



November 10, 2025

CONTRACT NO. 1797

OHIO RIVER TUNNEL

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ADDENDUM No. 6

All bidders bidding **Contract No. 1797** shall read and take note of this **Addendum No. 6**. The Contract Documents for **Contract No. 1797 – Ohio River Tunnel** are hereby revised and/or clarified as stated below.

Acknowledgement of Contract No. 1797; Addendum No. 6

The Acknowledgement attached to **Addendum No. 6** is to be signed and returned immediately via email to ORT.bids@alcosan.org and acknowledged with Bidder's Proposal.

Michael Lichte, P.E.

Director of Regional Conveyance

ACKNOWLEDGEMENT OF
CONTRACT NO. 1797 – OHIO RIVER TUNNEL
**** return via email to ORT.bids@alcosan.org ****

ADDENDUM No. 6

FIRM NAME: _____

SIGNATURE: _____

TITLE: _____

DATE: _____

November 10, 2025
CONTRACT NO. 1797
OHIO RIVER TUNNEL
ADDENDUM No. 6

ATTENTION:

BIDS DUE: 11:00 A.M., prevailing time, on Monday, January 26, 2026
DEADLINE FOR QUESTIONS: 5:00 P.M., Friday, December 19, 2025
DEADLINE FOR CORE SHED VISITS: Wednesday, December 17, 2025

This Addendum No. 006 consists of 55 total pages:

- Attachment A – APPENDIX B – CONTRACT DRAWINGS (1 page)
 - Revised A48-ST-300 (Sheet 361 of 770)
- Attachment B – APPENDIX B – CONTRACT DRAWINGS (1 page)
 - Revised O06A-ST-800 (Sheet 623 of 770)
- Attachment C – APPENDIX B – CONTRACT DRAWINGS (14 pages)
 - Revised ORT-GN-011 (Sheet 10 of 770)
 - Revised ORT-GN-013 (Sheet 13 of 770)
 - Revised O27-CI-106 (Sheet 196 of 770)
 - Revised O27-CI-110 (Sheet 200 of 770)
 - Revised O41-CI-206 (Sheet 305 of 770)
 - Revised O41-CI-207 (Sheet 306 of 770)
 - Revised A48-CI-305 (Sheet 358 of 770)
 - Revised A58-CI-406 (Sheet 392 of 770)
 - Revised O14-CI-607 (Sheet 526 of 770)
 - Revised O14-CI-608 (Sheet 527 of 770)
 - Revised O14-CI-609 (Sheet 528 of 770)
 - Revised ORT-MD-028 (Sheet 675 of 770)
 - Revised ORT-MD-029 (Sheet 676 of 770)
 - Revised ORT-MD-030 (Sheet 677 of 770)
- Attachment D – APPENDIX B – CONTRACT DRAWINGS (5 pages)
 - **Revised O27-ST-135** (Sheet 238 of 770)
 - **Revised O41-ST-218** (Sheet 333 of 770)
 - **Revised O41-ST-225** (Sheet 340 of 770)

- o **Revised A58-ST-417** (Sheet 418 of 770)
 - o **Revised O07-ST-707** (Sheet 506 of 770)
- Attachment E – APPENDIX E – SUPPLEMENTAL INFORMATION (FOR REFERENCE ONLY) (3 pages)
 - o Section 5.8 - Drawing Sheets approved by Pittsburgh Water that are not part of the ORT Contract Documents: Section 5.8 fly sheet; Cover Sheet - Pittsburgh Water Utility Relocations; EA-A48-CI-300, EA-A48 Civil Pad Plan, Early Action Ductbank Installation

ATTENTION BIDDERS

The following additions to and modifications of the Contract Documents will be included in and become part of the Contract for the Allegheny County Sanitary Authority (ALCOSAN) Ohio River Tunnel. Bidders are instructed to take the following into account in rendering any Bid for this work.

The Bidder is responsible for verifying that he/she has received and reviewed all of the pages of the Contract Documents as well as all of the pages and attachments of all addenda. The Bidder shall verify all pages with the table of contents in the Contract Documents and the first page of all Addenda. Receipt of this Addendum must be noted on the Bid Form. These items modify the portions of the documents specifically noted; all other provisions of the Contract Documents shall remain in effect.

CONTRACT NO. 1797
OHIO RIVER TUNNEL

ADDENDUM NO. 6

A. QUESTIONS & ANSWERS FROM RFI'S SENT TO
ORT.bids@alcosan.org

- Q1 *Section C on contract drawings ORT-ST-410 makes reference to "#8 Warped Bars Spaced Equally." Please provide details and a definition of a "Warped Bar".*
- A1 **The term "Warped Bars" refers to the curved reinforcement required at the inside face of the junction. This reinforcement needs to be bent to follow the curvature of the tunnel. Refer to Section A in the same sheet ORT-ST-410 for additional clarification. This clarification applies to all Contract Drawing sheets where "Warped Bars" are called out.**
- Q2 *Revision to Article 2, 2.05 Examination of Contract Documents and Site - We ask that the Owner revise Section 2.05 EXAMINATION OF CONTRACT DOCUMENTS AND SITE – Paragraph 2 – from*
- "Before submitting a Bid, Bidders shall, at their own expense, make such investigations and tests as they may deem necessary to determine their Bid for performance of the Work is in accordance with the time, price and other terms and conditions of the Contract Documents. The Owner will not reimburse Bidder's bid/proposal costs."*
- TO*
- "Before submitting a Bid, Bidders shall, at their own expense, make such reasonable investigations and tests as they may deem necessary to determine their Bid for performance of the Work is in accordance with the time, price and other terms and conditions of the Contract Documents. The Owner will not reimburse Bidder's bid/proposal costs."*
- This revision represents typical contract language for this scope of work, fairly shares risk between the Bidder and the Owner, and realistically describes the pre-bid capabilities of the Bidder.*
- A2 **No changes to the Bid Documents will be made. ALCOSAN does not expect the Contractor to make unreasonable investigations or otherwise act in a manner that is not reasonable.**

- Q3 *Revision to Article 2, 2.10 Reference Information - We ask that the Owner revise Section 2.10 REFERENCE INFORMATION – Paragraph 1 – from*

"All information given in the Reference Information relating to existing conditions is from the sources presently available to the Owner. All such information is furnished for the information and convenience of Bidders and is not guaranteed. All prospective Bidders agree that as a condition for Owner's review of its Bid that said information shall not be used as a basis for asserting any claims or demands against the Owner. It is understood by all prospective Bidders that they shall be responsible for determining the exact conditions prior to bidding and that they shall not be compensated for what they may feel is extra work because of their failure to discover conditions they could have discovered upon investigation."

TO

"All information given in the Reference Information relating to existing conditions is from the sources presently available to the Owner. All such information is furnished for the information and convenience of Bidders and is not guaranteed. It is understood by all prospective Bidders that they shall be responsible for reasonably determining conditions prior to bidding and that they shall not be compensated for what they may feel is extra work because of their failure to discover conditions they could have discovered upon reasonable investigation."

This revision represents typical contract language for this scope of work, fairly shares risk between the Bidder and the Owner, and realistically describes the pre-bid capabilities of the Bidder.

- A3 **Delete “the exact”. ALCOSAN does not expect the Contractor to make unreasonable investigations or otherwise act in a manner that is not reasonable. See Section B, Item 1 - CHANGES TO CONTRACT DOCUMENTS for revisions.**

- Q4 *Revision to Article 2, 2.11 Bidders to Investigate, Paragraph A - We ask that the Owner revise Section 2.11 BIDDERS TO INVESTIGATE – Paragraph A – from*

"Bidders must satisfy themselves, by personal examination of the Job Site(s) and by such other means as may be necessary or helpful as to the actual and exact conditions existing, the character and requirements of the Work and the difficulties attendant upon its execution and analyze all laws and regulations which may affect the Work. Bidders are required to visit the Core Shed. Owner will provide Bidders reasonable access to the core shed to examine borings (at Bidder's own expense) for submission of a Bid. Schedule and access requirements for the core shed will be provided during the Pre-Bid Conference."

TO

"Bidders must satisfy themselves, by personal examination of the Job Site(s) and by such other reasonable means as may be necessary or helpful as to the actual conditions existing, the character and requirements of the Work and the difficulties attendant upon its execution and analyze all laws and regulations which may affect the Work. Bidders are required to visit the Core Shed. Owner will provide Bidders reasonable access to the core shed to examine borings (at Bidder's own expense) for submission of a Bid. Schedule and access requirements for the core shed will be provided during the Pre-Bid Conference."

This revision represents typical contract language for this scope of work, fairly shares risk between the Bidder and the Owner, and realistically describes the pre-bid capabilities of the Bidder.

A4 No changes to the Bid Documents will be made. ALCOSAN does not expect the Contractor to make unreasonable investigations or otherwise act in a manner that is not reasonable.

Q5 *Revision to Article 2, 2.11 Bidders to Investigate, Paragraph B - We ask that the Owner revise Section 2.11 BIDDER TO INVESTIGATE – Paragraph B – from*

"If any discrepancies should be found between existing conditions and the Contract Documents, prospective Bidders shall report these discrepancies to the Owner for clarification prior to submitting a Bid. Failure of the Bidder to recognize Job Site conditions that affect the Work shall not be considered sufficient cause for an increase in the Contract Price."

TO

"If any discrepancies should be found between existing conditions and the Contract Documents, prospective Bidders shall report these errors, inconsistencies, discrepancies, ambiguities, or omissions to the Owner for clarification prior to submitting a Bid. The Bidder shall not be liable to the Owner for any damage resulting from any such errors, inconsistencies, discrepancies, ambiguities, or omissions in the Contract Documents unless the Bidder recognized such error, inconsistency, discrepancy, ambiguity, or omission and failed to report it, immediately, in writing, to the Owner."

This revision represents typical contract language for this scope of work, fairly shares risk between the Bidder and the Owner, and realistically describes the pre-bid capabilities of the Bidder.

A5 Bidders must exercise reasonable diligence with investigations and identification of discrepancies. See Section B, Item 2 - CHANGES TO CONTRACT DOCUMENTS for revisions.

Q6 *Revision to Article 2, 2.11 Bidders to Investigate, Paragraph C - We ask that the Owner revise Section 2.11 BIDDER TO INVESTIGATE – Paragraph C – from*

"The submission of a Bid will constitute an incontrovertible representation of Bidder that Bidder has and will comply with every term, condition and requirement of the Contract Documents and that the Contract Documents are sufficient in scope to convey all terms, conditions and requirements for performance and furnishing of the Work."

TO

"The submission of a Bid will constitute a representation that Bidder has and will comply with every term, condition and requirement of the Contract Documents and that the Contract Documents are sufficient in scope to convey all terms, conditions and requirements for performance and furnishing of the Work."

This revision represents typical contract language for this scope of work, fairly shares risk between the Bidder and the Owner, and realistically describes the pre-bid capabilities of the Bidder.

A6 **DELETE “incontrovertible”. See Section B, Item 3 - CHANGES TO CONTRACT DOCUMENTS for revisions.**

Q7 *Revision to Article 3, 3.6 Responsibility for the Work - We ask that the Owner revise Section 3.6 RESPONSIBILITY FOR THE WORK Paragraph 1 – from*

"The Contractor represents and warrants by submission of its Bid that it has thoroughly examined and has become familiar with the Contract Documents and determined the nature and location of the Work, the general and local conditions, the availability of labor, materials, supplies, and equipment, and all other matters which can in any way affect the Work under this Contract. Failure to make any examination necessary for this determination shall not release the Contractor from the obligations of this Contract or be grounds for any claim based on Differing Site Conditions."

TO

"The Contractor represents and warrants by submission of its Bid that it has thoroughly examined and has become familiar with the Contract Documents and determined the nature and location of the Work, the general and local conditions, the availability of labor, materials, supplies, and equipment, and all other matters which can in any way affect the Work under this Contract. Failure to make any reasonable examination necessary for this determination shall not release the Contractor from the obligations of this Contract or be grounds for any claim based on Differing Site Conditions."

This revision represents typical contract language for this scope of work, fairly shares risk between the Bidder and the Owner, and realistically describes the pre-bid capabilities of the Bidder.

A7 No changes to the Bid Documents will be made. ALCOSAN does not expect the Contractor to make unreasonable investigations or otherwise act in a manner that is not reasonable.

Q8 *Please advise if the Owner will agree to add a provision limiting the Contractor's total liability for all claims arising under the Contract—whether in contract, tort (including negligence), or any other legal theory—to a defined percentage of the Contract Sum. This type of cap is standard in the market and ensures a fair balance of risk relative to the contract value. It also allows the Contractor to manage project risk and insurance costs appropriately.*

A8 Liability will be capped to 100% of the contract value per the specified provisions. See Section B, Item 4 - CHANGES TO CONTRACT DOCUMENTS for revisions.

Q9 *Reference Vol. 1, Art. 3SC, Sec. 3.3.10, 3.19, 3.20. Please advise if the Owner will agree to revise the indemnity provisions to reflect an indemnity regime based on proportionate negligence. Specifically, we ask that the Contractor's obligation to indemnify be limited "to the extent" that any damage or loss results from the Contractor's negligent acts or omissions. As currently written, the provision could make the Contractor solely liable for damages resulting from the concurrent negligence of the Owner or its representatives. Aligning the indemnity obligation with the Contractor's actual share of fault is consistent with industry practice and provides a fairer allocation of risk between the parties.*

A9 No changes to the Bid Documents will be made. The language of Article 3, Section 3.10 limits the indemnity obligation to those liabilities arising out of Contractor's Work on the Project "resulting in any way from any act or commission or omission of the Contractor, any subcontractor of the Contractor of any tier, or any person or organization directly or indirectly employed or engaged by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable." The sole negligence provision is an exception to the indemnification obligation whereby Contractor is not required to indemnify the Indemnified Parties for damages arising solely from the negligence of the Indemnified Parties.

- Q10 *Reference Vol. 1, Art. 3SC, Sec. 3.51*
The Contract places the entire risk of loss or damage to materials delivered at the job site on the Contractor until final acceptance by the Owner. As currently written, this obligation is not limited to the Contractor's negligence or failure to perform contractual duties, effectively creating unlimited liability for damage to equipment, including damages arising from causes outside of the Contractor's control. Please advise if the Owner will agree to modify the clause so that the Contractor is responsible only to the extent that loss or damage results from its own negligence or contractual breach. This change would align the risk allocation with standard industry practice, while Builder's Risk Insurance will continue to protect both parties from covered losses.
- A10 **No changes to the Bid Documents will be made. Article 3, Section 3.51 requires Contractor to maintain the Work site during construction until final acceptance. Builder's Risk Insurance covers any damages or loss from factors outside of Contractor's control.**
- Q11 *Reference Vol. 1, Art 3.34, Sec. 3.34A.1 and 3.34D*
The Contract limits compensation for delay damages to delays arising from the negligence of the Owner. This is unduly restrictive and will require substantial contingencies if, for example, the Contractor is barred from claiming extended indirect costs arising from differing site conditions, change orders, or other Owner interference. Please advise if Owner will agree to the below suggested revisions to Volume 1, Article 3.34:
- *Revise Vol. 1, Sec. 3.34A.1 to: "1. Acts, omissions, negligence, or interference by the Owner or any person engaged or employed by the Owner."*
 - *Revise Vol. 1, Sec. 3.34D to: "The Contractor agrees that it shall have no claim against the Owner for an increase in the Contract Sum or for any other monetary damages resulting from delays, disruptions, or interference on account of or resulting from conditions set forth in Subparagraph 3.34A except only for claims for delays caused by the Owner, as set forth in Subparagraphs 3.34.A.1, 3.34.A.2, 3.34.A.4, 3.34.A.7, and/or 3.34.8."*
- A11 **Contractor may submit change requests per Contract per Article 3, Section 3.32. Article 3, Section 3.34 is specific to delays and extensions of time. Article 3, Section 3.34 A.2 and A.8 will be added to paragraph D of Article 3SC. See Section B, Item 5 - CHANGES TO CONTRACT DOCUMENTS for revisions.**

- Q12 *Reference Vol. 1, Art. 3SC, Sec. 3.60B. Please advise if the Owner will agree to revise the Termination for Convenience provision. The current notice period (7 days) for the Contractor to notify the Owner of cost impacts is impractical and does not allow enough time for the Contractor to fully determine cost impacts. Please advise if the Owner can agree to accept termination for convenience proposal within 60 days of termination. The Contract appears to require the Contractor to continue performing obligations even after termination, which is commercially impractical. Please advise if the Owner can agree to removal of any obligation to perform and obligations after the effective date of a termination for convenience, which by its nature cannot be partial.*
- A12 **No changes to the Bid Documents will be made. Section 3.60B in Article 3 merely requires the Contractor to notify ALCOSAN in writing “of the effect” that a termination for convenience order will have on the Contractor’s Work. This does not require a full determination of “cost impacts” or submission of a “proposal” of any sort within the seven-day window. Regarding continuation of work after termination, it is possible to terminate a contract in part, but not in full if a portion of the project is descoped. This is why the obligation to require the Contractor to keep working exists.**
- Q13 *Rights and Duties of Contractor, Sec. 3.10. Please add a reciprocal indemnity provision requiring the Owner to indemnify the Contractor, its subcontractors, and employees to the extent that any losses are caused by the negligence of the Owner, its agents (including the Construction Manager and Consulting Engineer), or its own forces. Just as the Contractor is responsible for its own negligence, the Owner should likewise be responsible for its negligence and that of those acting under its direction.*
- A13 **No changes to the Bid Documents will be made.**
- Q14 *Rights and Duties of Contractor, Sec. 3.55. Would you agree to revise the final payment clause in a more equitable manner so that acceptance of final payment does not waive unresolved claims previously submitted in writing by the Contractor or the Owner’s contractual obligations that should survive project completion, such as indemnification?*
- A14 **No changes to the Bid Documents will be made.**
- Q15 *Rights and Duties of Contractor, Sec. 3.60. Would you agree to revise the termination provisions to apply only to a “substantial or persistent breach of a material provision” and require the Contractor to commence corrective efforts within the 7-day notice period rather than fully remedy the issue?*
- A15 **No changes to the Bid Documents will be made. All that is required to avoid termination is that the Contractor make acceptable progress toward remedying the defect/deficiency during the seven-day window, not a full cure.**

Q16 *We seek clarification regarding the duration of the Builder's Risk coverage required under Article 3 (Insurance). As currently written, the clause indicates that the Contractor shall maintain Builder's Risk insurance "until final payment is made unless otherwise agreed to in writing by the Owner."*

In the insurance market, Builder's Risk policies are generally available only through Substantial Completion of the Work, with coverage transition typically occurring at that point to permanent property insurance carried by the Owner. Continuing Builder's Risk until Final Payment or Final Acceptance may not be commercially available.

Could you please confirm whether the Owner's intent is:

- To require Builder's Risk coverage only through Substantial Completion (with appropriate evidence of coverage transition at that time), or*
- To extend the requirement through Final Payment/Final Acceptance, and if so, whether the Contract may be amended to stipulate that such extension will only apply if commercially available in the insurance market.*

Your clarification will help us ensure compliance while aligning with insurance industry practice.

A16 **Per Addendum #2, Answer #5, Builders Risk insurance is for the term of the contract only through Final Completion.**

Q17 *Reference Vol. 1, Art. 3SC, Sec. 3.60A*

We note that the current clause allows the Owner to terminate the Contract "for any cause whatsoever," which exposes the Contractor to arbitrary termination. We request confirmation whether the Owner would be open to revising this provision to limit termination for cause to instances of material breach. This would align with common practice and ensure a fair balance of rights.

A17 **No changes to the Bid Documents will be made.**

Q18 *With the latest bid opening date pushed back, does Alcosan plan to hold any additional site tours?*

A18 **No additional site tours are planned however bidders are free to visit the sites on their own.**

- Q19 *Gate Control Building Pile Installation - Drawing sheets 262 & 462 of 770 include a pile schedule for the two Gate Control Buildings at sites O27 & A58. Piles 1 through 18 on each pile schedule include an asterisk on the pile callout. This asterisk is used to indicate pile shall be driven a minimum of 5 feet into rock layer.*
- Specification Section 31 62 16 for Steel H Piles, Paragraph 3.2.A tells Contractors that impact and vibratory driving for steel H-pile installation is prohibited.*
- If we cannot vibrate or drive the piles, will a drilled 5' rock socket without any impact or vibration be acceptable?*
- A19 **The term "driven" found within Sheets O27-ST-149 and A58-ST-446's Pile Loading notes means extending pile into rock within the drilled casing. It does not mean the method of pile installation. Pile installation methods shall be per Specification Section 31 62 16.**
- Q20 *Manhole A-58-00 Location - Drawing sheet A58-CI-400 lists ALCOSAN manhole A-58-00 is located at the A58 site. There is no manhole with this callout present on the A58 plans. Please indicate where this manhole can be found.*
- A20 **Revised Drawing A58-CI-400 provided as Addendum No. 5 - Attachment B.**
- Q21 *Prebid Schedule - Due to the complexity of the project, limited work area, and high degree of prime contractor coordination there is concern that the specified Contract Time is not sufficient for a project of this magnitude. Please provide an Owner/Engineer schedule confirming that the work can be completed within the specified contract time.*
- A21 **The Owner/Engineer schedule will not be provided.**
- Q22 *A58 Regulator No. 02 - Drawing sheets A58-ST-403 (note 4) & A58-ST-409 (sequence step 1) reference the determination of structural repairs of the existing regulator to be determined by the Contractor's Professional Engineer. If the Contractor's Professional Engineer deems repairs necessary, how are Contractor's reimbursed for this repair cost?*
- A22 **Additional scope and repairs will be administered through the change request process per Contract per Article 3, Section 3.32.**
- Q23 *A58 Regulator No. 02 - Suggested sequence step number 4 on sheet A58-ST-409 dictates that secant piles can only be installed during dry weather conditions. What is the purpose of this restriction?*
- A23 **Secants are located adjacent to the culvert. Installation during wet weather should be avoided to prevent structural damage during heavy culvert flow.**

- Q24 *A58-OF Tremie Seal - Reference drawing sheet A58-ST-414. When the existing Outfall structure was constructed, they installed a tremie seal to cut off the water. The cofferbox for construction of the new outfall does not show a tremie seal from the old sheets out to the new sheets, instead it details a 6" aggregate base with a six-inch mud slab. Wouldn't a tremie seal be required here as well to seal off the water?*
- A24 **Contract documents do not include a tremie seal as this is a Contractor means and methods preference. Any tremie seal to be included by the contractor shall be fully designed to ensure stability of the excavation. These can be submitted post-award of the Contract for consideration, but bidders should bid the plans and specifications as received.**
- Q25 *Drilling Through Existing 10' x 12' Culvert at A58 - Reference Drawing Sheet A58-ST-411. Can the Contractor core holes through the top and bottom slabs of the 12'W x 10'H existing box culvert under Voegtly Street to perform grouting, SOE, and underpinning?*
- A25 **No, due to the active use of the culvert for existing flow during construction. The suggested approach can be submitted post-award of the Contract for ALCOSAN's consideration, but bidders should bid the plans and specifications as received.**
- Q26 *We have reviewed the provisions of Section 01 22 00 – Measurement and Payment which state that the Mobilization and Demobilization Bid Item shall not exceed 2.5% of the Contract Price, with payment milestones tied to NTP, Substantial Completion, and Final Completion.*
- We would like to respectfully request clarification on whether ALCOSAN would consider revising this cap from 2.5% to 5% of the Contract Price, in line with common industry practice for large-scale tunneling projects.*
- While we note that Insurance, Bond and TBM procurement/assembly are covered under separate bid items, the Mobilization and Demobilization scope still entails substantial upfront costs, including:*
- Establishing and equipping multiple shaft sites and support facilities;*
 - Mobilizing specialized equipment, plants, and systems;*
 - Utilities, temporary works, and security measures;*
 - Final demobilization and restoration of all project sites.*
- Maintaining the current 2.5% cap would result in a higher initial financial exposure for the Contractor. This, in turn, would increase financing and risk-related costs that will ultimately be reflected in the bid price. By adjusting the cap to 5%, ALCOSAN would help reduce the Contractor's financial exposure, thereby lowering the overall project cost risk for the Owner.*

We would appreciate ALCOSAN's confirmation whether such an adjustment is possible.

- A26 The cap will be changed to 5%. See Section B, Item 6 - CHANGES TO CONTRACT DOCUMENTS for revisions.**
- Q27 Specification 31 62 16, 1.8 Pile Testing, Paragraph A.1 requires a minimum of one pile to be tested for axial compressive capacity static load test by ASTM D1143 for each Outfall and each Manhole. Please reconsider this requirement at Outfall and Manhole locations given the space constraints caused by internal bracing for support of excavation.*
- A27 Pile testing requirements to remain and priced as such. Actual testing arrangement during construction to be determined on a case-by-case basis.**
- Q28 Drawings A58-ST-446, O27-ST-149. Notes on these two pages seem to indicate that piling for Control Buildings is driven. Please confirm this. If this is the case, is Dynamic Pile Testing more appropriate for this application?*
- A28 Refer to A19 Response.**
- Q29 Specification 31 62 16, 1.8 Pile Testing. Please confirm that all pile tests are performed on production piles (i.e. no sacrificial piles are required).*
- A29 All pile tests shall be priced for production piles. Actual testing arrangement during construction to be determined on a case-by-case basis per Specification 31 62 16 part 1.8.**
- Q30 Specification 31 62 16 Section 3.2.A states that "Install steel H-piles by pre-drilling to their proposed tip elevations. Impact and vibratory driving for steel H-pile installation is prohibited" however, Drawing A58-ST-446 states " indicates pile shall be driven a minimum of 5 feet into rock layer." Please confirm that rock socketed H-piles are to be pre-drilled and non-rock socketed H-piles are to be driven.*
- A30 Refer to A19 Response.**
- Q31 Please confirm ALCOSAN will accept DBE firms certified by PAUCP and that work awarded to such firms will be counted toward the M/WBE goal on the contract.*
- A31 Confirmed – PAUCP certified firms will be counted toward M/WBE goals.**
- Q32 The 10% M/WBE participation goal mandated is unusually high for the underground industry and will be extremely challenging to meet. The nature of tunneling requires a higher self-perform percentage than is standard for other industries. We suggest a more typical value of 5%.*

- A32 **The stated M/WBE participation percentages are goals. Bidders are encouraged to make every reasonable effort to engage M/WBE firms in areas where services and materials can be provided.**
- Q33 *As we are not able to predict what sort of M/WBE work may be included in the Allowance scopes, and there are no M/WBE manufacturers of the specialty underground equipment (including TBM, separation plant, underground prime movers, permissible excavation equipment, etc.) needed for the project we suggest excluding both values from the M/WBE participation calculations. This would be consistent with other contracts in the underground industry.*
- A33 **See A32 response.**
- Q34 *Clause 3.1.H in specification 01 35 26 appears to call for all shaft and tunnel equipment to comply with 30 CFR Part 36 and for the Contractor to submit proof of MSHA certification for each piece of equipment thus employed. This requirement will significantly impact availability of equipment and will delay the start of the underground works due to lead times of MSHA certified permissible equipment. Please confirm clause 3.5.F.2 in specification 31 71 00 can be applied to equipment used for all facets of shaft and tunnel work allowing the contractor to prepare equipment that meets the applicable MSHA standards without the need to garner MSHA approval.*
- A34 **Confirmed.**
- Q35 *Please confirm excavation for the near surface facilities does not have to be performed with permissible equipment per clause 3.1.H in specification 01 35 26.*
- A35 **Equipment used for construction of Near Surface Facilities do not have to meet the requirements of MSHA, unless the work falls under the guidelines of MSHA as determined by the Contractor.**
- Q36 *Please consider delaying the bid due date to Thursday January 29, 2026 to permit estimate closeout activities to be performed on traditional work days.*
- A36 **The bid due date will not be changed.**
- Q37 *At site AS1, please confirm the Contractor can close S. Canal St. between Chestnut St. and the dead end west of Warfield St. to public traffic, fence in and utilize the resulting area as part of the work site.*
- A37 **S. Canal Street between Chestnut Street and the western limits of the S. Canal Street right of way will be closed to traffic. The ORT contractor will be able to use this S. Canal right of way recognizing that the Bid Documents define access needed by Owner and others during construction.**
- Q38 *At site A48 for the bypass pumping, it states it can be pumped to MH008F002 and this manhole can be found on A48-CI-300. It is not shown on this drawing. Please provide the location for this manhole.*

- A38** **Note 4 on Contract Drawing A48-ST-300 has been updated. See Section B, Item 8 - CHANGES TO CONTRACT DOCUMENTS for revisions.**
- Q39** *Specification 31 62 16 notes that it covers Control Buildings, Outfalls, and other structures. Subsection 3.2.A states: “Install steel H-piles by pre-drilling to their proposed tip elevations. Impact and vibratory driving for steel H-pile installation is prohibited.” The Contract drawings clearly show the pre-drilled holes for the Outfall at A58. However, no drilled holes are shown at either Control Building at A58 or O27. Moreover, Inspection Notes on Tables 1705.7 at both locations discuss recording hammer type and blows per foot. Are the H-Piles at the Control Buildings to be installed by impact driving?*
- A39** **Method of installation per Specification 31 62 16. Apply Table 1705.7 as applicable to the installation methods defined by contract documents.**
- Q40** *Section 01 11 00 ‘SUMMARY OF WORK’ paragraph 1.1.D.7.b states “Shafts ORT-AS1 and ORT-O27-DS will consist of reinforced slurry walls (or diaphragm walls) in overburden strata...”.
Section 31 75 00 “Shaft Construction” paragraph 1.1.B.1 states that “The Work specified in this Section shall include, but not be limited to: 1. Providing reinforced slurry or secant pile walls as shown on the Contract Drawings and as specified in Section 31 56 00 – Slurry Wall and Section 31 57 00– Secant Pile Wall, respectively, for temporary support of the shafts in soil”.
Addendum 1 dated July 30, 2025, questions and answers states:
“Q2 What is the reason for Slurry wall designed locations as opposed to Secant pile wall?
A2 The main reason for the slurry wall design is the size of the shaft.”*
- Please confirm that Slurry Walls is the only prescribed technical option to bid for Shafts ORT-AS1 and ORT-O27-DS.*
- A40** **For all shafts, secant piles and slurry walls are interchangeable as stated in the GBR, as the Contractor's option. The Contract Drawings provide AS1 and O27 shafts using slurry walls and all other shafts using secant piles as base designs. The Bidder has the option to use either method provided all design requirements are met as specified in the applicable Specification Sections. But no other methods than slurry walls or secant piles are permitted as stated in the Contract Documents.**
- Q41** *Section 01 11 00 ‘SUMMARY OF WORK’ paragraph 1.1.D.7.c states that “The remaining shafts...” [Other than Shafts ORT-AS1 and ORT-O27-DS] “will consist of secant pile walls in overburden strata...”.
Section 31 75 00 “Shaft Construction” paragraph 1.1.B.1 states that “The Work specified in this Section shall include, but not be limited to: 1. Providing reinforced slurry or secant pile walls as shown on the Contract Drawings and as specified in Section 31 56 00 – Slurry Wall and Section 31 57 00– Secant Pile Wall,*

respectively, for temporary support of the shafts in soil”.

Addendum 1 dated July 30, 2025, questions and answers states:

“Q2 What is the reason for Slurry wall designed locations as opposed to Secant pile wall?”

A2 The main reason for the slurry wall design is the size of the shaft.”

Please confirm that Secant Piles is the only prescribed technical option to bid for shafts other than ORT-AS1 and ORT-O27-DS.

A41 For all shafts, secant piles and slurry walls are interchangeable as stated in the GBR, as the Contractor's option. The Contract Drawings provide AS1 and O27 shafts using slurry walls and all other shafts using secant piles as base designs. The Bidder has the option to use either method provided all design requirements are met as specified in the applicable Specification Sections. But no other methods than slurry walls or secant piles are permitted as stated in the Contract Documents.

Q42 Could you please provide a Conceptual Construction Project Schedule?

A42 The Owner/Engineer schedule will not be provided.

Q43 Drawings for the owner provided electrical equipment and pads from Contract 1794 included in Appendix E appear to indicate a different for the 1MW transformer to be installed at site AS1 than what is shown in the Contract 1797 drawings. Please confirm which drawing set governs.

A43 The location of the 1MW transformer shown in set 1797 is correct; see Contract Drawing AS1-EL-500 (sheet 513 of 770).

Q44 31 75 00 – 1.7.I.1 : Is the intent of the statement “shall provide concrete mix additives as specified in Section 03 30 00” that all shaft lining concrete requires an integral waterproofing admixture as described in 03 30 00 – 2.3.L Integral Waterproofing?

A44 Yes, but the use of integral waterproofing admixture does not replace other additives as required by Section 03 30 00. It shall be used in conjunction with other additives as specified.

Q45 31 75 00: Please clarify if the Leakage Criteria for Permanent Shaft Linings (1.7.I) only applies to the lining/wall as defined in 1.2.D or if it is intended to apply to all cast-in-place concrete that would be a leakage path into the shafts such as top slabs, invert slabs, and tunnel collars.

A45 This requirement applies to leakage through the shaft final lining which includes the wall, the tunnel/shaft collars (or junctions), and the base slab. Any other sources of leakage alluded to in this RFI shall be stopped as required by the relevant Sections.

- Q46 *Please confirm that no integral waterproofing admixture is required for cast-in-place tunnel liners and junctions.*
- A46 **Integral waterproofing admixture is required - refer to Section 31 71 01 Non-TBM Tunnel Excavation and Section 03 30 00 Cast- in- Place Concrete for all requirements, including waterproofing admixture requirement of cast-in-place concrete.**
- Q47 *Bypass Pumping - O06A-CI-800 - Note 4 on drawing sheet O06A-ST-800 directs the Contractor to pump around the interior shotcrete pipe support from Manhole MROCK0340A to MROCK0289 shown on drawing sheet O06A-CI-800. To accomplish this, the pump lines will need to cross Shingiss street and then across the right lane of Ella street outside of the LOD/LOC. Is it Alcosan's intention to have the Contractor trench across Shingiss street and Ella street under the pavement to install the pump around lines?*
- A47 **Note 4 on Contract Drawing O06A-ST-800 has been updated. See Section B, Item 8 - CHANGES TO CONTRACT DOCUMENTS for revisions.**
- Q48 *Bypass Pumping - O06A-CI-800 - Note 4 on drawing sheet O06A-ST-800 directs the Contractor to pump around the interior shotcrete pipe support from Manhole MROCKMH0340A to MROCKMH0289 shown on drawing sheet O06A-CI-800. To accomplish this, the pump lines will need to cross Shingiss street and then across the right lane of Ella street outside of the LOD/LOC. Will Alcosan obtain the permission from the appropriate authorities to extend the LOC/LOD lines to accomplish the trenching to reach manhole MROCKMH0289?*
- A48 **Please refer to the above response (A47).**
- Q49 *US DOT Disadvantaged Business - Enterprise Firm Decertification - With the US DOT action on October 3, 2025, decertifying DBE Subcontractors and Suppliers, how are Contractors to meet the DEB goal on the project?*
- A49 **US DOT is not applicable to this project.**
- Q50 *Bid Evaluation & Award - Article 1 requires the two lowest bidders to submit a Bidder's Execution Statement (Schedule D) within five (5) working days. However, Section 2.02 of Article 2 states that the award will be made to the lowest responsive and responsible bidder. Please clarify the Owner's intent regarding how the Execution Statement will be evaluated and how it will factor into the overall bid evaluation relative to bid price.*
- A50 **The Bidder's Execution Statement will not factor into the overall bid evaluation relative to price. It will only factor into the bid as being responsive/nonresponsive.**

- Q51 *Management, handling, and disposal of excavated materials - Section 31 23 00 specifies the requirements for the management, handling, storage, characterization, transportation, and disposal of all excavated materials. Based on these requirements, our understanding is that all excavated materials are subject to sampling and characterization to determine the appropriate disposal site—whether for clean, regulated, or hazardous materials. In other words, all excavated materials must be temporarily stored until sampling and testing are completed prior to disposal. Please confirm if this understanding is correct.*
- A51 **Yes. See Appendix A, Specification Section 01 31 00 Permits and Approvals, Attachment 1: NPDES Individual Permit for Discharges of Stormwater Associated with Construction Activities issued by Pennsylvania Department of Environmental Protection (PADEP). See also Appendix E – Supplemental Information (For Reference Only), Section 8 – ORT Material Management Plan – Issued for Permit, which the Contractor must complete for each near surface site, including tunnel shafts, and submit to ALCOSAN and PADEP. See also Addendum 2, Attachment A.**
- Q52 *Management, handling, and disposal of excavated materials - Section 31 23 00 specifies the requirements for the management, handling, storage, characterization, transportation, and disposal of all excavated materials. Based on these requirements, our understanding is that all excavated materials are subject to sampling and characterization to determine the appropriate disposal site—whether for clean, regulated, or hazardous materials. In other words, all excavated materials must be temporarily stored until sampling and testing are completed prior to disposal. Can the Owner specify or limit the locations or tunnel stations where such sampling and testing are required?*
- A52 **See Appendix A, Specification Section 01 31 00 Permits and Approvals, Attachment 1: NPDES Individual Permit for Discharges of Stormwater Associated with Construction Activities issued by PADEP. See also Appendix E – Supplemental Information (For Reference Only), Section 8 – ORT Material Management Plan – Issued for Permit, which the contractor must complete for each near surface site, including tunnel shafts, and submit to ALCOSAN and PADEP. See also Addendum 2, Attachment A.**
- Q53 *Escrow Bid Document Submission Timeframe - Article 2, paragraph 2.33 for the Escrow Bid Documents instructs the two apparent low bidders to submit one copy of all documentary information generated in preparation of Bid prices for this project to the Escrow Agent within three working days after opening of the bids. Please change this language to allow submission of the escrow bid documents within five working days of bid opening for the two apparent lowest bidders. Should this change be adopted, bidders will still be held to the specifications and can have*

their bid be found unresponsive if not submitted within five working days of bid opening.

A53 Five (5) business days is acceptable. See Section B, Item 7 - CHANGES TO CONTRACT DOCUMENTS for revisions.

Q54 Bid Date *-Given the current situation with the WWPS contract procurement, do we expect the bid date for the ORT project to be extended further?*

A54 The bid due date will not be changed.

Q55 Article 3, Sec 3.10-INDEMNIFICATION -Q/A No. 1 in Addendum 2 *- Following your response to Q1 in Addendum 2 regarding Article 3-3.10 "Indemnification," we still have concerns that the clause does not set reasonable limitations on the Contractor's liabilities. Specifically: 1. The Contractor remains liable even if the Owner or other protected parties are partially negligent (partly at fault). The only exception provided is when the issue is 100% caused by the Owner's or other protected parties' negligence. We believe this is not fair or reasonable. 2. The clause further states that "the foregoing obligations shall survive the completion of the Work and/or termination of the Contract." This implies that the indemnification obligations continue indefinitely, even after the work is completed or the contract is terminated, creating open-ended liabilities for the Contractor. This is also not fair or reasonable. We therefore respectfully request that this clause be revised to reflect standard industry practice and to include reasonable limitations on the Contractor's liabilities.*

A55 The language of Section 3.10 limits the indemnity obligation to those liabilities arising out of Contractor's Work on the Project "resulting in any way from any act or commission or omission of the Contractor, any subcontractor of the Contractor of any tier, or any person or organization directly or indirectly employed or engaged by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable." The sole negligence provision is an exception to the indemnification obligation whereby Contractor is not required to indemnify the Indemnified Parties for damages arising solely from the negligence of the Indemnified Parties.

