

GATEWAY ON 4TH

GATEWAY ON FOURTH PHASE 1 LLC

NO.	DATE	REVISIONS	BY	CHD
1	2/25/2028	REVISED FOR NPDES SUBMISSION	BAK	KJR
2	05/08/26	ISSUED FOR 90% CONTRACT DRAWINGS	BAK/ELH	KJR
3	05/15/26	REVISED FOR NPDES SUBMISSION	BAK/ELH	KJR
4	06/01/26	REVISED PER CITY COMMENTS	BAK/ELH	KJR

The map shows the area around Bethlehem, PA, with the Lehigh River flowing through it. Key streets include E Market St, E 4th St, E 2nd St, and E 1st St. Landmarks such as the Lehigh River, South Terrace, and the Church of Saint Joseph are labeled. A black circle marks the project site, which is located near the intersection of E 4th St and the Lehigh River. A line points from this circle to a text box labeled "PROJECT SITE".

DESIGNED BY	KJR	DRAWING	CVR
CHECKED BY	KJR		
DRAWN BY	BAK	SHEET	01
DATE	02-20-2026		
SCALE	AS NOTED		
PROJ. NO.	PENR00169		
			OF 29

PROJECT INFORMATION: FILE PATH: C:\Projects\PENNY00160 (Plans)\PENNY00160.dwg
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LEGEND

(ORIENTATION & SIZE MAY VARY)

	EX. CONCRETE CURB LINE		EX. SIGN
	EX. INLET		EX. LIGHT POLE
	EX. MANHOLE		EX. FIRE HYDRANT
	EX. TREE		EX. POLE
	EX. WATER VALVE		EX. CONTOUR
	EX. VENT		EX. SPOT ELEVATION
	EX. FENCE		EX. BUILDING
	EX. TREELINE		EX. BORING TEST LOCATION
	PROPERTY LINE		EX. TEST PIT
	EX. ADJOINING PROPERTY LINE		
	EX. RIGHT-OF-WAY LINE		
	EX. GAS LINE		
	EX. SANITARY SEWER		
	EX. WATER LINE		
	EX. CABLE TELEVISION CONDUIT		
	EX. UNDERGROUND ELECTRIC		
	EX. UNDERGROUND TELEPHONE		
	EX. STORM SEWER		
	EX. ZONING BOUNDARY		

	PROP. BUILDING		PROP. CONCRETE MONUMENT
	PROP. PAVEMENT		PROP. EDGE OF PAVE
	PROP. CONCRETE AREA		PROP. SPOT ELEVATION
			PROP. INDEX CONTOUR
			PROP. INTERMEDIATE CONTOUR

ZONING DATA

1. ZONING DISTRICT CLASSIFICATION:

CL - LIMITED COMMERCIAL DISTRICT
(FOR ALLOWED RESIDENTIAL USES, THE RT DISTRICT REQUIREMENTS SHALL APPLY)

2. PROPOSED USE:

RESIDENTIAL - MULTI-FAMILY - OVER 2.5 STORY - 120 RESIDENTIAL UNITS PROPOSED AND 1,900 SQ. FT. (APPROXIMATE) COMMERCIAL AREA

3. ZONING REQUIREMENTS TABLE

	REQUIRED (RT DISTRICT APPLIES UNLESS NOTED OTHERWISE-MULTI-FAMILY DWELLING >2.5 STORES)	PROPOSED LOT 1 (RT DISTRICT APPLIES UNLESS NOTED OTHERWISE-MULTI-FAMILY DWELLING >2.5 STORES)	PROPOSED LOT 2 (RT DISTRICT APPLIES UNLESS NOTED OTHERWISE-MULTI-FAMILY DWELLING >2.5 STORES)
MINIMUM LOT AREA	9,000 SF	67,824.64 SF, 1,5570 AC **	91,398.61 SF, 2,0982 AC
MAXIMUM UNIT DENSITY ALLOWED	1,200 SF PER UNIT	60 UNITS **	60 UNITS ***
MINIMUM LOT WIDTH	90 FT	185.94 FT	244.16 FT
MAXIMUM BUILDING/LOT COVERAGE	80%	35.3%	24.5%
MAXIMUM IMPERVIOUS COVERAGE	NONE	75.3% - 51,066 SQ.FT.	64.8% - 59,258 SQ.FT.
MINIMUM FRONT YARD	10' (SEE NOTE A)	0 FT (SEE NOTE A)	0 FT (SEE NOTE A)
MINIMUM SIDE YARD	15 FT + 5FT (NOTE F)	20 FT	20 FT
MINIMUM REAR YARD	20 FT + 5FT (NOTE F)	17.8 FT	25.4 FT
MAXIMUM BUILDING HEIGHT	5 STORIES/60 FT (CL. DISTRICT ALL USES)	4 STORIES/45 FT	4 STORIES/45 FT

NOTE A - THE ZONING HEARING BOARD GRANTED A VARIANCE FROM SECTION 1318.13a OF THE ZONING ORDINANCE FOR THE REQUIRED SETBACKS ALONG ALL STREET LINES.

* NOTE F - FOR EVERY FOOT OVER 35 FT THE SIDE AND REAR YARD SHALL BE INCREASED BY 1/2 FOOT.

** 67,824.64/1200 = 56 UNITS ALLOWED/60 UNITS PROPOSED - ZONING VARIANCE REQUIRED TO PHFA TAX CREDIT FUNDING.

*** 91,398.61/1200 = 76 UNITS ALLOWED/60 UNITS PROPOSED

TOTAL TRACT AREA WOULD BEING 132 UNITS, 120 TOTAL UNITS PROPOSED. ZONING RELIEF WAS RECEIVED FOR LOT 1 DUE TO INTERNAL LOT LINE BEING ADDED FOR FINANCING PURPOSES RELATED TO PHFA TAX CREDIT FUNDING.

4. PHASE 1 PARKING:

60 UNITS X 1.0 SPACES PER UNIT = 60 SPACES REQUIRED (BASED ON 1 TO 1 PARKING RATIO ALLOWED FOR AFFORDABLE HOUSING).
TOTAL PHASE 1 PARKING PROVIDED = 61 SPACES (INCLUDES 10 ADA ACCESSIBLE SPACES AND 6 EV SPACES).
ADDITIONAL 11 SPACES WITHIN BUILDING B TO BE ASSIGNED TO RESIDENCES.

PHASE 2 PARKING:

60 UNITS X 1.0 SPACES PER UNIT = 60 SPACES REQUIRED (BASED ON 1 TO 1 PARKING RATIO ALLOWED FOR AFFORDABLE HOUSING).
ADDITIONAL 11 SPACES WITHIN BUILDING D TO BE ASSIGNED TO RESIDENCES.

TOTAL PHASE 2 PARKING PROVIDED = 61 SPACES (INCLUDES 10 ADA ACCESSIBLE SPACES AND 6 EV SPACES).

5. PROPOSED UNIT TYPES:

PHASE 1
BUILDING A - 44 TOTAL UNITS CONSISTING OF 29 (1) BEDROOM UNITS, 14 (2) BEDROOM UNITS AND 1 (3) BEDROOM UNIT.

BUILDING B - 16 TOTAL UNITS CONSISTING OF 15 (3) BEDROOM UNITS AND 1 (2) BEDROOM UNIT.

PHASE 2

BETWEEN BUILDING C AND D 60 - TOTAL UNITS. EACH UNIT TYPE NOT DETERMINED BUT IT IS ANTICIPATED TO BE SIMILAR TO PHASE 1

6. PROPOSED BIKE PARKING:

PER THE CITY ORDINANCE, BICYCLE PARKING SHALL BE PROVIDED TO MEET 5% OF THE VEHICLE PARKING REQUIREMENT
120 x 5% = 6 SPACES REQUIRED.
TWO RACKS THAT CAN PROVIDE FOR 7 BICYCLES EACH ARE PROVIDED AT EACH BUILDING.

SITE STATISTICS

1. APPLICANT/EQUITABLE OWNER:

GATEWAY ON FOURTH PHASE 1 LLC
1301 N. 31ST ST
PHILADELPHIA, PA 19121
PHONE: 267-386-8719
EMAIL: KYAN@PENNROSE.COM

2. OWNER OF RECORD/EXISTING PROPERTY IDENTIFICATION:

P7SWIA-7-1-0204:AKA PARCEL A
APN: P7SWIA-7-1-0204
OWNER: LEHIGH VALLEY INDUSTRIAL PARK INC
PHONE: 610-866-4600
EMAIL: BRYAN@LVIP.ORG
LOCATION: 1400 EAST FOURTH STREET
BETHLEHEM, PA 18018
CITY OF BETHLEHEM, NORTHAMPTON COUNTY
DOCUMENT: 2025-1-057740
GROSS AREA: 23,040.00 SQ FT

P7SWIA-7-2-0204:AKA PARCEL B
APN: P7SWIA-7-2-0204
OWNERS: LEHIGH VALLEY INDUSTRIAL PARK INC
LOCATION: 1414 EAST FOURTH STREET
BETHLEHEM, PA 18018
CITY OF BETHLEHEM, NORTHAMPTON COUNTY
DOCUMENT: 2025-1-057638
GROSS AREA: 141,848.00 SQ FT

