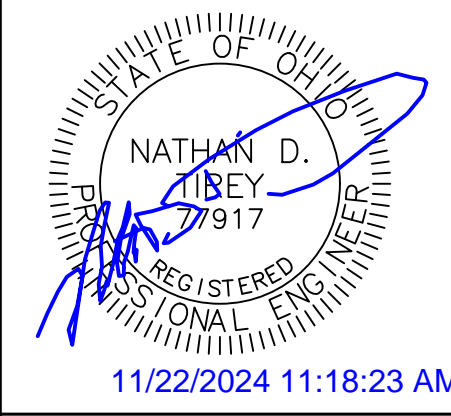


SITE DEVELOPMENT PLANS FOR:

PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN

1 INDIAN TRAIL CITY OF PIQUA, MIAMI COUNTY, OHIO



Item	Description	Date
1	ADDENDUM 4	11/22/2024

DEVELOPMENT / DESIGN TEAM

CIVIL ENGINEER / CONSULTANT
 Burkhardt Engineering
 Contact: Jonathan Burkhardt
 Phone: 937.388.0060
 Email: jdburkhardt@burkhardtinc.com

ARCHITECT

RDA Group Architects
 Contact: Jonathan Schaaf
 Phone: 937.610.3440
 Email: jrs@rda-group.com

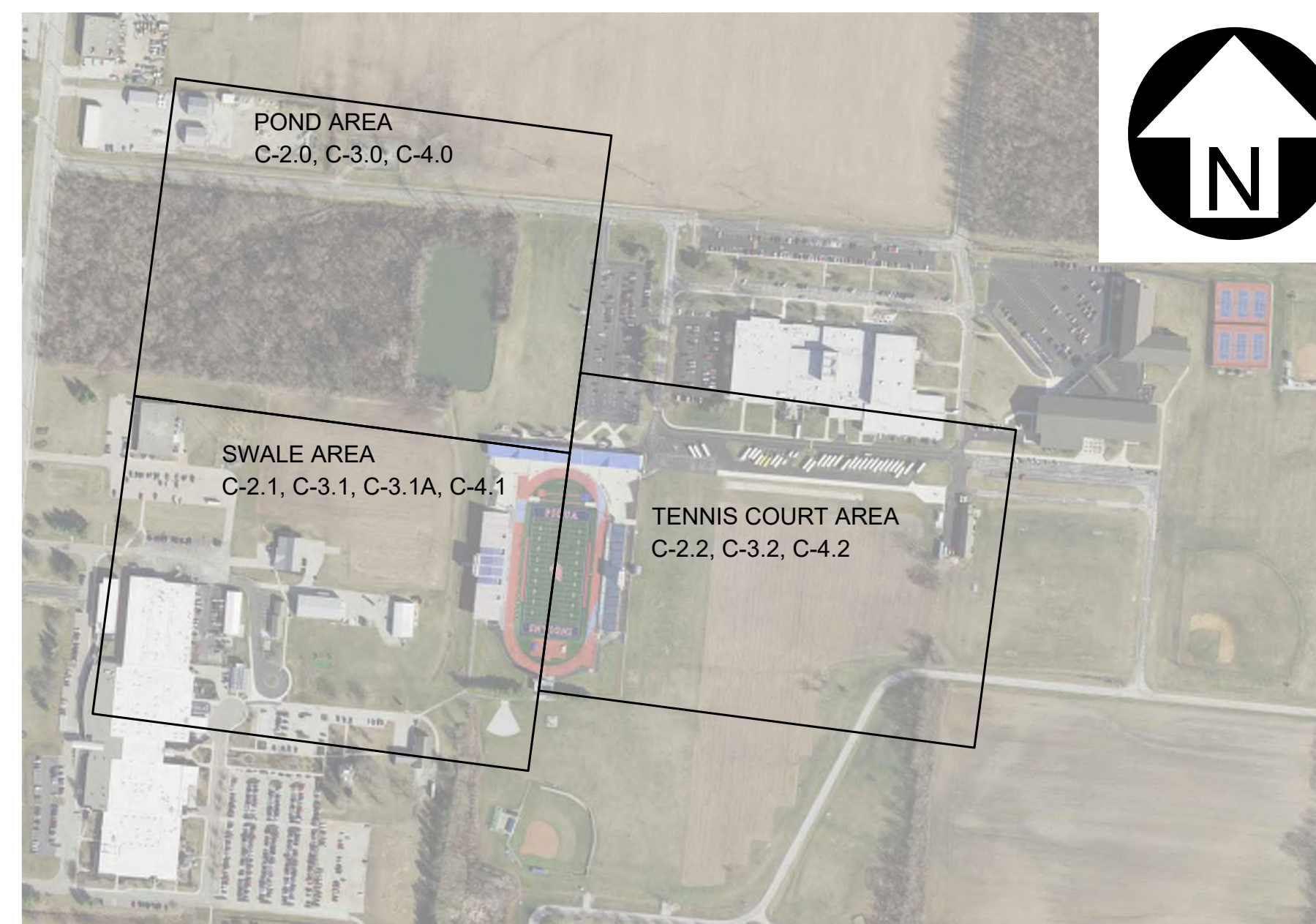
PROJECT SUMMARY

Project will include the demolition and removal of utilities, vegetation, pavement, etc. as necessary to construct a new set of tennis courts, buildings, bleachers, a sidewalk, utility extensions, and other associated site improvements. Also included in the scope of work is the expansion of the existing stormwater facility, as well as a new pond outlet structure and improvement to the existing swale that the pond discharges to.

PROPERTY INFORMATION

Address: 1 Indian Trail, Piqua, Ohio 45356
 Legal Description: PT IL 7857
 Area: 8.339 acres (Tennis Court parcel)
 Zoning: CV - Civic District
 Flood Zone Designation: FIRM # 39109C0062E, effective date: August 2, 2011.
 Zone "X" : Areas determined to be outside the 0.2% annual chance floodplain.

Note: Architectural, Structural, Mechanical, Electrical and Plumbing Plans in separate set.



LOCATION KEY
1" = 400'

SHEET INDEX	
C-0.0	TITLE SHEET
C-0.1	GENERAL NOTES
C-1.0	EXISTING CONDITIONS & DEMOLITION PLAN - POND
C-1.1	EXISTING CONDITIONS & DEMOLITION PLAN - SWALE
C-1.2	EXISTING CONDITIONS & DEMOLITION PLAN - TENNIS COURTS
C-2.0	SITE PLAN - POND
C-2.1	SITE PLAN - SWALE
C-2.2	SITE PLAN - TENNIS COURTS
C-3.0	GRADING PLAN - POND
C-3.1	GRADING PLAN - SWALE
C-3.1A	ALTERNATE SWALE
C-3.2	GRADING PLAN - TENNIS COURTS
C-4.0	UTILITY PLAN - POND
C-4.1	UTILITY PLAN - SWALE
C-4.2	UTILITY PLAN - TENNIS COURTS
C-4.3	STORM SEWER PROFILES
C-4.4	STORM SEWER PROFILES
C-4.5	SANITARY SEWER PROFILES
C-5.0	SITE & STORM NOTES & DETAILS
C-5.1	STORM DETAILS
C-5.2	WATER MAIN NOTES & DETAILS
C-5.3	SANITARY NOTES & DETAILS
C-6.0	SWPPP - POND
C-6.1	SWPPP - SWALE
C-6.2	SWPPP - TENNIS COURTS
C-6.3	EROSION CONTROL NOTES AND DETAILS
C-7.0	EXISTING DRAINAGE MAP
C-7.1	PROPOSED DRAINAGE MAP
C-7.2	STORM WATER MANAGEMENT PLAN

* Landscaping is not in the scope of the work. A separate bid package will be completed at a later time.

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO



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Date:	10.18.2024
Sheet:	TITLE SHEET

Sheet No.: **C-0.0**

CIVIL ISSUE LOG	
Description	Date
Issued for Bid / Permit / Construction	10.18.2024
Addendum 4	11.22.2024

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The Contractor shall obtain a copy of the Geotechnical Engineering Report prepared by Bowser-Morner, dated January 4, 2024 and shall refer to the report for site preparation, compaction, utility trench backfill, pavement, foundations and slabs, construction and design criteria.

GENERAL CONSTRUCTION NOTES

- 1. Site/Civil Specifications: All plans, construction, materials, workmanship, and methods shall be in accordance with the current "Rules and Regulations" of The City of Piqua and the Ohio Department of Transportation Construction and Material Specifications, current edition. When in conflict, the City of Piqua requirements shall prevail.
2. Prior to the start of construction, the Contractor shall be responsible for ensuring that all required permits and approvals have been obtained. No construction or fabrication shall begin until the Contractor has received and reviewed all plans and other documents approved by all the permitting authorities. The Contractor shall post all bonds, pay all fees, and provide proof of insurance as required to obtain permits.
3. All sediment and erosion control measures, as shown on Sheets C-6.0, C-6.1 & C-6.2, shall be in place prior to the start of any demolition, clearing and grubbing, or construction operations. Erosion control measures shall conform to all Local, State, and Federal regulations and requirements.
4. North arrow, existing topography, and property lines based on field survey of the subject property prepared by Burkhardt Engineering in June 2024. An ALTA/NSPS Land Title Survey was not performed, survey may not depict any or all easements impacting the subject property.
5. Information on existing utilities has been compiled from available information including utility company and municipal records and field survey and is not guaranteed correct and complete. Utilities are shown to alert the Contractor to their presence and the Contractor is solely responsible for determining actual locations and elevations of all utilities. Prior to demolition or construction, the Contractor shall contact "811", 72 hours before commencement of work and verify all utility locations.
6. The Contractor shall provide and maintain traffic control devices for protection of vehicles and pedestrians consisting of drums, barriers, signs, lights, fences and uniformed traffic officers as required by Local and State Authorities.
7. The Contractor shall protect all iron pins, monuments and property corners during construction. Any Contractor disturbed pins, monuments, etc. shall be reset by a Professional Land Surveyor (Registered with the State) at the expense of the Contractor.
8. Any disturbance incurred to any adjacent properties or public right-of-way during demolition and construction shall be restored to its original condition or better, in accordance with and to the satisfaction of Local and State Authorities.
9. The Contractor shall abide by all OSHA, Federal, State, and Local regulations when operating cranes, booms, hoists, etc. in close proximity to overhead electric lines. If Contractor must operate equipment close to electrical lines, contact the local Utility Provider to make arrangements for proper safeguards.
10. All material schedules shown on the plans are for general information only. The Contractor shall prepare their material schedules based upon their plan review. All schedules shall be verified in the field by the Contractor prior to ordering materials or performing work.
11. The Contractor shall review all plans prior to construction and immediately report any conflicts and/or discrepancies to the engineer-of-record.
12. All work within public rights-of-way shall be in accordance with the The City of Piqua rules, specifications, and regulations.

GENERAL DEMOLITION NOTES

- 1. Within the subject property, the intent is to have a clean, clear site, free of all existing items noted to be removed in order to allow for the construction of the new project.
2. All items noted to be removed shall be done as part of the contract for general construction.
3. Remove and dispose of any materials requiring removal from the work area in an approved off-site landfill.
4. The Contractor shall secure all permits for demolition and disposal of demolition material to be removed from the site. The Contractor shall post all bonds and pay all permit fees as required.
5. The Contractor shall cut and plug, or arrange for the appropriate utility company to cut and plug service piping at the property line or at the main (as required). All services may not be shown on this plan.
6. For all items noted to be removed, remove not only above ground elements, but all underground elements as well, including, but not necessarily limited to: foundations, slabs, gravel fills, tree roots, pipes, wires, unsuitable materials, etc.
7. The Contractor shall sawcut existing pavement to provide a clean edge between existing pavement to remain and existing pavement to be removed.
8. Limits of removal and sawcut lines shown on demolition plan are approximate only. Actual quantities may vary due to construction activities. Contractor is responsible for all demolition, removal and restoration work necessary to allow for the construction of the new project.
9. Backfill excavations resulting from demolition work to meet the requirements for fill outlined in the Geotechnical / Soils Report.

GENERAL SITE NOTES

- 1. Building dimensions shown on the Civil Engineering Plans are for reference purposes only. The Contractor shall use the Architectural and Structural Plans for exact building dimensions.
2. All site and radii dimensions are referenced to the face of curbs or edge of paving unless otherwise noted.
3. All dimensions to the building are referenced to the outside face of the foundation wall.
4. All sidewalks, curb and gutter, street paving, curb cuts, driveway approaches, handicap ramps, etc. constructed outside the property line in the right-of-way shall conform to all Local and/or State specifications and requirements.
5. All proposed handicap ramps, parking areas, and accessible routes shall strictly comply with current Local, State, and Federal regulations, including but not necessarily limited to the ADA Accessibility Guidelines (ADAAG).
6. All ADA accessible routes shall have detectable warnings installed as required by the ADAAG. Detectable warnings shall consist of raised truncated domes which contrast visually with the adjoining surfaces, either light-on-dark, or dark-on-light.
7. Contractor shall sawcut existing pavement to provide a clean, straight joint where new pavement meets existing pavement and ensure positive drainage.
8. All concrete pavement shall have joints in accordance with ACI 330R-08, Section 3.7 and Appendix C. Contraction joints shall be 1/4 of the slab thickness. Isolation joints shall be placed between pavement and foundations, inlets, and other fixed structures. Contraction joints shall be tool finished and spaced as follows:
Curbing: 10'-0" (max) spacing.
Sidewalks: 5'-0" (max) spacing.
Vehicular Traffic Areas: 24 x Concrete Pavement Thickness (feet), 15'-0" (max) spacing.

GENERAL GRADING, EARTHWORK & DRAINAGE NOTES

- 1. All spot elevations indicated in pavement areas are at bottom face of curb and/or finished pavement grade unless noted otherwise. All spot elevations indicated in grass or landscape areas are finished grade unless noted otherwise.
2. The Contractor shall be responsible for the removal and disposal of all vegetation and organic materials from the site that results from clearing & grubbing activities.
3. The Contractor shall be responsible for stripping and removal of all excess topsoil from the site. All topsoil that cannot be used on site shall be removed from the site at the Contractor's expense. The Contractor may dispose of excess topsoil by burying topsoil in landscape areas only at the direction of the Owner or the Owner's Representative.
4. The Contractor will be responsible for all safety requirements and for the protection of all existing and proposed utilities or structures during earthwork procedures.
5. The Contractor shall be responsible for the import of structural fill materials if suitable material is not available on site. The location and testing of suitable material shall be the Contractor's responsibility. The Contractor shall be responsible for the export and disposal of all excess or unsuitable materials.
6. The Contractor shall provide construction dewatering as necessary to complete construction as outlined in plans.
7. The Contractor shall exercise extreme care in establishing all grades and slopes in pavement areas, ramps and sidewalks in the vicinity of handicap parking and access areas and shall comply with Federal, State, and Local Codes.
8. In areas where sheet drainage flows from grass or landscape areas onto paved areas, the finished grade in grass or landscape areas shall be 1/2 inch above the top of curb or above the pavement in areas without curb. In areas where sheet drainage flows from pavement to grass or landscaped areas, the finished grade in grass or landscape areas shall be 1/2 inch below the pavement.
9. The Contractor shall provide positive drainage in all areas and away from all buildings.
10. All pavement shall be laid on a straight, even, and uniform grade with a minimum of 1:100 (1.0%) slope toward the collection points unless otherwise specified on plans. Cut or fill slopes in unpaved areas shall not exceed 3:1 (33.3%) maximum grade unless otherwise noted on plans.
11. ADA accessible areas shall not exceed the following slopes:
Ramps - 1:12 (8.3%) max.
Routes - 1:20 (5.0%) max.
Parking - 1:50 (2.0%) max.
Cross Slopes - 1:50 (2.0%) max.
12. The Contractor shall adjust tops/lids/grates of all cleanouts, manholes, inlets, valves, etc. to match final grade.
13. Following grading of subsoil to subgrade elevations, the Contractor shall provide 4" of topsoil (minimum) in all disturbed areas which are not to be paved. Final grades should be smoothly finished to surrounding areas and ensure positive drainage. Stockpiled topsoil shall be screened prior to respreading and should be free of subsoil, debris, and stones.
14. The Contractor shall apply hydroseed and establish permanent lawn vegetation (grass) in all areas disturbed by construction (including rights-of-way and adjacent properties), unless otherwise specified on landscape plans. Hydroseed application rate, mulch, fertilization, and watering shall be appropriate for the local climate and soil conditions, to ensure a healthy stand of lawn.
15. The Contractor shall be responsible for determining exact quantities of cut and/or fill for estimating and construction and should alert the Engineer of any excessive cut and/or fill, especially if additional cut and/or fill will be required due to poor existing soil conditions discovered during earthwork operations.
16. Refer to the Architectural and Structural Plans for information regarding any perimeter foundation drains & downspout locations.
17. The Contractor shall obtain a copy of the Geotechnical / Soils Report and become thoroughly familiar with site and subgrade information and fully implement recommendations given therein.
18. The Contractor shall provide geotextile weed mat under all landscape mulch/stone and rip-rap.
19. If field tiles are encountered, notify Engineer, field tiles will likely need to be replaced and connected to storm sewer system.

GENERAL UTILITY NOTES:

- 1. All utilities shown are approximate locations only and have been compiled from the latest available mapping. The exact location of all underground utilities shall be verified by the Contractor prior to the start of construction.
2. Contractor to coordinate with the local utility companies for all locations and connections. A preconstruction meeting with the various utility companies may be required prior to the start of any construction activity.
3. The Contractor shall visit the site and verify the location, elevation, and condition of all existing utilities by various means prior to beginning any excavation. Test pits shall be dug at all locations where existing and proposed utility lines cross, and the horizontal and vertical locations of the utilities shall be determined. The Contractor shall contact the Engineer in the event of any unforeseen conflicts between existing and proposed utilities so that an appropriate modification may be made.
4. The Contractor shall ensure that all utility companies and local standards for materials and construction methods are met. The Contractor shall perform proper coordination with the respective utility company. The Contractor shall coordinate work to be performed by the various utility companies and shall pay all fees for connections, disconnection, relocations, inspections, and demolition.
5. This plan details pipes up to 5' from the building face. Refer to the building drawings for building connections. Supply and install pipe adapters as necessary.
6. All valve boxes and curb boxes shall be adjusted to the final grades and located in grassed areas unless indicated otherwise on the plans.
7. The Contractor shall provide traffic bearing concrete collars and lids for all cleanouts, manholes, inlets, valves, etc. which are located in paved areas.
8. All existing pavement within the rights-of-way where utility piping is to be installed shall be saw cut and replaced or directionally bored in accordance with Local and/or State requirements. Existing pavement shall be repaired as necessary.
9. All utility lines and trenches shall be installed, bedded and backfilled according to manufacturer's specifications and to the satisfaction of Local and State Authorities.
10. Sanitary sewer laterals shall maintain (10' min. horizontal, 1.5' min. vertical) separation distance from water lines unless otherwise shown, or additional protection measures will be required. Where water line crosses above sanitary lateral by less than 2' vertical, a concrete encasement shall be installed, Contractor shall center one joint of pipe at crossing.
11. Roof drains, foundation drains, and other clean water connections to the sanitary sewer system are prohibited.
12. The Contractor shall prepare and submit shop drawings of all site utility structures and materials to engineer-of-record for review, prior to ordering materials or construction.

SANITARY SEWER NOTES:

Contractor to provide 8" (max.) sanitary sewer service line, as depicted, to service proposed tennis court restrooms and future improvements. Install tap, manholes, cleanouts and other appurtenances as required by the local utility provider. Coordinate building connection with plumbing plans.

All sanitary sewer pipe shall be P.V.C. SDR 35, ASTM D-3034 with joints conforming to ASTM 3212. All pipe shall be installed in accordance with the manufacturer's recommended procedures and shall maintain a minimum slope of 0.40% for 8" and 2% for 4".

Sanitary sewer clean-outs shall be installed at all sewer pipe bends, angles, and junctions, unless a manhole is indicated. All cleanouts in pavement areas shall be installed with traffic bearing lids and concrete collars. Cleanout spacing should not exceed 100'. Per detail / Sheet C-5.3.

Contractor to confirm sanitary inverts shown on this plan (as they exit the building) match what is provided on the Plumbing Plans, notify engineers of any conflicts.

Sanitary sewer service connection, permit and construction to be coordinated with the City of Piqua.

WATER NOTES:

Contractor to provide new water services, as depicted, to service proposed tennis court restrooms and future improvements. Install tap, valves, meter, backflow preventer, and other appurtenances as required by the local utility provider. Coordinate building connection with Plumbing Plans.

All water main pipe shall be AWWA C-151 Ductile Iron Pipe, Class 52. Mains shall be installed with a minimum cover of 54" or below frost line, whichever is greater.

Water main connection, permit and construction to be coordinated with The City of Piqua.

STORM SEWER NOTES:

All storm sewer shall be reinforced concrete pipe (RCP, ASTM C76 - Class IV, minimum) or high-density polyethylene pipe (ADS N-12 WT, watertight, or equivalent), unless otherwise noted on plans. All pipe shall be installed according to manufacturer's specifications. All storm sewer pipe and joints to be watertight, including the downspout collection system.

Contractor to provide downspout collection system to connect building downspouts / roof drains to storm sewer system. See architectural plans for downspout locations.

Downspout collection pipe (DCP) may be HDPE (ADS N-12 WT, watertight, or equivalent) or Schedule 40 PVC pipe. All downspout collector pipes to be at 1.00% minimum slope. All pipe shall be installed according to Local, State, and manufacturer's specifications. Provide cleanouts at all bends, angles, and junctions. All cleanouts in pavement areas shall be installed with traffic bearing lids and concrete collars, per detail on Sheet C-5.0.

Contractor to provide tennis court underdrain system, according to specifications provided by Geotechnical Engineer and Tennis Court Designer.

Contractor to provide steps, as required by ODOT and OSHA, in all catch basins and manholes. All catch basins installed in sump areas to have finger drains as detailed on Sheet C-5.0.

Storm sewer connection, permit and construction to be coordinated with the City of Piqua.

ELECTRIC NOTES:

Coordinate electric service lines, transformer, meter, and connections with Electrical Plans and local utility provider. Contractor shall verify both location and availability of service prior to the start of construction.

Coordinate site lighting, signage wiring, conduit locations, connections, etc. with electrical plans. Notify Engineers of any potential conflicts.



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PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO

BURKHARDT ENGINEERS & SURVEYORS
28 North Cherry Street | Germantown, Ohio 45327 | Phone: 937-386-0660 | BURKHARDTINC.COM
CIVIL ENGINEERING | LAND SURVEYING | NATIONAL RETAIL SITE DEVELOPMENT



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Date: 10.18.2024

Sheet: GENERAL NOTES

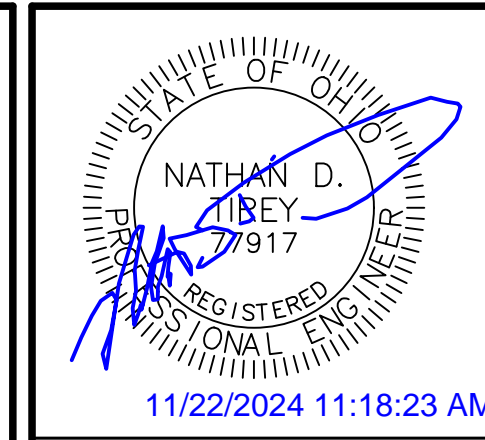
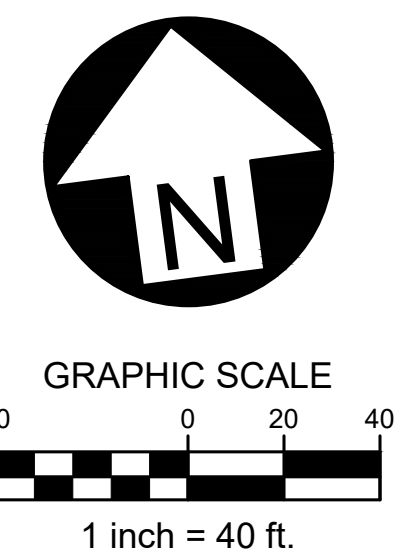
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EXISTING LEGEND	
	ELECTRIC METER
	ELECTRIC CABINET
	POWER POLE
	LIGHT POLE
	CABLE TV CABINET
	TELEPHONE CABINET
	ELECTRIC TRANSFORMER
	FIBER OPTIC CABINET
	FIBER OPTIC MARKER
	GAS MARKER
	TRAVERSE POINT SET
	SANITARY MANHOLE
	CATCH BASIN
	STORM MANHOLE
	AREA DRAIN
	FIRE HYDRANT
	WATER MAIN VALVE
	BOLLARD
	FENCE POST
	SIGN
	TREE W/SIZE
	EVERGREEN TREE
	ADA ACCESSIBLE PARKING

DEMO LEGEND	
	EX. CONCRETE - TO BE REMOVED AND REPLACED AFTER UTILITY INSTALLATION
	EX. UTILITY LINE - TO BE REMOVED
	EX. TREELINE - TO BE REMOVED

- DEMOLITION KEYNOTES**
- 01 REMOVE EX. SIDEWALK
- SEE DEMO LEGEND FOR NOTES
 - 02 REMOVE EX. POND OUTLET
- TO BE REMOVED FOR INSTALLATION OF NEW POND OUTLET STRUCTURE
 - 03 TREE REMOVAL INCLUDING CLEARING & GRUBBING
- TO BE COMPLETED FOR POND ADDITION
 - 04 PORTION OF EX. STORM PIPE TO BE REMOVED



Sanitary sewer, storm sewer, water, gas, electric, and telecom utilities, servicing the football stadium, could not be located or may not be depicted in their exact locations. Contractor shall locate at the start of construction and notify engineers of any conflicts. Existing utility services to the football stadium may need to be relocated or reburied to mitigate conflicts with proposed storm sewer and sanitary sewer.

Date	Description
11/22/2024	
Item 1	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO



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Sheet No.: C-1.0	





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Date	Description
11/22/2024	

Item 1 ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO

BURKHARDT ENGINEERS & SURVEYORS
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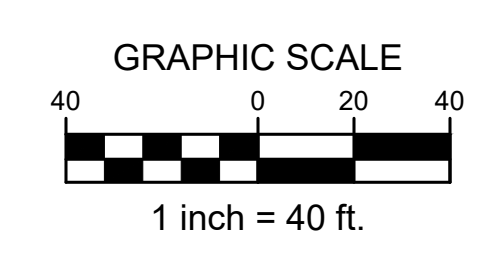
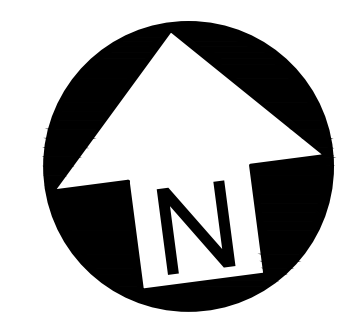
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 Sheet: EXISTING CONDITIONS & DEMOLITION PLAN - SWALE
 Sheet No.: C-1.1

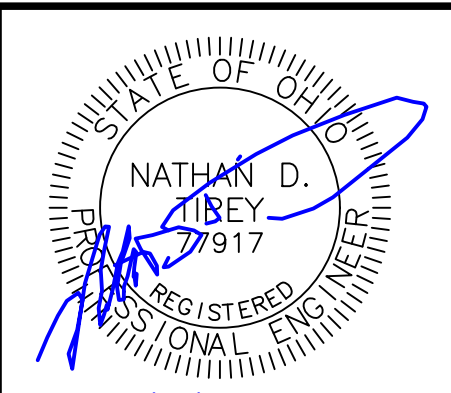
EXISTING LEGEND	
	ELECTRIC METER
	ELECTRIC CABINET
	POWER POLE
	LIGHT POLE
	CABLE TV CABINET
	TELEPHONE CABINET
	ELECTRIC TRANSFORMER
	FIBER OPTIC CABINET
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	GAS MARKER
	TRAVERSE POINT SET
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	STORM MANHOLE
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	E/P = EDGE OF PAVEMENT
	B/C = BACK OF CURB
	EX. MINOR CONTOUR
	EX. MAJOR CONTOUR
	EX. WATER MAIN
	EX. GAS MAIN
	EX. SANITARY SEWER
	EX. STORM SEWER
	ADJACENT PROPERTY LINE
	EX. BUILDING SETBACK LINE
	EX. FENCE
	CONCRETE

DEMO LEGEND	
	EX. UTILITY LINE - TO BE REMOVED

- DEMOLITION KEYNOTES**
- 01 EX. STORM STRUCTURE TO BE REMOVED
 - 02 PORTION OF EX. STORM PIPE TO BE ABANDONED IN PLACE
 - 03 PORTION OF EX. STORM PIPE TO BE REMOVED
 - CONTRACTOR TO VERIFY VIA CAMERA THAT NO BLIND CONNECTION EXIST PRIOR TO ABANDONMENT. REPORT FINDINGS TO ENGINEER OF RECORD.
 - FILL ABANDONED PIPE WITH GROUT
 - 04 EX. HEADWALL TO BE REMOVED
 - 05 EX. STRUCTURE TO BE REMOVED & REPLACED
 - SEE SHEET C-4.1 FOR STRUCTURE INFORMATION

Sanitary sewer, storm sewer, water, gas, electric, and telecom utilities, servicing the football stadium, could not be located or may not be depicted in their exact locations. Contractor shall locate at the start of construction and notify engineers of any conflicts. Existing utility services to the football stadium may need to be relocated or reburied to mitigate conflicts with proposed storm sewer and sanitary sewer.