Q56 Article 3, Sec 3.23-AUTHORITY OF THE OWNER - Q/A No. 3 in Addendum 2 *- Following your response to Q3 in Addendum 2 regarding Article 3, Section 3.23 – Authority of the Owner, your reply states: "Supplemental Contract Conditions, Sec. 3.56 – Disputes and Claims provides a mechanism by which the Contractor may dispute an Owner decision. That Section provides both the Contractor and Owner the right to refer disputes to the DRB, provided the conditions precedent to doing so have been satisfied." However, Section 3.3 of the Supplemental Contract Conditions*

states that the DRB report is nonbinding. This creates a conflict: the Contractor cannot reasonably rely on a nonbinding DRB resolution process when Section 3.23 effectively negates its purpose by stating: "The Owner, either directly or through its agents, shall be the sole judge of the intent and meaning of the Contract Documents and its decisions thereon and its interpretations thereof will be final, conclusive, and binding on all parties." This language grants unilateral authority to the Owner, undermining the DRB process and eliminating any meaningful dispute resolution mechanism. We respectfully request that Section 3.23 be deleted or revised to align with the dispute resolution provisions and to ensure a fair and balanced process for both parties.

- A56 Supplemental Section 3.56 outlines escalating dispute resolution steps that provide opportunities for resolution prior to the dispute being decided by one or more independent third parties, and culminate in a fair and binding dispute resolution process through arbitration or litigation.**
- Q57** *DWG O41-CI-202 Do Not Disturb Paint Striping - Sheets 041-CI-202 & ORT-ES-200 include hatching with a flag reading "'do not disturb' paint striping. No disturbance permitted in this area." The location of the hatching conflicts with the Trackout Control Mat and Belmont Street site entrance. Please define the restrictions associated with the "do not disturb" hatching.*
- A57 "Do Not Disturb" limits are shown where excavation is to be avoided. Installation of Trackout Control Mat (TCM) as shown on E&SC drawings ORT-ES-902 allows for TCM installation on the ground surface in this area.**
- Q58** *Retainage - Article 3, Section 3.35 and 3.37 - Addendum 5, Q/A 20 revised the language to state: "Retainage shall be 6% until 50% of the contract is completed. When the contract is 50% completed, retainage shall be reduced to 3%. After Substantial Completion, retainage will be calculated at 1.5 times the value of incomplete work and punch list items." Could you please clarify the meaning of "retainage will be calculated at 1.5 times the value of incomplete work"? For example, if the value of site restoration work remaining is \$10 million, would the Owner withhold \$15 million as retainage? Please confirm the intended application of this clause.*
- A58 Retainage after Substantial Completion shall be per Title 62 of Pennsylvania's Consolidated Statutes as specified in the Contract.**

B. CHANGES TO CONTRACT DOCUMENTS

** changes are denoted in red text

1. Article 2.10 – REFERENCE INFORMATION (Article 2, page 2-6)

CHANGE paragraph 1, 4th sentence as follows:

It is understood by all prospective Bidders that they shall be responsible for determining ~~the exact~~ conditions prior to bidding and that they shall not be compensated for what they may feel is extra work because of their failure to discover conditions they could have discovered upon investigation."

2. Article 2.11 – BIDDERS TO INVESTIGATE (Article 2, page 2-7)

CHANGE 2.11 B. as follows (CHANGES ARE DENOTED IN RED):

Bidders must exercise reasonable diligence with investigations and identification of discrepancies. If any discrepancies should be found between existing conditions and the Contract Documents, prospective Bidders shall report these errors, inconsistencies, ambiguities, or omissions to the Owner for clarification prior to submitting a Bid.

3. Article 2.11 – BIDDERS TO INVESTIGATE (Article 2, page 2-7)

CHANGE 2.11 C. as follows (CHANGES ARE DENOTED IN RED):

The submission of a Bid will constitute ~~a an incontrovertible~~ representation of Bidder that Bidder has and will comply with every term, condition and requirement of the Contract Documents and that the Contract Documents are sufficient in scope to convey all terms, conditions and requirements for performance and furnishing of the Work.

4. CONTRACT DOCUMENTS, Article 3SC – ADD Article 3.61 LIMITATION OF LIABILITY

ADD the following in its entirety at the end of Article 3.61, 1st paragraph on page 3-69 (CHANGES ARE DENOTED IN RED):

The Contractor's total liability for all claims will be limited to 100% of the Contract value, but will not apply to any amounts expressly payable pursuant to this Contract or any amounts entitled to be set-off, or Contractor's liability, to the extent that:

- A. Such losses have been covered by insurance pursuant to this Contract.
- B. Such losses are covered by the proceeds of insurance carried by the Contractor regardless of whether such policies are required pursuant to this Contract.
- C. Under any indemnity pursuant to this Contract where such indemnity relates to claims asserted and/or losses suffered by any third party including those listed as indemnified parties in Article 3SC, Section 3.10, Indemnification.
- D. Loss arising out of fraud, willful misconduct, recklessness, criminal conduct, bad faith or gross negligence.

5. CONTRACT DOCUMENTS, Article 3SC – REVISE Article 3.34 D. – DELAYS AND EXTENSIONS OF TIME

DELETE the 1st sentence in Article 3.34 D. – DELAYS AND EXTENSIONS OF TIME (page 3-41) and REPLACE as follows (CHANGES ARE DENOTED IN RED):

D. The Contractor agrees that it shall have no claim against the Owner for an increase in the Contract Sum or for any other monetary damages resulting from delays, disruptions, or interference on account of or resulting from conditions set forth in Subparagraph 3.34.A except only for claims for delays caused by the Owner, as set forth in Subparagraph 3.34.A.1, A.2, A.8 and solely as provided in this Subparagraph 3.34.D.

6. TECHNICAL SPECIFICATIONS SECTION 01 22 00 - MEASUREMENT AND PAYMENT – BID ITEM 1. Mobilization and Demobilization

CHANGE Item 1 as follows (CHANGES ARE DENOTED IN RED):

1. The Mobilization and Demobilization Payment Item has been established to provide the Contractor with reimbursement for a portion of its costs to Mobilize and Demobilize as specified in Section 01 71 14 “Mobilization and Demobilization.” The price for this BID ITEM shall not be more than ~~2.5%~~ **5 %** of the total Contract Amount.

7. Article 2.33 – ESCROW BID DOCUMENTS (Article 2, page 2-15)

CHANGE 2.33, 2nd paragraph as follows (CHANGES ARE DENOTED IN RED):

The two (2) apparent low Bidders shall submit one copy of all documentary information generated in preparation of Bid prices for this project to the Escrow Agent within ~~three (3)~~ **five (5)** working days after opening of the Bids. This material is hereinafter referred to as Escrow Bid Documents (EBDs). The EBDs of the

Successful Bidder will be held in escrow for the duration of the Contract and Post-Completion Correction period. EBDs of other Bidders will be returned to the Bidders following award and execution of the Contract with the Successful Bidder.

8. APPENDIX B –CONTRACT DRAWINGS

- a) **DELETE A48-ST-300 (Sheet 361 of 770) and ADD Revised A48-ST-300 (Sheet 361 of 770)**, which is Attachment A to this Addendum.
- b) **DELETE O06A-ST-800 (Sheet 623 of 770) and ADD revised O06A-ST-800 (Sheet 623 of 770)**, which is Attachment B to this Addendum.

9. APPENDIX B – CONTRACT DRAWINGS

- a) **DELETE ORT-GN-011 (Sheet 10 of 770) and ADD Revised ORT-GN-011 (Sheet 10 of 770)**, which is Attachment C to this Addendum.
- b) **DELETE ORT-GN-013 (Sheet 13 of 770) and ADD Revised ORT-GN-013 (Sheet 13 of 770)**, which is Attachment C to this Addendum.
- c) **DELETE O27-CI-106 (Sheet 196 of 770) and ADD Revised O27-CI-106 (Sheet 196 of 770)**, which is Attachment C to this Addendum.
- d) **DELETE O27-CI-110 (Sheet 200 of 770) and ADD Revised O27-CI-110 (Sheet 200 of 770)**, which is Attachment C to this Addendum.
- e) **DELETE O41-CI-206 (Sheet 305 of 770) and ADD Revised O41-CI-206 (Sheet 305 of 770)**, which is Attachment C to this Addendum.
- f) **DELETE O41-CI-207 (Sheet 306 of 770) and ADD Revised O41-CI-207 (Sheet 306 of 770)**, which is Attachment C to this Addendum.
- g) **DELETE A48-CI-305 (Sheet 358 of 770) and ADD Revised A48-CI-305 (Sheet 358 of 770)**, which is Attachment C to this Addendum.
- h) **DELETE A58-CI-406 (Sheet 392 of 770) and ADD Revised A58-CI-406 (Sheet 392 of 770)**, which is Attachment C to this Addendum.
- i) **DELETE O14-CI-607 (Sheet 526 of 770) and ADD Revised O14-CI-607 (Sheet 526 of 770)**, which is Attachment C to this Addendum.
- j) **DELETE O14-CI-608 (Sheet 527 of 770) and ADD Revised O14-CI-608 (Sheet 527 of 770)**, which is Attachment C to this Addendum.
- k) **DELETE O14-CI-609 (Sheet 528 of 770) and ADD Revised O14-CI-609 (Sheet 528 of 770)**, which is Attachment C to this Addendum.
- l) **DELETE ORT-MD-028 (Sheet 675 of 770) and ADD Revised ORT-MD-028 (Sheet 675 of 770)**, which is Attachment C to this Addendum.
- m) **DELETE ORT-MD-029 (Sheet 676 of 770) and ADD Revised ORT-MD-029 (Sheet 676 of 770)**, which is Attachment C to this Addendum.
- n) **DELETE ORT-MD-030 (Sheet 677 of 770) and ADD Revised ORT-MD-030 (Sheet 677 of 770)**, which is Attachment C to this Addendum.

10. APPENDIX B – CONTRACT DRAWINGS

- a) **DELETE O27-ST-135** (Sheet 238 of 770) **and ADD Revised O27-ST-135** (Sheet 238 of 770), which is Attachment D to this Addendum.
- b) **DELETE O41-ST-218** (Sheet 333 of 770) **and ADD Revised O41-ST-218** (Sheet 333 of 770), which is Attachment D to this Addendum.
- c) **DELETE O41-ST-225** (Sheet 340 of 770) **and ADD Revised O41-ST-225** (Sheet 340 of 770), which is Attachment D to this Addendum.
- d) **DELETE A58-ST-417** (Sheet 418 of 770) **and ADD Revised A58-ST-417** (Sheet 418 of 770), which is Attachment D to this Addendum.
- e) **DELETE O07-ST-707** (Sheet 506 of 770) **and ADD Revised O07-ST-707** (Sheet 506 of 770), which is Attachment D to this Addendum.

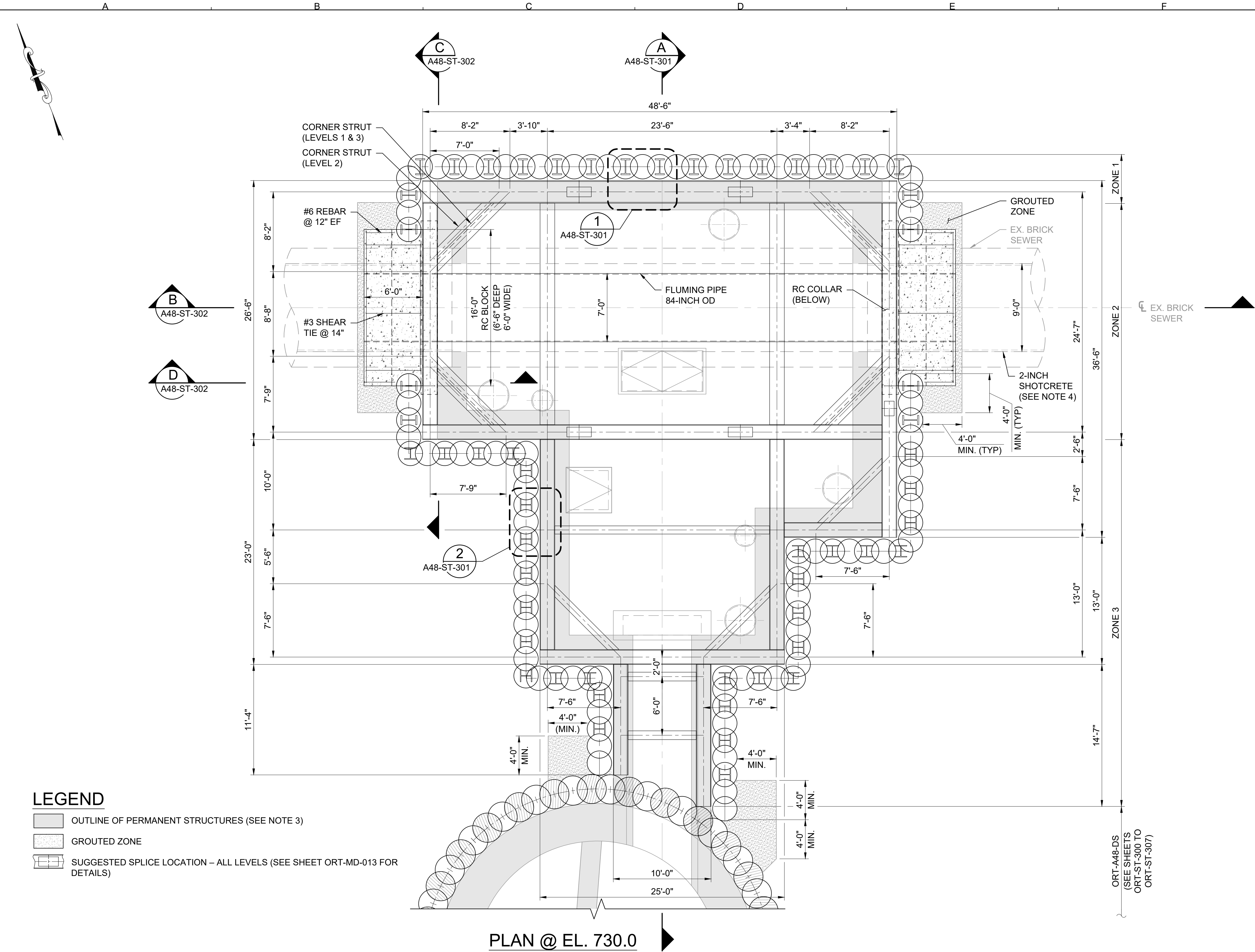
Addendum No. 6

Attachment A

APPENDIX B – CONTRACT DRAWINGS

- **Revised A48-ST-300 (Sheet 361 of 770) (1 page)**

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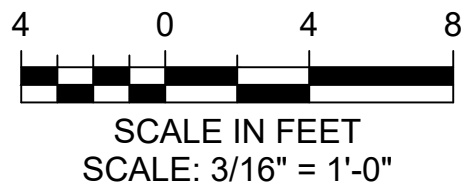
LEGEND

- OUTLINE OF PERMANENT STRUCTURES (SEE NOTE 3)
- GROUTED ZONE
- SUGGESTED SPLICE LOCATION - ALL LEVELS (SEE SHEET ORT-MD-013 FOR DETAILS)

NOTES

- SEE GEOTECHNICAL BASELINE REPORT (GBR) FOR SITE SPECIFIC BASELINED GROUND AND GROUNDWATER CONDITIONS.
- SEE SHEETS A48-CI-300 TO A48-CI-307 FOR SITE EXISTING CONDITIONS, REQUIRED UTILITY RELOCATIONS, DEMOLITIONS, GENERAL SITE LAYOUT, DESIGNATION OF SITE STRUCTURES, COORDINATES OF HORIZONTAL CONTROL POINTS, AND PROPOSED FINAL SITE RESTORATION.
- SEE SHEETS A48-ST-306 TO A48-ST-314 FOR DETAILS OF PERMANENT STRUCTURES. THE OUTLINES OF THE PERMANENT STRUCTURES SHOWN ON SHEETS A48-ST-300 TO A48-ST-302 ARE FOR REFERENCE ONLY.
- THE CONTRACTOR SHALL PROVIDE INTERIOR LINING SUPPORT AROUND THE FULL CIRCUMFERENCE OF THE EXISTING BRICK SEWER PRIOR TO INSTALLATION OF ANY SUPPORT OF EXCAVATION (SOE) ELEMENTS AND GROUND TREATMENT. THE LENGTH OF THE INTERIOR SUPPORT SHALL EXTEND FROM 20 FEET BEYOND THE WESTERN PERMANENT ENDWALL TO 20 FEET BEYOND THE EASTERN PERMANENT ENDWALL. THE CONTRACTOR SHALL FACILITATE THE ABOVE SEWER INTERIOR LINING WORK BY IMPLEMENTING BYPASS PUMPING FROM PWSA MANHOLES MH008F104 TO MH008G069 OR INTERNAL CHANNELING AT CONTRACTOR'S CHOICE. SEE SHEET A48-CI-300 FOR THE MANHOLE LOCATIONS.
- THE SOE ELEMENTS SHOWN ON SHEETS A48-ST-300 TO A48-ST-302, INCLUDING THE REINFORCED CONCRETE (RC) BLOCK AND COLLAR AROUND THE EXISTING SEWER AT EACH END, DEMONSTRATE THE MINIMUM REQUIREMENTS, INCLUDING THE DEFINED SECANT PILES AND THEIR DIAMETERS, DEPTHS, SPACINGS, EFFECTIVE SOE WALL THICKNESS AND BRACING STRUCTURAL MEMBER TYPES AND SIZES. STRUCTURAL CONNECTION DETAILS OF BRACING ELEMENTS ARE NOT SHOWN HEREIN FOR CLARITY. SEE SHEETS ORT-MD-013 AND ORT-MD-014 FOR DETAILS AND SPECIFICATION SECTION 31 41 00 FOR FURTHER REQUIREMENTS. THE CONTRACTOR'S FINAL SOE LAYOUT MUST MEET THESE MINIMUM REQUIREMENTS. ANY ALTERNATIVES PROVIDING LESSER STRUCTURAL CAPACITIES, RIGIDITIES, AND WATERTIGHTNESS SHALL NOT BE PERMITTED AT THE A48-RG SITE.
- THE CONTRACTOR'S SHOP DRAWINGS FOR THE SOE LAYOUT SHALL INCORPORATE TOLERANCE REQUIREMENTS IN ACCORDANCE WITH SPECIFICATION SECTION 31 57 00 TO PROVIDE THE DESIGN DIMENSIONS OF THE PERMANENT STRUCTURES AND ANY NEED FOR SHIMMING TO ACHIEVE TIGHT CONTACT BETWEEN THE WALERS AND THE SOE WALL AT ALL SECANT PILES.
- THE LOCATION, DEPTH, AND DIMENSIONS OF THE EXISTING BRICK SEWER ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL EMPLOY THE APPROPRIATE MEANS AND METHODS TO FIELD VERIFY THESE ELEMENTS AND LOCATE THE EXISTING SEWER BETWEEN THE SECANT PILE CROSSINGS PRIOR TO THE DEVELOPMENT OF SHOP DRAWINGS.
- THE CONTRACTOR SHALL PERFORM FIELD VERIFICATION OF THE PRESENCE OF HISTORICAL SHORING ELEMENTS AND OTHER OBSTRUCTIONS LEFT IN PLACE DURING CONSTRUCTION OF THE EXISTING SEWER. THE CONTRACTOR SHALL REMOVE OBSTRUCTIONS ONLY DURING DRY WEATHER CONDITIONS AS DEEMED NECESSARY FOR GROUTING OPERATIONS AND INSTALLATION OF THE SECANT PILES ADJACENT TO THE EXISTING SEWER.
- ANY EXCAVATION DEEPER THAN 4 FEET PERFORMED FOR PURPOSES OF FIELD VERIFICATION SHALL BE PROPERLY SUPPORTED WITH SHORING. EXCAVATION WORK TO BE PERFORMED ON THE NORFOLK SOUTHERN RAILROAD SIDE SHALL BE NO MORE THAN 8 FEET DEEP AND MUST FALL WITHIN THE SOE LIMITS. DAMAGES TO THE EXISTING SEWER AND THE RAILROAD RETAINING WALL MUST BE PREVENTED UNDER ALL CIRCUMSTANCES.
- FIELD FINDINGS THAT WILL PREVENT THE FINAL SOE LAYOUT FROM MEETING THE MINIMUM REQUIREMENTS SHOWN ON THE CONTRACT DRAWINGS SHALL BE REPORTED TO THE OWNER AND DESIGN LAYOUTS ADJUSTED BY THE CONTRACTOR AND APPROVED BY THE OWNER TO ACCOMMODATE ACTUAL FIELD CONDITIONS.
- THE INSTALLATION OF THE REINFORCED CONCRETE (RC) BLOCKS ABOVE, AND FULL-DEPTH PILES IMMEDIATELY NEXT TO, THE EXISTING SEWER MUST AVOID DAMAGES TO THE SEWER BY LEAVING THE APPROPRIATE CLEARANCES, TO BE DETERMINED BY THE CONTRACTOR BASED ON ITS MEANS AND METHODS. THE CONTRACTOR SHALL INSTALL WALER SEATS EMBEDDED INTO THE RC BLOCK FOR BRACING LEVEL 1 END WALERS. THE NUMBER OF WALER SEATS EMBEDDED IN THE RC BLOCK SHALL FOLLOW THE SAME SPACING PATTERN AS FOR THE SECANT PILES, BUT THERE SHALL BE NO FEWER THAN TWO SEATS.

(NOTES CONTINUE ON SHEET A48-ST-301)



Designed by:	REVISION			
JP/SE	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	11/07/25	NOTE 4 UPDATE	KMC
BJD				
Checked by:				
ZC				

M

MOTT
MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900

811

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040205

COMMONWEALTH OF
PENNSYLVANIA

ZHENQI CAI
ENGINEER
No. PE000708

alcosan
allegheny county sanitary authority

ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

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

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ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN) OHIO RIVER TUNNEL (ORT)		Contract: 1797
A48-ST-300 ORT-A48-RG SUPPORT OF EXCAVATION SHEET 1 OF 3		File: A48-ST-300.dwg
		Date: 07/30/2025
		Sheet: 361 OF 770

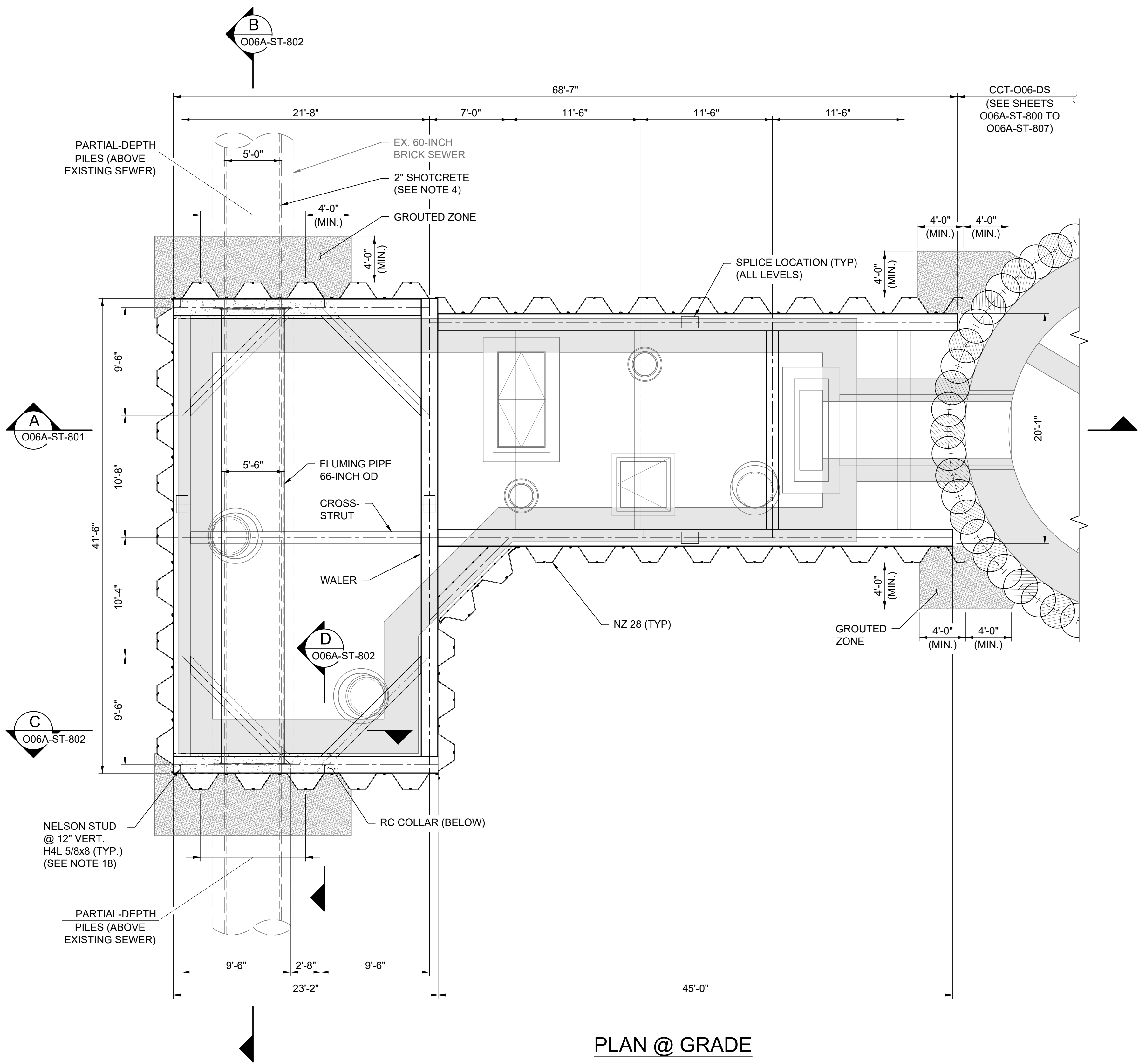
Addendum No. 6

Attachment B

APPENDIX B – CONTRACT DRAWINGS

- **Revised O06A-ST-800 (Sheet 623 of 770) (1 page)**

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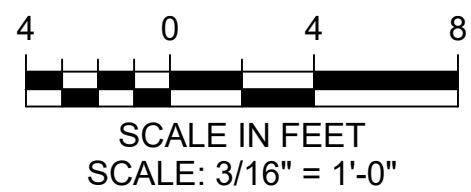
NOTES

- SEE GEOTECHNICAL BASELINE REPORT (GBR) FOR SITE SPECIFIC BASELINED GROUND AND GROUNDWATER CONDITIONS.
- SEE SHEETS O06A-CI-800 TO O06A-CI-813 FOR SITE EXISTING CONDITIONS, REQUIRED UTILITY RELOCATIONS, GENERAL SITE LAYOUT, DESIGNATION OF SITE STRUCTURES, COORDINATES OF HORIZONTAL CONTROL POINTS, AND PROPOSED FINAL SITE RESTORATION.
- SEE SHEETS O06A-ST-806 TO O06A-ST-813 FOR DETAILS OF PERMANENT STRUCTURES. THE OUTLINES OF THE PERMANENT STRUCTURES SHOWN ON SHEETS O06A-ST-800 TO O06A-ST-802 ARE FOR REFERENCE ONLY.
- THE CONTRACTOR SHALL PROVIDE INTERIOR LINING SUPPORT AROUND THE FULL CIRCUMFERENCE OF THE EXISTING BRICK SEWER PRIOR TO INSTALLATION OF ANY SUPPORT OF EXCAVATION (SOE) ELEMENTS AND GROUND TREATMENT. THE LENGTH OF THE INTERIOR SUPPORT SHALL EXTEND FROM 20 FEET BEYOND THE WESTERN PERMANENT ENDWALL TO 20 FEET BEYOND THE EASTERN PERMANENT ENDWALL. THE CONTRACTOR SHALL FACILITATE THE ABOVE SEWER INTERIOR LINING WORK BY IMPLEMENTING BYPASS PUMPING FROM MANHOLES MROCK MH0340A TO MROCK(MH0288) SEE SHEET O06A-CI-800 FOR THE MANHOLE LOCATIONS.
- THE SOE ELEMENTS SHOWN ON SHEETS O06A-ST-800 TO O06A-ST-802, INCLUDING THE REINFORCED CONCRETE (RC) COLLAR (AS A PART OF THE PERMANENT STRUCTURE AT THIS SITE) AROUND THE EXISTING SEWER AT EACH END, DEMONSTRATE THE MINIMUM REQUIREMENTS, INCLUDING THE DEFINED STEEL SHEETING TYPE, THEIR DEPTHS AND BRACING STRUCTURAL MEMBER TYPES AND SIZES. STRUCTURAL CONNECTION DETAILS OF BRACING ELEMENTS ARE NOT SHOWN HEREIN FOR CLARITY - SEE SHEETS ORT-MD-013 AND ORT-MD-014 FOR DETAILS AND SPECIFICATIONS SECTION 31 41 00 FOR FURTHER REQUIREMENTS. THE CONTRACTOR'S FINAL SOE LAYOUT MUST MEET THESE MINIMUM REQUIREMENTS. ANY ALTERNATIVES PROVIDING LESSER STRUCTURAL CAPACITIES, RIGIDITIES, AND WATERTIGHTNESS SHALL NOT BE PERMITTED AT THE CCT-O06A-RG SITE.
- THE CONTRACTOR'S SHOP DRAWINGS FOR THE SOE LAYOUT SHALL INCORPORATE TOLERANCE REQUIREMENTS IN ACCORDANCE WITH SPECIFICATION SECTION 31 41 16 TO PROVIDE THE DESIGN DIMENSIONS OF THE PERMANENT STRUCTURES AND ANY NEED FOR SHIMMING TO ACHIEVE TIGHT CONTACT BETWEEN THE WALERS AND THE SOE WALL AT ALL SHEET PILES.
- THE LOCATION, DEPTH, AND DIMENSIONS OF THE EXISTING BRICK SEWER ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL EMPLOY THE APPROPRIATE MEANS AND METHODS TO FIELD VERIFY THESE ELEMENTS AND LOCATE THE EXISTING SEWER BETWEEN THE SHEET PILE CROSSINGS PRIOR TO THE DEVELOPMENT OF SHOP DRAWINGS.
- THE CONTRACTOR SHALL PERFORM FIELD VERIFICATION OF THE PRESENCE OF HISTORICAL SHORING ELEMENTS AND OTHER OBSTRUCTIONS LEFT IN PLACE DURING CONSTRUCTION OF THE EXISTING SEWER. THE CONTRACTOR SHALL REMOVE OBSTRUCTIONS ONLY DURING DRY WEATHER CONDITIONS AS DEEMED NECESSARY FOR GROUTING OPERATIONS AND INSTALLATION OF THE SHEET PILES ADJACENT TO THE EXISTING SEWER.
- ANY EXCAVATION DEEPER THAN 4 FEET PERFORMED FOR PURPOSES OF FIELD VERIFICATION WITHIN ELLA STREET OR SHINGISS STREET SHALL BE PROPERLY SUPPORTED WITH SHORING.
- FIELD FINDINGS THAT WILL PREVENT THE FINAL SOE LAYOUT FROM MEETING THE MINIMUM REQUIREMENTS SHOWN ON THE CONTRACT DRAWINGS SHALL BE REPORTED TO THE OWNER AND DESIGN LAYOUTS ADJUSTED BY THE CONTRACTOR AND APPROVED BY THE OWNER TO ACCOMMODATE ACTUAL FIELD CONDITIONS.

(NOTES CONTINUE ON SHEET O06A-ST-801)

LEGEND

- OUTLINE OF PERMANENT STRUCTURES (SEE NOTE 3)
- GROUTED ZONE
- SUGGESTED SPLICE LOCATION - ALL LEVELS (SEE SHEET ORT-MD-013 FOR DETAILS)



Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
JP/SE	1	11/07/25	NOTE 4 UPDATE	KMC
Drawn by:				
BJD				
Checked by:				
ZC				

M

MOTT
MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900

811

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040203

COMMONWEALTH OF
PENNSYLVANIA
REGISTERED
PROFESSIONAL
ENGINEER
ZHENQI CAI
No. PE096708

alcosan
alleggheny 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 (ALCOSAN) OHIO RIVER TUNNEL (ORT)		Contract: 1797
O06A-ST-800 CCT-O06A-RG SUPPORT OF EXCAVATION SHEET 1 OF 3		File: O06A-ST-800.dwg
		Date: 07/30/2025
		Sheet: 623 OF 770

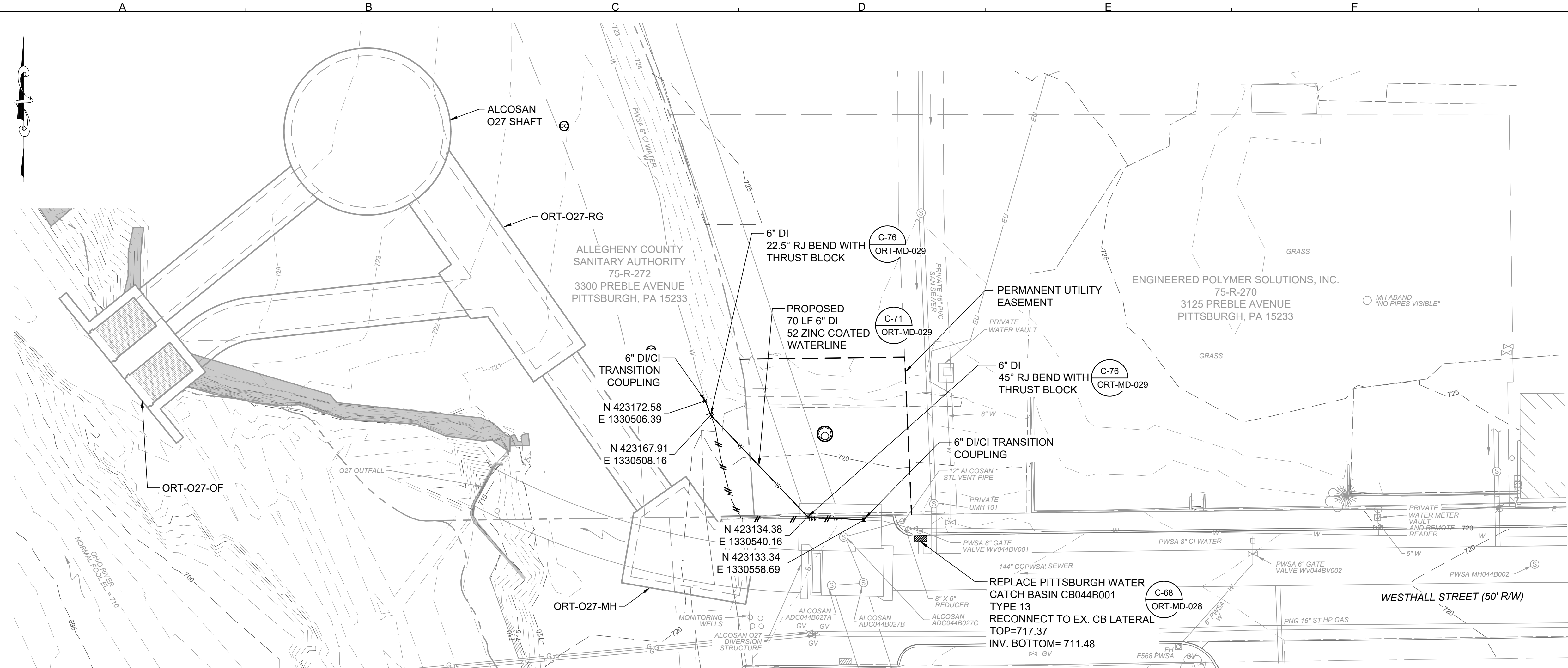
Addendum No. 6

Attachment C

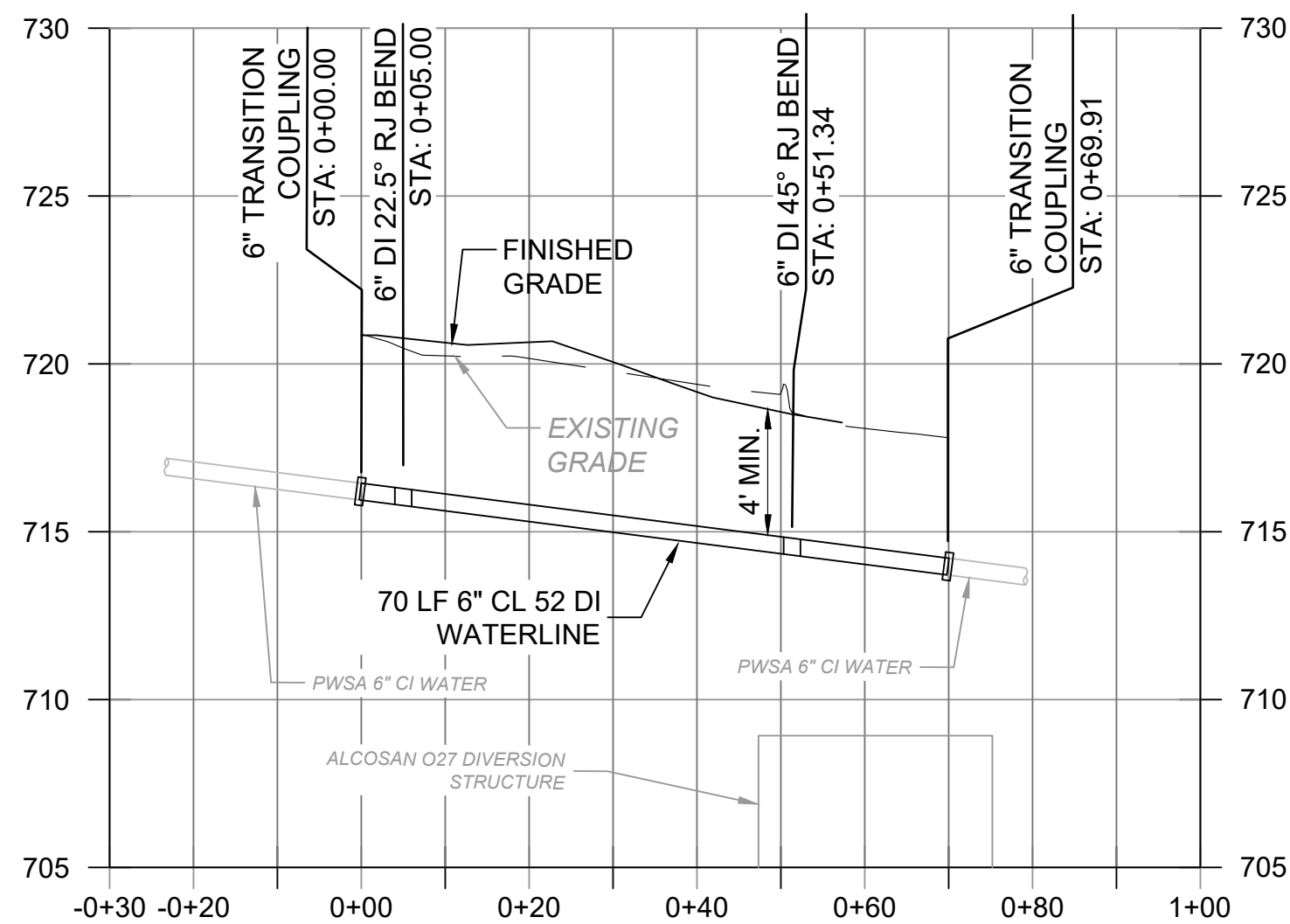
APPENDIX B – CONTRACT DRAWINGS

- **Revised ORT-GN-011 (Sheet 10 of 770) (1 page)**
- **Revised ORT-GN-013 (Sheet 13 of 770) (1 page)**
- **Revised O27-CI-106 (Sheet 196 of 770) (1 page)**
- **Revised O27-CI-110 (Sheet 200 of 770) (1 page)**
- **Revised O41-CI-206 (Sheet 305 of 770) (1 page)**
- **Revised O41-CI-207 (Sheet 306 of 770) (1 page)**
- **Revised A48-CI-305 (Sheet 358 of 770) (1 page)**
- **Revised A58-CI-406 (Sheet 392 of 770) (1 page)**
- **Revised O14-CI-607 (Sheet 526 of 770) (1 page)**
- **Revised O14-CI-608 (Sheet 527 of 770) (1 page)**
- **Revised O14-CI-609 (Sheet 528 of 770) (1 page)**
- **Revised ORT-MD-028 (Sheet 675 of 770) (1 page)**
- **Revised ORT-MD-029 (Sheet 676 of 770) (1 page)**
- **Revised ORT-MD-030 (Sheet 677 of 770) (1 page)**

