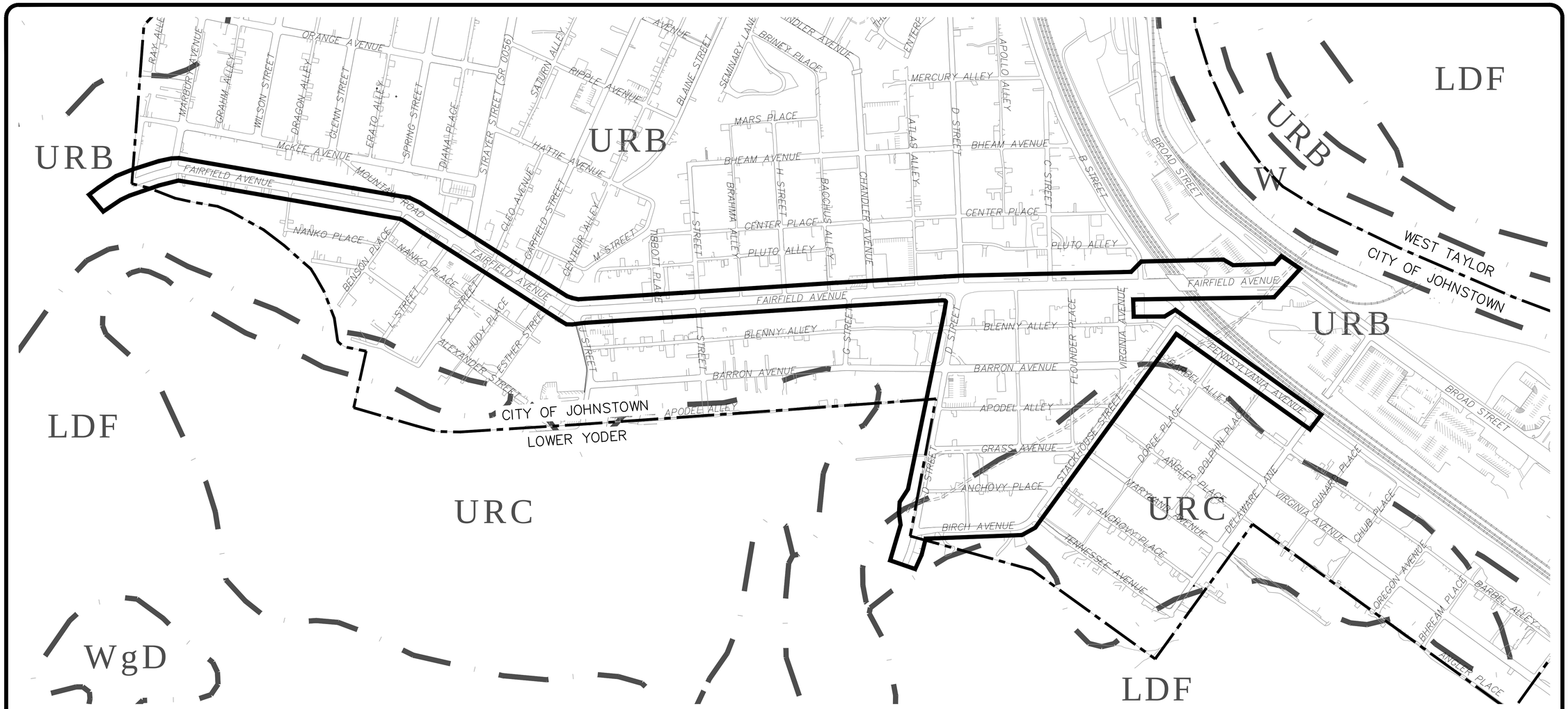

SYMBOL LEGEND

- CORPORATE BOUNDARY
- E&S PERMIT BOUNDARY
- SOIL BOUNDARY
- URB — SOIL TYPE

EROSION & SEDIMENTATION CONTROL PLAN

SCALE: 1" = 300'

300 0 300

GENERAL NOTES:

1. FOR LIMITS OF DISTURBANCE, SEE LIMITS OF DISTURBANCE DETAIL ON SHEET ES-3.
2. THE RECEIVING WATERS OF THE COMMONWEAL ARE ST. CLAIR RUN AND ELK RUN WHICH ARE CLASSIFIED AS COLD WATER FISHES (CWF) AND THE CONEMAUGH RIVER WHICH IS CLASSIFIED AS WARM WATER FISHES (WWF) BY TITLE 25, CHAPTER 93, OF THE PENNSYLVANIA CODE.
3. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

Seal

Date

No.	Revisions	Date

Scale: AS NOTED
Date: AUGUST 2018
Drawn By: B.L.M.
Checked By: T.J.K.
Project No.: 0620-15-590
File No.: 4426

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JOHNSTOWN REDEVELOPMENT AUTHORITY / CITY OF JOHNSTOWN

FAIRFIELD AVENUE INTERCEPTOR & STORM WATER SEPARATION PROJECT CONTRACTS 2018-INT-01 / 2018-03

CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

EROSION & SEDIMENTATION CONTROL PLAN

Drawing No.
ES-1

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LIME AND FERTILIZER

1. LIME SHALL BE PULVERIZED AGRICULTURAL LIMESTONE CONTAINING A MINIMUM OF 85% TOTAL CARBONATES, GROUND SO THAT AT LEAST 90% PASSES A NO. 20 SIEVE AND AT LEAST 50% PASSES A NO. 100 SIEVE. LIME SHALL BE APPLIED AT THE RATE OF EIGHT HUNDRED (800) POUNDS (LBS.) PER ONE THOUSAND (1,000) SQUARE YARDS.

2. FERTILIZER SHALL BE STANDARD 10-20-20 COMMERCIAL PRODUCT IN BAGS SHOWING WEIGHT ANALYSIS AND MANUFACTURER'S NAME. AVAILABILITY OF THE VARIOUS ELEMENTS SHALL CONFORM TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. FERTILIZER SHALL BE APPLIED AT THE RATE OF ONE HUNDRED FORTY (140) POUNDS (LBS.) PER ONE THOUSAND (1,000) SQUARE YARDS. BOTH LIME AND FERTILIZER SHALL BE WORKED INTO THE TOPSOIL TO A DEPTH OF 2" BY RAKING, DISCING OR HARROWING.

3. FERTILIZER AND LIME SHALL NOT BE USED OR APPLIED WITHIN WETLANDS.

MULCHING

1. APPLY MULCH WITHIN 48 HOURS AFTER SEEDING, AND AT MINIMUM RATE OF SIX THOUSAND (6,000) POUNDS (LBS.) PER ACRE. MECHANICAL BLOWER WILL BE ALLOWED TO APPLY MULCH PROVIDED MACHINE IS SPECIFICALLY DESIGNED AND APPROVED FOR THIS PURPOSE. MACHINES THAT CUT MULCH INTO SHORT PIECES WILL NOT BE PERMITTED.

2. ANCHOR MULCH BY USE OF TWINE AND STAKES, WIRE STAPLES, PAPER OR PLASTIC NETS, OR OTHER MEANS APPROVED BY ENGINEER. EMULSIFIED ASPHALT WILL BE ALLOWED PROVIDED IT IS APPLIED UNIFORMLY AT A RATE OF THREE AND FOUR-TENTHS (3.4) GALLONS PER ONE THOUSAND (1,000) SQUARE FEET.

SEEDING SPECIFICATIONS

FORMULA AND SPECIES	% BY WEIGHT	MINIMUM % PURITY	MINIMUM % GERMINATION	MAX % WEED SEED	SEEDING RATE LB/1000 YD^2
FORMULA B (LAWNS)					42.0 TOTAL
• PERENNIAL RYEGRASS MIXTURE (LOLIUM PERENNE). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT.	20	97	90	0.10	8.5
• CREEPING RED FESCUE OR CHEWINGS FESCUE (FESTUCA RUBRA OR SSP COMMUTATE) (IMPROVED AND CERTIFIED)	30	97	85	0.10	12.5
• KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL BLUEGRASS COMPONENT.	50	97	80	0.15	21.0
FORMULA D CONSERVATION MIX (SLOPES < 3:1)					50.0 TOTAL
• TALL FESCUE (FESTUCA ARUNDINACEA VAR. KENTUCKY 31)	60	96	85	0.10	30.0
• CREEPING RED FESCUE OR CHEWINGS FESCUE (FESTUCA RUBRA OR SSP COMMUTATE) (IMPROVED AND CERTIFIED)	30	97	85	0.10	15.0
• ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	10	95	90	0.10	5.0
FORMULA E (TEMPORARY SEEDING)					10.0 TOTAL
• ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	100	95	90	0.10	10.0
FORMULA L MIX (SLOPES 3:1 OR GREATER)					48.0 TOTAL
• HARD FESCUE MIXTURE (FESTUCA LONGIFOLIA). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL HARD FESCUE COMPONENT	55	97	85	0.10	26.4
• CREEPING RED FESCUE (FESTUCA RUBRA) (IMPROVED AND CERTIFIED)	35	97	85	0.10	16.8
• ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	10	95	90	0.10	4.8

TEMPORARY SEEDING AND MULCHING

IN AREAS WHERE PERMANENT SEEDING WILL NOT BE PERFORMED WITHIN A PERIOD OF 4 DAYS AFTER THE EXCAVATION OR EMBANKMENT OPERATION HAVE BEEN SUSPENDED, TEMPORARY SEEDING CONSISTING OF ANNUAL RYE GRASS SHALL BE APPLIED AT THE RATE OF 10 POUNDS (LBS.) PER ONE THOUSAND (1,000) SQUARE YARDS AND MULCHED. TEMPORARY SEEDING AND/OR MULCHING FOR EXPOSED AREAS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THIS PROJECT AND NO ADDITIONAL COMPENSATION WILL BE MADE.

