

ALLEGHENY COUNTY SANITARY AUTHORITY

January 29, 2021

CONTRACT NO. 1729 G, E, H, P

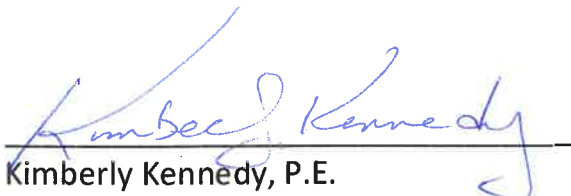
EAST HEADWORKS

ADDENDUM NO. 6

All bidders bidding Contract No. 1729 G, E, H, P shall read and take note of this Addendum No. 6. The Contract Documents for **Contract No. 1729 G, E, H, P – East Headworks** are hereby revised and/or clarified as stated below.

Acknowledgement of Contract No. 1729 G, E, H, P; Addendum No. 6

The Acknowledgement attached to Addendum No. 6 is to be signed and returned immediately via email to Dustin Copenhaver at Dustin.Copenhaver@alcosan.org and acknowledged with the Bidder's Proposal.



Kimberly Kennedy, P.E.
Director – Engineering and Construction

**ACKNOWLEDGEMENT OF
CONTRACT NO. 1729 G, E, H, P – EAST HEADWORKS**

ADDENDUM NUMBER 6

FIRM NAME: _____

SIGNATURE: _____

TITLE: _____

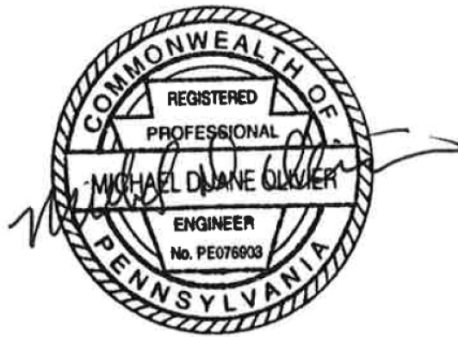
DATE: _____

January 29, 2021

CONTRACT NO. 1729 G, E, H, P

EAST HEADWORKS

ADDENDUM NO. 6



JANUARY 29, 2021

CONTRACT NO. 1729 G, E, H, P

EAST HEADWORKS

ADDENDUM NO. 6

A. Contract Documents – Volume 1

1. Legal Notice

- a) DELETE the first paragraph of the legal notice and REPLACE with the following paragraph:

Sealed Bids for **CONTRACT NO. 1729–East Headworks** shall be received at the Engineering Department office of the Allegheny County Sanitary Authority, 3300 Preble Avenue, Pittsburgh, PA, 15233, until **11:00 A.M., Prevailing Time, Tuesday, April 13, 2021** and then shall be publicly opened and read. A Pre-Bid Meeting will be held via a video conference call on **Wednesday, December 9, 2020 at 11:00 A.M., Prevailing Time.**

2. Article 2 Information for Bidders

- a) Page Article 2-2, section 2.04, SUBMISSION AND OPENING OF BIDS: DELETE the second paragraph and REPLACE it with the following:

The Bid must be submitted intact, sealed and delivered in the envelope which accompanied these Contract Documents, addressed to the Allegheny County Sanitary Authority, Director of Engineering and Construction, 3300 Preble Avenue, Pittsburgh, PA 15233. The Bidder's name and address shall be marked in the upper left-hand corner and the words "**SEALED BID FOR CONTRACT 1729 G, E, H, P: EAST HEADWORKS Contract Documents**" shall be clearly marked in the lower left-hand corner of the sealed envelope. Hand delivered Bids shall be delivered to the Contract Clerks at the Owner's Engineering Department. The envelope shall also bear notation to clearly indicate all Addenda received by its identifying numbers and dates received. It is the responsibility of each Bidder to make sure that its Bid is received by the Owner prior to the date and time set for opening of the

Bids. Upon Bidder's failure to comply with the foregoing, the Owner may treat the Bid as "nonresponsive" and return it to the Bidder unopened. Bids will be received at the office of the Owner until **11:00 A.M.**, prevailing time, on **Tuesday, April 13, 2021** at which time and place said Bids will be opened publicly and read aloud.

B. Contract Specifications – Volume 2

1. No items

C. Contract Specifications – Volume 3

1. Management, Handling, and Disposal of Excavated Soil and Other Excavated Material (31 23 00)
 - a) DELETE This section and REPLACE with the attached version. It includes language about segregation of wastes and not causing any delays towards final completion.

D. Contract Drawings

1. Drawing CDM-01
 - a) DELETE this drawing and REPLACE with the attached drawing CDM-01
2. Drawing C-21
 - a) DELETE this drawing and REPLACE with the attached drawing C-21.
3. Drawing C-22
 - a) DELETE this drawing and REPLACE with the attached drawing C-22.
4. Drawing 509-C-10
 - a) DELETE Sheet Key Note No. 1 and REPLACE with the following, “SEE DWG. 520-M-12 FOR WEST PIPE GALLERY RELOCATION PLAN AND DWG. 520-M-34 FOR RELOCATION SECTIONS”
5. Drawing 420-ES-01
 - a) DELETE this drawing and REPLACE with the attached drawing 420-ES-01.

6. Drawing 510-ES-01

a) DELETE this drawing and REPLACE with the attached drawing 510-ES-01.

7. Drawing 514-ET-01

a) DELETE this drawing and REPLACE with the attached drawing 514-ET-01.

8. Drawing 515-ET-01

a) DELETE this drawing and REPLACE with the attached drawing 515-ET-01.

9. Drawing 530-ES-05

a) DELETE this drawing and REPLACE with the attached drawing 530-ES-05.

10. Drawing 530-TT-09

a) DELETE this drawing and REPLACE with the attached drawing 530-TT-09.

E. Questions

74. QUESTION: Contract drawing C-10 (34 of 645) was re-issued in Addendum No. 4. This re-issued drawing indicates revisions were made to the drawing as part of Addendum No. 2. There were no changes to drawing C-10 included as part of Addendum No. 2 when issued on 12/22/2020. Also, there are a number of differences in the drawings details when comparing the REV 0 drawing to the version issued in Addendum No. 4 which are not clouded. Please advise.

RESPONSE: Drawing C-10 was re-issued in Addendum No. 4. Changes were included that were erroneously identified as Addendum No. 2 revisions. All changes are valid, however, so bidders shall base their bids on Drawing C-10 as issued in Addendum No. 4 unless otherwise modified in a future addendum.

75. QUESTION: Contract drawing C-21 (38 of 645) was re-issued in Addendum No. 4. This re-issued drawing indicates changes to the DIP 42 RSW line and keynote No. 6 that are clouded and labeled as revised in Addendum No. 2. There were no changes to drawing C-21 included as part of Addendum No. 2 when issued on 12/22/2020. Please advise.

RESPONSE: Drawing C-21 was re-issued in Addendum No. 4 and is being re-issued again in Addendum No. 6. Changes were included in Addendum No. 4 that were erroneously identified as Addendum No. 2 revisions. All changes are valid, however, so bidders shall base their bids on Drawing C-21 as issued in Addendum No. 6 unless otherwise modified in a future addendum.

76. QUESTION: On drawing C-03 (31 of 645), CDM-01 (32 of 645) & drawing C-21 (38 of 645) re-issued in Addendum No. 4 an existing ductbank is shown running northwest-southeast along the east side of the existing pumping station (500) and just west of EX SMH-4. On CDM-01 keynote 10 indicates that the ductbank will be abandoned in place. Will the section of the ductbank just west of EX SMH-4 also be abandoned in place?

RESPONSE: The ductbank referred to in the question is the same as referred to in Addendum No. 1, Section 01 52 00, Section 1.7, new paragraph P.1. This ductbank will be abandoned, but not until power is re-fed to Building 510 as part of Contract 1739. New ductbanks are being installed in the general area of EX. SMH-4 as part of Contract 1739. All work in the area of EX. SMH-4 shall be closely coordinated with the Construction Manager and the Contract 1739 Contractor.

77. QUESTION: Reference drawing 509-C-10 (61 of 645) sheet key notes no. 1. The keynote is shown in plan view where the 120" PCCP crosses the existing pipe gallery and the note indicates to reference drawings 520-M-30 and 520-M-31. Please confirm that key note no. 1 should be referencing drawings 520-M-12 and 520-M-34 for the details at this location.

RESPONSE: Correct. Sheet Key Note No. 1 should reference drawings 520-M-12 and 520-M-34 for west pipe gallery relocation plan and sections.

78. QUESTION: Reference specification section 01 52 00, 1.7, D which states that during the work on the West Primary Sedimentation Tanks (Area 700) flows will be reduced below 250MGD and will be scheduled for a dry weather, low flow period. For the purposes of developing our bid schedule, please indicate the time(s) during the year that these low flow conditions are typical at the plant.

RESPONSE: Ideally this work will happen between November 1 and April 30 due to less stringent permitting requirements . However, the exact timing will need to be coordinated with owner and CM and the weather forecast and is not limited to any time of year.

79. QUESTION: Reference drawing C-21 (38 of 645) which was re-issued in addendum no. 4 and drawing C-41 (49 of 645). There is a manhole south of the existing main pumping station which is called out as **EX-MH-2** on drawing C-41 and the same manhole is called out **EX SMH-1** on drawing C-21. Please advise.

RESPONSE: EX-MH-2 on Drawing C-41 is referring to the same manhole called out as EX SMH-1 on Drawing C-21.

80. QUESTION: Reference drawing C-21 (38 of 645) which was re-issued in addendum no. 4 shows a 24" line connecting EX SMH-1 to MH-1 and a 12" line connecting MH-1 to MH-2 and both are listed as HDPE. Also reference drawings C-41 (49 of 645) and drawing C-43 (51 of 645) which list the same lines as 15" RCP. Please clarify the line sizes and which pipe material is to be used.

RESPONSE: 15" RCP is the correct size and material for the referenced lines. Drawing C-21 has been re-issued to correct pipes.

81. QUESTION: Reference drawing C-22 (39 of 645) which was re-issued in addendum no. 4. The 12" line running from CB-5 to CB-8 is listed as RCP. Also reference drawings C-42 (50 of 645) and drawing C-44 (52 of 645) which list the same lines as DI. Please clarify which pipe material is to be used.

RESPONSE: 12" DI is the correct size and material for the referenced lines. Drawing C-22 has been re-issued to correct pipes.

82. QUESTION: Reference the The North Elevation, drawing 1 on drawing 530-A-020 : indicates what appears to be exposed CMU at the first floor level near column lines 3 and 2.4. The exposed CMU is shown mostly in lieu of UHPC, but also Insulated Metal Panels. Please clarify if this is a drawing error and UHPC and Insulated Metal Panels are desired here. If this condition is desired at this location, please provide a wall section.

RESPONSE: This is a graphic error. Insulated metal panels (MTL-2 and MTL-3) and ultra high performance concrete panels (UHPC-1) will be installed here, similar to the adjacent areas. Section 3/530-A-26 is through this wall as referenced on the floor plan. This section calls out Detail 7/530-A-46, which shows the full assembly with all components.

83. QUESTION: Do we have to maintain continuous access to the screening garage while were installing the 120-inch line?

RESPONSE: No, but every effort shall be employed by the Contractor to minimize times where access to the screening garage is unavailable. In order to allow construction of the 120-inch line, it is anticipated that there will be a period of time where normal truck access to the screening garage will not be available. During this time, the Owner will employ an alternate means of screenings removal via a loading dock in the general vicinity of Building 518 (Grit Garage). Contractor shall coordinate with the Owner to provide continuous truck access to the referenced loading dock and Building 518.

84. QUESTION: Reference drawings 530-A-38 (103) & 530-A-58 (123) : Please confirm that, since they are not scheduled in the stairs, that there are no precast terrazzo stair treads as detailed on the drawing.

RESPONSE: At Stair 1 and 2, the treads and risers shall be RST-1 as noted in the Interior Finish List on Drawing 530-A-58. The top, bottom, and intermediate landings for Stairs 1 and 2 shall be RT-2 as noted in the Interior Finish List on Drawing 530-A-58. The Elevator Lobby Stair (Refer to enlarged plan 3/530-A-39 and section 5/530-A-39) treads and risers shall be precast terrazzo with 3" abrasive strips as indicated in Detail 10/530-A-38.

85. QUESTION: Please provide the maximum inlet and outlet pressure for the following Self Contained Control valves: Drawing 420-M01 4-1" and 1 – 2", Drawing 534-M-01 1-1 ½", Drawing 420-M-02 8-1".

RESPONSE: The self-contained valves depicted on Drawings 420-M-01, 420-M-02, 420-M-03, and 534-M-01 maximum operating inlet and outlet pressure will be 150 psi.

86. QUESTION: Reference drawing 530-S-74 : Please provide the bottom elevation of column B(+14')-11(-9')? Its base is not shown on any plans or sections.

RESPONSE: The bottom of base plate of Column B(+14') – 11 (-9') is EL 705' -1 1/2"

87. QUESTION: Reference drawing 530-S-46 : Can a detail be provided for the ladders to the platforms on the Enlarged Partial Plan 2?

RESPONSE: The requirements for the aluminum ladders are specified in Section 05 50 00 paragraph 2.1 and 2.8. The design of the aluminum ladder is delegated to the Contractor.

88. QUESTION: Reference spec section 40 05 00, pages 16-22. Reviewing your specs vs. our scope I noticed our grit piping takeoff and your System 2 spec for grit pipe shows "no lining." If the grit that the pipe will see is pre-screened, the pipe should be glass lined to prevent interior buildup of "struvite type" material. If the media is not screened and chunky, unlined then is probably best. Your spec for System 3 calls for double cement lining for siphon air piping. Pipe for air service should be unlined. Please clarify.

RESPONSE: The grit pipe was requested to be unlined by ALCOSAN. The siphon break pipe may occasionally be splashed or filled with raw wastewater. Therefore, double cement lining for the siphon air piping is required.

89. QUESTION: Reference Grit Pump Seal Water System – Contract Drawing 530-1-10 East Headworks Basement Partial Plan B: Is the G Contract responsible for providing the (12) Seal Water Flow Switches and (12) Grit Pump Seal Water Solenoid Vales as detailed on the East Headworks Basement Partial Plan B?

RESPONSE: Seal water units shall include flow sensor as specified in Section 40 05 00 - Common Work Results for Process Interconnections. The GC shall supply the pump seal water unit flow sensor.

Grit Pump Seal Water Solenoid valves shall be supplied as specified in Section 40 05 00 - Common Work Results for Process Interconnections. The GC shall supply the pump seal water solenoid valves.

90. QUESTION: Reference Grit Screw Instrumentation – Contract Drawing 530-1-10 East Headworks Basement Partial Plan B: Is the G Contract responsible for providing the (6) Grit Screw Hanger Bearing Solenoid Valves, (6) Grit Screw Low Flow Switches and (6) Seal Water Solenoid Valves as detailed on the East Headworks Basement Partial Plan B?

RESPONSE: Grit screw hanger bearing solenoid valves shall be supplied as specified in Section 40 05 00 - Common Work Results for Process Interconnections. The GC shall supply the Grit screw hanger bearing solenoid valves.