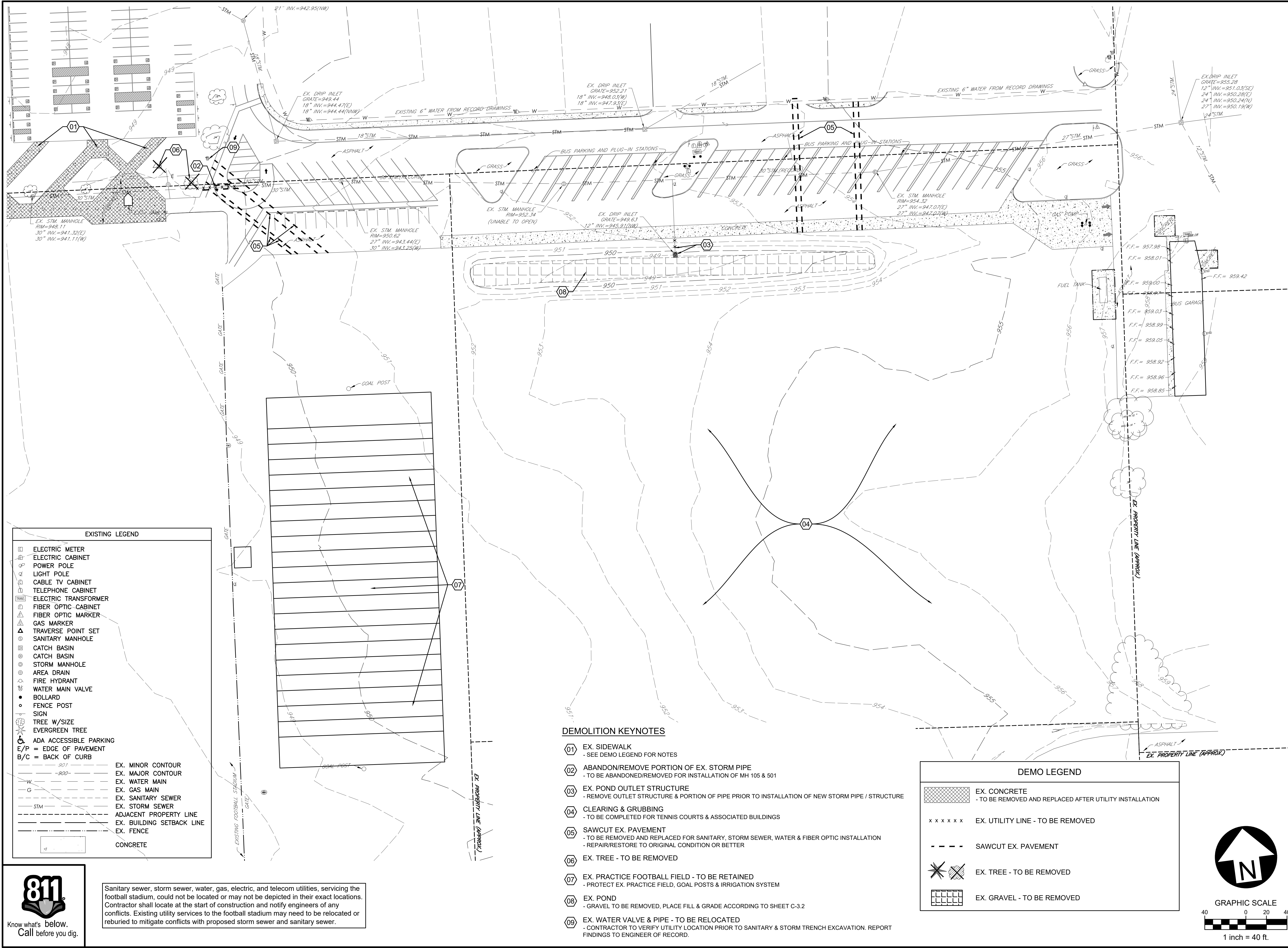
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Date	Description
11/22/2024	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO



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Sheet No.: C-1.2	

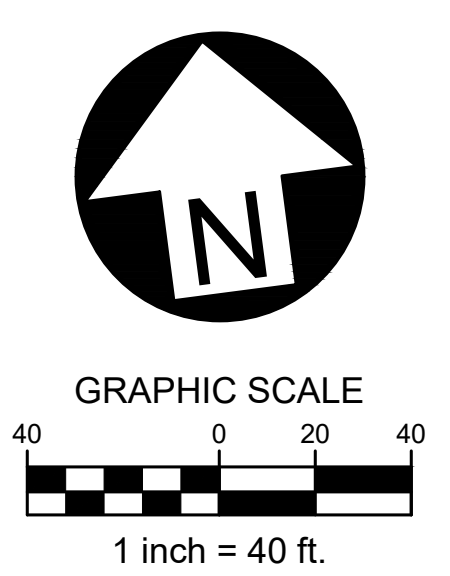


EXISTING LEGEND	
	ELECTRIC METER
	ELECTRIC CABINET
	POWER POLE
	LIGHT POLE
	CABLE TV CABINET
	TELEPHONE CABINET
	ELECTRIC TRANSFORMER
	FIBER OPTIC CABINET
	FIBER OPTIC MARKER
	GAS MARKER
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	SANITARY MANHOLE
	CATCH BASIN
	STORM MANHOLE
	AREA DRAIN
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	E/P = EDGE OF PAVEMENT
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	901 EX. MINOR CONTOUR
	-900- EX. MAJOR CONTOUR
	W- EX. WATER MAIN
	G- EX. GAS MAIN
	- - - EX. SANITARY SEWER
	- - - EX. STORM SEWER
	- - - ADJACENT PROPERTY LINE
	- - - EX. BUILDING SETBACK LINE
	- - - EX. FENCE
	CONCRETE

DEMOLITION KEYNOTES

- 01 EX. SIDEWALK
- SEE DEMO LEGEND FOR NOTES
- 02 ABANDON/REMOVE PORTION OF EX. STORM PIPE
- TO BE ABANDONED/REMOVED FOR INSTALLATION OF MH 105 & 501
- 03 EX. POND OUTLET STRUCTURE
- REMOVE OUTLET STRUCTURE & PORTION OF PIPE PRIOR TO INSTALLATION OF NEW STORM PIPE / STRUCTURE
- 04 CLEARING & GRUBBING
- TO BE COMPLETED FOR TENNIS COURTS & ASSOCIATED BUILDINGS
- 05 SAWCUT EX. PAVEMENT
- TO BE REMOVED AND REPLACED FOR SANITARY, STORM SEWER, WATER & FIBER OPTIC INSTALLATION
- REPAIR/RESTORE TO ORIGINAL CONDITION OR BETTER
- 06 EX. TREE - TO BE REMOVED
- 07 EX. PRACTICE FOOTBALL FIELD - TO BE RETAINED
- PROTECT EX. PRACTICE FIELD, GOAL POSTS & IRRIGATION SYSTEM
- 08 EX. POND
- GRAVEL TO BE REMOVED, PLACE FILL & GRADE ACCORDING TO SHEET C-3.2
- 09 EX. WATER VALVE & PIPE - TO BE RELOCATED
- CONTRACTOR TO VERIFY UTILITY LOCATION PRIOR TO SANITARY & STORM TRENCH EXCAVATION. REPORT FINDINGS TO ENGINEER OF RECORD.

DEMO LEGEND	
	EX. CONCRETE - TO BE REMOVED AND REPLACED AFTER UTILITY INSTALLATION
	EX. UTILITY LINE - TO BE REMOVED
	SAWCUT EX. PAVEMENT
	EX. TREE - TO BE REMOVED
	EX. GRAVEL - TO BE REMOVED

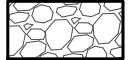




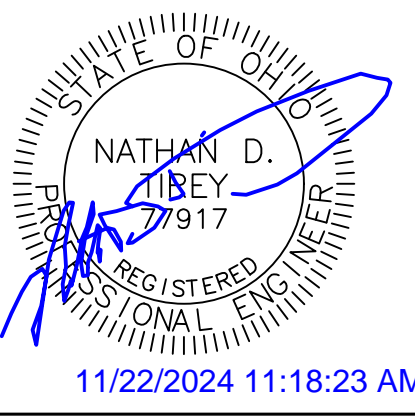
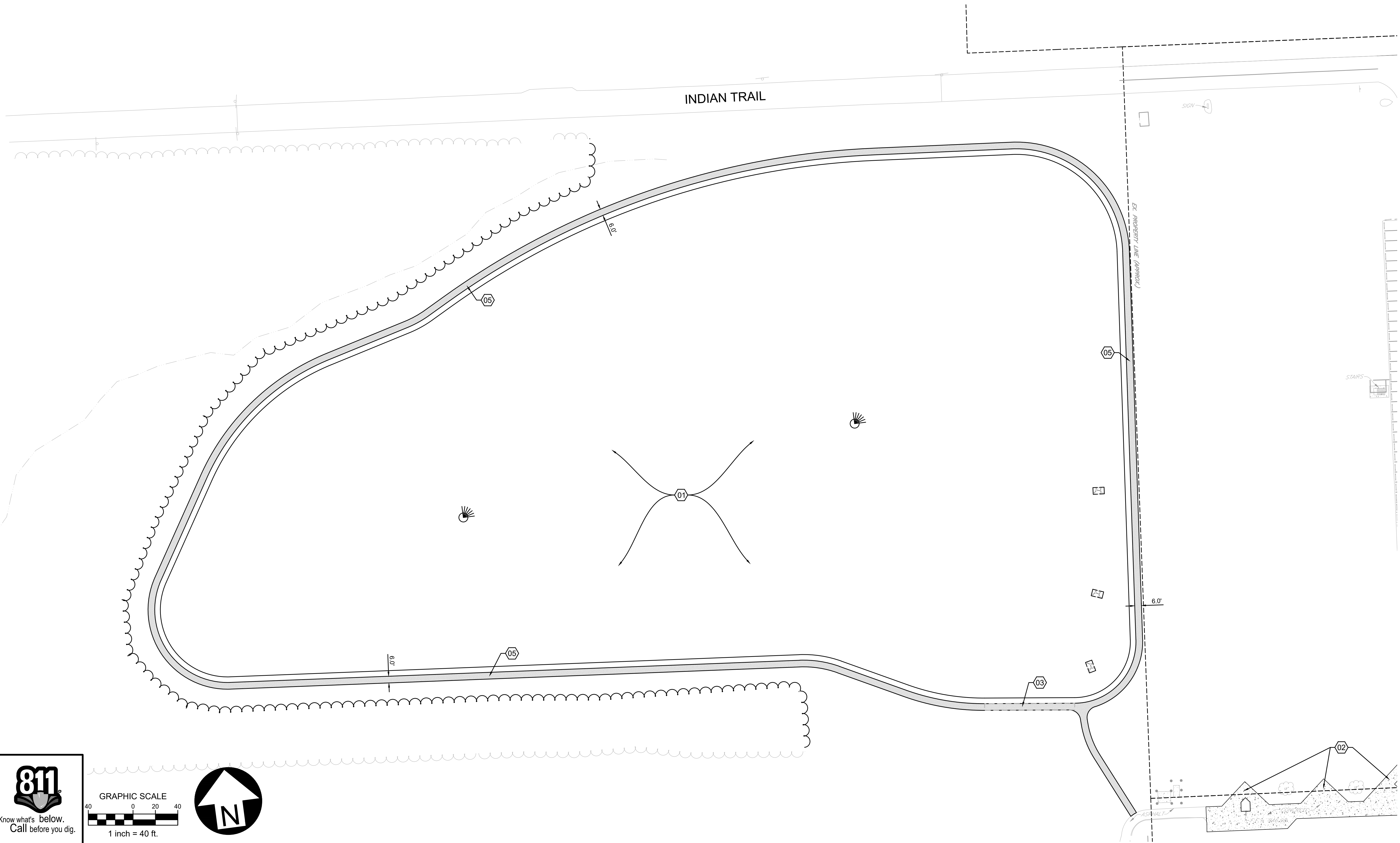
Sanitary sewer, storm sewer, water, gas, electric, and telecom utilities, servicing the football stadium, could not be located or may not be depicted in their exact locations. Contractor shall locate at the start of construction and notify engineers of any conflicts. Existing utility services to the football stadium may need to be relocated or reburied to mitigate conflicts with proposed storm sewer and sanitary sewer.

SITE KEYNOTES

- 01 PROP. STORMWATER DETENTION POND
- SEE SHEET C-3.0 FOR GRADING & C-7.2 FOR DETAILS
- 02 CONCRETE PAVEMENT
- PER DETAIL / SHEET C-5.0
- 03 EMERGENCY SPILLWAY AT LOW POINT OF BIKE PATH
- SEE GRADING ON SHEET C-3.0
- SEE SHEET C-7.2 FOR DETAILS
- 04 NOT USED
- 05 PROP. 6' WIDE ASPHALT PATH
- PER DETAIL / SHEET C-5.0
- 06 NOT USED

SITE LEGEND

-  PROP. RIP-RAP/ROCK CHANNEL PROTECTION
-  PROP. CONCRETE
-  PROP. ASPHALT PATH



11/22/2024 11:18:23 AM

Item	Description	Date
1	ADDENDUM 4	11/22/2024

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS
& COMPREHENSIVE STORM
WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO




Design: MES Proj: 23.191
 Draw: MES Dwg:
 Check: JDB Tab:
 Scale: AS SHOWN

Date: 10.18.2024

Sheet: SITE PLAN - POND

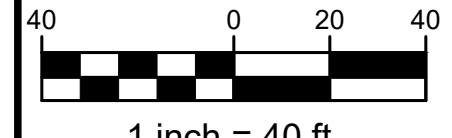
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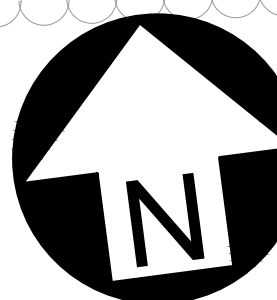
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Know what's below.
Call before you dig.

GRAPHIC SCALE

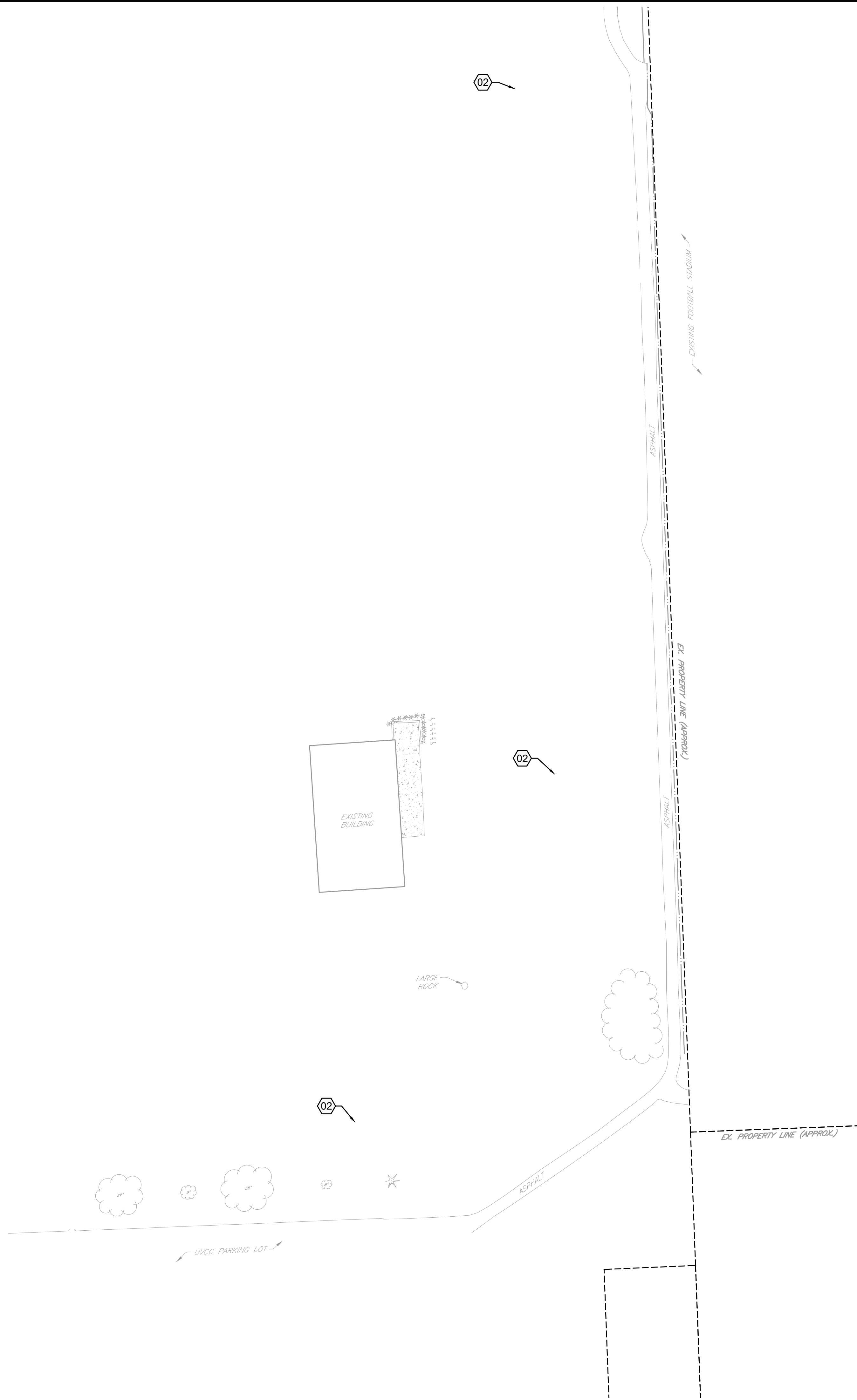
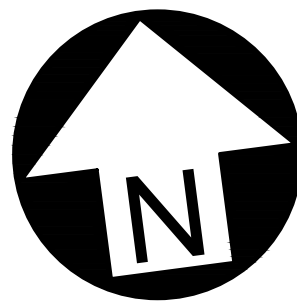




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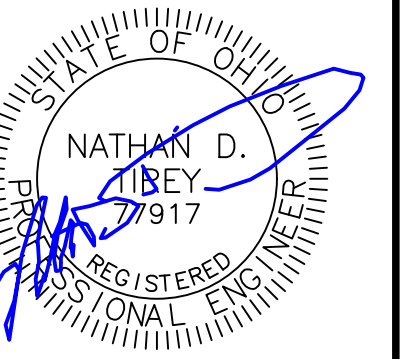


Know what's below.
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SITE KEYNOTES

- 01 NOT USED
- 02 SITE OF NEW POND OUTLET PIPING



11/22/2024 11:18:23 AM

Item	Description	Date
1	ADDENDUM 4	11/22/2024

**SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS
& COMPREHENSIVE STORM
WATER PLAN**
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO



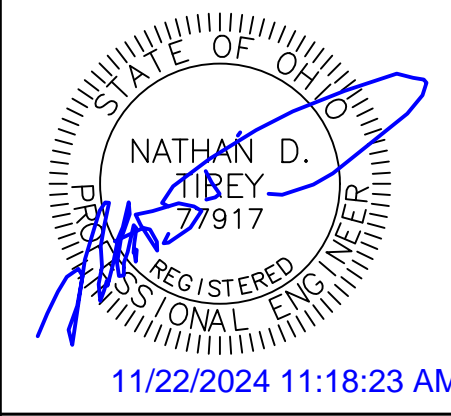
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Date: 10.18.2024

Sheet: SITE PLAN - SWALE

Sheet No.: **C-2.1**

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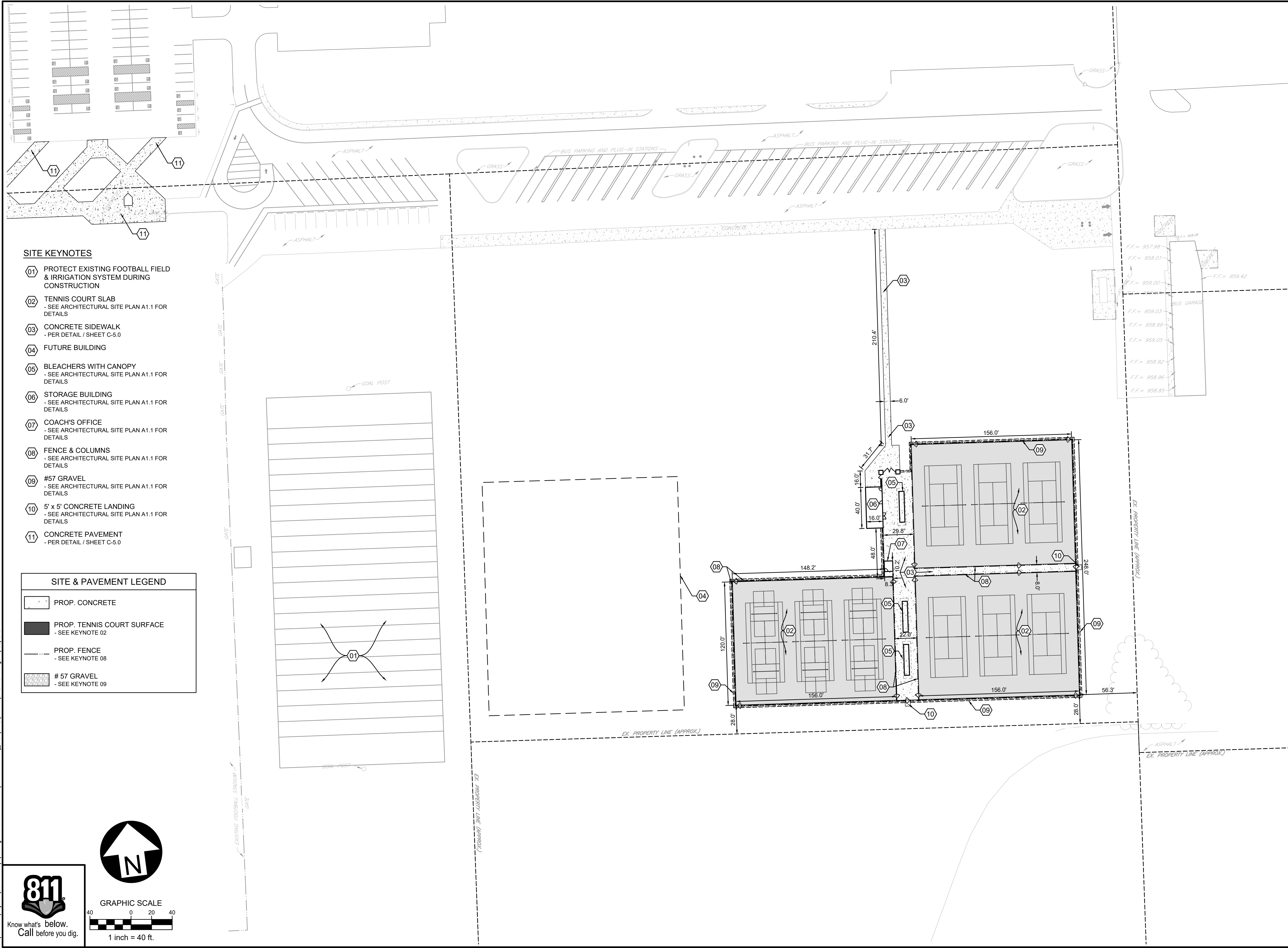


Date	Description
11/22/2024	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO



Design: MES	Proj: 23.191
Draw: MES	Dwg:
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Scale: AS SHOWN	
Date:	10.18.2024
Sheet:	SITE PLAN - TENNIS COURTS
Sheet No.:	C-2.2

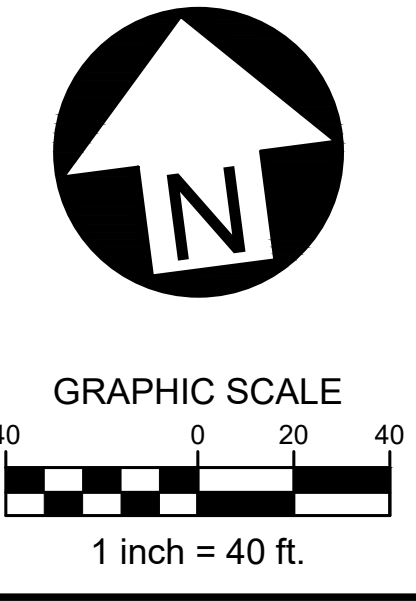


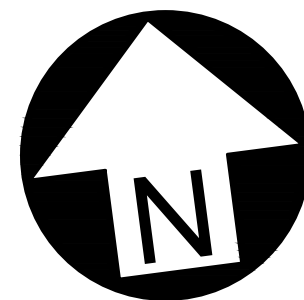
SITE KEYNOTES

- 01 PROTECT EXISTING FOOTBALL FIELD & IRRIGATION SYSTEM DURING CONSTRUCTION
- 02 TENNIS COURT SLAB
- SEE ARCHITECTURAL SITE PLAN A1.1 FOR DETAILS
- 03 CONCRETE SIDEWALK
- PER DETAIL / SHEET C-5.0
- 04 FUTURE BUILDING
- 05 BLEACHERS WITH CANOPY
- SEE ARCHITECTURAL SITE PLAN A1.1 FOR DETAILS
- 06 STORAGE BUILDING
- SEE ARCHITECTURAL SITE PLAN A1.1 FOR DETAILS
- 07 COACH'S OFFICE
- SEE ARCHITECTURAL SITE PLAN A1.1 FOR DETAILS
- 08 FENCE & COLUMNS
- SEE ARCHITECTURAL SITE PLAN A1.1 FOR DETAILS
- 09 #57 GRAVEL
- SEE ARCHITECTURAL SITE PLAN A1.1 FOR DETAILS
- 10 5' x 5' CONCRETE LANDING
- SEE ARCHITECTURAL SITE PLAN A1.1 FOR DETAILS
- 11 CONCRETE PAVEMENT
- PER DETAIL / SHEET C-5.0

SITE & PAVEMENT LEGEND

	PROP. CONCRETE
	PROP. TENNIS COURT SURFACE - SEE KEYNOTE 02
	PROP. FENCE - SEE KEYNOTE 08
	# 57 GRAVEL - SEE KEYNOTE 09





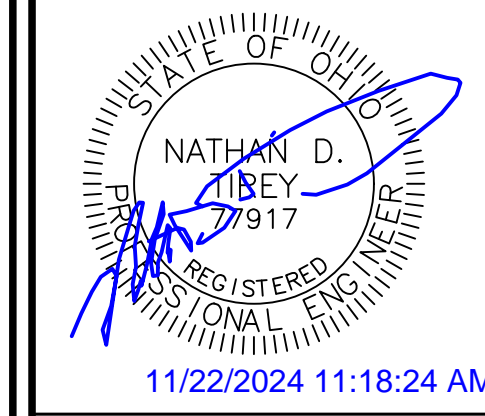
GRADING KEYNOTES

- 01 RETENTION POND OUTLET STRUCTURE
- SEE SHEET C-7.2 FOR POND DETAILS
- 02 NOT USED
- 03 TYPE B RIP-RAP

* Landscaping is not in the scope of the work. A separate bid package will be completed at a later time.