SOILS INFORMATION

DISTURBED SOILS

SYMBOL	NAME	SLOPE (%)	SURFACE RUNOFF CLASS	DEPTH OF BEDROCK (INCHES)	DEPTH TO SEASONAL HIGH H2O TABLE (INCHES)	NATURAL DRAINAGE CLASS	CAPABILITY SUB CLASS	HYDROLOGIC SOIL GROUP	HYDRIC SOIL
LDF	LAIDIG SOILS	25-70	HIGH	>80	28 TO 36	WELL	7e	B	NO
URB	URBAN LAND-UDORTHENTS COMPLEX	3-8		>80	>80	MODERATELY WELL	7s	A	NO
URC	URBAN LAND-UDORTHENTS COMPLEX	8-15		>80	>80	MODERATELY WELL	7s	A	NO

CAPABILITY/SUBCLASS CLASSIFICATION

1 - SOILS HAVE SLIGHT LIMITATIONS THAT RESTRICT THEIR USE

2 - SOILS HAVE SOME LIMITATIONS THAT REDUCE THE CHOICE OF PLANTS OR THAT REQUIRE SPECIAL CONSERVATION PRACTICES OR BOTH

3 - SOILS HAVE SEVERE LIMITATIONS THAT REDUCE THE CHOICE OF PLANTS OR THAT REQUIRE SPECIAL CONSERVATION PRACTICES OR BOTH

4 - SOILS HAVE VERY SEVERE LIMITATIONS THAT REDUCE THE CHOICE OF PLANTS OR THAT REQUIRE SPECIAL CONSERVATION PRACTICES OR BOTH

5 - SOILS THAT ARE NOT LIKELY TO ERODE BUT HAVE OTHER LIMITATIONS, IMPRACTICAL TO REMOVE WITHOUT MAJOR RECLAMATION

6 - SOILS HAVE SEVERE LIMITATIONS THAT MAKE THEM GENERALLY UNSUITABLE FOR CULTIVATION

7 - SOILS AND MISCELLANEOUS HAVE LIMITATIONS THAT NEARLY PRECLUDE THEIR USE FOR COMMERCIAL CROP PRODUCTION

8 - SOILS AND MISCELLANEOUS AREAS HAVE LIMITATIONS THAT PRECLUDE COMMERCIAL PLANT PRODUCTION AND THAT RESTRICT THEIR USE TO RECREATIONAL PURPOSES, WILDLIFE HABITAT, WATERSHED, OR ESTHETIC PURPOSES.

e - MAIN RISK IS EROSION

w - WATER INTERFERES WITH PLANT GROWTH OR CULTIVATION

s - LIMITED BECAUSE IT IS SHALLOW, DROUGHTY, OR STONY

GENERAL NOTES

* THE ABOVE SOILS INFORMATION IS PROVIDED FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE WEB SOIL SURVEY AS GENERAL INFORMATION ONLY.

* IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ACTUAL SITE CONDITION.

EROSION AND SEDIMENTATION CONTROL GENERAL NOTES:

1. COMMENCEMENT OF CONSTRUCTION ACTIVITIES ANTICIPATED IN EARLY 2019, WITH CONSTRUCTION ACTIVITIES LASTING APPROXIMATELY 1 YEAR.

2. SITE CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL STANDARDS, SPECIFICATIONS, AND REQUIREMENTS.

3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND DETAILS FOR NEW IMPROVEMENTS.

4. EROSION AND SEDIMENTATION CONTROLS SHALL BE PROVIDED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN, PRIOR TO ANY CLEARING, GRUBBING, AND CONSTRUCTION.

5. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

6. CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES BY TEST PITS PRIOR TO CONSTRUCTION IN THE VICINITY OF THE UTILITIES.

7. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE CAMBRIA COUNTY CONSERVATION DISTRICT FOR ANY BORROW OR WASTE AREAS.

8. THE SUBJECT WORK AREA IS IN A SINGLE FAMILY RESIDENTIAL AREA WITH BITUMINOUS PAVED STREETS, GRASS ALLEYS AND GRASS LAWNS. THE PROPOSED USE CONSISTS OF THE INSTALLATION OF NEW SANITARY SEWER LINE TO REPLACE DETERIORATED OLD VITRIFIED CLAY SEWER MAINS & APPURTENANCES.

9. OPEN ONLY SUFFICIENT TRENCH LENGTH FOR UTILITY LINE REPLACEMENT WHICH CAN BE STABILIZED IN A SINGLE WORK PERIOD. PLACE EXCAVATED MATERIAL ON UPSLOPE SIDE OF TRENCH, WHERE POSSIBLE.

10. AT THE END OF EACH WORKING DAY, ANY SEDIMENT TRACKED OR CONVEYED ONTO A PUBLIC ROADWAY WILL BE REMOVED AND REDEPOSITED ONTO THE CONSTRUCTION SITE. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS, BUT MUST NEVER BE WASHED OFF THE ROAD BY USE OF WATER.

11. VEGETATION WILL BE OF "LAWN" QUALITY AND THE SITE WILL BE STABILIZED WHEN A 70% UNIFORM VEGETATIVE COVER HAS BEEN ESTABLISHED.

12. ALL CONSTRUCTION WASTES OTHER THAN NATURAL SOILS SHALL BE REMOVED FROM THE SITE AND EITHER RECYCLED OR DISPOSED AT AN APPROVED DISPOSAL FACILITY.

13. EARTH DISTURBANCE OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE ACCELERATED SOIL EROSION IN ACCORDANCE WITH THE PA DEP "SOIL EROSION AND SEDIMENTATION CONTROL MANUAL" MARCH 2012, AND AS SHOWN ON THE DRAWINGS.

14. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO INSTALL THE EROSION AND SEDIMENTATION CONTROL BMP'S.

15. EROSION AND SEDIMENT CONTROL BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.

16. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.

17. ANY DISTURBED AREA ON WHICH GRADING OPERATIONS CEASE FOR FOUR (4) OR MORE DAYS SHALL HAVE INTERIM SOIL STABILIZATION MEASURES APPLIED, SUCH AS TEMPORARY SEEDING AND MULCHING AND SILT BARRIER FENCE.

18. MULCH SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.

19. IN THE EVENT THAT WATER NEEDS TO BE PUMPED FROM A TRENCH OR OTHER DEPRESSION, THE FILTER BAG FACILITY WILL BE USED.

MAINTENANCE SCHEDULE:

1. THE EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL GROUND DISTURBING ACTIVITIES CEASE AND THE SITE IS STABILIZED, (70% UNIFORM VEGETATION OR AGGREGATE BASE), ALL EROSION AND SEDIMENT "BEST MANAGEMENT PRACTICES" (BMP'S) MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS.

2. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY.

3. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.

4. SEDIMENT REMOVED FROM THE BMP'S SHALL BE PLACED IN AN AREA CONTROLLED BY SEDIMENT BMP'S OR REMOVED FROM THE SITE AND DISPOSED AT THE CONTRACTOR'S APPROVED DISPOSAL AREA.

5. DEP FORM 3150-FM-BWEW0083 DATED 2/2012 SHOWING DATES THAT E&S BMP'S WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.

SEWERLINE CONSTRUCTION STAGING/SEQUENCE:

1. CONTACT THE CAMBRIA COUNTY CONSERVATION DISTRICT AT LEAST SEVEN (7) DAYS PRIOR TO THE INTENDED START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING TO BE HELD WITH THE CONSERVATION DISTRICT AND THE PROJECT ENGINEER. THE CITY OF JOHNSTOWN AND CAMBRIA COUNTY SHALL ALSO BE NOTIFIED IN WRITING 3 DAYS PRIOR TO THE MEETING.