Grit screw seal water units shall include flow sensor as specified in Section 40 05 00 - Common Work Results for Process Interconnections. The GC shall supply the grit screw seal water unit flow sensor.

Grit screw seal water solenoid valves shall be supplied as specified in Section 40 05 00 - Common Work Results for Process Interconnections. The GC shall supply the Grit screw seal solenoid valves.

91. QUESTION: Reference Simplex Sump Pumps – Drawing 530-1-14 Pipe Gallery and East Headworks Sump Pump Plans: Is the G Contract responsible to provide and install the (3) Float Switches associated with Simplex Sump Pumps SPP011-520, SPP010-520 and SPP014-530?

RESPONSE: Simplex sump pumps shall be supplied with the float type switches as specified in Section 43 24 16 Sump Pumps. The GC shall supply the simplex sump pump float switches.

92. QUESTION: Reference East-West Pipe Tunnel Flowmeter Relocation – Drawing 723-I-01 East-West Pipe Tunnel: Is the G Contract responsible for the relocation of the (2) existing Orifice Plate Flowmeters and Transmitters in the East-West Pipe Tunnel?

RESPONSE: The G contract is responsible for the relocation of the existing orifice plate flowmeters and transmitters in the East-West Pipe Tunnel. The E contract is responsible for extending conduit, routing and connecting new conductors to the new transmitter locations.

93. QUESTION: Reference Speaker System Feed – Contract Drawing 530-TR-01 East Headworks PA Outlet Cabling:
Note (5) shows a copper backbone cable to existing system head end in existing Alcosan Control Center. Is this separate from the 25 pair copper backbone? If so, what should this cable be?

RESPONSE: Note (5) shows a copper backbone cable to existing system head end in existing ALCOSAN that is the 25 pair copper backbone.

On the last addendum it was clarified that it was to be 14/2 going to the speakers. SECTION 27 15 13- COMMUNICATION COPPER HORIZONTAL CABLING only calls for CAT6A to go to the speakers. Am I to understand that there is no CAT6A or that each speaker location is also to get a data drop with the CAT6A?

RESPONSE: There is no CAT6A on each speaker location. Data drops are only required at each of the data outlets as indicated on the drawings.

94. QUESTION: Reference Surveillance Cameras – Contract Drawing 530-TR-04 East Headworks Video Surveillance Cam Outlet Cabling: The two cameras in the Truck Access Area are not shown on 530-TT-06, are they meant to be there and in what area of the Truck Access Area will they be positioned?

RESPONSE: See updated drawing 530-TT-09 for Truck Access Area cameras, both are exterior building cameras, one on the west exterior wall and one on the south exterior wall. These are consistent with camera locations shown on Drawing 530-TY-10.

95. QUESTION: Reference Copper and Fiber Backbone Termination Point – Contract Drawing TSP-01 Site-Partial Plan and Details: Notes (2) and (5) on this drawing are asking for “2. New 25-Pair Copper Cable”, SECTION 27 13 13 COMMUNICATION COPPER BACKBONE CABLING 3.7 states a 50-pair cable is to be installed, and drawing 530-TR-02 is calling for a single 25-pair. Which of these is correct?

RESPONSE: The drawings are correct, provide a single 25-pair copper cable.

Notes (4) and (5) on this drawing say to allow for 200 feet of cable, raceway, and fittings from the basement wall penetration to get to the Fiber Optic Termination Hub and the Copper Termination Hub. Are these in two separate areas or is only one pipe throughout the existing building to the second floor necessary?

RESPONSE: These are two separate areas.

96. QUESTION: Reference Boxes within the Administrative Area – Contract Drawing 530-TD-03 East Headworks Telecom Connection Details: Interior Wall Outlet Box Installation depicts a 3.5” Box, is that applicable in the administration area?

RESPONSE: The details are applicable to Building 530 First Floor, especially in the Control Room and Break Room.

SECTION 27 05 28 PATHWAYS FOR COMMUNICATION SYSTEMS 3.7 states duplex data drops within the administrative area are to be piped with 1.5" EMT, is this correct?

RESPONSE: ¾" conduit is sufficient for the data drops in the Control Room and the Break Room for the data outlets.

97. **QUESTION:** Reference Cable Tray Construction - Specification Section 27 05 28 Pathways For Communications Systems 1.1 Scope of Work Sections D. & E: Should all Ladder Tray be 24" x 4" or are some areas designed for 12" x 4"?

RESPONSE: All Ladder Tray shall be 24" x 4" as shown on the drawings.

98. **QUESTION:** Reference Drawing 5530-ES-09 & 530-ELP-06: Lighting Fixture Types K & K1 and L & L1, found on Lighting Drawing 530-ELP-06, are not indicated on the Light Fixture Schedule on Electrical Drawing 530-ES-09. Please advise.

RESPONSE: Refer to updated lighting schedules included with Addendum No. 1.

99. **QUESTION:** Would the relocation of any underground utilities such as water and electrical lines be part of the general scope or would they fall under other contracts?

RESPONSE: Relocation of underground utilities are part of the G Contract.

100. **QUESTION:** Would a 2-week extension to the bid due date be considered?

RESPONSE: Bid period extended until April 13, 2021.

101. **QUESTION:** Reference article 3.74 and specification 01 11 00 20, 3.1.B which indicates that work performed on owner-designated holidays, afterhours, or weekends shall be overseen by the construction manager (CM) at the sole expense of the contractor. Each section goes on to state that cost for the Owner's staff, CM's staff, and consulting engineers staff shall be borne by the contractor and 01 11 00 20, 3.1.B indicates that time shall be based on his designated rate of pay. Please publish all of the applicable rate(s) of pay for the Owner's staff, CM's Staff, and consulting engineers' staff which may be assessed for work performed outside normal working hours so the contractor may contemplate such costs during bid preparation.

RESPONSE: Designer is \$190/hr. CM Inspector is \$150/hr. CM Resident Engineer is \$180/hr. CM Safety Officer is \$140/hr. Owner cost is exempt in both of these sections.

F. Clarifications

Attachments:

Specifications:

31 23 00 - Management, Handling, and Disposal of Excavated Soil and Other Excavated Material

Drawings:

CDM-01

C-21

C-22

420-ES-01

510-ES-01

514-ET-01

515-ET-01

530-ES-05

530-TT-09

*** END OF ADDENDUM NO. 6 ***

SECTION 31 23 00 - MANAGEMENT, HANDLING, AND DISPOSAL OF EXCAVATED SOIL AND OTHER EXCAVATED MATERIAL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. This Section pertains to excavated soils and other excavated materials.
2. For purposes of this project, excavated soils and other excavated material are anticipated to fall under the following classifications: Residual Waste, Other Contaminated Waste, Excavated Clean Fill, Regulated Fill or Construction/Demolition Waste, as those terms are defined below.
3. Contractor shall adhere to all applicable federal, state and local laws and policies related to the excavation, permitting, testing, storage, handling, transportation and disposal/disposition of the excavated soils and other excavated materials, including, but not limited to, all requirements of OSHA, DEP, USEPA, USDOT, and PennDOT, based on the Waste or Fill classification of the excavated soil or other excavated material.
4. Excavation, permitting, testing, storage, handling, transportation and disposal/disposition of excavated soils and other excavated materials that are contaminated, or more contaminated, as a result of Contractor's activities shall be the responsibility of the Contractor, regardless of Waste classification. These materials shall be permitted, tested, stored, handled, transported and disposed of per applicable federal, state and local regulations at the Contractor's expense. Contractor will provide Owner with copies of all analytical data, permits, certifications, chain-of-custody forms, bills of lading, manifests and other documentation related to the removal, transportation and disposal/disposition of these materials from the site.

B. Related Specification Sections include but are not necessarily limited to:

1. Division 00 - Procurement and Contracting Requirements
2. Division 01 - General Requirements
3. Section 31 21 00 - Earthwork, Excavation, Trenching, and Backfilling

1.2 QUALITY ASSURANCE

A. Federal Regulations:

1. Occupational Safety and Health Administration (OSHA):
 - a. 29 CFR Part 1926.650, Safety and Health Regulations for Construction - Excavations, referred to herein as OSHA Standards.
2. United States Environmental Protection Agency (USEPA):
 - a. Title 40, Code of Federal Regulations, 40 CFR Parts 260 through 273, and Part 302, all applicable Sub-Parts, the most recent amendments.
3. Department of Transportation (USDOT):
 - a. Title 49, Code of Federal Regulations, Parts 171, 172, 173, 174 and 194, all applicable Sub-Parts, the most recent amendments.

B. Pennsylvania Regulations and Policy:

1. The Department of Environmental Protection (DEP)
 - a. Regulations pertaining to land recycling (25 Pa. Code 250); hazardous waste (260a through 270a); municipal waste (25 Pa. Code 271 through 285); residual waste (25 Pa. Code 287 through 299); and all other state regulations and policies applicable to management of excavated soil or other excavated material.
 - b. Solid Waste Management Act, codified at 35 P.S. 6018.101 et seq.
 - c. Act 2 -- The Land Recycling and Environmental Remediation Standards Act, Act 2 of 1995, codified at 35 P.S. §§ 6026.101-6026.908.
 - d. Erosion and Sediment Control Regulations (25 Pa. Code Chapter 102).
 - e. Pennsylvania Department of Environmental Protection “Management of Fill” Policy (Doc. No. 258-2182-733), November 2, 2019 (“Policy”)
2. Commonwealth of Pennsylvania Department of Transportation (PennDOT):
 - a. Publication 408/2016 Specifications.

1.3 DEFINITIONS

- A. Clean Fill: Uncontaminated, non-water-soluble, non-decomposable inert solid material used to level an area or bring the area to grade. The term does not include materials placed in or on the waters of this Commonwealth.
- B. Excavated Clean Fill: Clean Fill that is excavated from the site.
- C. Imported Clean Fill: Clean Fill that is brought onto the site from another location.
- D. Regulated Fill: “Fill” as the term is defined for this project, that has been affected by release of a regulated substance and is not “uncontaminated material,” as the term is defined in this Policy. The term does not include fill that has been blended, mixed or treated with the purpose of meeting the definition of “regulated fill” and that without being blended, mixed or treated would fail to meet the regulated fill concentration limits, as the term is defined in this policy.

- E. Uncontaminated or Uncontaminated material: Either of the following: (1) Fill unaffected by a release of a regulated substance or, (2) Fill affected by release of a regulated substance, if the concentrations of regulated substances in the fill do not exceed the Clean Fill Concentration Limits, as the term is defined in the Policy. Analysis should be carried out for only those regulated substances that are suspected to be present due to a release. The term does not include fill that has been blended, mixed or treated with the purpose of meeting the definition of “uncontaminated material.

- F. Solid Waste: Waste, including but not limited to, municipal, residual or hazardous waste, including solid, liquid, semisolid or contained gaseous materials.
 - 1. Waste: Discarded material which is recycled or abandoned. A waste is abandoned by being disposed of, burned or incinerated or accumulated, stored or processed before or in lieu of being abandoned by being disposed of, burned or incinerated. A discarded material includes contaminated soil, contaminated water, contaminated dredge material, spent material or by-product recycled in accordance with 25 Pa. Code 287.1, processed or disposed. For purposes of this project, the term “Waste” refers collectively to Residual Waste, Other Contaminated Waste, and Construction/Demolition Waste.

 - 2. Municipal Waste: Garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities; and sludge not meeting the definition of residual or hazardous waste under this section from a municipal, commercial or institutional water supply treatment plant, waste water treatment plant or air pollution control facility.

 - 3. Residual Waste: Garbage, refuse, other discarded material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations and sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous.

 - 4. Obvious Contamination: Waste that can be identified on the basis of visual observation and/or field screening.

 - 5. Hazardous Waste: Garbage, refuse or sludge from an industrial or other wastewater treatment plant, sludge from a water supply or air pollution control facility, and other discarded material, including solid, liquid, semisolid or contained gaseous material resulting from municipal, commercial, industrial, institutional, mining, or agricultural operations, and from community activities; or a combination of the above, or a combination of these materials, which because of its quantity, concentration or physical, chemical or infectious characteristics may do one of the following:
 - a. Cause or significantly contribute to an increase in mortality or increase in morbidity in either an individual or the total population.

- b. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

- 6. The term is further defined in 25 Pa. Code Chapter 261a (relating to identification and listing of hazardous waste) and 40 CFR Part 261 (relating to identification and listing of hazardous waste) to the extent incorporated in § 261a.1 (relating to incorporation by reference, purpose and scope).

- 7. 6. Construction/Demolition Waste: Solid waste resulting from the construction or demolition of buildings and other structures, including, but not limited to, wood, plaster, metals, asphaltic substances, bricks, block and unsegregated concrete. The term does not include the following if they are separate from other waste and are used as Clean Fill:
 - a. Uncontaminated soil, rock, stone, gravel, bricks, block, concrete and used asphalt.
 - b. Waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material.

- 8. Special Handling Waste: Solid waste that requires the application of special storage, collection, transportation, processing or disposal techniques due to the quantity of material generated or its unique physical, chemical or biological characteristics. The term includes dredged material, sewage sludge, regulated medical waste, chemotherapeutic waste, ash residue from a solid waste incineration facility, friable asbestos-containing waste, PCB-containing waste, waste oil that is not hazardous waste, fuel contaminated soil, waste tires and water supply treatment plant sludges.
 - a. PCB Containing Waste: Solid waste containing PCBs in the following concentrations:
 - i. More than 4 parts per million, but less than 50 parts per million.
 - ii. Fifty parts per million or more, if the following are met:
 - Regulations promulgated under the Toxic Substances Control Act (TSCA) provide that the waste may be disposed of as municipal solid waste.
 - The waste is not a hazardous waste under the act.
 - The Resource Conservation and Recovery Act (RCRA) does not impose specific standards or requirements for the disposal of the waste.
 - b. Regulated waste means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

9. Other Contaminated Waste: The term “Other Contaminated Waste” refers to Hazardous Waste, Special Handling Waste, PCB Containing Waste, Regulated Waste and all other types of waste except Residual Waste and Construction/Demolition Waste.

1.4 4 SUBMITTALS

A. Plans and Schedules:

1. Detailed procedures for the excavation, permitting, handling, testing, storage, segregation, transportation and disposal/disposition of all Excavated Clean Fill, Regulated Fill, Residual Waste, Construction/Demolition Waste and Other Contaminated Wastes and associated material in compliance with all applicable regulations shall be supplied to the Construction Manager prior to initiation of work activities.
2. Documentation that all workers involved in these operations have been provided appropriate training regarding the risks and safety precautions associated with this work. This training shall comply with all applicable regulations, including, but not limited to, all applicable DEP, USEPA, USDOT and PennDOT regulations related to specific classifications of Wastes and Fill.
3. A Spill Prevention, Countermeasures and Control (SPCC) Plan including a Transportation and Containment Plan (TCP) shall be prepared and submitted to the Construction Manager prior to initiating activities at the Site. This plan shall address all the potential hazards, necessary actions to follow in case of spills, and emergency phone numbers to each disposal facility.
4. A detailed Schedule of Work Activities pursuant to this Section indicating the sequencing of operations to be performed shall be submitted.