3. TRACT AREA SUMMARY:

CONSOLIDATED GROSS TRACT AREA (PARCEL A & B) = 3,7853 AC, 164,888.00 SF
EXISTING PENNDOT LEGAL R-O-W DEDICATION = 0.1300 AC, 5,664.75 SF
NET TRACT AREA TO BE DEVELOPED = 3,6553 AC, 159,223.25 SF
TOTAL NUMBER OF PROPOSED LOTS = 2 LOTS
PHASE 1 LOT AREA = 1,5570 AC, 67,824.64 SF
PHASE 2 LOT AREA = 2,0982 AC, 91,398.61 SF

4. UTILITY CONNECTIONS:

SEWER SERVICE:
EXISTING - PUBLIC PROVIDED BY CITY OF BETHLEHEM
PROPOSED - PUBLIC PROVIDED BY CITY OF BETHLEHEM

WATER SERVICE:
EXISTING - PUBLIC PROVIDED BY CITY OF BETHLEHEM
PROPOSED - PUBLIC PROVIDED BY CITY OF BETHLEHEM

5. ALL PROPERTIES ARE IN WARD 17 CITY BLOCK 13.

GENERAL NOTES

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS, SPECIFICATIONS, AND REFERENCED DOCUMENTS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT OR DISCREPANCY WITH THE DRAWINGS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE CONSTRUCTION MEETS ALL APPLICABLE CODE REQUIREMENTS.
- ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVEGROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL AND VERTICAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF THE PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974, AS AMENDED BY ACT 124 OF 2024, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. PA LAW REQUIRES THREE WORKING DAYS NOTICE FOR CONSTRUCTION PHASE. CALL THE PA ONE CALL SYSTEM AT 1-800-242-1776. SERIAL NO. 20243371817 WAS PLACED FOR DESIGN PURPOSES ONLY.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
- ALL PROPOSED IMPROVEMENTS SHALL COMPLY WITH "THE AMERICAN DISABILITIES ACT", "ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES", AND "THE PENNSYLVANIA UNIVERSAL ACCESSIBILITY ACT".
- THIS PLAN SHALL NOT BE USED FOR BUILDING TAKEOUT PURPOSES. PROPOSED BUILDING LOCATION AS DEPICTED IS WITHIN ACCEPTABLE TOLERANCES FOR SITE WORK ONLY. PLEASE REFER TO ARCHITECTURAL/STRUCTURAL PLANS FOR EXACT BUILDING PLACEMENT.
- THE BUILDING FOOTPRINTS DEPICTED HEREON HAVE BEEN TRANSPOSED FROM ARCHITECTURAL PLANS. FINAL BUILDING DIMENSIONS MAY VARY SLIGHTLY FROM THOSE DEPICTED HEREON BUT SHALL ULTIMATELY CONFORM TO ALL APPLICABLE ZONING SETBACKS, IMPERVIOUS SURFACE COVERAGE RATIOS, ETC. CONTRACTOR SHALL NOTIFY PROJECT ENGINEER IF FINAL BUILDING FOOTPRINTS SUBSTANTIALLY VARY FROM THE FOOTPRINTS HEREON.
- CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH PENNDOT "PUBLICATION 408", LATEST EDITION, MUNICIPAL STANDARDS AND SPECIFICATIONS, AND UTILITY AUTHORITY/CO. STANDARDS AND SPECIFICATIONS, WHICHEVER ARE MORE RESTRICTIVE.
- SIGNED/SEALED STRUCTURAL DESIGN CALCULATIONS AND CONSTRUCTION DETAILS OF PROPOSED RETAINING WALL(S) SHALL BE SUBMITTED BY THE CONTRACTOR TO THE PROJECT ENGINEER AND MUNICIPALITY FOR APPROVAL PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS AND COMPLETE ALL WORK INDICATED OR IMPLIED ON THE PLANS AND/OR SPECIFICATIONS THAT ARE NOT EXISTING ON THE PROJECT SITE AND THAT ARE NOT SPECIFICALLY NOTED AS "FUTURE", "NOT IN CONTRACT (NIC)", "BY OTHERS", "BY OTHER CONTRACTORS", "BY EC", "BY PC", "BY MC".
- THE CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR ANY/ALL CERTIFICATIONS, INSPECTIONS, ETC. REQUIRED BY ALL GOVERNING JURISDICTIONAL AGENCIES DURING AND AFTER CONSTRUCTION FOR SIGN-OFF AND CERTIFICATION OF OCCUPANCY ISSUANCE INCLUDING BUT NOT LIMITED TO PROCUREMENT OF SERVICES, SCHEDULING OF FIELD OBSERVATIONS AND COORDINATION WITH REPRESENTATIVES OF THE APPROPRIATE PARTIES. CONTRACTOR IS RESPONSIBLE TO COORDINATE CERTIFICATIONS, SIGN-OFFS, ETC. NECESSARY FOR JOB CLOSEOUT AND ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND PLANS, ETC.
- THE PROPERTY SURVEY AS CERTIFIED SHALL BE CONSIDERED A PART OF THESE PLANS.
- THESE PLANS ARE BASED ON INFORMATION PROVIDED TO OUR OFFICE AT THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES OR CONDITIONS NOT SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER EXISTING SITE FEATURES.
- ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK DUE TO DISCREPANCIES OR CONFLICTS ON THE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN PRIOR TO THE START OF WORK AND MATERIALS PROCUREMENT.
- ADA RAMPS ARE SHOWN WITH RAMP TYPE.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL/MEFP PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY SERVICE LOCATIONS AND SITE ELECTRICAL DESIGN.
- DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, COUNTY, STATE AND FEDERAL LAWS AND APPLICABLE CODES. CONTRACTOR SHALL PROPERLY REMOVE AND DISPOSE OF HAZARDOUS/UNSAFABLE MATERIAL IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES AND LAWS.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
- THE CONTRACTOR IS TO EXERCISE CARE WHEN PERFORMING WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES AND FACILITIES THAT ARE TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES AS NECESSARY TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT TO REMAIN, AND PROVIDE A SAFE WORK AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL, INTERCONNECTED CABLE, CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO EXISTING ITEMS DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, SIDEWALK, ETC. REPAIR SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO PROVIDE DOCUMENTATION OF THE CONDITION OF EXISTING ITEMS TO THE OWNER'S DESIGNATED REPRESENTATIVE PRIOR TO CONSTRUCTION START.
- CONCRETE SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS INDICATED IN SPECIFICATIONS AND REFERENCE DOCUMENTS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
- THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS/MEANS FOR COMPLETION OF THE WORK DEPICTED ON THESE PLANS NOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM THE SAME. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND NOTIFICATION OF OWNER AND ENGINEER OF RECORD IN WRITING WHEN A CONFLICT IS IDENTIFIED.
- THE CURRENT LANDOWNER SHALL BE RESPONSIBLE TO ENSURE THAT THE BICYCLE STORAGE RACK CONTINUES TO BE AVAILABLE AND IS WELL MAINTAINED AND REPLACED IF DAMAGED OR REMOVED.
- NEITHER THE PROFESSIONAL ACTIVITIES OF T&M ASSOCIATES NOR THE PRESENCE OF T&M ASSOCIATES OR ITS EMPLOYEES AND SUB-CONSULTANTS AT ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. T&M ASSOCIATES AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE CONTROL OVER THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HEREIN IS NOT RESPONSIBLE FOR JOB SITE SAFETY NOR HAS HE BEEN RETAINED FOR SUCH PURPOSES. T&M ASSOCIATES SHALL BE INDEMNIFIED BY THE CONTRACTOR AND SHALL BE MADE AN ADDITIONAL INSURED UNDER THE CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
- T&M ASSOCIATES SHALL REVIEW AND COMMENT OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORK WITH OTHER TRADES AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. T&M ASSOCIATES' REVIEW SHALL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE PROMPTNESS IS REQUIRED TO PERMIT THE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT T&M ASSOCIATES HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. T&M ASSOCIATES SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF T&M IN WRITING BY THE CONTRACTOR. T&M ASSOCIATES SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OR CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
- THIS SHEET IS PART OF A LAND DEVELOPMENT PLAN SET ON RECORD AT THE MUNICIPALITY OF JURISDICTION.
- ALL CURB RADII SHALL BE MIN. 5' UNLESS OTHERWISE NOTED OR DIMENSIONED.
- AN AS-BUILT PLAN SHALL BE PREPARED FOR THE PROJECT INDICATING ACTUAL LOCATIONS, DIMENSIONS, AND ELEVATIONS OF ALL COMPLETED IMPROVEMENTS. THE PLAN SHALL BE PREPARED BY A PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF PENNSYLVANIA AND CERTIFIED BY THE ENGINEER WHO PREPARED THE FINAL PLAN. THE AS-BUILT PLAN SHALL BE FILED WITH THE TOWNSHIP NO LATER THAN NINETY (90) DAYS AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE DEVELOPMENT.
- THE OWNER/EQUITABLE OWNER OF THE PROPERTIES WILL BE RESPONSIBLE FOR THE ONGOING INSPECTIONS, OPERATION, REPAIR, AND MAINTENANCE OF THE STORMWATER MANAGEMENT BMP'S AND CONVEYANCE SYSTEMS AFTER COMPLETION OF CONSTRUCTION.
- A BLANKET STORMWATER MANAGEMENT EASEMENT PROPOSED TO BE GRANTED TO THE CITY TO ALLOW LEGAL ACCESS AND MAINTENANCE VEHICLE ACCESS FOR MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES SHOULD THE NEED ARISE.
- ALL PROPOSED PEDESTRIAN FACILITIES WITHIN THE SITE AND WITHIN THE PUBLIC RIGHT-OF-WAY (INCLUDING CURB RAMPS AND PEDESTRIAN ACCESS ROUTES) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE U.S. ACCESS BOARD, PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) OF THE AMERICAN GUIDELINES OF BUILDINGS AND FACILITIES (ADAAG), PENNDOT DESIGN MANUAL PART 2, CHAPTER 6, AND PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION (PUBLICATION 72M, RC-67M). UNLESS SPECIFIED OTHERWISE THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO INSTALLATION.
- ALL REQUIRED PERMITS MUST BE OBTAINED FROM THE CITY ENGINEERING OFFICE PRIOR TO THE BEGINNING OF ANY WORK IN THE RIGHT-OF-WAY.
- A KNOX BOX FOR CITY OF BETHLEHEM FIRE DEPARTMENT ACCESS SHALL BE INSTALLED. EXACT LOCATION TO BE DETERMINED.
- FIRE DEPARTMENT CONNECTIONS (FDC) SHALL BE AS SHOWN ON THE PLANS OR AS OTHERWISE APPROVED BY THE FIRE MARSHAL. ANY CHANGE IN THE LOCATION OF FIRE DEPARTMENT CONNECTIONS SHALL BE APPROVED BY THE CITY OF BETHLEHEM FIRE DEPARTMENT.
- AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON SITE.
- CHAPTER 33 OF THE IFC "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION" SHALL BE ENFORCED FOR THE DURATION OF THE CONSTRUCTION PROJECT.