2. EACH STEP IN THE CONSTRUCTION SEQUENCE SHALL BE COMPLETED BEFORE INITIATION OF THE NEXT STEP.

3. IF ANY AREA OF THE SITE NEEDS DEWATERED AT ANY TIME DURING CONSTRUCTION, USE EITHER A FILTER BAG FACILITY OR OTHER APPROVED DEWATERING METHOD.

4. THE CONTRACTOR NEEDS TO MAKE ARRANGEMENTS WITH PROPERTY OWNERS AND/OR THE LOCAL MUNICIPALITIES FOR THE STORAGE OF CONSTRUCTION MATERIALS AND PARKING OF CONSTRUCTION EQUIPMENT.

5. INSTALL EROSION AND SEDIMENTATION CONTROL DEVICES AS SHOWN AND AS FIELD CONDITIONS WARRANT. INSTALL INLET PROTECTION AS DETAILED TO PREVENT SEDIMENT LADEN WATER FROM ENTERING DOWNSTREAM WATERWAYS.

6. OPEN ONLY SUFFICIENT TRENCH LENGTH THAT CAN BE STABILIZED IN A SINGLE WORK PERIOD. PLACE ALL EXCAVATION MATERIAL UPSLOPE OF THE TRENCH. STABILIZE AS SOON AS POSSIBLE.

7. EXCAVATION, INSTALLATION, AND TESTING OF PIPING AND BACKFILL SHALL BE CONDUCTED AS PER THE SPECIFICATION AND DETAILS. USE THE FILTER BAG FACILITY IF DEWATERING IS REQUIRED.

8. FINISHED GRADING IS TO MATCH EXISTING CONTOURS AS CLOSE AS POSSIBLE. BANKS AND SLOPES ARE TO BE STABILIZED AS SOON AS POSSIBLE.

9. STABILIZE SITE WITH AGGREGATE IN PAVED AREAS AND PERMANENT SEEDING AND MULCH IN GRASSED AREAS IMMEDIATELY AFTER REACHING FINAL GRADE. ADDITIONAL MULCH AND SEED WILL BE REQUIRED UNTIL THE PROJECT AREA IS STABILIZED BY PERENNIAL VEGETATIVE COVER. AN AREA IS DEEMED STABILIZED WHENEVER THERE IS A MINIMUM 70% UNIFORM VEGETATIVE COVER.

10. MAINTAIN EROSION AND SEDIMENTATION CONTROL DEVICES UNTIL THE SITE IS DECLARED SATISFACTORY STABILIZED BY THE ENGINEER OR CAMBRIA COUNTY CONSERVATION DISTRICT.

MULCHING NOTES:

1. STRAW SHALL BE UNROTTED, SMALL, GRAIN FREE OF ALL KINDS OF WEEDS AND PROHIBITIVE NOXIOUS WEEDS SUCH AS: THISTLES, JOHNSONGRASS AND QUACKGRASS.

2. WOOD CELLULOSE SHALL BE GREEN DYED AND AIR-DRIED WOOD CELLULOUS FIBERS, CONTAINING NO GROWTH OR GERMINATION INHIBITING SUBSTANCES, IN PACKAGES NOT EXCEEDING ONE HUNDRED (100) POUNDS (LBS.) NET WEIGHT SHOWN ON PACKAGE AND MEETING THE FOLLOWING:
   A. MOISTURE CONTENT: 14% +/- 3%
   B. ORGANIC MATTER (OVEN DRIED BASIS): 98.6 +/- 0.2%
   C. ASH CONTENT: 1.4% +/- 0.2%
   D. WATER HOLDING CAPACITY: 1000 GRAMS OF WATER PER 100 GRAMS FIBER

3. SHREDDED BARK SHALL BE SUITABLE FIBROUS GROUND, SHREDDED OR CHUNKS, AGED HARDWOOD BARK, FREE FROM VIABLE, NOXIOUS WEED SEEDS AND INSECT LIFE NOT DECOMPOSED AND BETWEEN 1/4" AND 2" IN DIMENSION.

4. A. EMULSIFIED ASPHALT SHALL COMFORM TO PADOT STANDARDS CONTAINING NO SOLVENTS OR DILUTING AGENTS TOXIC TO PLANT LIFE AND NOT MORE THAN 0.75% OF SAPONIFIABLE ACIDS.

   B. CUTBACK ASPHALT SHALL COMFORM TO PADOT STANDARDS.

   C. NON ASPHALTIC EMULSION SHALL BE NATURAL VEGETABLE GUM BLENDED WITH JELLING AND HARDENING AGENTS (TERRA TACK AR) AS MANUFACTURED BY GRASS GROWERS COMPANY OR EQUAL.

   D. OTHER MULCH BINDERS AS APPROVED BY THE PADEP BUREAU OF LAND AND WATER CONSERVATION.

4. HAY OR STRAW MULCH MUST BE APPLIED AT RATES OF AT LEAST 2.9 TONS PER ACRE.

RECEIVING WATERS OF THE COMMONWEALTH

NAME	CHAPTER 93 CLASSIFICATION
CONEMAUGH RIVER	WARM WATER FISHES
ELK RUN	COLD WATER FISHES
SAINT CLAIR RUN	COLD WATER FISHES

RESPONSIBILITY FOR FILL MATERIALS:

THE CONTRACTOR SHALL ONLY USE CLEAN FILL ON THIS PROJECT SITE. CLEAN FILL IS DEFINED AS FILL THAT IS UNCONTAMINATED, NONWATER-SOLUBLE, NON-DECOMPOSABLE, INERT SOLID MATERIAL USED TO LEVEL AN AREA OR BRING THE AREA TO GRADE. THE TERM DOES INCLUDE THE FOLLOWING MATERIALS: SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND RECOGNIZABLE AS SUCH. IT DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE SURFACE WATERS UNLESS OTHERWISE AUTHORIZED, MILLED ASPHALT, OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE. TO DETERMINE IF THE FILL IS CLEAN THE CONTRACTOR MUST PERFORM AN ENVIRONMENTAL DUE DILIGENCE WHICH IS DEFINED AS INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF OWNERSHIP AND USE HISTORY OF PROPERTY, SANDBORNE MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ENVIRONMENTAL ASSESSMENTS AND AUDITS.

RECYCLING OR DISPOSAL OF CONSTRUCTION MATERIALS:

CONTRACTOR MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHERE POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.

ALL RECYCLABLE MATERIAL SHALL BE SEPARATED AND BE TAKEN TO AN APPROPRIATE RECYCLING FACILITY. ALL OTHER WASTE MATERIALS, EXCEPT EXCESS SOIL, SHALL BE DISPOSED OF OFF-SITE AT A LEGAL SANITARY LANDFILL. EXCESS SOIL WASTE AND BORROW AREAS SHALL RECEIVE PRIOR APPROVAL FROM THE CONSERVATION DISTRICT AND SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED.

THE CONTRACTOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.

GEOLOGIC FORMATIONS / SOIL CONDITIONS:

NO KNOWN NATURALLY OCCURRING GEOLOGIC FORMATIONS OR SOIL CONDITIONS EXIST ON THE PROJECT SITE THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION DURING EARTH DISTURBANCE ACTIVITIES. IF ANY SUCH FORMATIONS OR SOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL HALT CONSTRUCTION AND CONTACT THE ENGINEER PRIOR TO ANY ADDITIONAL EARTH MOVING ACTIVITIES.

BASED UPON THE PROPOSED PROJECT SCOPE AND OUR REVIEW OF THE SOIL LIMITATIONS LISTED IN THE SOIL REPORTS, WE DO NOT ANTICIPATE ANY MAJOR ISSUES WITH THE SOILS EXISTING ON THE SITE. IF ANY SOIL LIMITATION ISSUES ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL HALT CONSTRUCTION AND CONTACT THE ENGINEER PRIOR TO ANY ADDITIONAL EARTH MOVING ACTIVITIES.

MINIMIZE SOIL COMPACTION:

SOIL COMPACTION WILL BE MINIMIZED BY REDUCING THE SITE DISTURBANCE OF THE PROJECT AREA THROUGH DESIGN AND CONSTRUCTION PRACTICES.