B. Qualifications and Certifications:

1. Certificates of calibration for all safety and environmental monitoring equipment used under this specification and records of subsequent calibrations or calibration verifications in accordance with the manufacturer’s direction shall be provided.
2. Provide the qualifications of the personnel calibrating and operating all safety and environmental monitoring equipment used under this specification demonstrating that they have been appropriately trained in the use and calibration of these instruments.
3. Environmental samples shall be tested at a DEP Accredited Laboratory whose certification is current for the testing methods requested.

C. Samples:

1. Coordinate sampling and testing with the Construction Manager.
2. All samples shall be collected, and preserved, as necessary, in accordance with applicable sampling protocols and methods.
3. All parameters shall be tested using the applicable U.S. EPA and/or DEP test methods, with chain-of-custody that follows the samples from field collection to laboratory analysis.
4. Test results shall be reported to the Construction Manager within 24 hours after the results have become available. Detailed test reports and documentation shall be submitted to the Construction Manager within seven days of receipt of the analytical results. The documentation shall include, but are not limited to,
 - a. Field screening data
 - b. Photographic documentation
 - c. Sample location plans and sample collection protocols
 - d. Chain-of-custody reports
 - e. Laboratory analytical reports
 - f. Determination of the Waste and/or Fill classification(s).

D. Disposal Documentation and Records:

1. The Contractor shall keep accurate records for the type and quantity of excavated soil and other excavated materials, removed from the site and associated analytical testing results.
2. For all Waste and Fill removed from the site, Contractor will forward appropriate documentation of the disposition of the materials, including, but not limited to, as applicable, bills of lading, manifests, certifications, and permitting, within two days of sending each shipment of the Waste or Fill offsite.
3. Certificates of disposal issued by the disposal or treatment facility, certifications of disposition of Fill, deed acknowledgements for placement of Regulated Fill and all other documentation of disposal/disposition of Waste or Fill shall be submitted to the Construction Manager within seven days of the disposal/disposition of each shipment of Waste or Fill.
4. Locations, telephone numbers, and contacts of offsite locations receiving the Waste or Fill removed from the site shall be submitted to the Construction Manager in advance of disposal. Names, addresses, and telephone numbers of Waste and Fill transportation companies shall also be submitted to the Construction Manager.
5. A manifest system will be used to track Other Contaminated Wastes from excavation to ultimate disposal.
 - a. The manifest shall comply with all provisions of the transportation and disposal regulations.

- b. All transporters must sign the appropriate portions of the manifest and must comply with all provisions established in the applicable regulations.
- c. Other Contaminated Waste manifests must be signed by the Construction Manager or the Owner's/Construction Manager's designated representative.
- d. The Owner shall be listed as the waste generator except in cases where the Contractor or others are identified as the Responsible Party.

1.5 PROJECT CONDITIONS

A. Excavated Soils and Other Excavated Materials:

1. Excavated soils and other excavated materials must be stored in accordance with applicable regulatory requirements depending on the applicable Waste or Fill classification. If Contractor reasonably suspects, or should suspect, that an excavated soil or other excavated material may be classified as Other Contaminated Waste, the excavated soil or other excavated waste must be managed as Other Contaminated Waste in compliance with all applicable federal, state and local laws, unless and until appropriate analytical analysis is received to demonstrate and document that the soil or material falls within another classification. All other excavated soils and other excavated material shall be presumed as, and managed as, Residual Waste in accordance with all applicable federal, state and local laws. If analytical results and/or other information documents and demonstrates that the presumed Residual Waste meets the classification as Other Contaminated Waste or Construction/Demolition Waste, the excavated soils and other excavated material must be managed in compliance with all federal, state and local laws and policies for that classification. Segregation and management of Construction/Demolition Waste shall result in no delays to the Substantial Completion or Final Completion Contract Times outlined in Article 4. Segregation and management of Other Contaminated Waste shall not be unreasonably delayed, and Contractor shall make best efforts to complete all such segregation in a manner that will result in no delays to the Substantial Completion or Final Completion Contract Times outlined in Article 4. If analytical results and/or other information documents and demonstrates that the presumed Residual Waste meets the classification as Excavated Clean Fill or Regulated Fill, the excavated soils and other excavated material may, at Contractor's discretion, be managed in compliance with DEP's "Management of Fill" Policy ("Policy") and all federal, state and local laws and policies for that classification. If Contractor chooses to segregate and manage Excavated Clean Fill or Regulated Fill as described here, it shall result in no delays to the Substantial Completion or Final Completion Contract Times outlined in Article 4. All excavated soil and other excavated Materials are considered unsuitable for use onsite as Fill.
2. Sampling, testing, and analysis of all excavated soils and other excavated materials must be performed to characterize the material prior to removal off-site. Sampling analysis and determination must be in compliance with Commonwealth of Pennsylvania regulations.

B. Testing

1. Costs associated with testing for all excavated soil and other excavated material shall be paid by the Contractor and are included in the bid pricing, except as otherwise set for in this Section regarding costs associated with (a) decontamination of haul vehicles and/or containers for Other Contaminated Waste; and (b) the additional testing of Other Contaminated Waste that is required by a receiving facility and that exceeds the testing necessary to classify the Other Contaminated Waste.

C. Permitting, Handling and Disposal

1. Costs for the permitting (including fees associated with obtaining, submitting, and reviewing), storage, handling, transportation and disposal/disposition of excavated soils and other excavated material will be determined based on the classification of the soil and other excavated material, as follows:
 - a. Residual Waste: All excavated soils and other excavated materials are assumed to be Residual Waste, as that term is defined in Specification 31 23 00, unless adequate documentation is provided by Contractor to demonstrate that another Waste or Fill classification applies. All costs associated with the permitting, storage, handling, transportation and disposal of such Residual Wastes shall be paid for by the Contractor and are included in the bid price. Segregation of Construction/Demolition Waste, Excavated Clean Fill and/or Regulated Fill from Residual Waste shall be included in the bid price.
 - b. Other Contaminated Waste: There is the possibility of the Contractor encountering excavated soils that may be classified as Other Contaminated Waste, and not Residual Waste. The nature and extent of Other Contaminated Wastes within the project limits have not been defined. All costs related to the permitting, storage handling, transportation and disposal of such Other Contaminated Waste shall be paid under force account. If Other Contaminated Waste, or suspected Other Contaminated Waste, is encountered, the Contractor shall stop the work and inform the CM immediately. Segregation of suspected Other Contaminated Waste from Residual Waste will be paid by force account. Construction/Demolition Wastes are not included in the definition of Other Contaminated Wastes. Segregation and management of Other Contaminated Waste shall not be unreasonably delayed, and Contractor shall make best efforts to complete all such segregation in a manner that will result in no delays to the Substantial Completion or Final Completion Contract Times outlined in Article 4.

Excavated Clean Fill: Excavated soil or other excavated material that does not exceed the Clean Fill Concentration Limits for any parameter and is unaffected by the release of a hazardous substance, as defined in the Policy, and is eligible for use as Clean Fill may, at Contractor's discretion, be managed offsite as Clean Fill, so long as the Contractor demonstrates

and documents that it has complied with and fulfilled all requirements in the Policy, including, but not limited to, complying with limited types of uses, conducting due diligence, completing certifications, etc. Excavated Clean Fill shall not be used as Fill onsite. Prior to taking any Excavated Clean Fill offsite for use as Clean Fill, Contractor must provide ALCOSAN with documentation that (a) the excavated soil or other excavated material does not exceed the Clean Fill Concentration Limits; and (b) all requirements of the Policy have been fulfilled. Any cost saving incurred by the Contractor for the proper use of Excavated Clean Fill offsite will not be deducted from the bid costs that would have otherwise been applied to this excavated soil as Residual Waste or Construction/Demolition Waste, as applicable. Any segregation costs associated with Excavated Clean Fill, and/or suspected Excavated Clean Fill, will be included in the bid price. If Contractor chooses to segregate and manage Excavated Clean Fill as described here, it shall result in no delays to the Substantial Completion or Final Completion Contract Times outlined in Article 4.

- c. Regulated Fill: Excavated soil or other excavated materials that exceeds the Clean Fill Concentration Limits for any parameter, but does not exceed the Regulated Fill Concentration Limits, as defined in the Policy may, at Contractor’s discretion, be managed, permitted and taken offsite as Regulated Fill, as defined in the Policy, so long as the Contractor demonstrates that it has complied with and fulfilled all requirements in the Policy, including, but not limited to, complying with limited types of uses, conducting due diligence, obtaining the necessary permitting, etc. Regulated Fill shall not be used as Fill onsite. Prior to taking any excavated soil or other excavated material offsite for use as Regulated Fill, Contractor must provide ALCOSAN with documentation to demonstrate that (a) the excavated soil or other excavated material does not exceed the Regulated Fill Concentration Limits; and (b) all requirements of the Policy have been fulfilled. Any cost savings incurred by the Contractor for the proper use of Regulated Fill offsite will not be deducted from the bid costs that would have otherwise been applied to this excavated soil as Residual Waste or Construction/Demolition Waste. Any segregation costs associated with Regulated Fill, and/or suspected Regulated Fill, will be included in the bid price. If Contractor chooses to segregate and manage Regulated Fill as described here, it shall result in no delays to the Substantial Completion or Final Completion Contract Times outlined in Article 4.

- d. Construction/Demolition Waste: All excavated materials that meet the definition of Construction/Demolition Waste, as that term is defined in this Specification, and all costs associated with the permitting, storage, handling, transportation and disposal of such Construction/Demolition Waste shall be paid for by the Contractor and included in the bid price. Segregation of Construction/Demolition Waste from Residual Waste, Excavated Clean Fill and/or Regulated Fill will be included in the bid price. Segregation and management of Construction/Demolition Waste

shall result in no delays to the Substantial Completion or Final Completion Contract Times outlined in Article 4.

2. All Waste excavated shall be removed from the site by the Contractor shall be disposed of at an appropriately permitted off-site disposal location of its own choosing.
3. All Excavated Clean Fill and Regulated Fill will be taken offsite and will be used as Fill or disposed at an appropriate and permissible location.
4. In addition to the other requirements specified in this Section, and other Sections, for "Other Contaminated Waste," Hazardous Waste shall be disposed of at a permitted RCRA Subtitle C disposal facility. Hazardous Waste must be managed in accordance with state and federal Hazardous Waste laws, including requirements for labeling, containing, storing, permitting, handling, transporting and disposing of the Hazardous Waste. A Uniform Hazardous Waste Manifest and a permitted Hazardous Waste Transporter are required for off-site disposal.

D. Sampling Liquid:

1. Liquid collected from storage areas, ground water inside utility manholes, vaults, or excavations shall be sampled for heavy metals, oil, and pH and shall meet the ALCOSAN Regulation for discharge into the sanitary Sewer. Obtain permits from ALCOSAN before discharge.
2. Liquid that does not meet ALCOSAN Regulation for discharge into the sanitary Sewer shall be appropriately transported and treated offsite. Analyses for such liquid to be taken to an offsite treatment facility shall conform to local, state, and federal criteria as well as to the requirements of the treatment facility. Documentation of all analyses performed shall be furnished to the Contracting Officer. Additional sampling and analysis to the extent required by the approved offsite treatment, storage or disposal (TSD) facility receiving the material shall be the responsibility of the Contractor and shall be performed at no additional cost to the owner.
3. The Contractor shall keep accurate records for the type and quantity of liquids removed from the site and associated analytical testing results. For liquids removed from the site, Contractor will forward appropriate documentation of the disposition of the materials, including, but not limited to, as applicable, bills of lading, manifests, certifications, and permitting, within two days of sending each shipment of the liquids offsite.

E. Site Information:

1. Data has been provided in previous subsurface investigation reports. The Owner or Engineer will not be responsible for interpretations or conclusions drawn from this data by Contractor.

- 2. Additional test borings, environmental sampling, and other exploratory operations may be performed by Contractor, at the Contractor's option; however, no change in the Contract Sum will be authorized for such additional exploration, environmental sampling, and testing.
- 3. Site data provided is not contractual and shall be considered "for information only."

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Barrier Materials: Any materials erected to control or prevent run on to and/or runoff from excavations, stockpiles and/or staging areas including synthetic materials, sediment fence or other appropriate structure or material.

PART 3 - EXECUTION

3.1 PROTECTION

- A. Barrier Materials must be erected to prevent run on to and/or runoff from excavations, stockpiled excavated soils and other excavated materials and/or staging areas as regulatorily required according to the particular Waste or Fill classification. Appropriate synthetic covers shall be used to prevent infiltration of liquids.
- B. Barrier Materials and erosion and sediment control measures should be identified on the site's erosion and sediment control plan (E&SC Plan). Contractor must at all times adhere to the requirements of the E&SC Plan.
- C. Personnel working inside and around the excavation areas shall be trained and familiar with the safety precautions and equipment required for controlling potential hazards associated with this work.

3.2 2 SEGREGATION

- A. Waste with Obvious Contamination must be segregated from other Waste and suspected Fill during excavation. This may be accomplished by visual observation and by field screening the soil and/or other material as it is excavated using field instruments such as photoionization detectors, flame ionization detectors, and other appropriate field measurement procedures.
- B. Segregation of Waste during excavation will facilitate laboratory testing, treatment and disposal. To the extent reasonably possible, Waste should be segregated from suspected Excavated Clean Fill and Regulated Fill, concrete, asphalt material, and other debris.
- C. In cases where Obvious Contamination is observed (either localized or extensive), "presumably Other Contaminated Waste" is to be segregated from "presumably Residual or Construction/Demolition Waste," with suspect Excavated Clean Fill and Regulated Fill also separated from these Wastes, until such time as the classification of the excavated

soil or other excavated material is determined.

- D. If Obvious Contamination is observed and the Waste is not segregated from other Waste or Fill, the costs associated with the testing, permitting, storage, handling, transportation, and disposal of all such Waste, whether later classified as Other Contaminated Waste or not, shall be paid for by the Contractor at no additional cost to the Owner or the Construction Manager.

3.3 STORAGE

- A. Waste removed from the excavation must be stored in accordance with applicable federal, state and local laws..
- B. Stockpiles of Other Contaminated Waste shall be completely and securely covered for the duration of the storage period with an impermeable barrier material of sufficient strength, thickness, anchoring or weighting to prevent tearing or lifting of the cover, infiltration of precipitation or surface water run-on, and exposure of the soil to the atmosphere.
- C. Other Contaminated Wastes that are Hazardous Wastes, or another type of Waste under this classification, must be stored in accordance with applicable federal and state regulations and requirements, including, but not limited to, limitations regarding accumulation time.

3.4 4 EVALUATION

- A. Testing shall conform to federal, state, and local regulating agency requirements identified in the previous sections.
- B. The Contractor shall contact the receiving facility to determine the required prequalification testing and disposal testing.
 - 1. Testing required by the receiving facility may be in excess of that required by regulating agencies.
 - 2. Costs associated with the testing of Residual Waste required by the receiving facility are incidental to the costs of disposal and shall be paid by the Contractor at no additional costs to the Owner or Construction Manager.
 - 3. Costs associated with the testing of Other Contaminated Waste required by the receiving facility that exceeds the testing necessary to classify the Waste or Fill will be handled by force account.