GRADING LEGEND

- X 100.00FG PROP. FINISH GRADE ELEVATION
- PROP. FLOW ARROW
- 900 — PROP. CONTOUR - INDEX
- 901 — PROP. CONTOUR - INTERMEDIATE
- 900 — EX. CONTOUR - INDEX
- 901 — EX. CONTOUR - INTERMEDIATE



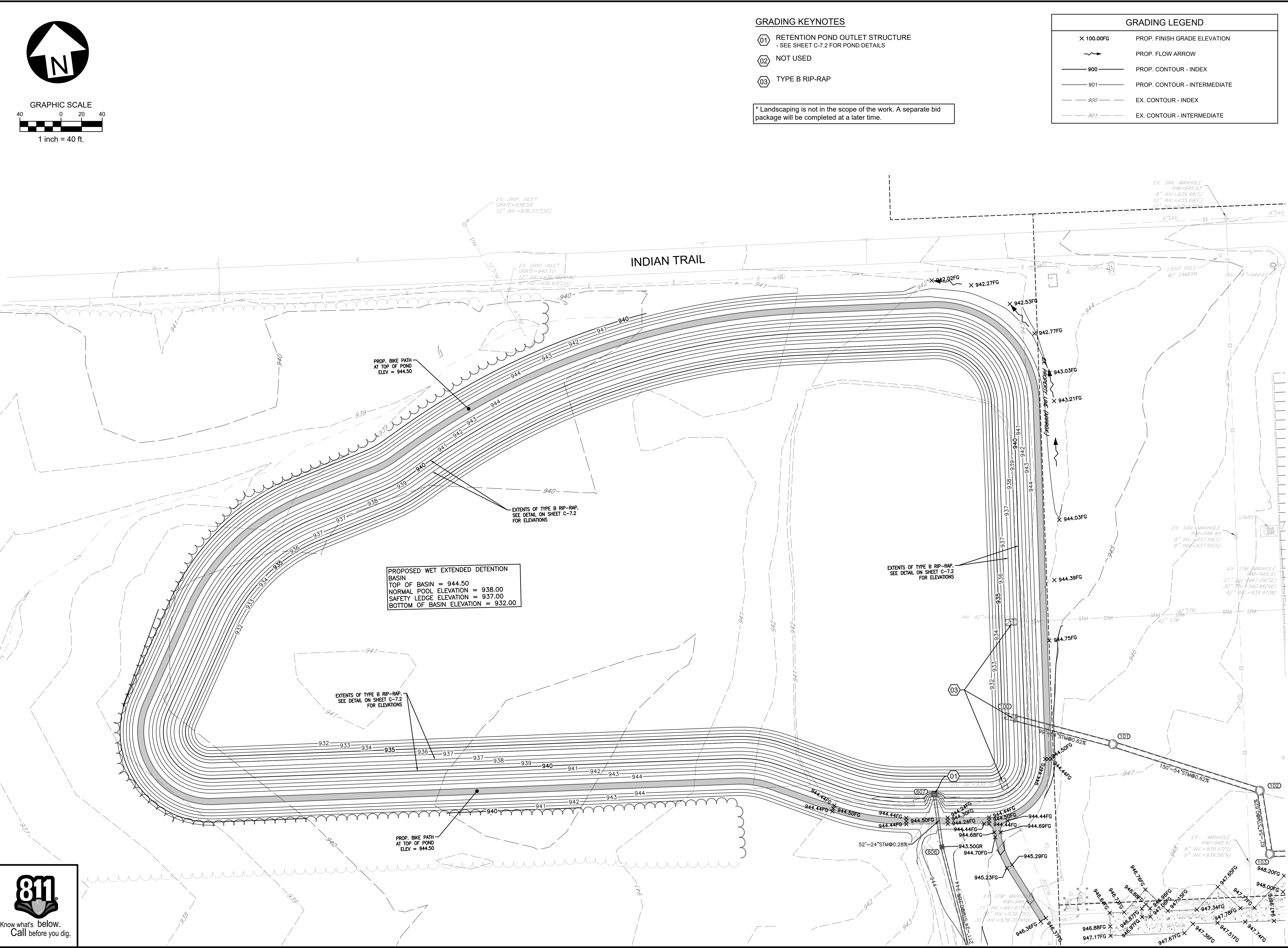
Date	Description
11/22/2024	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO



Design: MES	Proj: 23.191
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Scale: AS SHOWN	
Date: 10.18.2024	
Sheet: GRADING PLAN - POND	
Sheet No.: C-3.0	

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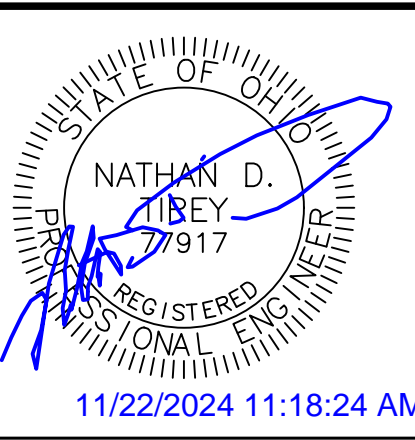
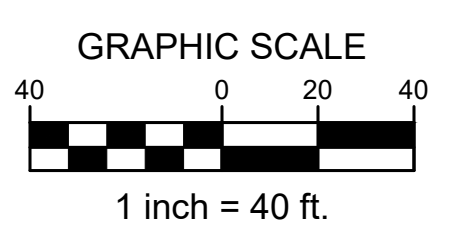
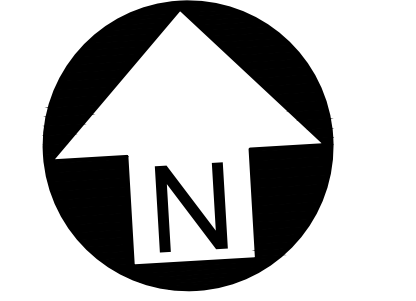


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GRADING LEGEND	
X 100.00FG	PROP. FINISH GRADE ELEVATION
	PROP. FLOW ARROW
900	PROP. CONTOUR - INDEX
901	PROP. CONTOUR - INTERMEDIATE
900	EX. CONTOUR - INDEX
901	EX. CONTOUR - INTERMEDIATE

* Landscaping is not in the scope of the work. A separate bid package will be completed at a later time.



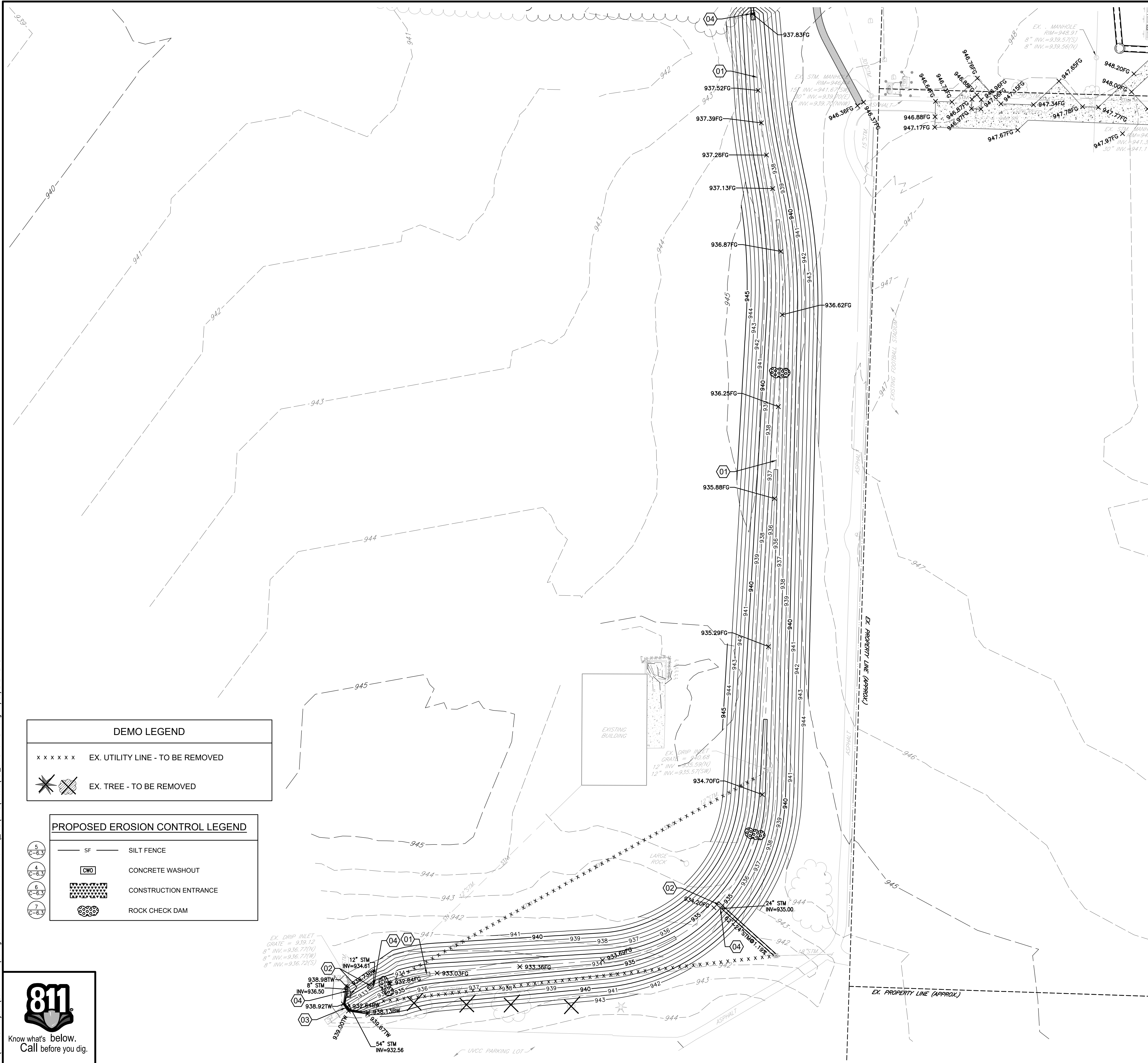
Date	Description
11/22/2024	
1	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO

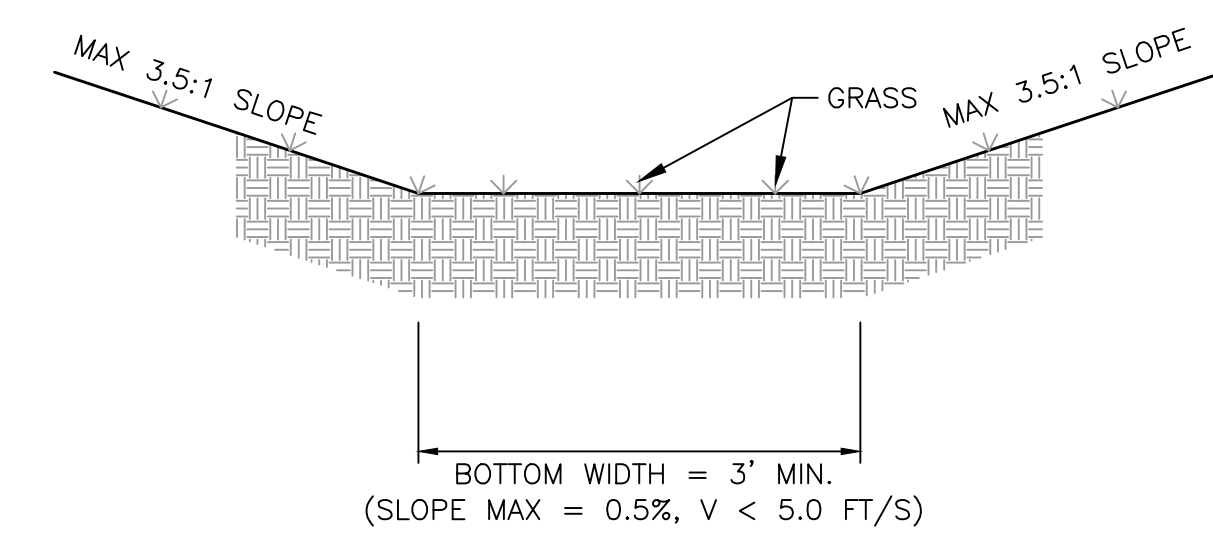


Design: MES	Proj: 23.191
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Check: JDB	Tab:
Scale: AS SHOWN	
Date:	10.18.2024
Sheet:	GRADING PLAN - SWALE
Sheet No.:	C-3.1

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ALTERNATE #7 DESCRIPTION
 STRUCTURE 606 WOULD BE REPLACED WITH A HALF-HEIGHT ODOT HEADWALL. STRUCTURE 601 WOULD BE REPLACED WITH A FULL-HEIGHT HEADWALL. A NEW EXPANDED AND DEEPEMED SWALE WOULD BE CONSTRUCTED BETWEEN STRUCTURE 606 AND 601 IN ACCORDANCE WITH THIS DRAWING. 2 ADDITIONAL HALF-HEIGHT HEADWALLS WOULD BE ADDED NEAR THE SOUTH END OF THE SWALE TO PROVIDE DAY-LIGHTING FOR EXISTING STORM LINES THAT ARE BEING PARTIALLY DEMOLISHED. ADDITIONAL DEMOLITION IS ALSO SHOWN TO ACCOMMODATE THIS SWALE FOOTPRINT AS WELL AS ADDITIONAL EROSION CONTROL MEASURES.



GRADING LEGEND

X 100.00FG	PROP. FINISH GRADE ELEVATION
X 100.00BW	PROP. BOTTOM OF WALL ELEVATION
X 100.00TW	PROP. TOP OF WALL ELEVATION
→	PROP. FLOW ARROW
— 900 —	PROP. CONTOUR - INDEX
— 901 —	PROP. CONTOUR - INTERMEDIATE
- - - 900 - - -	EX. CONTOUR - INDEX
- - - 901 - - -	EX. CONTOUR - INTERMEDIATE

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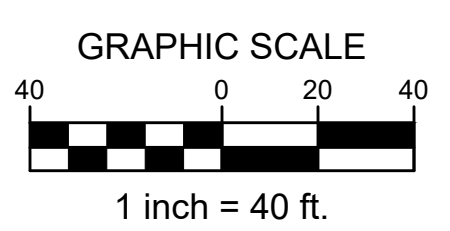
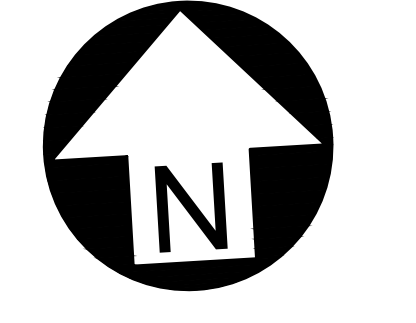
- GRADING KEYNOTES**
- 01 PROPOSED SWALE - SEE THIS SHEET FOR GRADES AND TYPICAL SECTION
 - 02 TYPE B RIP-RAP
 - 03 PROPOSED FULL-HEIGHT HEADWALL - SEE DETAIL ON SHEET C-5.1
 - 04 PROPOSED HALF-HEIGHT HEADWALL - SEE DETAIL ON SHEET C-5.0

DEMO LEGEND

x x x x x	EX. UTILITY LINE - TO BE REMOVED
✖	EX. TREE - TO BE REMOVED

PROPOSED EROSION CONTROL LEGEND

SF	SILT FENCE
CWO	CONCRETE WASHOUT
[Hatched Box]	CONSTRUCTION ENTRANCE
[Rock Pattern]	ROCK CHECK DAM



Date	Description
11/22/2024	

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO

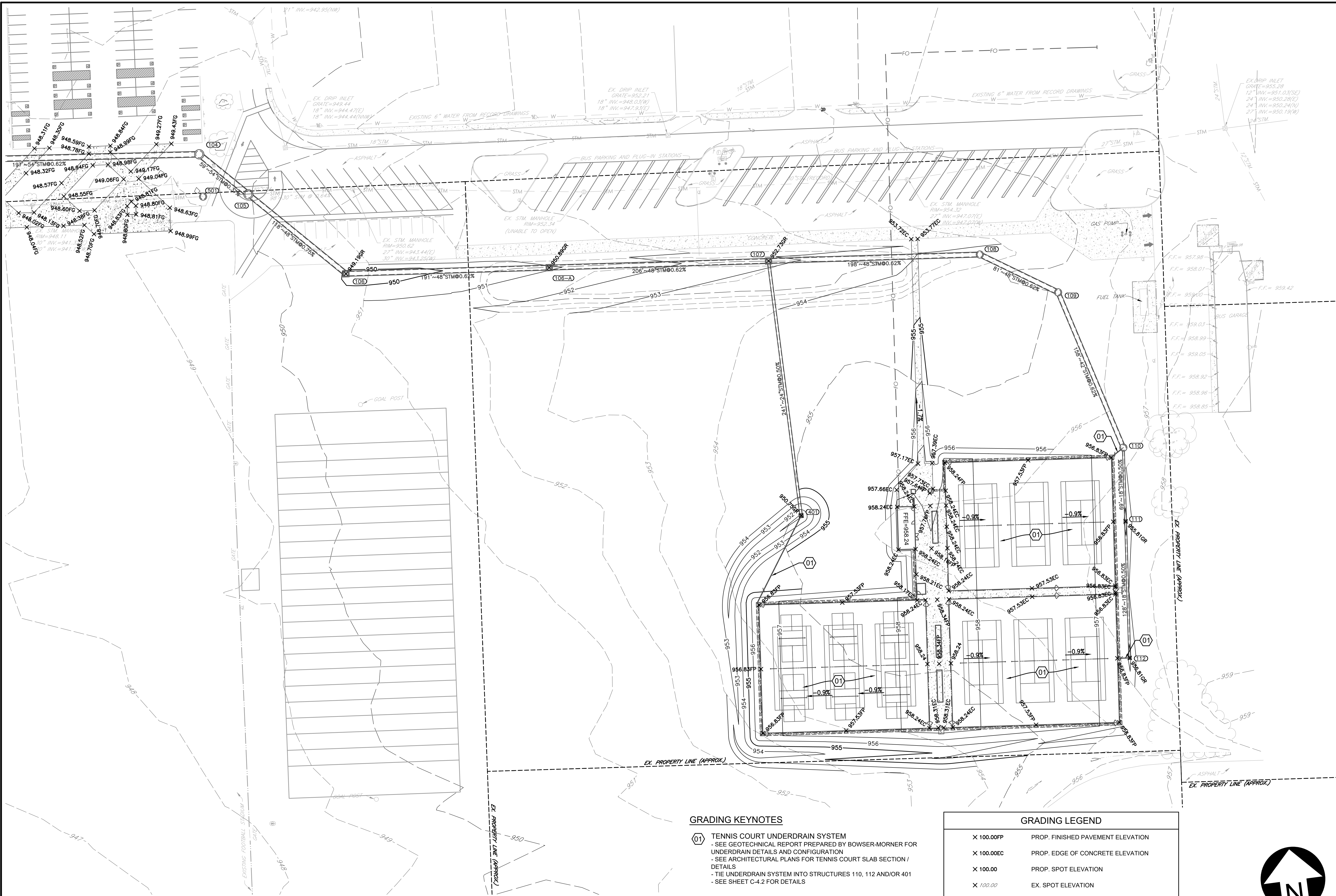


Design: MES	Proj: 23.191
Draw: MES	Dwg:
Check: JDB	Tab:
Scale: AS SHOWN	
Date: 10.18.2024	
Sheet: ALTERNATE SWALE (ALTERNATE #7)	
Sheet No.: C-3.1A	

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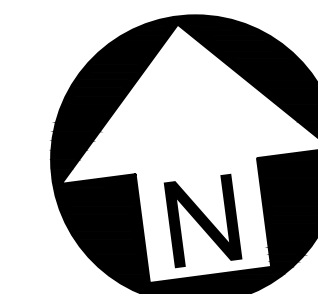
GRADING KEYNOTES

- 01 TENNIS COURT UNDERDRAIN SYSTEM
- SEE GEOTECHNICAL REPORT PREPARED BY BOWSER-MORNER FOR UNDERDRAIN DETAILS AND CONFIGURATION
- SEE ARCHITECTURAL PLANS FOR TENNIS COURT SLAB SECTION / DETAILS
- TIE UNDERDRAIN SYSTEM INTO STRUCTURES 110, 112 AND/OR 401
- SEE SHEET C-4.2 FOR DETAILS

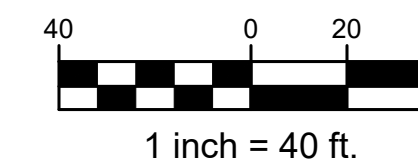
* Landscaping is not in the scope of the work. A separate bid package will be completed at a later time.

GRADING LEGEND

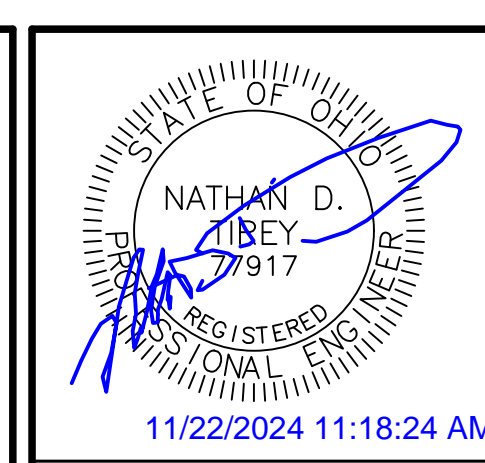
X 100.00FP	PROP. FINISHED PAVEMENT ELEVATION
X 100.00EC	PROP. EDGE OF CONCRETE ELEVATION
X 100.00	PROP. SPOT ELEVATION
X 100.00	EX. SPOT ELEVATION
→	PROP. FLOW ARROW
— 900 —	PROP. CONTOUR - INDEX
— 901 —	PROP. CONTOUR - INTERMEDIATE
— 900 —	EX. CONTOUR - INDEX
— 901 —	EX. CONTOUR - INTERMEDIATE



GRAPHIC SCALE



1 inch = 40 ft.



11/22/2024 11:18:24 AM

Date	Description
11/22/2024	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO

BURKHARDT
ENGINEERS & SURVEYORS
28 North Cherry Street | Germantown, Ohio 45327 | Phone: 937-386-9860 | BURKHARDTINC.COM
CIVIL ENGINEERING | LAND SURVEYING | NATIONAL RETAIL SITE DEVELOPMENT

Design: MES	Proj: 23.191
Draw: MES	Dwg:
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Scale: AS SHOWN	
Date:	10.18.2024
Sheet:	GRADING PLAN - TENNIS COURTS
Sheet No.:	C-3.2

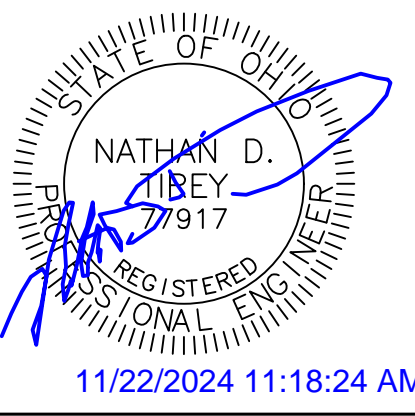
STORM STRUCTURES	
Structure	Details
100	Headwall HW-2.2_Circ 54"INV=938.42(E)

STORM STRUCTURES	
Structure	Details
101	STORM MH-3 GRATE=946.56 54"INV=939.86(SE) 54"INV=939.03(W)
102	STORM MH-3 GRATE=947.97 54"INV=940.79(S) 54"INV=940.79(NW)
103	STORM MH-3 GRATE=948.63 54"INV=941.18(E) 54"INV=941.18(N)
606	Catch Basin 2-3 (CB-1.2) GRATE=943.50 24"INV=937.83(N) 24"INV=937.83(S)
607	Catch Basin 2-4 (CB-1.2) GRATE=943.50 24"INV=937.88(S)

UTILITY LEGEND	
●	PROP. CLEANOUT
■	PROP. CATCH BASIN
○	PROP. MANHOLE (SAN. OR STM.)
—	PROP. SANITARY SEWER
—	PROP. STORM SEWER
— W —	PROP. WATER SERVICE

UTILITY KEYNOTES

- 01 PROP. POND OUTLET PIPE
- SEE SHEET C-3.3 FOR STORM PIPE PROFILE
- 02 PROP. SANITARY SEWER
- SEE SHEET C-4.5 FOR SANITARY PROFILE
- 03 PROP. STORM SEWER
- SEE SHEETS C-4.2 THROUGH C-4.4 FOR STORM PROFILES
- 04 FLOATING POND FOUNTAIN
- AIRMAX ECOSERIES 1/2HP FLOATING FOUNTAIN OR APPROVED EQUIVALENT
- CONTRACTOR TO VERIFY WITH OWNER
- REFER TO ELECTRICAL PLANS FOR WIRING / CONDUIT INFORMATION



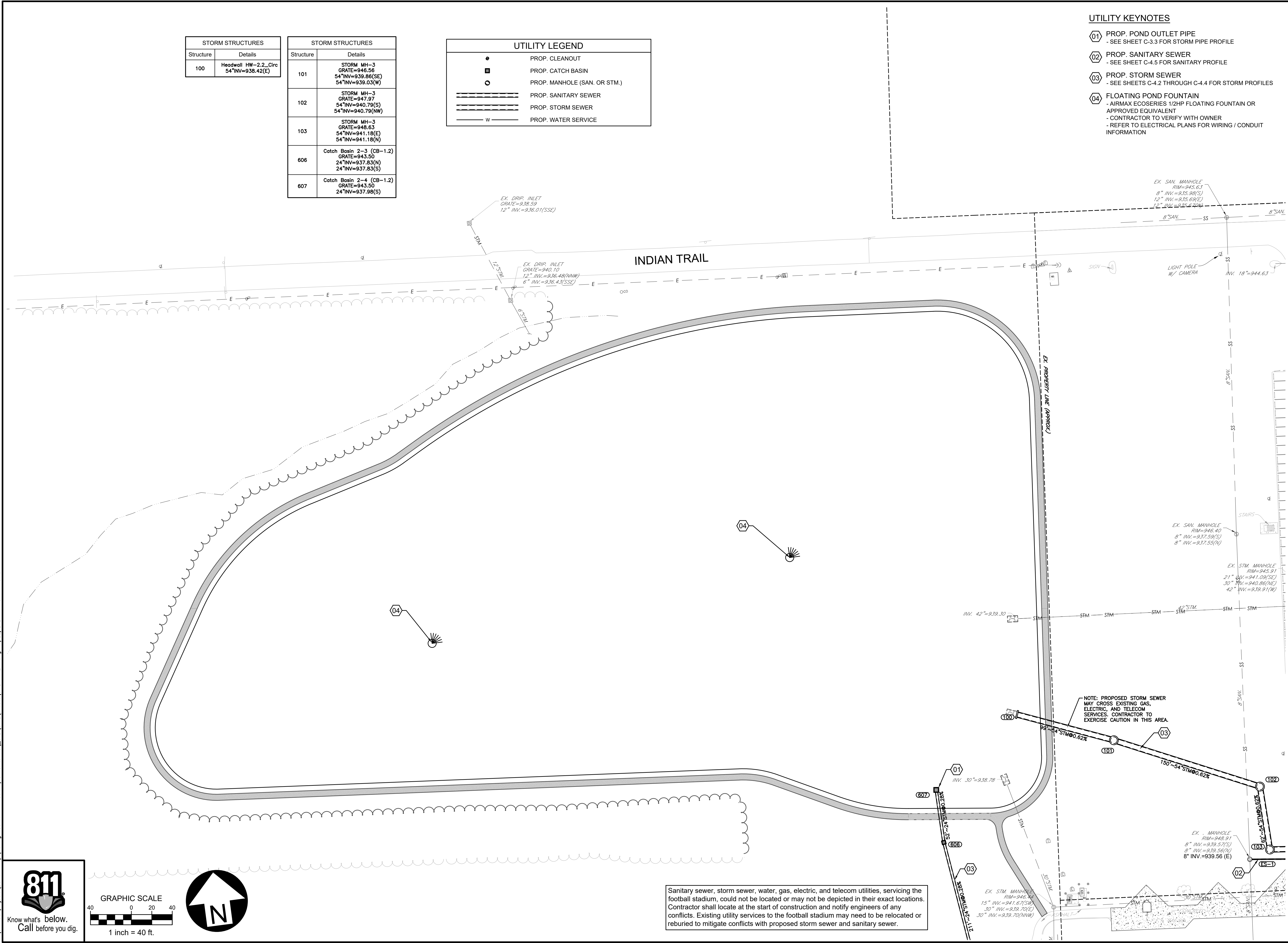
Date	Description
11/22/2024	ADDENDUM 4

**SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS
& COMPREHENSIVE STORM
WATER PLAN**
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO




Design: MES	Proj: 23.191
Draw: MES	Dwg:
Check: JDB	Tab:
Scale: AS SHOWN	
Date:	10.18.2024
Sheet:	UTILITY PLAN - POND

Sheet No.: **C-4.0**

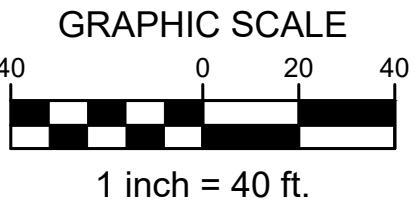
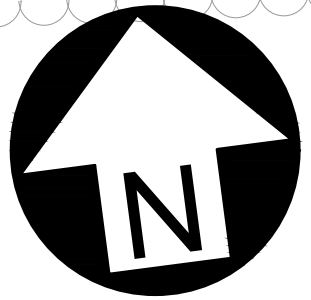


Sanitary sewer, storm sewer, water, gas, electric, and telecom utilities, servicing the football stadium, could not be located or may not be depicted in their exact locations. Contractor shall locate at the start of construction and notify engineers of any conflicts. Existing utility services to the football stadium may need to be relocated or reburied to mitigate conflicts with proposed storm sewer and sanitary sewer.