POTENTIAL THERMAL IMPACTS:

IMPERVIOUS AREAS INCLUDING, BUT NOT LIMITED TO, ASPHALT AND CONCRETE ABSORB HEAT THAT PRODUCE TEMPERATURE EXTREMES OF RUNOFF THAT CAN SIGNIFICANTLY AFFECT RECEIVING STREAM AQUATIC HABITAT. NO KNOWN INCREASE IN THERMAL IMPACTS TO SURFACE WATERS WILL RESULT FROM EARTH DISTURBANCE ACTIVITIES. THE PROPOSED PROJECT WILL NOT CHANGE THE EXISTING COVER TYPES AND THERE ARE NO ADDITIONAL IMPERVIOUS AREAS OR PAVEMENT PROPOSED WITH THE PROJECT.

Seal

Date

No.	Revisions	Date

Scale AS NOTED
Date AUGUST 2018
Drawn By B.L.M.
Checked By T.J.K.
Project No. 0620-15-590
File No. 4426

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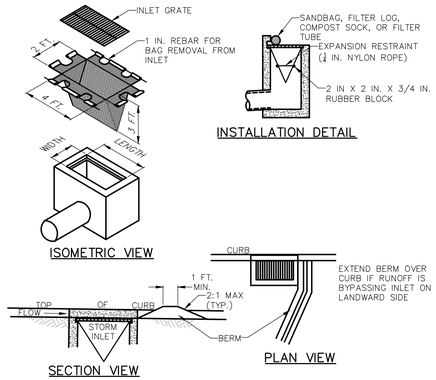
JOHNSTOWN REDEVELOPMENT AUTHORITY / CITY OF JOHNSTOWN
FAIRFIELD AVENUE INTERCEPTOR
& STORM WATER SEPARATION PROJECT
CONTRACTS 2018-INT-01 / 2018-03
CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

EROSION & SEDIMENTATION CONTROL NOTES

Drawing No.
ES-2

R:\4426 – JOHNSTOWN REDEVELOPMENT AUTHORITY\15590 Fairfield Ave inter\06 CADD\20 MS\ES2 & ES3.dwg 8/28/2018 9:49 AM



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

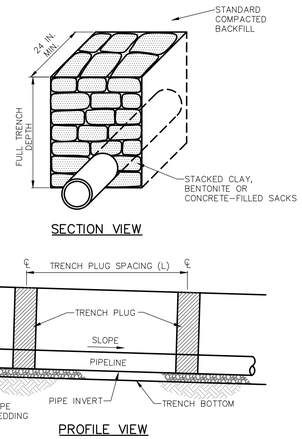
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET

NOT TO SCALE



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

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

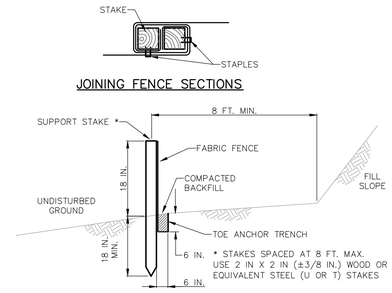
* TOPSOIL MAY NOT BE USED TO FILL SACKS

NOTES:

IMPERVIOUS TRENCH PLUGS ARE REQUIRED FOR ALL STREAM, RIVER, WETLAND, OR OTHER WATER BODY CROSSINGS.

STANDARD CONSTRUCTION DETAIL #13-4
TRENCH PLUG INSTALLATION

NOT TO SCALE



NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

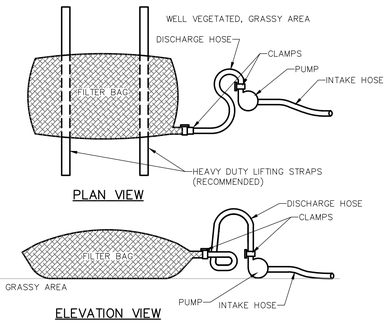
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4-6).

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

STANDARD CONSTRUCTION DETAIL #4-7
STANDARD SILT FENCE (18" HIGH)

NOT TO SCALE



NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

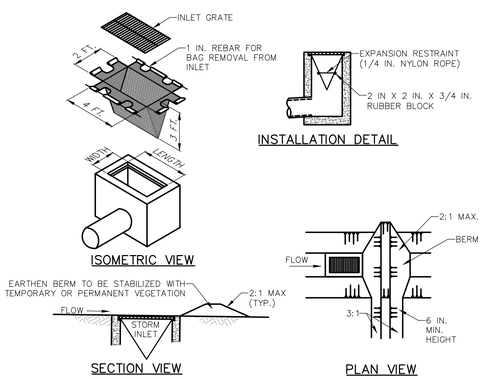
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG

NOT TO SCALE



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

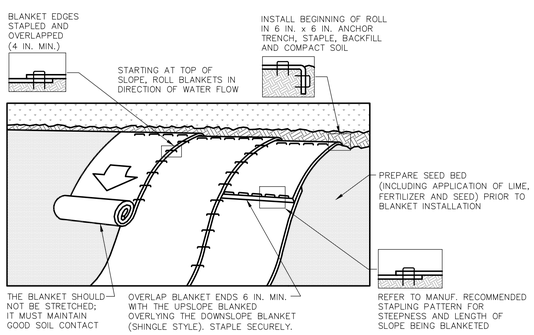
INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET

NOT TO SCALE

THIS DETAIL SHALL BE USED ON ALL CUT AND FILL SLOPES 3:1 OR GREATER



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

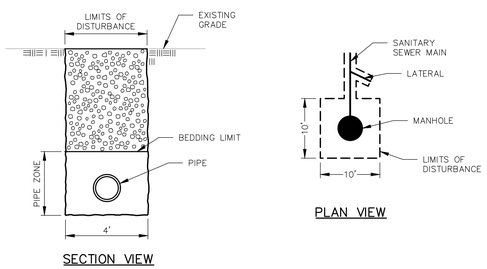
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

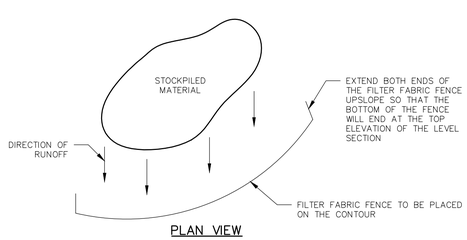
STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION

NOT TO SCALE



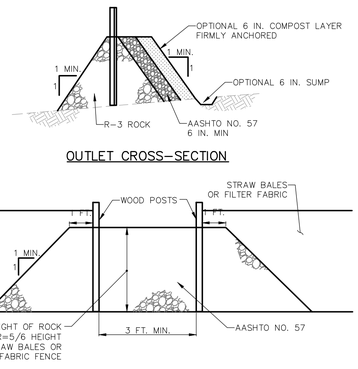
LIMITS OF DISTURBANCE

NOT TO SCALE



EROSION PROTECTION OF STOCKPILED MATERIAL

NOT TO SCALE



NOTES:

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET

NOT TO SCALE

Seal

No.	Revisions	Date

Scale AS NOTED
Date AUGUST 2018
Drawn By B.L.M.
Checked By T.J.K.
Project No. 0620-15-590
File No. 4426

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JOHNSTOWN REDEVELOPMENT AUTHORITY / CITY OF JOHNSTOWN
FAIRFIELD AVENUE INTERCEPTOR
& STORM WATER SEPARATION PROJECT
CONTRACTS 2018-INT-01 / 2018-03
CITY OF JOHNSTOWN
CAMBRIA COUNTY, PENNSYLVANIA

EROSION & SEDIMENTATION CONTROL DETAILS

Drawing No.
ES-3

R:\4426 - JOHNSTOWN REDEVELOPMENT AUTHORITY\1590 Fairfield Ave Inter\06 CADD\20 MS\ES2 & ES3.dwg 8/28/2018 9:48 AM

COMMONWEALTH OF PENNSYLVANIA
County of Cambria } SS

PUBLIC NOTICE
City of Johnstown/Johnstown Redevelopment Authority—Fairfield Avenue Interceptor & Storm Water Separation Project

The City of Johnstown & the Johnstown Redevelopment Authority are in the process of applying for loans from PENNVEST (Pennsylvania Infrastructure Investment Authority) to fund the sanitary and storm sewer rehabilitation along Fairfield Avenue in the Morrellville neighborhood of the City of Johnstown. Construction is scheduled to begin in September 2019 that will replace the Johnstown Redevelopment Authority's interceptor sewers and the City of Johnstown's laterals and collection lines. The amount of the loan is estimated to be about 5.2 million dollars for the City of Johnstown and about 8.5 million dollars for the Johnstown Redevelopment Authority both to be repaid over a minimum twenty year period with an average interest rate of approximately one percent. City and Johnstown Redevelopment Authority customer's user rates will not be affected by the repayment of this loan. The project is being considered for an environmental review Categorical Exclusion.