3.5 LOADING AND HAULING

- A. Waste shall be loaded and transported by the Contractor to an Owner approved permitted treatment, reclamation or disposal site, in accordance with all applicable policies, laws and permits. Excavated Clean Fill and Regulated Fill shall, at Contractor’s discretion, be instead loaded and transported to an approved Fill site, in accordance with all applicable policies, laws and permits.

- B. All haul vehicles are to be inspected for Waste or Fill adhesion to wheels, under carriage, and other external components. This Waste or Fill shall be removed and properly handled by the Contractor before the haul vehicle leaves the site. The Contractor is responsible for proper disposal of all materials generated from this activity.
- C. Contractor shall be responsible for the disposal and any associated testing related to the decontamination of haul vehicles and/or containers. All disposal and associated testing costs related to decontamination of haul vehicles and/or containers of for Residual Waste, Excavated Clean Fill, Regulated Fill and/or Construction/Demolition Waste are incidental to the project. All disposal and associated testing costs related to decontamination of haul vehicles and/or containers of Other Contaminated Waste will be handled by force account.
- D. Transport vehicles shall not be allowed to leave the site if they are leaking or spilling materials or there is evidence that leaking or spilling may likely occur.
- E. Haulers shall have all the necessary permits and licenses issued by the state and federal authorities to transport Waste and Fill through all required states.
- F. All transport vehicles shall be in strict conformance with all applicable federal, state, and local laws.

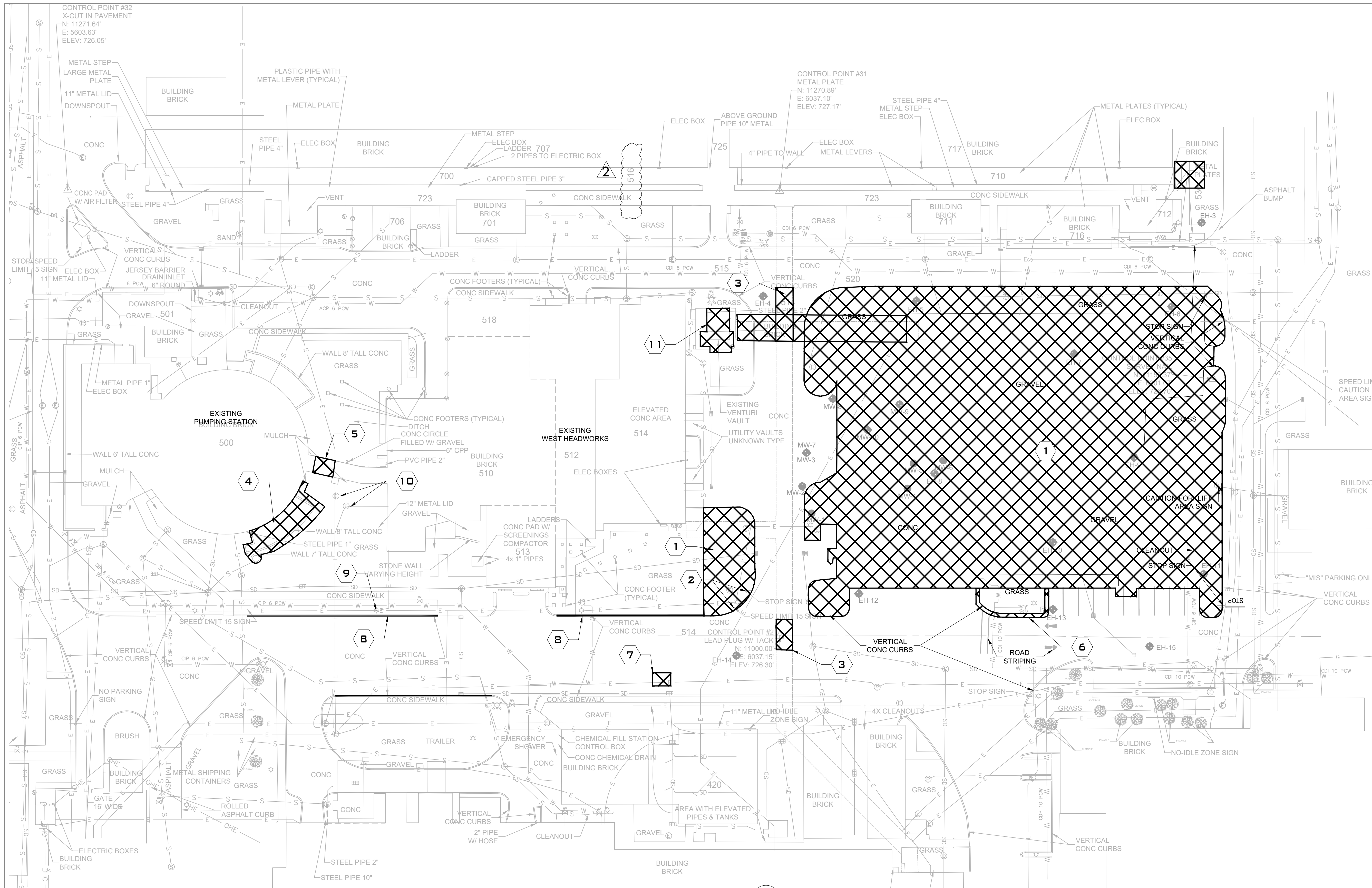
3.6 DISPOSAL

- A. The Contractor shall be responsible for all sampling and analytical testing as required by the receiving facility to accept the Waste or Fill for disposal/disposition, to the extent such testing exceeds the testing necessary to classify the Waste or Fill. The costs for such sampling/testing for Residual Waste, Excavated Clean Fill, Regulated Fill and Construction/Demolition Waste are incidental to the project. The costs for such sampling/testing for Other Contaminated Waste will be handled by force account.
- B. Arrangements for disposal shall be performed by the Contractor.
- C. All Waste and Fill shall be handled, treated and/or disposed of in accordance with all the requirements and/or standards defined in all applicable policies, regulations and permits.
- D. Disposal of all Waste and disposition of all Fill by the Contractor shall be accomplished so that the process relieves the Construction Manager and Owner of all present and future liability. Contractor shall indemnify Construction Manager and Owner from all claims, without exception, related in any way to remediation, injunctive relief and/or penalties associated with the transport and/or disposal of all Waste and disposition of all Fill.

3.7 SPILLS

- A. The Contractor is responsible for promptly and thoroughly cleaning up all leaks and spills from trucks and/or containers and other items onsite or offsite that occur because of the Contractor's negligence or that are in any other way related to the project.
- B. Immediate containment actions shall be taken, as necessary, to minimize the effect of any spill or leak.
- C. The Contractor shall immediately notify the Construction Manager of the incident. Construction Manager shall timely report the incident, if required by federal, state or local regulation.
- D. Cleanup shall be in accordance with applicable federal, state, and local laws and regulations at no additional cost to the Construction Manager and Owner.

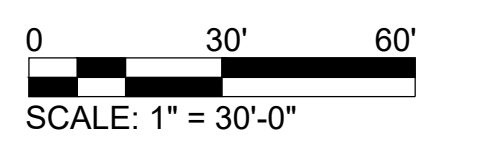
END OF SECTION



- KEYNOTES**
1. REMOVE EXISTING CURB, GRAVEL AND CONCRETE
 2. REMOVE SIGNS
 3. DEMO FOR PIPE GALLERIES (SEE SHEET 520-SDM-10 FOR DETAILED PIPE GALLERY DEMOLITION PLAN)
 4. REMOVE EXISTING CONCRETE WALLS AND STEEL PIPE (SEE SHEETS 500-SDM-11 AND 500-SDM-12)
 5. PARTIAL BREEZEWAY DEMOLITION, REFER TO STRUCTURAL PLANS.
 6. REMOVE EXISTING CURB
 7. DEMO CURB & PAVEMENT FOR OVERHEAD ODOR CONTROL DUCT STRUCTURE
 8. REMOVE EXISTING CURBING FOR PIPE EXCAVATION
 9. REMOVE AND RELOCATE LIGHT POLE.
 10. EXISTING ELECTRIC MANHOLES AND ASSOCIATED DUCTBANKS TO BE ABANDONED IN PLACE BY OTHERS PRIOR TO START OF WORK. CONTRACTOR TO REMOVE MANHOLES AND DUCTBANK AS NECESSARY TO COMPLETE WORK.
 11. CONTRACTOR TO DEMOLISH EXISTING VENTURI VAULT AND ABOVE GRADE ACCESS. SEE STRUCTURE DEMOLITION DETAILS IN THE PLAN SET.

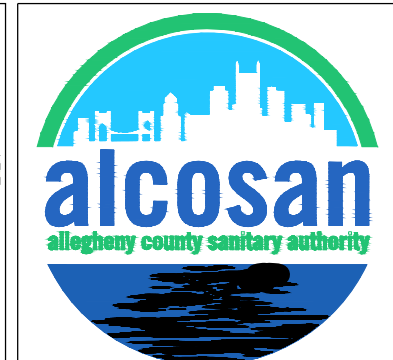
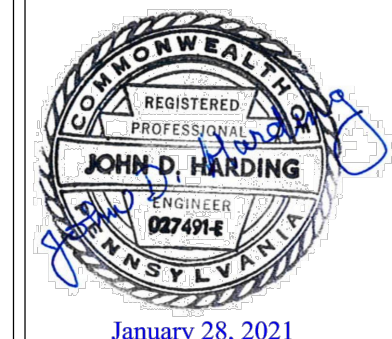
- GENERAL NOTES**
1. ALL MONITORING WELLS WILL BE ABANDONED IN PLACE.
 2. ENGAGE A PROFESSIONAL ENGINEER TO PERFORM AN ENGINEERING SURVEY OF CONDITION OF BUILDING TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF STRUCTURE OR ADJACENT STRUCTURES DURING SELECTIVE BUILDING DEMOLITION OPERATIONS.
 3. TEMPORARY SHORING: DESIGN, PROVIDE, AND MAINTAIN SHORING BRACING, AND STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF CONSTRUCTION AND FINISHES TO REMAIN, AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED.
 4. THE PRIMARY SITE DEMOLITION REQUIREMENTS ARE INDICATED ON THIS DRAWING. CONTRACTOR SHALL PERFORM ADDITIONAL DEMOLITION (SIDEWALKS/CURB REMOVAL, POLE RELOCATIONS, ETC.) AS REQUIRED TO COMPLETE THE WORK.

SITE DEMOLITION PLAN 1
SCALE: 1" = 30'-0" HORIZ.



Designed by:	JRS
Drawn by:	TPM
Checked by:	KPK

REVISION		DESCRIPTION	APPV
REV No.	DATE		
0	10/28/20	ISSUED FOR BIDS	
1	12/22/20	ADDENDUM 2	
2	1/28/21	ADDENDUM 6	



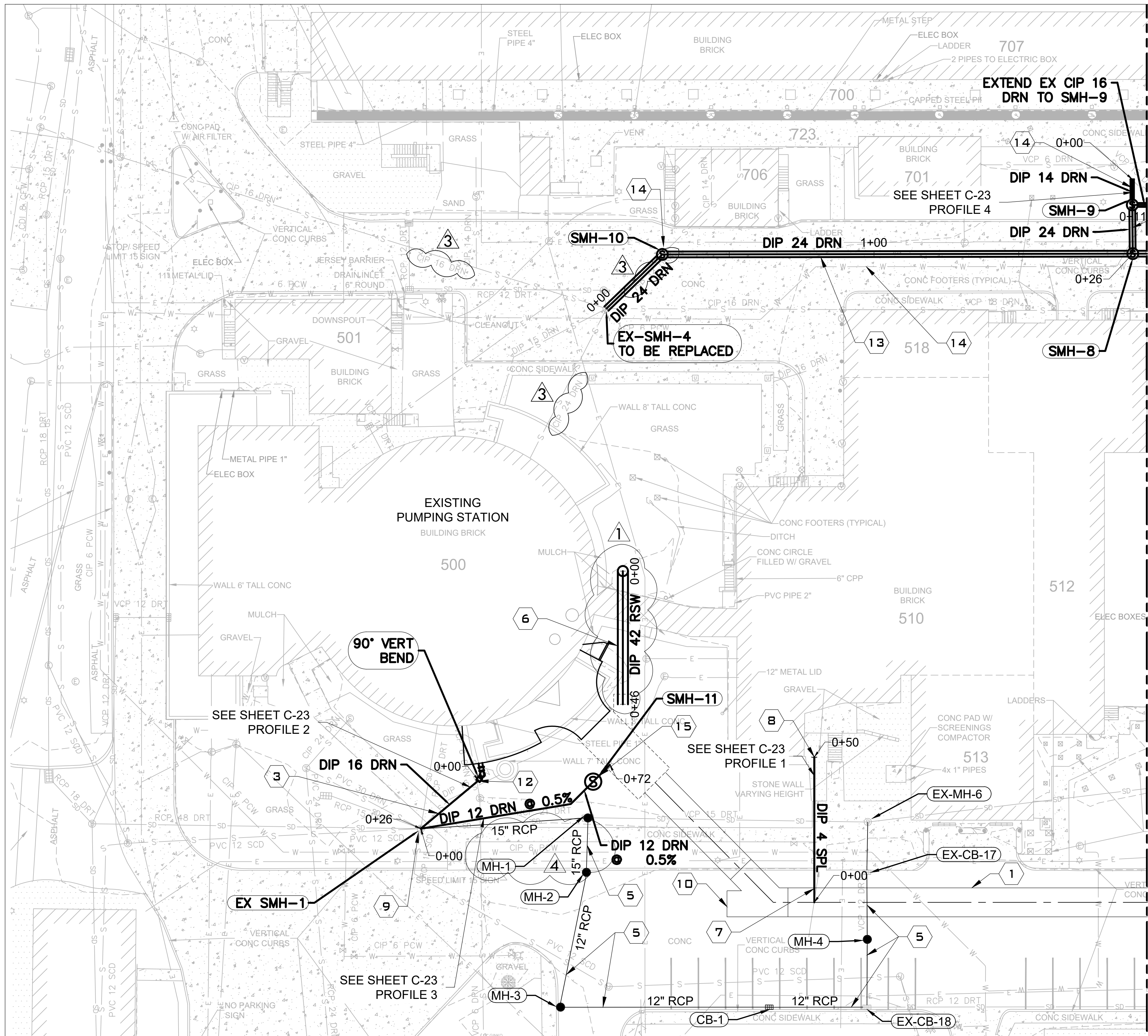
ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

3300 PREBLE AVE.
PITTSBURGH, PA 15233
(412) 766 - 4810
www.alcosan.org

ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
EAST HEADWORKS

CDM-01
SITE DEMOLITION PLAN

Contract: 1729
CAD File Name: CDM-01 SITE DEMOLITION.DWG
Date: OCTOBER 2020
Sheet: 32 OF 645



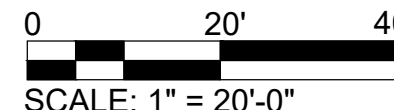
YARD PIPING PLAN - WEST 1
SCALE: 1" = 20' HORIZ.