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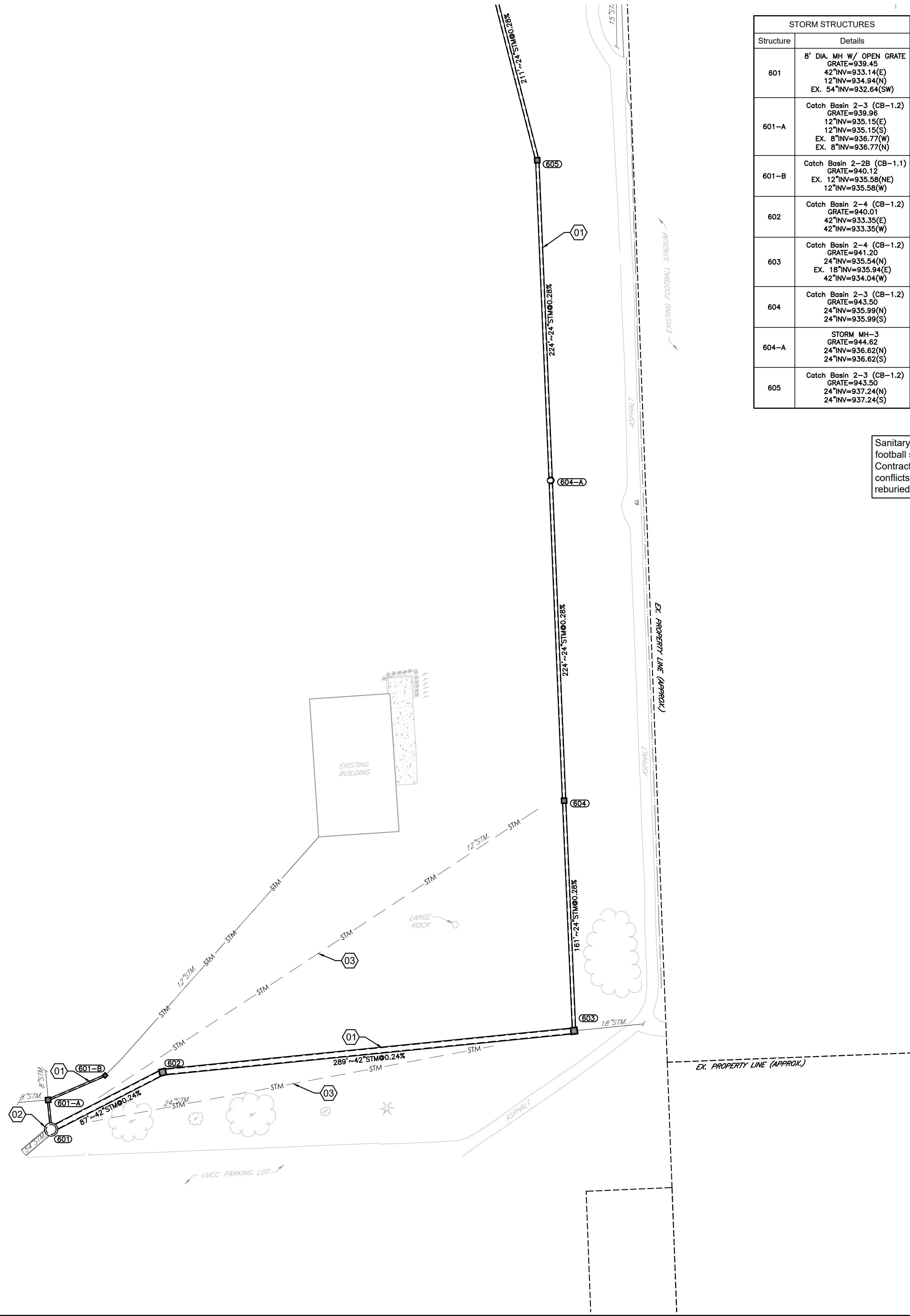
GRAPHIC SCALE

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Know what's below.
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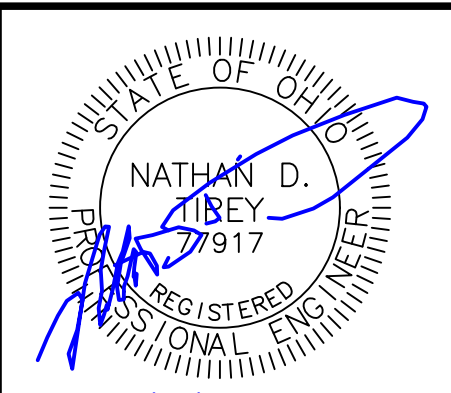
STORM STRUCTURES	
Structure	Details
601	8' DIA. MH W/ OPEN GRATE GRATE=939.45 42"NV=933.14(E) 12"NV=934.94(N) EX. 54"NV=932.64(SW)
601-A	Catch Basin 2-3 (CB-1.2) GRATE=939.96 12"NV=935.15(E) 12"NV=935.15(S) EX. 8"NV=936.77(W) EX. 8"NV=936.77(N)
601-B	Catch Basin 2-2B (CB-1.1) GRATE=940.12 EX. 12"NV=935.58(NE) 12"NV=935.58(W)
602	Catch Basin 2-4 (CB-1.2) GRATE=940.01 42"NV=933.35(E) 42"NV=933.35(W)
603	Catch Basin 2-4 (CB-1.2) GRATE=941.20 24"NV=935.54(N) EX. 18"NV=935.94(E) 42"NV=934.04(W)
604	Catch Basin 2-3 (CB-1.2) GRATE=943.50 24"NV=935.99(N) 24"NV=935.99(S)
604-A	STORM MH-3 GRATE=944.62 24"NV=936.62(N) 24"NV=936.62(S)
605	Catch Basin 2-3 (CB-1.2) GRATE=943.50 24"NV=937.24(N) 24"NV=937.24(S)

UTILITY KEYNOTES

- 01 PROP. STORM SEWER
- SEE SHEETS C-4.3 & C-4.4 FOR STORM SEWER PROFILE
- 02 PROP. STORM MANHOLE
- PER DETAIL / SHEET C-5.1
- 8' DIA., FLAT SLAB TOP & OPEN GRATE
- 03 EXISTING STORM SEWER
- TO BE ABANDONED IN PLACE / SEE SHEET C-1.1

UTILITY LEGEND	
●	PROP. CLEANOUT
■	PROP. CATCH BASIN
○	PROP. MANHOLE (SAN. OR STM.)
—	PROP. SANITARY SEWER
—	PROP. STORM SEWER
— w —	PROP. WATER SERVICE

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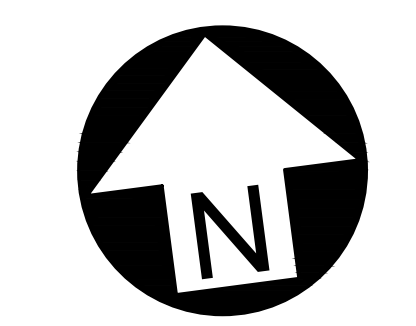
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Date	Description
11/22/2024	

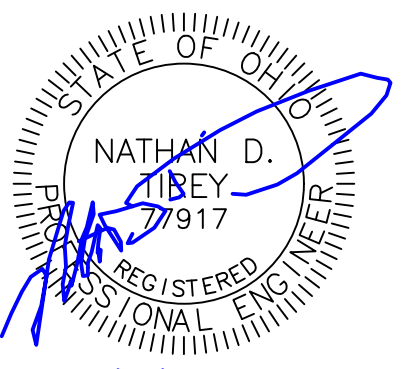
SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO



Design: MES	Proj: 23.191
Draw: MES	Dwg:
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Date: 10.18.2024	
Sheet: UTILITY PLAN - SWALE	
Sheet No.: C-4.1	



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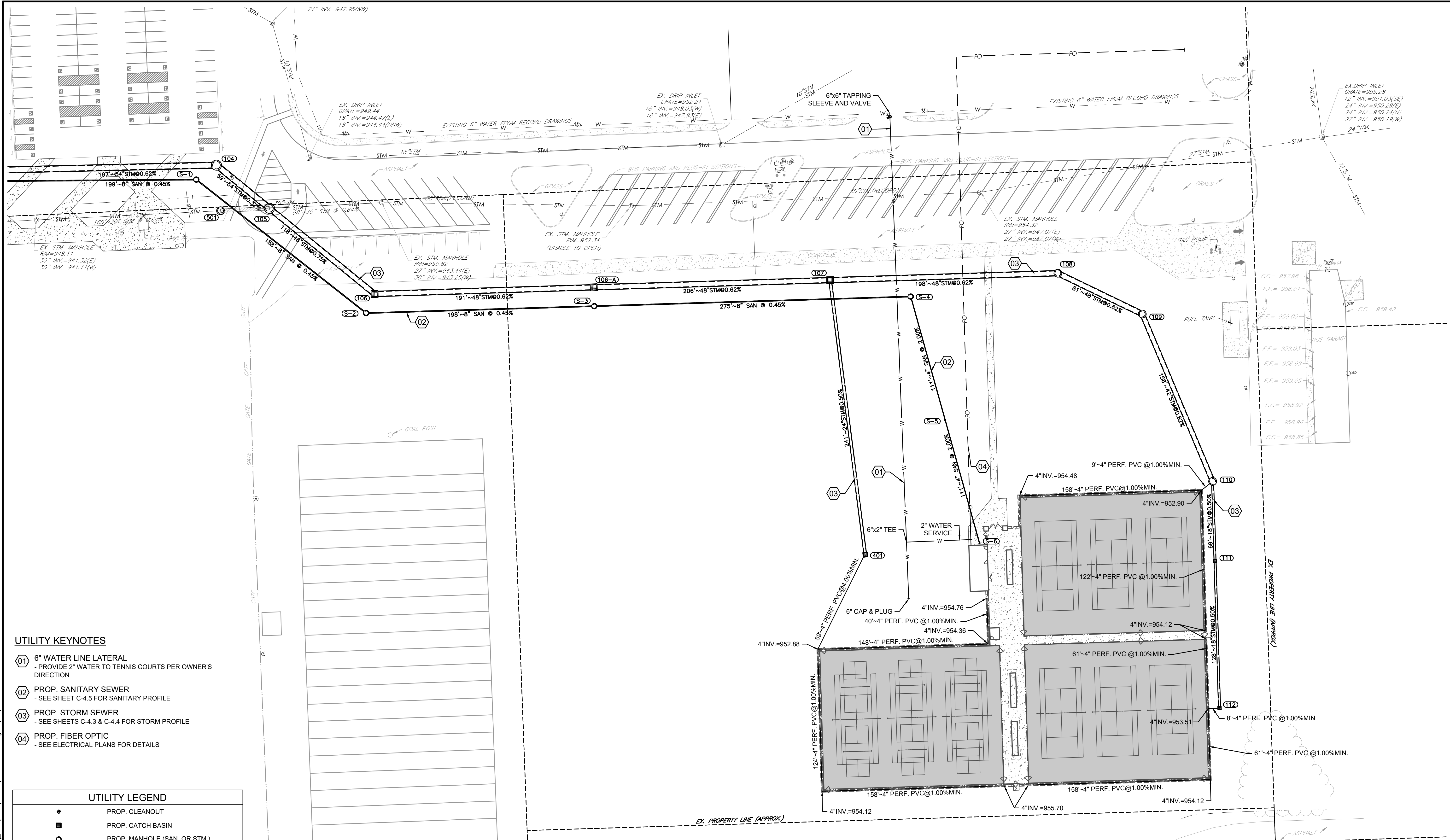
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Date	Description
11/22/2024	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
**PIQUA HIGH SCHOOL TENNIS
 & COMPREHENSIVE STORM
 WATER PLAN**
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO



Design: MES	Proj: 23.191
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Scale: AS SHOWN	Date: 10.18.2024
Sheet: UTILITY PLAN - TENNIS COURTS	Sheet No.: C-4.2

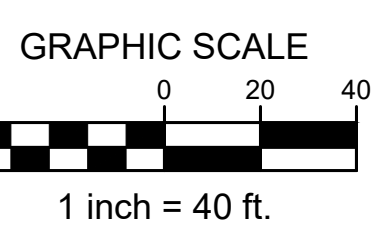
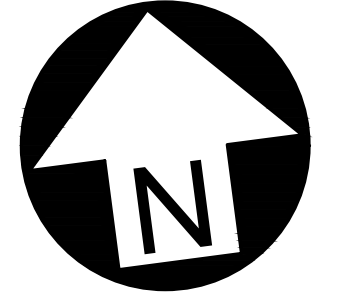


UTILITY KEYNOTES

- 01 6" WATER LINE LATERAL
- PROVIDE 2" WATER TO TENNIS COURTS PER OWNER'S DIRECTION
- 02 PROP. SANITARY SEWER
- SEE SHEET C-4.5 FOR SANITARY PROFILE
- 03 PROP. STORM SEWER
- SEE SHEETS C-4.3 & C-4.4 FOR STORM PROFILE
- 04 PROP. FIBER OPTIC
- SEE ELECTRICAL PLANS FOR DETAILS

UTILITY LEGEND

- PROP. CLEANOUT
- PROP. CATCH BASIN
- PROP. MANHOLE (SAN. OR STM.)
- ==== PROP. SANITARY SEWER
- ==== PROP. STORM SEWER
- W PROP. WATER SERVICE
- PROP. FIBER OPTIC



Sanitary sewer, storm sewer, water, gas, electric, and telecom utilities, servicing the football stadium, could not be located or may not be depicted in their exact locations. Contractor shall locate at the start of construction and notify engineers of any conflicts. Existing utility services to the football stadium may need to be relocated or reburred to mitigate conflicts with proposed storm sewer and sanitary sewer.

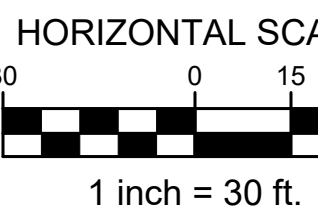
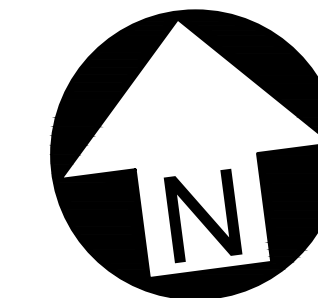
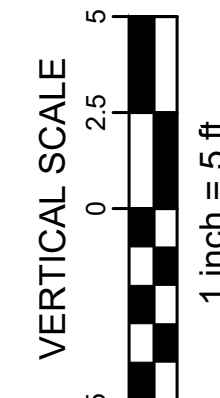
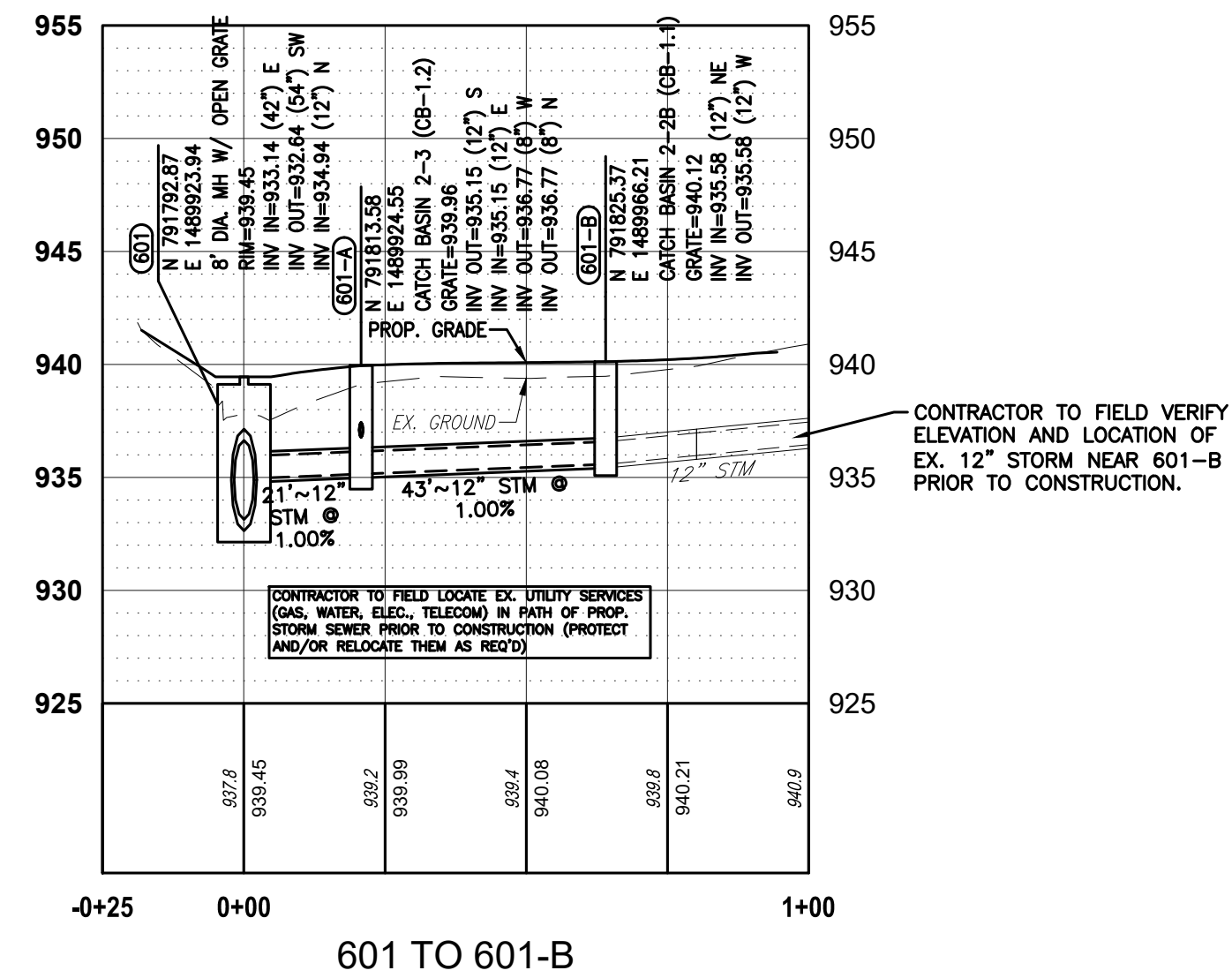
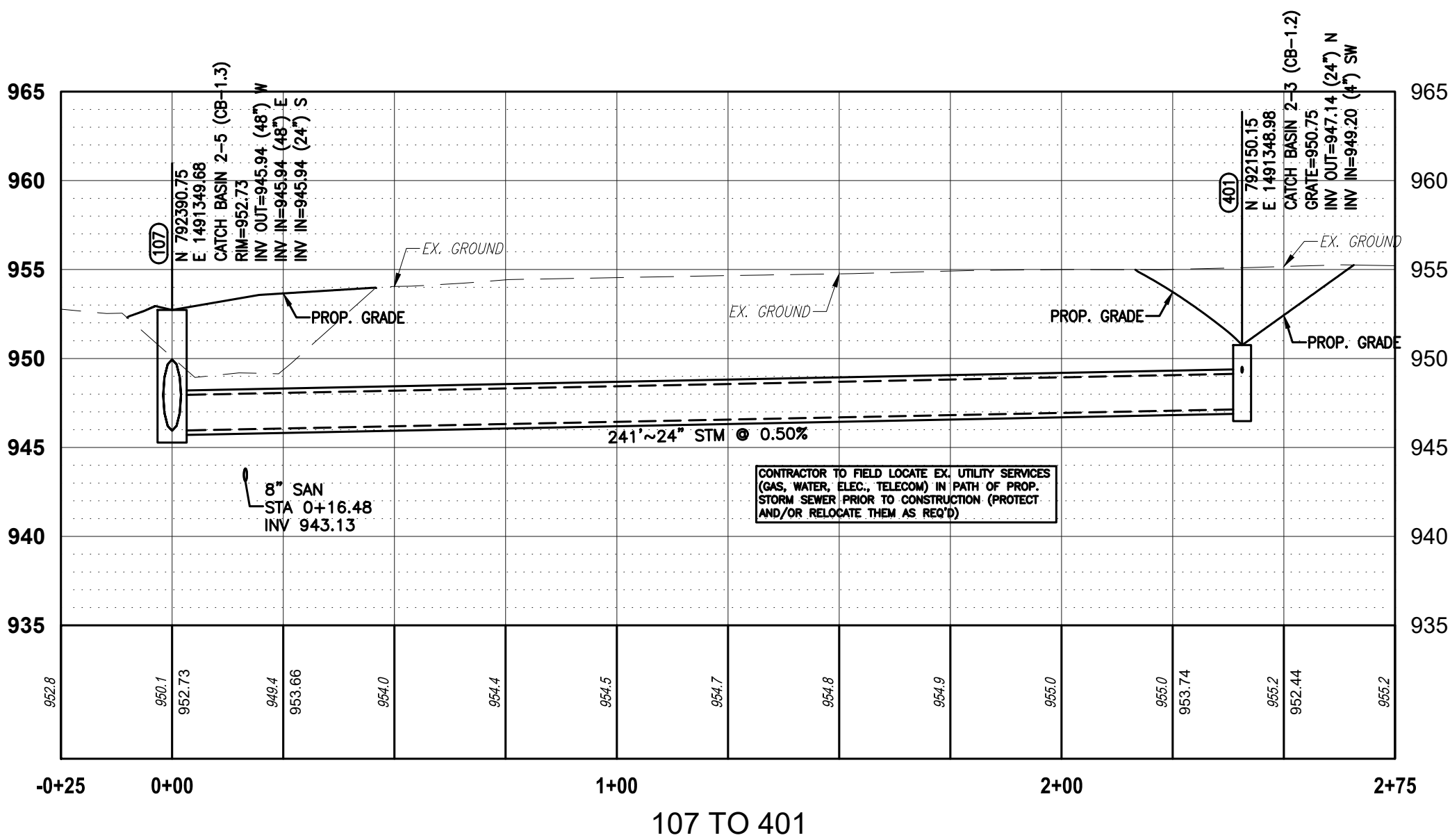
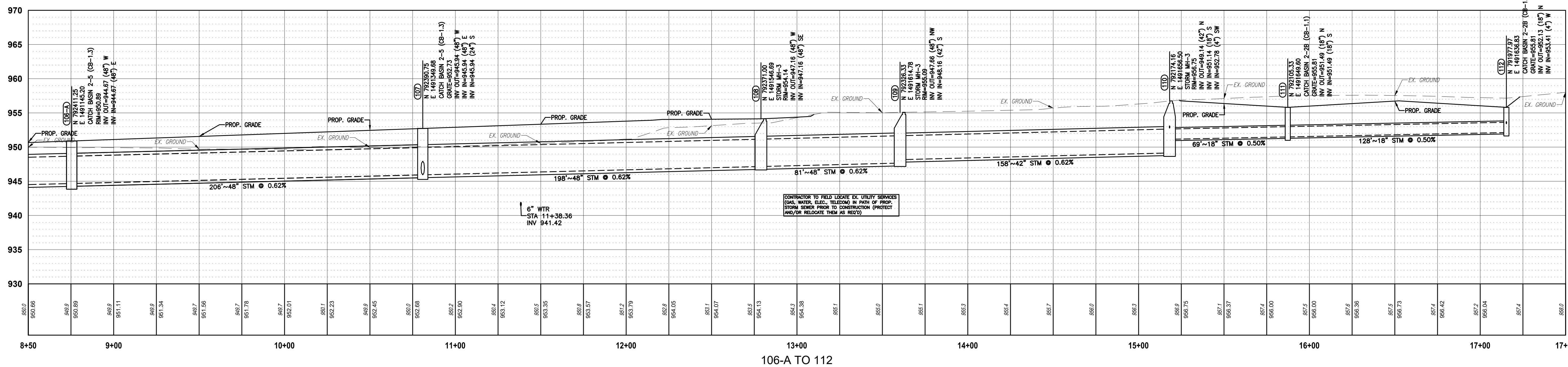
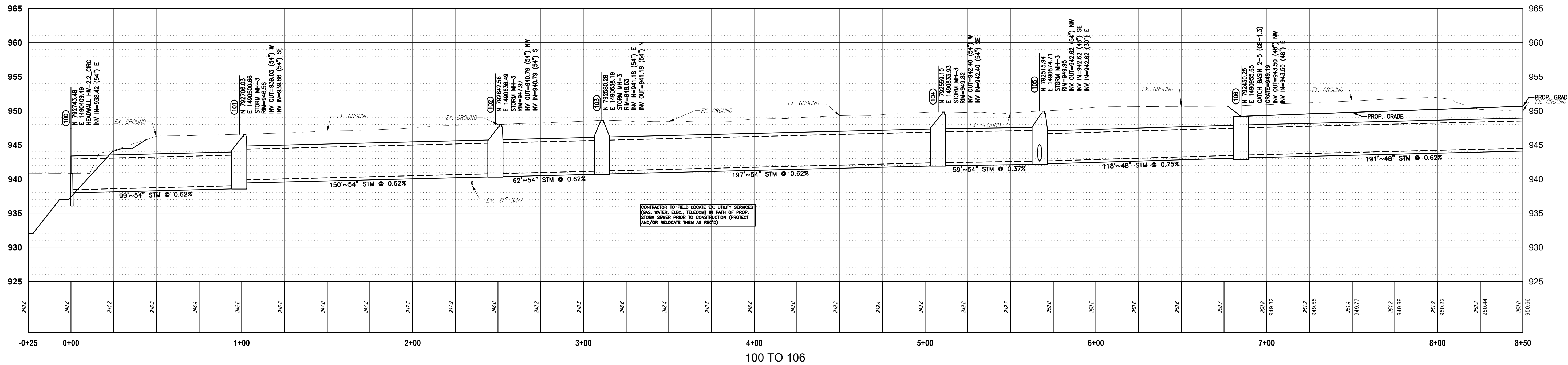
Structure	Details
S-1	PROP. SAN MH GRATE=949.75 8" INV.=940.46(SE) 8" INV.=940.46(W)
S-2	PROP. SAN MH GRATE=950.57 8" INV.=941.30(E) 8" INV.=941.30(NW)
S-3	PROP. SAN MH GRATE=951.59 8" INV.=942.20(E) 8" INV.=942.20(W)

Structure	Details
S-4	PROP. SAN MH GRATE=953.86 4" INV.=943.77(S) 8" INV.=943.44(W)
S-5	Cleanout to Grade GRATE=955.17 4" INV.=945.99(S) 4" INV.=945.99(N)
S-6	Cleanout to Grade GRATE=956.18 4" INV.=948.22(N)

Structure	Details
104	STORM MH-3 GRATE=949.82 54" INV.=942.40(SE) 54" INV.=942.40(W)
105	STORM MH-3 GRATE=949.95 48" INV.=942.62(SE) EX. 30" INV.=942.62(E) 54" INV.=942.62(NW)
106	Catch Basin 2-5 (CB-1.3) GRATE=949.19 48" INV.=943.50(E) 48" INV.=943.50(NW)
107	Catch Basin 2-5 (CB-1.3) GRATE=952.73 48" INV.=945.94(E) 24" INV.=945.94(S) 48" INV.=945.94(W)

Structure	Details
108	STORM MH-3 GRATE=954.14 48" INV.=947.16(SE) 48" INV.=947.16(W)
109	STORM MH-3 GRATE=950.09 42" INV.=948.16(S) 48" INV.=947.66(NW)
110	STORM MH-3 GRATE=956.75 18" INV.=951.14(S) 48" INV.=952.78(SW) 42" INV.=949.14(N)
111	Catch Basin 2-2B (CB-1.1) GRATE=955.81 18" INV.=951.49(S) 18" INV.=951.49(N)

Structure	Details
112	Catch Basin 2-2B (CB-1.1) GRATE=955.81 4" INV.=953.41(W) 18" INV.=952.13(N)
401	Catch Basin 2-3 (CB-1.2) GRATE=950.75 4" INV.=949.20(SW) 24" INV.=947.14(N)



Date	Description
11/22/2024	

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO

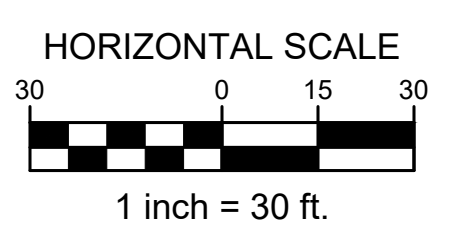
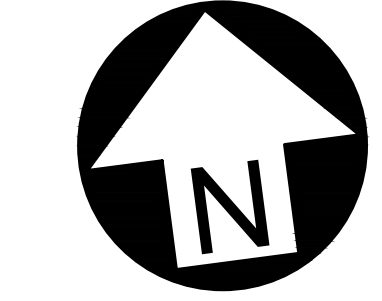
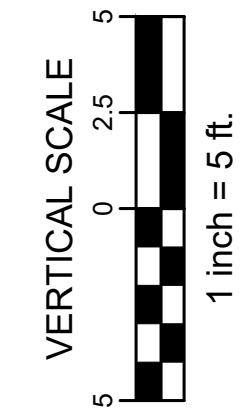
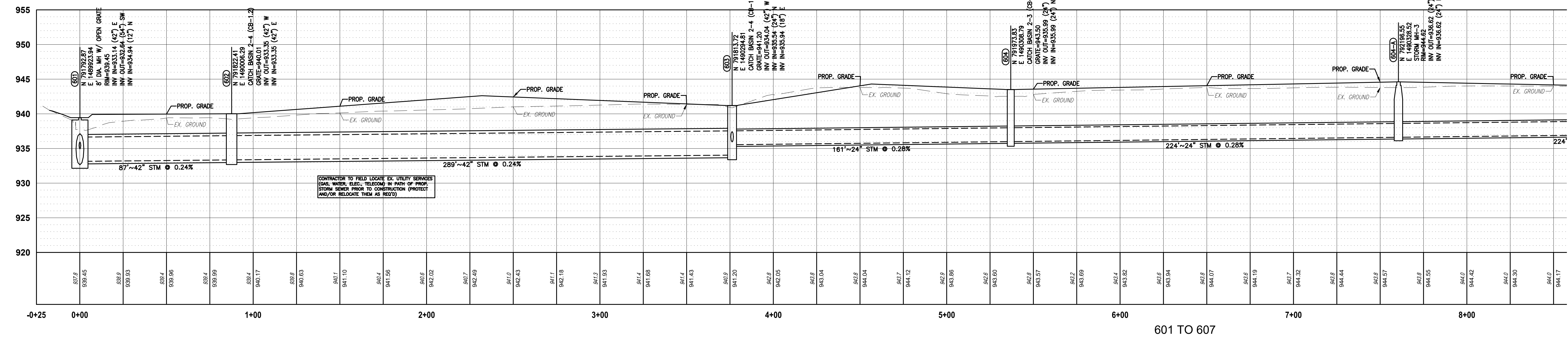
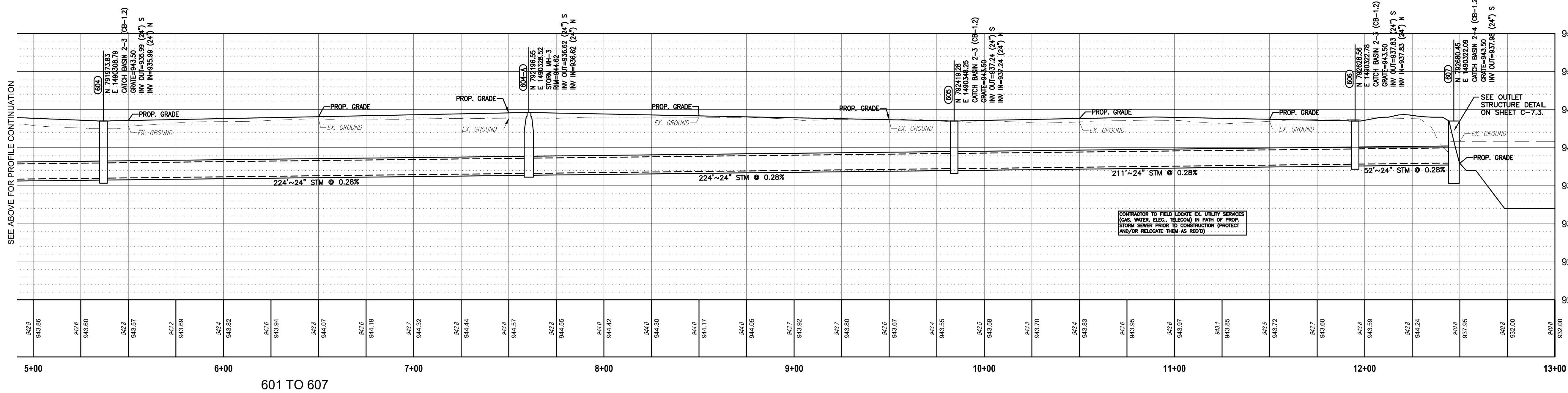
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Scale: AS SHOWN	
Date: 10.18.2024	
Sheet: STORM SEWER PROFILES	
Sheet No.: C-4.3	

STATE OF OHIO
 NATHAN D. TUBEY
 77917
 REGISTERED PROFESSIONAL ENGINEER
 11/22/2024 11:18:24 AM



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Call before you dig.