CITY OF BETHLEHEM STANDARD NOTES:

NPDES NOTE

BY SUBMISSION OF THESE PLANS THE ENGINEER ON RECORD CERTIFIES THAT THESE PLANS ARE IN COMPLETE CONFORMANCE WITH THE CITY OF BETHLEHEM STORM WATER MANAGEMENT ORDINANCE.

REVISIONS NOTE

IN ORDER TO MAINTAIN CONTINUITY BETWEEN PLAN REVISIONS, ANY CHANGES TO A PREVIOUS PLAN SUBMISSION SHALL BE FLAGGED WITH A TRIANGLE. ANY CHANGES NOT FLAGGED MAY BE CONSIDERED NOT APPROVED. FLAGGED CHANGES SHALL BE REFERENCED TO THE APPROPRIATE REVISION DATE IN THE REVISION BLOCK.

AS-BUILT NOTE

ACCURATE AS-BUILT PLANS SHALL BE KEPT UP TO DATE DURING THE CONSTRUCTION PROCESS. AT THE COMPLETION OF THE PROJECT RECORD DRAWINGS SHALL BE DEVELOPED FROM THE AS-BUILT PLANS AND SUBMITTED TO THE CITY ENGINEER'S OFFICE. ALL FINAL DRAWINGS SHALL SHOW NORTH AMERICAN DATUM (NAD) 1983 STATE PLANE COORDINATES IN FEET (PENNSYLVANIA SOUTH, TIPS ZONE 3702) AND THE DIGITAL FILE SHALL COME IN STATE PLANE FEET COORDINATES AS APPLICABLE. THE HARD COPY OF THE RECORD DRAWINGS SHALL BE IN THE FORM OF A MYLAR COPY. THE ENGINEER OF RECORD SHALL CERTIFY (I.E. P.E. STAMPED AND SIGNED) THAT THE RECORD DRAWINGS COMPLY SUBSTANTIALLY WITH THE APPROVED PLAN AND THAT THEY CONFORM TO INDUSTRY STANDARDS. ALL DIGITAL FILES SHALL RESIDE ON PC COMPATIBLE CD ROM CONTAINING THE DIGITAL REPRESENTATION OF THE FINAL PLAN AS PRESENTED ON THE TWENTY-FOUR (24) INCH BY THIRTY-SIX (36) INCH SHEETS. THE DIGITAL MAP SHALL BE AUTOCAD COMPATIBLE. ALL LAYERS INCLUDING IN THE DIGITAL MAPS SHALL BE THE STANDARDIZED LAYERS PREPARED AND UTILIZED BY THE CITY OF BETHLEHEM TO ENSURE COMPATIBILITY WITH THE CITY'S EXISTING CAD STANDARDS AND AS DESCRIBED IN APPENDIX A OF THE CITY'S SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

ENGINEERING PERMITS NOTE

PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY, PERMITS MUST BE OBTAINED FROM CITY ENGINEERING OFFICE.

RETAINING WALL NOTE

DETAIL OF RETAINING WALL IS REQUIRED. THE DESIGN AND DETAILS OF THE RETAINING WALLS, CERTIFIED BY AN ENGINEER EXPERIENCED IN THE DESIGN OF RETAINING WALLS AND LICENSED IN THE STATE OF PENNSYLVANIA, WILL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL.

STORM WATER NOTES

THE MAINTENANCE OF STORM WATER FACILITIES SHALL BE THE OWNER'S RESPONSIBILITY. THE OWNER'S DEED, AND THE DEED TO ANY SUBSEQUENT OWNER, SHALL NOTE THAT THE OWNER SHALL ACCEPT THE MAINTENANCE RESPONSIBILITIES. THE CITY OF BETHLEHEM SHALL BE PERMITTED TO INSPECT THE STORM WATER FACILITIES ON AT LEAST AN ANNUAL SCHEDULE TO ENSURE THAT ANY NECESSARY CORRECTIVE WORK IS PERFORMED IN A TIMELY MANNER.

THE DRAINAGE EASEMENT PROVIDES FOR THE FLOW OF STORM WATER ACROSS LOTS, AND MAY NOT BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER. NO OBSTRUCTIONS SUCH AS PLANTING BERMS OR FENCES MAY BE INSTALLED IN THE DRAINAGE EASEMENTS AREAS WITHOUT SUFFICIENT PROVISION FOR THE PASSAGE OF STORM WATER, AND ANY SUCH PROPOSED PROVISION SHALL BE APPROVED IN WRITING BY THE CITY ENGINEER.

FLOODPLAIN NOTE

THE PARCEL IS NEITHER LOCATED WITHIN THE FLOODWAY NOR ANY SPECIAL FLOOD HAZARD AREA, REFERENCE FEMA FIRM MAP 4209500328E, EFFECTIVE ON 07/16/2014.

MISCELLANEOUS INFORMATION/ DESIGN STANDARDS

ROAD CONSTRUCTION OR OVERLAY

SUPER PAVE IS REQUIRED AND MUST MEET PENN DOT SPECIFICATIONS PUB.408

LVPC REVIEWS

NOTE THAT THE LVPC REVIEWS ALL SITE PLANS THAT IT IS REQUIRED TO SIGN PRIOR TO BEING RECORDED IN THE COURTHOUSE OF NORTHAMPTON COUNTY, REGARDLESS OF THE SIZE OF THE SITE OR THE NET AMOUNT OF IMPERVIOUS SURFACES.

EROSION & SEDIMENTATION CONTROL PLAN

A PLAN IS REQUIRED FOR EARTH DISTURBANCE ACTIVITY OF 5,000 SQUARE FEET OR MORE. CITY REQUIRES COUNTY CONSERVATION (NCCD) REVIEW OF 1 ACRE (43,560 SQUARE FEET) OR MORE.

TAPPING FEE

IN ACCORDANCE WITH ORDINANCE NO. 4342, AT THE TIME OF A REQUEST FOR A BUILDING PERMIT OR AT THE EXECUTION OF THE DEVELOPER'S AGREEMENT, A SANITARY SEWER TAPPING FEE OF \$2,527 PER EDU WILL NEED TO BE PAID. THE TOTAL AMOUNT WILL BE DETERMINED WHEN A SANITARY SEWER FACILITIES PLANNING MODULE APPLICATION IS SUBMITTED. A COVER LETTER, DESCRIBING THE PROJECT, AND A UTILITY PLAN SHALL BE INCLUDED IN THE PLANNING MODULE SUBMITTAL. PLEASE NOTE THAT BUILDING PERMITS CAN NOT BE ISSUED UNTIL THE PLANNING MODULE IS REVIEWED AND APPROVED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