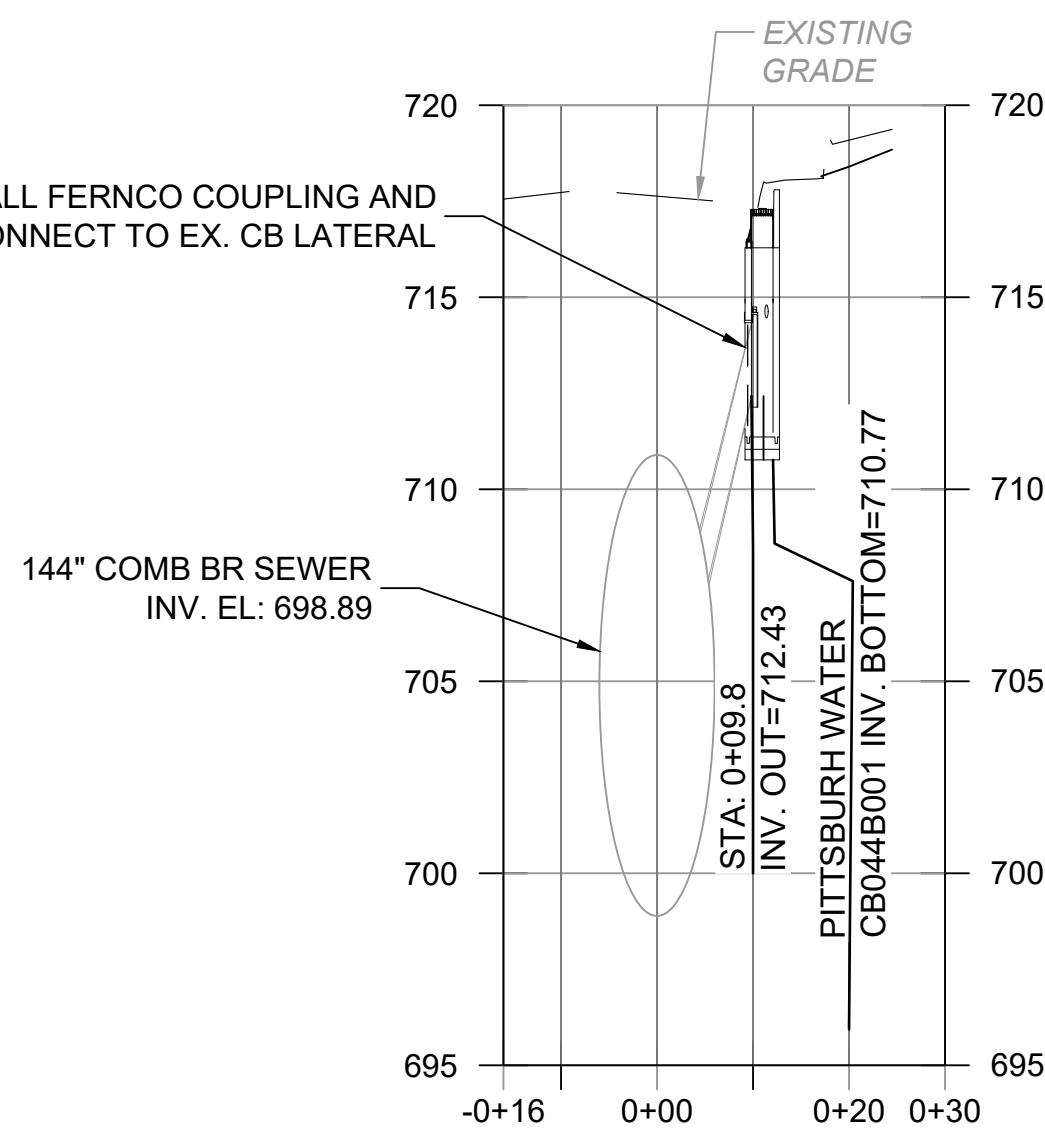
FILE NAME: C:\Users\bow101681\OneDrive\Documents\Mott MacDonald\507105621 - ALCOSAN Ohio River Tunnel Design - T&M\Project Files\1 - ORT\02-Civil\Sheets\Post 100% Addendum - 027-CI-106 LAST SAVED BY: BOW101681 PLOT DATE: 10/31/2025 12:06:28 PM



PLAN
SCALE: 1" = 20'



NEW 6" WATERLINE PROFILE



PITTSBURGH WATER CATCH BASIN CB044B001

NOTES:

1. NOTIFY PITTSBURGH WATER BY CONTACTING ANA BENNETT AT Aflores@pgh2o.com WITH SUFFICIENT NOTICE OF THE SEWER RELOCATION WORK AS DISCUSSED IN PRECONSTRUCTION MEETING.
2. A PITTSBURGH WATER INSPECTOR MUST BE ON SITE FOR ALL WORK.
3. ALL WATERLINE TO BE RESTRAINED JOINT.
4. REMOVE ALL VISIBLE OR BURIED MEG BOXES FROM ALL SEGMENTS OF ABANDONED WATER LINE.
5. TELEWISE CATCH BASIN LATERAL DURING CONSTRUCTION AND REPLACE IF REQUIRED BY THE PITTSBURGH WATER INSPECTOR.

LEGEND

- EX. WATERLINE TO BE REMOVED
- EX. WATER VALVE
- EX. FIRE HYDRANT
- EX. WATER METER VALVE
- EX. CATCH BASIN
- NEW 6" CL 52 ZINC COATED DI WATERLINE
- NEW CATCH BASIN
- REFER TO STANDARD CIVIL DETAIL SHEETS

PITTSBURGH WATER APPROVAL BLOCK

To be completed by the Applicant and provided on each sheet within the plan set:

(Check all that apply)

- NEW WATER CONNECTION(S)
- NEW SEWER CONNECTION(S)
- REUSE EXISTING WATER CONNECTION(S)
- REUSE EXISTING SEWER CONNECTION(S)
- TERMINATE EXISTING WATER CONNECTION(S)
- TERMINATE EXISTING SEWER CONNECTION(S)
- PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

To be completed by Pittsburgh Water:

(Required for ALL approvals)

Ana Bennett
Digitally signed by Ana Bennett
DN: cn=Ana Bennett,
ou=Engineering,
Date: 2025.08.11 09:20:38 -
WV

REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION

Zach Rinker
Digitally signed by Zach Rinker
DN: cn=Zach Rinker,
ou=Engineering,
Date: 2025.08.18 12:57:59 -
WV

SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION

BJ McFadden
Director of Operations

DIRECTOR OF OPERATIONS

(Required for "Private Construction of Public Facilities" ONLY)

Digitally signed by Barry King
DN: cn=Barry King,
ou=Engineering,
Date: 2025.09.16 12:44:53 -
WV

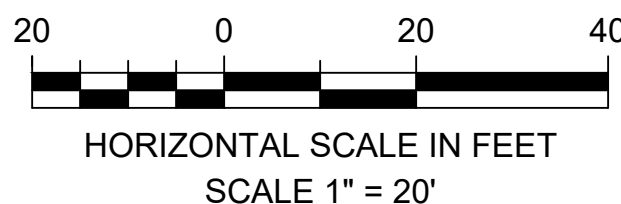
DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION

PITTSBURGH WATER PROJECT NUMBER

TAP C RECORD NUMBER NOT APPLICABLE

Pittsburgh Water approval was based on information provided by others under the assumption that this information was accurate and complete. Please refer to Pittsburgh Water Developer's Manual for detailed information on the regulations and procedures for obtaining water and sewer service.

027-CI-110 WESTHALL STREET PLAN (TO BE COMPLETED AS PART OF ALCOSAN'S ORT CONSTRUCTION AND INCLUDED AS SHEET 200 OF 770) IS INCLUDED AS REVIEWED AND APPROVED BY PITTSBURGH WATER.



Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	11/07/25	PITTSBURGH WATER APPROVED UTILITY PLAN	KMC
Checked by:				

M

MOTT
MACDONALD

M

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900

811

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Pennsylvania One Call System Serial Number

FINAL DESIGN TICKET # 20250040208

COMMONWEALTH OF PENNSYLVANIA

REGISTERED PROFESSIONAL ENGINEER

KATHY MACHAWARA

No. PA-00111-E

EXPIRATION DATE 12/31/25

alcosan

allegheny county sanitary authority

ARLETTA SCOTT WILLIAMS

EXECUTIVE DIRECTOR, ALCOSAN

3300 PREBLE AVE.

PITTSBURGH, PA 15233

(412) 766 - 4810

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ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)

OHIO RIVER TUNNEL (ORT)

027-CI-106

UTILITY PLAN

WATERLINE RELOCATION

Contract:

1797

File:

O27-CI-106.dwg

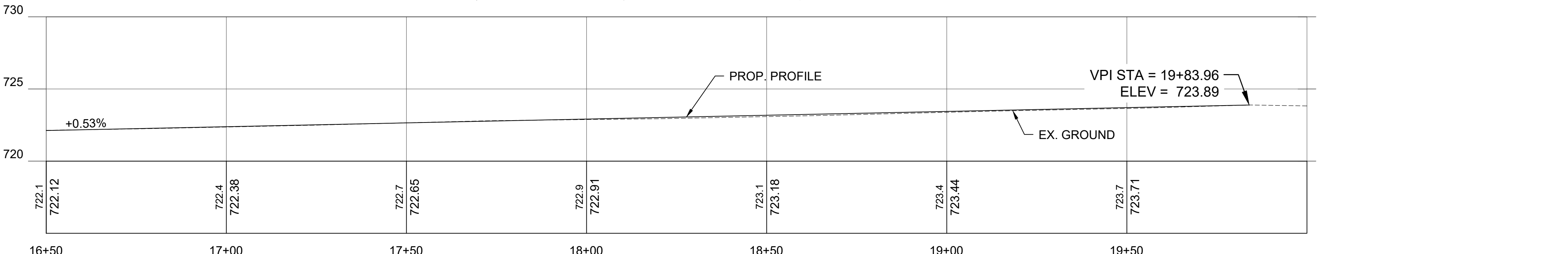
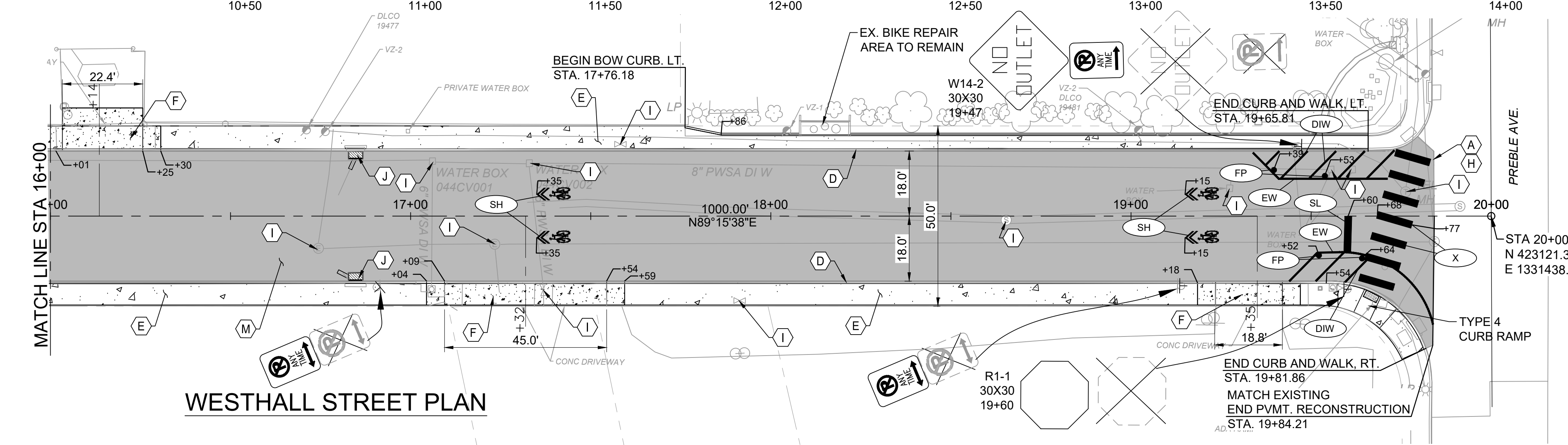
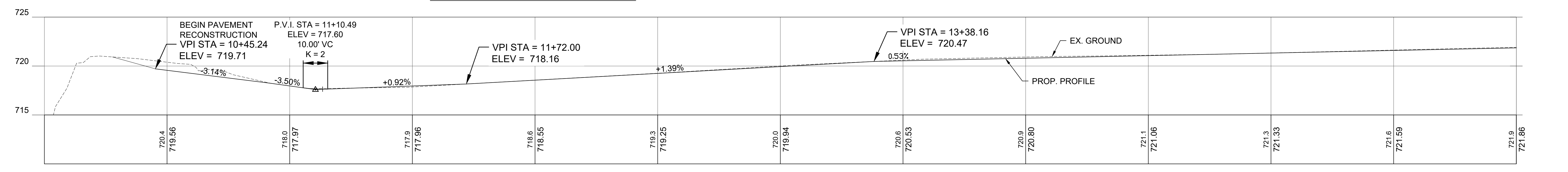
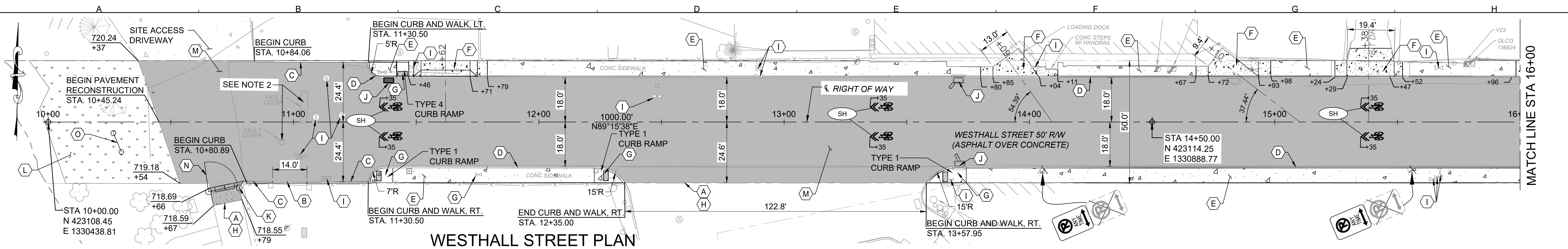
Date:

08/04/2025

Sheet:

196 OF 770

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WESTHALL STREET PROFILE

NOTES

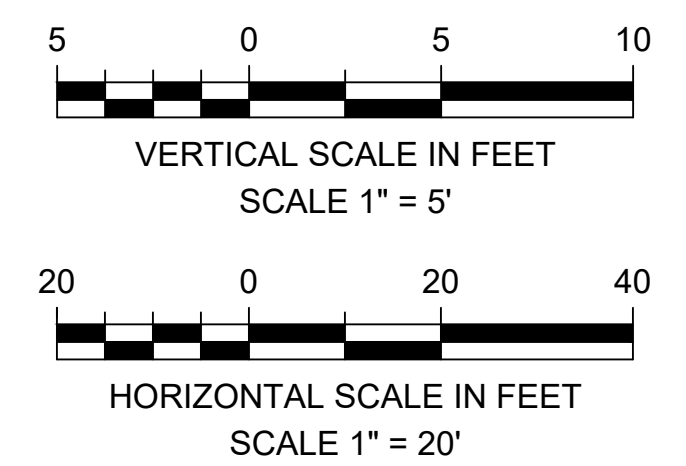
- RIGHT-OF-WAY RESTORATION WILL COMPLY WITH CITY OF PITTSBURGH DEPARTMENT OF MOBILITY AND INFRASTRUCTURE RIGHT-OF-WAY PROCEDURES MANUAL DATED MAY 1, 2022.
- NO ELEVATION ADJUSTMENTS TO EXISTING TOP OF VAULT COVERS. PROPOSED FINISHED PAVEMENT GRADE TO MATCH EXISTING VAULT COVERS.

KEY NOTES

- (A) TIE PROPOSED ROADWAY ELEVATION INTO EXISTING
- (B) CONCRETE DEEP CURB W/ 2" REVEAL (SEE STANDARD DETAIL C-42)
- (C) CONCRETE DEEP CURB W/ 4" REVEAL (SEE STANDARD DETAIL C-42)
- (D) CONCRETE DEEP CURB W/ 7" REVEAL (SEE STANDARD DETAIL C-42)
- (E) REINFORCED CONCRETE SIDEWALK (SEE STANDARD DETAIL C-43)
- (F) TYPE 1A CONCRETE DRIVEWAY APRON WITH DECK CURB (SEE STANDARD DETAIL C-51)
- (G) TYPE 1 CURB RAMP (SEE STANDARD DETAIL C-45)
- (H) SAWCUT EX. PAVEMENT
- (I) ADJUST CASTING TO FINISHED GRADE
- (J) PROPOSED CATCH BASIN (SEE STANDARD DETAIL C-68)
- (K) STANDARD PERMANENT BOLLARD (TYP.) (SEE STANDARD DETAIL C-16)
- (L) TOPSOIL AND PERMANENT SEEDING (SEE STANDARD DETAIL C-57)
- (M) FULL DEPTH PAVEMENT RECONSTRUCTION (SEE SHEET 027-CI-111)
- (N) EXISTING TRAIL GATE TO BE SANDBLASTED, PAINTED AND REINSTALLED
- (O) REINSTALL PRISON CAT COVE SIGN / MONUMENT

LEGEND

- (SL) STOP LINE
- (EW) EDGE LINE, WHITE, 4"
- (X) CROSSWALK LINE, TYPE G
- (FP) WHITE SURFACE MOUNTED FLEXIBLE CITY POST, TYPE SM
- (DIW) DIAGONAL LINE, WHITE, 4" (@ 5'C/C)
- (SH) PROPOSED SHARED LANE MARKING (SHARROW, SPACED @ 200')
- (X) EXISTING SIGN TO BE REMOVED
- (□) PROPOSED SIGN
- (T) SINGLE POST GROUND MOUNTED



Designed by:	TMA	REV No.	1	DATE	11/07/25	DESCRIPTION	PITTSBURGH WATER APPROVED UTILITY PLAN	APPV	KMC
Drawn by:	TMA								
Checked by:	DLM								

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040208

ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCO SAN

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

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ALLEGHENY COUNTY SANITARY AUTHORITY (ALCO SAN)
OHIO RIVER TUNNEL (ORT)

**027-CI-110
WESTHALL STREET PLAN**

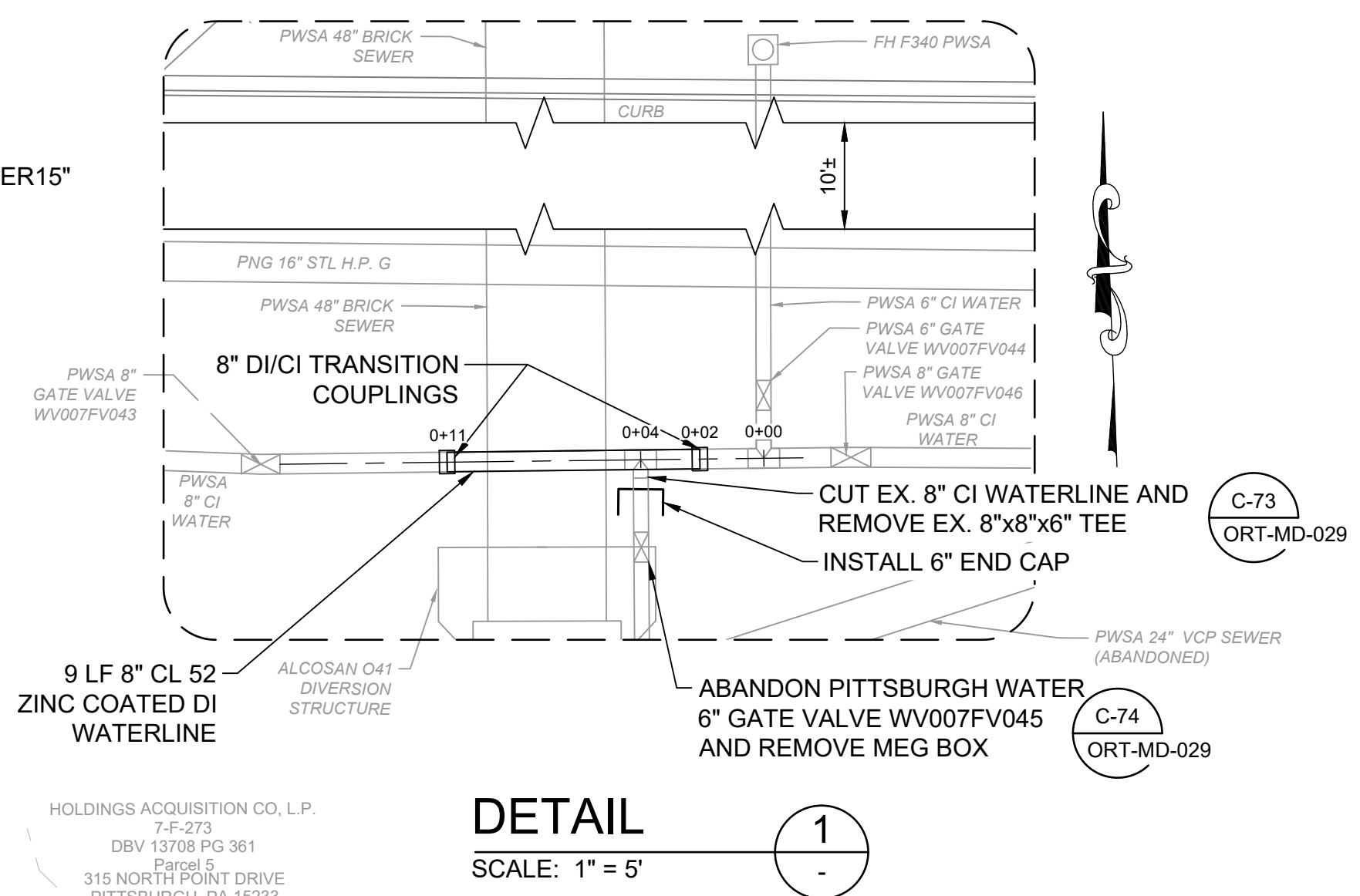
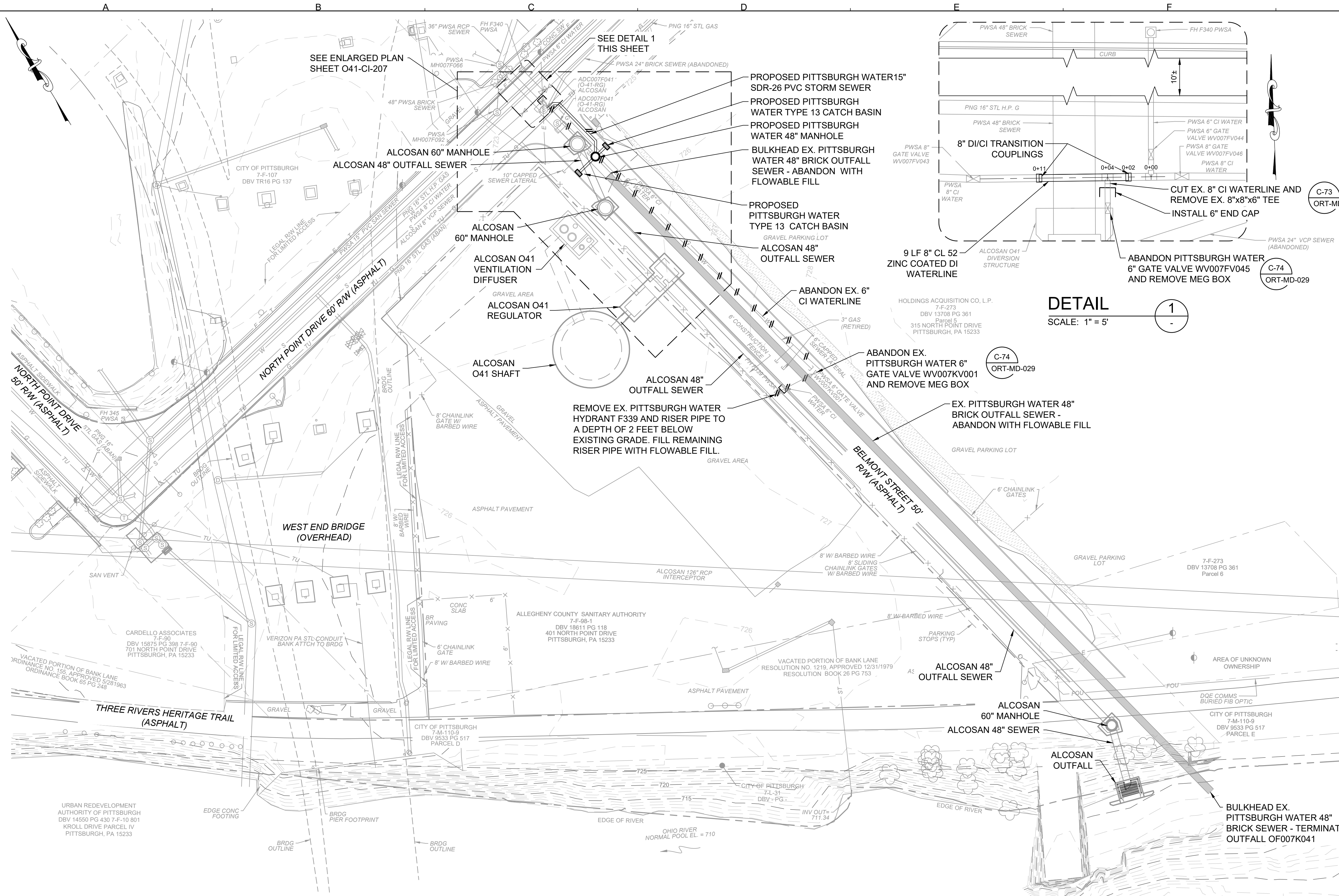
Contract: 1797

File: 027-CI-110.dwg

Date: 08/04/2025

Sheet: 200 OF 770

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NOTES

- NOTIFY PITTSBURGH WATER BY CONTACTING ANA BENNETT AT Aflores@pgh2o.com WITH SUFFICIENT NOTICE OF THE SEWER RELOCATION WORK AS DISCUSSED IN PRECONSTRUCTION MEETING.
- A PITTSBURGH WATER INSPECTOR MUST BE ON SITE FOR ALL WORK.
- DOCUMENT AND RECORD LIMITS OF WATERLINE ABANDONMENT AND REMOVAL ON AS-BUILT RECORD DRAWINGS.

LEGEND

	TO BE ABANDONED
	WATER VALVE
	FIRE HYDRANT
	END CAP
	NEW CATCH BASIN
	NEW SEWER
	NEW MANHOLE
	FLOWABLE FILL
	REFER TO STANDARD CIVIL DETAIL SHEETS

PITTSBURGH WATER APPROVAL BLOCK

To be completed by the Applicant and provided on each sheet within the plan set:

(Check all that apply)

☐	NEW WATER CONNECTION(S)
☐	NEW SEWER CONNECTION(S)
☐	REUSE EXISTING WATER CONNECTION(S)
☐	REUSE EXISTING SEWER CONNECTION(S)
☐	TERMINATE EXISTING WATER CONNECTION(S)
☐	TERMINATE EXISTING SEWER CONNECTION(S)
☒	PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

To be completed by Pittsburgh Water:

(Required for ALL approvals)

Ana Bennett
Digitally signed by Ana Bennett
DN: cn=Ana Bennett, ou=Engineering, email=ana.bennett@pgh2o.com, c=PA
Date: 2025.08.11 09:20:38 -0400

REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION

Zach Rinker
Digitally signed by Zach Rinker
DN: cn=Zach Rinker, ou=Engineering, email=zach.rinker@pgh2o.com, c=PA
Date: 2025.08.15 12:57:59 -0400

SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION

B.J. McFadin
Digitally signed by B.J. McFadin
DN: cn=B.J. McFadin, ou=Operations, email=bj.mcfadin@pgh2o.com, c=PA
Date: 2025.08.15 12:57:59 -0400

DIRECTOR OF OPERATIONS

(Required for "Private Construction of Public Facilities" ONLY)

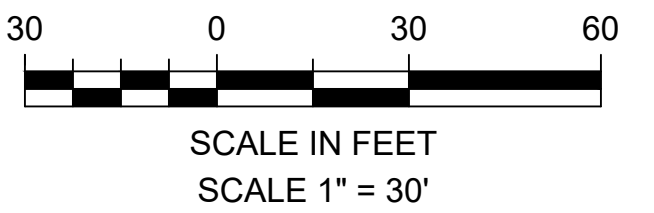
B.J. McFadin
Digitally signed by B.J. McFadin
DN: cn=B.J. McFadin, ou=Operations, email=bj.mcfadin@pgh2o.com, c=PA
Date: 2025.08.15 12:57:59 -0400

DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION

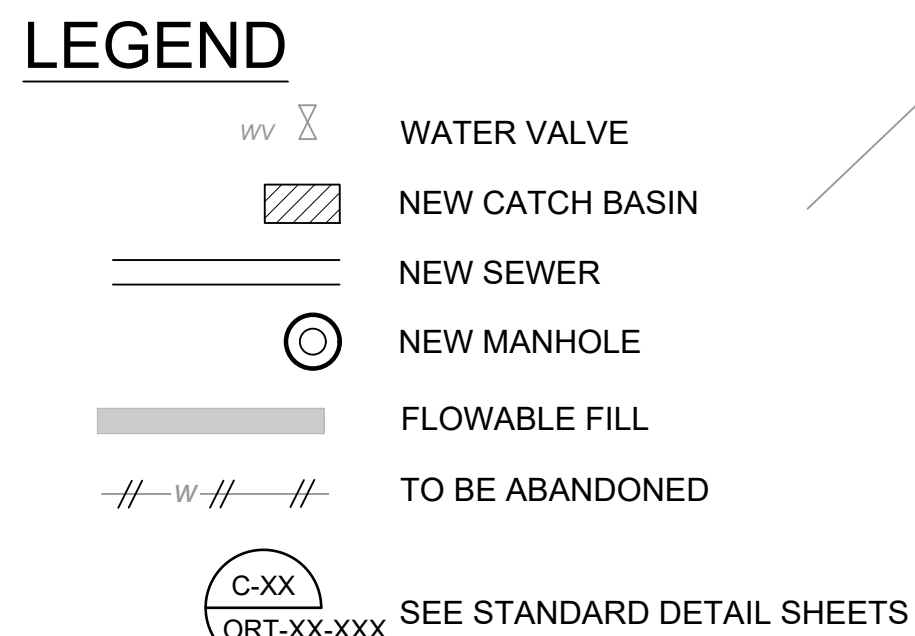
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TAP C RECORD NUMBER NOT APPLICABLE

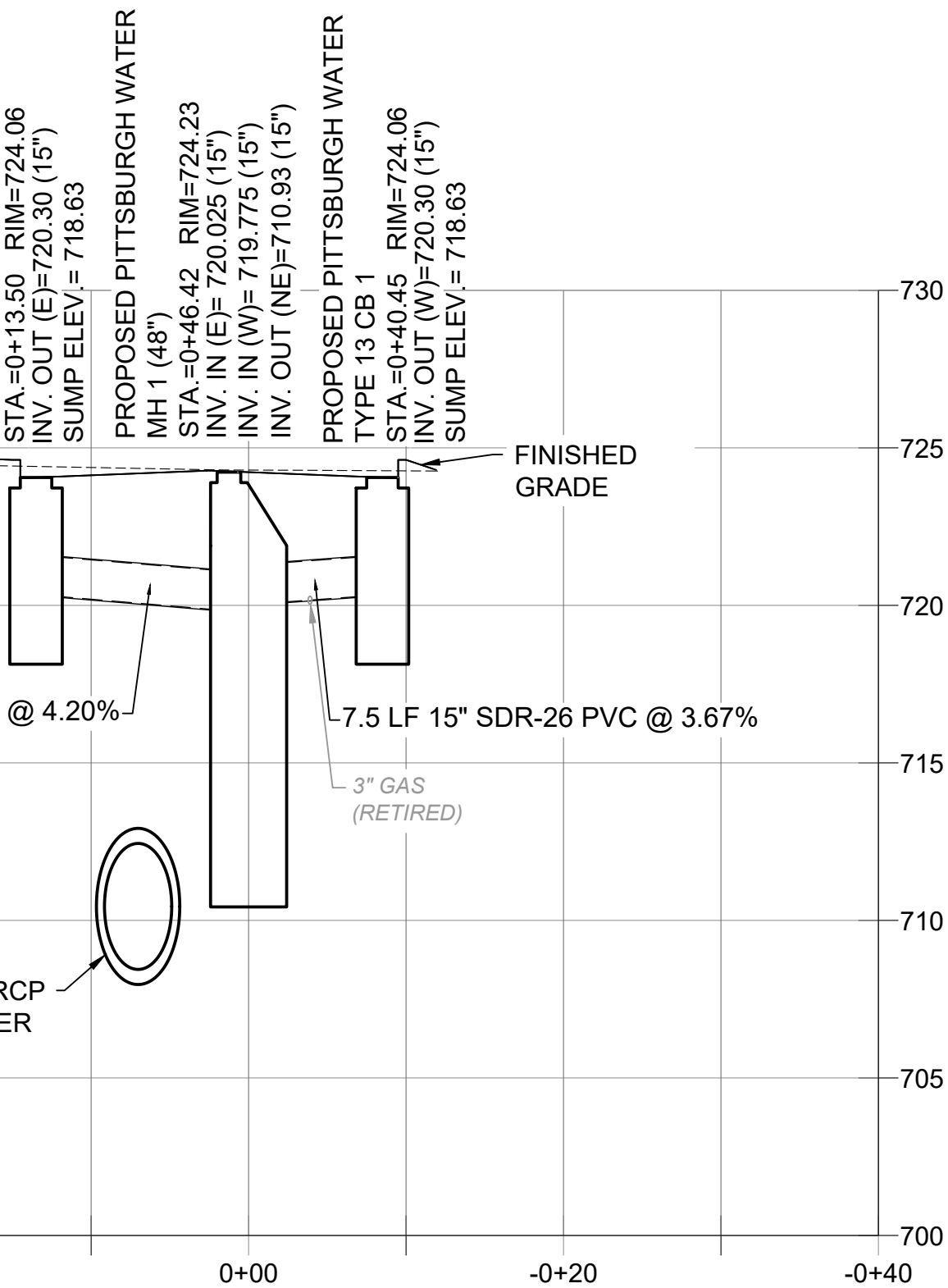
Pittsburgh Water approval was based on information provided by others under the assumption that this information was accurate and complete. Please refer to Pittsburgh Water Developer's Manual for detailed information on the regulations and procedures for obtaining water and sewer service.



Designed by: DLM	REV No. 1 DATE 11/07/25 DESCRIPTION PITTSBURGH WATER APPROVED UTILITY PLAN APPV KMC	 Two Allegheny Center Nova Tower 2, Suite 1301 Pittsburgh, PA 15212 (412) 497 - 2900	 Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation. Pennsylvania One Call System Serial Number FINAL DESIGN TICKET # 20250040206		 www.alcosan.org	ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN 3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810	ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN) OHIO RIVER TUNNEL (ORT) 041-CI-206 UTILITY PLAN WATERLINE RELOCATION	Contract: 1797
Drawn by: MJN	File: 041-CI-206.dwg							
Checked by: KMC	Date: 08/04/2025							
								Sheet: 305 OF 770



1. NOTIFY PITTSBURGH WATER BY CONTACTING ANA BENNETT AT Aflores@gph2a.com WITH SUFFICIENT NOTICE OF THE SEWER RELOCATION WORK AS DISCUSSED IN PRECONSTRUCTION MEETING.
2. A PITTSBURGH WATER INSPECTOR MUST BE ON SITE FOR ALL WORK.
3. INLET NOTED AS ABANDONED ON 2008 AS-BUILT RECORD DRAWINGS FOR NORTH POINT DRIVE SANITARY/STORM SEWER CONSTRUCTION.
4. FOR WATERLINE ABANDONMENT, SEE SHEET Q41-CI-206.



PITTSBURGH WATER APPROVAL BLOCK	
<i>To be completed by the Applicant and provided on each sheet within the plan set:</i>	
(Check all that apply)	
☐	NEW WATER CONNECTION(S)
☐	NEW SEWER CONNECTION(S)
☐	REUSE EXISTING WATER CONNECTION(S)
☐	REUSE EXISTING SEWER CONNECTION(S)
☐	TERMINATE EXISTING WATER CONNECTION(S)
☐	TERMINATE EXISTING SEWER CONNECTION(S)
☒	PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

<i>To be completed by Pittsburgh Water:</i>	
(Required for ALL approvals)	
Ana Bennett	Digitally signed by Ana Bennett DN: cn=Ana Bennett, ou=Engineering, Date: 2025.03.11 00:20:06 - GMT

REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION	
Zach Rinker	Digitally signed by Zach Rinker DN: cn=Zach Rinker, ou=Engineering, Date: 2025.03.19 12:57:59 - GMT

SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION	
	Digitally signed by Bill McHadden DN: cn=Bill McHadden, ou=Engineering, Date: 2025.03.19 12:44:50 - GMT

DIRECTOR OF OPERATIONS	
(Required for "Private Construction of Public Facilities" ONLY)	
	Digitally signed by Barry King DN: cn=Barry King, ou=Engineering, Date: 2025.03.19 12:44:50 - GMT

DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION	
PITTSBURGH WATER PROJECT NUMBER _____	
TAP C RECORD NUMBER _____ NOT APPLICABLE	

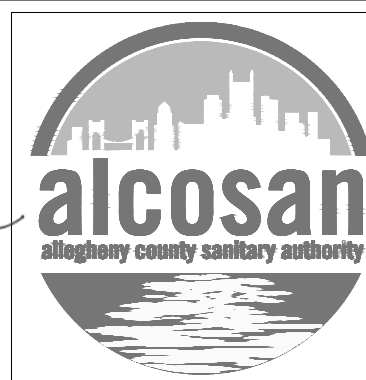
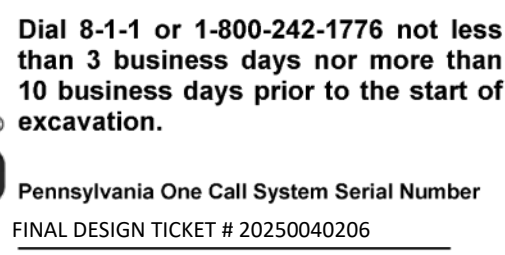
Pittsburgh Water approval was based on information provided by others under the assumption that this information was accurate and complete. Please refer to Pittsburgh Water Developer's Manual for detailed information on the regulations and procedures for obtaining water and sewer service.