Item	Description	Date
1	ADDENDUM 4	11/22/2024

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO

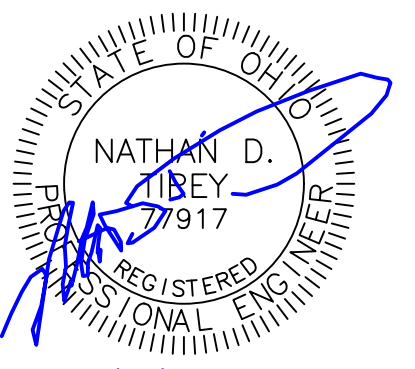
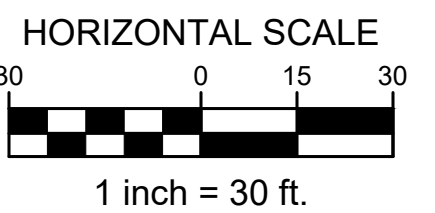
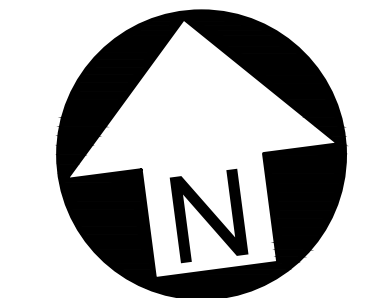
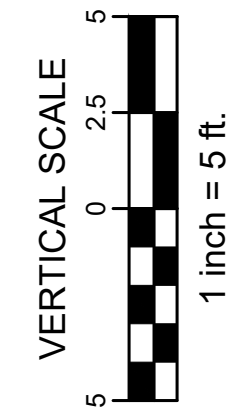
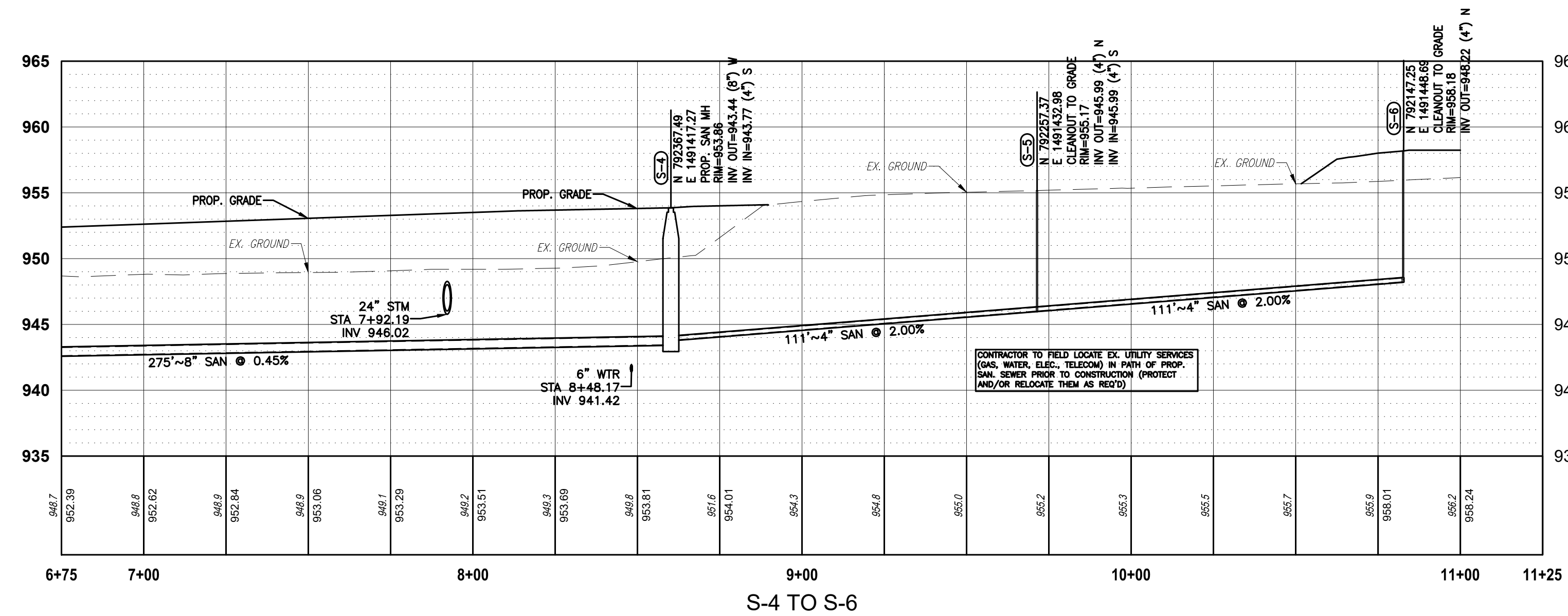
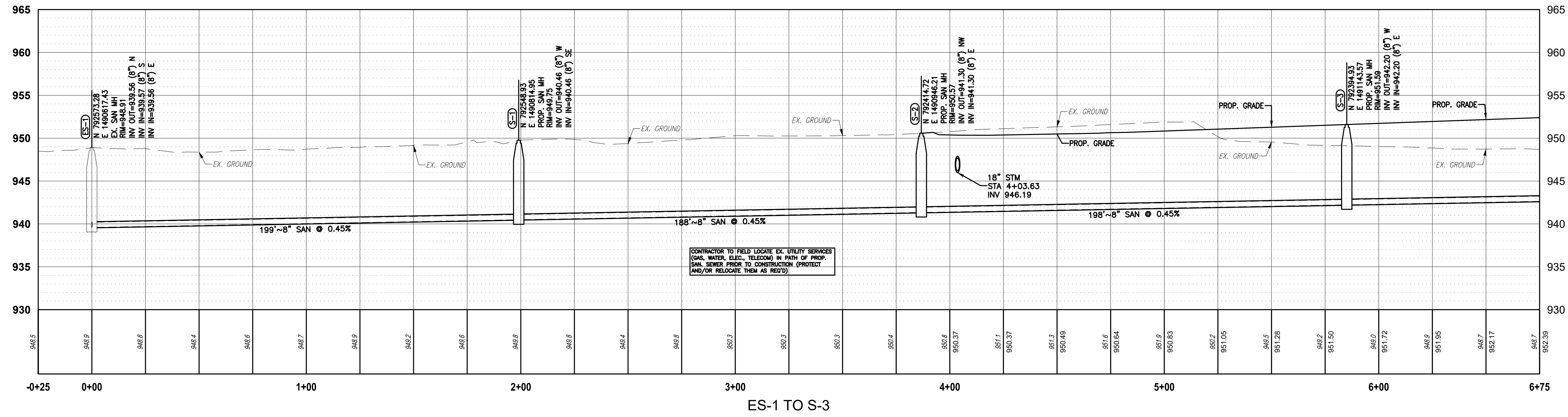
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Design: MES	Proj: 23.191
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Scale: AS SHOWN	
Date: 10.18.2024	
Sheet: STORM SEWER PROFILES	
Sheet No.: C-4.4	

NATHAN D. FREY
REGISTERED PROFESSIONAL ENGINEER
NO. 77917
STATE OF OHIO
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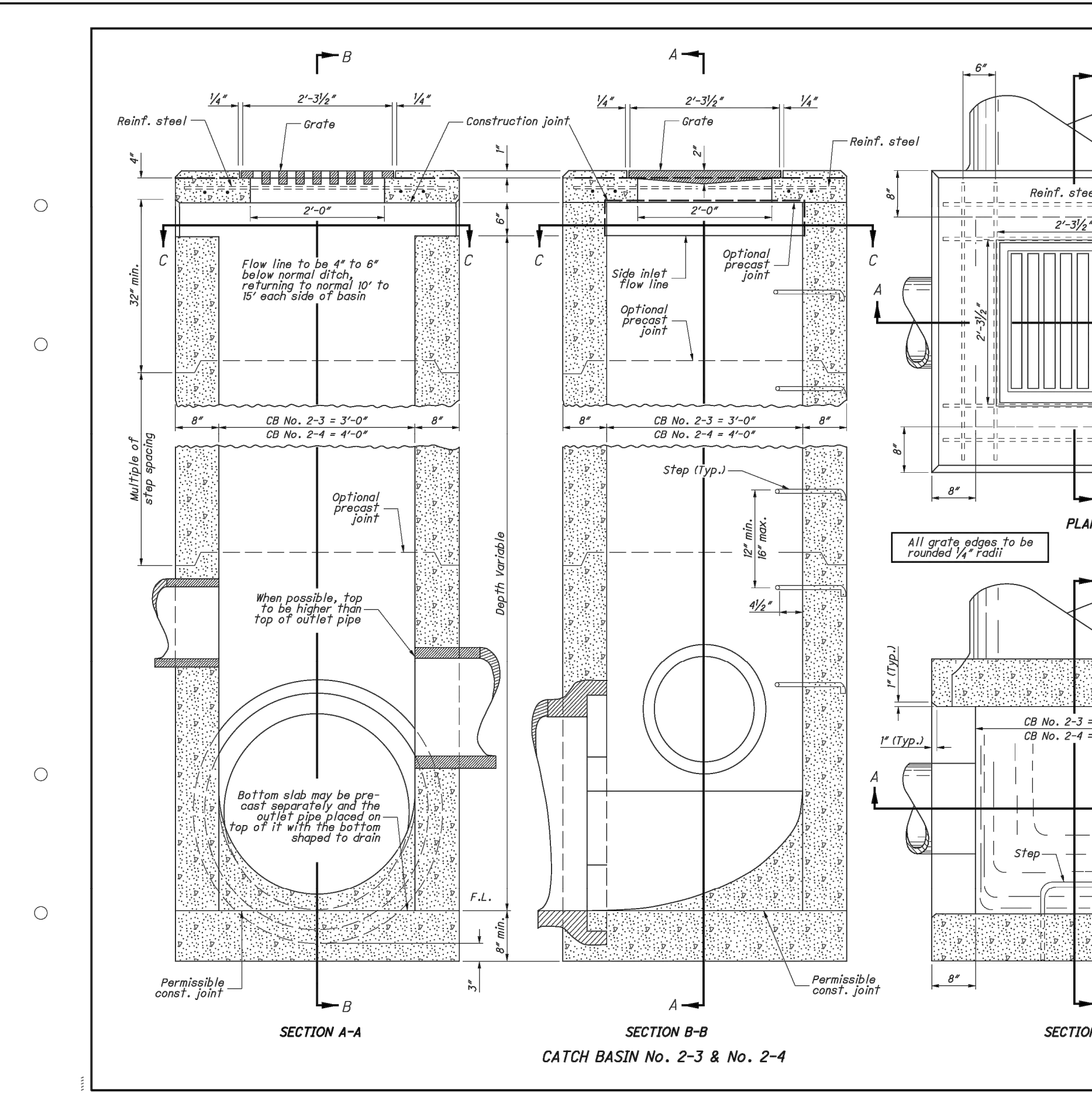
Item	Description	Date
1	ADDENDUM 4	11/22/2024

SITE DEVELOPMENT PLANS FOR:
**PIQUA HIGH SCHOOL TENNIS
& COMPREHENSIVE STORM
WATER PLAN**
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO

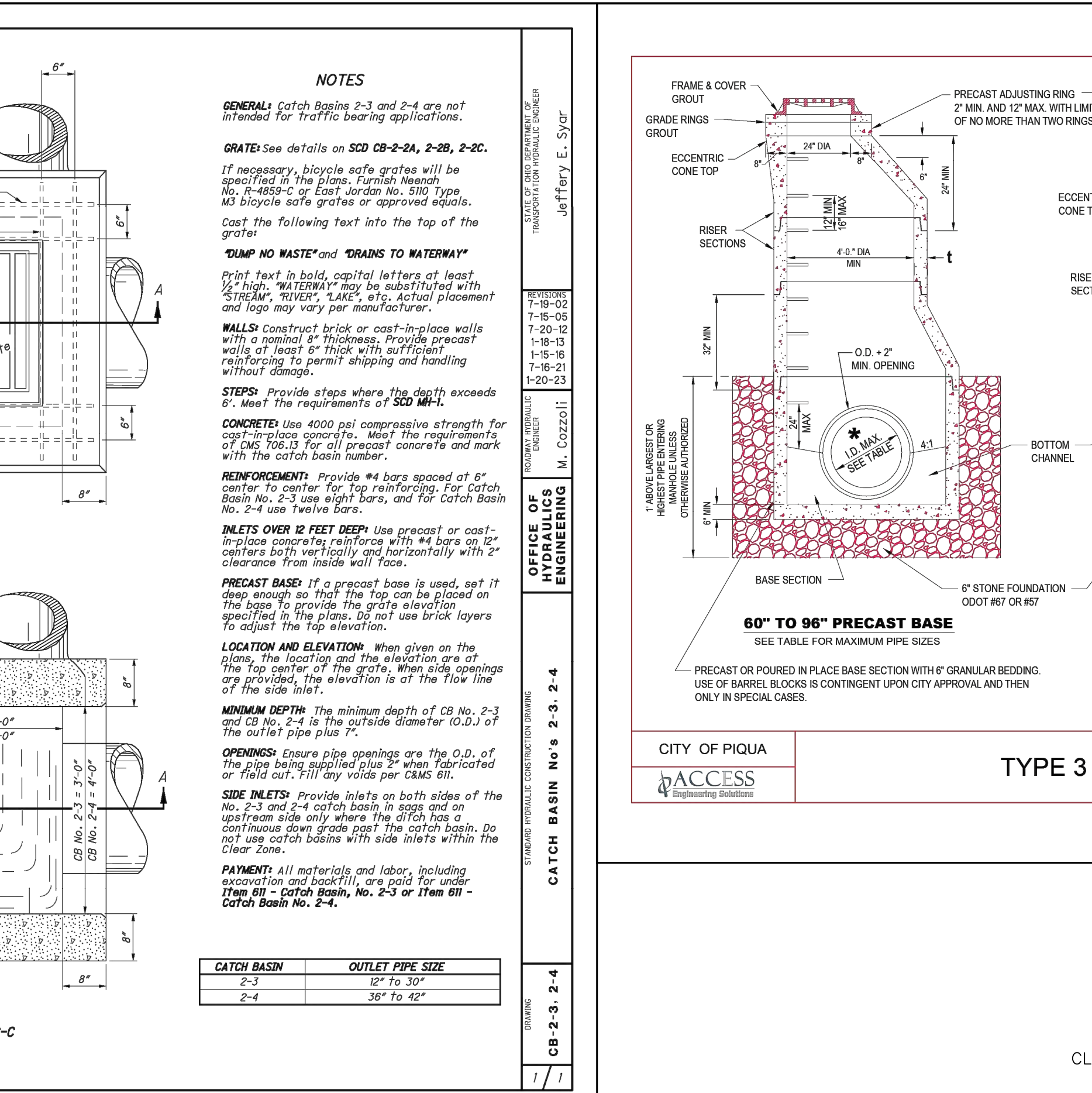


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Sheet No.: C-4.5	

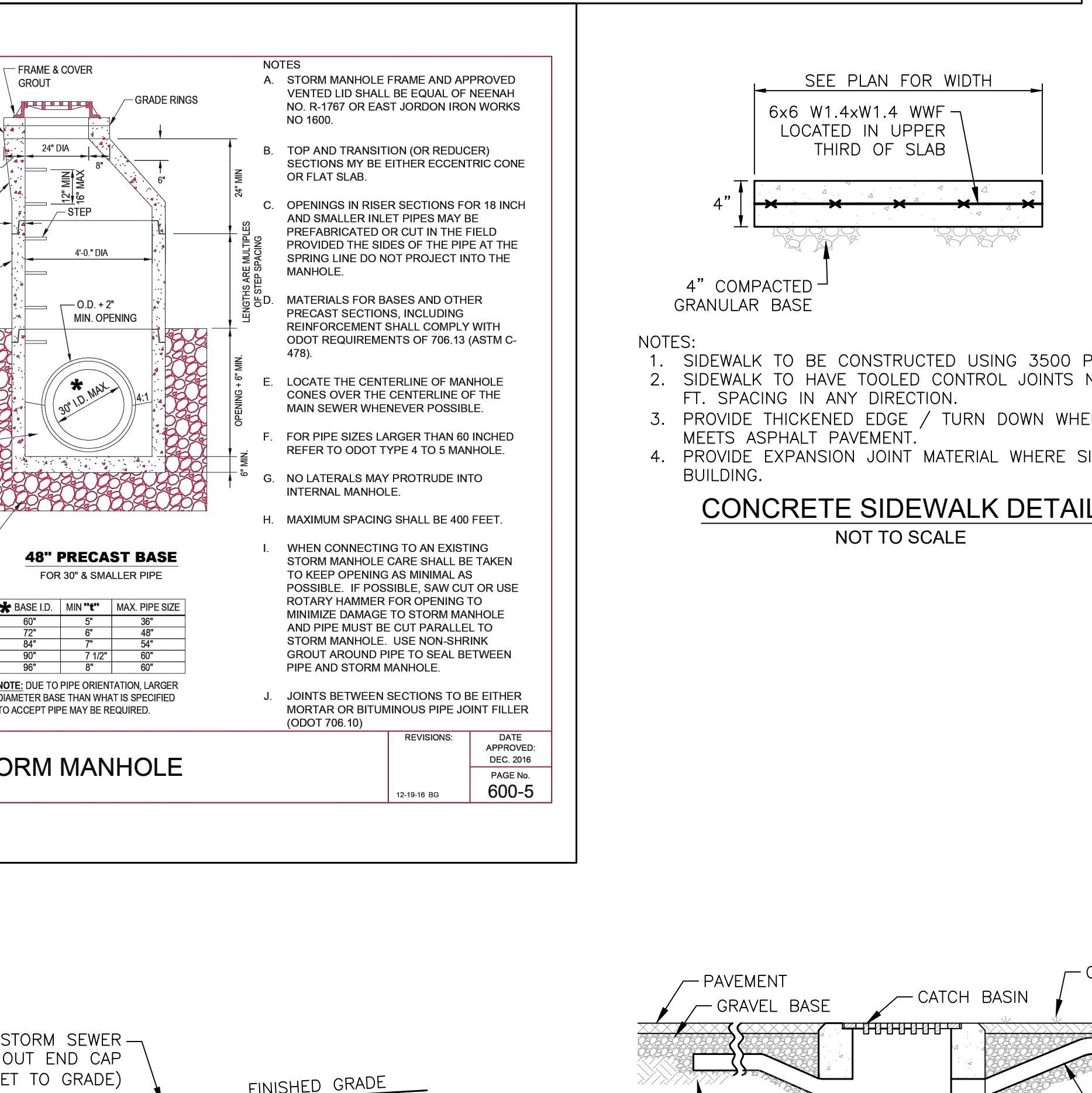
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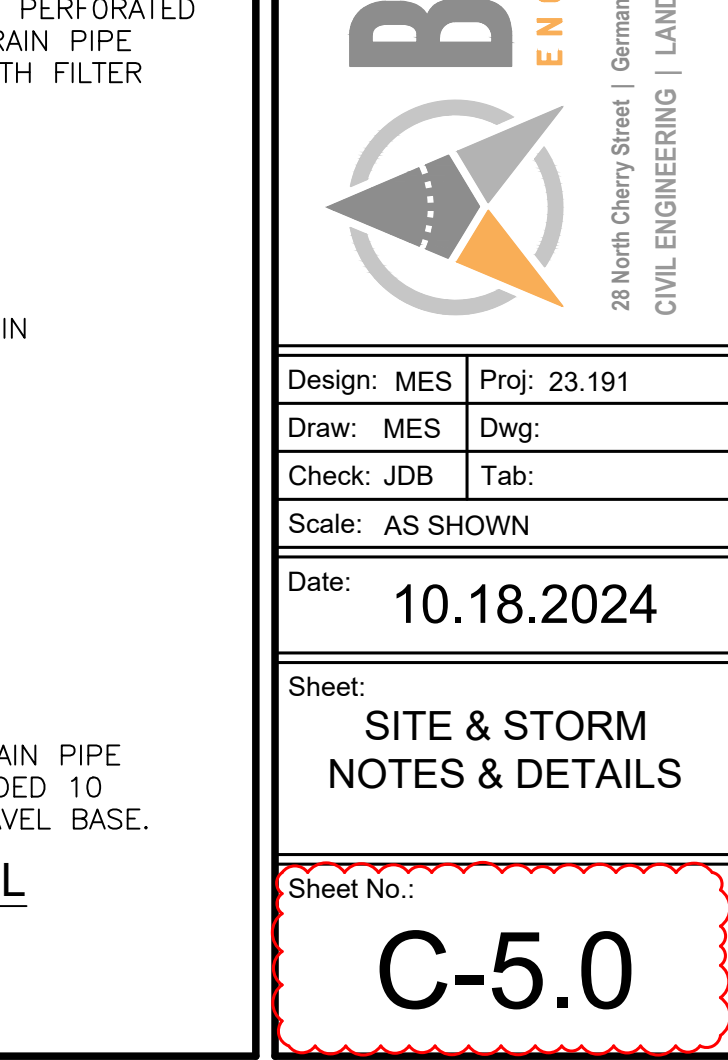
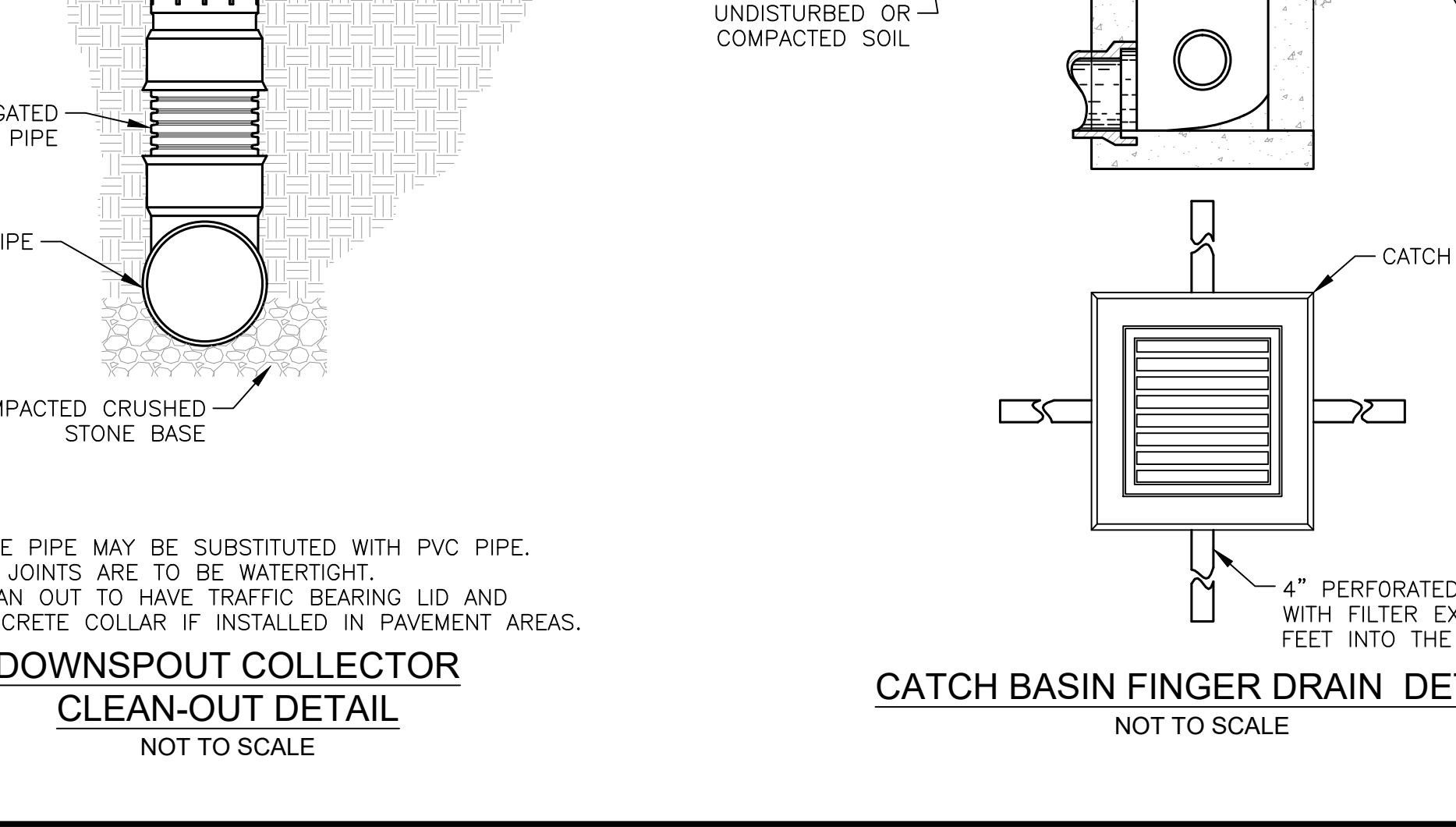
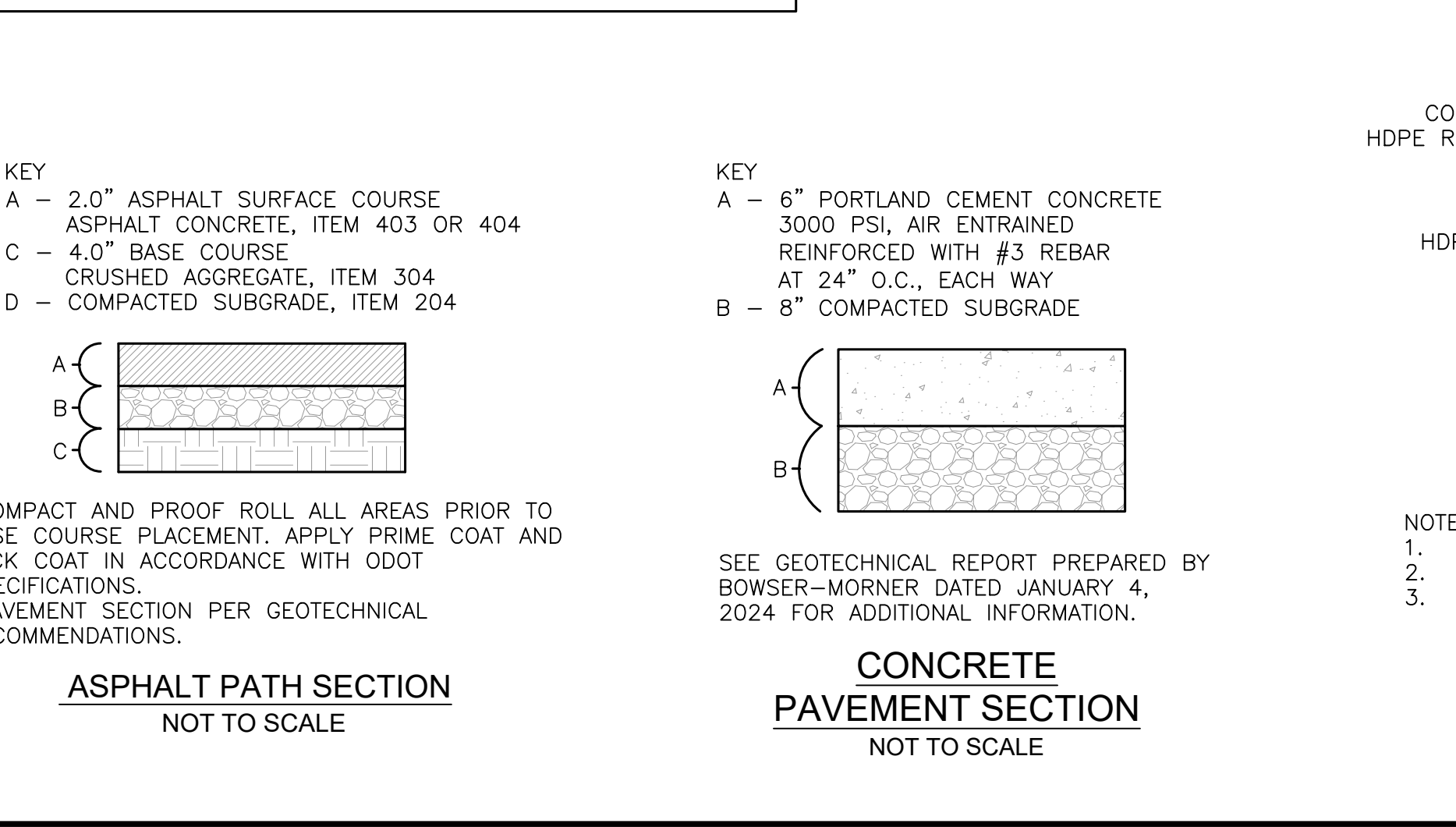
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ACCESS Engineering Solutions	11.30.20 80KX	DEC. 2018
	PAGE No.	300-9