A 30-day comment period has been established to allow the general public to review and comment on the proposed project. The 30-day period will begin on January 18, 2019 and conclude on February 18, 2019. The general public may provide written comments to The EADS Group, Inc., 227 Franklin Street, Suite 300, Johnstown, PA, 15901. Written public comments will be accepted until February 18, 2019. Plans for the proposed project can be viewed at City Hall, 401 Main Street, Room 102, Johnstown, PA, 15901, Monday through Friday from 9:00 am to 4:00 pm.

On this 25th day of January A.D. 2019, before me, the subscriber, a Notary Public in and for said County and State, personally appeared Christine Marhefka, who being duly sworn according to law, deposes and says as Sales Manager / Major Accounts of the Tribune-Democrat, Johnstown, PA, a newspaper of general circulation as defined by the "Newspaper Advertising Act", a merger September 8, 1952, of the Johnstown Tribune, established December 7, 1853; and of the Johnstowu Democrat, established March 5, 1863,

publi ounty of Cambria, and Commonwealth of Pennsylvania and that above matter published in said publication in the regular issues of Th , PA, on January 18, 2019; and that the Affiant is not inter dvertising and that all of the allegations as to time, place and character of said publication are true.

Christine Marhefka

STATEMENT OF ADVERTISING COSTS

Signed and sworn to before me on
25th day of January, 2019,
by Christine Marhefka making the statement.

0.00 Lines @ $2.50 per line	0.00
65 Inches @ $25.00 per inch	162.50
Notary Fee	5.00
Clerical Fee	2.50
Total Cost	170.00

Commonwealth of Pennsylvania - Notary Seal
Vivian Ohs, Notary Public
Cambria County
My commission expires December 6, 2020
Commission number 1123017
Member, Pennsylvania Association of Notaries

To The Tribune-Democrat, Johnstown, PA
For publishing the notice or publication attached hereto on the above stated dates.

PUBLISHER'S RECEIPT FOR ADVERTISING COSTS

_____ for publisher of _____
a newspaper of general circulation, hereby acknowledges receipt of the aforesaid and publication costs and certifies that the same has been duly paid.

_____
(Name of Newspaper)

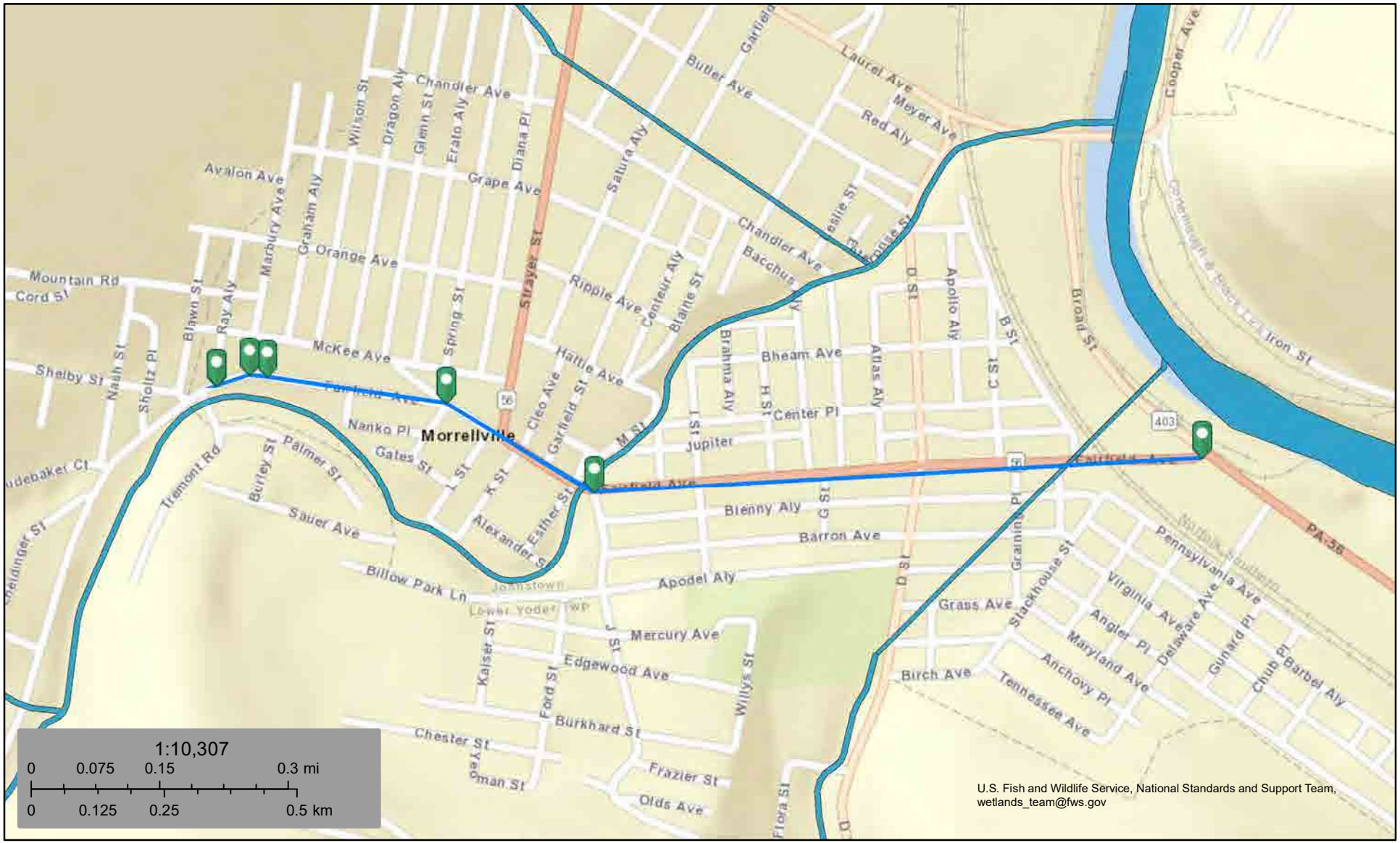
By_____

APPENDIX C

NATIONAL WETLANDS INVENTORY MAP

U.S. Fish and Wildlife Service
National Wetlands Inventory

Fairfield Avenue Project



May 6, 2019

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

FEMA

(//www.fema.gov/)

Navigation

Search

Languages

MSC Home (/portal/)

MSC Search by Address (/portal/search)

MSC Search All Products (/portal/advanceSearch)

MSC Products and Tools (/portal/resources/productsandtools)

Hazus (/portal/resources/hazus)

LOMC Batch Files (/portal/resources/lomc)

Product Availability (/portal/productAvailability)

MSC Frequently Asked Questions (FAQs) (/portal/resources/faq)

MSC Email Subscriptions (/portal/subscriptionHome)

Contact MSC Help (/portal/resources/contact)

FEMA Flood Map Service Center: Search By Address

Enter an address, place, or coordinates:

fairfield avenue, johnstown pa | Search

Whether you are in a high risk zone or not, you may need flood insurance (https://www.fema.gov/national-flood-insurance-program) because most homeowners insurance doesn't cover flood damage. If you live in an area with low or moderate flood risk, you are 5 times more likely to experience flood than a fire in your home over the next 30 years. For many, a National Flood Insurance Program's flood insurance policy could cost less than $400 per year. Call your insurance agent today and protect what you've built.

Learn more about steps you can take (https://www.fema.gov/what-mitigation) to reduce flood risk damage.

Search Results—Products for **JOHNSTOWN, CITY OF**

Show ALL Products » (https://

The flood map for the selected area is number **42021C0377D**, effective on **06/19/2012**

DYNAMIC MAP

MAP IMAGE

Changes to this FIRM

Revisions (0)