REQUIREMENTS FOR AS-BUILT DRAWINGS

- ALL FINAL DRAWINGS SHALL SHOW NORTH AMERICAN DATUM (NAD) 1983 STATE PLANE COORDINATES IN FEET (PENNSYLVANIA SOUTH, TIPS ZONE 3702) AND THE DIGITAL FILE SHALL BE IN STATE PLANE FEET COORDINATES AS APPLICABLE. THE HARD COPY OF THE RECORD DRAWINGS SHALL BE IN THE FORM OF A MYLAR COPY. THE ENGINEER OF RECORD SHALL CERTIFY (I.E. P.E. STAMPED AND SIGNED) THAT THE RECORD DRAWINGS COMPLY SUBSTANTIALLY WITH THE APPROVED PLAN AND THAT THEY CONFORM TO INDUSTRY STANDARDS. ALL DIGITAL FILES SHALL RESIDE ON PC COMPATIBLE CD ROM CONTAINING THE DIGITAL REPRESENTATION OF THE FINAL PLAN AS PRESENTED ON THE TWENTY-FOUR (24) INCH BY THIRTY-SIX (36) INCH SHEETS. THE DIGITAL MAP SHALL BE AUTOCAD COMPATIBLE. ALL LAYERS INCLUDING IN THE DIGITAL MAPS SHALL BE THE STANDARDIZED LAYERS PREPARED AND UTILIZED BY THE CITY OF BETHLEHEM TO ENSURE COMPATIBILITY WITH THE CITY'S EXISTING CAD STANDARDS AND AS DESCRIBED IN APPENDIX A OF THE CITY'S SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.
- THE AUTOCAD FILE SHALL HAVE THE TITLE BLOCK INCLUDING TO THE FILE(S).
- STORM AND SANITARY SEWERS SHALL BE SHOWN INCLUDING, SIZE, LENGTH, MATERIAL, GRADE AND INVERTS.
- WATER LINES SHALL BE SHOWN INCLUDING SIZE AND MATERIAL.
5. CONTOURS SHALL BE SHOWN.
6. ANY IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY (CURB, SIDEWALK, DRIVEWAYS, ETC.) SHALL BE SHOWN INCLUDING DIMENSIONS.
7. TOP AND BOTTOM OF CURB ELEVATIONS SHALL BE SHOWN EVERY 30' ALONG CURB LOCATION WITHIN THE PUBLIC RIGHT-OF-WAY.
8. THE BUILDING FOOTPRINT INCLUDING DIMENSIONS SHALL BE SHOWN. ADDRESSEES SHALL ALSO BE SHOWN WITHIN THE BUILDING FOOTPRINT.
9. ALL SITE DATA INCLUDING ADDRESS, PROPERTY S.F., PARCEL ID NUMBER, DEED NUMBER, ETC., SHALL BE INCLUDED.
10. THE BENCHMARK INFORMATION SHALL CLEARLY BE LABELED.

GRADING NOTES

- VERTICAL DATUM IS NAVD 1988 AND ESTABLISHED BY OBSERVATIONS REFERENCED TO THE NGS CORS NETWORK.
- THE MINIMUM SLOPE IN GRASSED AREAS SHALL NOT BE LESS THAN 2% AND THE MINIMUM IN PAVED AREAS SHOULD NOT BE LESS THAN 1%.
- RUNOFF FROM IMPERVIOUS AREAS SHALL NOT BE DIRECTED INTO THE SANITARY SEWER OR ONTO ADJACENT PROPERTIES.
- WALLS IN EXCESS OF 30" IN HEIGHT REQUIRE A SAFETY FENCE A MINIMUM OF 42" IN HEIGHT. REFER TO DETAIL SHEETS.
- PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE / RECORD PLAN WILL SUPERSEDE IN ALL CASES. THE ENGINEER OF RECORD MUST BE IMMEDIATELY NOTIFIED IN WRITING OF ANY CONFLICTS.
- THE CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS (INCLUDING DEP, ETC.) FOR ALL OFF-SITE HAUL AND/OR BORROW SITES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO DESIGN ENGINEER AND OWNER PRIOR TO INITIATING WORK.
- EXISTING INLETS AND STORM SEWER INDICATED AS FILLED W/DEBRIS SHALL BE CLEANED AND FLUSHED. NEW INLETS AND PIPES SHALL BE CHECKED FOR SILT/DEBRIS AFTER CONSTRUCTION AND FLUSHED/CLEANED IF NECESSARY.
- DEPTH OF EXISTING UTILITIES IN PORTIONS OF THE SITE ARE UNKNOWN. WHERE EXISTING UTILITIES ARE TO REMAIN AND ARE FOUND TO HAVE INADEQUATE GROUND COVER AFTER FINAL PROPOSED GRADES HAVE BEEN ESTABLISHED, THE DESIGN ENGINEER SHALL BE CONTACTED IMMEDIATELY AND PRIOR TO FURTHER CONSTRUCTION ACTIVITIES IN THE AREA OF SAID CONFLICT.
- ALL DESIGNERS AND CONTRACTORS UTILIZING THIS PLAN AND THE INFORMATION CONTAINED THEREON ARE CAUTIONED TO COMPLY WITH THE REQUIREMENTS OF PENNSYLVANIA ACT 287. LOCATION OF EXISTING AND PROPOSED UNDERGROUND UTILITIES AND FACILITIES SHOWN ON THE DRAWINGS HAVE BEEN DEVELOPED FROM INFORMATION MADE AVAILABLE. COMPLETENESS AND ACCURACY OF LOCATION AND DEPTH OF UTILITIES AND FACILITIES CANNOT BE GUARANTEED. THE CONTRACTOR IS TO VERIFY THE DEPTH AND LOCATION OF ALL UTILITIES AND FACILITIES BEFORE THE START OF WORK. UTILIZE HAND-BORED OR OTHER UTILITY LOCATING EQUIPMENT IN ACCORDANCE WITH THE STANDARDS OF THE UTILITY COMPANIES WHOSE FACILITIES ARE IN THE PROXIMITY OF THE WORK. THE CONTRACTOR SHALL CONTACT THE PENNSYLVANIA ONE CALL SYSTEM AT 1-800-242-1776, AT LEAST 3 DAYS PRIOR TO EXCAVATION.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL CODES, AND ALL REGULATIONS PERTINENT TO THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. ALL WORK SHALL BE DONE IN ACCORDANCE WITH PROJECT SPECIFICATIONS INCLUDING CURRENT APPLICABLE STANDARDS AND REQUIREMENTS. WHERE ANY STANDARDS SEEM IN CONFLICT WITH THESE DRAWINGS, NOTIFY THE DESIGN ENGINEER AND CONSTRUCTION MANAGER FOR DIRECTION PRIOR TO PROCEEDING WITH WORK.
- CONTRACTORS SHALL HAVE ALL REQUIRED SUBMITTAL APPROVALS PRIOR TO BEGINNING WORK OR ORDERING MATERIALS.
- CONTRACTORS SHALL VERIFY ALL DIMENSIONS, INVERTS, ELEVATIONS, AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH THE WORK OR PROCUREMENT OF MATERIALS. VARIATIONS BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY, PROCEDURES, MEANS AND METHODS, SEQUENCING, AND COORDINATION.
- ALL WORK SHALL BE PERFORMED BY QUALIFIED, EXPERIENCED PERSONNEL.
- CONTRACTOR SHALL NOTIFY THE OWNER OF PREEXISTING CONDITIONS OF DETERIORATION IN AREAS OF WORK THAT ARE UNCOVERED OR EXPOSED DURING THE WORK.
- FIELD CHANGES REQUIRE PRIOR DESIGN ENGINEERING REVIEW AND WRITTEN CONFIRMATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR TO ANY SIDEWALKS, LAWN, TREES, PAVING, AND OTHER IMPROVEMENTS DISTURBED OR DAMAGED BY DEMOLITION ACTIVITIES PROPOSED HEREIN.
- CONTRACTOR SHALL PROVIDE PROPER TEMPORARY BRACING AND SHORING OF ALL CONSTRUCTION TO REMAIN OR DEMOLITION WORK IN PROGRESS.
- CONTRACTOR SHALL PROVIDE LAYOUT, LINE AND GRADE UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL NOTIFY THE OWNER OF ANY DISCREPANCIES WITHIN THE DRAWINGS, SPECIFICATIONS, CODES OR STANDARDS FOR CORRECTIVE ACTION PRIOR TO START OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF VEHICULAR AND PEDESTRIAN TRAFFIC. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH LOCAL, PENNDOT & OSHA REGULATIONS.
- CONTRACTOR SHALL PROVIDE PROTECTION FOR EXISTING UTILITIES UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY UTILITY LINE INTERRUPTION AT NO ADDITIONAL CONTRACT COST. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION AND SUPPORT FOR ALL UTILITIES EXPOSED DURING THE WORK TO INSURE AGAINST DAMAGE AT NO ADDITIONAL COST.
- CONTRACTOR SHALL PROVIDE TEMPORARY DEWATERING OF EXCAVATIONS THROUGHOUT THE DURATION OF CONTRACT AT NO ADDITIONAL COST.
- EXISTING UTILITIES SHOWN ARE BASED ON AVAILABLE DATA. DUE TO THE POTENTIAL LACK OF COMPLETE OR ACCURATE DATA REGARDING EXISTING ONSITE AND OFFSITE UTILITIES, THE CONTRACTOR SHALL ASSUME AVAILABLE DATA. SHALL REQUIRE UTILITY COMPANY MARKOUTS. SHALL COORDINATE WITH AFFECTED UTILITY COMPANIES, AND SHALL DIG TEST PITS AT ALL PROPOSED UTILITY CROSSING LOCATIONS SO THAT ELEVATIONS CAN BE TAKEN TO ASSESS POTENTIAL CONFLICTING PIPES/UTILITIES PRIOR TO ANY PROPOSED UTILITY CONSTRUCTION. IF UNEXPECTED UTILITY LOCATIONS OR PIPE CONFLICTS ARE ENCOUNTERED DURING CONSTRUCTION, OR IF TEST PITS REVEAL POTENTIAL CONFLICT, DESIGN ENGINEER SHALL BE NOTIFIED SO THAT ELEVATIONS AND LOCATIONS (WHERE NECESSARY) OF AFFECTED UTILITIES CAN BE OBTAINED TO FACILITATE NECESSARY DESIGN ADJUSTMENTS.
- REMOVAL OF EXISTING UTILITIES SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES.
- REFER TO THE SITE / RECORD PLAN FOR ADDITIONAL NOTES.
- ALL SIDEWALKS, CROSSLWALK, TRAILS, ENTRANCES, AND RAMPS TO BE BUILT IN ACCORDANCE WITH ADA STANDARDS. MAXIMUM LONGITUDINAL SLOPE TO BE 5%. MAXIMUM CROSS SLOPE TO BE 2%. IT IS RECOMMENDED TO CONSTRUCT CROSS SLOPES AT 1.5% AND LONGITUDINAL SLOPES AT 4.9% TO ALLOW FOR CONSTRUCTION TOLERANCE.
- REFER TO ADA CURB RAMP CONSTRUCTION DETAILS AND ADA ACCESSIBILITY PLAN FOR ADDITIONAL INFORMATION SPECIFIC TO CURB RAMP AND ACCESSIBLE ROUTE GRADING.