MATCH LINE TO C-22

PLANT NORTH

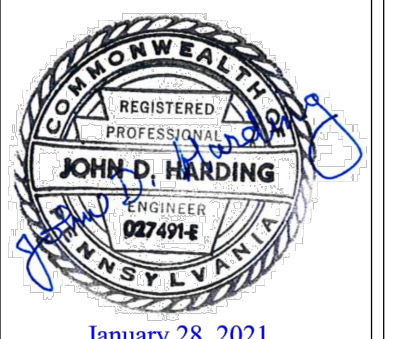
- KEYNOTES**
- 120" EAST HEADWORKS INFLUENT PIPE (SEE SHEET 509-C10)
 - NEW 6" WATERLINE
 - NEW 16" UTILITY SANITARY DRAIN LINE FOR EXISTING PUMPING STATION (SEE SHEET 500-M-10).
 - NEW 6" WATERLINE CONNECTION WITH NEW BURIED VALVE
 - NEW STORMDRAIN - SEE NOTE 7 BELOW
 - NEW 42" RAW SEWAGE LINE (SEE DRAWING G-08 FOR DESIGN) SEE DRAWING 500-M-10
 - SAMPLING LINE CONNECTION TO PROPOSED 120" INFLUENT PIPE
 - 4" SAMPLING LINE CONNECTION (3' EAST OF BUILDING CORNER)
 - EXISTING MANHOLE FOR NEW PLANT DRAIN LINES
 - FUTURE WET WEATHER PUMPING STATION CONNECTION
 - NEW 6" WATER VALVE
 - NEW MANHOLE (SEE PROFILE SHEET C-23) TIE INTO 90° VERTICAL BEND. SEE MECHANICAL DRAWINGS (FACILITY 500) FOR CONTINUATION
 - NEW 24" DIAMETER PLANT DRAIN (SEE PROFILE SHEET C-25)
 - (3) MANDATORY TEST PITS (LOCATIONS MAY VARY)
 - 6' DIAMETER SEALED DRY WELL VALVE VAULT (TYP. MANHOLE) SEALED WITH 12" GATE VALVE. (SEE DETAIL 48 20 ON SHEET 6B-11 CD-12.)

- NOTES**
- SEE SHEETS C-31 AND C-32 FOR GRADING PLAN.
 - ALL SITE WORK WILL BE COMPLETED BY THE GENERAL CONTRACTOR.
 - INSTALLATION OF SITE UTILITIES / YARD PIPING WILL BE COMPLETED BY THE GENERAL CONTRACTOR TO 5 FEET FROM THE EXTERIOR WALL OF STRUCTURES. THE PLUMBING CONTRACTOR WILL BE RESPONSIBLE FOR ALL BUILDING CONNECTIONS TO THIS CONNECTION POINT.
 - THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE ENTIRE PROPOSED GAS LINE FROM THE BUILDING TO CONNECTION POINT AT THE EXISTING LINE. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR TRENCHING, BEDDING, AND BACKFILL.
 - ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF CONDUITS, WIRING, CONCRETE AND REBAR FOR DUCTBANKS. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR TRENCHING, BEDDING AND BACKFILL.
 - SEE SHEETS C-23, C-24, AND C-25 FOR YARD PIPING PROFILES.
 - REFER TO DRAWING C-41 AND C-42 FOR STORM DRAIN PIPING DESIGN.



Designed by:	LJK
Drawn by:	TPM
Checked by:	KPK

REV No.	DATE	REVISION DESCRIPTION	APPV
0	10/28/20	ISSUED FOR BIDS	
1	12/22/20	ADDENDUM 2	
2	1/5/21	ADDENDUM 3	
3	1/11/21	ADDENDUM 4	
4	1/28/21	ADDENDUM 6	



ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

3300 PREBLE AVE.
PITTSBURGH, PA 15233
(412) 766 - 4810

www.alcosan.org

ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
EAST HEADWORKS

C-21
YARD PIPING PLAN - WEST

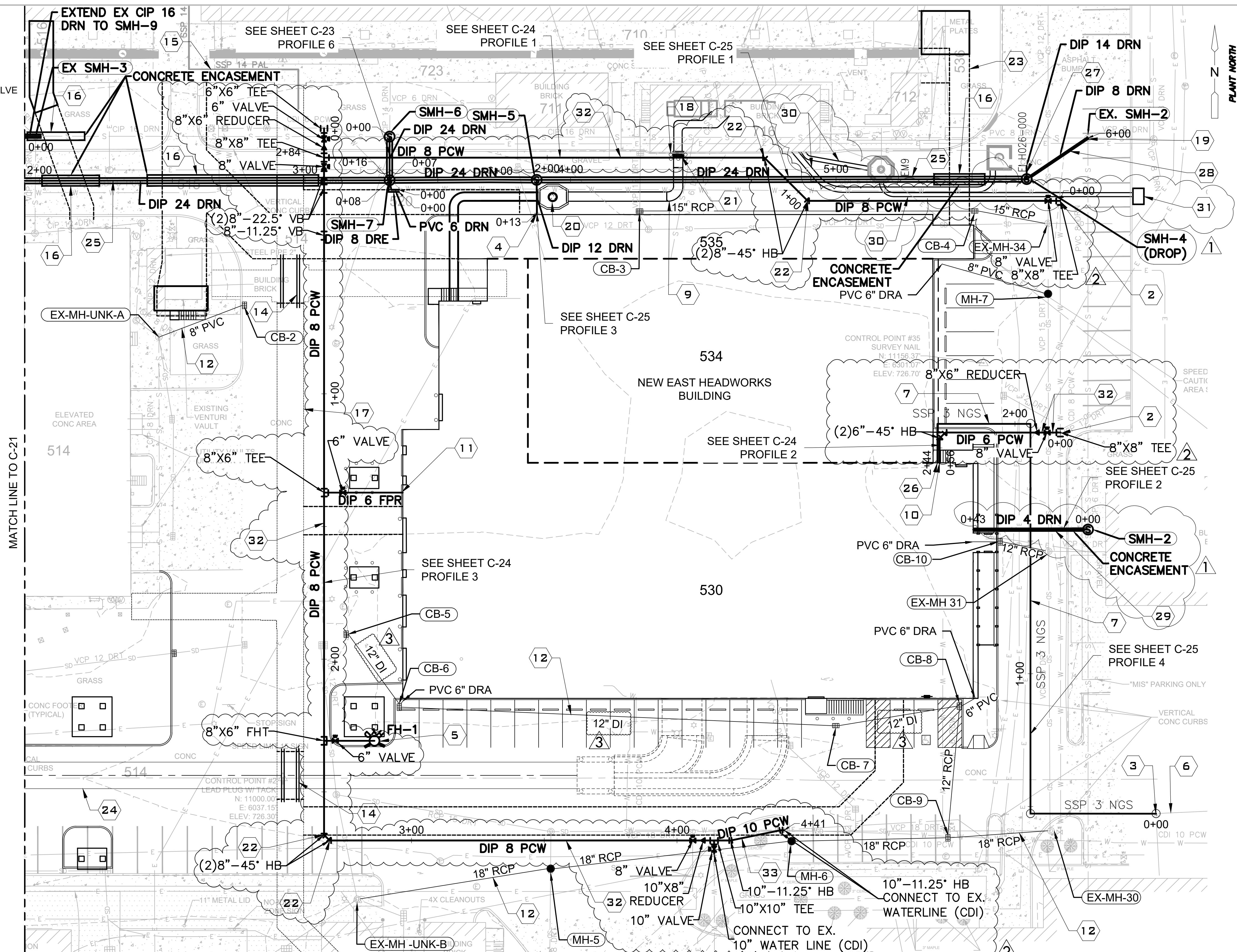
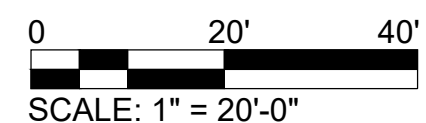
Contract: 1729
CAD File Name: C-SITE-DESIGN.DWG
Date: OCTOBER 2020
Sheet: 38 OF 645

KEYNOTES

1. NEW 6" WATER LINE
2. WATERLINE 6"x6" x 8" x 8" CONNECTION, AND NEW 6" VALVE (SEE PROFILE ON C-24)
3. NEW 3" GAS LINE CONNECTION TO EXISTING GAS LINE - 3" TEE FITTING AND NEW BURIED PLUG VALVE
4. TANK LINE DRAIN (8" SANITARY) SEE 530-M-09 FOR CONTINUATION
5. 6" WATERLINE TO FIRE HYDRANT ASSEMBLY (FH-1) (SEE DETAIL NUMBER 7, SHEET CD-10)
6. APPROXIMATE LOCATION OF EXISTING 3" GAS LINE LOCATION FOR CONNECTION
7. NEW 3" GAS LINE
8. NEW SANITARY MANHOLE SMH-1
9. CABLE ELECTRIC DUCTBANK
10. NEW 2" WATER LATERAL WITH 6" x 2" REDUCER
11. NEW 6" FIRE SUPPRESSION LINE TO BUILDING
12. NEW STORM DRAIN (SEE SHEET C-41 AND C-42 FOR STORM DRAINS)
13. NORTH WATERLINE RELOCATION (SEE SHEET C-24 FOR PROFILE)
14. NEW (PIPE GALLERY UTILITIES)
15. ABOVE GRADE AIR LINE
16. CONCRETE ENCASMENT FOR NEW PLANT DRAIN (SEE PROFILES)
17. EXISTING PIPE GALLERY
18. NEW BOLLARDS - TO PROTECT PROPOSED ELECTRICAL - SEE DETAIL 6 ON CD-10 (TYPICAL)
19. 24" PLANT DRAIN CONNECTION TO EXISTING SEWER (SEE PROFILE ON SHEET C-25)
20. NEW ELECTRICAL MANHOLE 10' X 10' X 8" (SEE ELECTRICAL DRAWINGS)
21. NEW UTILITY WALL PENETRATION (REFERENCE ELECTRICAL DRAWINGS)
22. (2) 45 DEGREE BENDS (6" 8" PCW WATERLINES)
23. NEW EAST PRIMARY INFLUENT CONDUIT (FACILITY 536)
24. NEW PROPOSED 120" INFLUENT PIPE (SEE SHEET 509-C10)
25. NEW 24" SANITARY SEWER PLANT DRAIN LINE
26. NEW 3" GAS LINE LATERAL TO EAST HEADWORKS
27. EXTEND 14" DIP NORTH FOR FUTURE TANK DRAIN APPROXIMATELY 5'. PROVIDE 14" RESTRAINED DIP CAP.
28. NEW DIP 8" DRN
29. CONCRETE ENCASMENT FOR NEW PLANT DRAIN (SEE PROFILES)
30. NEW ELECTRIC DUCTBANK (18" X 18"). TO BE INSTALLED WITH CONTRACT 1739.
31. NEW ELECTRICAL DUCTBANK HANDHOLE (18" X 18"). TO BE INSTALLED WITH CONTRACT 1739.
32. NEW 8" WATERLINE
33. NEW 10" WATER LINE

NOTES

1. ALL SITE WORK WILL BE COMPLETED BY THE GENERAL CONTRACTOR.
2. INSTALLATION OF SITE UTILITIES / YARD PIPING WILL BE COMPLETED BY THE GENERAL CONTRACTOR TO 5 FEET FROM THE EXTERIOR WALL OF STRUCTURES. THE PLUMBING CONTRACTOR WILL BE RESPONSIBLE FOR ALL BUILDING CONNECTIONS TO THE CONNECTION POINT WITH THE GENERAL CONTRACTOR.
3. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE ENTIRE PROPOSED GAS LINE FROM THE BUILDING TO CONNECTION POINT AT THE EXISTING LINE. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR TRENCHING, BEDDING, AND BACKFILL.
4. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF CONDUITS, WIRING, CONCRETE AND REBAR FOR DUCTBANKS. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR TRENCHING, BEDDING, AND BACKFILL.
5. SEE SHEETS C-23, C-24, AND C-25 FOR YARD PIPING PROFILES.
6. SEE SHEET C-26 FOR NEW CONDUIT PROFILES.
7. SEE SHEET C-41 AND C-42 FOR STORM DRAIN DESIGN.
8. CONTRACTOR TO SUPPORT NEW AND EXISTING ELECTRICAL UTILITIES DURING CONSTRUCTION OF NEW 24" DIAMETER PLANT DRAIN LINE. (SEE PROFILE ON C-25 FOR DETAILS).



YARD PIPING PLAN - EAST
SCALE: 1" = 20' HORIZ.

Designed by:	LJK	REVISION		
Drawn by:	TPM	REV No.	DATE	DESCRIPTION
Checked by:	KPK	0	10/28/20	ISSUED FOR BIDS
		1	12/22/20	ADDENDUM 2
		2	1/11/21	ADDENDUM 4
		3	1/28/21	ADDENDUM 6
		APPV		

ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
EAST HEADWORKS

C-22
YARD PIPING PLAN - EAST

Contract:	1729
CAD File Name:	C-SITE-DESIGN.DWG
Date:	OCTOBER 2020
Sheet:	39 OF 645

PANELBOARD: EX. PPB061-420		(FIELD VERIFY MANUFACTURE MAKE AND MODEL)	
LOCATION: CHEM BLDG		VOLTAGE: 480/277	
SUPPLY FROM: MCC061-420		PHASE: 3	
MOUNTING: SURFACE		WIRES: 4	
ENCLOSURE: TYPE 1		A.I.C. RATING: FIELD VERIFY	
		PANEL TYPE: MCB	
		BUS RATING: 225 A	
		MCB RATING: 125 A	

CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESCRIPTION	CKT
1				10.0 kVA	3.5 kVA					2
3	XFMR61C-420	50 A	3		10.0 kVA	3.5 kVA		3	50 A	XFMR61B-420
5						10.0 kVA	3.5 kVA			6
7				1.2 kVA	5.0 kVA					8
9	NEW VFD001-420	30 A	3		1.2 kVA	5.0 kVA		3	30 A	XFMR61A-420
11						1.2 kVA	5.0 kVA			10
13				1.2 kVA	0.0 kVA					12
15	NEW VFD002-420	30 A	3		1.2 kVA	0.0 kVA		3	20 A	SPARE
17						1.2 kVA	0.0 kVA			14
19				1.2 kVA	0.0 kVA					16
21	NEW VFD003-420	30 A	3		1.2 kVA	0.0 kVA		3	20 A	SPARE
23						1.2 kVA	0.0 kVA			18
TOTAL LOAD:				22.1 kVA	22.1 kVA	22.1 kVA				20
TOTAL AMPS:				80 A	80 A	80 A				22

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
POWER	66.3 kVA	100.00%	66.3 kVA	TOTAL CONN. LOAD 66.3 kVA
				TOTAL EST. LOAD 66.3 kVA
				TOTAL CONN. CURRENT 80 A
				TOTAL EST. DEMAND CURRENT 80 A