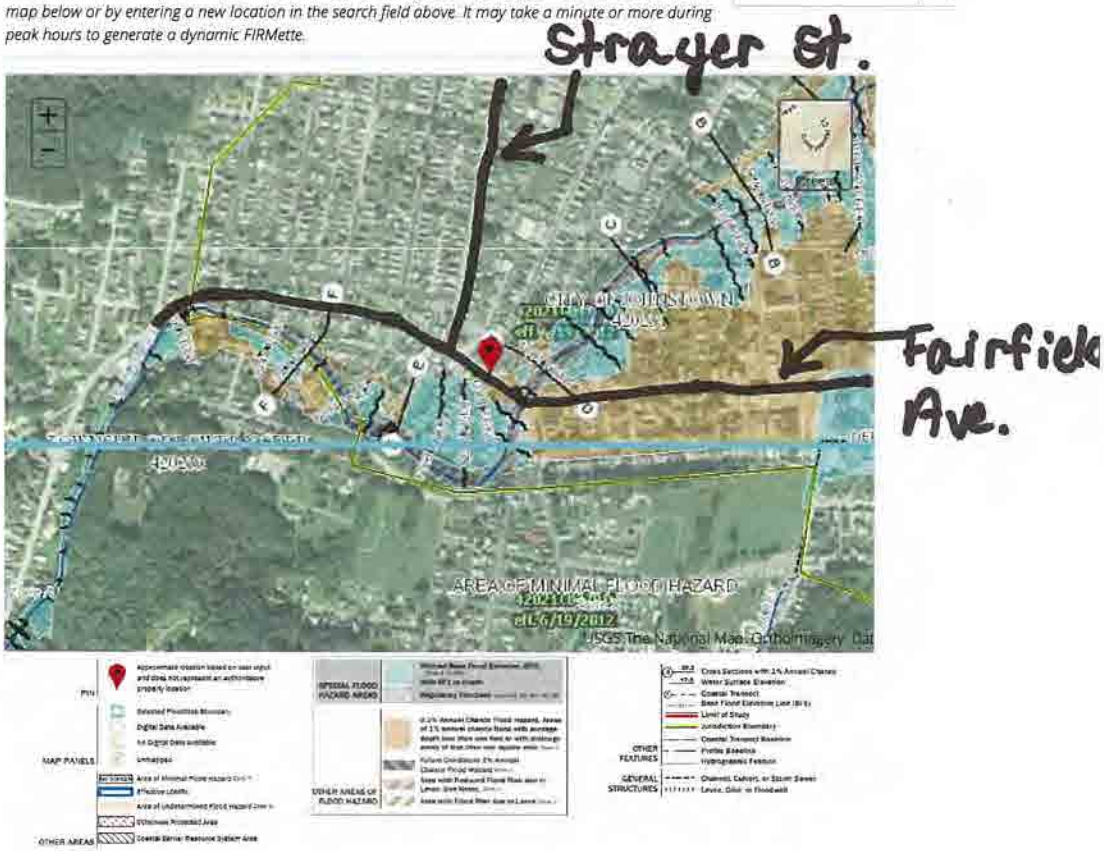
Amendments (0)

Revalidations (1)

(https://msc.fema.gov/portal/downloadProduct?filepath=/42/P/Firm/42021C0377D.png&productTypeID=FINAL_PRODUCT&productS

You can choose a new flood map or move the location pin by selecting a different location on the locator map below or by entering a new location in the search field above. It may take a minute or more during peak hours to generate a dynamic FIRMette.

Go To NFHL Viewer » (https



APPENDIX D

PNDI DOCUMENTATION

1. PROJECT INFORMATION

Project Name: **Fairfield Avenue Interceptor and Stormwater Separation Project**
Date of Review: **5/6/2019 05:00:59 PM**
Project Category: **Waste Transfer, Treatment, and Disposal, Liquid waste/Effluent, Sewer line maintainence-repair, replacement of existing line**
Project Area: **89.00 acres**
County(s): **Cambria**
Township/Municipality(s): **JOHNSTOWN; LOWER YODER**
ZIP Code: **15906**
Quadrangle Name(s): **JOHNSTOWN**
Watersheds HUC 8: **Conemaugh**
Watersheds HUC 12: **Hinckston Run-Conemaugh River**
Decimal Degrees: **40.344464, -78.946333**
Degrees Minutes Seconds: **40° 20' 40.713" N, 78° 56' 46.7977" 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.

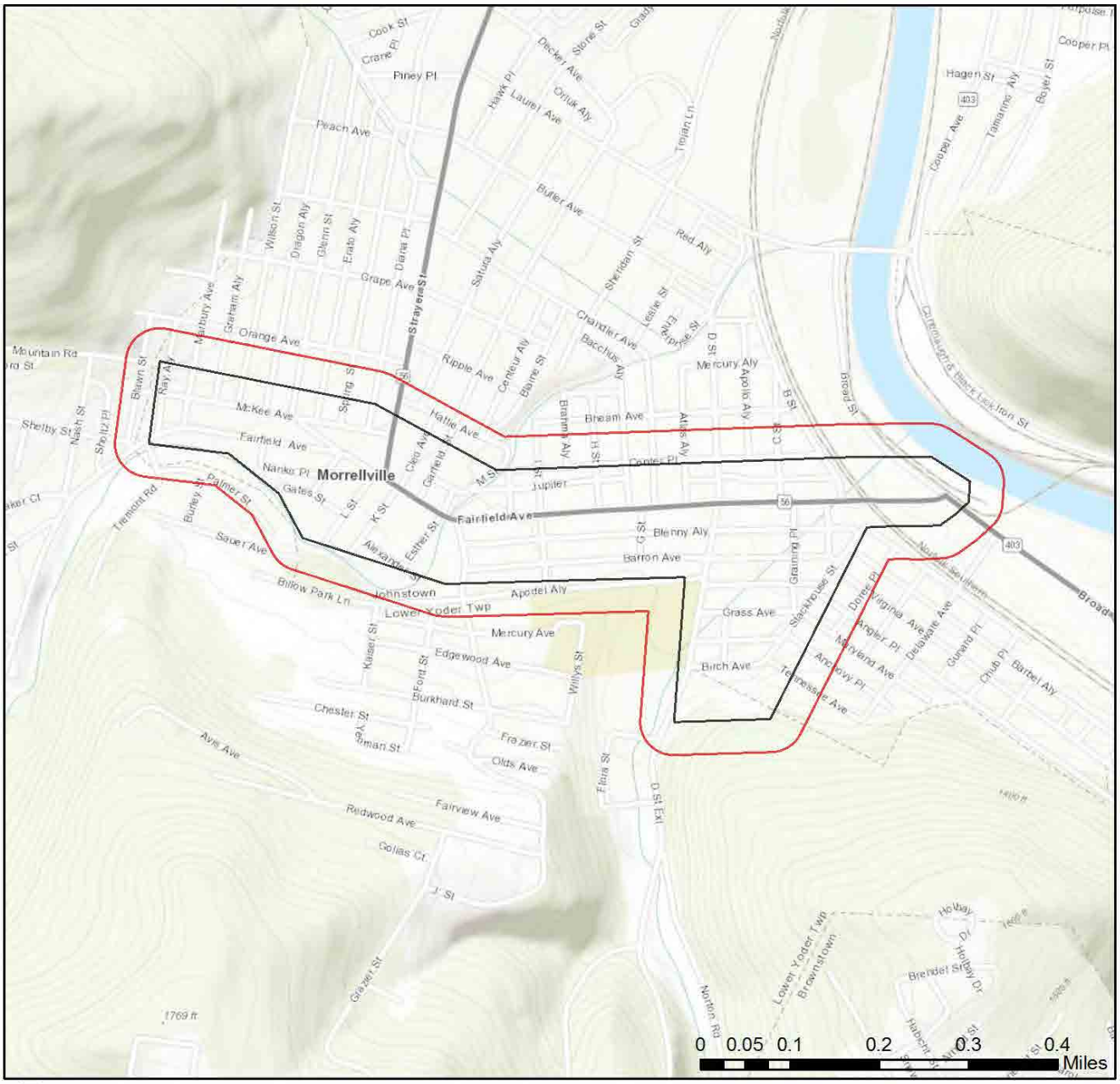
Fairfield Avenue Interceptor and Stormwater Separation Project

Project Boundary

Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Fairfield Avenue Interceptor and Stormwater Separation Project



Project Boundary

Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS,

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 jursidictional 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
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 Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Leah Adams
Company/Business Name: Tetra Tech, Inc.
Address: 661 Anderson Drive, suite 200
City, State, Zip: Pittsburgh, PA 15220
Phone: (412) 921-8950 Fax: ( )
Email: leah.adams@tetratech.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.

Leah M Adams 6/19/2019

applicant/project proponent signature date

APPENDIX E

PMHC INFORMATION

DEPARTMENT OF THE ARMY
PITTSBURGH DISTRICT, CORPS OF ENGINEERS
WILLIAM S. MOORHEAD FEDERAL BUILDING
1000 LIBERTY AVENUE
PITTSBURGH, PA 15222-4186

RECEIVED
JUL 12 '19
Pennsylvania State
Historic Preservation Office

July 8, 2019

Environmental and Cultural Resources Section

ER No. 2019-0829-021-B
The project will have
NO EFFECT
on historic properties
Date 7.17.19 Reviewer Douglas McLearen

Mr. Douglas McLearen
Pennsylvania Historical and Museum Commission
Commonwealth Keystone Building, Second Floor
400 North Street
Harrisburg, Pennsylvania 17120-0093

Dear Mr. McLearen,

The US Army Corps of Engineers, Pittsburgh District (Corps) is evaluating a federal funding request for a proposed sewer line replacement project for the City of Johnstown located along Fairfield Avenue in Johnstown, Cambria County, Pennsylvania. The project is being performed under the authority of Section 313 of the Water Resources Development Act of 1992, as amended, which provides design and construction assistance to non-federal interests in south central Pennsylvania for environmental infrastructure actions.