M

**MOTT
MACDONALD**

M

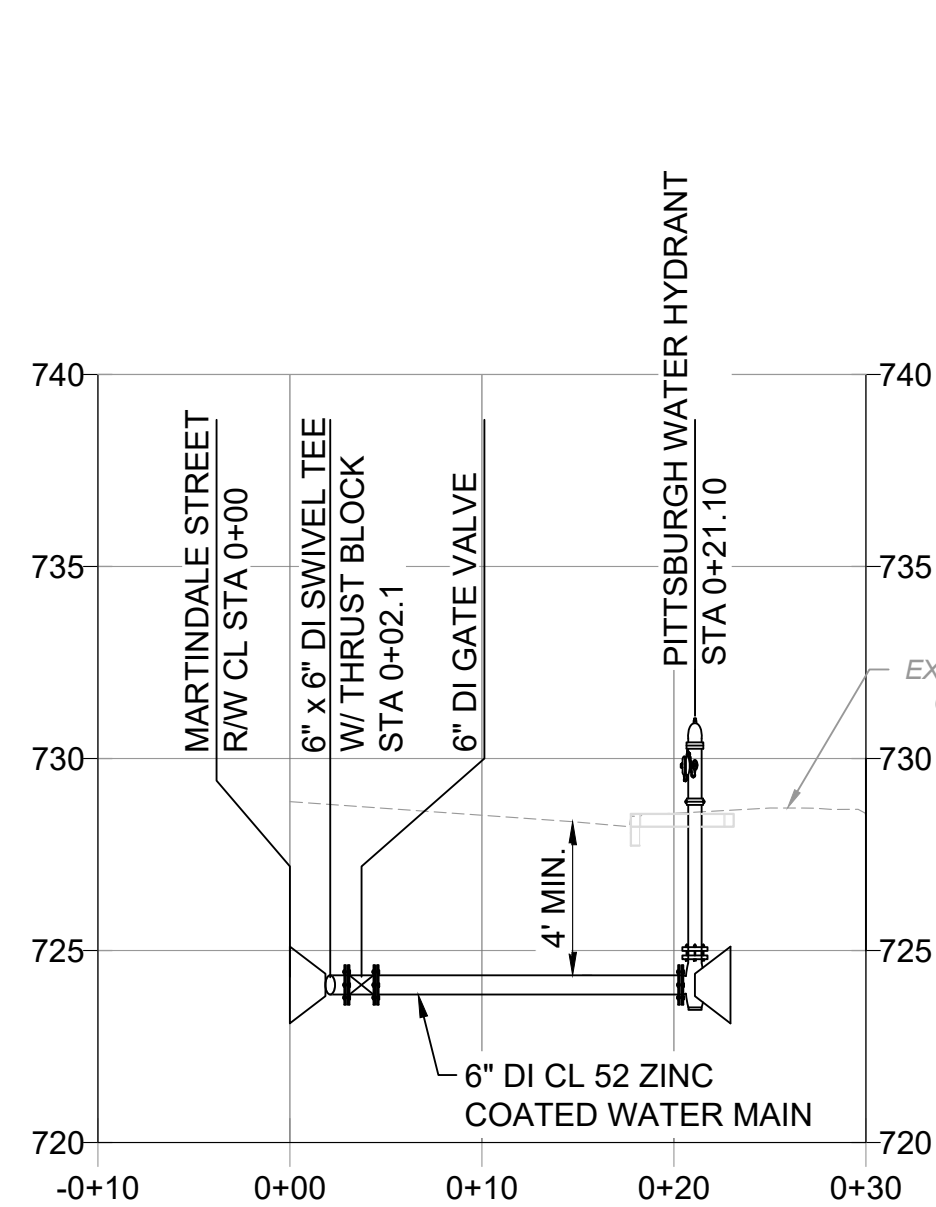
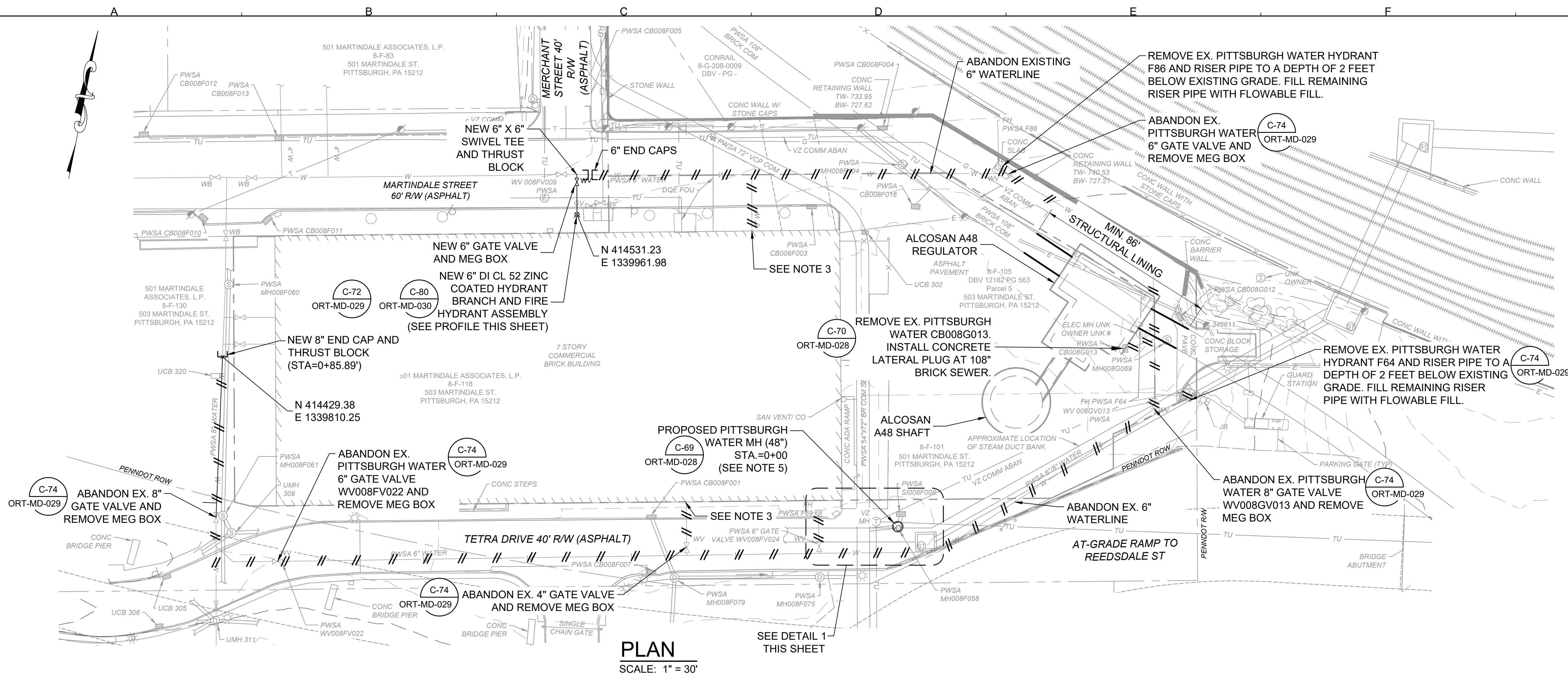
Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900



ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

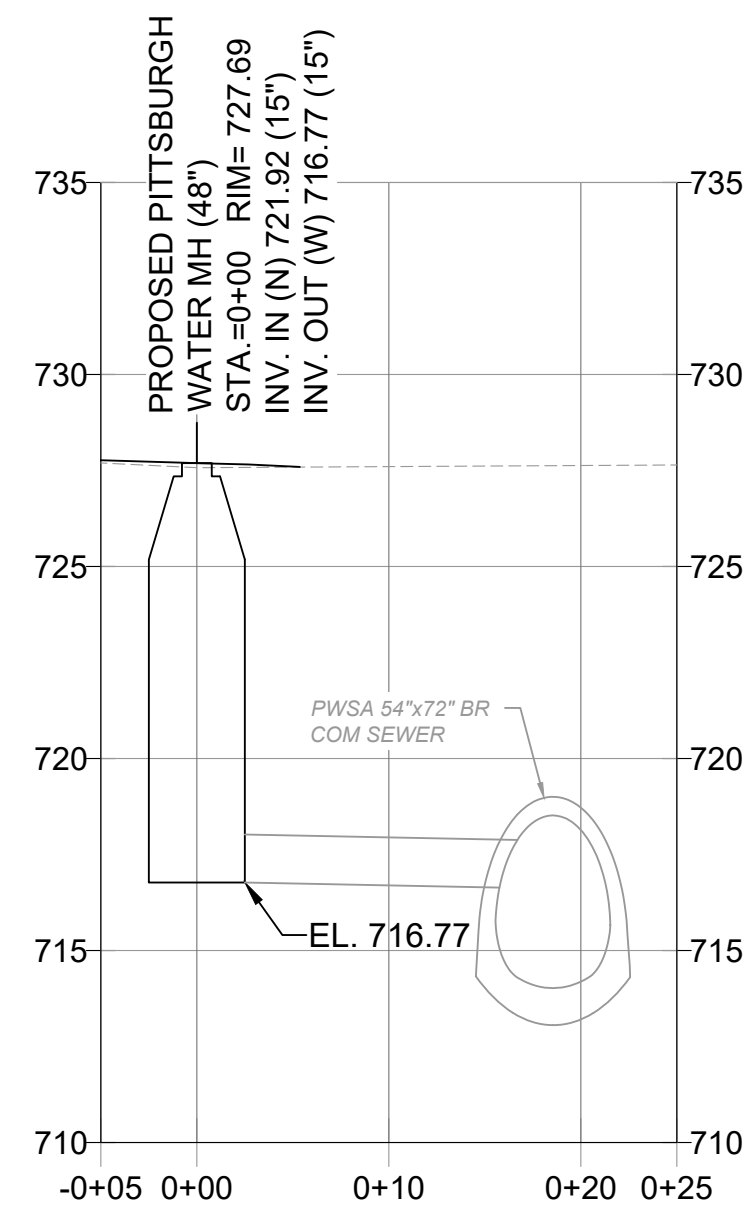
O41-CI-207
UTILITY PLAN
INLET RELOCATION

Contract:	1797
File:	O41-CI-207.dwg
Date:	08/04/2025
Sheet:	306 OF 770



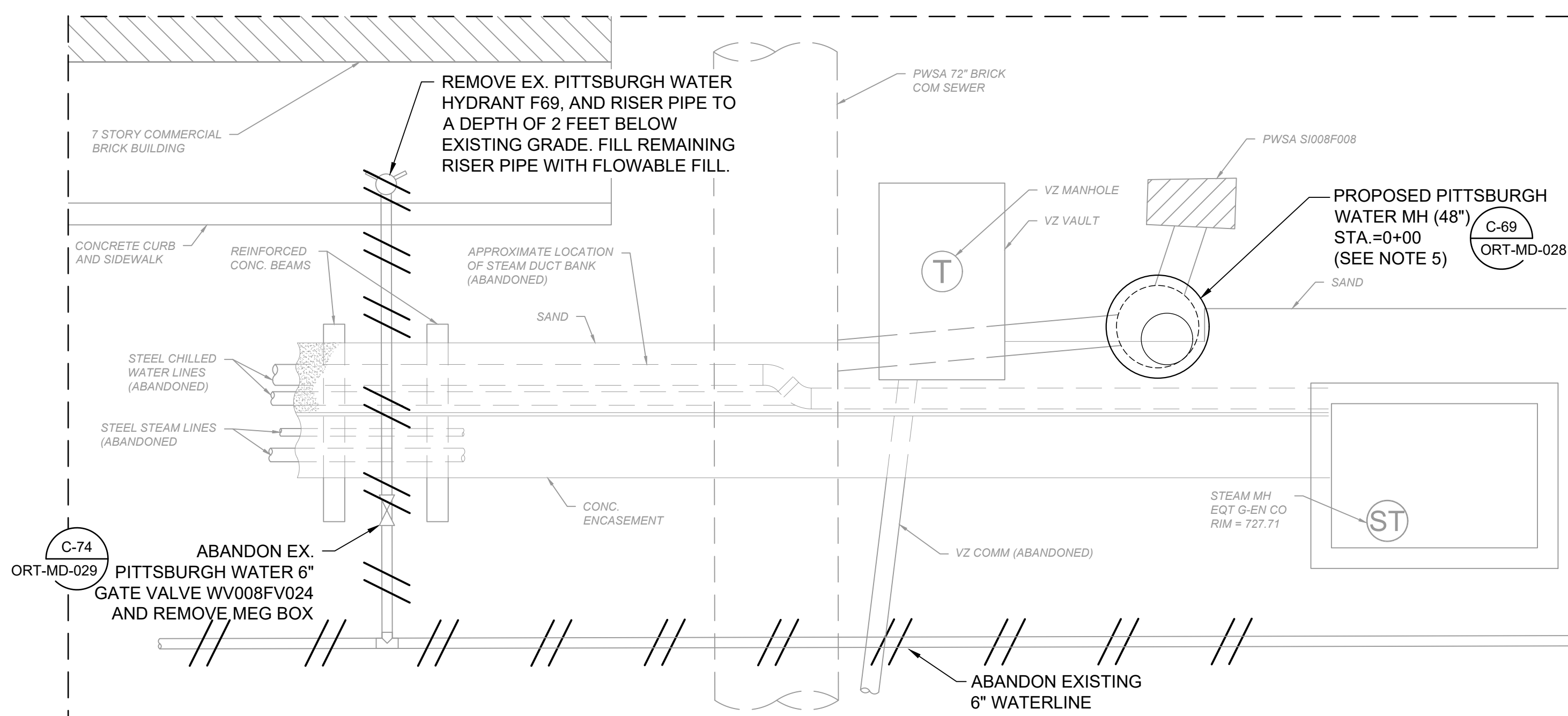
A48 NEW HYDRANT PROFILE

VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 10'



A48 NEW MH PROFILE

VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 10'



DETAIL

SCALE: 1" = 5'

NOTE:
DETAIL PER EQUITABLE GAS ENERGY CO.
AS-BUILT DWG. 379-4-16

Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
DLM	1	11/07/25	PITTSBURGH WATER APPROVED UTILITY PLAN	KMC
Drawn by:				
MJN				
Checked by:				
KMC				

M

M

**MOTT
MACDONALD**

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900

811 Dial 8-1-1 or 1-800-242-1776 Not less than 3 business days nor more than 10 business days prior to the start of excavation.

 Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040205



ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

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

www.alcosan.org

ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

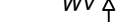
A48-CI-305
UTILITY PLAN
WATERLINE RELOCATION & MH REPLACEMENT

Contract:	1797
File:	A48-CI-305.dwg
Date:	08/04/2025
Sheet:	358 OF 770

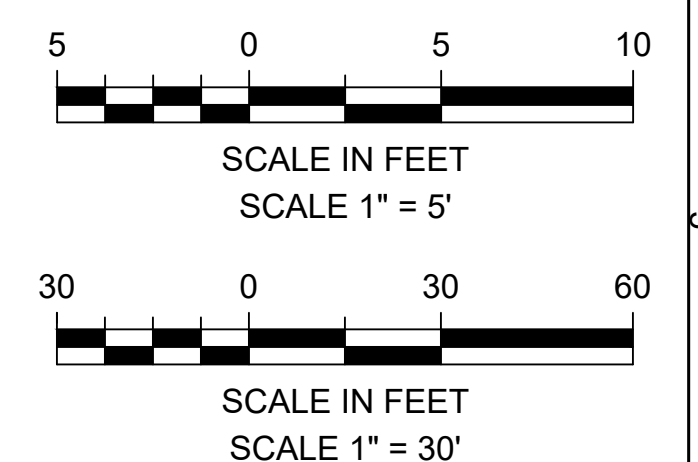
NOTES

1. NOTIFY PITTSBURGH WATER BY CONTACTING ANA BENNETT AT AFLORES@PGH2O.COM WITH SUFFICIENT NOTICE OF THE SEWER RELOCATION WORK AS DISCUSSED IN PRECONSTRUCTION MEETING.
2. A PITTSBURGH WATER INSPECTOR MUST BE ON SITE FOR ALL WATERLINE WORK.
3. PRELIMINARY FIELD INVESTIGATION FOUND WATER SERVICE LINES ARE NOT ACTIVE IN THIS LOCATION. CONTRACTOR TO VERIFY SERVICES LINES ARE INACTIVE. MEG BOXES SHALL BE REMOVED.
4. DOCUMENT AND RECORD LIMITS OF WATERLINE ABANDONMENT AND REMOVAL ON AS-BUILT RECORD DRAWINGS.
5. TELEVIEW CATCH BASIN LATERAL DURING CONSTRUCTION AND REPLACE IF REQUIRED BY THE PITTSBURGH WATER INSPECTOR.

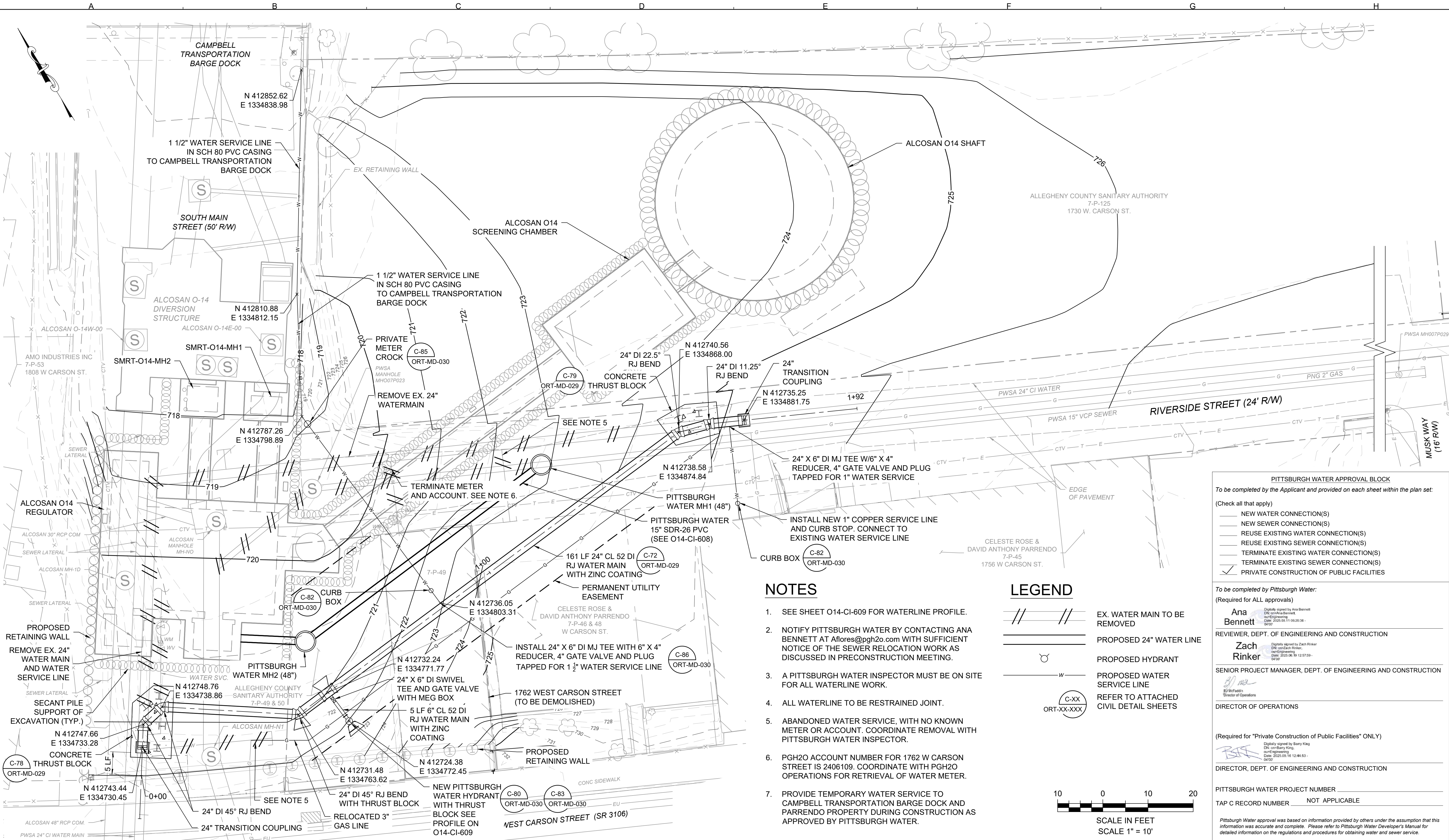
LEGEND

	TO BE ABANDONED
	WATER VALVE
	FIRE HYDRANT
	END CAP
	REFER TO ATTACHED CIVIL DETAIL SHEETS

PIITTSBURGH WATER APPROVAL BLOCK	
<i>To be completed by the Applicant and provided on each sheet within the plan set:</i> (Check all that apply) ☐ NEW WATER CONNECTION(S) ☐ NEW SEWER CONNECTION(S) ☐ REUSE EXISTING WATER CONNECTION(S) ☐ REUSE EXISTING SEWER CONNECTION(S) ☐ TERMINATE EXISTING WATER CONNECTION(S) ☐ TERMINATE EXISTING SEWER CONNECTION(S) ☒ PRIVATE CONSTRUCTION OF PUBLIC FACILITIES	
To be completed by Pittsburgh Water: (Required for ALL approvals) Ana Bennett <i>Digitally signed by Ana Bennett</i> <i>DN: cn=Ana Bennett,</i> <i>ou=Engineering</i> <i>Date: 2025.08.11 08:20:36 -</i> <i>04'00'</i>	
REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION Zach Rinker <i>Digitally signed by Zach Rinker</i> <i>DN: cn=Zach Rinker,</i> <i>ou=Engineering</i> <i>Date: 2025.08.19 12:57:55 -</i> <i>04'00'</i>	
SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION Bill McFaddin Director of Operations <i>Digitally signed by Barry King</i> <i>DN: cn=Barry King,</i> <i>ou=Engineering</i> <i>Date: 2025.09.16 12:44:53 -</i> <i>04'00'</i>	
DIRECTOR OF OPERATIONS	
(Required for "Private Construction of Public Facilities" ONLY) <i>Digitally signed by Barry King</i> <i>DN: cn=Barry King,</i> <i>ou=Engineering</i> <i>Date: 2025.09.16 12:44:53 -</i> <i>04'00'</i>	
DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION	
PIITTSBURGH WATER PROJECT NUMBER _____	
TAP C RECORD NUMBER _____ NOT APPLICABLE	



FILE NAME: C:\Users\bow101681\OneDrive\Documents\Mott MacDonald\507105621 - ALCOSAN Ohio River Tunnel Design - T&M\Project Files\3 - O14\02-Civil\Sheets\Post 100% Addendum - O14-CI-607 LAST SAVED BY: BOW101681 PLOT DATE: 10/31/2025 12:59:03 PM



PITTSBURGH WATER APPROVAL BLOCK

To be completed by the Applicant and provided on each sheet within the plan set:

(Check all that apply)

☐ NEW WATER CONNECTION(S)

☐ NEW SEWER CONNECTION(S)

☐ REUSE EXISTING WATER CONNECTION(S)

☐ REUSE EXISTING SEWER CONNECTION(S)

☐ TERMINATE EXISTING WATER CONNECTION(S)

☐ TERMINATE EXISTING SEWER CONNECTION(S)

☒ PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

To be completed by Pittsburgh Water:

(Required for ALL approvals)

Ana Bennett
Digitaly signed by Ana Bennett
DN: cn=Ana Bennett, ou=Engineering, Date: 2025.05.11 09:26:36 -0400
REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION

Zach Rinker
Digitaly signed by Zach Rinker
DN: cn=Zach Rinker, ou=Engineering, Date: 2025.05.19 12:57:59 -0400
SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION

BJ McFadden
Director of Operations
DIRECTOR OF OPERATIONS

(Required for "Private Construction of Public Facilities" ONLY)

Barry King
Digitaly signed by Barry King
DN: cn=Barry King, ou=Engineering, Date: 2025.05.16 12:44:53 -0400
DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION

PITTSBURGH WATER PROJECT NUMBER

TAP C RECORD NUMBER NOT APPLICABLE

Pittsburgh Water approval was based on information provided by others under the assumption that this information was accurate and complete. Please refer to Pittsburgh Water Developer's Manual for detailed information on the regulations and procedures for obtaining water and sewer service.

Designed by:	JRL	REV No.	DATE	REVISION DESCRIPTION	APPV
Drawn by:	BTM	1	11/07/25	PITTSBURGH WATER APPROVED UTILITY PLAN	KMC
Checked by:	DLM				

MOTT MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900

811

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040207

KATHY MACHAVARA
REGISTERED PROFESSIONAL ENGINEER
No. PA-000111-E
EXPIRATION DATE 12/31/2025

alcosan
allegheny county sanitary authority

ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

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

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ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

**O14-CI-607
UTILITY PLAN
WATERLINE RELOCATION**

Contract: 1797

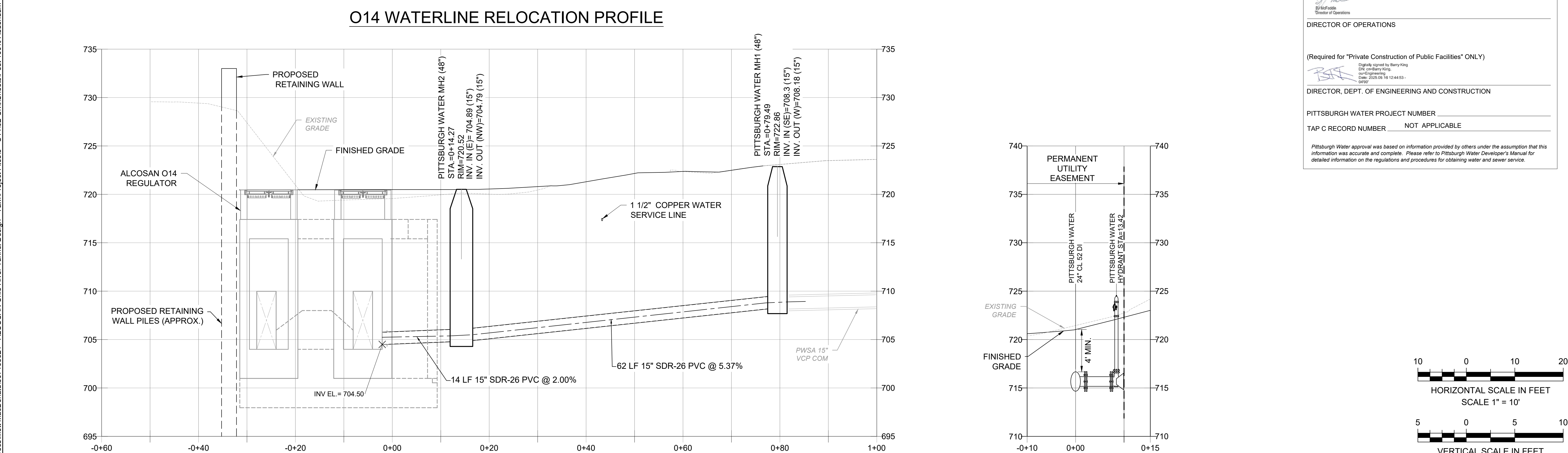
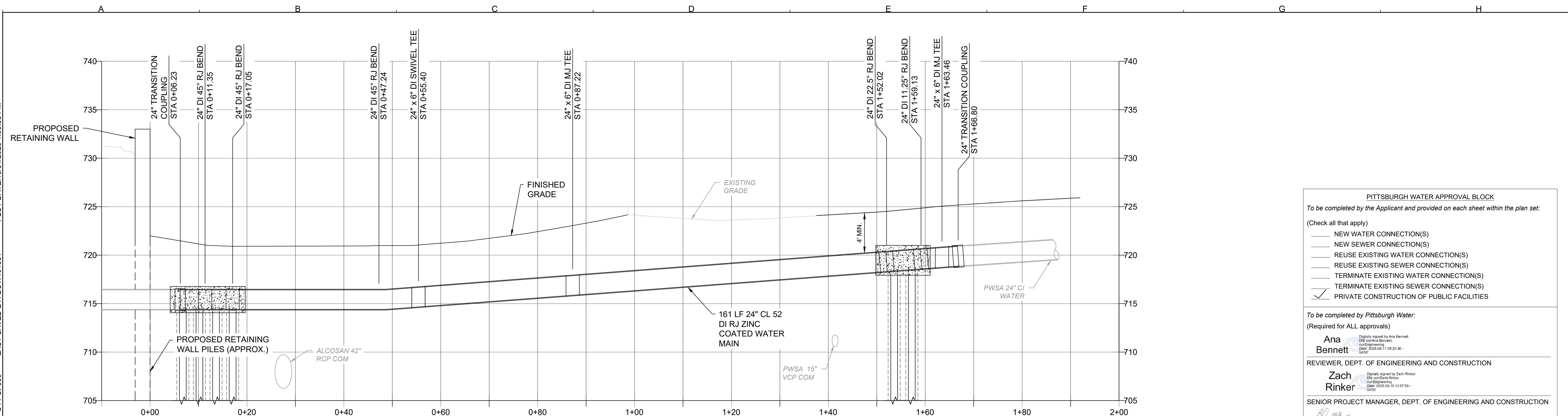
File: O14-CI-607.dwg