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	PAGE No.	600-8



CITY OF PIQUA	REVISIONS:	DATE APPROVED:
ACCESS Engineering Solutions	11.30.20 80KX	DEC. 2018
	PAGE No.	600-2



KEY
 A - 2.0" ASPHALT SURFACE COURSE
 B - ASPHALT CONCRETE, ITEM 403 OR 404
 C - 4.0" BASE COURSE
 D - COMPACTED SUBGRADE, ITEM 204

KEY
 A - 6" PORTLAND CEMENT CONCRETE 3000 PSI, AIR ENTRAINED REINFORCED WITH #3 REBAR AT 24" O.C., EACH WAY
 B - 8" COMPACTED SUBGRADE

KEY
 A - 6" PORTLAND CEMENT CONCRETE 3000 PSI, AIR ENTRAINED REINFORCED WITH #3 REBAR AT 24" O.C., EACH WAY
 B - 8" COMPACTED SUBGRADE

KEY
 A - 6" PORTLAND CEMENT CONCRETE 3000 PSI, AIR ENTRAINED REINFORCED WITH #3 REBAR AT 24" O.C., EACH WAY
 B - 8" COMPACTED SUBGRADE

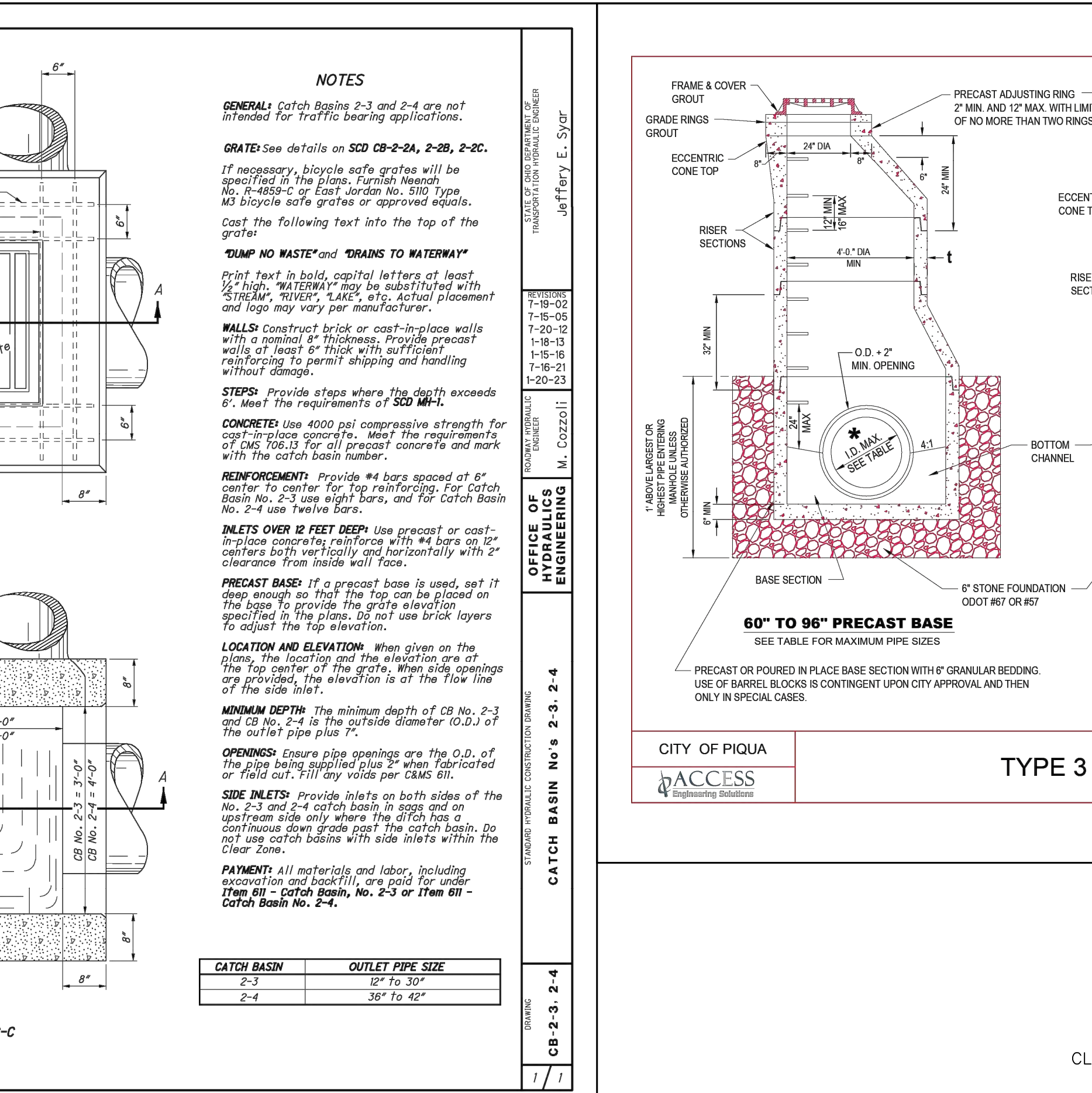
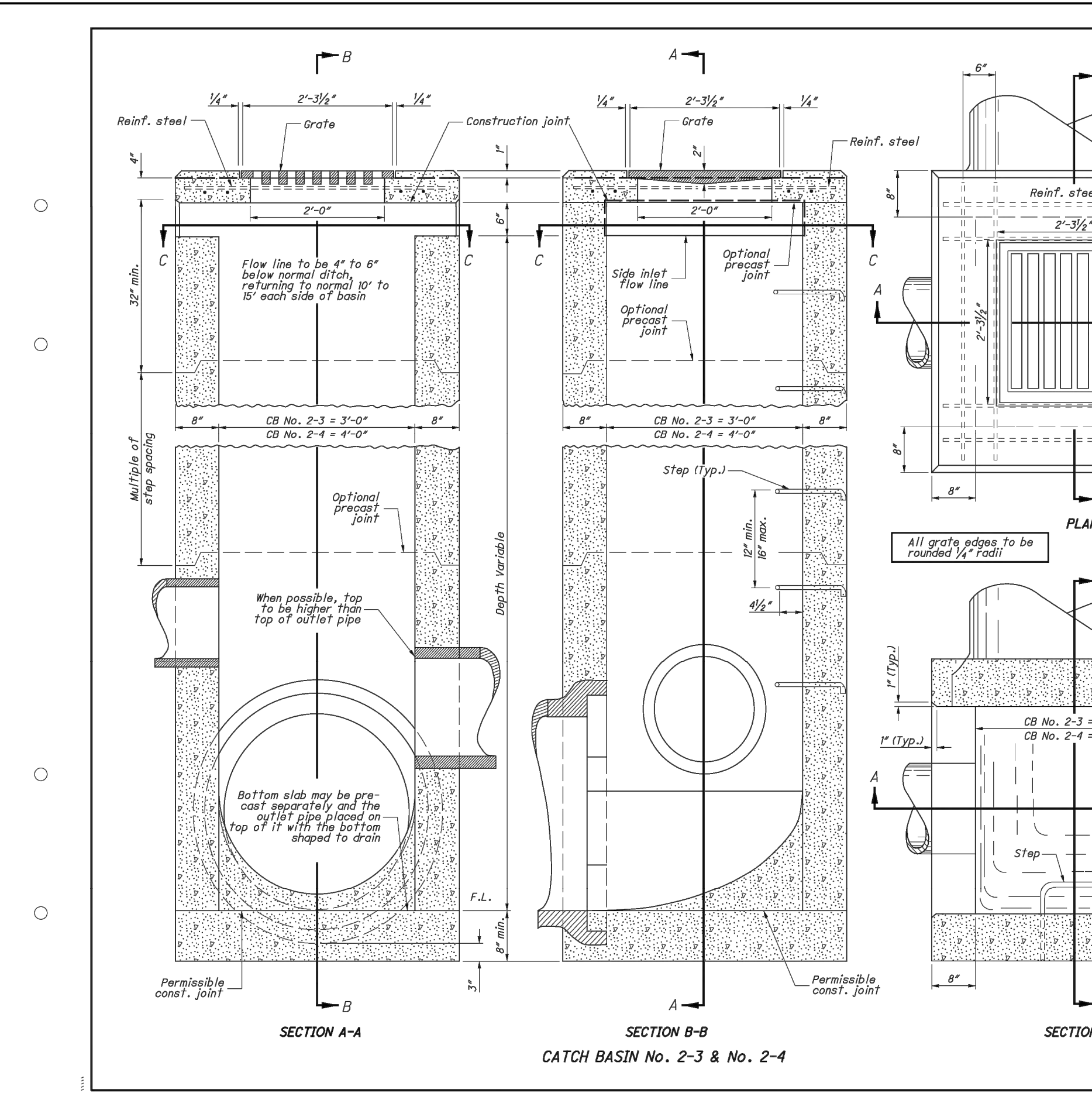
KEY
 A - 6" PORTLAND CEMENT CONCRETE 3000 PSI, AIR ENTRAINED REINFORCED WITH #3 REBAR AT 24" O.C., EACH WAY
 B - 8" COMPACTED SUBGRADE

ASPHALT PATH SECTION
NOT TO SCALE

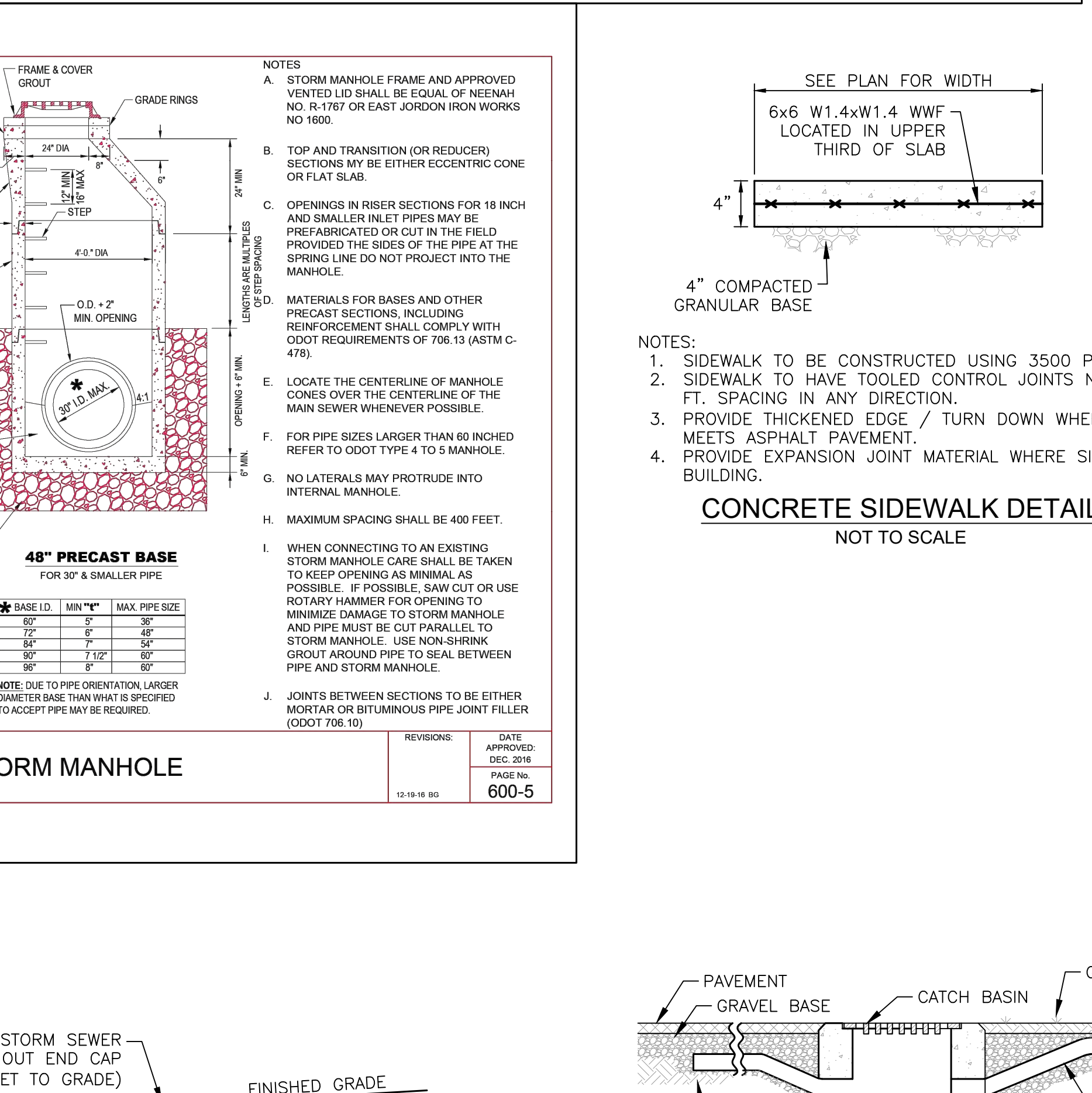
CONCRETE PAVEMENT SECTION
NOT TO SCALE

DOWNSPOUT COLLECTOR CLEAN-OUT DETAIL
NOT TO SCALE

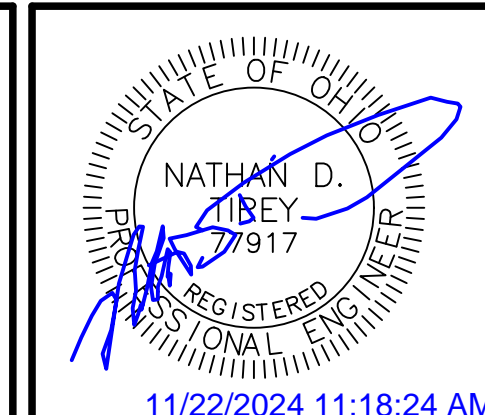
CATCH BASIN FINGER DRAIN DETAIL
NOT TO SCALE



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	PAGE No.	600-5



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ACCESS Engineering Solutions	11.30.20 80KX	DEC. 2018
	PAGE No.	600-2



Date	11/22/2024
Description	ADDITIONAL 4
Item	1

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO



Design: MES	Proj: 23.191
Draw: MES	Dwg:
Check: JDB	Tab:
Scale: AS SHOWN	
Date: 10.18.2024	
Sheet: SITE & STORM NOTES & DETAILS	
Sheet No.: C-5.0	



Know what's below.
Call before you dig.

NOTES

GENERAL: Catch Basins 2-5 and 2-6 are not intended for traffic bearing applications.

GRATE: See details on SCD CB-2-A, 2-B, 2-C. Minimum weight of grate: 220 lbs. or meets the requirements of COT 1.1.2. Provide grate openings and dimensions as shown here unless otherwise specified in the plans.

If necessary, bicycle safe grates will be specified in the plans. Furnish Newark No. R-400-3 or Cast Iron No. 5.112 Type M3 bicycle safe grates or approved equals.

Cast the following text into the top of the grate:

"DUMP NO WASTE" and "DRAINS TO WATERWAY"

Print text in bold, capital letters at least 1/2" high. "WATERWAY" may be substituted with "STREAM", "RIVER", "LAKE", etc. Actual placement and logo may vary per manufacturer.

WALLS: Construct reinforced concrete walls 8" thick, as shown. Construct brick walls used in place of reinforced concrete with a nominal thickness of 2". Provide grout walls at least 6" thick with sufficient reinforcing to permit shipping and handling without damage and at least equivalent to reinforced cast-in-place construction.

STEPS: Provide steps where the depth exceeds 6". Meet the requirements of SCD M1-1.

CONCRETE: Use 4000 psi compressive strength for cast-in-place concrete. Meet the requirements of CDS 706.13 for all precast concrete and mark with the catch basin number.

REINFORCEMENT: Provide #6 bars spaced 6" center to center and #6 bars spaced as shown for top reinforcing. Main bars to clear bottom of slab by 2". Side wall to be reinforced with #6 bars horizontal in each side, 6" long for CB No. 2-5 and 7" long for CB 2-6, spaced at 1' center to center, and #6 bars in each corner length equals depth plus 1'.

PRECAST BASE: If a precast base is used, set it deep enough so that the top can be placed on the base to provide the grate elevation specified in the plans. Do not use brick layers to adjust the top elevation.

LOCATION AND ELEVATION: When given on the plans, the location and the elevation are at the top center of the grate. When side openings are provided, the elevation is at the flow line of the side inlet.

MINIMUM DEPTH: The minimum depth of CB No. 2-5 and CB No. 2-6 is the outside diameter (D.O.) of the outlet pipe plus 7".

OPENINGS: Ensure pipe openings are the O.D. of the pipe being supplied plus 2" when fabricated or field cut. Fill all voids per CBMS 51.1.

SIDE INLETS: Provide inlets on both sides of the No. 2-5 and 2-6 catch basin in sags and on upstream side only where the ditch has continuous down grade past the catch basin. Do not use catch basins with side inlets within the Clear Zone.

PAVEMENT: All materials and labor, including excavation and backfilling, are paid for under Item 612 - Catch Basin, No. 2-5 or Item 611 - Catch Basin, No. 2-6.

CATCH BASIN	OUTLET PIPE SIZE
2-5	48" to 54"
2-6	60" to 72"

TABLE: FULL-HEIGHT HEADWALLS (ENGLISH)

PIPE DIA. D	H	θ = 0°				θ = 15°				θ = 30°				θ = 45°				PIPE DIA. D															
		L ₁	L ₂	h ₁	h ₂	L ₁	L ₂	h ₁	h ₂	L ₁	L ₂	h ₁	h ₂	L ₁	L ₂	h ₁	h ₂																
42"	5'-4"	3'-3"	1'-6"	2'-6"	1'-6"	#5	3'-7"	3'-6"	7.2	7.1	695	8'-9"	4'-6"	4'-1"	3'-7"	7.6	7.5	656	7'-10"	5'-9"	3'-7"	3'-8"	7.8	7.7	688	7'-10"	7'-9"	3'-7"	3'-8"	9.0	8.9	794	42"
48"	5'-10"	3'-6"	1'-6"	2'-9"	1'-6"	#5	4'-4"	3'-9"	8.8	8.6	861	10'-0"	5'-4"	4'-6"	3'-10"	9.3	9.1	806	8'-9"	6'-10"	3'-10"	3'-11"	9.4	9.2	833	8'-9"	8'-9"	3'-10"	3'-10"	10.9	10.8	970	48"
54"	6'-5"	3'-9"	1'-6"	3'-0"	1'-6"	#5	5'-2"	4'-2"	10.8	10.5	1,070	11'-4"	6'-3"	5'-0"	4'-2"	11.3	11.0	977	9'-8"	7'-11"	4'-2"	4'-3"	11.2	11.0	1,002	9'-8"	9'-2"	4'-2"	4'-4"	13.1	12.9	1,149	54"
60"	7'-0"	4'-0"	1'-6"	3'-3"	1'-6"	#5	5'-11"	4'-5"	12.7	12.4	1,153	12'-7"	7'-2"	5'-4"	4'-6"	13.4	13.1	1,127	10'-7"	9'-0"	4'-4"	4'-7"	13.2	12.9	1,124	10'-7"	12'-0"	4'-4"	4'-7"	15.4	15.1	1,306	60"
72"	8'-3"	4'-6"	1'-7"	3'-9"	1'-6"	#7	7'-5"	5'-0"	17.5	17.1	1,808	15'-1"	8'-11"	6'-3"	5'-1"	18.5	18.0	1,869	12'-5"	11'-2"	4'-10"	5'-2"	18.0	17.5	1,770	12'-5"	14'-10"	4'-10"	5'-3"	21.0	20.6	2,080	72"
84"	9'-4"	5'-0"	1'-10"	4'-3"	1'-6"	#8	9'-0"	5'-8"	24.6	24.0	2,608	17'-7"	10'-9"	7'-0"	5'-9"	25.7	25.1	2,563	14'-7"	13'-4"	5'-6"	5'-10"	25.1	24.5	2,559	14'-7"	17'-8"	5'-4"	5'-10"	28.9	28.3	2,943	84"

STORM SEWER TRENCH DETAIL
(NON-RIGID PIPE)

TRENCH DETAIL NOTES

A. GRANULAR BEDDING SHALL BE CRUSHED STONE OR GRAVEL, ODOT 603 TYPE 9 (85% OR 80%), OR OTHER APPROVED EQUIVALENT.

B. ALL TRENCHES OUTSIDE THE RIGHT-OF-WAY FROM PROPOSED OR EXISTING PAVEMENT, CURB, DRIVEWAY, ALLEYS, STONE AREAS OR WALKS CAN BE COMPACTED WITH EXISTING NATIVE MATERIAL IN 12 INCH MAXIMUM LIFTS OR AS APPROVED BY THE CITY. NO MATERIAL SHALL BE USED FOR BACKFILLING THAT CONTAINS STONE, ROCKS, ETC. GREATER THAN 4 INCH DIAMETER.

ALL TRENCHES INSIDE THE RIGHT-OF-WAY FROM PROPOSED OR EXISTING PAVEMENT, CURB DRIVEWAYS, ALLEYS, STONE AREAS OR WALKS SHALL BE COMPACTED WITH GRANULAR BACKFILL MATERIAL ODOT 603 TYPE 1 IN 6" MAXIMUM LIFTS.

A DENSITY TEST ON GRANULAR BACKFILL OF 95% OF ASTM D598 STANDARD PROCTOR CURVE MAY BE REQUIRED TO BE PERFORMED BY A COMMERCIAL TESTING LAB SATISFACTORY TO THE CITY.

C. OFF-PAVEMENT AREAS SHALL BE PROVIDED WITH A MINIMUM OF 6 INCH OF TOPSOIL OVER THE COMPACTED MATERIAL AND THEN SEEDED AND MULCHED PER ODOT ITEM 658.

ALL PAVED AREAS WITHIN THE STREET RIGHT-OF-WAY SHALL FOLLOW THE REQUIREMENTS OF PAGE 309-14 OF THE STANDARD DRAWINGS.

D. THE OPEN ENDS OF ALL PIPES SHALL BE PLUGGED TO THE APPROVAL OF THE CITY BEFORE LEAVING THE WORK FOR THE NIGHT.

REVISIONS: DATE APPROVED: SHEET NO. 600-9

NOTES

APPLICATION: PROVIDE FULL HEIGHT HEADWALLS FOR SEWED AND NON-SEWED CULVERTS HAVING A DIAMETER OR RISE OF 42" TO 84" INCLUSIVE. USE TYPE "A" WHEN THE SKEW ANGLE (θ) IS TEN DEGREES OR LESS AND TYPE "B" WHEN THE SKEW ANGLE IS OVER TEN DEGREES.

DESIGN DATA: THE FOLLOWING DESIGN DATA IS ASSUMED:

INTERNAL ANGLE OF FRICTION OF BACKFILL SOIL, φ₁ = 30°
 TOTAL UNIT WEIGHT OF BACKFILL SOIL, γ = 120 PCF
 INTERNAL ANGLE OF FRICTION (DRAINED), FOUNDATION SOIL, φ₂ = 28°
 UNDRAINED SHEAR STRENGTH (CONSOLIDATED), FOUNDATION SOIL, S_u = 1500 PSF
 UNIT WEIGHT OF CONCRETE = 150 PCF
 SLOPE OF BACKFILL = 2:1

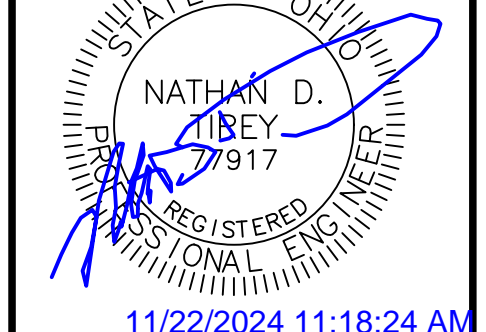
CONCRETE CLASS CCI - COMPRESSIVE STRENGTH = 4000 PSI
 REINFORCING STEEL - ASTM A635, A635, OR A637 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI (ALL REINFORCING SHALL BE EPOXY COATED.)

BASED ON THE ASSUMED DESIGN DATA, THE HEADWALLS FOR THE STANDARD DESIGN ACHIEVE FACTORED BEARING RESISTANCES THAT ARE GREATER THAN THEIR RESPECTIVE FACTORED BEARING PRESSURES. IF A BACKFILL MATERIAL WITH A HIGHER INTERNAL ANGLE OF FRICTION OR A LIGHTER TOTAL UNIT WEIGHT IS USED, OR IF A FOUNDATION SOIL WITH A HIGHER UNDRAINED INTERNAL ANGLE OF FRICTION OR A HIGHER UNDRAINED SHEAR STRENGTH IS ENCOUNTERED, THEN THE STABILITY OF THE WALL IS SATISFACTORY.

DETAILS AND QUANTITIES: ARE SHOWN FOR CIRCULAR SECTIONS ONLY. WHEN USED WITH REINFORCED ELLIPTICAL CONCRETE PIPE OR CORRUGATED METAL PIPE ARCHES, ADJUST DIMENSIONS AND QUANTITIES TO CONFORM TO THOSE LISTED FOR THE NEAREST SIZE CIRCULAR PIPE. APPLY THE DIMENSIONS ESTABLISHED BY VERTICAL DIAMETER TO SPAN, ROUND ALL CALCULATED DIMENSIONS ESTABLISHED BY HORIZONTAL DIAMETER TO THE NEAREST 1". CHAMFER ALL EXPOSED CORNERS 1/4".

HEADWALL LOCATION: DETERMINE BY INTERSECTION OF THE EMBANKMENT SLOPE AT THE BACK OF THE HEADWALL AT POINT "K". PROVIDE 2:1 SLOPES ADJACENT TO THE HEADWALL.

PAVEMENT: ITEM 602 CONCRETE MASONRY INCLUDES REINFORCING.