PLACEMENT OF FILL NOTES:

- BACKFILLING, TO THE SUBGRADE

1. THIS IS AN ABOVE GROUND SURVEY. LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM ABOVE GROUND INSPECTION OF THE SITE, UTILITY COMPANY RECORDS.
2. COMPLETENESS OR ACCURACY OF THE TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDER GROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED BY ASH ASSOCIATES, INC. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES.
3. PURSUANT TO REQUIREMENTS OF THE PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 121 OF 2008, CONTRACTORS MUST VERIFY THE LOCATION AND DEPTH OF ALL UNDER GROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
4. PATAILL SERIAL NUMBER 20241204325, WAS PLACED FOR DESIGN PURPOSES ONLY.

UTILITY COMPANY	RESPONSE:
1. QX-BETHLEHEM CITY	FIELD MARKED ON 4/30/24.
2. ION-FIRSTLIGHT FIBER CLEAR.	NO FACILITIES PRESENT
3. LKC-LUMEN FORMERLY LEVEL 3	CLEAR. NO FACILITIES PRESENT, BASED ON UTILITY MAP PROVIDED
4. PID-PPL ELECTRIC UTILITIES CORPORATION	PLANS RECEIVED, PLOTTED AS SHOWN
5. SET-SERVICE ELECTRIC CABLE TV INC	CLEAR. NO FACILITIES PRESENT
6. YI-VERIZON PENNSYLVANIA LLC	CLEAR. NO FACILITIES PRESENT
7. PPL-ZAYO BANDWIDTH	CLEAR. NO FACILITIES PRESENT
8. UJ-UGI UTL LEHIGH HAZLETON	DESIGN CONFLICT, PLANS RECEIVED, PLOTTED AS SHOWN

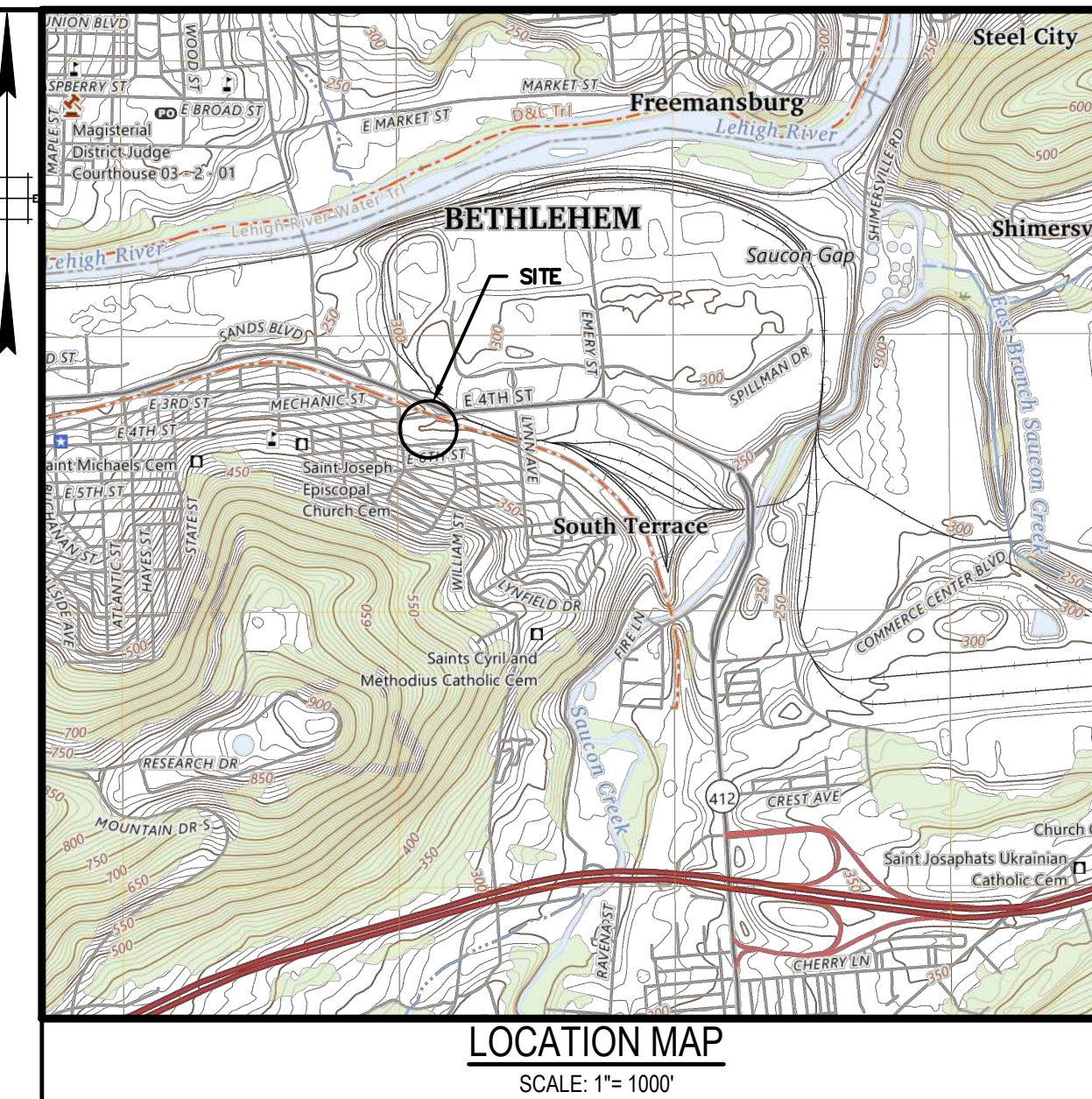
P7SW1A-7-1-0204: AKA PARCEL A
APN: P7SW1A-7-1-0204
OWNER: LEHIGH VALLEY INDUSTRIAL PARK INC
LOCATION: 1400 EAST FOURTH STREET
BETHLEHEM, PA 18018
CITY OF BETHLEHEM, NORTHAMPTON COUNTY
DOUMENT: 2020-1-263398
GROSS AREA: 23,040.00 SQ FT

P7SW1A-7-2-0204: AKA PARCEL B
APN: P7SW1A-7-2-0204
OWNER: LEHIGH VALLEY INDUSTRIAL PARK INC
LOCATION: 1414 EAST FOURTH STREET
CITY OF BETHLEHEM, PA 18018
CITY OF BETHLEHEM, NORTHAMPTON COUNTY
DOCUMENT: 19961-1313
GROSS AREA: 141,848.00 SQ FT

1. ANY DEFECT, LIEN, ENCUMBRANCE, ADVERSE CLAIM, OR OTHER MATTER THAT APPEARS FOR THE FIRST TIME IN THE PUBLIC RECORDS OR IS CREATED, ATTACHES, OR IS DISCLOSED DURING THE COMMITMENT DATE AND THE DATE ON WHICH ALL OF THE SCHEDULE B, PART I—REQUIREMENTS ARE MET. (NOT A SURVEY ISSUE)
2. RIGHTS OR CLAIMS BY PARTIES IN POSSESSION OR UNDER THE TERMS OF ANY UNRECORDED LEASE OR AGREEMENT(S) OF SALE. (NOT A SURVEY ISSUE)
3. ANY VARIATION IN LOCATION OF LINES OR DIMENSIONS OR OTHER MATTERS WHICH AN ACCURATE SURVEY WOULD DISCLOSE. (SURVEY PERFORMED HEREIN)
4. EASEMENTS, OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS. (NOT A SURVEY ISSUE)
5. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR OR MATERIAL HERETOFORE FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS. (NOT A SURVEY ISSUE)
6. POSSIBLE ADDITIONAL TAX INCREASE BASED ON ADDITIONAL ASSESSMENTS. (NOT A SURVEY ISSUE)
7. RIGHTS OF OTHERS, IF ANY, TO THAT PORTION OF SUBJECT PREMISES LYING WITHIN THE RIGHT-OF-WAY OF THE PUBLIC ROADS. (AFFECTS PREMISES 'A' AND 'B') (SURVEY PERFORMED HEREIN, RIGHT-OF-WAY SHOWN)
8. RESTRICTION THAT CONVEYANCE IS MADE AND ACCEPTED UPON THE EXPRESS COVENANT AND AGREEMENT THAT EITHER THE PREMISES NOR ANY PART THEREOF, SHALL AT ANY TIME WITHIN A PERIOD OF FIVE YEARS BE USED FOR THE RETAIL SALE, STORAGE, OR DISPENSING OF GASOLINE. THIS COVENANT AND AGREEMENT IS IMPOSED FOR THE BENEFIT OF THE PARTY OF THE FIRST PART AND IS TO RUN WITH THE LAND. A SIMILAR RESTRICTIVE COVENANT SHALL BE INSERTED IN ANY DEED OR LEASE OR OTHER INSTRUMENT CONVEYING OR DEMISING THE PREMISES AS CITED IN NORTHAMPTON COUNTY RECORD BOOK 512 PAGE 446. (AFFECTS PREMISES 'A') (AFFECTS ENTIRE PORTION OF PARCEL A, RESTRICTS PROPERTY USAGE FOR A PERIOD OF FIVE YEARS FROM DATE OF CONVEYANCE)
9. NOTICE OF CONDEMNATION BY THE COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF TRANSPORTATION, RECORDED 44/1999 IN NORTHAMPTON COUNTY RECORD BOOK 1999-1 PAGE 82726. (AFFECTS PREMISES 'B') (AFFECTS SUBJECT PROPERTY, REQUIRED RIGHT-OF-WAY FOR E 4TH STREET, PLOTTED AS SHOWN)

3. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS IDENTIFIED BY THE CONTRACTOR SHALL BE REPORTED TO THE ENGINEER IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF ACTIVITY.
2. THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION OF THE WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT THE PUBLIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS AND OTHER FEDERAL, STATE, AND LOCAL REGULATIONS, TO ENSURE THE PUBLIC AND CONTRACTOR SAFETY.
3. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR/TO:
 - A. ENSURE COPIES OF ALL PERMITS AND APPROVALS ARE ON SITE FOR REVIEW.
 - B. THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO SITE DISTURBANCE.
 - C. ALL EXISTING UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE, SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL OBEY AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
 - D. PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED DURING DEMOLITION ACTIVITIES.
 - E. FAMILIARIZE THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AND RELOCATION AS IDENTIFIED OR REQUIRED FOR PROJECT. THE CONTRACTOR SHALL PROVIDE THE WORK INCLUDING HAZARDOUS MATERIAL, SOILS, UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
 - F. COORDINATE WITH UTILITY COMPANIES AND MUNICIPALITY REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT OF THE AFFECTED PARTIES.
 - G. ANY AND ALL CONTAMINANTS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. DOCUMENTATION OF ANY AND ALL CONTAMINANTS SHALL BE SUBMITTED TO THE CITY OF BETHLEHEM. SOILS, ASBESTOS, OR OTHER WORK REFERENCED OR IMPLIED HEREIN IS SOLELY THE RESPONSIBILITY OF THE OWNER'S ENVIRONMENTAL CONSULTANT.
4. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES AND ANY OTHER IMPROVEMENTS TO REMAIN ON OR OFF SITE.
5. IN ABSENCE OF WRITTEN SPECIFICATION, THE CONTRACTOR SHALL PERFORM EARTH MOVING ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIAL WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S GEOTECHNICAL ENGINEER.
6. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF THE OWNER. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROGRAM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION MONITORING AS REQUIRED BY THE CITY OF BETHLEHEM. THE LOCAL STRUCTURES, APPROVAL FROM CITY OF BETHLEHEM IS REQUIRED FOR ANY BLASTING.

- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL," AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHT-OF-WAYS.
- CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ADJACENT PROPERTIES, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY.
- DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINES, WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.
- USE DUST CONTROL MEASURES TO LIMIT THE AMOUNT OF AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR TO WITHIN FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE GUARANTEED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
- CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
- THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL MATERIALS AND METHODS ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
- THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.
- DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL REGULATIONS AND APPLICABLE CODES. CONTRACTOR SHALL PROPERLY REMOVE AND DISPOSE OF HAZARDOUS/UNSATISFACTORY MATERIAL IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, AND LAWS.
- THE CONTRACTOR SHALL COORDINATE SERVICE SHUTOFF AND DISCONNECT/REMOVAL PROCEDURES WITH EACH RESPECTIVE UTILITY COMPANY FOR THE EXISTING UTILITIES SHOWN TO BE REMOVED.
- THE DEMOLITION PLAN IS NOT INTENDED TO SHOW EROSION CONTROL MEASURES. FOR SUCH GUIDELINES AND DETAILS, SEE THE EROSION AND SEDIMENT CONTROL PLAN AND DETAILS.
- ALL EXISTING FEATURES WITHIN THE LIMIT OF DISTURBANCE (AS DEFINED ON THE PLAN SET) ARE TO BE REMOVED (UNLESS OTHERWISE NOTED) AT NO ADDITIONAL COST TO THE OWNER. FEATURES OR NOT EXPLICITLY DEPICTED ON THIS PLAN, FEATURES TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO ALL TREES, VEGETATION, STRUCTURES, ABANDONED UTILITIES, AND ABANDONED IRRIGATION PIPE AND SYSTEM COMPONENTS. CONTRACTOR SHALL ABANDON ANY MATERIAL PRESENT WITHIN THE LIMIT OF DISTURBANCE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.



LOCATION M

SCALE: 1"= 1000'

LEGEND

	PROPERTY LINE
	BUILDING OUTLINE
	ADJOINER PROPERTY LINE
	EXISTING DRIVEWAY/PARKING
	BUILDING SETBACK LINE
	RIGHT-OF-WAY LINE
	CONCRETE CURB
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	WATER LINE
	GAS LINE
	SEWER LINE
	EXISTING DECIDUOUS TREE (TBR)
	IRON PIN, REBAR OR IRON PIPE (FOUND)
	IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
	WATER VALVE/WATER CURB BOX
	BUILDING/PAVEMENT/GRAVEL TO BE REMOVED
	TBR
	TO BE REMOVED BY CONTRACTOR

LEGAL
RIGHT-OF-WAY

LINE	BEARING	DISTANCE
L1	N 84°07'38" E	137.19'
L2	N 00°02'06" E	5.08'
L3	N 84°02'08" E	22.50'
L4	S 04°57'52" E	4.68'
L5	N 82°51'19" E	122.90'
L6	S 15°20'49" E	24.19'
L7	S 89°28'34" E	26.31'
L8	S 08°13'16" E	5.00'
L9	N 88°07'05" E	81.50'
L10	N 45°54'28" E	28.16'

- REMOVE VEGETATION AND DEBRIS TO LOCATE EXISTING INLET/PIPE AND VERIFY CONDITION.

UoD - URBAN LAND-DUFFIELD COMPLEX, 8 TO 25 PERCENT SLOPES

INFILTRATION TESTING CHART		
TEST PIT ID	TEST DEPTH (FEET)	INFILTRATION RATE (INCHES/HOUR)
TP-1	3.5	0.0
TP-3	3.5	19.8
TP-4	3.0	12.4
TP-5	3.5	0.0
TP-6	3.5	19.8
TP-7	3.0	1.2

NOTE: EXISTING UTILITY SERVICES THAT WILL NO LONGER BE USED SHALL BE CAPPED AND ABANDONED AT THE MAIN PER CITY REQUIREMENTS.

EXISTING WATER
SERVICE CAPPED
AT SIDEWALK

PROJECT INFORMATION:
FILE PATH: G:\Projects\PENR\00169\Plans\
FILE NAME: PENR00169_SHT003_EXC.dwg
LAST SAVED DATE AND TIME: 09 Jun 2026,
LAST SAVE BY: bksibaugh

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KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

TE

COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 056285E

GATEWAY ON FOURTH PHASE 1 LLC

GATEWAY ON 4TH

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA

EXISTING CONDITIONS AND DEMOLITION PLAN



74 WEST BROAD STREET STE 300

74 WEST BROAD STREET, STE 300
BETHLEHEM, PA 18018
TEL 610-625-2999
FAX 610-625-2969
www.landmassociates.com

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY
MASSACHUSETTS, MICHIGAN, NEW JERSEY
OHIO AND PENNSYLVANIA

DESIGNED BY

CHECKED BY	
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10000	100000	100	1000	1000000	10	100000000	1000
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DRAWN BY

DATE 02

SCALE

PROJ. NO.