Date: 08/04/2025

Sheet: 526 OF 770



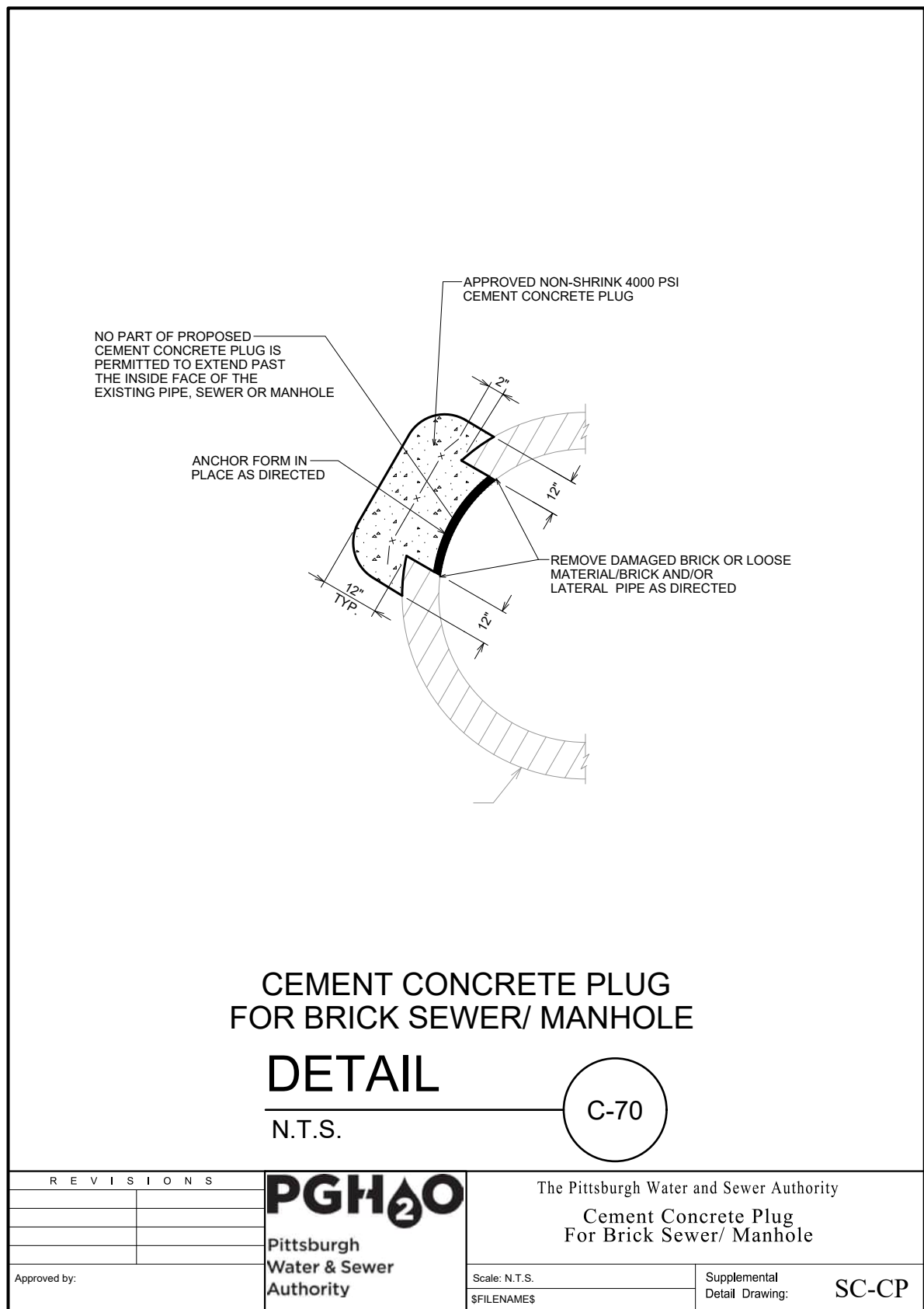
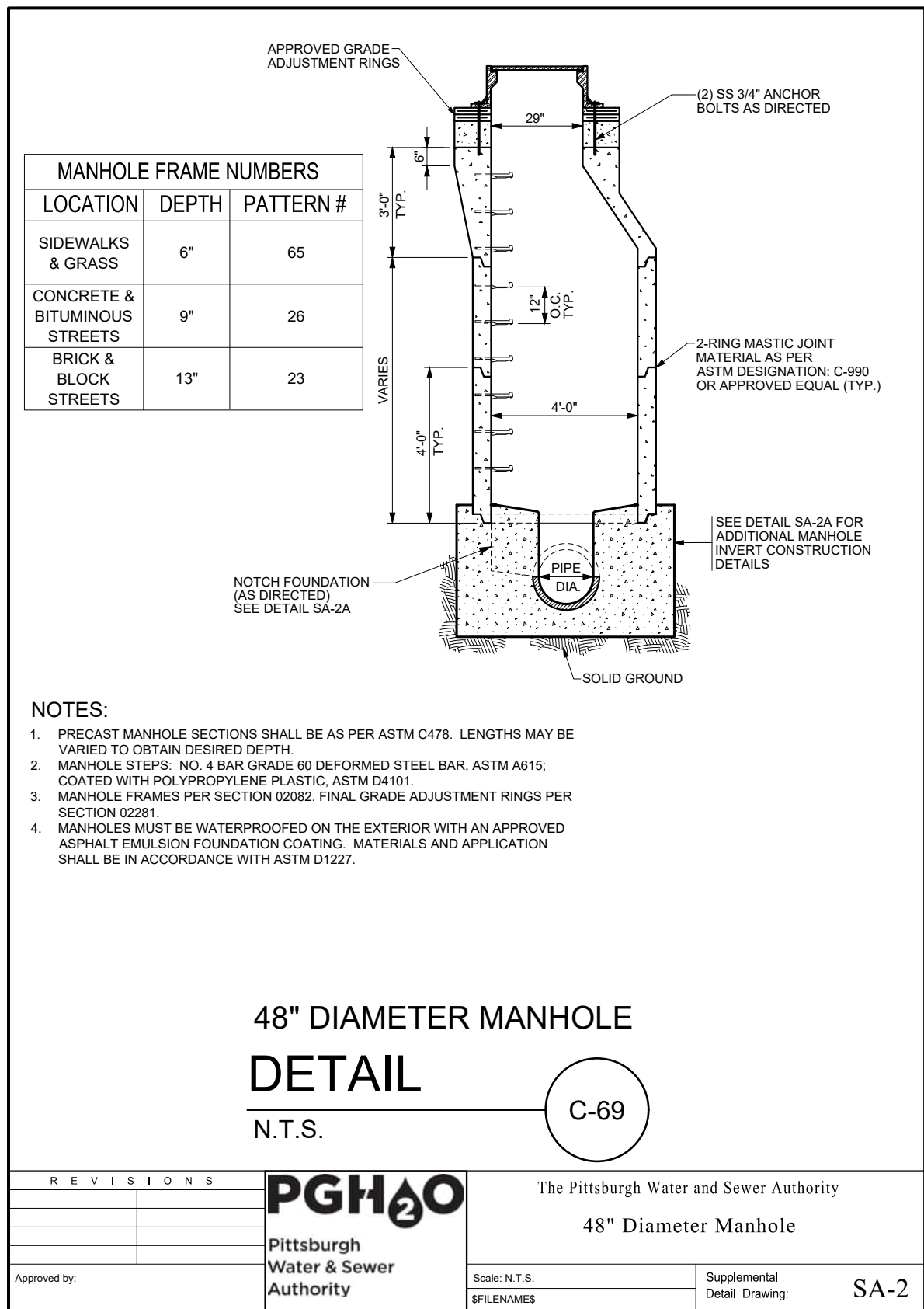
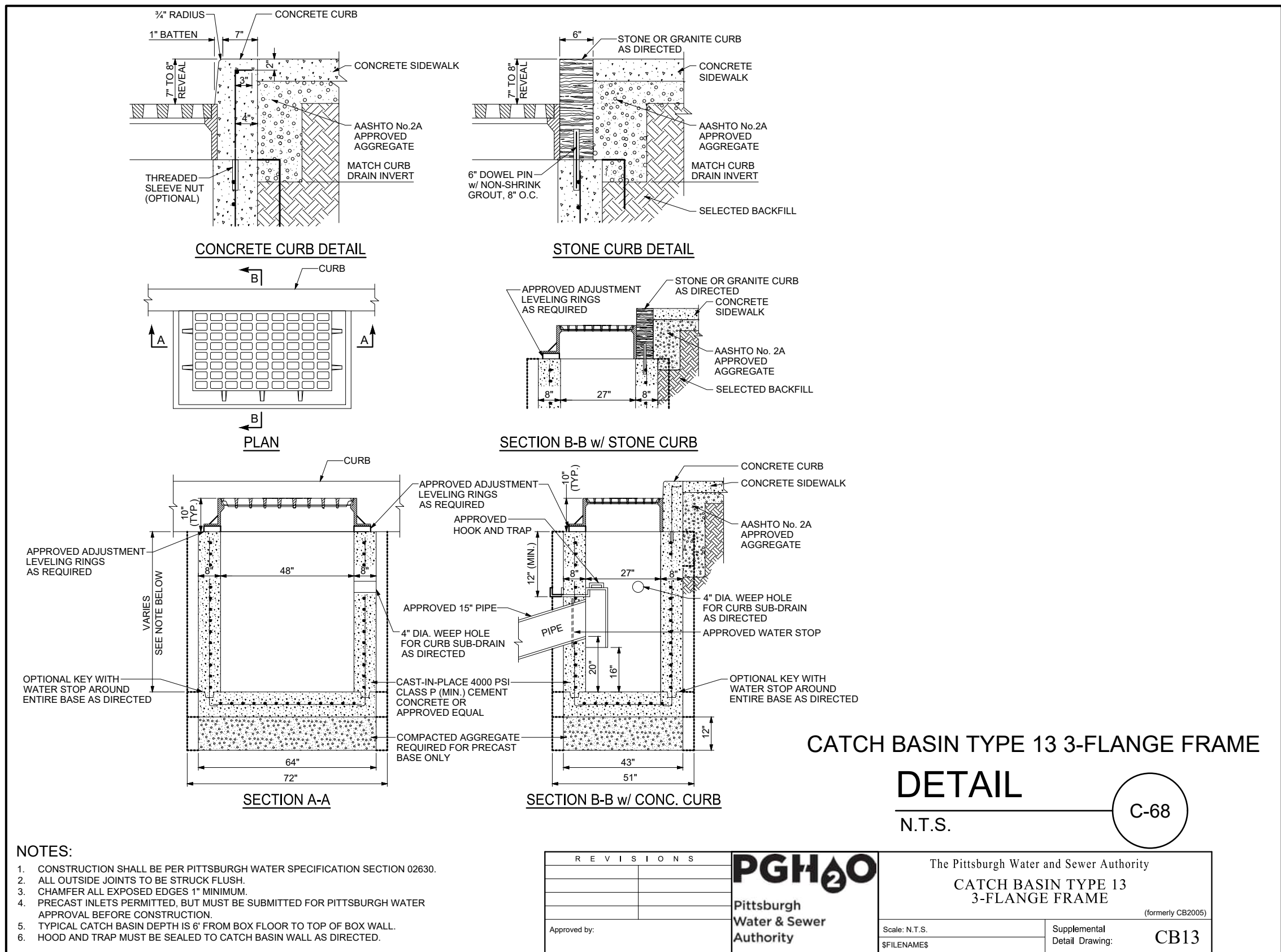
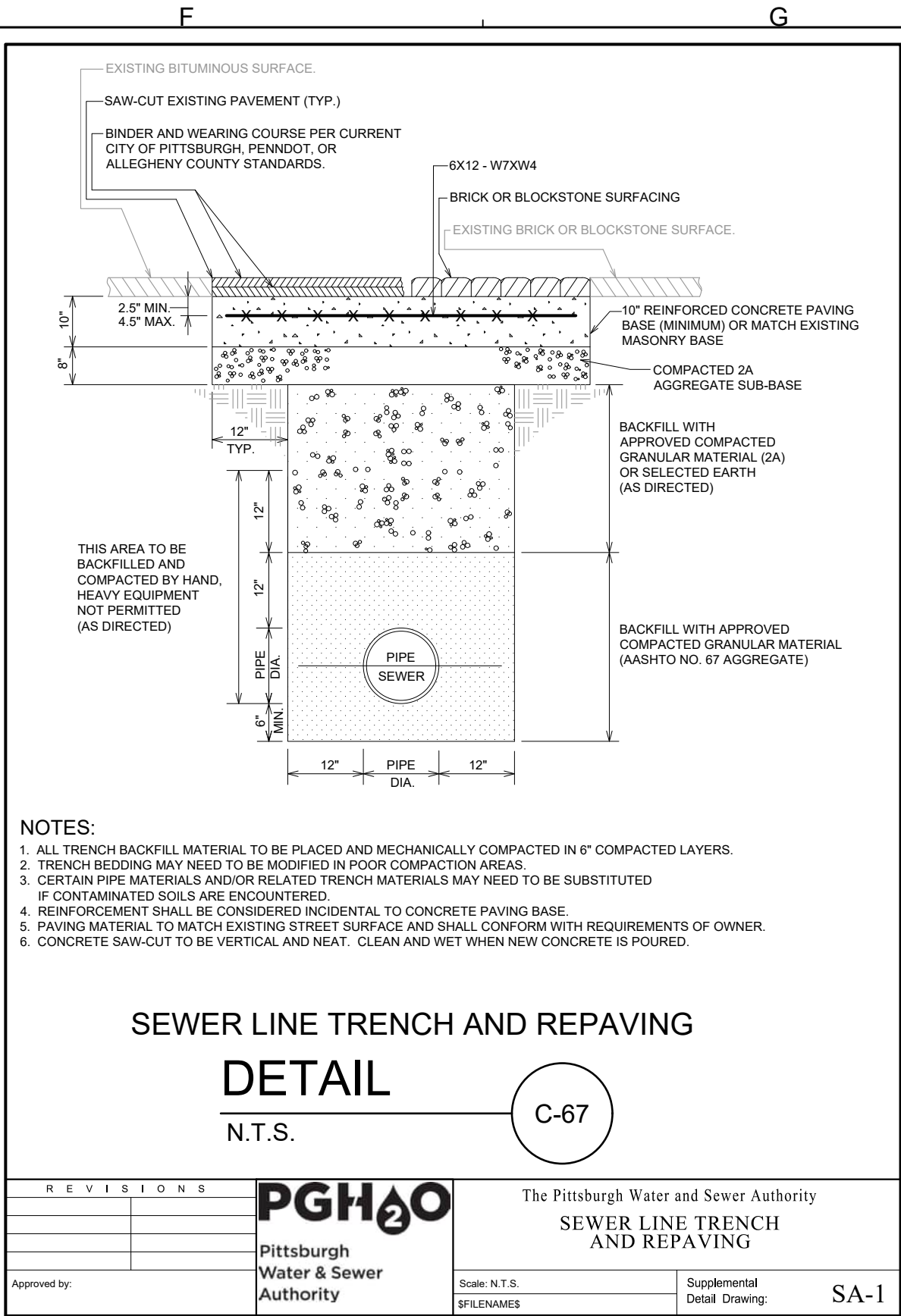
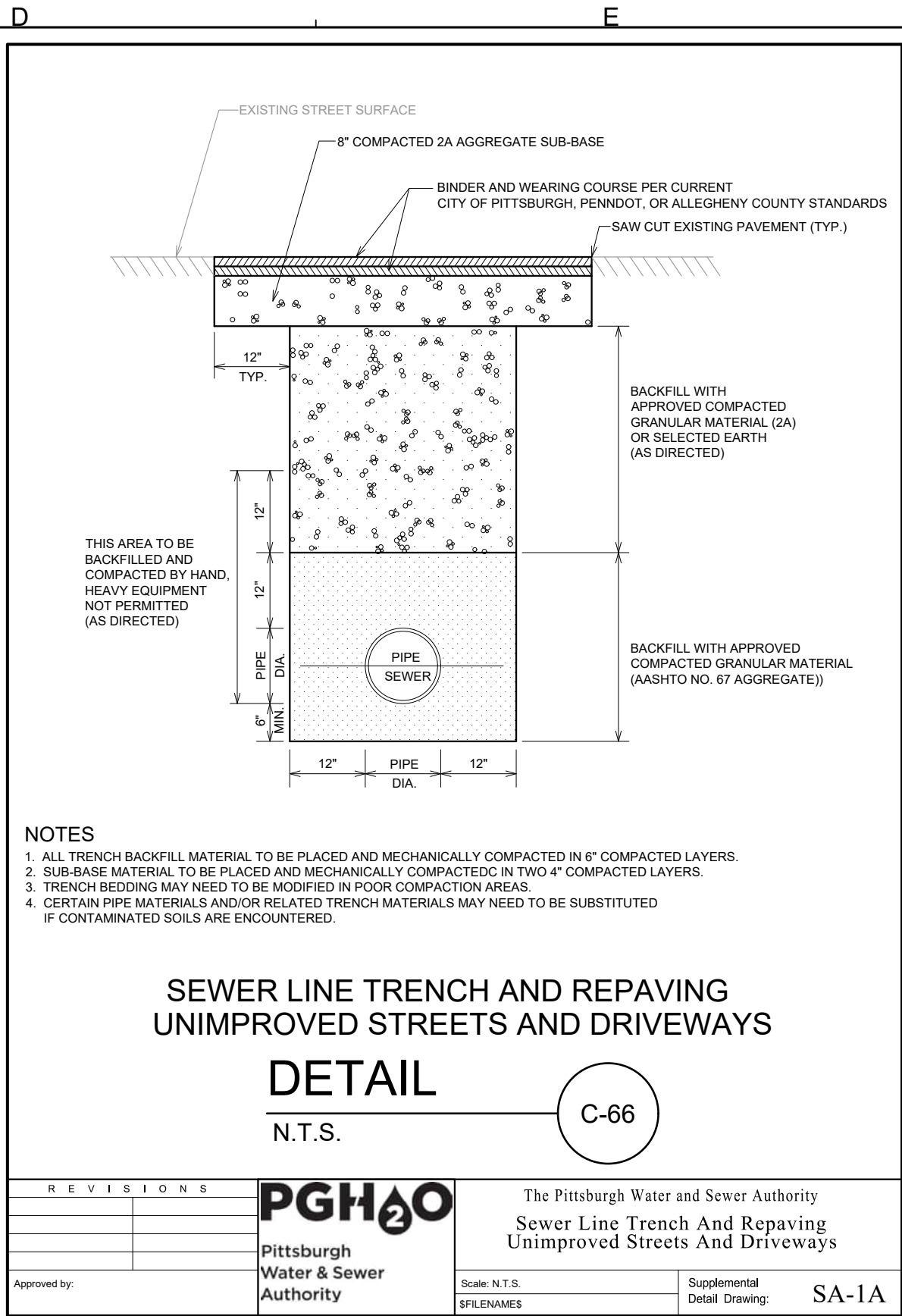
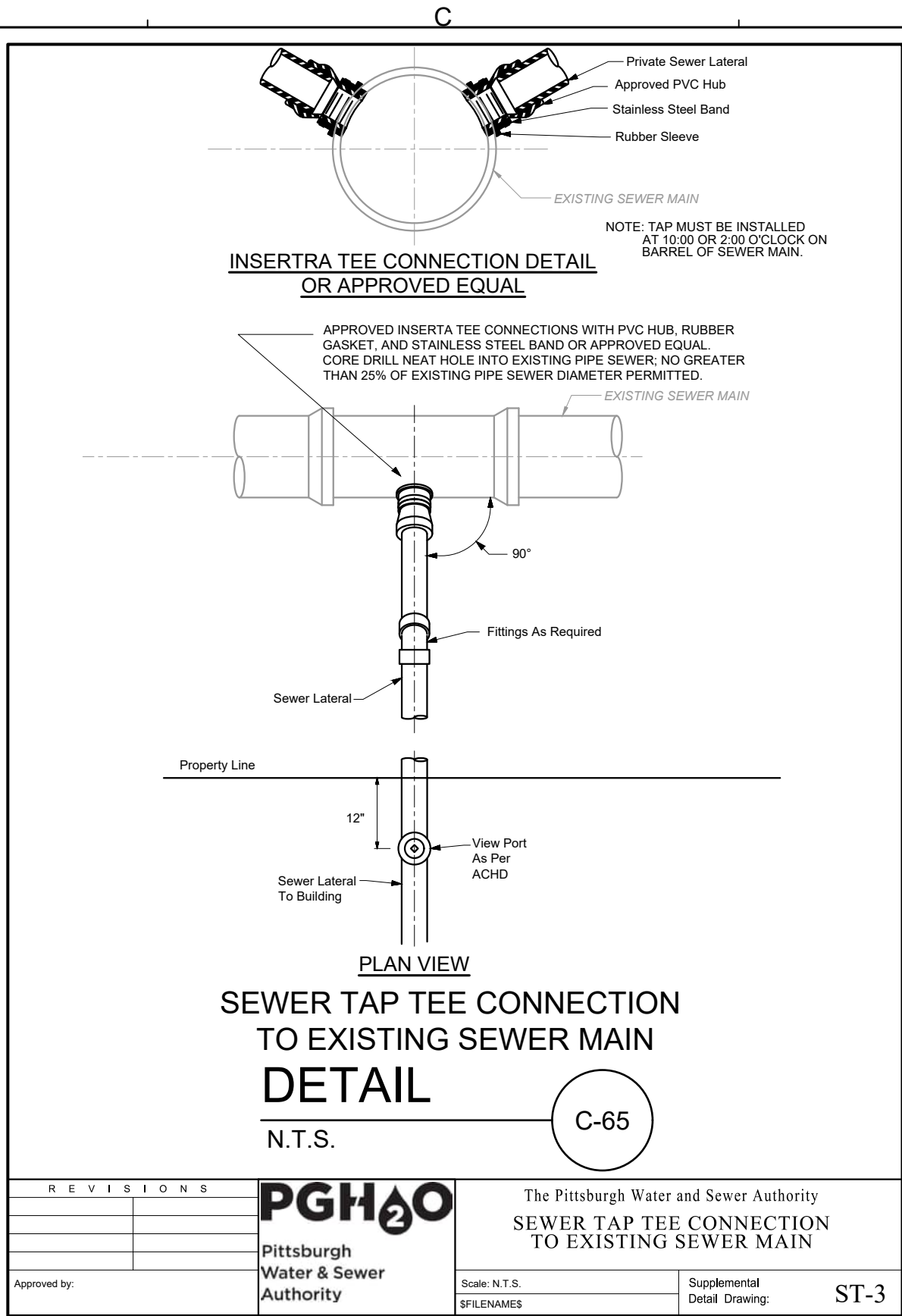
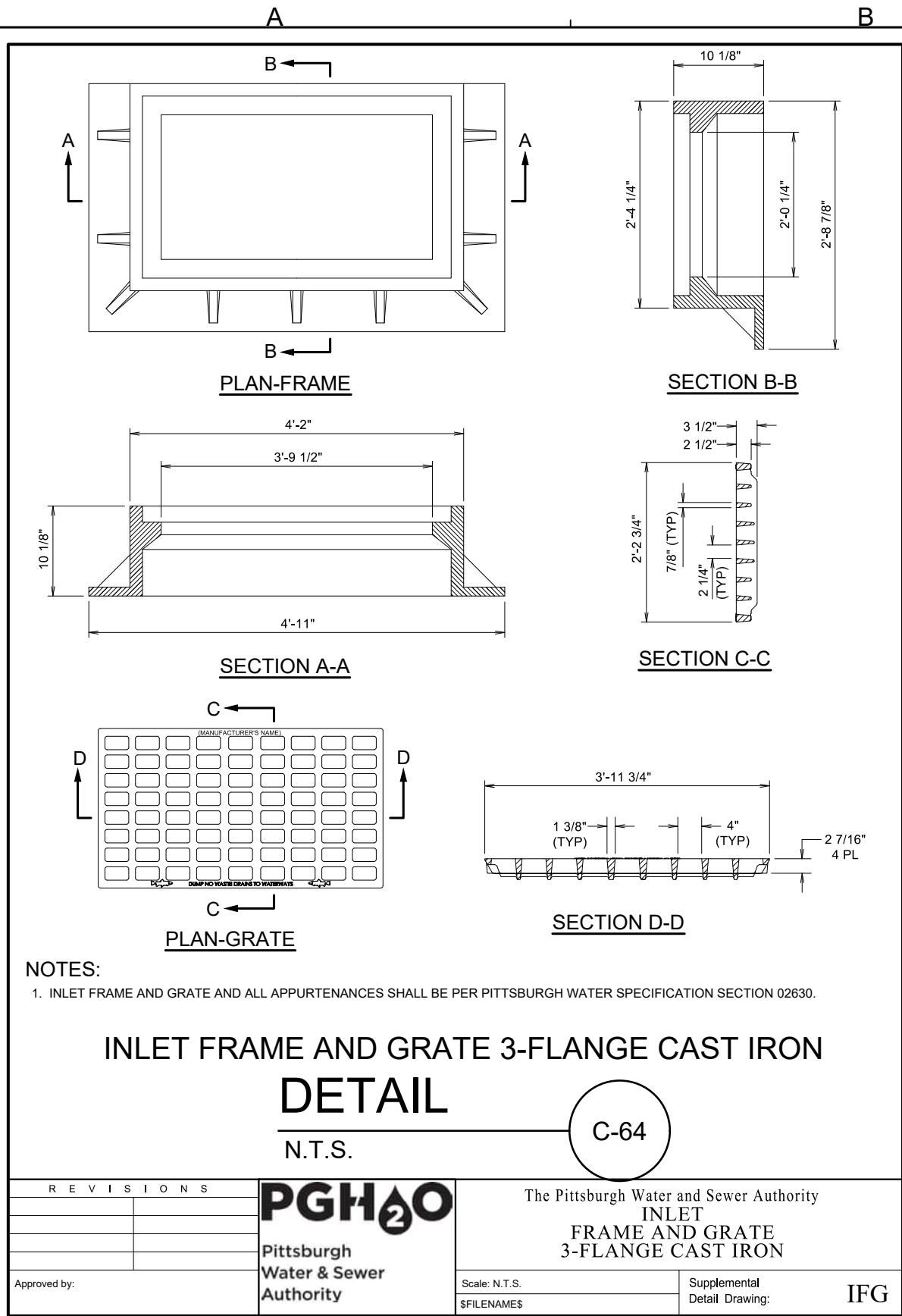
Designed by:		REVISION				M M MOTT MACDONALD Two Allegheny Center Nova Tower 2, Suite 1301 Pittsburgh, PA 15212 (412) 497 - 2900 Pennsylvania One Call System Serial Number FINAL DESIGN TICKET # 20250040207	811 Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.	KATHY M. CHAVARA REGISTERED PROFESSIONAL ENGINEER No. 00001116 Expires 12/31/25	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 (ALCOSAN) OHIO RIVER TUNNEL (ORT)		Contract: 1797
DLM	REV No.	DATE	DESCRIPTION	APPV	File: O14-CI-608.dwg							
Drawn by:					Date: 08/04/2025							
MJN					Sheet: 527 OF 770							
Checked by:												
KMC												



PITTSBURGH WATER APPROVAL BLOCK <i>To be completed by the Applicant and provided on each sheet within the plan set:</i> (Check all that apply) ☐ NEW WATER CONNECTION(S) ☐ NEW SEWER CONNECTION(S) ☐ REUSE EXISTING WATER CONNECTION(S) ☐ REUSE EXISTING SEWER CONNECTION(S) ☐ TERMINATE EXISTING WATER CONNECTION(S) ☐ TERMINATE EXISTING SEWER CONNECTION(S) ☒ PRIVATE CONSTRUCTION OF PUBLIC FACILITIES	
<i>To be completed by Pittsburgh Water:</i> (Required for ALL approvals)	
Ana Bennett <i>Digitally signed by Ana Bennett DN: cn=Ana Bennett, ou=Engineering Date: 2025.08.11 08:20:36 - 04'00'</i>	
REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION	
Zach Rinker <i>Digitally signed by Zach Rinker DN: cn=Zach Rinker, ou=Engineering Date: 2025.08.19 12:57:59 - 04'00'</i>	
SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION	
<i>BJ McFadden</i> <i>BJ McFadden Director of Operations</i>	
DIRECTOR OF OPERATIONS	
(Required for "Private Construction of Public Facilities" ONLY)	
<i>Barry King</i> <i>Digitally signed by Barry King DN: cn=Barry King, ou=Engineering Date: 2025.08.19 12:44:53 - 04'00'</i>	
DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION	
PITTSBURGH WATER PROJECT NUMBER _____	
TAP C RECORD NUMBER _____ NOT APPLICABLE	
<i>Pittsburgh Water approval was based on information provided by others under the assumption that this information was accurate and complete. Please refer to Pittsburgh Water Developer's Manual for detailed information on the regulations and procedures for obtaining water and sewer service.</i>	

Designed by:	REVISION				M M MOTT MACDONALD Two Allegheny Center Nova Tower 2, Suite 1301 Pittsburgh, PA 15212 (412) 497 - 2900	811 Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation. Pennsylvania One Call System Serial Number FINAL DESIGN TICKET # 20250040207	JOHNSON WEALTH OF PROFESSIONAL KATHY M CHAVARA ENGINEER No. PA-001715 EXPIRATION DATE 06/30/25	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 (ALCOSAN) OHIO RIVER TUNNEL (ORT)	Contract: 179
Drawn by:	REV No.	DATE	DESCRIPTION	APPV					File: O14-CI-609.dwg	
	1	11/07/25	PITTSBURGH WATER APPROVED UTILITY PLAN	KMC					Date: 08/04/2025	
Checked by:									Sheet: 528 OF 77	

FILE NAME: C:\Users\bow101681\Documents\Mott MacDonald\507105621 - ALCOSAN Ohio River Tunnel Design - T&M\Project Files\1 - ORT-02-Civil\Sheets\Post 100% Addendum - ORT-MD-028 LAST SAVED BY: BOW101681 PLOT DATE: 10/31/2025 1:12:45 PM



PITTSBURGH WATER APPROVAL BLOCK	
To be completed by the Applicant and provided on each sheet within the plan set:	
(Check all that apply)	
☐	NEW WATER CONNECTION(S)
☐	NEW SEWER CONNECTION(S)
☐	REUSE EXISTING WATER CONNECTION(S)
☐	REUSE EXISTING SEWER CONNECTION(S)
☐	TERMINATE EXISTING WATER CONNECTION(S)
☐	TERMINATE EXISTING SEWER CONNECTION(S)
☒	PRIVATE CONSTRUCTION OF PUBLIC FACILITIES
To be completed by Pittsburgh Water:	
(Required for ALL approvals)	
Ana Bennett	Digitally signed by Ana Bennett DN: cn=Ana Bennett, ou=Engineering, Date: 2025.05.11 08:29:38 -0400
REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION	
Zach Rinker	Digitally signed by Zach Rinker DN: cn=Zach Rinker, ou=Engineering, Date: 2025.05.15 12:57:58 -0400
SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION	
DIRECTOR OF OPERATIONS	
(Required for "Private Construction of Public Facilities" ONLY)	
BRE	Digitally signed by Barry Rinker DN: cn=Barry Rinker, ou=Engineering, Date: 2025.05.15 12:44:53 -0400
DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION	
PITTSBURGH WATER PROJECT NUMBER	
TAP C RECORD NUMBER NOT APPLICABLE	
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Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	11/07/25	PITTSBURGH WATER APPROVED UTILITY PLAN	KMC
Checked by:				

M

MOTT MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900



ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

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

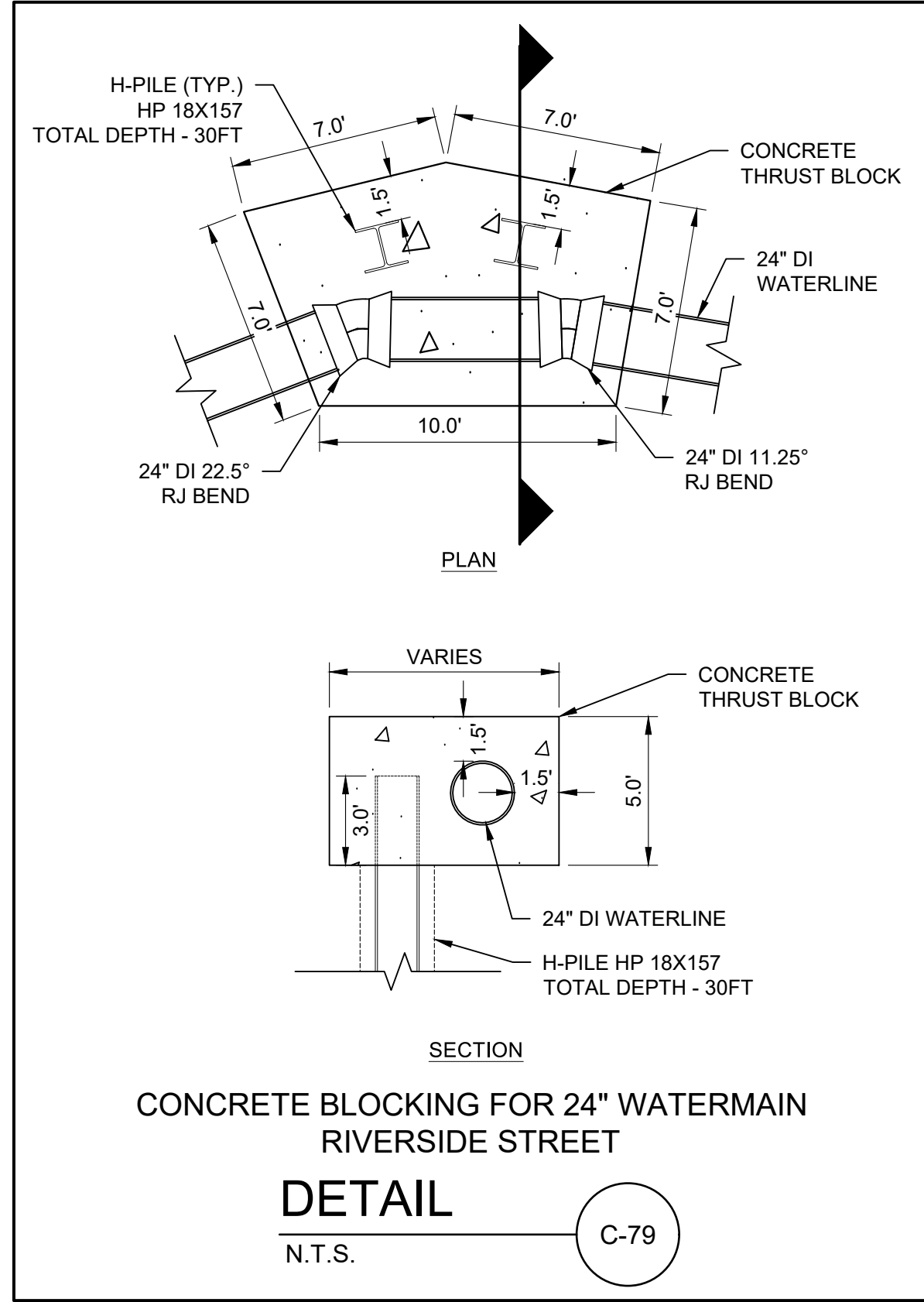
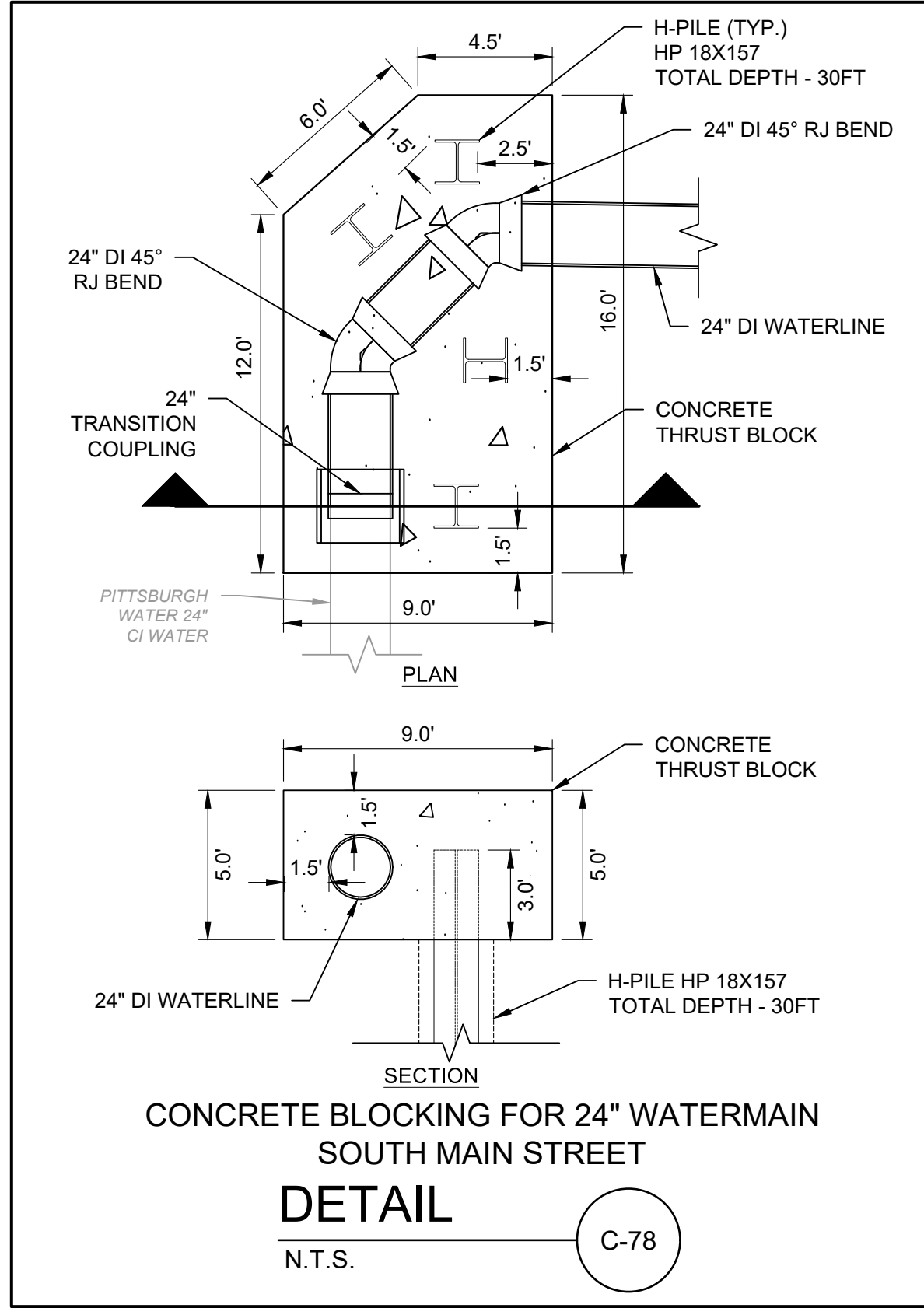
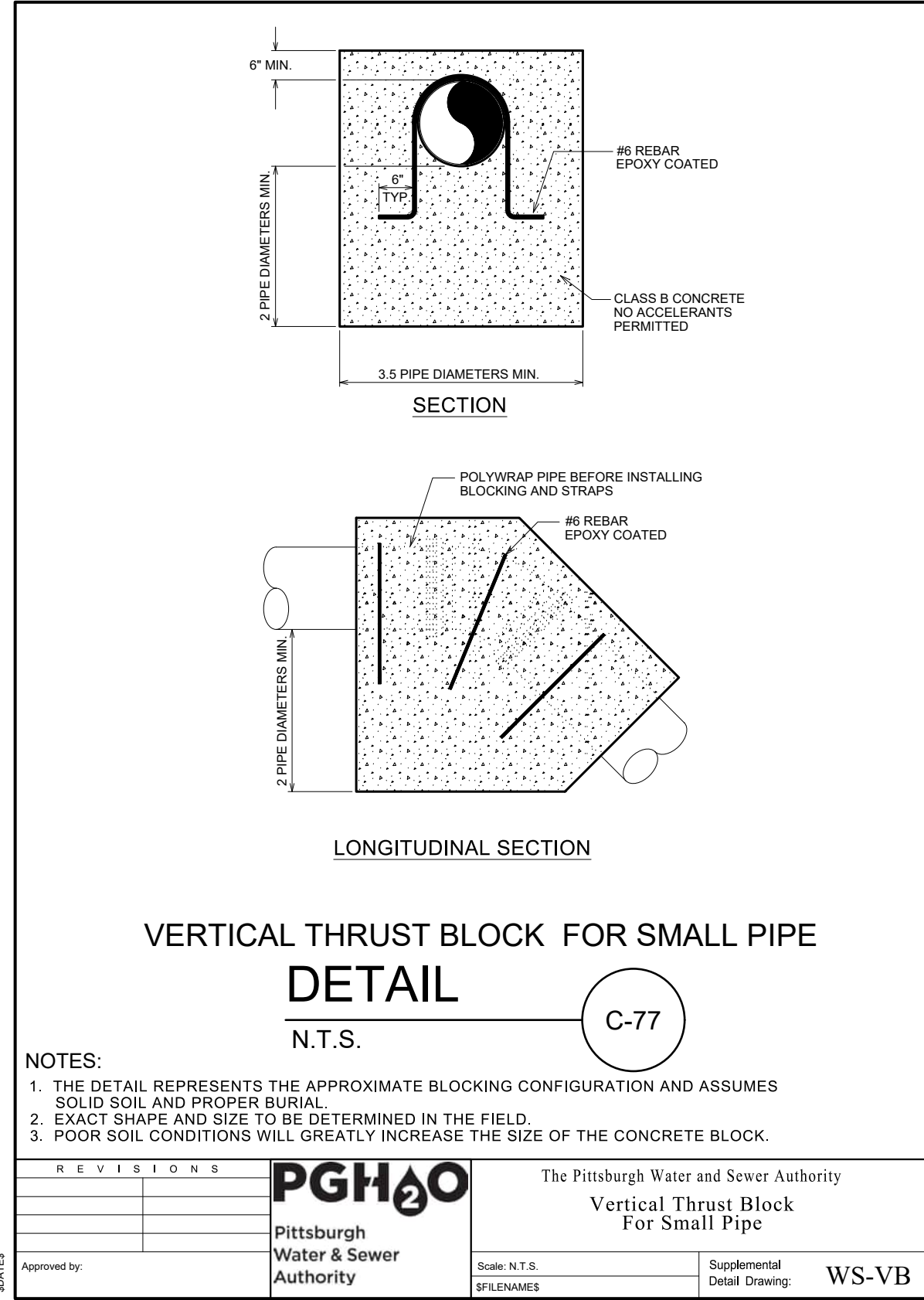
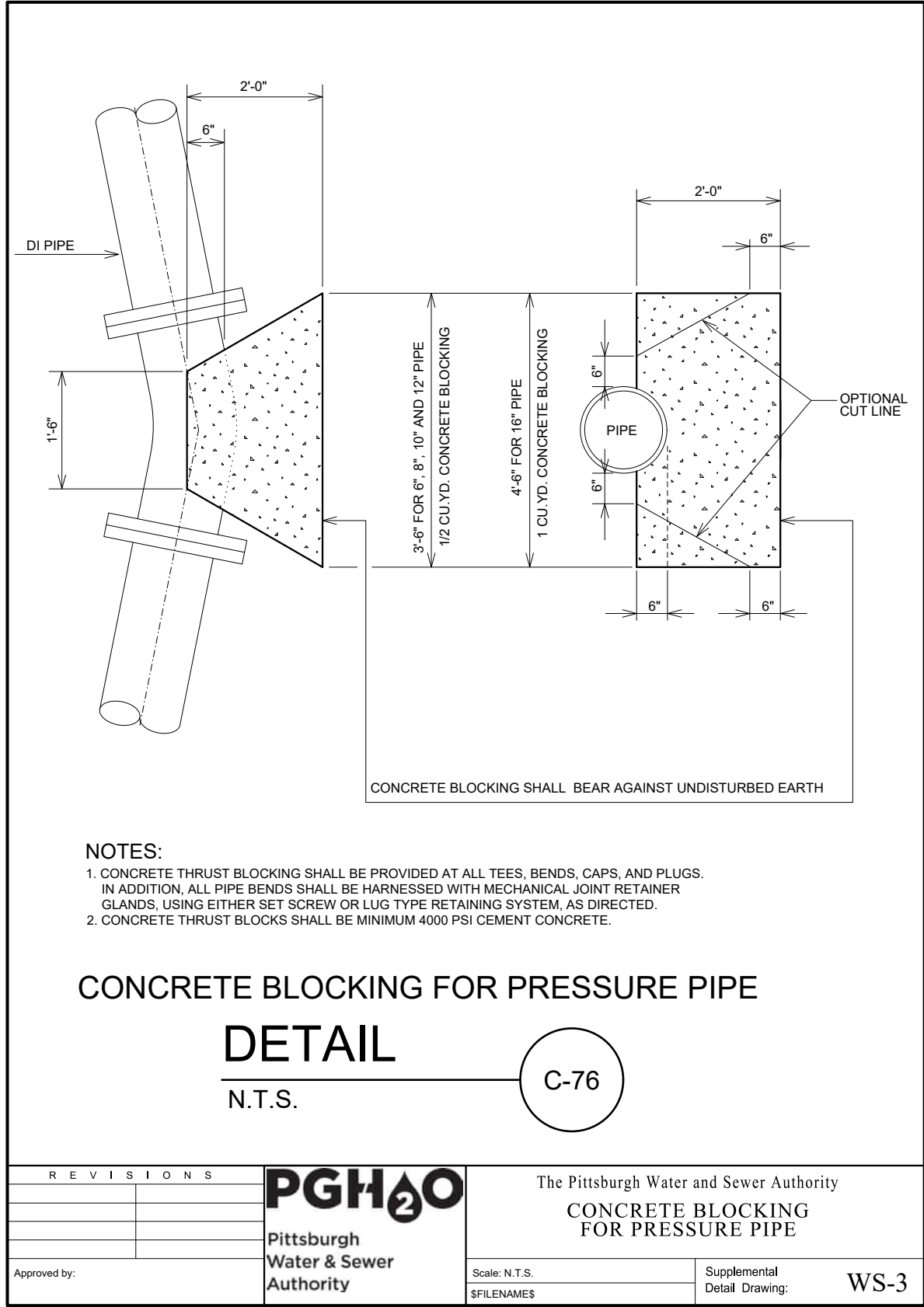
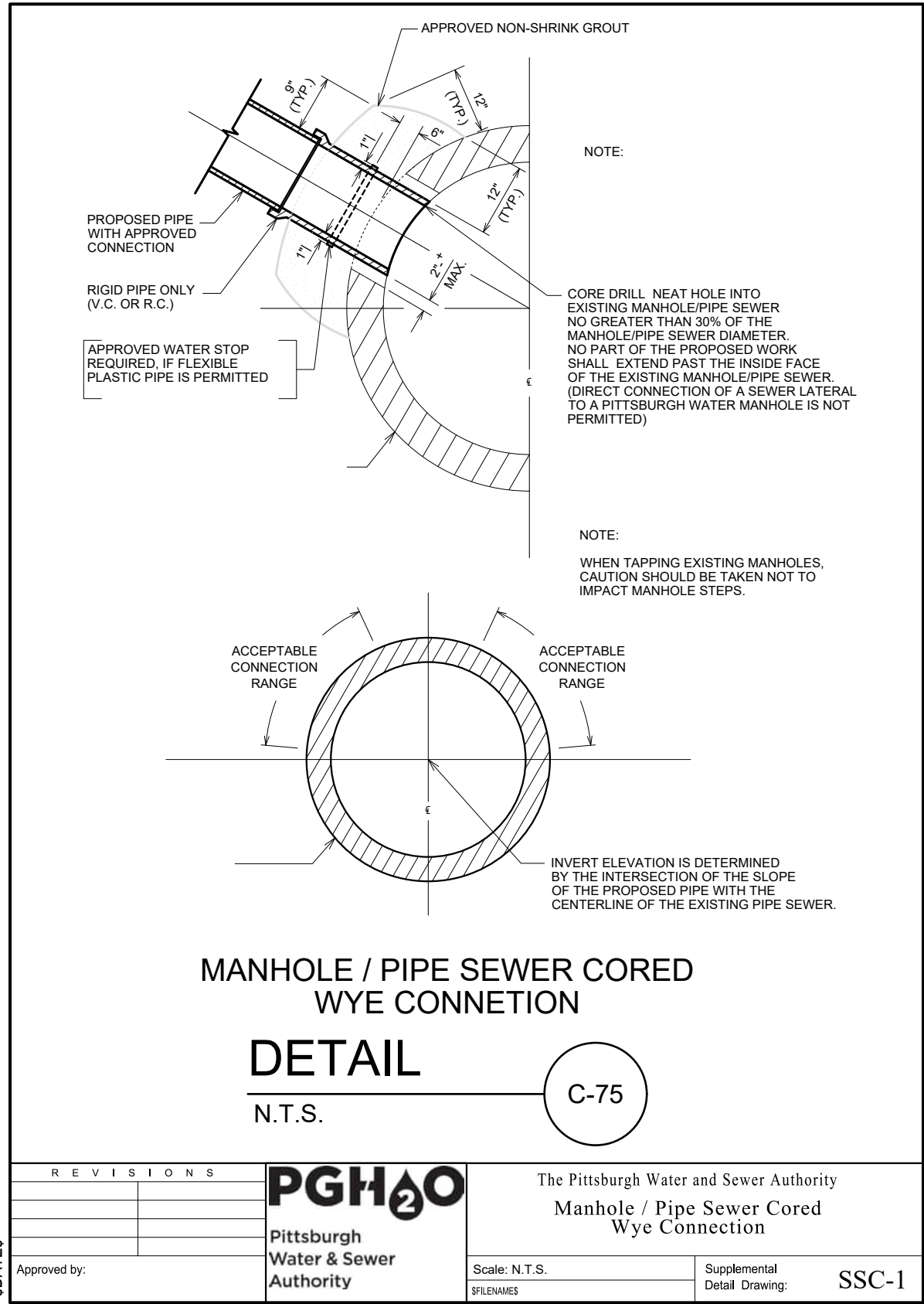
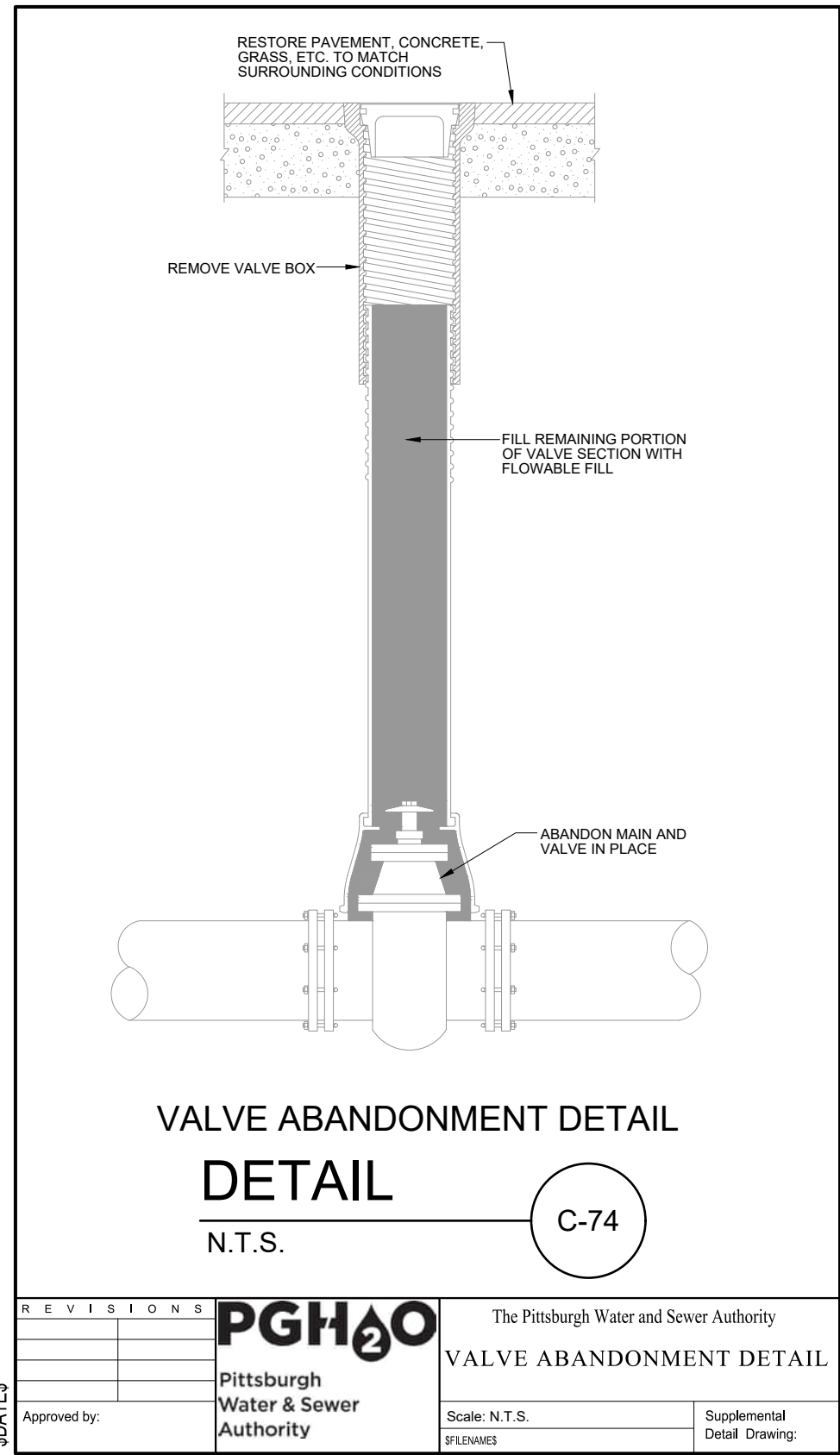
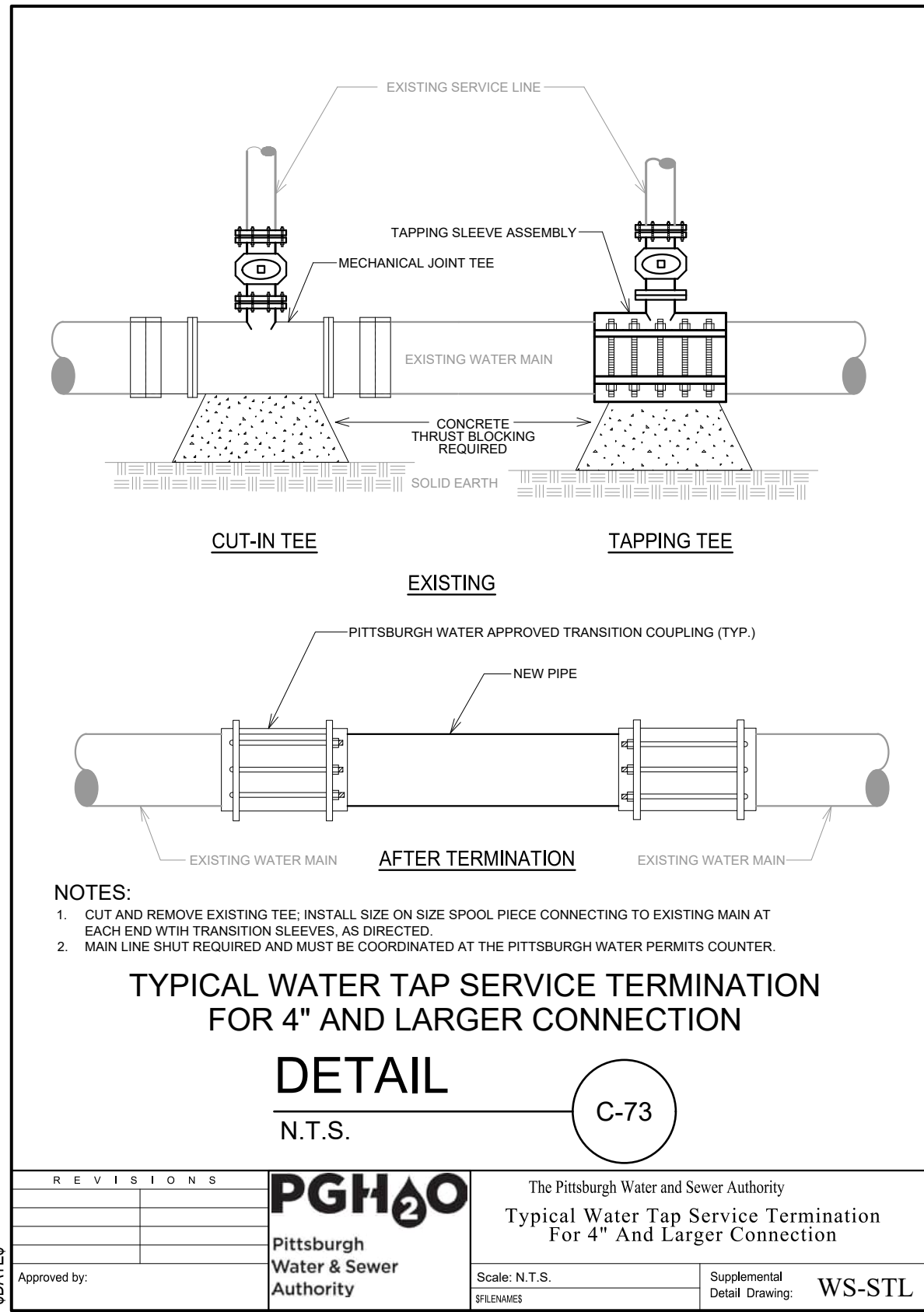
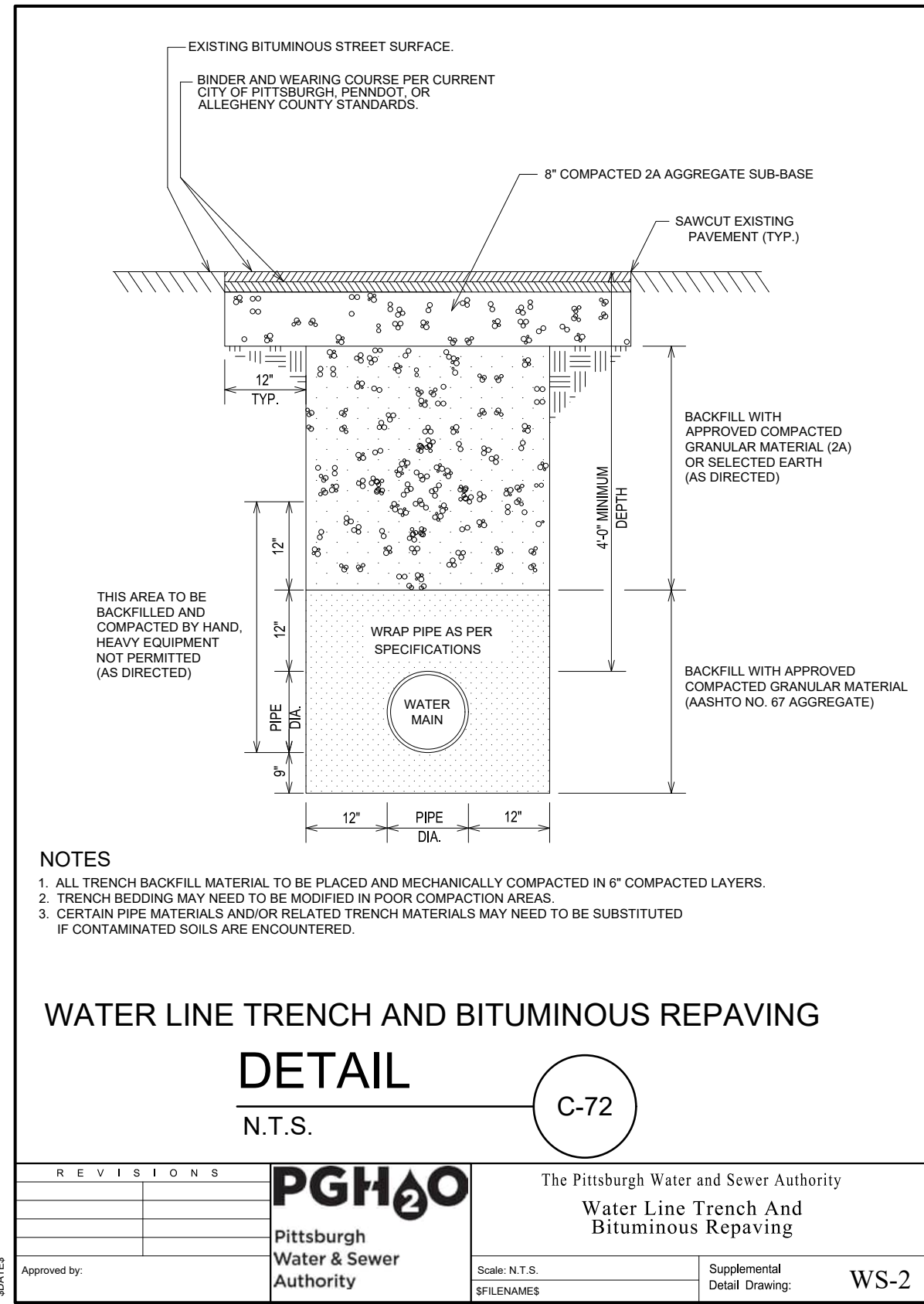
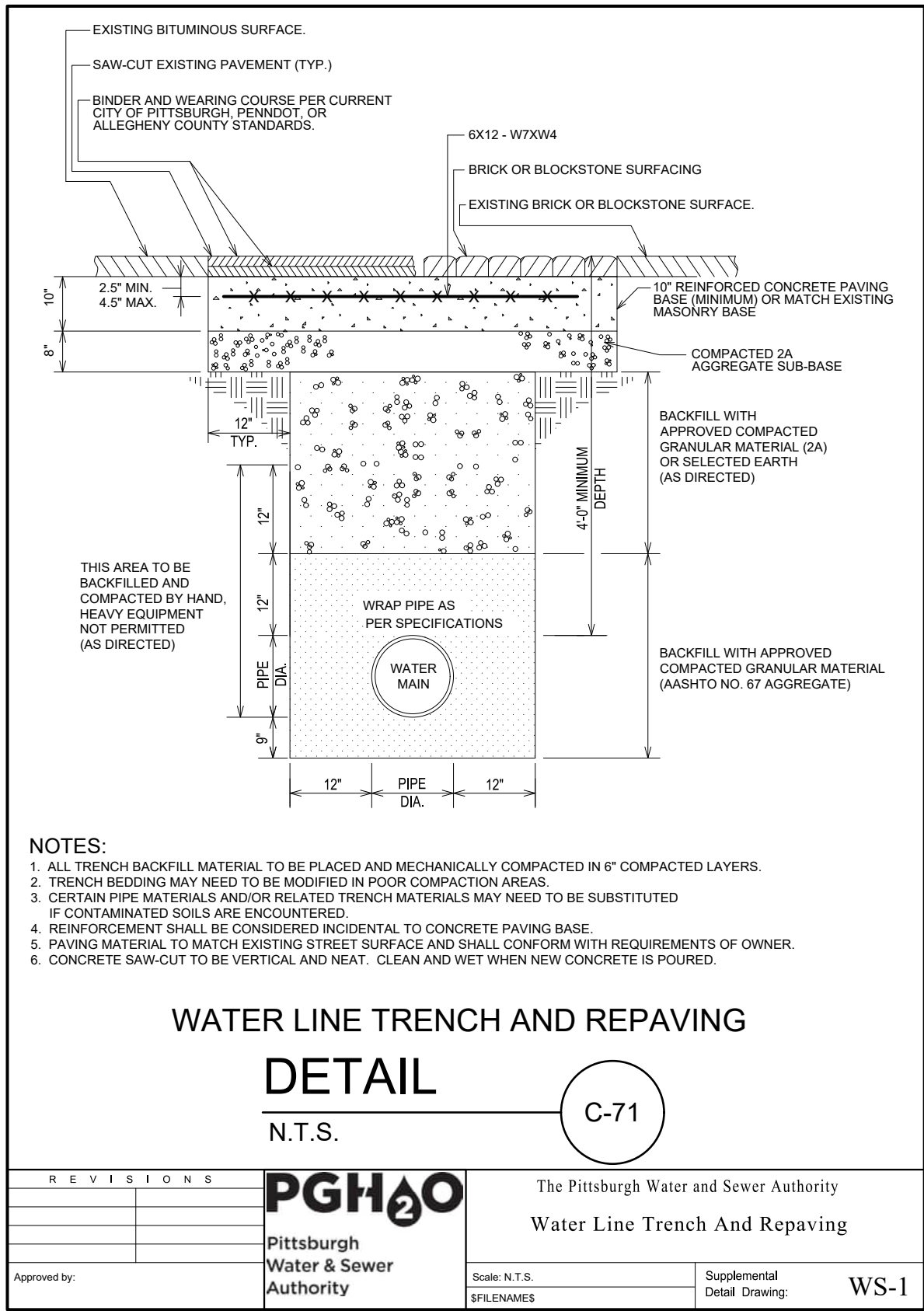
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ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