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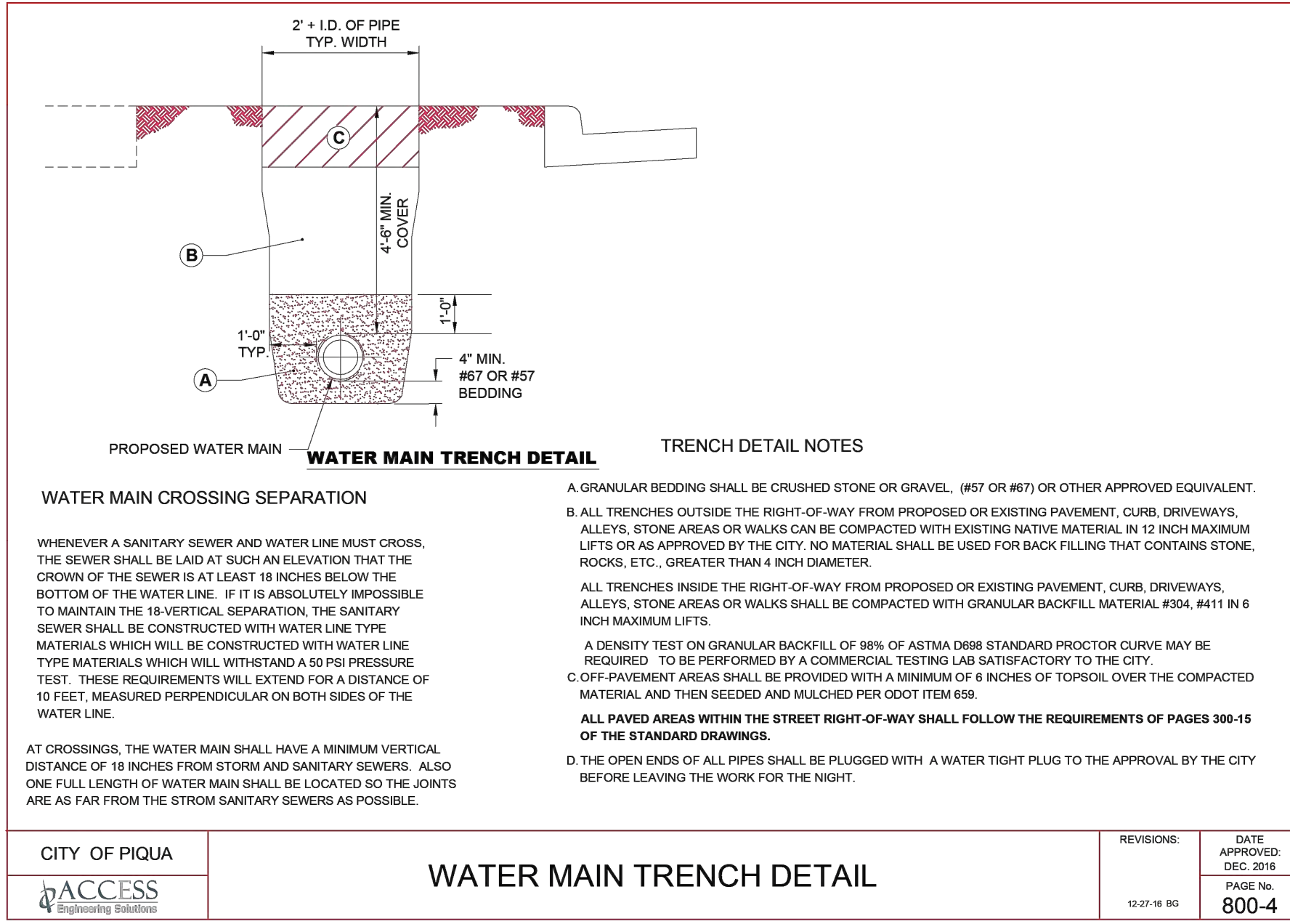
Date	Description
11/22/2024	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO

BURKHARDT ENGINEERS & SURVEYORS
 28 North Cherry Street | Germantown, Ohio 45327 | Phone: 937-356-0660 | BURKHARDTINC.COM
 CIVIL ENGINEERING | LAND SURVEYING | NATIONAL RETAIL SITE DEVELOPMENT

Design: MES Proj: 23.191
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 Scale: AS SHOWN
 Date: 10.18.2024
 Sheet: STORM DETAILS
 Sheet No.: C-5.1

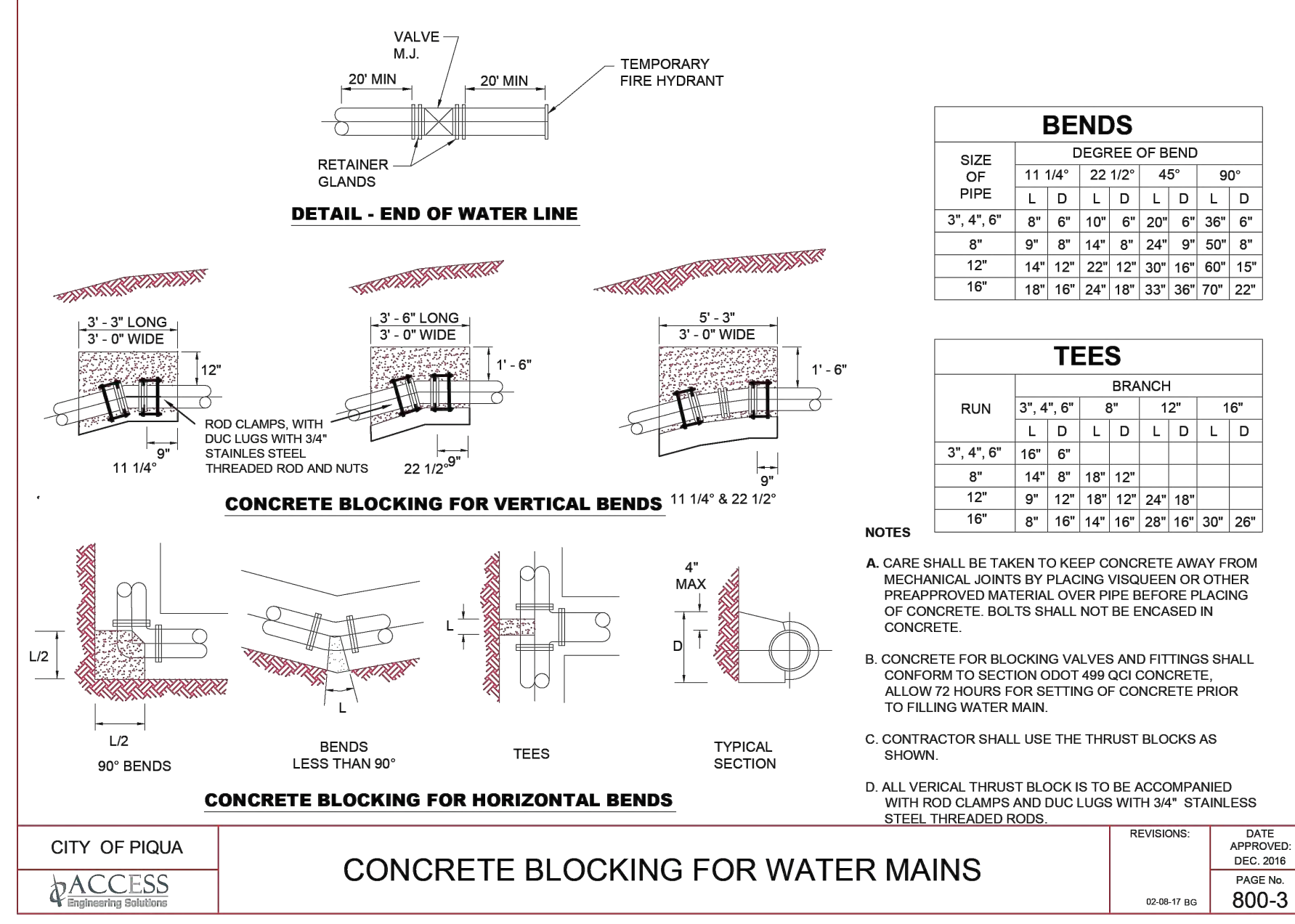
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WATER MAIN TRENCH DETAIL

CITY OF PIQUA
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PAGE No: 800-4



CONCRETE BLOCKING FOR WATER MAINS

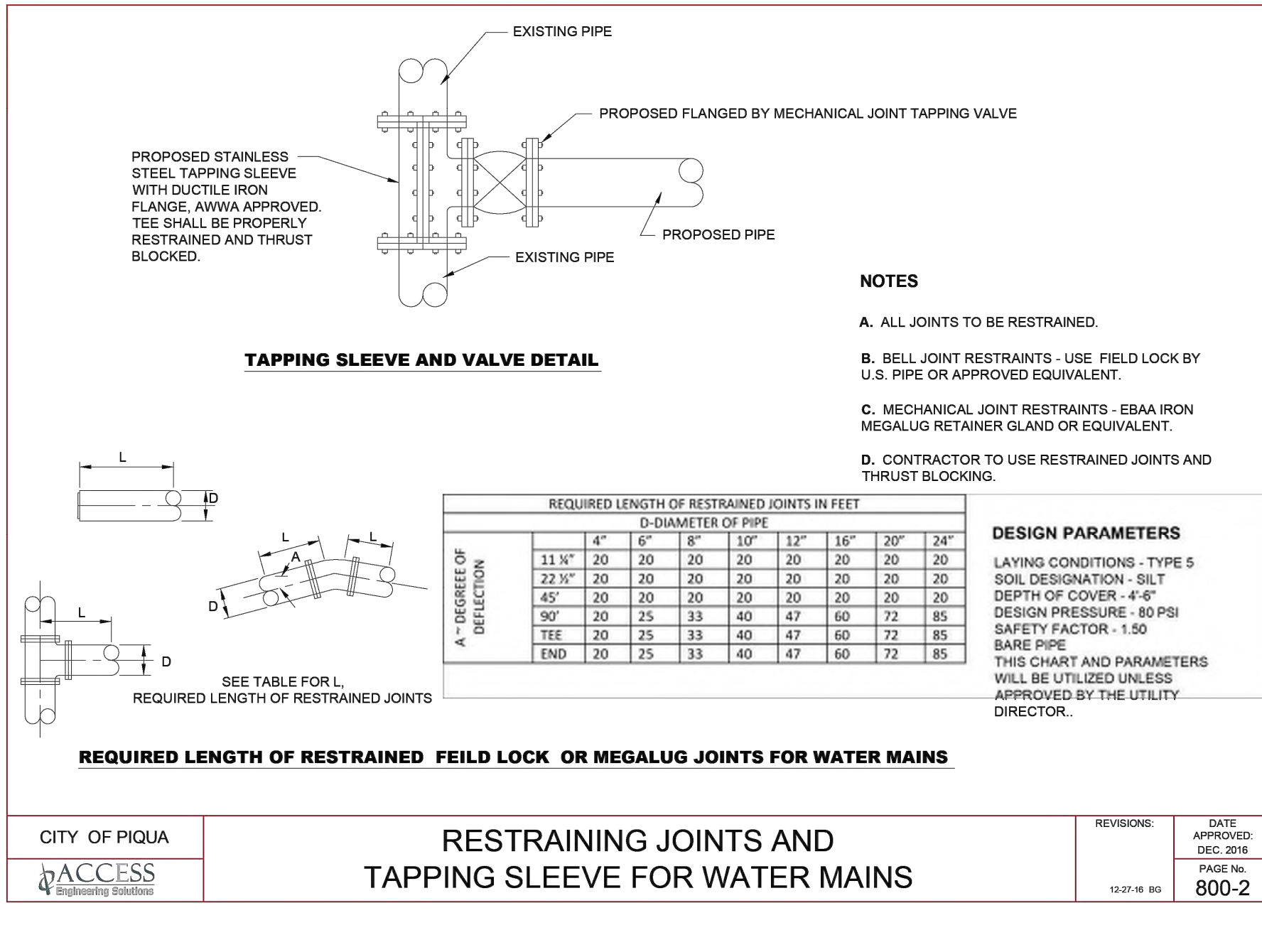
CITY OF PIQUA
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Engineering Solutions

REVISIONS: DATE APPROVED: DEC. 2016
PAGE No: 800-3

MISCELLANEOUS WATER NOTES

CITY OF PIQUA
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PAGE No: 800-6



RESTRAINING JOINTS AND TAPPING SLEEVE FOR WATER MAINS

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PAGE No: 800-2

WATER MAIN MATERIAL AND TESTING

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PAGE No: 800-5



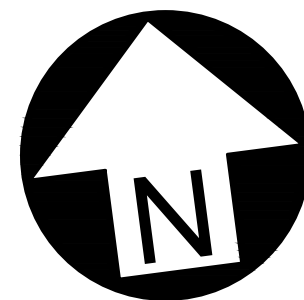
Date	Description
11/22/2024	ADDENDUM 4

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PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
1 INDIAN TRAIL
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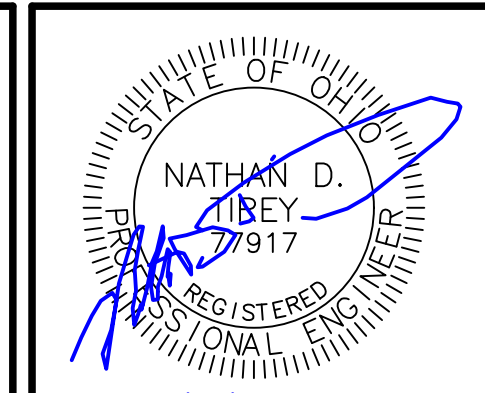


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Sheet No.: C-5.2	





PROPOSED EROSION CONTROL LEGEND	
	SF SILT FENCE
	CWO CONCRETE WASHOUT
	CONSTRUCTION ENTRANCE
	ROCK CHECK DAM



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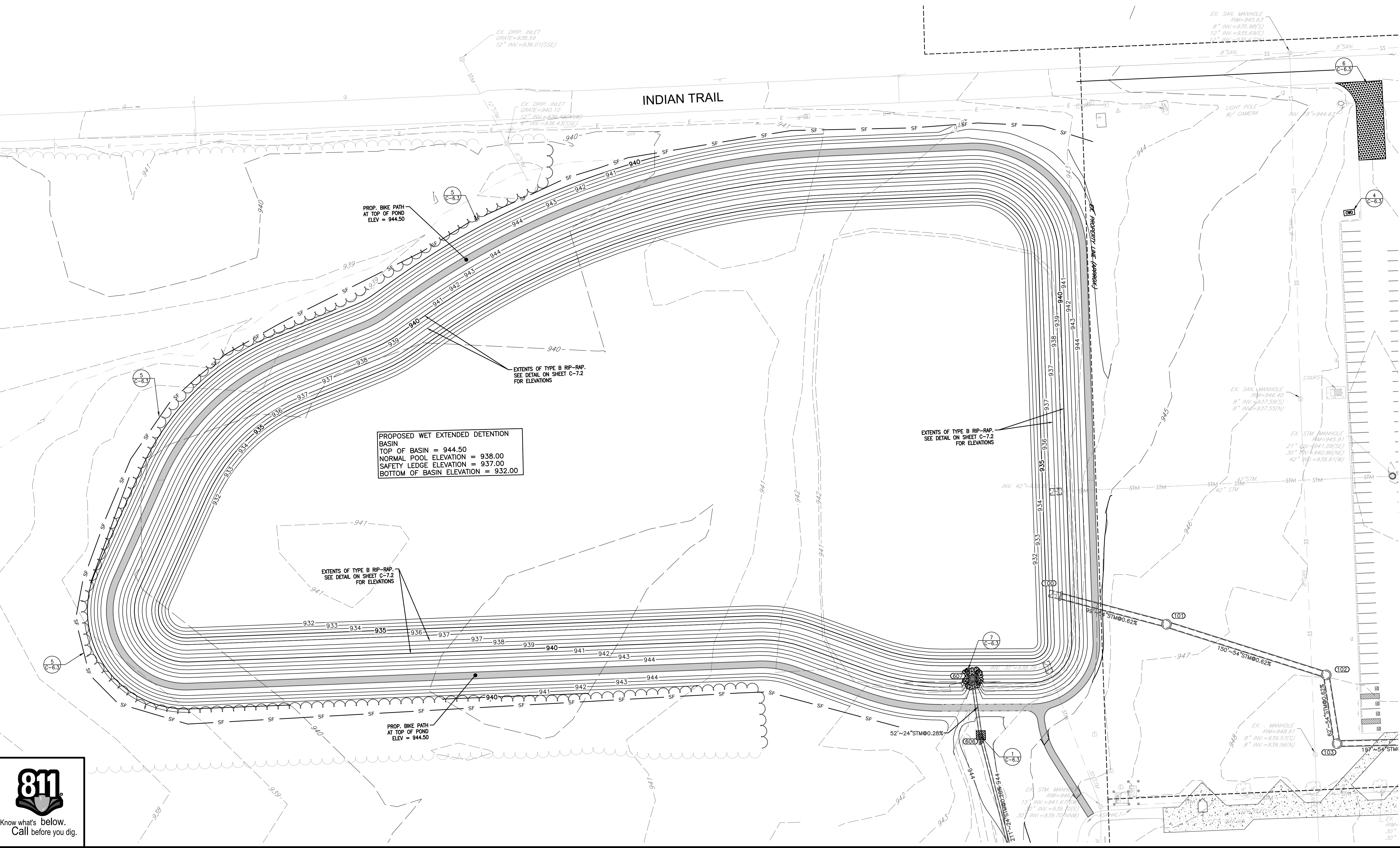
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Item 1	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO



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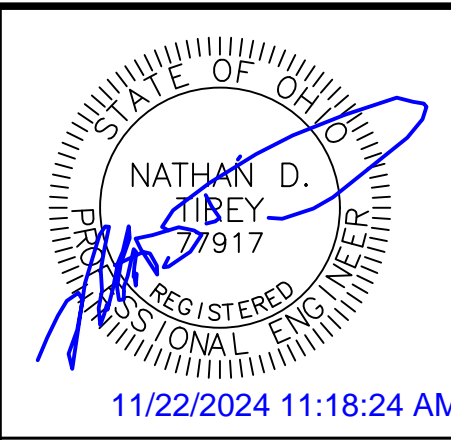


Know what's below.
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PROPOSED EROSION CONTROL LEGEND

	SILT FENCE
	CONCRETE WASHOUT
	CONSTRUCTION ENTRANCE
	ROCK CHECK DAM

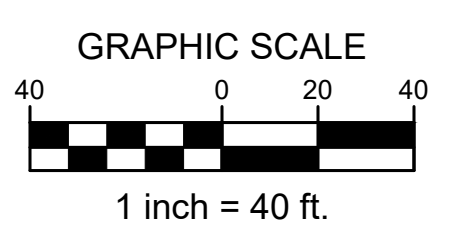
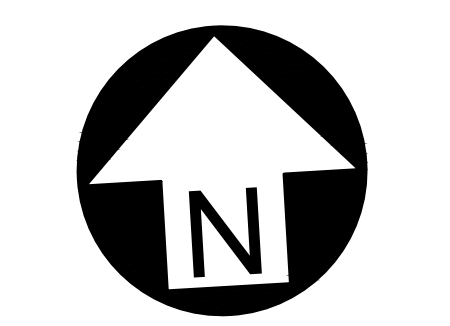


Date	Description
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1	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
**PIQUA HIGH SCHOOL TENNIS
& COMPREHENSIVE STORM
WATER PLAN**
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO

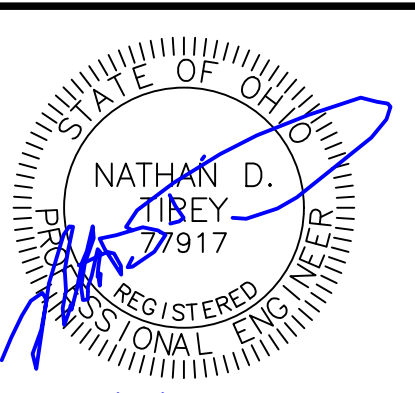


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Sheet: SWPPP - SWALE	



Sheet No.: **C-6.1**

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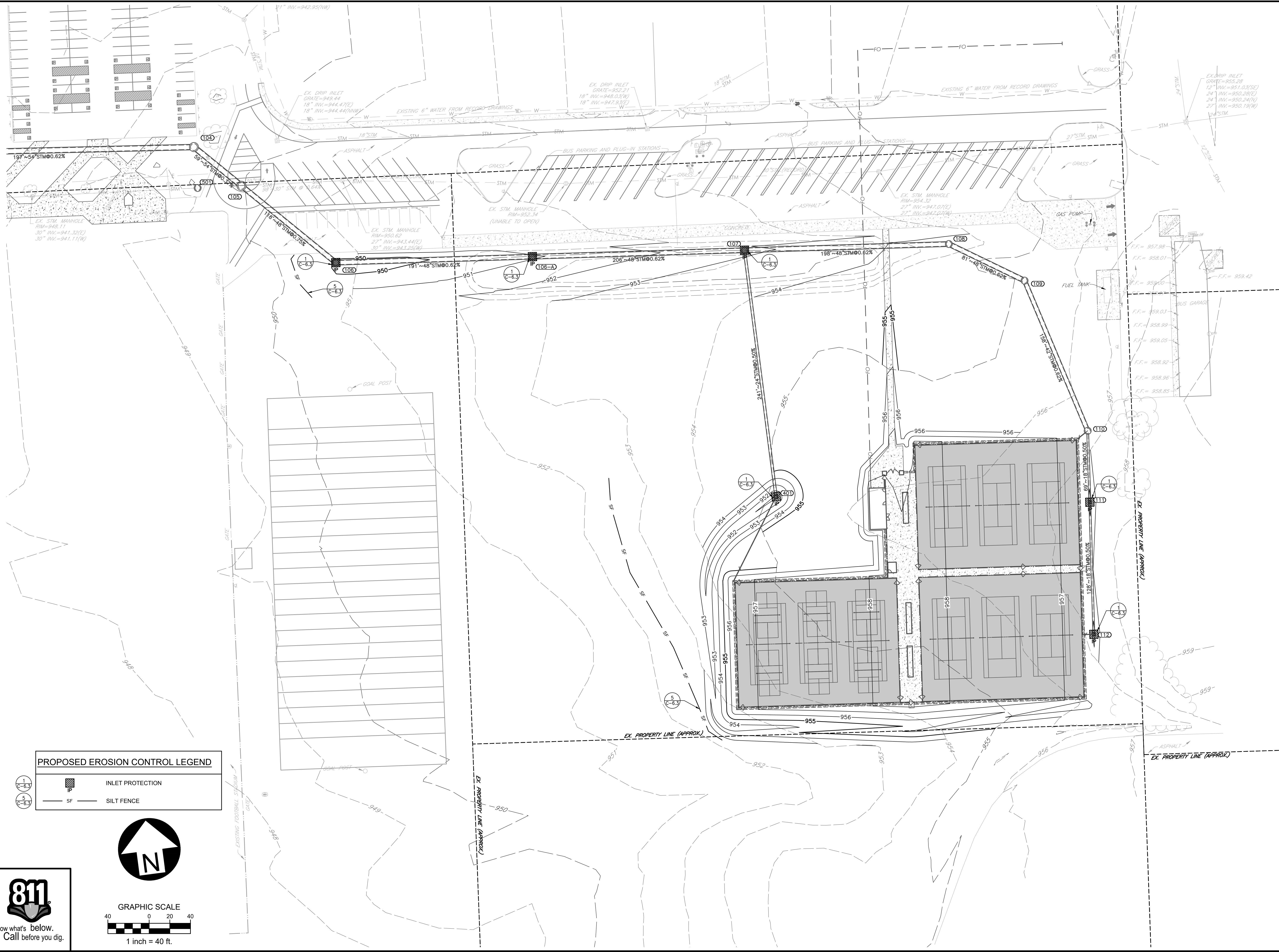
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Date	Description
11/22/2024	1 ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
**PIQUA HIGH SCHOOL TENNIS
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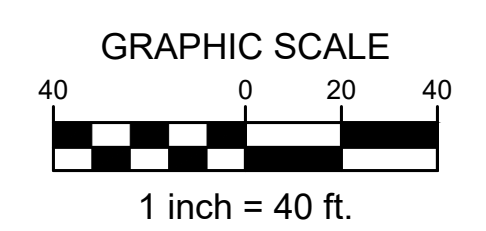
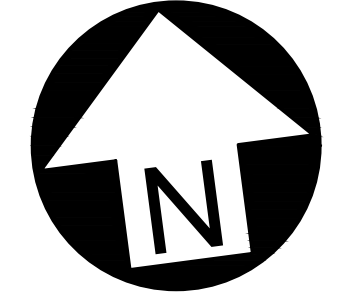


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Sheet:	SWPPP - TENNIS COURTS
Sheet No.:	C-6.2



PROPOSED EROSION CONTROL LEGEND

	INLET PROTECTION
	SILT FENCE



GENERAL STORMWATER POLLUTION PREVENTION NOTES

- All erosion and sediment control practices must conform to the standards and specifications set forth by the Local, State, and Federal Authorities.
- Construction activities shall be scheduled such that a minimum area of the site is disturbed at a time. Construction operation shall be scheduled and performed so that preventative soil erosion control measures are in place prior to excavation in critical areas and temporary stabilization measures are in place immediately following backfilling operations. Contractor shall reduce effects of storm water by using and/or maintaining grassed swales, infiltration structures, or water diversions.
- Special precautions will be taken in the use of construction equipment to prevent situations that promote erosion.
- Cleanup will be done in a manner to ensure that erosion control measures are not disturbed.
- The soil erosion controls are to be inspected once a week and within 24 hours of a 0.50 inch or greater rain event. A written log of these inspections and improvements to controls shall be kept on site. The logs shall include the date of inspection, name of the inspector, weather conditions, actions taken to correct any problems and the date corrective actions were taken.
- Temporary soil stabilization shall occur within 7 days after rough grading if the area will remain idle longer than 14 days. Any disturbed area that is not going to be worked for 365 days or more must be permanently stabilized (seeded and mulched) within 7 days of most recent disturbance.
- Trenches for underground utility lines and pipes shall be temporarily stabilized within 7 days if they are to remain inactive for 14 days. Trench dewatering devices shall discharge in a manner that filters soil-laden water before discharging it to a receiving drainage ditch or pond. If seeding, mulching or other erosion and sediment control measures were previously installed; these protective measures shall be reinstalled. Pipelines with joints that allow a manufactured length of pipe to be placed in the trench with the pipe joint assembled/made in the trench require an open pipeline trench that is only slightly longer than the length of pipe being installed. The total length of excavated trench open at any time should not be greater than the total length of pipeline/utility that can be placed in the trench and backfilled in one working day. No more than 50 linear feet of open trench should exist when pipeline/utility line installation ceases at the end of the work day.
- Soil stockpiles shall be stabilized or protected to prevent soil loss.
- All disturbed areas shall be permanently stabilized within 7 days of final grading. Further, soil erosion control measures shall be maintained until permanent stabilization is complete, at which time temporary measures will be removed. Permanent vegetation is a ground cover dense enough to cover 80% of the soil surface and mature enough to survive winter weather conditions.
- Silt fence to be 2' minimum from property lines in areas where work is near adjacent properties.
- The Contractor shall establish a permanent on-site benchmark prior to clearing, grubbing and/or demolition.
- Haul Routes - The Contractor shall be responsible for the cleanup of any mud, dirt, or debris deposited on haul roads as a result of his operations. Soil shall be removed from roads and paved surfaces at the end of each day in such a manner that does not create off-site sedimentation in order to ensure safety and abate off-site soil loss. Collected sediments shall be placed in a stable location on site or taken off-site to a stable location. Contractor shall use State Routes (and shortest distance non-state routes) for project haul route.
- No solid or liquid waste shall be discharged into storm water runoff.
- Disposal of solid, sanitary and toxic waste - Solid, sanitary and toxic waste must be disposed of in a proper manner in accordance with local, state and federal regulations. It is prohibited to burn, bury or pour out onto ground or into storm sewer any solvents, paint, stains, gasoline, diesel fuel, used motor oil, hydraulic fluid, antifreeze, cement curing compounds and other such toxic or hazardous waste.
- Wash out of cement trucks should occur in the designated area where the washing can collect and be disposed of properly when it hardens.
- If a concrete washout area, and/or a stockpile area are needed, a delineated area for each must be provided and maintained for them. Areas can be located in an alternate location than that shown on the plans if necessary due to construction operations and other field considerations.
- No fuel storage is permitted on-site.
- All storm sewers, infiltration, detention, and retention areas shall be cleared of construction sediment upon completion of construction.
- The General Contractor shall be responsible for submitting a Notice of Intent (NOI) and Notice of Termination (NOT) as required by the Ohio EPA.
- The General Contractor is responsible for ensuring that all soil erosion and sediment control practices comply with the Ohio EPA's General Permit for Construction No. OHC000005 and follow the best practices set forth in the ODNR Rainwater and Land Development Manual.
- Dumpsters shall be provided for the disposal of debris, trash, hazardous and petroleum waste. All containers must be covered and leak proof.
- All construction and demolition debris waste will be disposed of in an OEPA approved C&DD landfill as required by Ohio Revised Code 3714.
- Any areas that will be used for mixing or storing fertilizers, lime, asphalt or concrete or used for vehicle fueling shall be designated and these areas should be kept away from any watercourses or storm sewers.
- A Spill Prevention Control and Countermeasures (SPCC) Plan shall be developed if the site has one above ground storage tank of 660 gallons or more, total above ground tank storage of 1330 gallons, or below ground storage of 42,000 gallons of fuel.
- All contaminated soils must be treated and/or disposed in OEPA approved soil waste management facilities or hazardous waste treatment, storage or disposal facilities (TSDFs).
- In the event of a large release of petroleum waste (25 gallons or more) contractor shall contact OEPA at 1-800-282-9378, the local fire department and the local emergency planning committee (LEPC) within 30 minutes of spill.
- Protected storage areas for industrial or construction materials shall be used to minimize exposure of such materials to storm water.
- If the Contractor uses pumps to assist in construction dewatering efforts, the water must be filtered prior to discharging it into the municipal storm sewer system, ensuring that no soil, silt or sediment enters the system.
- Contractor to review and determine the best locations for construction entrance, concrete washout, dumpsters, and other SWPPP elements. All dirt and sediment is to be kept off public streets.
- Contractor shall coordinate all soil erosion control and construction entrance with the City of Piqua prior to start.

SOIL EROSION CONTROL SEQUENCE OF CONSTRUCTION

- Stone tracking pad atop geotextile liner.
- Install silt fence and protection fencing.
- Install sediment basin.
- Initial clearing, grubbing, and demolition.
- Strip and stockpile top soil.
- Rough grade and balance site.
- Install underground utilities (i.e. Sanitary, Storm & Water)
- Place inlet filters on all storm inlets.
- Install franchise utilities (i.e. Gas, Electric, Telephone & Cable TV).
- Final grade site.
- Install pavement, curb, and other hardscape structures/surfaces.
- Stabilize ditches, swales, common areas and slopes.
- Establish permanent vegetation for all disturbed areas.
- Remove all temporary erosion and sediment control devices.
- Clean out storm sewer system, infiltration, detention, and retention areas upon completion.

SOIL EROSION CONTROL MAINTENANCE

- Inlet protection devices and barriers shall be repaired or replaced if they show signs of undermining or deterioration.
- All seeded areas shall be checked regularly to see that a good stand is maintained. Areas should be fertilized, watered, and reseeded as necessary.
- Silt fences shall be repaired to their original conditions if damaged. Sediment shall be removed from the silt fences when it reaches one-half the height of the silt fence.
- The construction entrance shall be maintained in a condition which will prevent tracking or flow of mud onto public rights-of-way.
- Sediment from the storm sewers, infiltration, detention, and retention areas shall be removed as necessary to maintain proper functionality.

SOIL EROSION CONTROL PRODUCT NOTES

All stormwater inlets shall be protected with Geotextile Inlet Protection or Inlet Filters (Dandy Products, Flexstorm, or equivalent).

INSPECTION NOTES

- Inspections shall be made weekly and within 24 hours after a rain event of 0.5 inches within a 24 hour period. Inspection frequency may be reduced to monthly for dormant sites if the entire site is temporarily stabilized or if runoff is unlikely due to weather conditions for extended periods of time.
- Only qualified inspection personnel shall perform inspections.
- Inspection checklist shall be completed and signed by the inspector after every inspection. The inspection checklist shall contain the following: date, name/title/qualifications of inspectors, weather for the period since the last inspection (rainfall amounts, duration, etc.), weather and description of any discharges occurring at time of inspection, location of discharges or other pollutants from the site, location of BMP needing maintenance, location of any failed BMPs, location for additional BMPs needed based on inspection, corrective actions required including any changes to the SWP3 and implementation dates.
- The inspection records are to be kept 3 years after termination of construction activity.
- Non sediment pond BMPs are to be repaired 3 days after inspections and sediment ponds to be repaired or cleaned out within 10 days after inspection.
- If a BMP is not functioning like it was intended to it shall be replaced within 10 days of inspection.
- For missing BMPs they shall be installed within 10 days of inspection.