DRAWING

F

[illegible]

SHEET

C

C

OF

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION

GRAPHIC SCALE

40' 20' 0 40' 80'

1" = 40'

1. ZONING DISTRICT CLASSIFICATION
CL - LIMITED COMMERCIAL DISTRICT

- (FOR ALLOWED RESIDENTIAL USES, THE RT DISTRICT REQUIREMENTS SHALL APPLY)
2. PROPOSED USE:
- RESIDENTIAL – MULTI-FAMILY – OVER 2.5 STORY – 120 RESIDENTIAL UNITS PROPOSED AND 1,900 SQ. FT. (APPROXIMATE) COMMERCIAL AREA
3. ZONING REQUIREMENTS TABLE
- | | REQUIRED
(RT DISTRICT APPLIES UNLESS
NOTED OTHERWISE–MULTI-FAMILY
DWELLING >2.5 STORIES) | PROPOSED LOT 1
(RT DISTRICT APPLIES UNLESS
NOTED OTHERWISE–MULTI-FAMILY
DWELLING >2.5 STORIES) | PROPOSED LOT 2
(RT DISTRICT APPLIES UNLESS
NOTED OTHERWISE–MULTI-FAMILY
DWELLING >2.5 STORIES) |
|-------------------------------|---|---|---|
| MINIMUM LOT AREA | 9,000 SF | 67,824.64 SF, 1.5570 AC ** | 91,398.61 SF, 2.0982 AC |
| MAXIMUM UNIT DENSITY ALLOWED | 1,200 SF PER UNIT | 60 UNITS ** | 60 UNITS ** |
| MINIMUM LOT WIDTH | 90 FT | 185.94 FT | 244.16 FT |
| MAXIMUM BUILDING/LOT COVERAGE | 80% | 35.3% | 24.5% |
| MAXIMUM IMPERVIOUS COVERAGE | NONE | 75.3% – 51,066 SQ.FT. | 64.8% – 59,258 SQ.FT. |
| MINIMUM FRONT YARD | 10' (SEE NOTE A) | 0 FT (SEE NOTE A) | 0 FT (SEE NOTE A) |
| MINIMUM SIDE YARD | 15 FT + 5 FT (NOTE 1) | 20 FT | 20 FT |
| MINIMUM REAR YARD | 20 FT + 5 FT (NOTE 1) | 71.8 FT | 25.4 FT |
| MAXIMUM BUILDING HEIGHT | 5 STORIES/60 FT
(CL DISTRICT ALL USES) | 4 STORIES/45 FT | 4 STORIES/45 FT |
- NOTE A – THE ZONING HEARING BOARD GRANTED A VARIANCE FROM SECTION 1318.13a OF THE ZONING ORDINANCE FOR THE REQUIRED SETBACKS ALONG ALL STREET LINES.
- * NOTE 1 – FOR EVERY FOOT OVER 35 FT THE SIDE AND REAR YARD SHALL BE INCREASED BY 1/2 FOOT.
- ** 67,824.64/1200 = 56 UNITS ALLOWED/60 UNITS PROPOSED – ZONING VARIANCE REQUIRED TO PERMIT 60 UNITS.
- *** 91,398.61/1200 = 76 UNITS ALLOWED/60 UNITS PROPOSED
- TOTAL TRACT AREA WOULD PERMIT 132 UNITS. 120 TOTAL UNITS PROPOSED. ZONING RELIEF WAS RECEIVED FOR LOT 1 DUE TO INTERNAL LOT LINE BEING ADDED FOR FINANCING PURPOSES RELATED TO PHFA TAX CREDIT FUNDING.
4. PHASE 1 PARKING:
60 UNITS X 1.0 SPACES PER UNIT = 60 SPACES REQUIRED (BASED ON 1 TO 1 PARKING RATIO ALLOWED FOR AFFORDABLE HOUSING).
- TOTAL PHASE 1 PARKING PROVIDED = 61 SPACES (INCLUDES 10 ADA ACCESSIBLE SPACES AND 6 EV SPACES).
ADDITIONAL 11 SPACES WITHIN BUILDING B TO BE ASSIGNED TO RESIDENCES.
- PHASE 2 PARKING:
60 UNITS X 1.0 SPACES PER UNIT = 60 SPACES REQUIRED (BASED ON 1 TO 1 PARKING RATIO ALLOWED FOR AFFORDABLE HOUSING).
ADDITIONAL 11 SPACES WITHIN BUILDING D TO BE ASSIGNED TO RESIDENCES.
- TOTAL PHASE 2 PARKING PROVIDED = 61 SPACES (INCLUDES 10 ADA ACCESSIBLE SPACES AND 6 EV SPACES).
5. PROPOSED UNIT TYPES:
PHASE 1
BUILDING A – 44 TOTAL UNITS CONSISTING OF 29 (1) BEDROOM UNITS, 14 (2) BEDROOM UNITS AND 1 (3) BEDROOM UNIT.
BUILDING B – 16 TOTAL UNITS CONSISTING OF 15 (3) BEDROOM UNITS AND 1 (2) BEDROOM UNIT.
- PHASE 2
BETWEEN BUILDING C AND D 60 – TOTAL UNITS: EACH UNIT TYPE NOT DETERMINED BUT IT IS ANTICIPATED TO BE SIMILAR TO PHASE 1
6. PROPOSED BIKE PARKING:
PER THE CITY ORDINANCE, BICYCLE PARKING SHALL BE PROVIDED TO MEET 5% OF THE VEHICLE PARKING REQUIREMENT
120 X .05 = 6 SPACES REQUIRED
TWO RACKS THAT CAN PROVIDE FOR 7 BICYCLES EACH ARE PROVIDED AT EACH BUILDING.

THE FOLLOWING VARIANCES WERE APPROVED BY THE ZONING HEARING BOARD AT THEIR NOVEMBER 20, 2024 HEARING, WITH WRITTEN DECISION DATED DECEMBER 18TH 2024

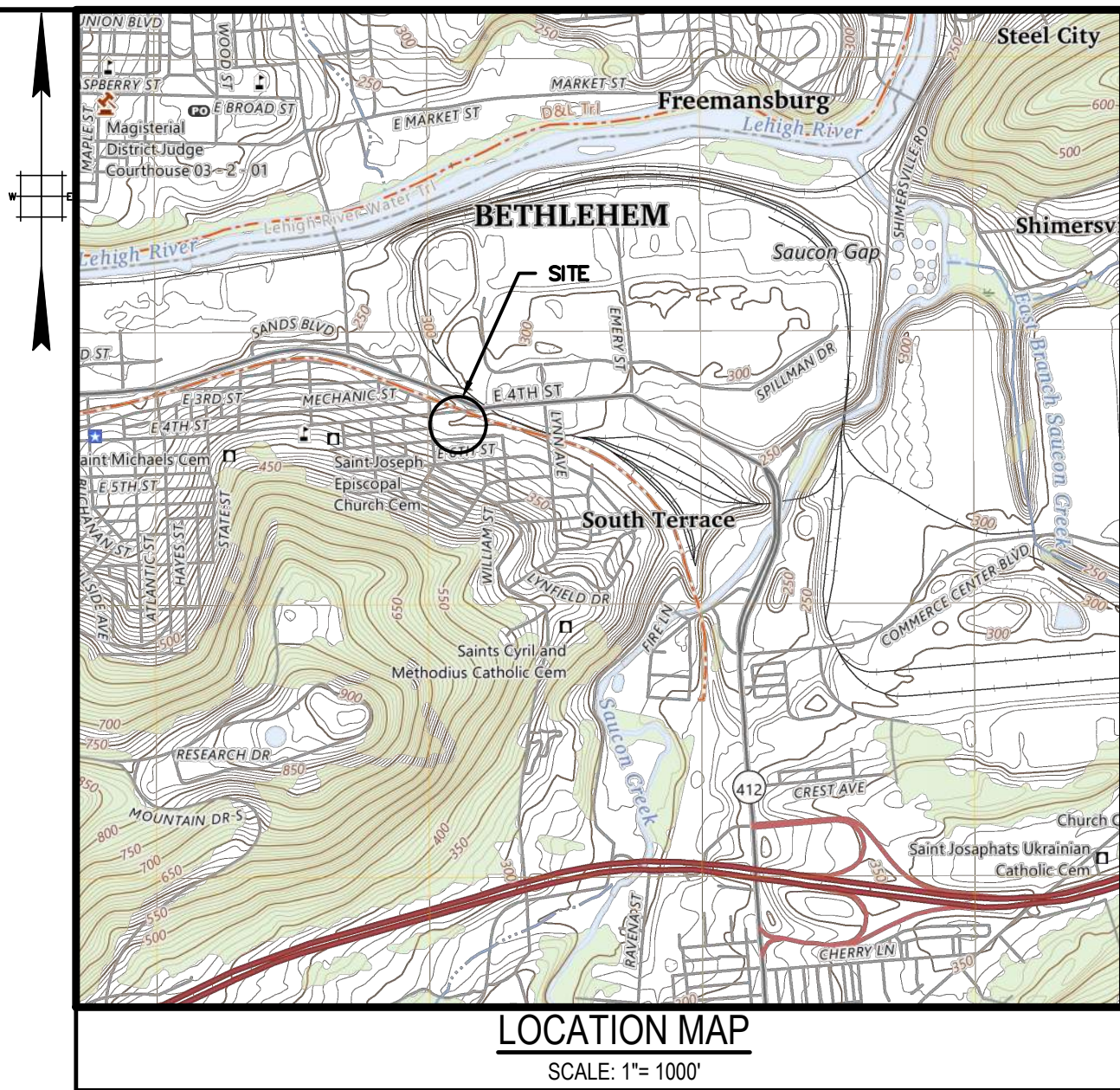
1. VARIANCE UNDER SECTION 1305.01 (footnote) TO WAIVE THE REQUIREMENT OF COMMERCIAL USE ON THE E. 4TH STREET FRONTAGE.
2. VARIANCE UNDER SECTION 1306.01(a)(4) TO ENABLE A LOT LINE CHANGE AND DEVELOPMENT OF 60 MULTI-FAMILY DWELLING UNITS ON THE NEW RECONFIGURED LOT 1.
3. VARIANCE UNDER SECTION 1318.13(a) TO REDUCE THE REQUIRED YARD SETBACKS TO 0 FEET.