ORT-MD-028
PITTSBURGH WATER RELOCATION DETAILS
SHEET 1 OF 3

Contract:	1797
File:	ORT-MD-028.dwg
Date:	08/04/2025
Sheet:	675 OF 770

FILE NAME: C:\Users\bow101681\OneDrive\Projects\101681\DC\ACCDocs\Mott MacDonald\507105621 - ALCOSAN Ohio River Tunnel Design - T&MP\Project Files\1 - ORT-02-Civil\Sheets\Post 100% Addendum - ORT-MD-029 LAST SAVED BY: BOW101681 PLOT DATE: 10/31/2025 1:16:31 PM



PITTSBURGH WATER APPROVAL BLOCK
To be completed by the Applicant and provided on each sheet within the plan set:

(Check all that apply)

☐ NEW WATER CONNECTION(S)
☐ NEW SEWER CONNECTION(S)
☐ REUSE EXISTING WATER CONNECTION(S)
☐ REUSE EXISTING SEWER CONNECTION(S)
☐ TERMINATE EXISTING WATER CONNECTION(S)
☐ TERMINATE EXISTING SEWER CONNECTION(S)
☒ PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

To be completed by Pittsburgh Water:
(Required for ALL approvals)

Ana Bennett
Digitally signed by Ana Bennett
DN: cn=Ana Bennett, ou=Engineering, Date: 2025.06.11 08:23:36 -0400
REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION

Zach Rinker
Digitally signed by Zach Rinker
DN: cn=Zach Rinker, ou=Engineering, Date: 2025.06.19 12:57:59 -0400
SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION

Director of Operations

(Required for "Private Construction of Public Facilities" ONLY)

Digitally signed by Barry King
DN: cn=Barry King, ou=Engineering, Date: 2025.06.16 12:44:53 -0400
DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION

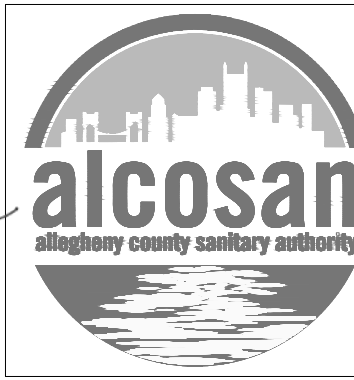
PITTSBURGH WATER PROJECT NUMBER
TAP C RECORD NUMBER NOT APPLICABLE

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Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	11/07/25	PITTSBURGH WATER APPROVED UTILITY PLAN	KMC
Checked by:				

MOTT MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900



ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

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

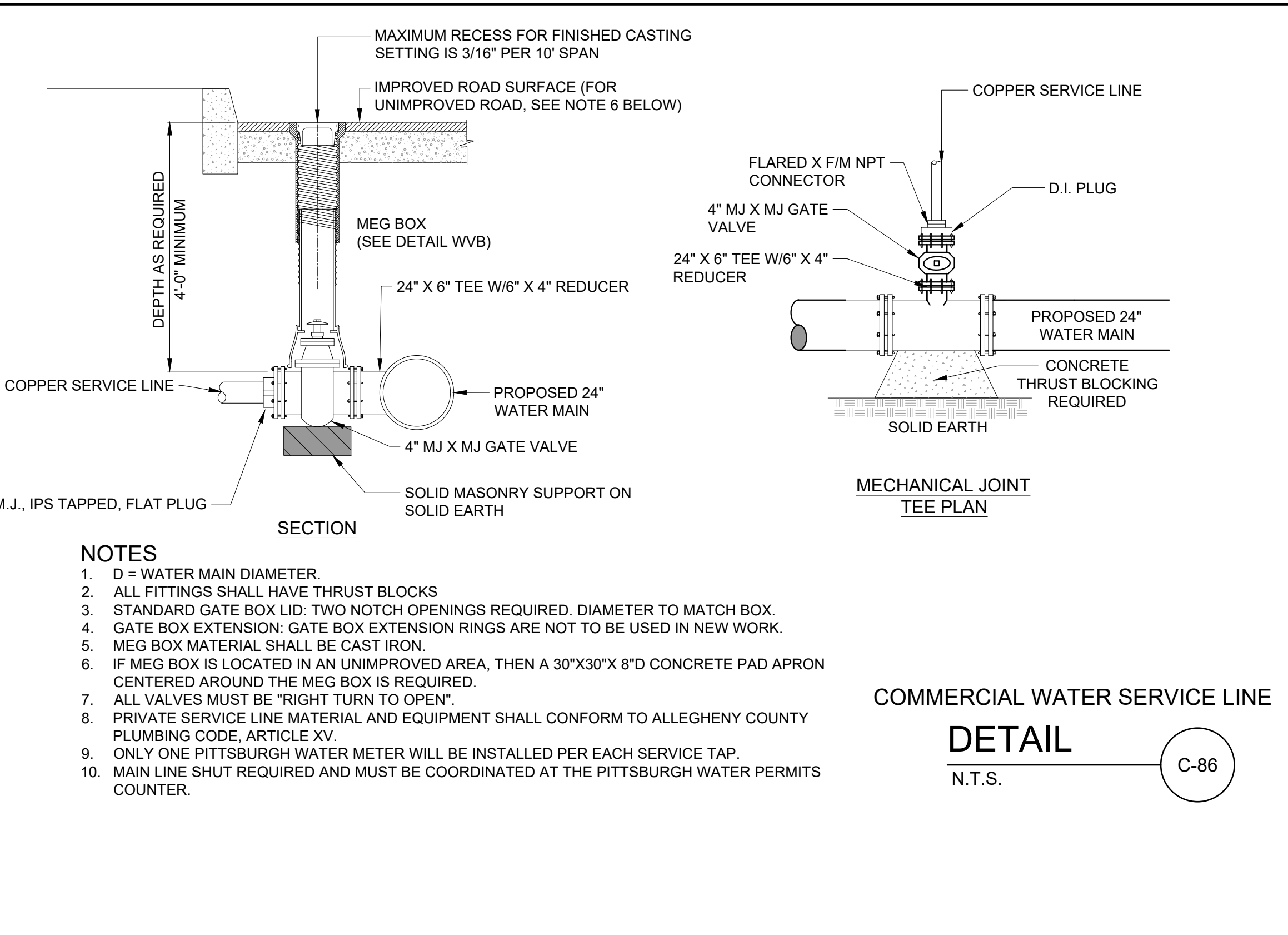
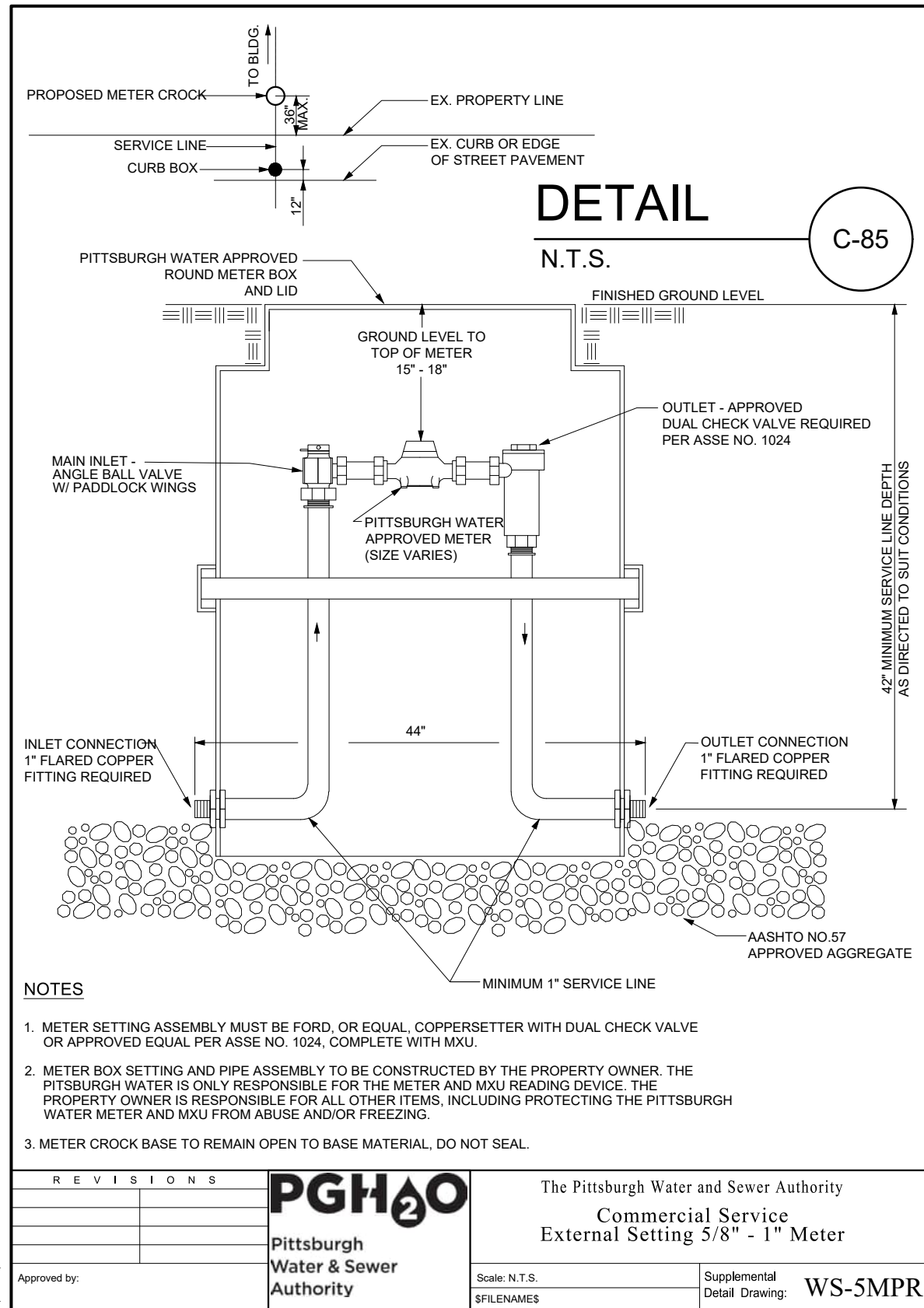
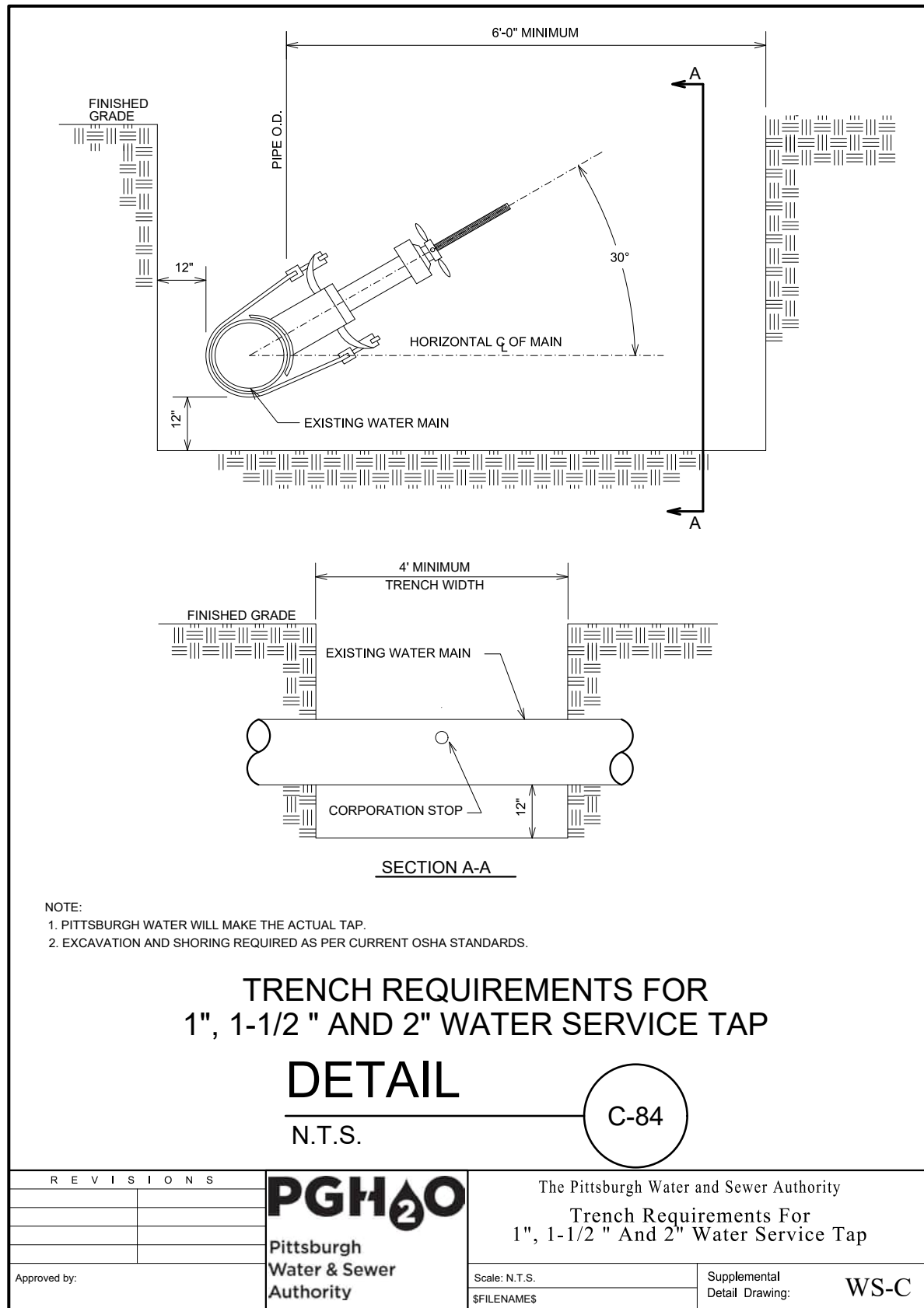
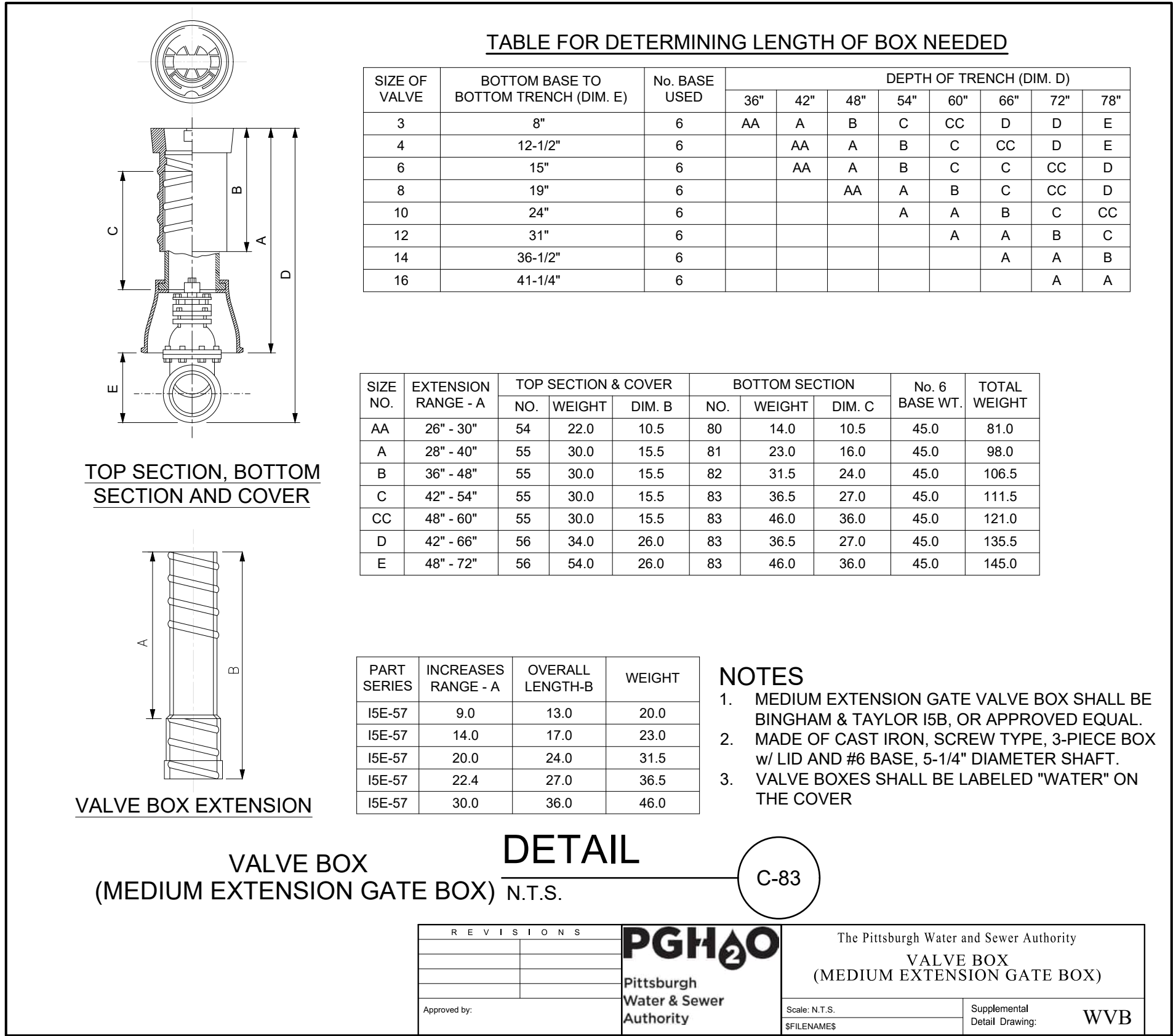
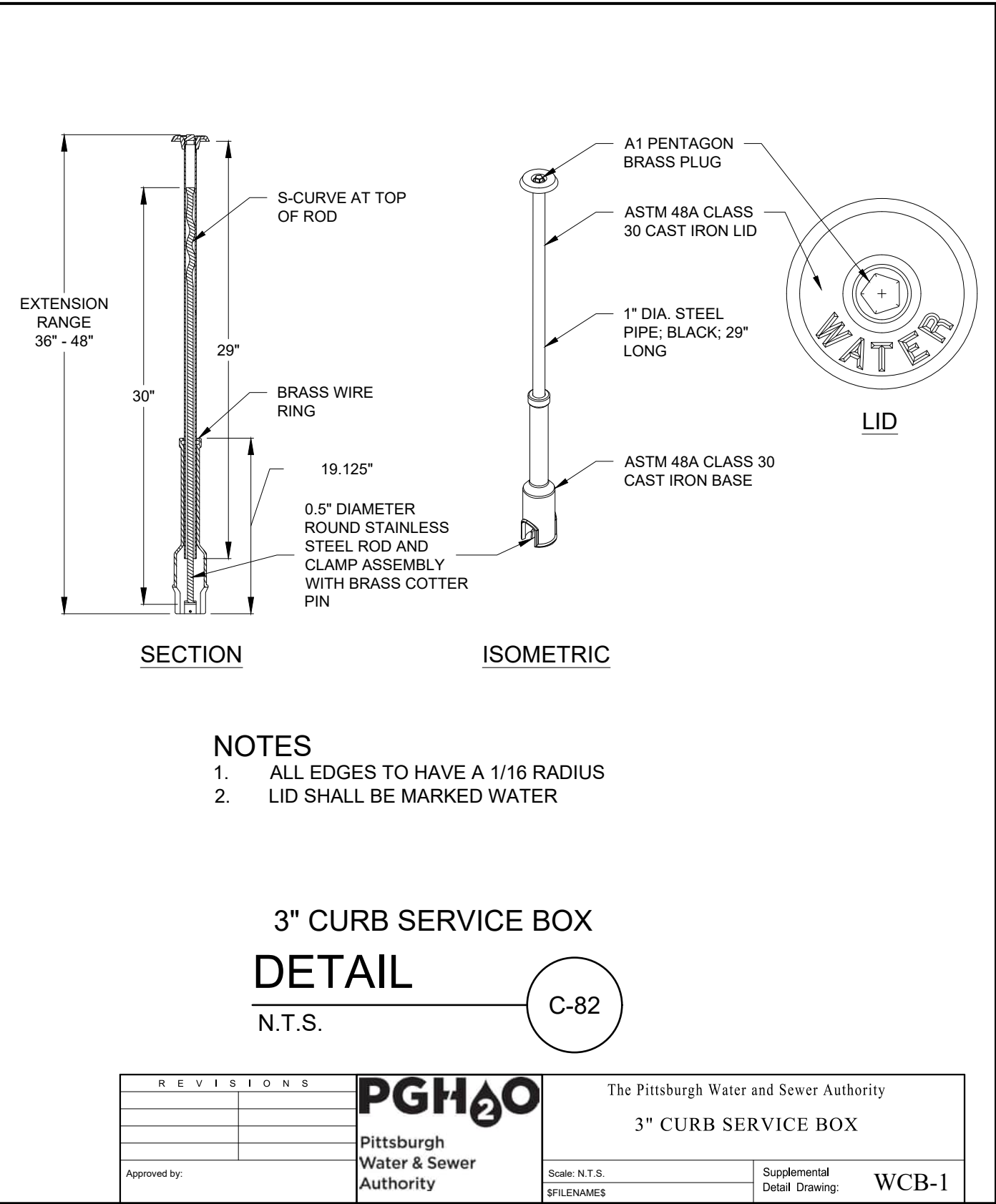
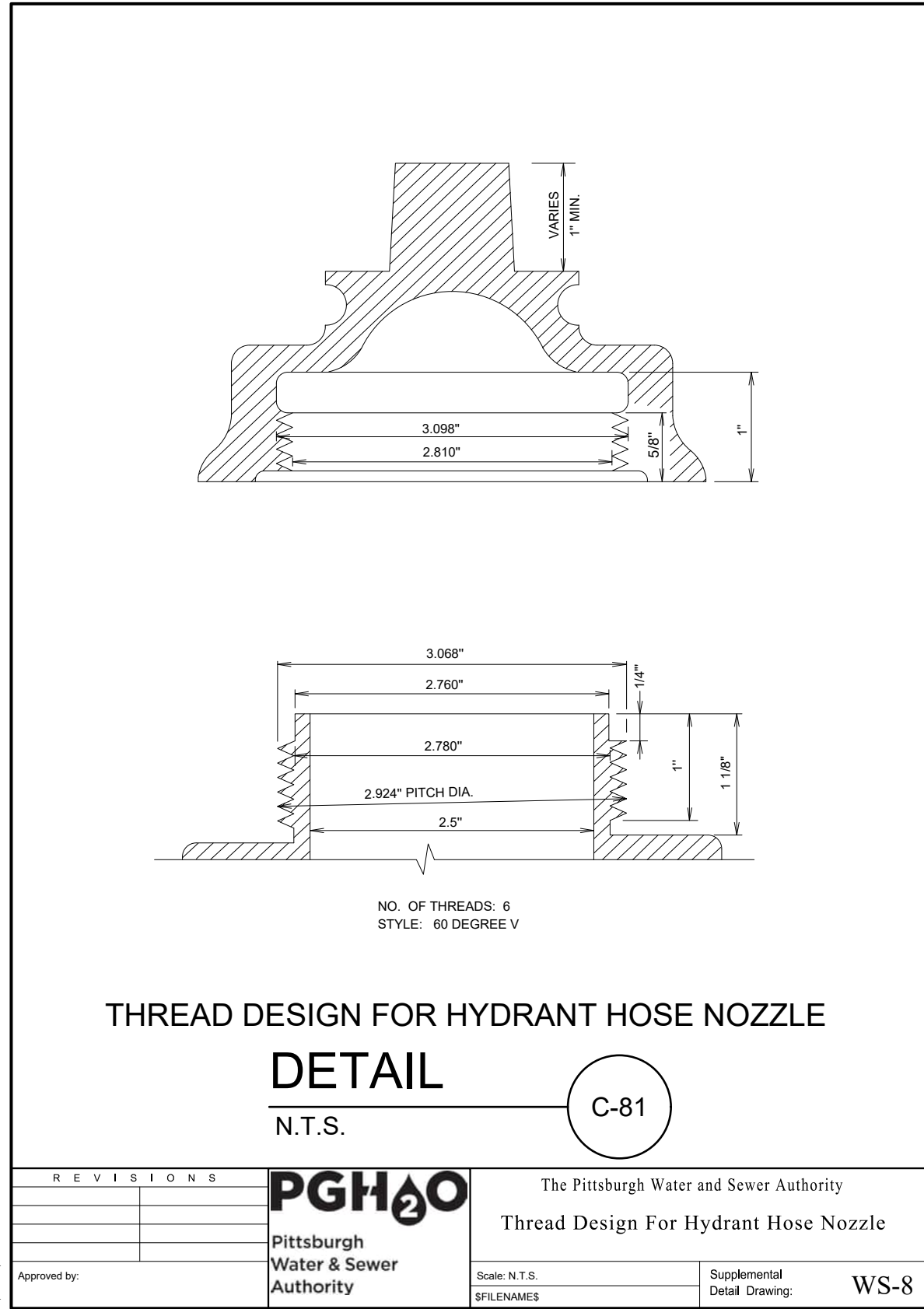
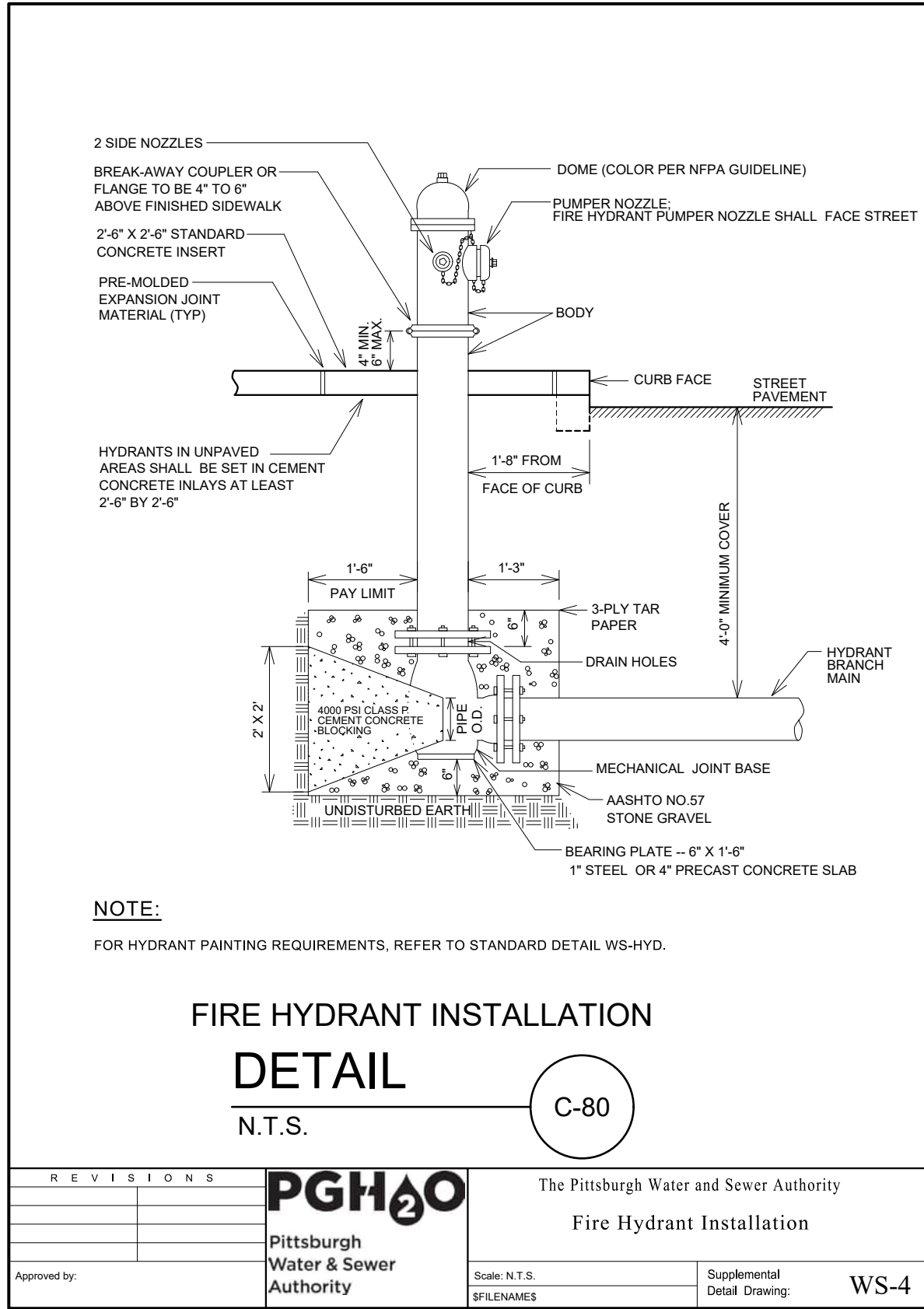
www.alcosan.org

ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

ORT-MD-029
PITTSBURGH WATER RELOCATION DETAILS
SHEET 2 OF 3

Contract:	1797
File:	ORT-MD-029.dwg
Date:	08/04/2025
Sheet:	676 OF 770

FILE NAME: C:\Users\bow16181\OneDrive\Documents\Mott MacDonald\507105621 - ALCOSAN Ohio River Tunnel Design - T&M\Project Files\1 - ORT02-Civil\Sheets\Post 100% Addendum - ORT-MD-030 LAST SAVED BY: BOW101681 PLOT DATE: 11/6/2025 4:43:23 PM



PITTSBURGH WATER APPROVAL BLOCK

To be completed by the Applicant and provided on each sheet within the plan set:

(Check all that apply)

☐ NEW WATER CONNECTION(S)
☐ NEW SEWER CONNECTION(S)
☐ REUSE EXISTING WATER CONNECTION(S)
☐ REUSE EXISTING SEWER CONNECTION(S)
☐ TERMINATE EXISTING WATER CONNECTION(S)
☐ TERMINATE EXISTING SEWER CONNECTION(S)
☒ PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

To be completed by Pittsburgh Water:
(Required for ALL approvals)

Ana Bennett
Digitally signed by Ana Bennett
DN: cn=Ana Bennett, ou=Engineering, email=ana.bennett@pgh2o.com, c=US
Date: 2025.08.11 13:30:36 -0400

REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION

Zach Rinker
Digitally signed by Zach Rinker
DN: cn=Zach Rinker, ou=Engineering, email=zach.rinker@pgh2o.com, c=US
Date: 2025.08.15 12:57:59 -0400

SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION

DIRECTOR OF OPERATIONS

(Required for "Private Construction of Public Facilities" ONLY)

BRIAN
Digitally signed by Brian King
DN: cn=Brian King, ou=Engineering, email=brian.king@pgh2o.com, c=US
Date: 2025.08.15 12:57:59 -0400

DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION

PITTSBURGH WATER PROJECT NUMBER _____
TAP C RECORD NUMBER NOT APPLICABLE

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Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
Drawn by:	1	11/07/25	PITTSBURGH WATER APPROVED UTILITY PLAN	KMC
Checked by:				

M

MOTT MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900



ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

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

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ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

ORT-MD-030
PITTSBURGH WATER RELOCATION DETAILS
SHEET 3 OF 3

Contract:	1797
File:	ORT-MD-030.dwg
Date:	08/04/2025
Sheet:	677 OF 770

Addendum No. 6

Attachment D

APPENDIX B – CONTRACT DRAWINGS

- **Revised O27-ST-135 (Sheet 238 of 770) (1 page)**
- **Revised O41-ST-218 (Sheet 333 of 770) (1 page)**
- **Revised O41-ST-225 (Sheet 340 of 770) (1 page)**
- **Revised A58-ST-417 (Sheet 418 of 770) (1 page)**
- **Revised O07-ST-707 (Sheet 506 of 770) (1 page)**

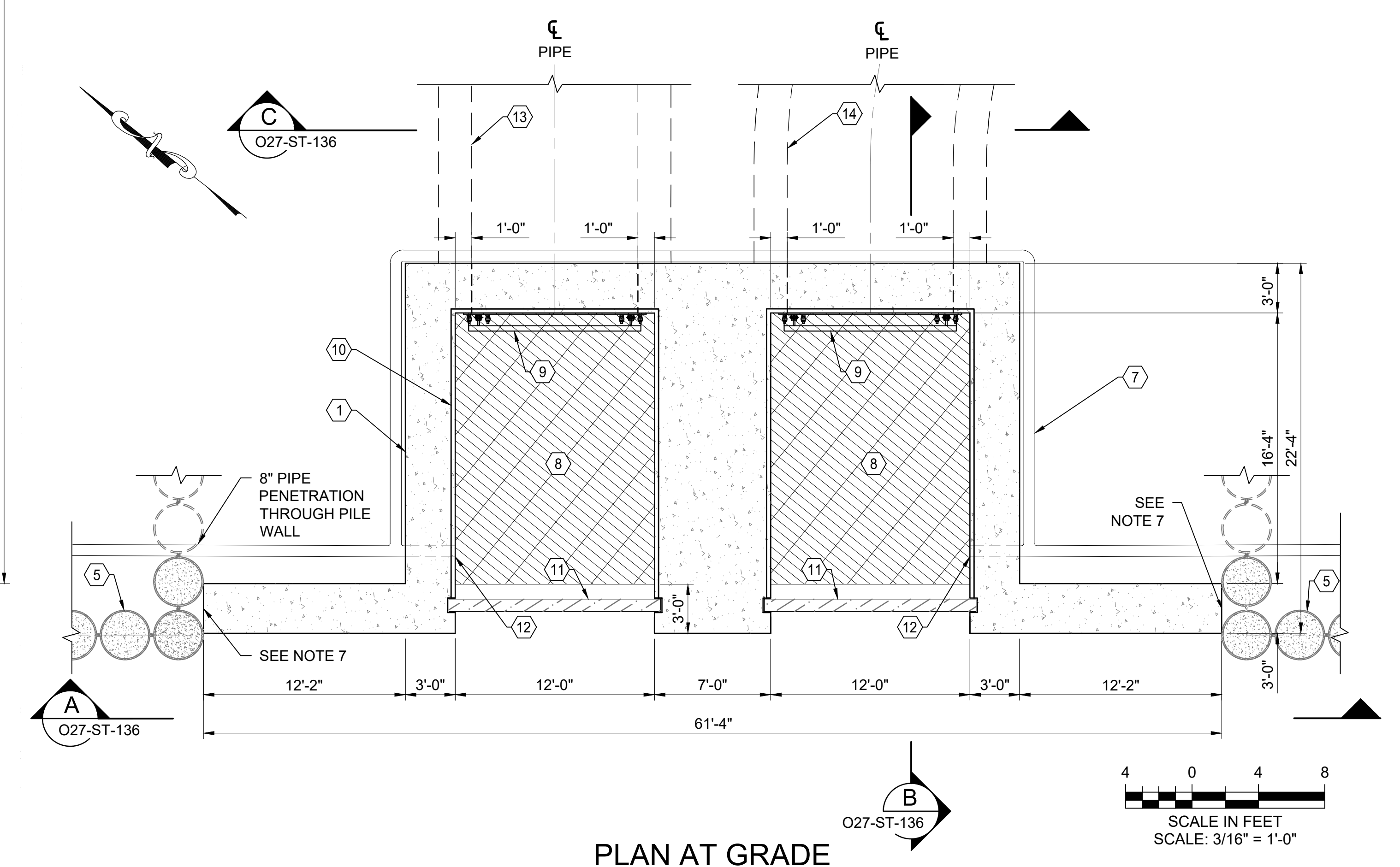


NOTES:

1. SEE SHEET 027-ST-136 FOR NOTES RELATED TO THIS WORK.
2. SEE SHEETS 027-ST-139 & 027-ST-140 FOR DETAILS TO BE INCORPORATED INTO WORK.
3. FLAP GATE FRAME TO BE COORDINATED WITH CONCRETE LAYOUT - SEE SHEET 027-ME-103
4. NOT ALL SOE IS SHOWN FOR CLARITY - SEE SOE SHEETS.
5. SEE SHEET 027-ST-104 FOR CONNECTION DETAILS.
6. SEE SHEET 027-ST-129 FOR CONNECTION DETAILS.
7. OVERPOUR WING WALLS TO SOE

 SCOUR PROTECTION

PILE SCHEDULE											
CALLOUT	PILE TOP EL. (FEET)	ESTIMATED PILE TIP EL. (FEET)	ESTIMATED PILE LENGTH (FEET)	ASSUMED ROCK EL. (FEET)	MINIMUM ROCK SOCKET DEPTH (FEET)	MINIMUM PILE SECTION MODULUS (CUBIC INCHES)	PILE SECTION	QUANTITY	MINIMUM DIA. OF HOLE (INCHES)	VERTICAL DESIGN LOAD PER PILE (KIPS)	HORIZONTAL DESIGN LOAD PER PILE (KIPS)
1	693.2	666.0	27.2	671.0	5	290	HP 18x157	24	30	250	31



PLAN AT GRADE

Designed by:	REVISION				 MOTT MACDONALD Two Allegheny Center Nova Tower 2, Suite 1301 Pittsburgh, PA 15212 (412) 497 - 2900	 Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation. Pennsylvania One Call System Serial Number FINAL DESIGN TICKET # 20250040208		 ARLETTA SCOTT WILLIAMS EXECUTIVE DIRECTOR, ALCOSAN 3300 PREBLE AVE. PITTSBURGH, PA 15233 (412) 766 - 4810 www.alcosan.org
JO/RNT	REV No.	DATE	DESCRIPTION	APPV				
Drawn by:	1	11/07/25	PILE TIP DEPTH UPDATE	PSK				
JO								
Checked by:								
PSK								

Contract: 179

File: O27-ST-135.dwg

Date: 07/30/2025

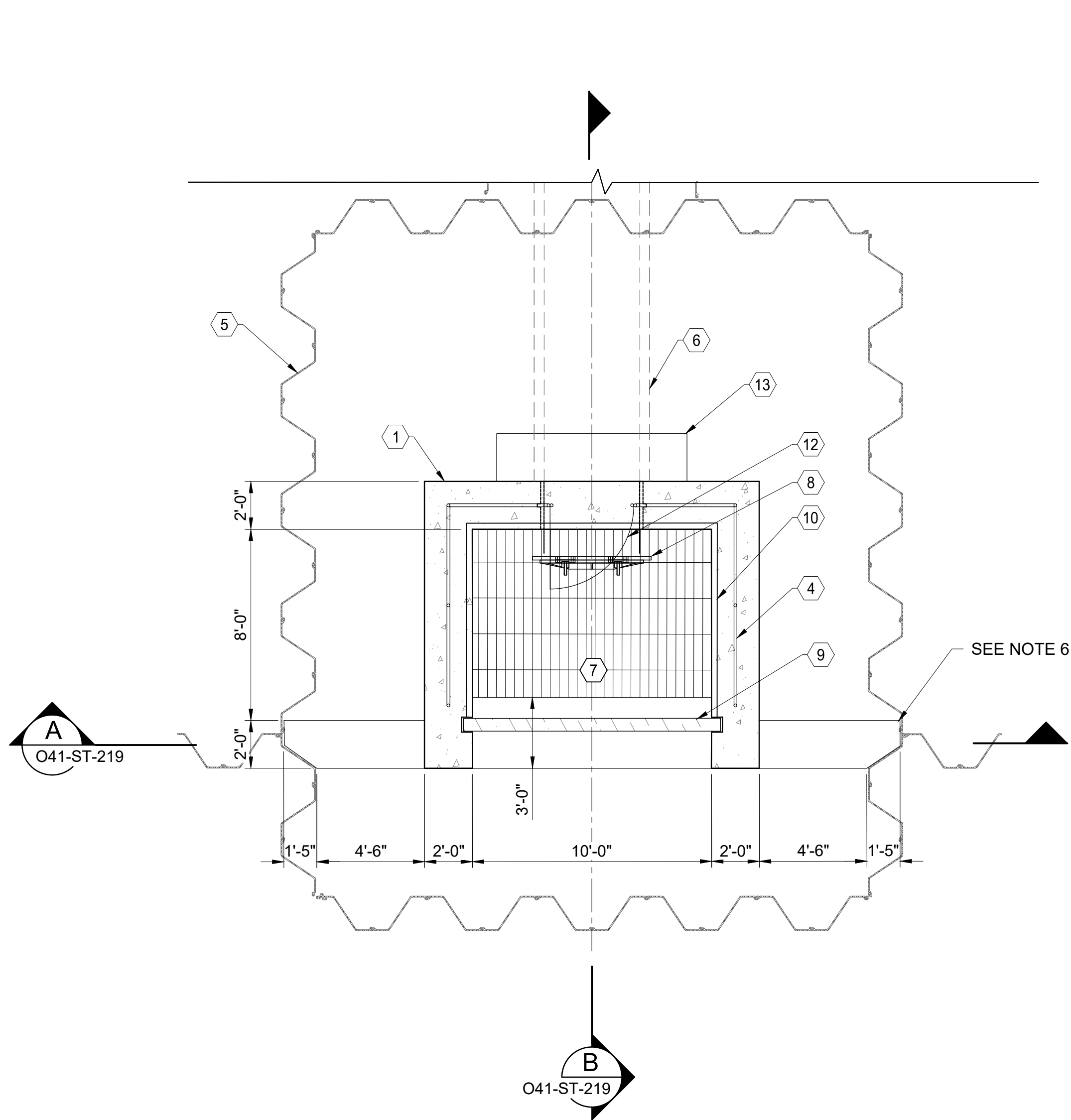
Sheet: 238 OF 77

ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

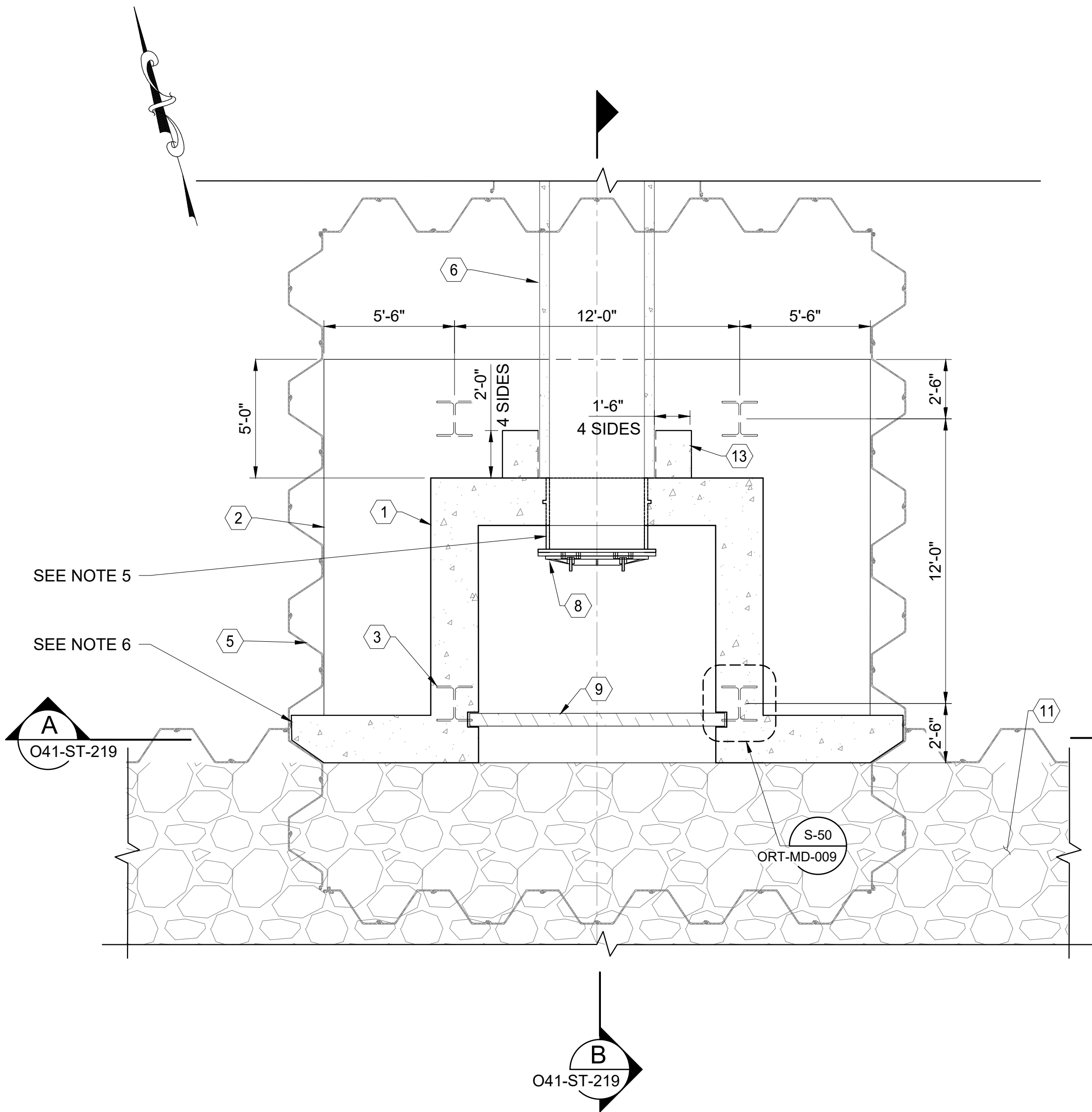
O27-ST-135 ORT-O27-OF PLANS

FILE NAME: C:\Users\OG0925\0\DC\ACCDocs\Mott MacDonaldd\507105621 - ALCOSAN Ohio River Tunnel Design - T&M\Project Files\4 - O41\05-Structural\Sheets - O41-ST-218 LAST SAVED BY: OG092510 PLOT DATE: 11/3/2025 11:28:31 AM

PILE SCHEDULE											
CALLOUT	PILE TOP EL. (FEET)	ESTIMATED PILE TIP EL. (FEET)	ESTIMATED PILE LENGTH (FEET)	ASSUMED ROCK EL. (FEET)	MINIMUM ROCK SOCKET DEPTH (FEET)	MINIMUM PILE SECTION MODULUS (CUBIC INCHES)	PILE SECTION	QUANTITY	MINIMUM DIA. OF HOLE (INCHES)	VERTICAL DESIGN LOAD PER PILE (KIPS)	HORIZONTAL DESIGN LOAD PER PILE (KIPS)
1	701.5	655.0	46.5	660.0	5	290	HP 18x157	4	30	105	24



PLAN AT GRADE



PLAN AT PIPE OPENING

NOTES

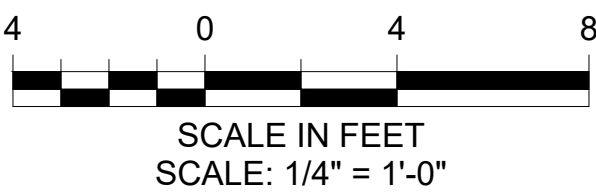
1. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OUTFALL SUPPORT OF EXCAVATION SHEETS. SEE SHEETS O41-ST-207 AND O41-ST-208. NOT ALL SOE SHOWN FOR CLARITY.
2. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE CIVIL SITE SHEETS. SEE SHEETS O41-CI-200 TO O41-CI-215.
3. FOR TYPICAL DETAILS RELATED TO THIS WORK, SEE SHEETS ORT-MD-001 TO ORT-MD-014.
4. SEE SHEET O41-ST-222 FOR DETAILS TO BE INCORPORATED INTO THIS WORK.
5. FLAP GATE WALL THRU PIPE TO BE COORDINATED WITH CONCRETE LAYOUT - SEE SHEET O41-ME-203
6. OVERPOUR SIDES OF BASE SLAB AND WING WALLS TO SOE.

KEY NOTES:

- 1 REINFORCED CONCRETE WALL
- 2 REINFORCED CONCRETE BASE SLAB
- 3 HP PILE - (TYP.) - SEE SCHEDULE
- 4 HANDRAIL - SEE TYPICAL DETAILS
- 5 NZ28 SHEET PILES - SEE SOE SHEETS
- 6 48" RCP - CLASS V WALL C - SEE SHEET O41-CI-204
- 7 REMOVABLE BAR GRATING - INTERSTATE GRATINGS 8-W-4- 2 1/4" X 3/16" SEE DETAIL 1 ON O41-ST-222
- 8 48" FLAP GATE - SEE SHEET O41-ME-203
- 9 STOP LOG - SEE SHEET O41-ME-203
- 10 TOP OF WALL LEDGE
- 11 SCOUR PROTECTION - SEE SHEET O41-ST-217
- 12 42" WIDE LOCKABLE HANDRAIL ACCESS GATE
- 13 REINFORCED CONCRETE ENCASEMENT

LEGEND

- SCOUR PROTECTION



Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
JO/RNT	1	11/07/25	PILE TIP DEPTH UPDATE	PSK
Drawn by:				
JO				
Checked by:				
PSK				

M

MOTT
MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900



Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040206



ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

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

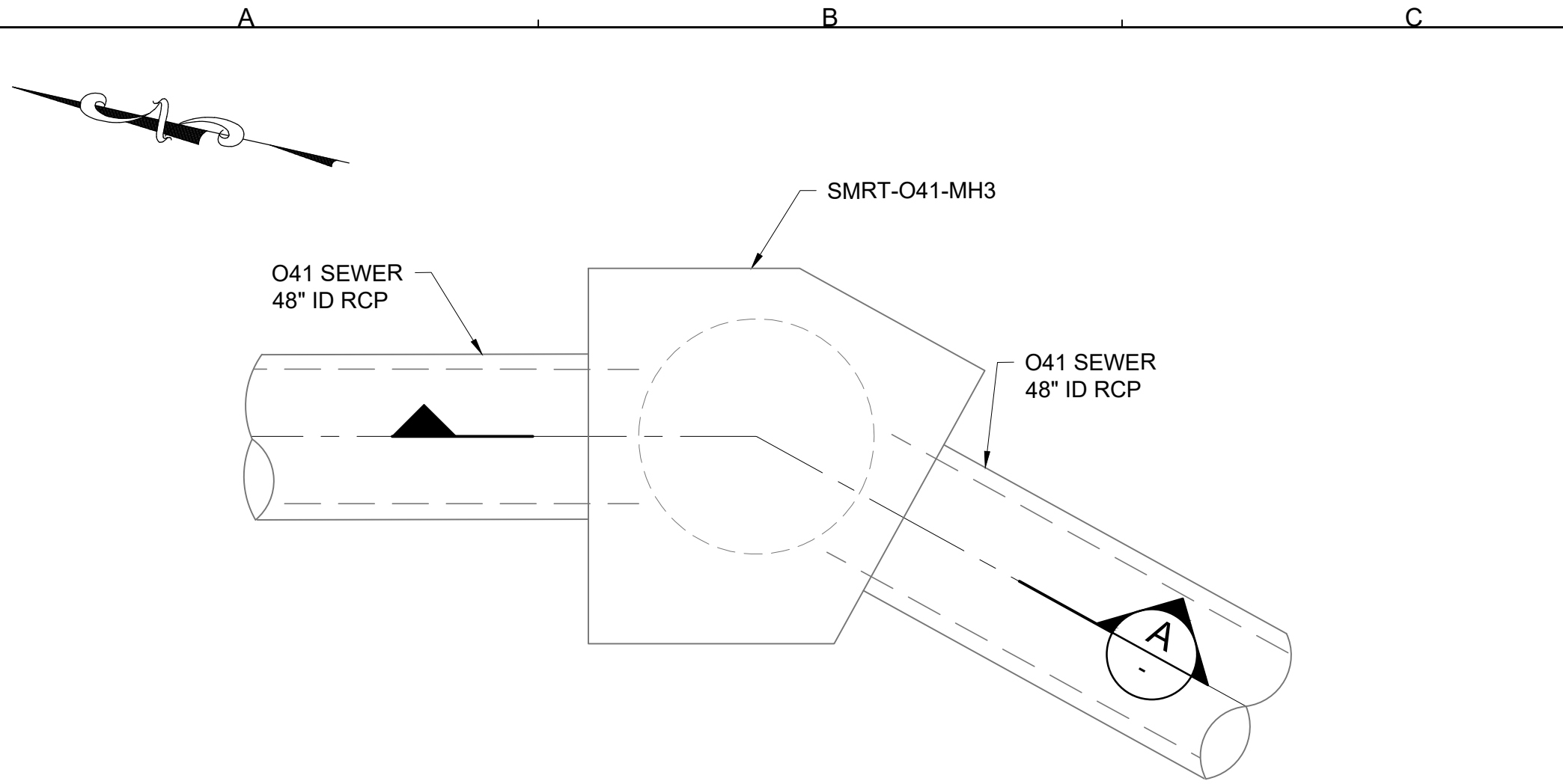
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ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

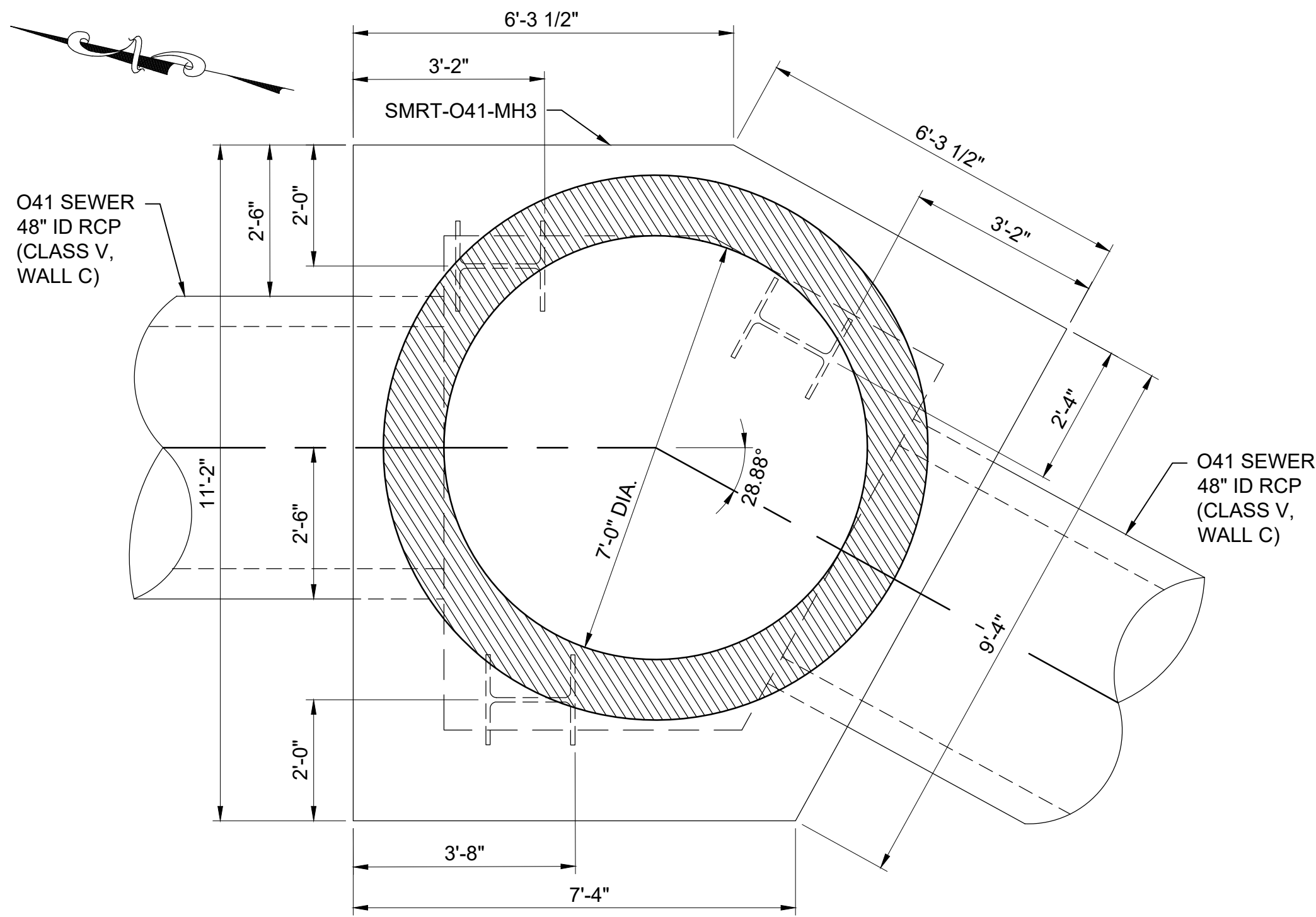
O41-ST-218
SMRT-O41-OF PLANS

Contract:	1797
File:	O41-ST-218.dwg
Date:	07/30/2025
Sheet:	333 OF 770

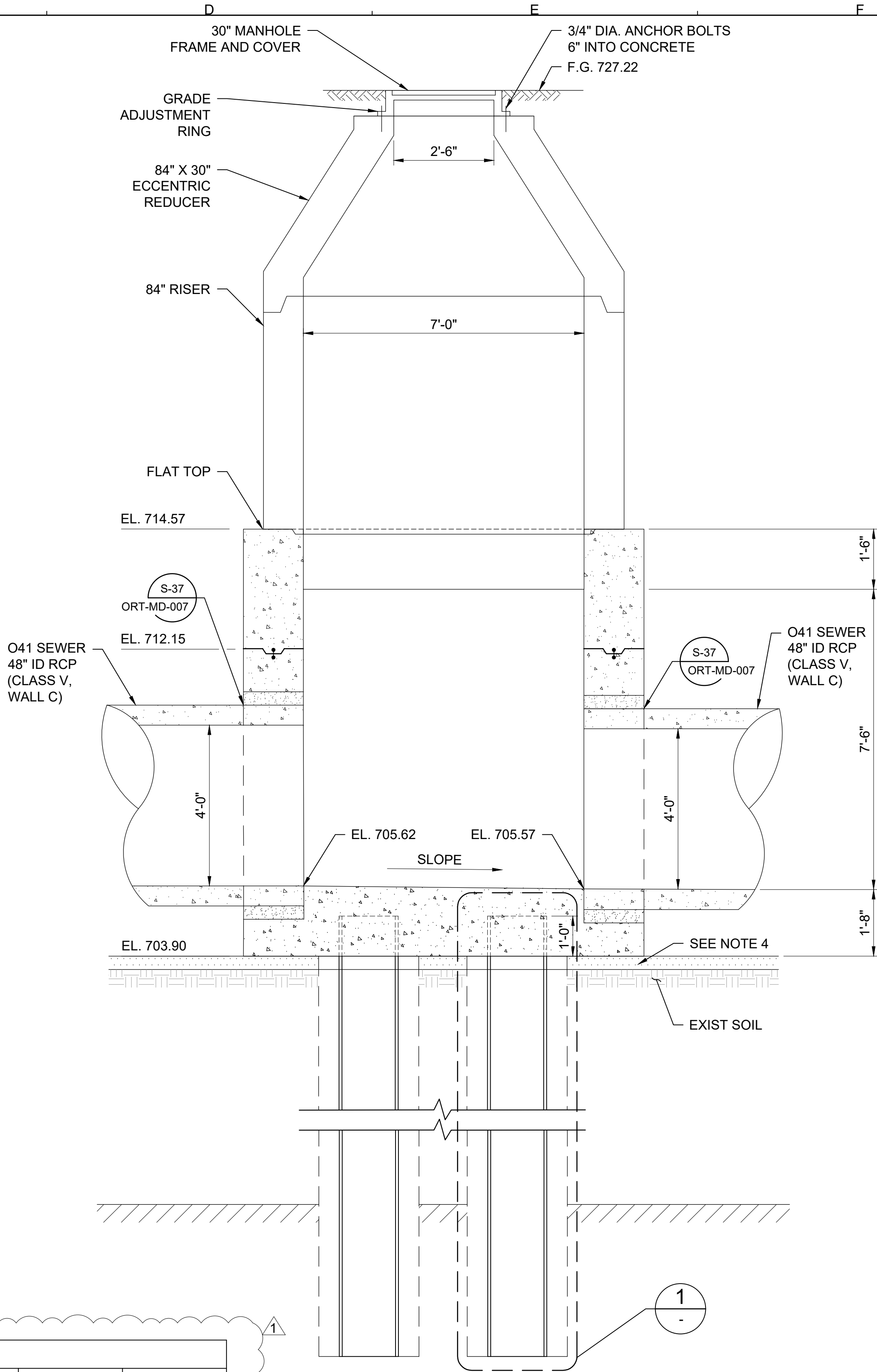
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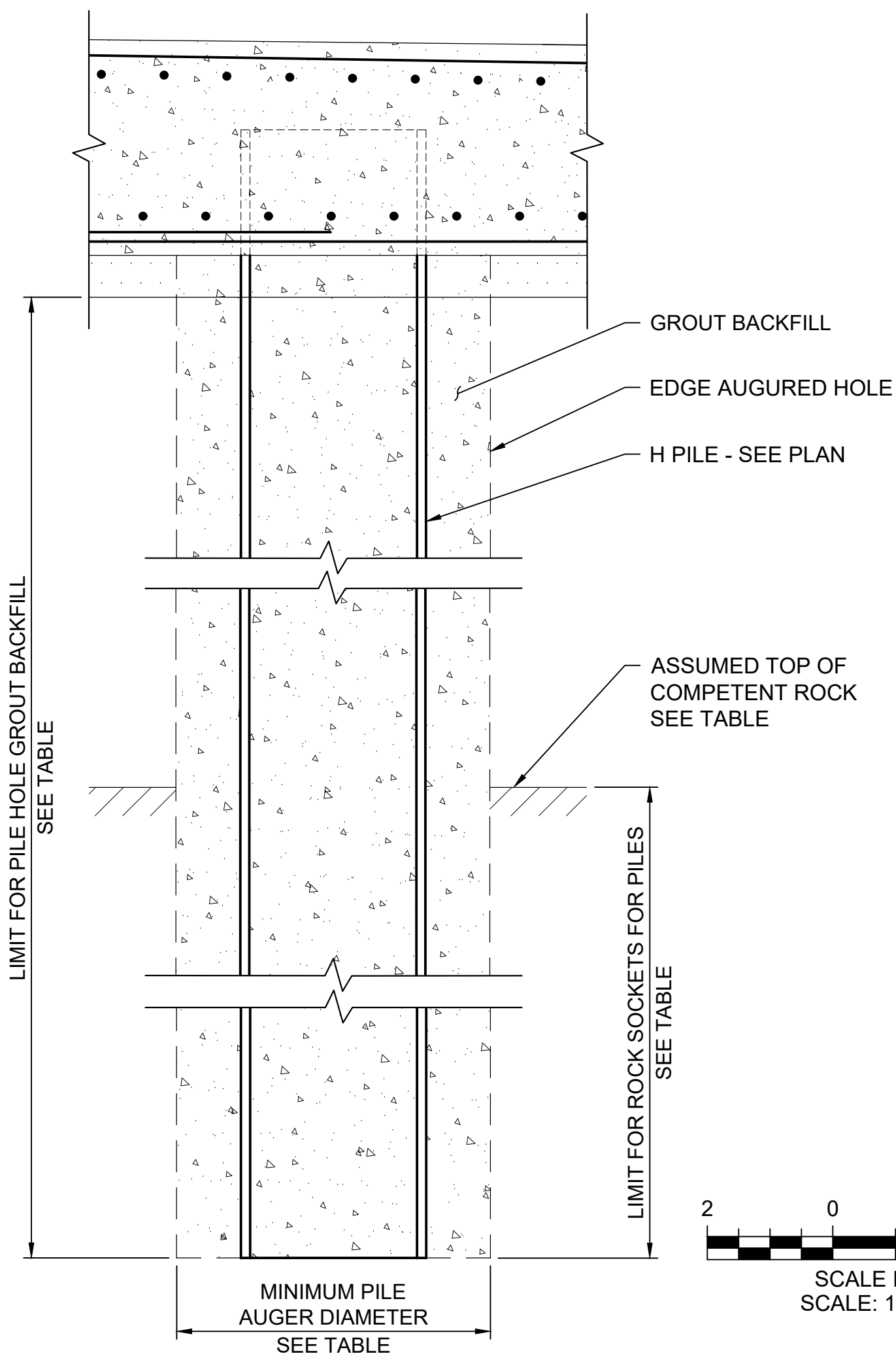
PLAN @ EL. 707± (SEWER S/L)
SCALE: N.T.S.