SITE OVERVIEW:

NATURE OF CONSTRUCTION ACTIVITY: The proposed improvements will include constructing a new set of tennis courts, buildings, bleachers, a sidewalk, utilities, and other associated site improvements. Runoff from the site will be collected in a new storm sewer system and routed through an improved Wet Extended Detention Basin, providing both Water Quality Volume and Detention Volume controls to reduce post-construction runoff rates in accordance with the Ohio EPA and City of Piqua Regulations. Mass grading will be performed as necessary to construct the project and we anticipate that a significant amount of existing soil will need to be transported off site due to the poor existing soil conditions as well as the grading cuts expected. Soil erosion control measures will be implemented throughout construction to prevent soil, silt, and other debris from entering the public storm sewer system.

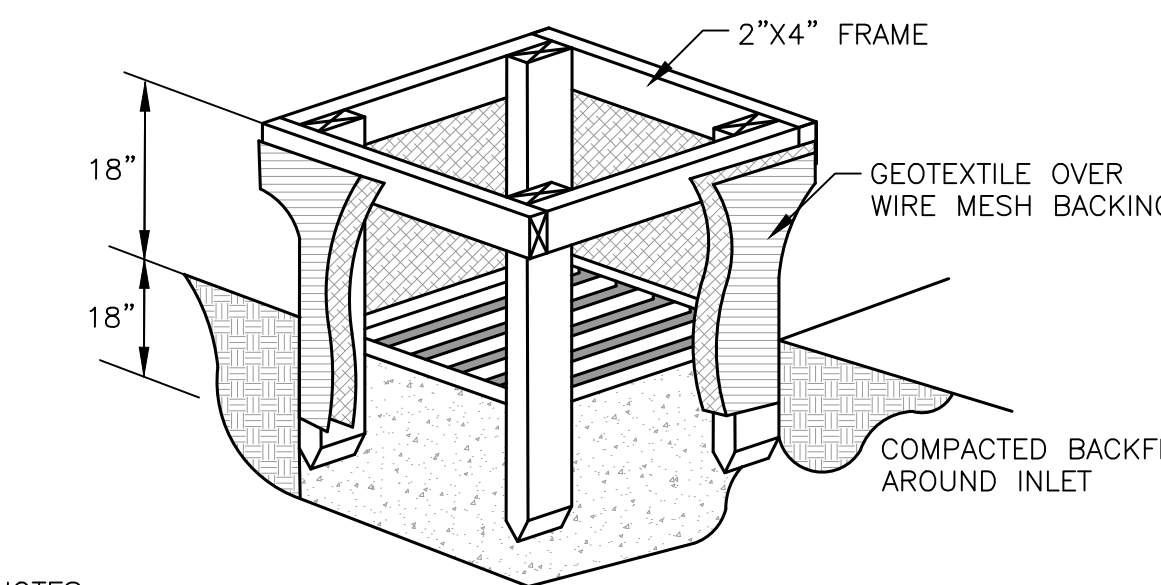
TOTAL AREA TO BE DISTURBED: Approximately 13.64 acres will be disturbed.

EXISTING SOILS: Site consists of Brookston Silty Clay Loam, Celina Silt Loam, Crosby Silt Loam, Crosby Silt Loam, and Odell Silt Loam.

EXISTING LAND USE: Land is currently used as a crop field with some lawn space and woods. Land use will change to a tennis court and sidewalk with a pond addition and lawn space. Property is not known to have had hazardous or solid waste.

NAME OF SURFACE WATER: The storm water enters an existing 54" culvert opening near the rear of the Upper Valley Career Center and ultimately drains into Garbry Creek.

WETLANDS: There are no wetlands in the work area.



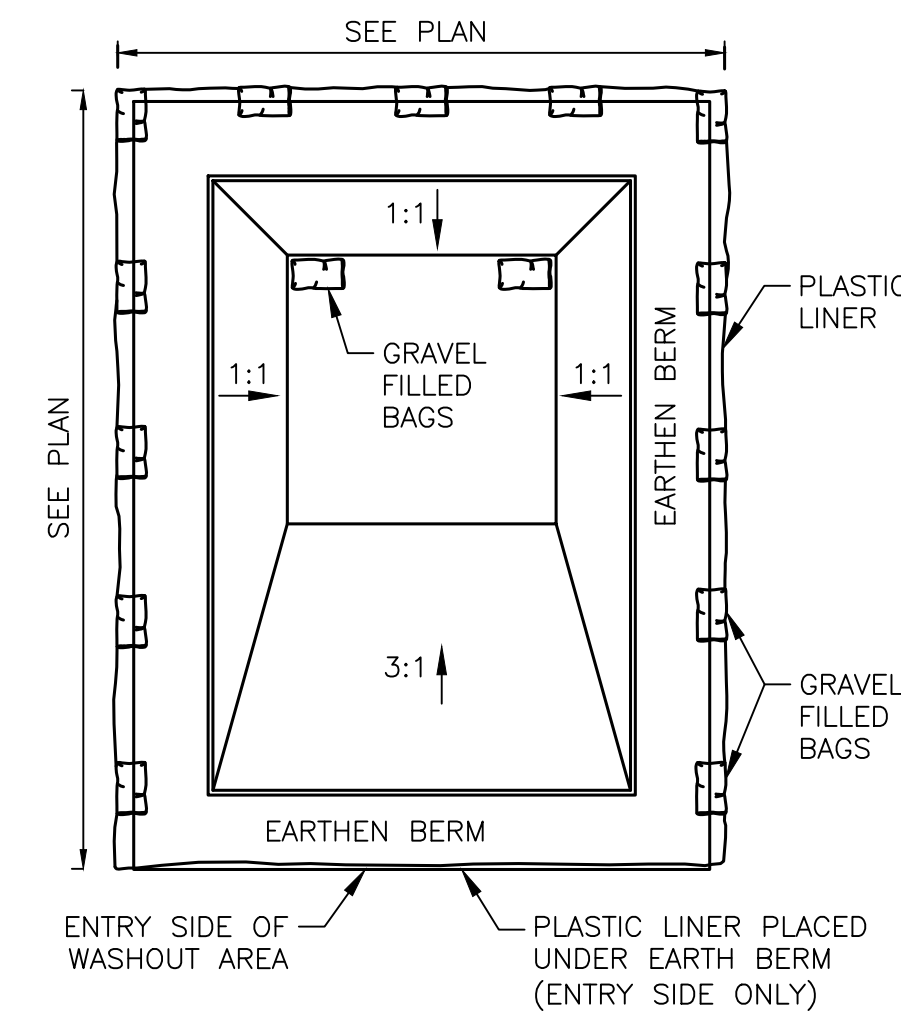
- NOTES:**
- INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
 - THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 IN.
 - THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-BY-4-IN. CONSTRUCTION-GRADE LUMBER. THE 2-BY-4-IN. POSTS SHALL BE DRIVEN 1 FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-BY-4-IN. FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 IN. BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
 - WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
 - GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 Sieve AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 IN. BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
 - BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6-IN. LAYERS UNTIL EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
 - A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 6 IN. HIGHER THAN THE TOP OF THE FRAME.

INLET PROTECTION DETAIL
NOT TO SCALE

DISTURBED AREA CALCULATIONS AND RUNOFF COEFFICIENTS

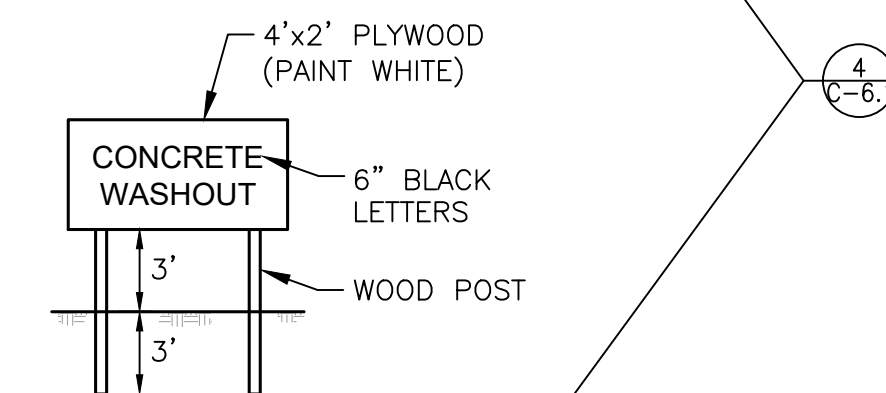
Total Area Disturbed = 13.64 Acres
 Pre-Developed Condition:
 Percent Impervious = 0.00% (13.64 Acres)
 Runoff Coefficient = 0.20
 Post-Developed Condition:
 Percent Impervious = 15.0% (2.35 Acres)
 Runoff Coefficient = 0.33

*Runoff Coefficient Used for Impervious Areas = 0.95
 *Runoff Coefficient Used for Lawns = 0.20

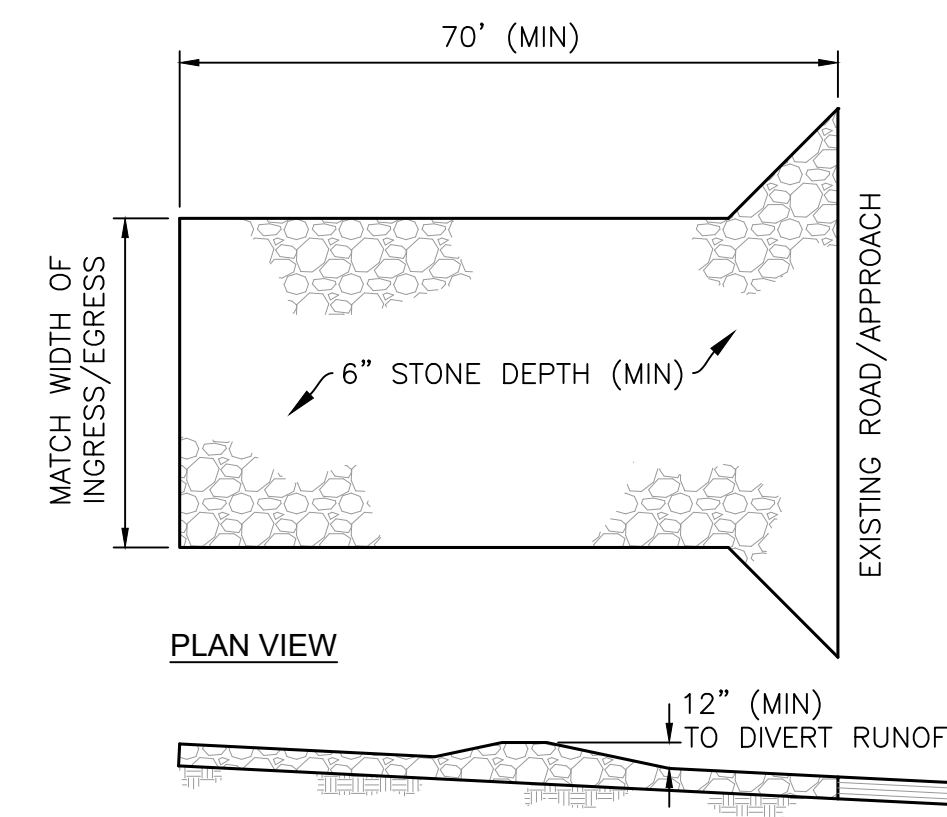


- NOTES:**
- PLASTIC LINER SHALL BE ANCHORED WITH GRAVEL-FILLED BAGS.
 - CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 10' OF THE CONCRETE WASHOUT AREA.

CONCRETE WASHOUT AREA
NOT TO SCALE

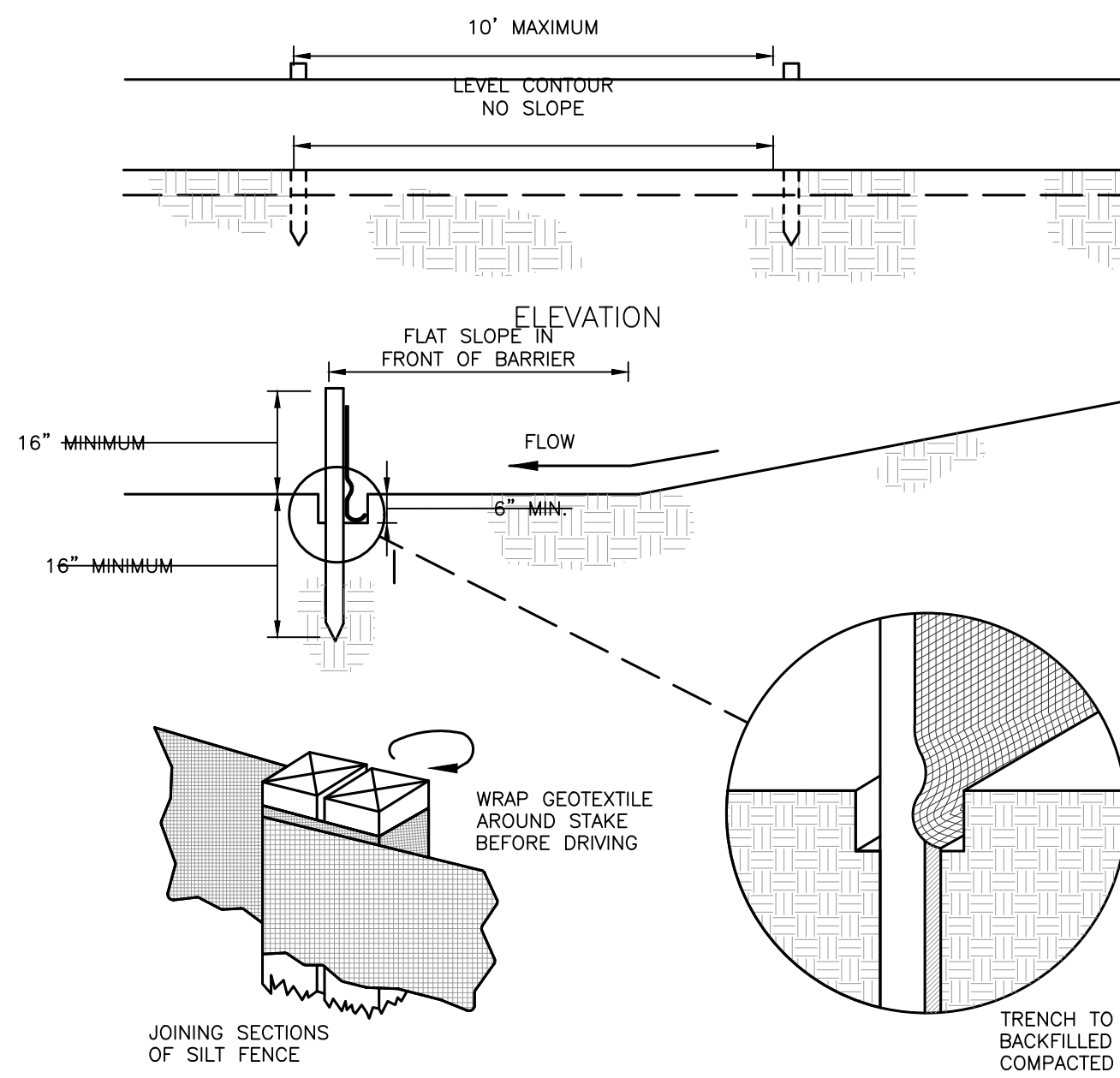


CONCRETE WASHOUT SIGN
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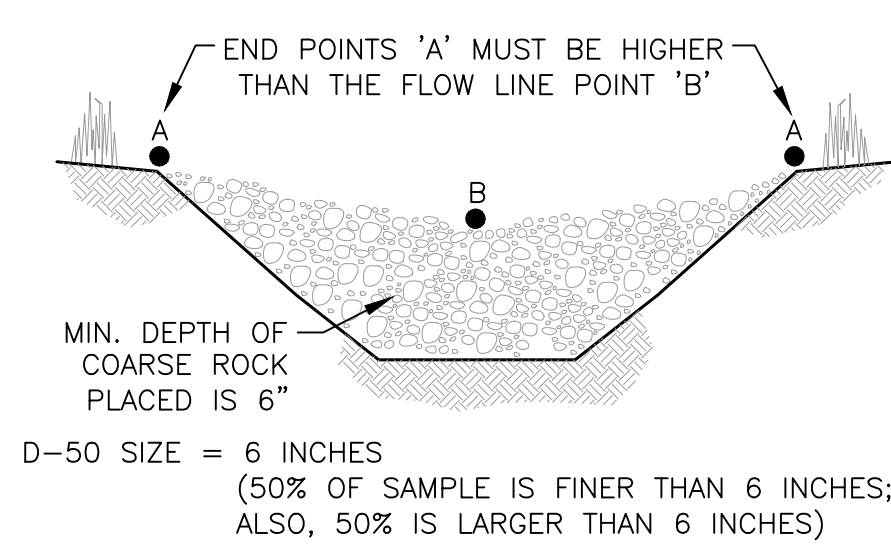


- NOTES:**
- STONE SHALL BE 1.5"-2.5" IN DIAMETER
 - GEOTEXTILE FABRIC SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. (US 200 OR EQUIV.)

CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



SILT FENCE & INLET PROTECTION INSTALLATION DETAIL
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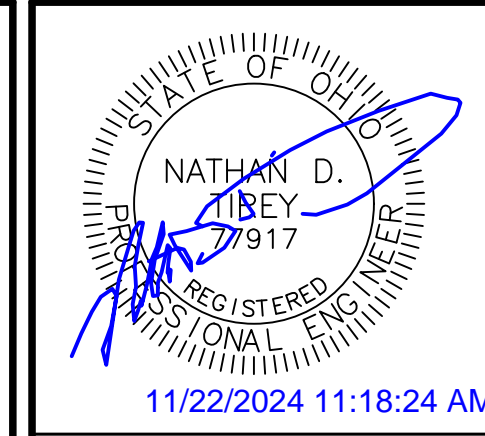


ROCK CHECK DAM IS TO BE REMOVED ONCE ALL CONSTRUCTION IS COMPLETE AND PERMANENT VEGETATION HAS BEEN ESTABLISHED.

INTENT OF ROCK CHECK DAM IS TO PREVENT SOIL, DEBRIS, AND OTHER CONSTRUCTION CONTAMINANTS FROM BEING RELEASED INTO THE PUBLIC STORMWATER SYSTEM AND DOWNSTREAM WATERS OF THE STATE.

TEMPORARY ROCK CHECK DAM
NOT TO SCALE

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SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
 1 INDIAN TRAIL
 PIQUA, MIAMI COUNTY, OHIO



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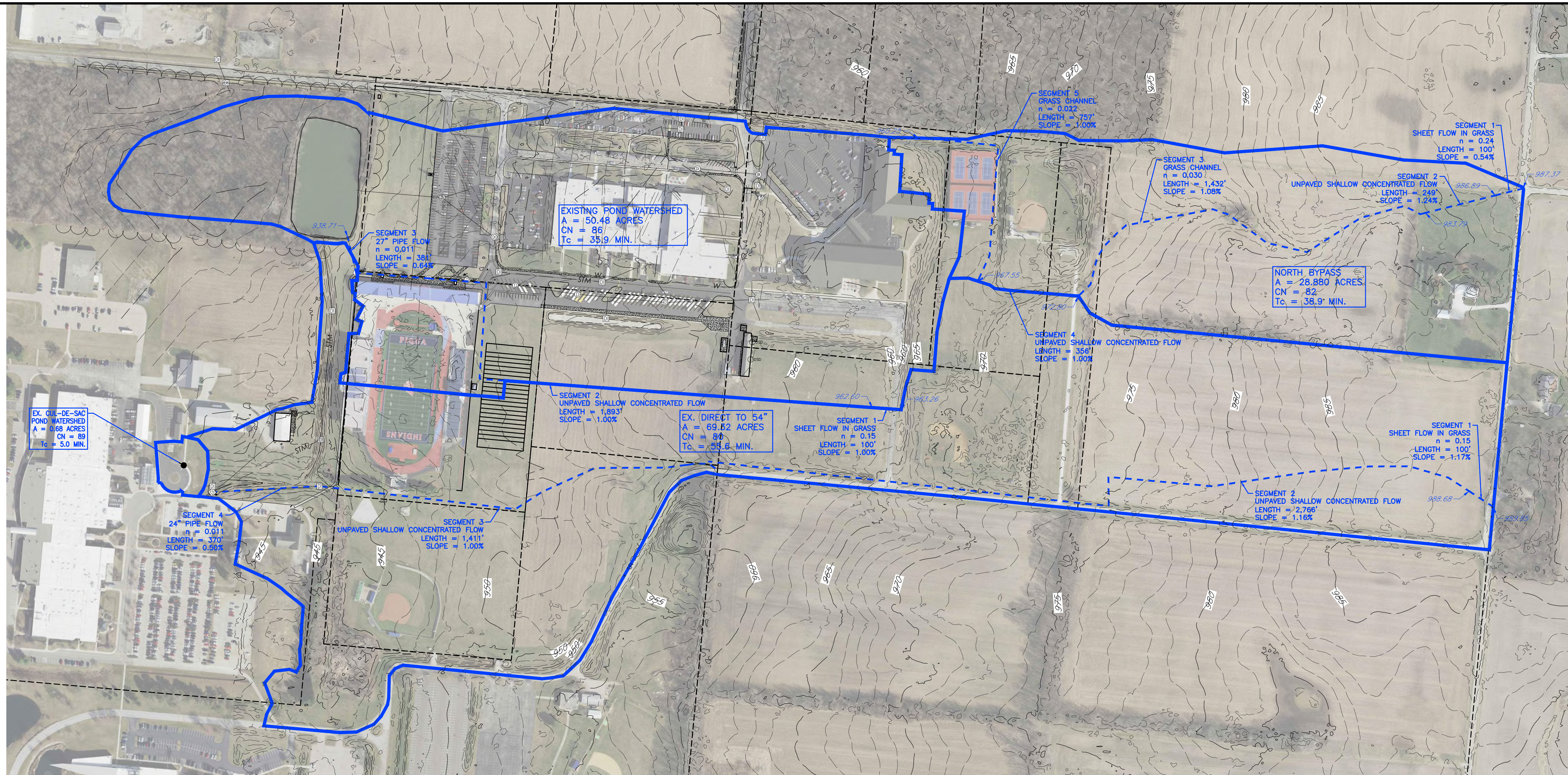
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Sheet No.:
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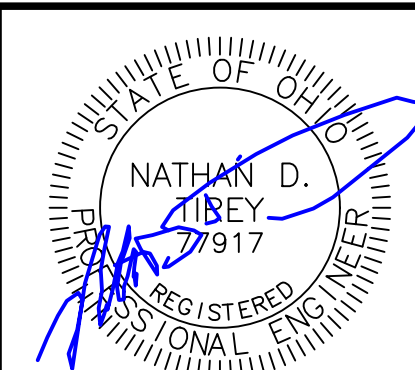
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EXISTING DRAINAGE MAP



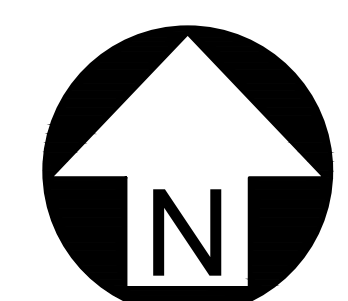
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11/22/2024	
1	ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
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 & COMPREHENSIVE STORM
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 1 INDIAN TRAIL
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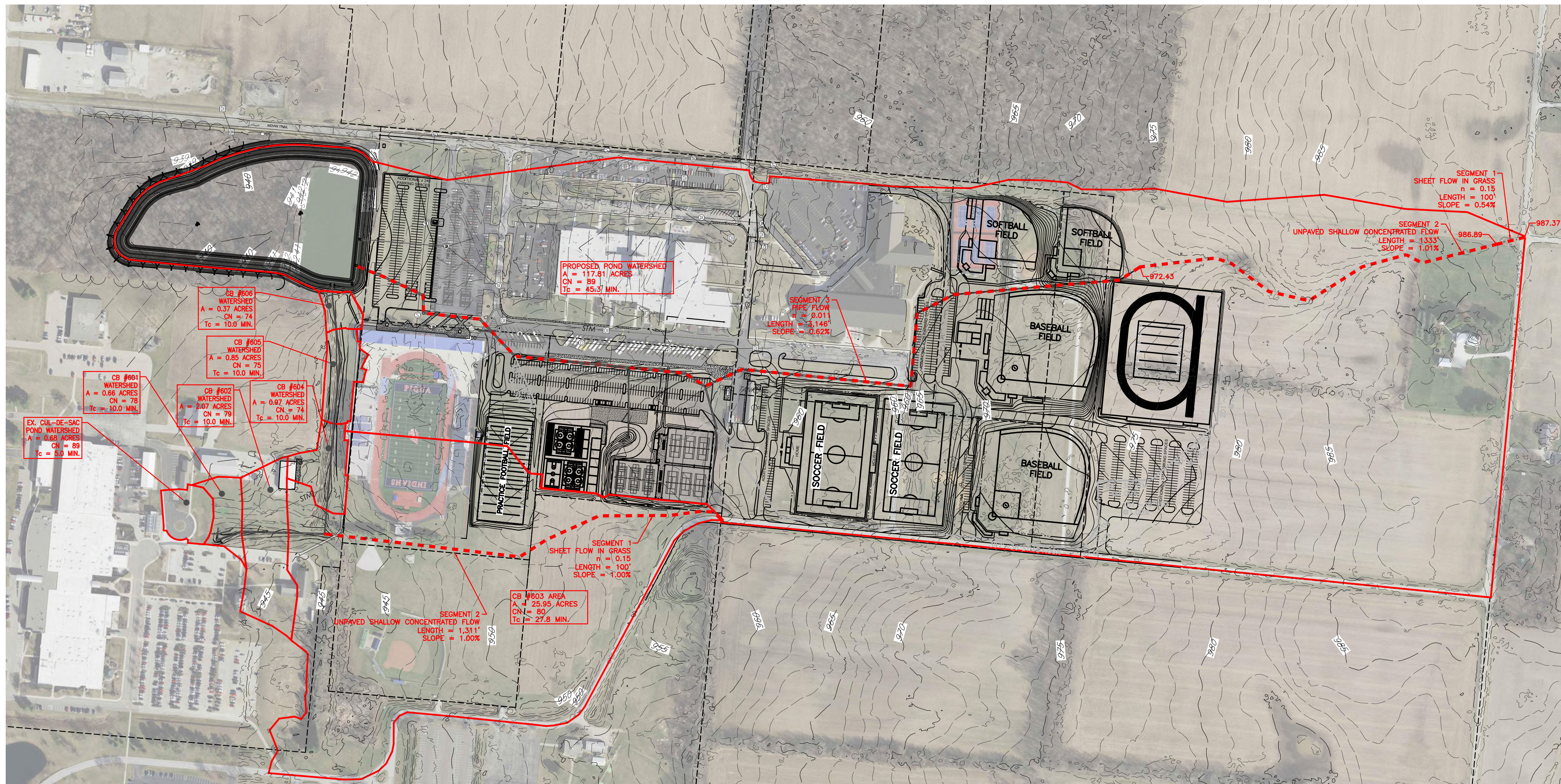
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Date: 10.18.2024	
Sheet: EXISTING DRAINAGE MAP	
Sheet No.: C-7.0	



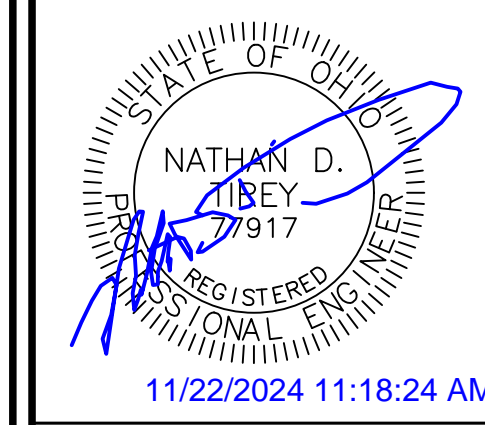
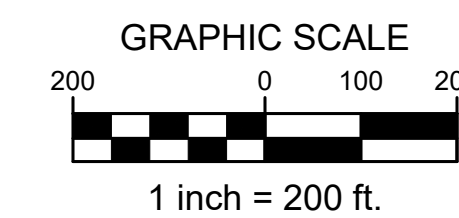
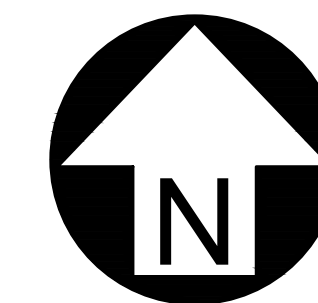
w:\civil_3d_projects\23.191 - piqua high school - master plan & tennis\cadd\civil\Sheets\DRainage.dwg 11/22/2024 11:16 AM Nathan



Know what's below.
Call before you dig.



PROPOSED DRAINAGE MAP



Date	Description
11/22/2024	1 ADDENDUM 4

SITE DEVELOPMENT PLANS FOR:
PIQUA HIGH SCHOOL TENNIS & COMPREHENSIVE STORM WATER PLAN
1 INDIAN TRAIL
PIQUA, MIAMI COUNTY, OHIO



Design: MES	Proj: 23.191
Draw: MES	Dwg:
Check: JDB	Tab:
Scale: AS SHOWN	
Date: 10.18.2024	
Sheet: PROPOSED DRAINAGE MAP	
Sheet No.: C-7.1	