Proposed work includes the construction of an 8,150 linear foot sanitary sewer line and forty-eight associated manholes within the PennDOT right-of-way along Fairfield Avenue in Johnstown. The new sewer line will replace the existing sewer line. Construction will occur in previously disturbed areas. The Roseland Roller Rink, located at 110 Fairfield Avenue, is eligible for listing in the National Register of Historic Places (ER#2002-8000-021). The sewer line replacement is proposed on the opposite side of the street from the roller rink and no impacts to the building structure are proposed. Enclosed are project plans and information, and location maps.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108), the Corps has reviewed the proposed project for effects to historic properties. The Corps has determined that the proposed project will have no effect on historic properties or on any other cultural resources. If you have any questions, please contact Erin Stuart, at 412-395-7517, or by e-mail at *Erin.Stuart@usace.army.mil.*

Sincerely,

Marc A. Glowczewski, P.E., PMP
Chief, Planning and Environmental Branch

Enclosures

Senita, Joe

From: Jennifer Burkhart <jburkhart@cojtwn.com>
Sent: Monday, May 6, 2019 11:02 AM
To: Senita, Joe
Subject: FW: Morrellville
Attachments: doc02083620181004070534.pdf

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

From: Frederick, Barbara [mailto:bafrederic@pa.gov]
Sent: Thursday, October 4, 2018 8:04 AM
To: Jennifer Burkhart <jburkhart@cojtwn.com>
Cc: Nagle, Cheryl <chnagle@pa.gov>
Subject: Morrellville

Jennifer

Good news! The committee agreed Morrellville is not eligible for the National Register. Rather than sorting through our files/addresses here, could you easily provide a list of addresses of those properties awaiting SHPO approval of demolition that are included in the area determined not eligible? Please see attached boundary map.

Thanks,

Barbara

Barbara Frederick | Historic Preservation Supervisor
PHMC | PA State Historic Preservation Office
400 North Street, 2nd Floor | Harrisburg, PA 17120-0093
Phone: 717.772.0921 | Fax: 717.772.0920
bafrederic@pa.gov
http://www.phmc.pa.gov/Preservation

Morrelville
Boundary -
No HD present

BUTLER
RIO
SHERIDAN
LESLIE
BEATTY
BROAD
WILSON
CLARK
SPRUCE
MARGERY
DRAGON
EFFARD
APPLE
BREAM
CENTER
CINTHIA
FAIRFIELD
BARRON
APODAL
APODAL
GRASS
EDWINDER
EASTERN
MERCURY
BIRCH
DOUGHER
DELAWARE
CUTTER
BARBER
CALIX
ANGLER
VIRGINIA

APPENDIX F

SOIL SURVEY REPORT

United States Department of Agriculture

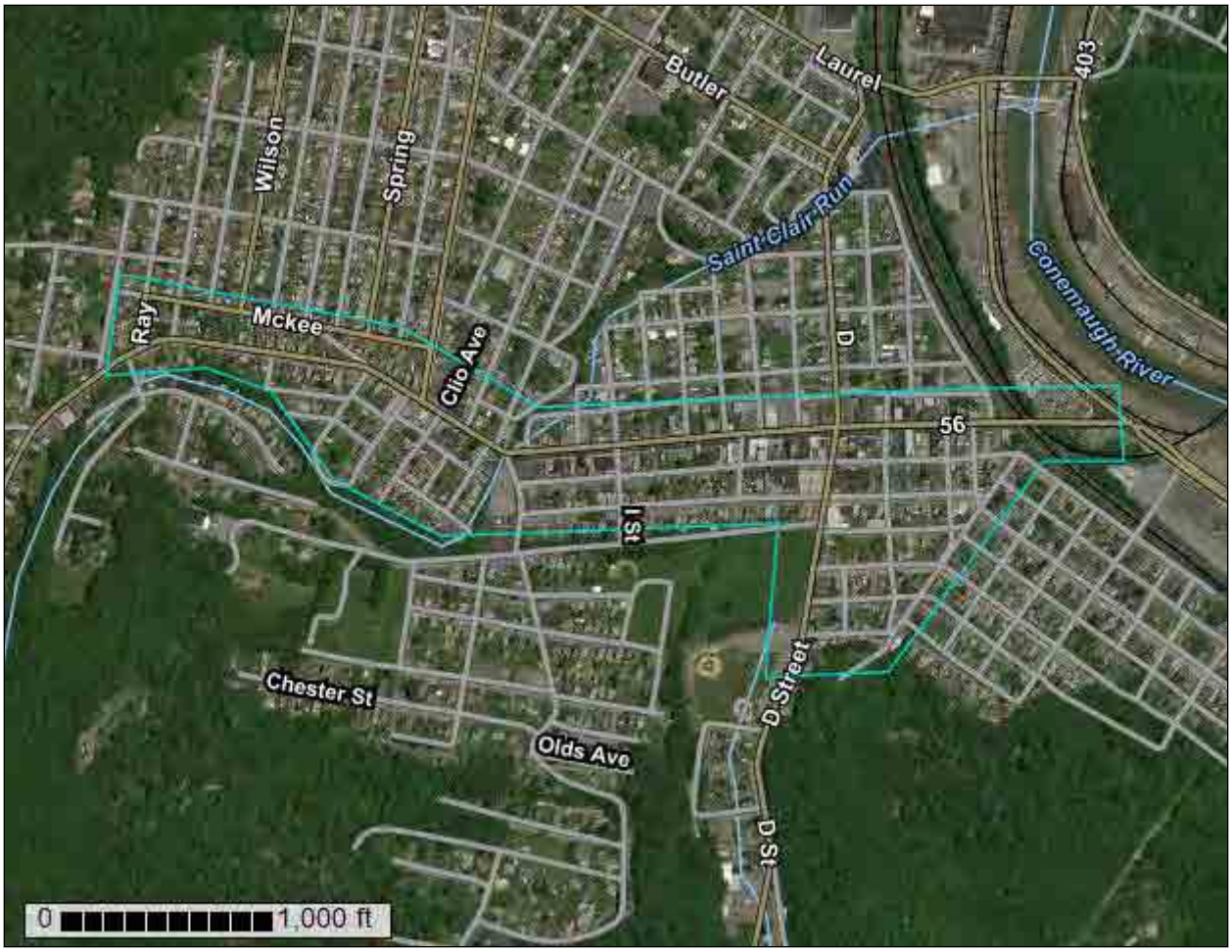
Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for

Cambria County, Pennsylvania

Fairfield Avenue Sewer Project



May 9, 2019

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:8,110 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cambria County, Pennsylvania
Survey Area Data: Version 14, Sep 18, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 23, 2010—Mar 8, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LDF	Laidig soils, 25 to 70 percent slopes	1.7	2.1%
URB	Urban land-Udorthents complex, gently sloping	67.9	86.3%
URC	Urban land-Udorthents complex, sloping	9.1	11.6%
Totals for Area of Interest		**78.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Cambria County, Pennsylvania

LDF—Laidig soils, 25 to 70 percent slopes

Map Unit Setting

National map unit symbol: l5xg
Elevation: 400 to 3,800 feet
Mean annual precipitation: 34 to 60 inches
Mean annual air temperature: 50 to 57 degrees F
Frost-free period: 120 to 175 days
Farmland classification: Not prime farmland

Map Unit Composition

Laidig and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Laidig

Setting

Landform: Mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainbase
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Mountain slope fine-loamy colluvium derived from interbedded sedimentary rock

Typical profile

H1 - 0 to 7 inches: channery loam
H2 - 7 to 36 inches: channery loam
H3 - 36 to 50 inches: very channery sandy loam
H4 - 50 to 65 inches: channery sandy loam

Properties and qualities

Slope: 25 to 70 percent
Depth to restrictive feature: 30 to 50 inches to fragipan
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 28 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Hydric soil rating: No

URB—Urban land-Udorthents complex, gently sloping

Map Unit Setting

National map unit symbol: l5xy
Elevation: 200 to 1,000 feet
Mean annual precipitation: 35 to 51 inches
Mean annual air temperature: 46 to 55 degrees F
Frost-free period: 100 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 60 percent
Udorthents and similar soils: 30 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Parent material: Human transported material

Description of Udorthents

Setting

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Man made and altered materials from mixed rock types