PLAN @ EL. 715
SCALE: 1/2" = 1'-0"



SECTION
SCALE: 1/2" = 1'-0"



DETAIL
SCALE: 1" = 1'-0"

NOTES

1. THE CONTRACTOR TO COORDINATE ALL WORK WITH THE SEWERS AND MANHOLES SUPPORT OF EXCAVATION DRAWINGS. SEE SHEETS O41-ST-200 TO O41-ST-206.
2. THE CONTRACTOR TO COORDINATE ALL WORK WITH THE CIVIL SITE DRAWINGS. SEE SHEETS O41-CI-200 TO O41-CI-215.
3. SOE NOT SHOWN FOR CLARITY - SEE SOE DRAWINGS.
4. PROVIDE 4" MUD SLAB AT BASE OF EXCAVATION.
5. FOR TYPICAL REINFORCEMENT, SEE SHEET O41-ST-224.
6. VERTICAL DESIGN LOAD PER PILE = 118 KIPS
7. HORIZONTAL DESIGN LOAD PER PILE = 10 KIPS

PILE SCHEDULE (SEE NOTES 6 & 7)

CALLOUT	PILE TOP EL. (FEET)	ESTIMATED PILE TIP EL. (FEET)	ESTIMATED PILE LENGTH (FEET)	ASSUMED ROCK EL. (FEET)	MINIMUM ROCK SOCKET DEPTH (FEET)	MINIMUM PILE SECTION MODULUS (CUBIC INCHES)	PILE SECTION	QUANTITY	MINIMUM DIA. OF HOLE (INCHES)
1	705	655	50	660	5	290	HP 18x157	3	30

Designed by:	REV No.	DATE	REVISION DESCRIPTION	APPV
YC	1	8/21/25	PILE SCHEDULE / NOTES UPDATE	SBP
Drawn by:	2	11/07/25	PILE TIP DEPTH UPDATE	SBP
MJN				
Checked by:				
DLM				

M

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MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900



Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040206



ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

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PITTSBURGH, PA 15233
(412) 766 - 4810

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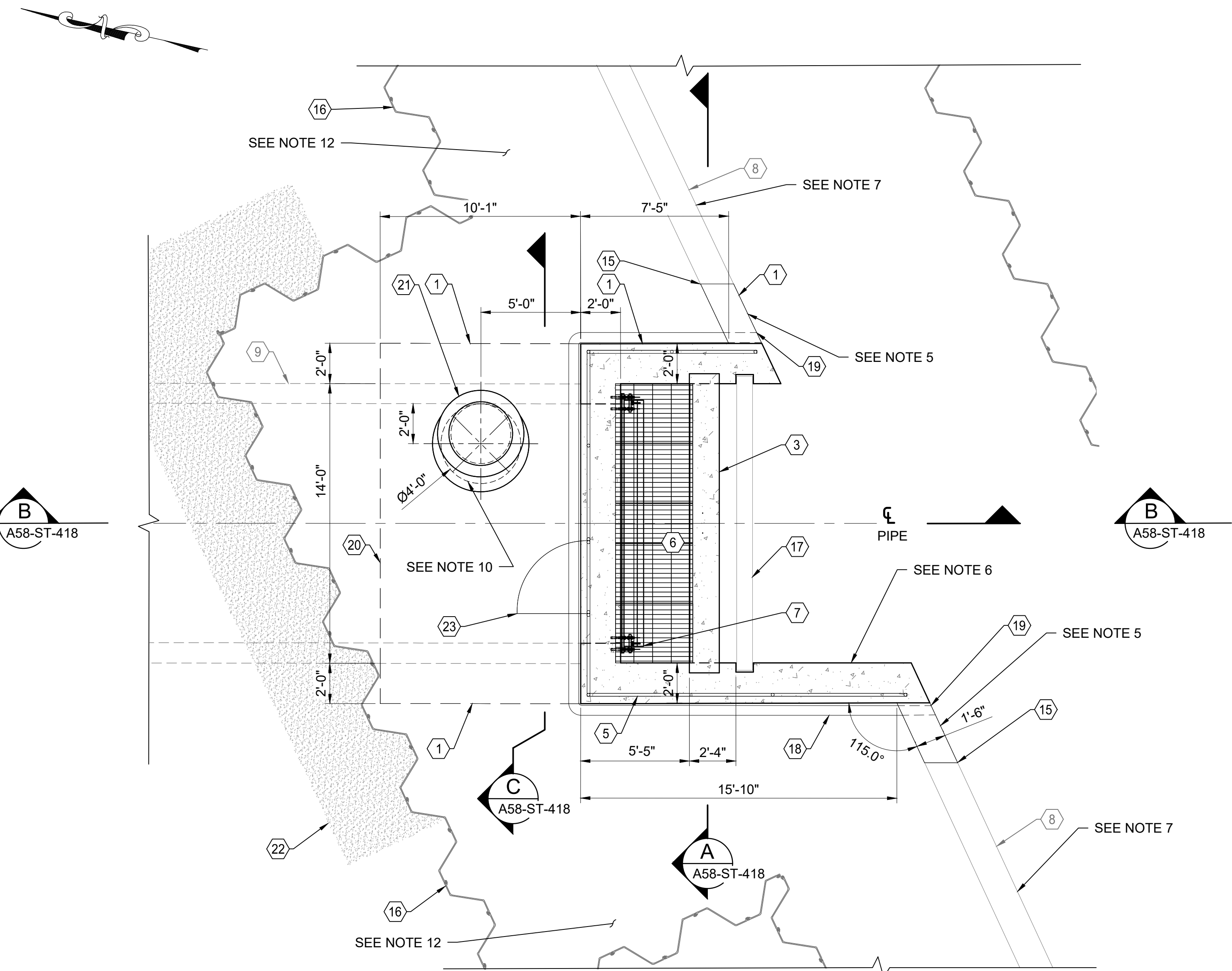
ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

O41-ST-225
SMRT-O41-MH3 DETAILS

Contract:	1797
File:	O41-ST-225.dwg
Date:	07/30/2025
Sheet:	340 OF 770

FILE NAME: C:\Users\OG0925\0\DC\ACCDocs\Mott MacDonal\507105621 - ALCOSAN Ohio River Tunnel Design - T&M\Project Files\6 - A5805-Structural\Sheets - A58-ST-417 PLOT DATE: 11/3/2025 12:01:28 PM LAST SAVED BY: OG092510

PILE SCHEDULE											
CALLOUT	PILE TOP EL. (FEET)	ESTIMATED PILE TIP EL. (FEET)	ESTIMATED PILE LENGTH (FEET)	ASSUMED ROCK EL. (FEET)	MINIMUM ROCK SOCKET DEPTH (FEET)	MINIMUM PILE SECTION MODULUS (CUBIC INCHES)	PILE SECTION	QUANTITY	MINIMUM DIA. OF HOLE (INCHES)	VERTICAL DESIGN LOAD PER PILE (KIPS)	HORIZONTAL DESIGN LOAD PER PILE (KIPS)
1	696.14	657.0	39.14	662.0	5	290	HP 18x157	7	30	75	15



NOTES

- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OUTFALL SOE SHEETS. SEE SHEETS A58-ST-413 TO A58-ST-416 . NOT ALL SOE IS SHOWN FOR CLARITY.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE CIVIL SITE SHEETS. SEE SHEETS A58-CI-400 TO A58-CI-414.
- FOR EXISTING CONDITIONS SEE SHEET A58-ST-412.
- FOR TYPICAL DETAILS RELATED TO THIS WORK, SEE SHEETS ORT-MD-001 TO ORT-MD-014.
- TOP OF WALL EL. 712.22 +/- (EL. TO MATCH TOP OF EXISTING RIVERWALL).
- TOP OF WALL EL. 720.00
- TOP OF EXIST RIVERWALL EL. 712.22 +/-
- SEE SHEETS A58-ST-421 & A58-ST-422 FOR DETAILS TO BE INCORPORATED INTO WORK.
- FLAP GATE FRAME TO BE COORDINATED WITH CONCRETE LAYOUT - SEE SHEET A58-ME-406.
- CUT HOLE IN EXIST BOX CULVERT ROOF TO MATCH ID OF MANHOLE AFTER CONCRETE SLAB HAS REACHED DESIGN STRENGTH.
- SCOUR PROTECTION NOT SHOWN FOR CLARITY - SEE SHEET A58-ST-423.
- ARMOR ROCK NOT SHOWN FOR CLARITY - SEE SHEET A58-ST-423.

PLAN AT GRADE

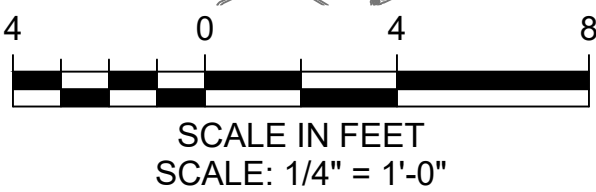
KEY NOTES:

- REINFORCED CONCRETE WALL
- REINFORCED CONCRETE BASE SLAB
- REINFORCED CONCRETE BEAM
- HP PILE - (TYP.) - SEE SCHEDULE
- HANDRAIL - SEE DETAIL S-29 ON SHEET ORT-MD-005
- REMOVABLE SS BAR GRATING - INTERSTATE GRATINGS 38-WS-4-2 1/2" X 3/8"
- 144" X 120" FLAP GATE - SEE SHEET A58-ME-406
- EXISTING RIVER WALL
- EXIST 12' X 10' BOX CULVERT
- EXISTING BOX CULVERT & SHEET PILE CUTLINE
- EXISTING CONCRETE FOOTER & SHEET PILE CUTLINE
- EXISTING SHEET PILES
- EXISTING RIVERWALL FOOTER BELOW
- EXIST TREMIE SEAL BELOW - APPROXIMATE LIMITS
- EXISTING RIVERWALL CUTLINE

LEGEND

- CAST IN PLACE REINFORCED CONCRETE
- EXISTING CONCRETE
- GROUT - SOE - SEE NOTE 1

PLAN AT EL. 704.39



Designed by:	REVISION			
JO/RNT	REV No.	DATE	DESCRIPTION	APPV
	1	11/07/25	PILE TIP DEPTH UPDATE	PSK
Drawn by:				
JO				
Checked by:				
PSK				

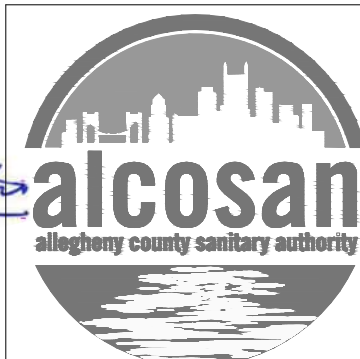


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Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040204



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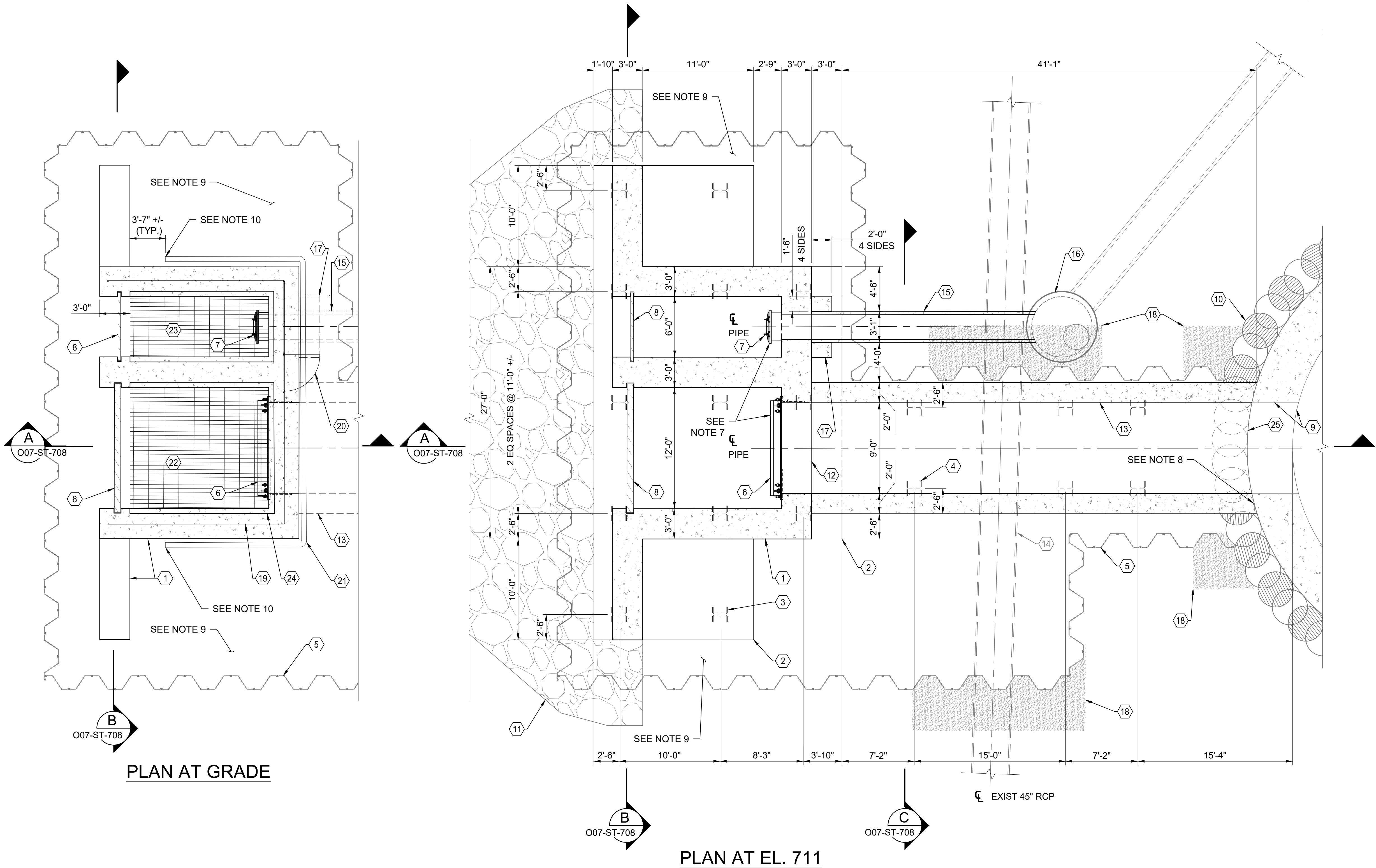
ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

A58-ST-417
ORT-A58-OF PLANS

Contract:	1797
File:	A58-ST-417.dwg
Date:	07/30/2025
Sheet:	418 OF 770

FILE NAME: C:\Users\OG0925\0\DCACCDocs\Mott MacDonaldd\507105621 - ALCOSAN Ohio River Tunnel Design - T&M\Project Files\1 - ORT\05-Structural\Sheets - 007-ST-707 LAST SAVED BY: OG092510 PLOT DATE: 11/3/2025 12:15:54 PM

PILE SCHEDULE											
CALLOUT	PILE TOP EL. (FEET)	ESTIMATED PILE TIP EL. (FEET)	ESTIMATED PILE LENGTH (FEET)	ASSUMED ROCK EL. (FEET)	MINIMUM ROCK SOCKET DEPTH (FEET)	MINIMUM PILE SECTION MODULUS (CUBIC INCHES)	PILE SECTION	QUANTITY	MINIMUM DIA. OF HOLE (INCHES)	VERTICAL DESIGN LOAD PER PILE (KIPS)	HORIZONTAL DESIGN LOAD PER PILE (KIPS)
1	700.98	664.0	36.98	669.0	5	290	HP 18x157	13	30	89	19
2	701.98	664.0	37.98	669.0	5	290	HP 18x157	6	30	280	0

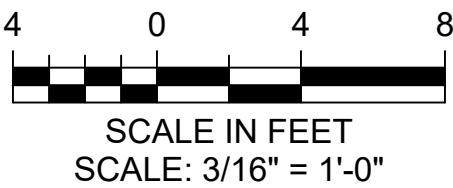


NOTES

1. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OUTFALL SUPPORT OF EXCAVATION SHEETS. SEE SHEETS 007-ST-700 TO 007-ST-704. NOT ALL SOE IS SHOWN FOR CLARITY.
2. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE ACCESS SHAFT SHEETS. SEE SHEETS ORT-ST-702 TO ORT-ST-709.
3. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE ACCESS SHAFT SUPPORT OF EXCAVATION SHEETS. SEE SHEETS ORT-ST-700 THROUGH ORT-ST-702.
4. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE CIVIL SITE SHEETS. SEE SHEETS 007-CI-700 TO 007-CI-708.
5. FOR TYPICAL DETAILS RELATED TO THIS WORK, SEE SHEETS ORT-MD-001 TO ORT-MD-014.
6. SEE SHEET 007-ST-711 FOR DETAILS TO BE INCORPORATED INTO THIS WORK.
7. FLAP GATE FRAME TO BE COORDINATED WITH CONCRETE LAYOUT - SEE SHEET 007-ME-700.
8. SEE SHEET ORT-ST-703 FOR CONNECTION DETAILS.
9. SCOUR PROTECTION ARMOR ROCK NOT SHOWN FOR CLARITY - SEE SHEET 007-ST-712
10. RUN DRAINAGE PIPE TO DAYLIGHT ON SCOUR PROTECTION ARMOR ROCK SLOPE.

KEY NOTES:

- | | |
|--|---|
| ① REINFORCED CONCRETE WALL | ⑩ C-04-MH3 - SEE CIVIL SHEETS |
| ② REINFORCED CONCRETE BASE SLAB | ⑪ REINFORCED CONCRETE ENCASEMENT |
| ③ HP-1 OUTFALL PILE - (TYP.) - SEE SCHEDULE | ⑫ GROUTED ZONES - SEE SOE SHEETS |
| ④ HP-2 CULVERT PILE - (TYP.) - SEE SCHEDULE | ⑬ HANDRAIL - SEE S-29 ON SHEET ORT-MD-005 |
| ⑤ NZ28 SHEET PILES - SEE SOE SHEETS | ⑭ 42" WIDTH LOCKABLE HANDRAIL ACCESS GATE |
| ⑥ 108" x 108" FLAP GATE - SEE SHEET 007-ME-700 | ⑮ 6" PERFORATED DRAIN PIPE @ 2% - CONT. |
| ⑦ 30" DIA. FLAP GATE - SEE SHEET 007-ME-700 | ⑯ REMOVABLE SS BAR GRATING - INTERSTATE GRATINGS 15-WS-4- 7" X 1/4" |
| ⑧ STOP LOG - SEE SHEET 007-ME-700 | ⑰ REMOVABLE SS BAR GRATING - INTERSTATE GRATINGS 38-WS-4- 7" X 1/4" |
| ⑨ CCT-007-AS - SEE ACCESS SHAFT SHEETS | ⑱ TOP OF WALL LEDGE |
| ⑩ CCT-007-AS SOE - SEE SOE SHEETS | ⑲ DROP SHAFT TO CULVERT CONNECTION |
| ⑪ OUTLINE - SCOUR PROTECTION | |
| ⑫ OUTFALL TO CULVERT CONNECTION | |
| ⑬ CCT-007-OS1 - REINFORCED CONCRETE CULVERT | |
| ⑭ EXIST 45" RCP TO REMAIN | |
| ⑮ C-04-OS1 - 30" RCP - CLASS V - WALL C - SEE CIVIL SHEETS | |



Designed by:	REVISION			
	REV No.	DATE	DESCRIPTION	APPV
JO/RNT	1	11/07/25	PILE TIP DEPTH UPDATE	PSK
Drawn by:				
JO				
Checked by:				
PSK				

M
MOTT
MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900



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Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040203



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ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
OHIO RIVER TUNNEL (ORT)

007-ST-707
CCT-007-OF PLANS

Contract:	1797
File:	007-ST-707.dwg
Date:	07/30/2025
Sheet:	596 OF 770

Addendum No. 6

Attachment E

APPENDIX E – SUPPLEMENTAL INFORMATION (FOR REFERENCE ONLY)

**Section 5.8 - Drawing Sheets approved by Pittsburgh Water that are not part of the
ORT Contract Documents (3 pages):**

- **Section 5.8 fly sheet**
- **Cover Sheet - Pittsburgh Water Utility Relocations**
- **EA-A48-CI-300, EA-A48 Civil Pad Plan, Early Action Ductbank Installation**

Addendum No. 6

Attachment E

APPENDIX E – SUPPLEMENTAL INFORMATION (FOR REFERENCE ONLY)

SECTION 5.8

**Drawing Sheets Approved by Pittsburgh Water that are not part of the
ORT Contract Documents, sheets 1 and 16.**

Note that:

- Pittsburgh Water-approved drawing sheets 1 and 16 are not part of the ORT Contract Documents.
- Pittsburgh Water-approved drawing sheets 2 through 15 (not included with Appendix E Section 5.8) have been amended to the ORT Contract Documents; see Addendum 6, Attachment C.

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Contract No. 1797
OHIO RIVER TUNNEL
PITTSBURGH WATER
UTILITY RELOCATIONS
AUGUST 4, 2025



MEMBERS OF THE BOARD

- Shannah Tharp-Gilliam, Ph.D.

- Chairperson
- Rep. Emily Kinkead

- Vice-Chairperson
- Sylvia C. Wilson

- Treasurer
- Darrin Kelly

- Secretary
- Harry A. Readshaw

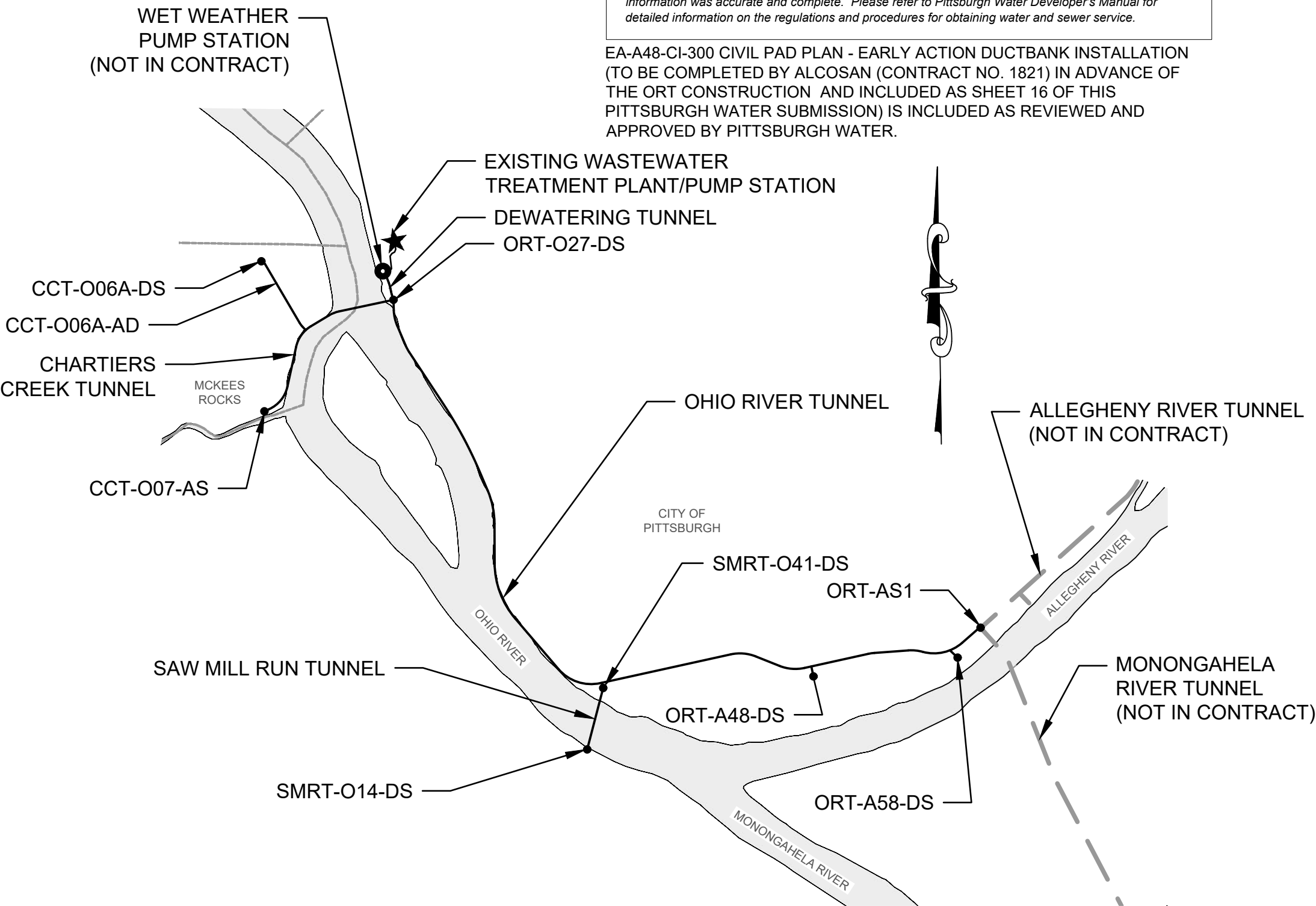
- Assistant Secretary / Treasurer
- Patrick J. Catena
- Theresa Kail-Smith

- Arletta Scott Williams

- Executive Director
- Michael Lichte, P.E.

- Director of Regional Conveyance

DRAWING LIST	
SHEET No.	DRAWING DESCRIPTION
1	COVER SHEET
2	PITTSBURGH WATER STANDARD NOTES
3	STANDARD SYMBOLS & LEGEND
4	O27-CI-106 - O27 WATERLINE RELOCATION
5	O27-CI-110 - O27 WESTHALL STREET PLAN
6	O41-CI-206 - O41 ABANDON WATERLINE AND INSTALL CATCH BASINS
7	O41-CI-207 - O41 INLET RELOCATION
8	A48-CI-305 - A48 WATERLINE RELOCATION & MH REPLACEMENT
9	A58-CI-406 - A58 WATERLINE RELOCATION
10	O14-CI-607 - O14 WATERLINE RELOCATION
11	O14-CI-608 - O14 SEWER RELOCATION
12	O14-CI-609 - O14 WATER & SEWER RELOCATION PROFILE
13	ORT-MD-028 - PITTSBURGH WATER RELOCATION DETAILS - SHEET 1 OF 3
14	ORT-MD-029 - PITTSBURGH WATER RELOCATION DETAILS - SHEET 2 OF 3
15	ORT-MD-030 - PITTSBURGH WATER RELOCATION DETAILS - SHEET 3 OF 3
16	EA-A48-CI-300 - EA-A48 CIVIL PAD PLAN - EARLY ACTION DUCTBANK INSTALLATION (ALCOSAN CONTRACT No. 1821)



PROJECT VICINITY M A P
N . T . S .



PITTSBURGH WATER APPROVAL BLOCK

To be completed by the Applicant and provided on each sheet within the plan set:

(Check all that apply)

☐ NEW WATER CONNECTION(S)

☐ NEW SEWER CONNECTION(S)

☐ REUSE EXISTING WATER CONNECTION(S)

☐ REUSE EXISTING SEWER CONNECTION(S)

☐ TERMINATE EXISTING WATER CONNECTION(S)

☐ TERMINATE EXISTING SEWER CONNECTION(S)

☒ PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

To be completed by Pittsburgh Water:

(Required for ALL approvals)

Ana Bennett

Digitally signed by Ana Bennett
DN: cn=Ana Bennett,
ou=Engineering
Date: 2025.08.11 08:18:59 -
04'00'

REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION

Zach Rinker

Digitally signed by Zach Rinker
DN: cn=Zach Rinker,
ou=Engineering
Date: 2025.08.19 11:02:36 -
04'00'

SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION

BJ McFaddin

Director of Operations

DIRECTOR OF OPERATIONS

(Required for "Private Construction of Public Facilities" ONLY)

Barry King

Digitally signed by Barry King
DN: cn=Barry King,
ou=Engineering
Date: 2025.08.16 12:43:41 -
04'00'

DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION

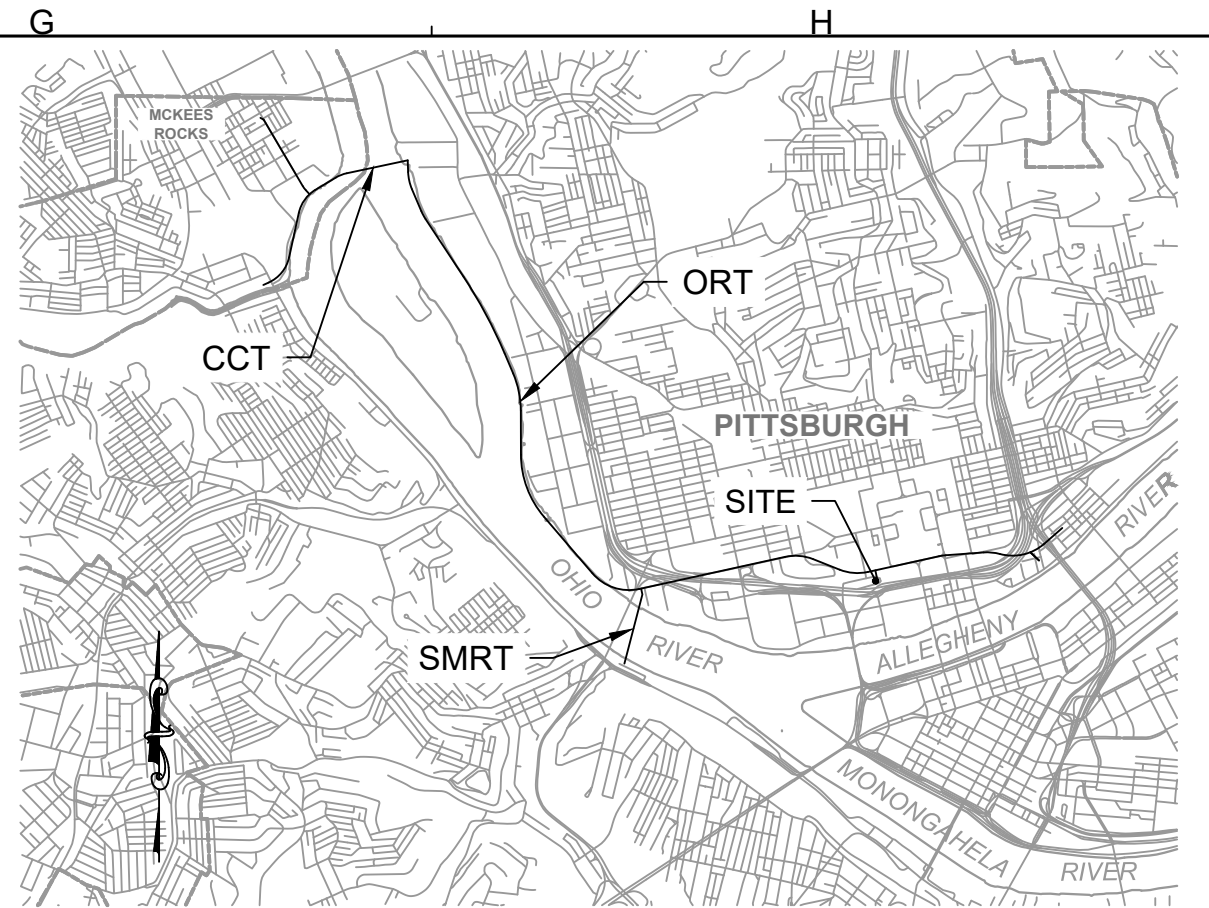
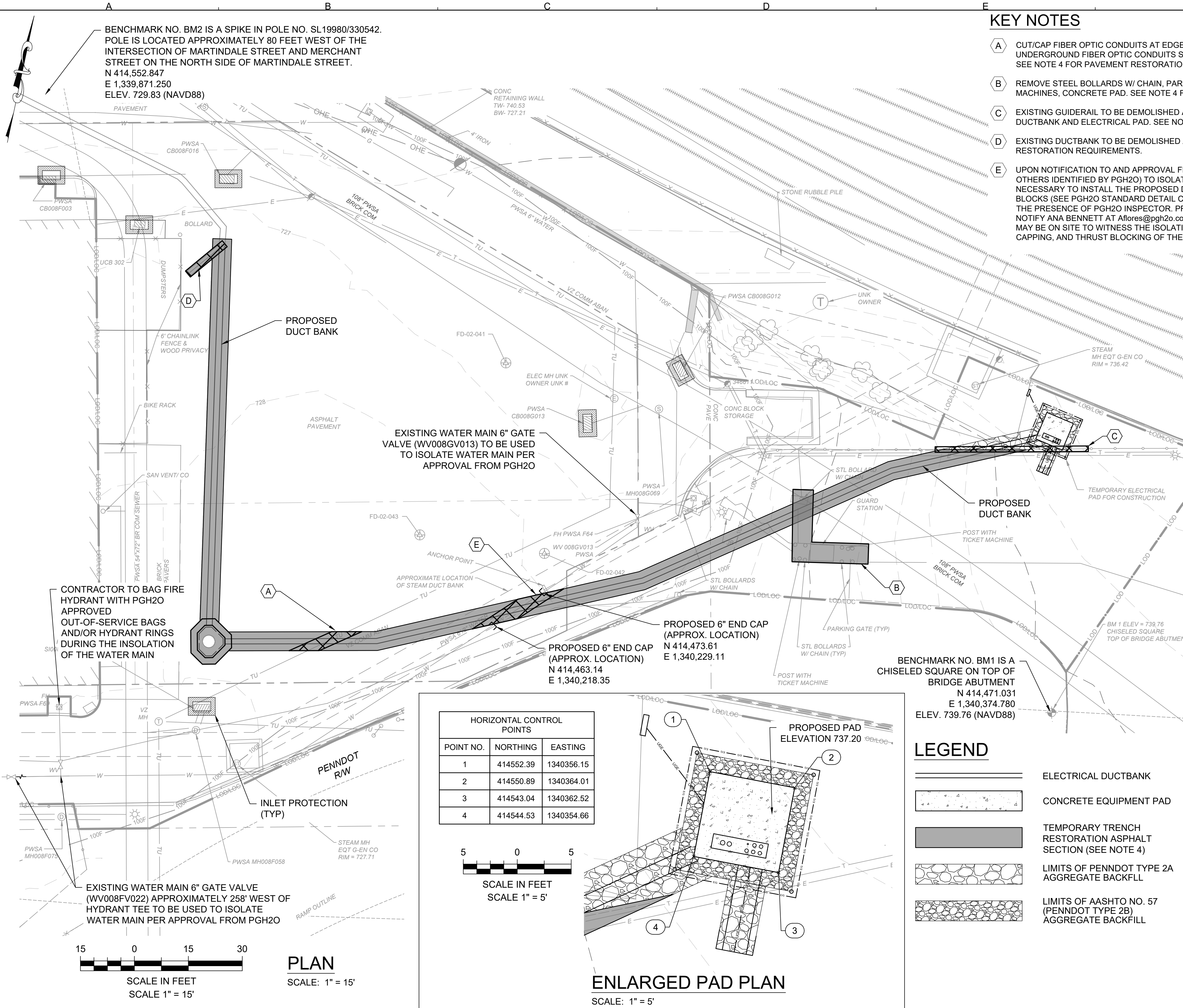
PITTSBURGH WATER PROJECT NUMBER

TAP C RECORD NUMBER NOT APPLICABLE

Pittsburgh Water approval was based on information provided by others under the assumption that this information was accurate and complete. Please refer to Pittsburgh Water Developer's Manual for detailed information on the regulations and procedures for obtaining water and sewer service.

EA-A48-CI-300 CIVIL PAD PLAN - EARLY ACTION DUCTBANK INSTALLATION (TO BE COMPLETED BY ALCOSAN (CONTRACT NO. 1821) IN ADVANCE OF THE ORT CONSTRUCTION AND INCLUDED AS SHEET 16 OF THIS PITTSBURGH WATER SUBMISSION) IS INCLUDED AS REVIEWED AND APPROVED BY PITTSBURGH WATER.

FILE NAME: C:\Users\bow101681\Documents\Mott MacDonal\507105621 - ALCOSAN Ohio River Tunnel Design - T&M\Project Files\7D - PRELIM DEMO 402-Civil - A48-CI-300 LAST SAVED BY: BOW101681 PLOT DATE: 9/5/2025 2:46:39 PM



Designed by:	JRL	REV No.	DATE	REVISION DESCRIPTION	APPV
Drawn by:	MJN				
Checked by:	DLM				

M
MOTT MACDONALD

Two Allegheny Center
Nova Tower 2, Suite 1301
Pittsburgh, PA 15212
(412) 497 - 2900

811

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Pennsylvania One Call System Serial Number
FINAL DESIGN TICKET # 20250040205

DAVID W. MANSON
REGISTERED PROFESSIONAL ENGINEER
PE076493
08/05/2025

alcosan
allegheny county sanitary authority

ARLETTA SCOTT WILLIAMS
EXECUTIVE DIRECTOR, ALCOSAN

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PITTSBURGH, PA 15233
(412) 766 - 4810

www.alcosan.org

ALLEGHENY COUNTY SANITARY AUTHORITY (ALCOSAN)
SUBSTATION PREP FOR Q27 AND A48

**EA-A48-CI-300
EA-A48 CIVIL PAD PLAN
EARLY ACTION DUCTBANK INSTALLATION**

Contract: 1821

File: EA-A48-CI-300.dwg

Date: 08/04/2025

Sheet: 1 OF 3