PANELBOARD: EX. LPB61C-420		(FIELD VERIFY MANUFACTURE MAKE AND MODEL)	
LOCATION: CHEM BLDG		VOLTAGE: 208/120	
SUPPLY FROM: XFMR61C-420		PHASE: 3	
MOUNTING: SURFACE		WIRES: 4	
ENCLOSURE: TYPE 1		A.I.C. RATING: 10kA	
		PANEL TYPE: MCB	
		BUS RATING: 100 A	
		MCB RATING: 100 A	

CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESCRIPTION	CKT
1	EX ANALYZERS CHEM BLDG	20 A	1	0.3 kVA	1.4 kVA			1	20 A	EX PNL 001-420 (ACID RELAY PNL)
3	EX ANALYZERS CHEM BLDG	20 A	1		0.3 kVA	1.4 kVA		1	20 A	EX PNL 002-420 (CAUSTIC PNL)
5	EX PNL 004-420 (CHEM ALARM PNL)	20 A	1			1.4 kVA	1.4 kVA	1	20 A	EX PNL 003-420 (HYPO RELAY PNL)
7	EX PNL 005-420 (FILL STATION)	20 A	1	0.6 kVA	0.5 kVA			1	20 A	EX FE420FOC001
9	EX LSH420TGS001	20 A	1		0.5 kVA	0.5 kVA		1	20 A	EX LSH420TGS002
11	EX LSH420TGS003	20 A	1			0.5 kVA	0.5 kVA	1	20 A	EX LSH420TGS004
13	LSH420TGS005 (FUTURE)	20 A	1	0.0 kVA	0.0 kVA			1	20 A	LSH420TGS006 (FUTURE)
15	EX FIT010PVM002	20 A	1		0.5 kVA	0.5 kVA		1	20 A	EX FIT420THS001
17	AIT-A420TGS006B TRANSMITTER	20 A	1			0.1 kVA	0.1 kVA	1	20 A	AIT-A420TGS005B TRANSMITTER
19	AIT-A420TGS006A TRANSMITTER	20 A	1	0.1 kVA	0.1 kVA			1	20 A	AIT-A420TGS005A TRANSMITTER
21	SPARE	20 A	1		0.0 kVA	0.0 kVA		1	20 A	SPARE
23	SPARE	20 A	1			0.0 kVA	0.0 kVA	1	20 A	SPARE
25	SPARE	20 A	1	0.0 kVA	0.0 kVA			1	20 A	SPARE
27	SPARE	20 A	1		0.0 kVA	0.0 kVA		1	20 A	SPARE
29	SPARE	20 A	1			0.0 kVA	0.0 kVA	1	20 A	SPARE
TOTAL LOAD:				3.0 kVA	3.7 kVA	4.0 kVA				26
TOTAL AMPS:				25 A	32 A	34 A				28

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
POWER	10.7 kVA	100.00%	10.7 kVA	TOTAL CONN. LOAD 10.7 kVA
				TOTAL EST. LOAD 10.7 kVA
				TOTAL CONN. CURRENT 30 A
				TOTAL EST. DEMAND CURRENT 30 A

PANELBOARD: EX. DPB061A-420		(FIELD VERIFY MANUFACTURE MAKE AND MODEL)	
LOCATION: CHEM BLDG		VOLTAGE: 208/120	
SUPPLY FROM: XFMR61A-420		PHASE: 3	
MOUNTING: SURFACE		WIRES: 4	
ENCLOSURE: TYPE 1		A.I.C. RATING: 10kA	
		PANEL TYPE: MCB	
		BUS RATING: 100 A	
		MCB RATING: 80 A	

CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESCRIPTION	CKT
1	LSSL420SDP001	20 A	1	1.0 kVA	1.2 kVA			1	20 A	PSF001-420C
3	SPARE (EX. PMP REMOVED)	20 A	1		0.0 kVA	0.0 kVA		1	20 A	SPARE (EX. PMP REMOVED)
5	SPARE (EX. PMP REMOVED)	20 A	1			0.0 kVA	0.0 kVA	1	20 A	SPARE (EX. PMP REMOVED)
7	SPARE	20 A	1	0.0 kVA	0.0 kVA			1	20 A	SPARE (EX. PMP REMOVED)
9	SPARE (EX. PMP REMOVED)	20 A	1		0.0 kVA	0.0 kVA		1	20 A	SPARE (EX. PMP REMOVED)
11	SPARE (EX. PMP REMOVED)	20 A	1			0.0 kVA	1.0 kVA	1	20 A	ECP001-420C
13	SPARE (EX. PMP REMOVED)	20 A	1	0.0 kVA	0.0 kVA			1	20 A	SPARE
15	SPARE	20 A	1		0.0 kVA	0.0 kVA		1	20 A	SPARE
17	SPARE (EX. PMP REMOVED)	20 A	1			0.0 kVA	0.0 kVA	1	20 A	SPARE
19	SPARE	20 A	1	0.0 kVA	0.0 kVA			1	20 A	SPARE
21	SPARE	20 A	1		0.0 kVA	0.0 kVA		1	20 A	SPARE
23	SPARE	20 A	1			0.0 kVA	0.0 kVA	1	20 A	SPARE
TOTAL LOAD:				2.2 kVA	0.0 kVA	1.0 kVA				20
TOTAL AMPS:				20 A	0 A	10 A				22

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
POWER	3.2 kVA	100.00%	3.2 kVA	TOTAL CONN. LOAD 3.2 kVA
				TOTAL EST. LOAD 3.2 kVA
				TOTAL CONN. CURRENT 9 A
				TOTAL EST. DEMAND CURRENT 9 A

SAFETY SWITCH SCHEDULE						
DESIGNATION	LOCATION	ENCLOSURE	VOLTAGE	NUMBER OF POLES	SWITCH RATING IN AMP	NOTES
PCA001-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PCA002-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PCA003-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PCA004-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PCB001-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PCB002-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PCB003-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PCB004-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PHF001-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PHF002-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PHF003-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
PHF004-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	30	
SRP001-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	60	
SRP002-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	60	
SRP003-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	60	
SRP004-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	60	
SRP005-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	60	
SRP006-420 NFSS	420-PROCESS AREA	NEMA 4X	480	3	60	

1/27/2021 11:05:29 AM

Designed by: VE	REVISION			APPV	 Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, MD 21231	 VETERANS ENGINEERING A SPIRIT TO SERVE	 DEBDAS GHOSAL ENGINEER No. 34918-E 10/22/2020	 alcosan allegheny county sanitary authority	ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN 3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810 www.alcosan.org	ALLEGHENY COUNTY SANITARY AUTHORITY WASTEWATER TREATMENT PLANT EAST HEADWORKS 420-ES-01 HEADWORKS ODOR CONTROL FACILITY SCHEDULES	Contract: 1729
	Drawn by: JC	REV No.	DATE								DESCRIPTION
Checked by: GM	0	10/28/20	ISSUED FOR BIDS		Date: OCTOBER 2020						Sheet: 511 of 645

SAFETY SWITCH SCHEDULE						
DESIGNATION	LOCATION	ENCLOSURE	VOLTAGE	NUMBER OF POLES	SWITCH RATING	NOTES
GOF001-500 NFSS	MAIN PUMP STATION UPPER LEVEL	NEMA 4X	480V	3	30	
KGV501-500 NFSS	MAIN PUMP STATION UPPER LEVEL	NEMA 4X	480V	3	30	
KGV502-500 NFSS	MAIN PUMP STATION UPPER LEVEL	NEMA 4X	480V	3	30	
KGV601-500 NFSS	MAIN PUMP STATION UPPER LEVEL	NEMA 4X	480V	3	30	
KGV602-500 NFSS	MAIN PUMP STATION UPPER LEVEL	NEMA 4X	480V	3	30	

1

- GENERAL SHEET NOTES**
- REFER TO DRAWING E-01 FOR LEGEND AND E-02 FOR GENERAL NOTES AND ABBREVIATIONS.
 - PANELBOARD SCHEDULES SHOWN ARE EXISTING TO REMAIN AND BASED ON FIELD SURVEY DATA FROM SEPTEMBER 2020.
 - REFER TO DRAWING 510-ET-01 FOR RACK AND CHLORINATION BUILDING POWER PLAN AND PANELBOARD LOCATIONS.
 - REFER TO DRAWING 513-ET-01 FOR RACK AND CHLORINATION BUILDING SCREENING GARAGE POWER PLAN AND EQUIPMENT LOCATIONS.
 - PROVIDE PERMANENT TYPED PANELBOARD DIRECTORY AS REQUIRED.

- SHEET KEYNOTES**
- CONNECT BRANCH CIRCUITS TO EXISTING SPARE CIRCUIT BREAKERS.
 - REPLACE EXISTING CIRCUIT BREAKERS WITH 30-AMP GFCI EQUIPMENT RATED CIRCUIT BREAKERS.

PANELBOARD: PNL BCP-H
 LOCATION: RACK AND CHLORINATIO...
 SUPPLY FROM: 30 XFMR PNL H
 MOUNTING: SURFACE
 ENCLOSURE: NEMA 1

VOLTAGE: 208/120
 PHASE: 3
 WIRES: 4

A.I.C. RATING: 10KAIC
 PANEL TYPE: MCB
 BUS RATING: 125 A
 MCB RATING: 125 A

CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESCRIPTION	CKT	
1	LT-RACK RM "LC1" EXT. LOAD	20 A	1	0.0 kVA	0.0 kVA		1	20 A	LT-RACK RM "LC2" EXT. LOAD	2	
3	LT-RACK RM "LC2" EXT. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	LT-RACK RM "LC1" EXT. LOAD	4	
5	LT-RACK RM "LC3" EXT. LOAD	20 A	1			0.0 kVA	0.0 kVA	1	20 A	LT-RACK RM "LC1" EXT. LOAD	6
7	LT-SCRNING GAR. (LC5) EXT. LOAD	20 A	1	0.0 kVA	0.2 kVA		1	20 A	SRS101-510	8	
9	LT-SCRNING GAR. (LC6) EXT. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	LTG-CNTRL/BALC/LNCH EXT. LOAD	10	
11	EMERG LTG-HALL LOBBY EXT. LOAD	20 A	1			0.0 kVA	0.0 kVA	1	20 A	LTG-TER/RESTRM/LCKR EXT. LOAD	12
13	SRS102-510	20 A	1	0.2 kVA	0.2 kVA		1	20 A	SRS201-510	14	
15	REC-RCK RM/GRIT GRG EXT. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	REC-RESRMLCKR/CHLR EXT. LOAD	16	
17	SRS202-510	20 A	1			0.2 kVA	0.0 kVA	1	20 A	REC-CNTRL/MEC/ELE RM EXT. LOAD	18
19	REC-CHLOR/GRIT GRG EXT. LOAD	20 A	1	0.0 kVA	0.0 kVA		1	20 A	SWGE SAMPLE PUMP#1 EXT. LOAD	20	
21	EMERG LTG - BSMT EXT. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	LTG-GRIT HNDLING "LC4" EXT. LOAD	22	
23	WATER COOLER FRIDGE EXT. LOAD	20 A	1			0.0 kVA	0.0 kVA	1	20 A	CHLORINE HALL EXT. LOAD	24
25	BSMNT SAMPLER EXT. LOAD	20 A	1	0.0 kVA	0.0 kVA		1	20 A	EMERG LTG ELEC RM EXT. LOAD	26	
27	HTC001-513 HEAT TRACE	20 A	1		0.0 kVA	0.0 kVA	1	20 A	STM. ACTTR. FAN LCKER EXT. LOAD	28	
29	LTG BSMT AEAR 510 EXT. LOAD	20 A	1			0.0 kVA	0.0 kVA	1	20 A	CLOCKS EXT. LOAD	30
31	LTG BSMT AEAR 510 EXT. LOAD	20 A	1	0.0 kVA	0.0 kVA		1	20 A	REC-RACK RM EXT. LOAD	32	
33	LTG-GRIT HNDLING "LC3" EXT. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	REC-EAST/SMPLR/FRIDGE EXT. LOAD	34	
35	LTG-GRIT HNDLING "LC4" EXT. LOAD	20 A	1			0.0 kVA	0.0 kVA	1	20 A	REC-ROOFTOP AREA 510 EXT. LOAD	36
37	LTG-GRIT HNDLING "LC3" EXT. LOAD	20 A	1	0.0 kVA	0.0 kVA		1	20 A	SAMPLER-CHLOR RM EXT. LOAD	38	
39	LTG-GRIT HNDLING "LC7" EXT. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	LIT510BSR100 RACK RM EXT. LOAD	40	
41	LTG-GRIT HNDLING "LC8" EXT. LOAD	20 A	1			0.0 kVA	0.0 kVA	1	20 A	FAN EFF003-510 ROOF EXT. LOAD	42
TOTAL LOAD:				0.5 kVA	0.0 kVA	0.2 kVA					
TOTAL AMPS:				5 A	0 A	2 A					
LOAD CLASSIFICATION		CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS						
POWER		0.7 kVA	100.00%	0.7 kVA	TOTAL CONN. LOAD		0.7 kVA				
					TOTAL EST. LOAD		0.7 kVA				
					TOTAL CONN. CURRENT		2 A				
					TOTAL EST. DEMAND CURRENT		2 A				