Typical profile

H1 - 0 to 6 inches: very channery silt loam
H2 - 6 to 60 inches: very channery silt loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Armagh, very stony

Percent of map unit: 5 percent
Landform: Depressions on hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: Yes

URC—Urban land-Udorthents complex, sloping

Map Unit Setting

National map unit symbol: l5xz
Elevation: 200 to 1,000 feet
Mean annual precipitation: 35 to 51 inches
Mean annual air temperature: 43 to 55 degrees F
Frost-free period: 100 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 60 percent
Udorthents and similar soils: 30 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Parent material: Modified, covered land

Description of Udorthents

Setting

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Man made and altered materials from mixed rock types

Typical profile

H1 - 0 to 6 inches: very channery silt loam
H2 - 6 to 60 inches: very channery silt loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Armagh, very stony

Percent of map unit: 5 percent
Landform: Depressions on hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: Yes

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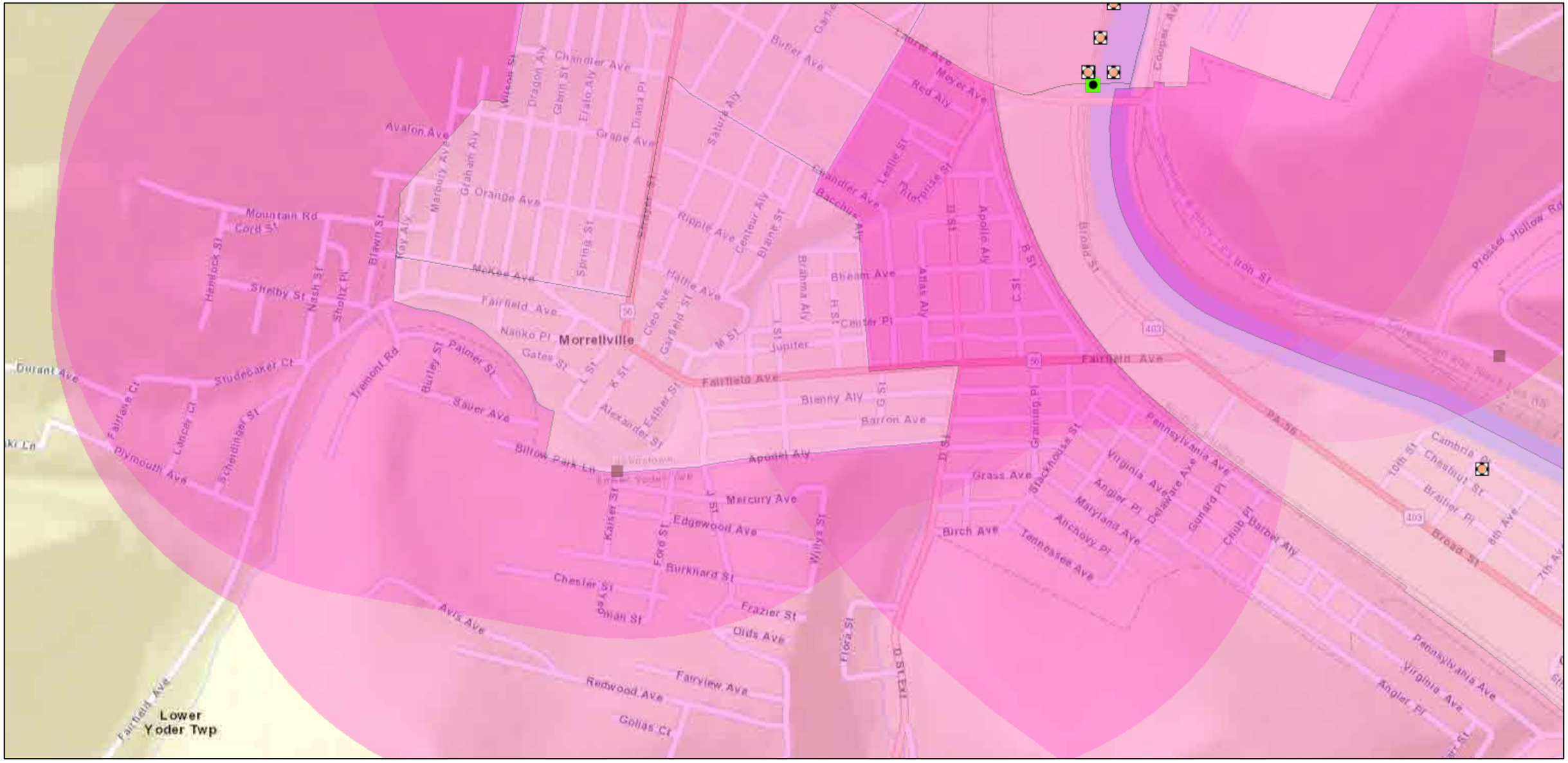
APPENDIX G

ENVIRONMENTAL JUSTICE MAP

Environmental Justice Areas



5/8/2019 11:03:57 AM

Conventional Wells

- Active Wells
- Abandoned Wells
- DEP Abandoned Wells
- DEP Orphan Wells
- DEP Plugged
- Plugged Wells

PADEP Environmental Justice Area

= Environmental Justice Area - 20% of population at or below poverty or 30% greater non-white

= Buffer Area

1:9,028

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

Esri, HERE, Garmin, INCREMENT P, NGA, USGS

Web AppBuilder for ArcGIS

Esri, HERE, Garmin, INCREMENT P, NGA, USGS |

DRAFT FINDING OF NO SIGNIFICANT IMPACT

Johnstown Redevelopment Authority, Fairfield Avenue Interceptor and Stormwater Separation Project
City of Johnstown, Cambria County, Pennsylvania

The U.S. Army Corps of Engineers, Pittsburgh District (Corps) is presenting an environmental assessment (EA) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended. The DRAFT EA, dated July 2019, for the Johnstown Redevelopment Authority Fairfield Avenue Interceptor and Stormwater Separation Project evaluates potential environmental impacts associated with a sanitary sewer interceptor system replacement proposed for federal funding under the Section 313 program located in the City of Johnstown, Cambria County, Pennsylvania. The Water Resources Development Act (WRDA) of 1992 (Public Law 102-580), as amended, allows the Corps to consider reimbursement for design and/or construction of environmental infrastructure in Pennsylvania.

The DRAFT EA considered two alternatives for the proposed sanitary sewer replacement. The preferred alternative, ultimately the Proposed Federal Action, includes federal funding for the sanitary sewer replacement including:

- the construction of an 8,150 linear foot sanitary sewer interceptor and forty-eight associated manholes along Fairfield Avenue in Johnstown, Cambria County.

In addition to the preferred alternative, a “no action” alternative was evaluated. For all alternatives, the potential effects to the following resources were evaluated:

Environmental Resource	Minor effect	No effect
Aesthetics	☒	☐
Air quality	☒	☐
Aquatic resources/wetlands	☒	☐
Invasive species	☐	☒
Fish and wildlife habitat	☐	☒
Threatened/Endangered species	☐	☒
Historic properties	☐	☒
Other cultural resources	☐	☒
Floodplains	☒	☐
Hazardous, toxic & radioactive waste	☐	☒
Hydrology	☐	☒
Land use	☐	☒
Navigation	☐	☒
Noise levels	☒	☐
Public infrastructure	☒	☐
Socio-economics	☒	☐

Environmental justice	☐	☒
Soils	☒	☐
Tribal trust resources	☐	☒
Water quality	☒	☐
Climate change	☐	☒
Child Health and Safety	☐	☒

No stream or wetland impacts are proposed. No compensatory mitigation is required.

Pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, as amended, the Corps determined that the preferred alternative will have no effect on threatened or endangered species, or on designated critical habitat.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, the Corps subsequently determined that the Proposed Federal Action has no effect on historic or cultural resources. The Pennsylvania Historical and Museum Commission concurred with this determination on 17 July 2019.

Pursuant to the Clean Water Act (CWA) of 1972, as amended, no discharge of dredged or fill material will occur with the proposed project.

A 15-day public comment period will occur from 27 August 2019 to 10 September 2019. The Corps will consider all submissions received before the expiration date of the public comment period. The nature or scope of the proposal may change upon consideration of the comments received. If significant effects on the quality of the human environment are identified during public comment which cannot be mitigated, the Corps will initiate an Environmental Impact Statement (EIS), and afford all of the appropriate public participation opportunities attendant to an EIS.

After having carefully evaluated all aspects of the Proposed Federal Action and based on the draft EA, I have reasonably concluded that the Proposed Federal Action does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement (EIS) is not required and will not be prepared.

_____
Date

_____
ANDREW J. SHORT
COLONEL, Corps of Engineers
District Commander