EXISTING PANELBOARD TO REMAIN MANUFACTURER/MODEL:
WESTINGHOUSE POW-R-LINE C PRL1

PANELBOARD: PNL H-1
 LOCATION: RACK AND CHLORINATIO...
 SUPPLY FROM: XFMR PNL H-1
 MOUNTING: SURFACE
 ENCLOSURE: NEMA 1




VOLTAGE: 208/120
 PHASE: 3
 WIRES: 4

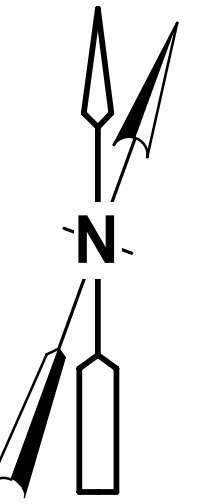
A.I.C. RATING: 10KAIC
 PANEL TYPE: MLO
 BUS RATING: 250 A
 MCB RATING: 250 A

CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESCRIPTION	CKT	
1	SPARE	20 A	1	0.0 kVA	0.0 kVA		1	20 A	MCC003-510 PWR MTR EXT. LOAD	2	
3	LTG BREEZEWAY EXT. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	SPARE	4	
5	EXHAUST FAN EXT. LOAD	20 A	1			0.0 kVA	0.0 kVA	1	20 A	SPARE	6
7	CHLOR. CNTRL RM. HTR EXT. LOAD	20 A	1	0.0 kVA	0.0 kVA		1	20 A	HTR CHLORINATOR RM EXT. LOAD	8	
9	LTS CHLOR RM EXT. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	SPARE	10	
11	LTS CHLOR. CNTRL RM EXT. LOAD	20 A	1			0.0 kVA	0.0 kVA	1	20 A	LTS. LOAD DOCK EXT. LOAD	12
13	SPARE	20 A	1	0.0 kVA	0.0 kVA		1	20 A	SPARE	14	
15	D1A001 & 002 /AIR DYRS EXT. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	SPARE	16	
17	SPARE	20 A	1			0.0 kVA	0.0 kVA	1	20 A	SPARE	18
19	SPARE	20 A	1	0.0 kVA	0.0 kVA		1	20 A	MSA EXT. LOAD	20	
21	SCRBBR VL CAT WALK EST. LOAD	20 A	1		0.0 kVA	0.0 kVA	1	20 A	SPARE	22	
23	HTP001-500:P5	30 A	1			2.4 kVA	0.0 kVA	1	20 A	SPARE	24
25	HTP001-500:P6	30 A	1	2.4 kVA	0.0 kVA		1	20 A	SPARE	26	
27	TRUCK SCALE WSV001-513	20 A	1		0.1 kVA	0.0 kVA	1	20 A	LOWER LEVEL HTR#1 EXT. LOAD	28	
29	SPARE	20 A	1			0.0 kVA	0.0 kVA	1	20 A	SPARE	30
31	SPARE	20 A	1	0.0 kVA	0.0 kVA		1	20 A	SPARE	32	
33	SPARE	20 A	1		0.0 kVA	0.0 kVA	1	20 A	ELECL RM LTS SENSOR EXT. LOAD	34	
35	LTS CONTROL RM EXT. LOAD	20 A	1			0.0 kVA	0.0 kVA	1	20 A	FOYER LIGHTS EXT. LOAD	36
37				0.0 kVA	0.0 kVA						38
39	PANELBOAD A EXT. LOAD	100 A	3		0.0 kVA	0.0 kVA	3	100 A	PANEL BCP-A EXT. LOAD	40	
41						0.0 kVA	0.0 kVA				42
TOTAL LOAD:				2.4 kVA	0.1 kVA	2.4 kVA					
TOTAL AMPS:				23 A	0 A	23 A					
LOAD CLASSIFICATION		CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS						
POWER		4.9 kVA	100.00%	4.9 kVA	TOTAL CONN. LOAD		4.9 kVA				
					TOTAL EST. LOAD		4.9 kVA				
					TOTAL CONN. CURRENT		13 A				
					TOTAL EST. DEMAND CURRENT		13 A				

EXISTING PANELBOARD TO REMAIN MANUFACTURER/MODEL:
EATON PRL1A

1/25/2021 8:36:03 AM

Designed by: TPB	REVISION REV No. DATE DESCRIPTION APPV 0 10/28/20 ISSUED FOR BIDS 1 1/28/21 ADDENDUM NO. 6	 Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, MD 21231	 IL HWAN KIM ENGINEER No. PE07607 PENNSYLVANIA	 ALCOSAN allegheny county sanitary authority	ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN 3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766-4810 www.alcosan.org	ALLEGHENY COUNTY SANITARY AUTHORITY WASTEWATER TREATMENT PLANT EAST HEADWORKS 510-ES-01 RACK AND CHLORINATION BUILDING SCHEDULES	Contract: 1729
Drawn by: TPB	Checked by: IHK						CAD File Name: 510-ES-01.DGN



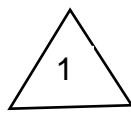
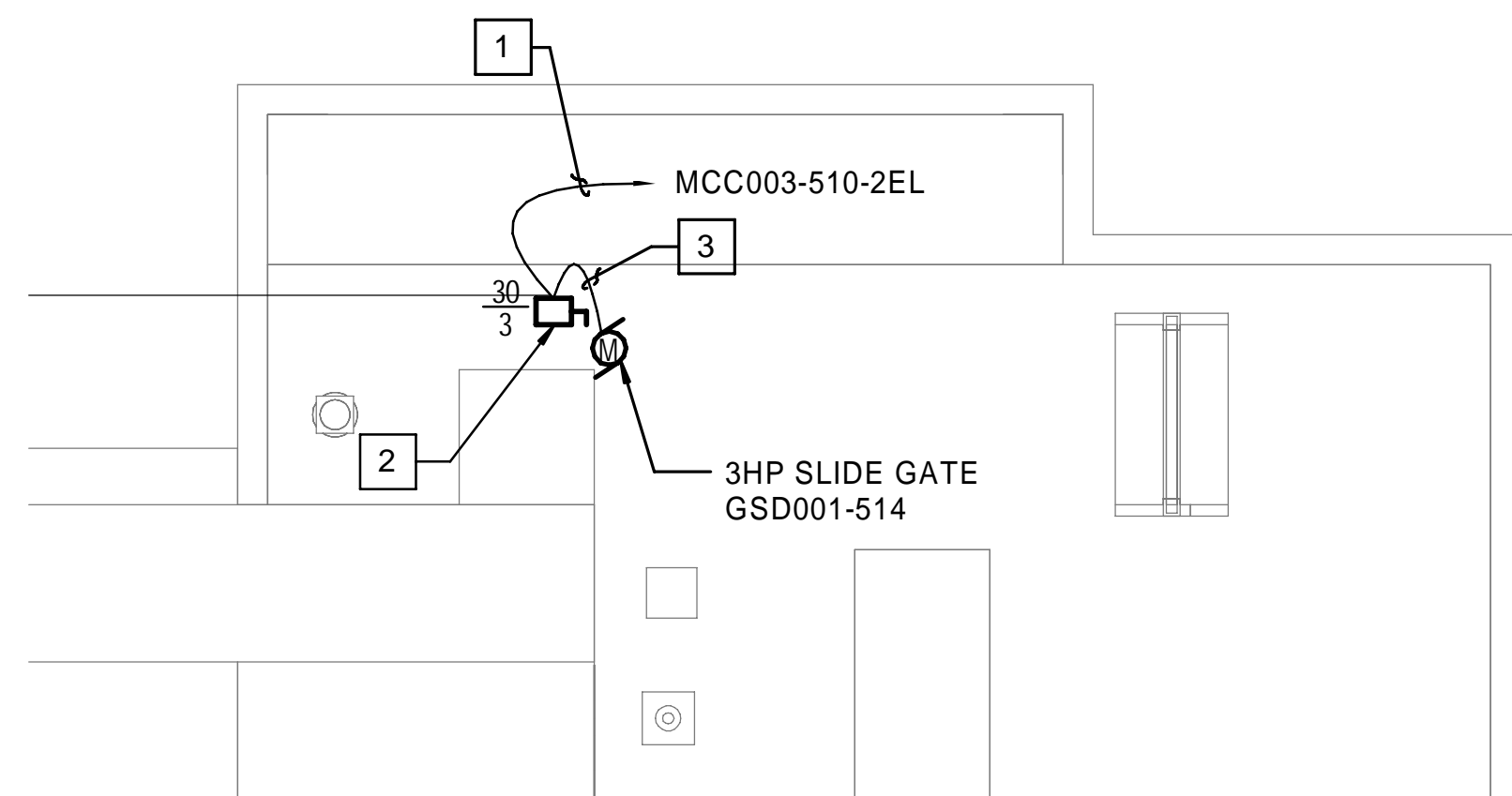
GENERAL SHEET NOTES

1. REFER TO DRAWING E-01 FOR LEGEND AND E-02 FOR GENERAL NOTES AND ABBREVIATIONS.
2. REFER TO DRAWINGS 516-G-10 FOR AREA CLASSIFICATIONS. ALL DEVICES AND EQUIPMENT IN THE RESPECTIVE AREA MUST BE LISTED FOR SUCH USE.
3. REFER TO DRAWINGS 510-ESL-01 AND 510-ESL-02 FOR SINGLE LINE DIAGRAMS.
4. REFER TO DRAWING 510-ET-01 FOR ELECTRICAL ROOM LAYOUT, PANELBOARD AND MOTOR CONTROL CENTER LOCATIONS.
5. REFER TO MECHANICAL DRAWINGS FOR ACTUAL EQUIPMENT LOCATIONS. COORDINATE FINAL LOCATIONS OF DEVICES WITH OTHER TRADES.
6. ALL EQUIPMENT SHOWN IS NEW UNLESS OTHERWISE NOTED.
7. PROVIDE PERMANENT NAMEPLATES FOR ALL EQUIPMENT. NAMEPLATES MUST BE PERMANENTLY FASTENED WITH LISTED EQUIPMENT NAME AND DESIGNATION.
8. PROVIDE SLOTTED STEEL AS REQUIRED TO SUPPORT NEW CONTROL PANELS AND SAFETY SWITCHES (TYP).

SHEET KEYNOTES

1. EXTEND BRANCH CIRCUIT, 3#12, 1#12 GND IN 3/4" CONDUIT TO CIRCUIT NUMBER INDICATED. DISTANCE TO MCC003-510 IS APPROXIMATELY 250'.
2. PROVIDE NEMA 4X SS SAFETY SWITCH.
3. WIRING IN LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT CONNECTION FROM CONTROL PANEL TO PUMP. CONDUIT AND SIZE BRANCH CONDUCTORS SIZES PER KEYNOTES 1.

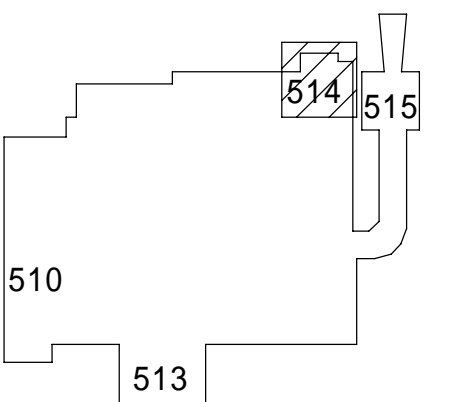
0 10/28/20 ISSUED FOR BIDS



SAFETY SWITCH SCHEDULE 514						
DESIGNATION	LOCATION	ENCLOSURE	VOLTAGE	NUMBER OF POLES	SWITCH RATING	NOTES
GSD001-514 NFSS	GRIT TANKS EFFLUENT	NEMA 4X	480V	3	30	

GRIT TANKS EFFLUENT GATE PART POWER PLAN 1
SCALE: 1/4" = 1'-0"

KEY PLAN



0 2' 4' 8'
SCALE: 1/4" = 1'-0"

1/25/2021 9:17:36 AM

Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
SP	0	10/28/20	ISSUED FOR BIDS	
Drawn by:	1	1/28/21	ADDENDUM NO. 6	
TPB				
Checked by:				
IHK				

ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
EAST HEADWORKS

514-ET-01
GRIT CHAMBERS
EFFLUENT GATE POWER PLAN

Contract:	1729
CAD File Name:	514-ET-01.DGN
Date:	OCTOBER 2020
Sheet:	519 of 645

SAFETY SWITCH SCHEDULE						
DESIGNATION	LOCATION	ENCLOSURE	VOLTAGE	NUMBER OF POLES	SWITCH RATING	NOTES
ACU001-530 NFSS	HIGH ROOF	NEMA 4X	250V	2	30	
ACU001-530 NFSS	IT 530-108	NEMA 4X	250V	2	30	
AHU005-530 NFSS	HIGH ROOF	NEMA 4X	480V	3	30	
AHU006-530 NFSS	HIGH ROOF	NEMA 4X	480V	3	30	
AHU007-530 NFSS	LOW ROOF	NEMA 4X	480V	3	100	
BFV101-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
BFV201-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
BFV301-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
BFV401-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
BFV501-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
BFV601-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
BSR001-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
BSR002-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
BSR003-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
BSR004-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
BSR005-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
BSR006-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
BWH001-530 NFSS	BOILER ROOM 530-201	NEMA 4X	480V	3	30	
BWH002-530 NFSS	BOILER ROOM 530-201	NEMA 4X	480V	3	30	
CGT001-530 NFSS	GRIT DEWATERING ROOM 530-103	NEMA 4X	480V	3	30	
ELEVATOR AUX. FSS	ELEVATOR EL	NEMA 12	250V	2	30	
FRE001-530 NFSS	LOW ROOF	NEMA 4X	480V	3	30	
FRE002-530 NFSS	HIGH ROOF	NEMA 4X	480V	3	30	
GSD000A-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD000B-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD001-535 NFSS	GRIT TANKS EFFLUENT CHANNEL 530	NEMA 4X	480V	3	30	
GSD101-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD102-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD103-534 NFSS	GRIT TANKS 534	NEMA 4X	480V	3	30	
GSD104-534 NFSS	GRIT TANKS EFFLUENT CHANNEL 530	NEMA 4X	480V	3	30	
GSD201-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD202-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD203-534MO NFSS	GRIT TANKS 534	NEMA 4X	480V	3	30	
GSD204-534 NFSS	GRIT TANKS EFFLUENT CHANNEL 530	NEMA 4X	480V	3	30	
GSD301-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD302-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD303-534 NFSS	GRIT TANKS 534	NEMA 4X	480V	3	30	
GSD304-534 NFSS	GRIT TANKS EFFLUENT CHANNEL 530	NEMA 4X	480V	3	30	
GSD401-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD402-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD403-534 NFSS	GRIT TANKS 534	NEMA 4X	480V	3	30	
GSD501-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD502-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD503-534 NFSS	GRIT TANKS 534	NEMA 4X	480V	3	30	
GSD504-534 NFSS	GRIT TANKS EFFLUENT CHANNEL 530	NEMA 4X	480V	3	30	
GSD601-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD602-530 NFSS	BAR RACK ROOM 530-105	NEMA 7	480V	3	30	
GSD603-534 NFSS	GRIT TANKS 534	NEMA 4X	480V	3	30	
GSD604-534 NFSS	GRIT TANKS EFFLUENT CHANNEL 530	NEMA 4X	480V	3	30	
GSD404534 NFSS	GRIT TANKS EFFLUENT CHANNEL 530	NEMA 4X	480V	3	30	
PBC001-530 NFSS	BOILER ROOM 530-201	NEMA 4X	480V	3	30	
PBC002-530 NFSS	BOILER ROOM 530-201	NEMA 4X	480V	3	30	
PGT101-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT102-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT201-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT202-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT301-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT302-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT401-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT402-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT501-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT502-530 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT601-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
PGT602-530MO NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	100	
RD-1 NFSS	SCREENINGS TRUCK BAY 530-104	NEMA 7	480V	3	30	
RD-2 NFSS	SCREENINGS TRUCK BAY 530-104	NEMA 7	480V	3	30	

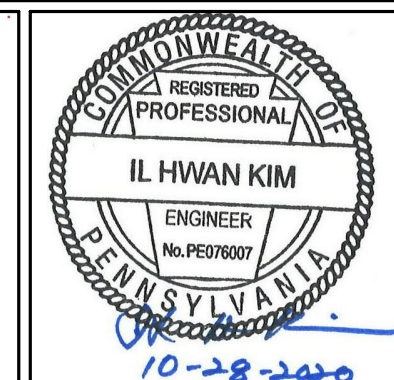
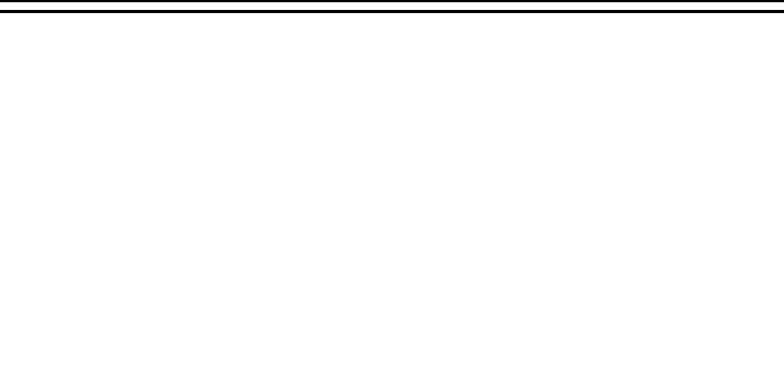
VFD SCHEDULE								
DESIGNATION	Location	ENCLOSURE	MOTOR DATA			PULSE	BYPASS	NOTES
			VOLATGE	PHASE	HP			
AHU001-530 VFD	MECHANICAL ROOM 530-203	NEMA 4X	480V	3	60	6	No	SUPPLIED BY HVAC CONTRACTOR
AHU002-530 VFD	MECHANICAL ROOM 530-203	NEMA 4X	480V	3	20	6	No	SUPPLIED BY HVAC CONTRACTOR
AHU003-530 VFD	MECHANICAL ROOM 530-203	NEMA 4X	480V	3	10	6	No	SUPPLIED BY HVAC CONTRACTOR
AHU004-530 VFD	MECHANICAL ROOM 002	NEMA 4X	480V	3	30	6	No	SUPPLIED BY HVAC CONTRACTOR
BSR001-530VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	1/2	6	No	
BSR002-530VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	1/2	6	No	
BSR003-530VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	1/2	6	No	
BSR004-530VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	1/2	6	No	
BSR005-530VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	1/2	6	No	
BSR006-530VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	1/2	6	No	
FRE001-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	5	6	No	SUPPLIED BY HVAC CONTRACTOR
FRE002-530 VFD	MECHANICAL ROOM 530-203	NEMA 4X	480V	3	3	6	No	SUPPLIED BY HVAC CONTRACTOR
PGT101-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT102-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT201-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT202-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT301-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT302-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT401-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT402-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT501-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT502-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT601-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PGT602-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	40	6	No	
PWH001-530 VFD	BOILER ROOM 530-201	NEMA 4X	480V	3	7 1/2	6	No	SUPPLIED BY HVAC CONTRACTOR
PWH002-530 VFD	BOILER ROOM 530-201	NEMA 4X	480V	3	7 1/2	6	No	SUPPLIED BY HVAC CONTRACTOR
PWH003-530 VFD	BOILER ROOM 530-201	NEMA 4X	480V	3	7 1/2	6	No	SUPPLIED BY HVAC CONTRACTOR
SGD001-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	2	6	No	
SGD002-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	2	6	No	
SGD003-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	2	6	No	
SGD004-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	2	6	No	
SGD005-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	2	6	No	
SGD006-530 VFD	ELECTRICAL ROOM 530-101	NEMA 12	480V	3	2	6	No	

SAFETY SWITCH SCHEDULE						
DESIGNATION	LOCATION	ENCLOSURE	VOLTAGE	NUMBER OF POLES	SWITCH RATING	NOTES
RD-3 NFSS	GRIT TRUCK BAY 530-102	NEMA 4X	480V	3	30	
SGC001-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
SGC002-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
SGC003-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
SGC004-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
SGC005-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
SGC006-534 NFSS	GRIT PUMPING ROOM 530-001	NEMA 4X	480V	3	30	
SGD001-530 NFSS	GRIT DEWATERING ROOM 530-103	NEMA 4X	480V	3	30	
SGD002-530 NFSS	GRIT DEWATERING ROOM 530-103	NEMA 4X	480V	3	30	
SGD003-530 NFSS	GRIT DEWATERING ROOM 530-103	NEMA 4X	480V	3	30	
SGD004-530 NFSS	GRIT DEWATERING ROOM 530-103	NEMA 4X	480V	3	30	
SGD005-530 NFSS	GRIT DEWATERING ROOM 530-103	NEMA 4X	480V	3	30	
SGD006-530 NFSS	GRIT DEWATERING ROOM 530-103	NEMA 4X	480V	3	30	
SPP014-530 NFSS	NORTH TUNNEL 530-X1	NEMA 4X	480V	3	30	
TCM001-530 NFSS	SCREENINGS TRUCK BAY 530-104	NEMA 7	480V	3	100	
THW001-530 NFSS	BOILER ROOM 530-201	NEMA 4X	480V	3	60	
UPS001 530 FSS	ELECTRICAL ROOM 530-101	NEMA 4X	250V	2	100	
UPS101 530 FSS	ELECTRICAL ROOM 530-101	NEMA 4X	250V	2	100	
XFMR UPS001 530 NFSS	ELECTRICAL ROOM 530-101	NEMA 4X	480V	2	60	
XFMR UPS101 530 NFSS	ELECTRICAL ROOM 530-101	NEMA 4X	480V	2	60	

1

1/25/2021 8:11:00 AM

Designed by:	SP	REVISION		
Drawn by:	TPB	REV No.	DATE	DESCRIPTION
Checked by:	IHK	0	10/28/20	ISSUED FOR BIDS
		1	1/28/21	ADDENDUM NO. 6
				APPV



ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

3300 PREBLE AVE.
PITTSBURGH, PA 15233
(412) 766 - 4810

www.alcosan.org

ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
EAST HEADWORKS

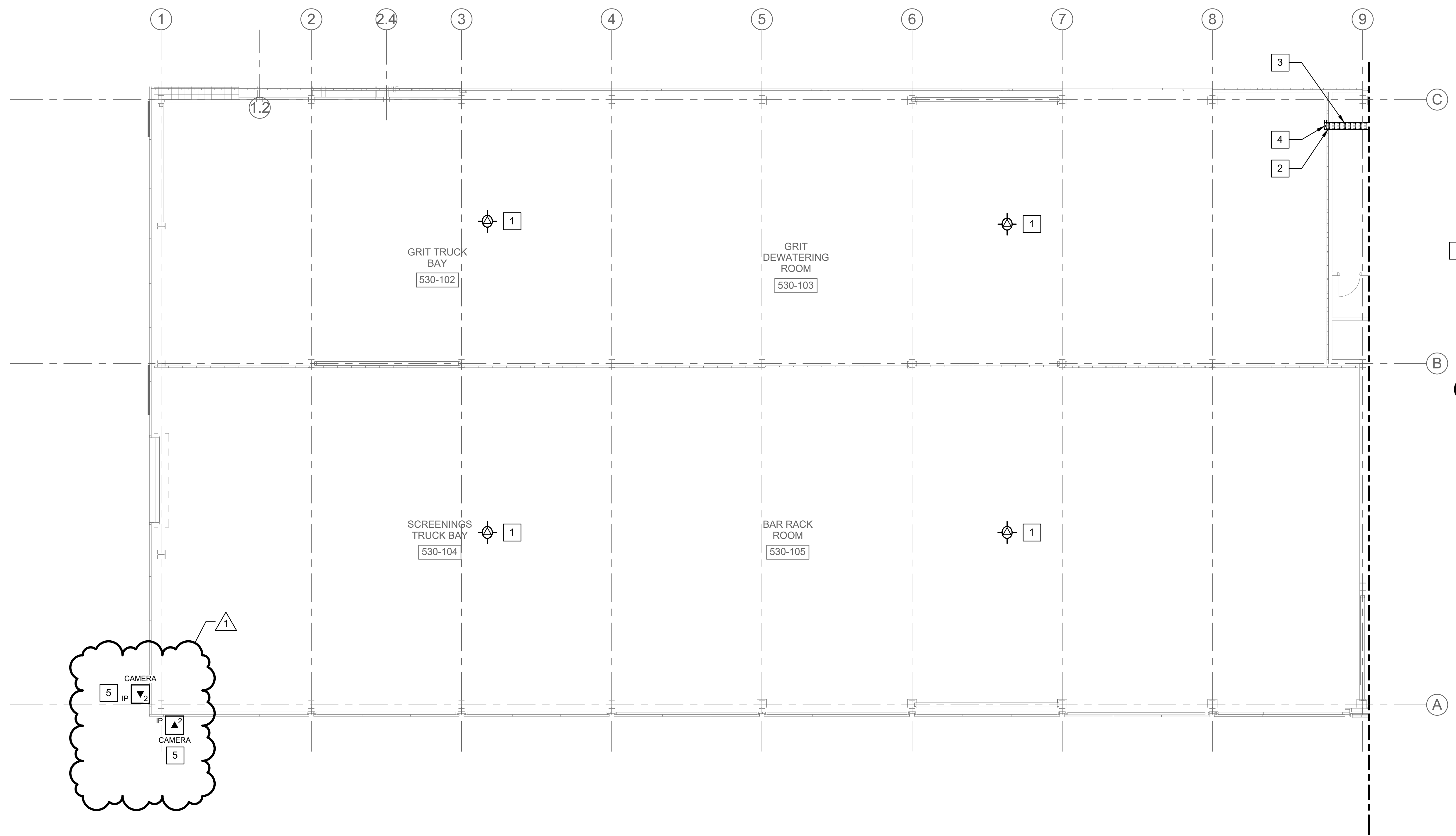
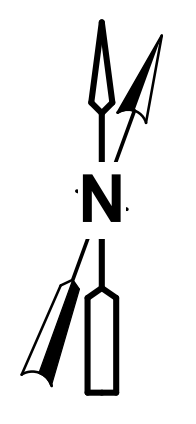
530-ES-05
EAST HEADWORKS
SCHEDULES

Contract: 1729

CAD File Name: 530-ES-05.DGN

Date: OCTOBER 2020

Sheet: 560 of 645

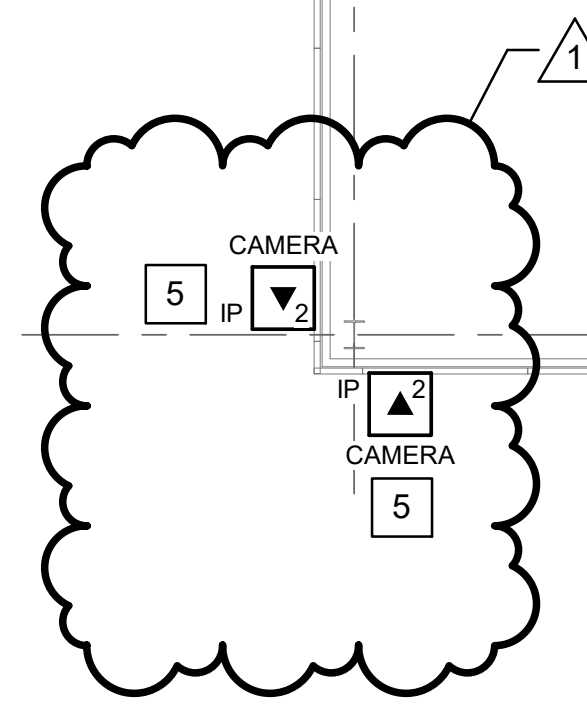


GENERAL SHEET NOTES

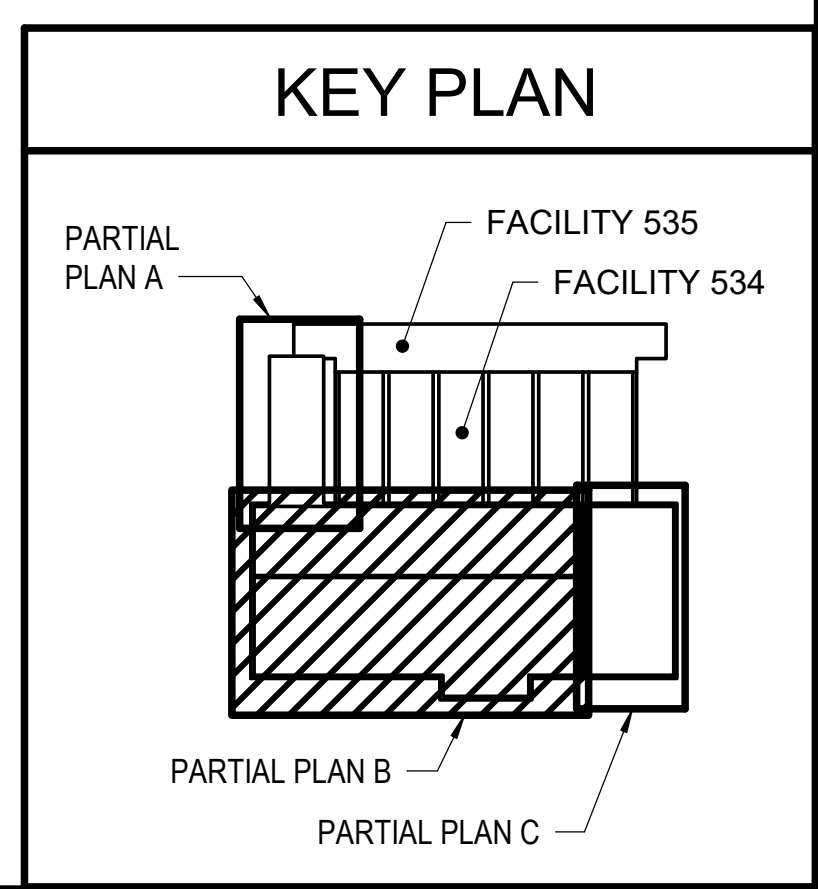
- REFER TO DRAWING T-01 FOR SYMBOLS, GENERAL NOTES AND ABBREVIATIONS.

SHEET KEYNOTES

- PROVIDE DUPLEX CAT6 CEILING MOUNTED OUTLET FOR WAP WITH IP67 COVER (TYPICAL OF 4)
- SEAL WALL PENETRATION WITH FIRE STOP MATERIAL.
- 12"x4" LADDER TRAY AT 9'-6" AFF.
- VERTICAL WALL MOUNTED 12"x4" LADDER TRAY DOWN TO FIRST FLOOR END AT 11'-0" AFF. PROVIDE ELBOWS AS REQUIRED.
- PROVIDE WEATHER RESISTANT CCTV CAMERA OUTLETS, WALL MOUNTED AT 15' AFF (TYPICAL OF 2)



PART B SECOND FLOOR TELECOMMUNICATIONS PLAN
SCALE: 1/8" = 1'-0"



0 4' 8' 16'
SCALE: 1/8" = 1'-0"

1/27/2021 11:28:15 AM

Designed by:	V.E.	REVISION		
Drawn by:	JC	REV No.	DATE	DESCRIPTION
Checked by:	RL	0	10/28/20	ISSUED FOR BIDS
		1	01/28/21	ADDENDUM NO. 6
				APPV

ALLEGHENY COUNTY SANITARY AUTHORITY
WASTEWATER TREATMENT PLANT
EAST HEADWORKS

**530-TT-09
EAST HEADWORKS
SECOND FLOOR - PLAN AREA - B**

Contract:	1729
CAD File Name:	530-TT-09.DGN
Date:	OCTOBER 2020
Sheet:	589 of 645