PROPOSED SIGN TABULATION				
SYMBOL	QUANTITY	SERIES	SIZE	DESCRIPTION
A	3	R1-1	18"x18"	STOP SIGN
B	20	R7-8	12"x18"	ADA PARKING SPACE
C	20	R7-8F	12"x18"	RESERVED PARKING PENALTIES SIGN
D	4	R7-8AP	12"x6"	VAN ACCESSIBLE PLAQUE

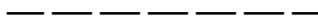
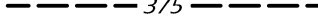
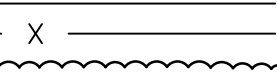
1. ALL PUBLIC UTILITIES REQUIRED TO SERVICE THIS LAND DEVELOPMENT SHALL BE PLACED UNDERGROUND EXCEPT FOR THOSE EXCEPTIONS NECESSARY TO PERMIT THE OVERALL INSTALLATION OF THE UTILITIES - OR - EXCEPT FOR TEMPORARY CONSTRUCTION SERVICE.

2. UTILITY CONNECTIONS:
SEWER SERVICE:
EXISTING - BY CITY OF BETHLEHEM
PROPOSED - BY CITY OF BETHLEHEM
WATER SERVICE:
EXISTING - BY CITY OF BETHLEHEM
PROPOSED - BY CITY OF BETHLEHEM
ELECTRIC SERVICE:
TO BE PROVIDED BY PPL.
IF PROPOSED GAS SERVICE:
TO BE PROVIDED BY AND IN COORDINATION WITH UGI.

1. TOPOGRAPHIC FEATURES SHOWN FROM ACTUAL FIELD SURVEY BY ASH ASSOCIATES COMPLETED MAY 12, 2024 AND IS LIMITED TO SHOWING FEATURES OF INTEREST ONLY.
2. VERTICAL DATUM IS NAVD 1988 AND ESTABLISHED BY GPS OBSERVATIONS REFERENCED TO THE NGS CORS NETWORK. SITE BENCHMARK IS A MAGNETIC NAIL FOUND AS SHOWN. SITE BENCHMARK ELEVATION=299.66'.
3. HORIZONTAL DATUM IS NAD 83, STATE PLANE COORDINATES OF PENNSYLVANIA AND ESTABLISHED GPS OBSERVATIONS REFERENCED TO THE NGS CORS NETWORK. BOTH DEED BEARINGS AND NAD 83 PENNSYLVANIA STATE PLANE BEARINGS ARE SHOWN. PARENTHESIS () INDICATES DEED BEARINGS.
4. RIGHT-OF-WAY WIDTHS SHOWN FROM CALCULATED FIELD SURVEYED BOUNDARY CORNER EVIDENCE AND DEEDS OF RECORD. EASEMENT PLANS WERE NOT REVIEWED. REQUEST FOR PLANS HAS BEEN MADE WITH DISTRICT 5.
5. THIS PLAN WAS MADE AS PER INSTRUCTIONS OF APPLICANT AND WITH THE BENEFIT OF A TITLE REPORT PREPARED BY FIRST AMERICAN TITLE DATED MAY 23, 2024, FILE NUMBER PFA24-2534 MM.
6. THIS PLAN DOES NOT SHOW ENVIRONMENTAL HAZARDS, OR ARCHEOLOGICAL SITES.
7. BUILDING DIMENSIONS ARE EXTERIOR AND MAY INCLUDE COVERED ENTRANCES AND ORNAMENTAL FACADES.
8. ENTIRE SITE IS LOCATED IN FLOOD ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. PER FEMA FLOOD INSURANCE RATE MAP (FIRST OF NORTHAMPTON COUNTY, PANEL 326 OF 355, MAP # 42095C0326E, REVISED JULY 16, 2014).
9. THE CURRENT LANDOWNER SHALL BE RESPONSIBLE TO ENSURE THAT THE BICYCLE RACK BEHIND THE BACK OF THE TRUCK CONTINUES TO BE AVAILABLE AND IS REPLACED IF DAMAGED OR REMOVED.
10. ALL LANDSCAPING, AS APPROVED ON FINAL SITE PLANS, SHALL BE COMPLETED AND MAINTAINED, INCLUDING THE REPLACEMENT OF DEAD PLANTINGS BY THE APPLICANT OR THEIR SUCCESSORS AND ASSIGNS.

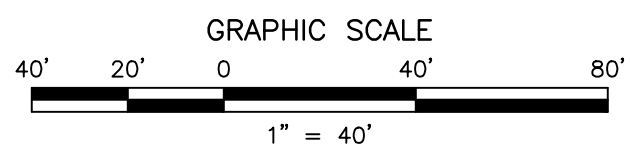
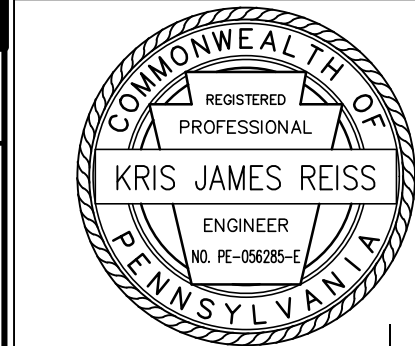


LEGEND

	PROPERTY LINE
	BUILDING OUTLINE
	ADJOINER PROPERTY LINE
	EXISTING DRIVEWAY/PARKING
	BUILDING SETBACK LINE
	RIGHT-OF-WAY LINE
	CONCRETE CURB
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	WATER LINE
	GAS LINE
	SEWER LINE
	EXISTING DECIDUOUS TREE (TBR)
	IRON PIN, REBAR OR IRON PIPE (FOUND)
	IRON PIN, IRON PIPE OR MAGS SPIKE (SFT)
	WATER VALVE, WATER CURB BOX
	ZONING BOUNDARY LINE
	NEW CONCRETE CURB LINE
	NEW BELGIAN BLOCK CURB LINE
	NEW FENCE LINE
	NEW TREELINE
	NEW ASPHALT
	NEW BUILDING
	NEW BUILDING OVERHANG
	NEW CONCRETE AREA
	PHASE 1/PHASE 2 CONSTRUCTION BOUNDARY

THE INTENT OF THIS PLAN IS TO CONSTRUCT A MID-RISE APARTMENT BUILDING A AND LOW-RISE MULTI-FAMILY BUILDING B AS PART OF PHASE 1, ALONG WITH ASSOCIATED PARKING AREAS, UTILITIES, STORMWATER MANAGEMENT FACILITIES, AND OTHER RELATED ITEMS. PHASE 2 OF THE PROJECT WILL CONSTRUCT A MID-RISE APARTMENT BUILDING C AND LOW-RISE MULTI-FAMILY BUILDING D, ALONG WITH ASSOCIATED PARKING AREAS, UTILITIES, STORMWATER MANAGEMENT FACILITIES, AND OTHER RELATED ITEMS.

EASEMENT LINE TABLE		
LINE	DIRECTION	LENGTH
L11	N71°54'24"W	10.26'
L12	S70°16'46"E	31.28'
L13	S72°18'58"W	48.12'
L14	N69°45'04"W	40.67'
L15	N72°18'58"E	47.02'
L16	S69°45'04"E	20.07'
L17	S15°31'28"W	24.94'
L18	N69°45'04"W	20.07'
L19	N15°31'28"E	24.94'

[illegible]

KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 056285E

COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 056285E

GATEWAY ON FOURTH PHASE 1 LLC

GATEWAY ON 4TH

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA

SITE RECORD PLAN



74 WEST BROAD STREET, STE 300
BETHLEHEM, PA 18018
TEL 610-625-2999
FAX 610-625-2969
www.tandmassociates.com

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY	KJR	DRAWING	CSP
CHECKED BY	KJR	SHEET	04
DRAWN BY	BAK		29
DATE	02-20-2026		
SCALE	1"=40'		
PROJ. NO.	PENR00169		

PROJECT INFORMATION:
FILE PATH: C:\Projects\PEN\00169\Plans\
FILE NAME: PEN\00169_SHUT04_CSP.dwg
LAST SAVE DATE AND TIME: 09 Jun 2026, 3:04PM
LAST SAVE BY: erolmes

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PIPE TABLE			
NAME	SIZE	LENGTH	SLOPE
PIPE 1	15"HDPE Pipe	19.91'	0.50%
PIPE 2	15"HDPE Pipe	46.17'	0.50%
PIPE 3	15"HDPE Pipe	41.09'	0.50%
PIPE 4	15"HDPE Pipe	42.59'	0.50%
PIPE 5	15"HDPE Pipe	53.62'	0.52%
PIPE 6	15"HDPE Pipe	47.25'	0.67%
PIPE 7	15"HDPE Pipe	42.58'	0.50%
PIPE 8	15"HDPE Pipe	73.29'	0.50%
PIPE 9	18"HDPE Pipe	117.43'	0.49%
PIPE 10	18"HDPE Pipe	91.40'	0.51%
PIPE 11	18"HDPE Pipe	67.61'	0.50%
PIPE 12	18"HDPE Pipe	27.11'	3.87%
PIPE 13	15"HDPE Pipe	29.21'	0.50%

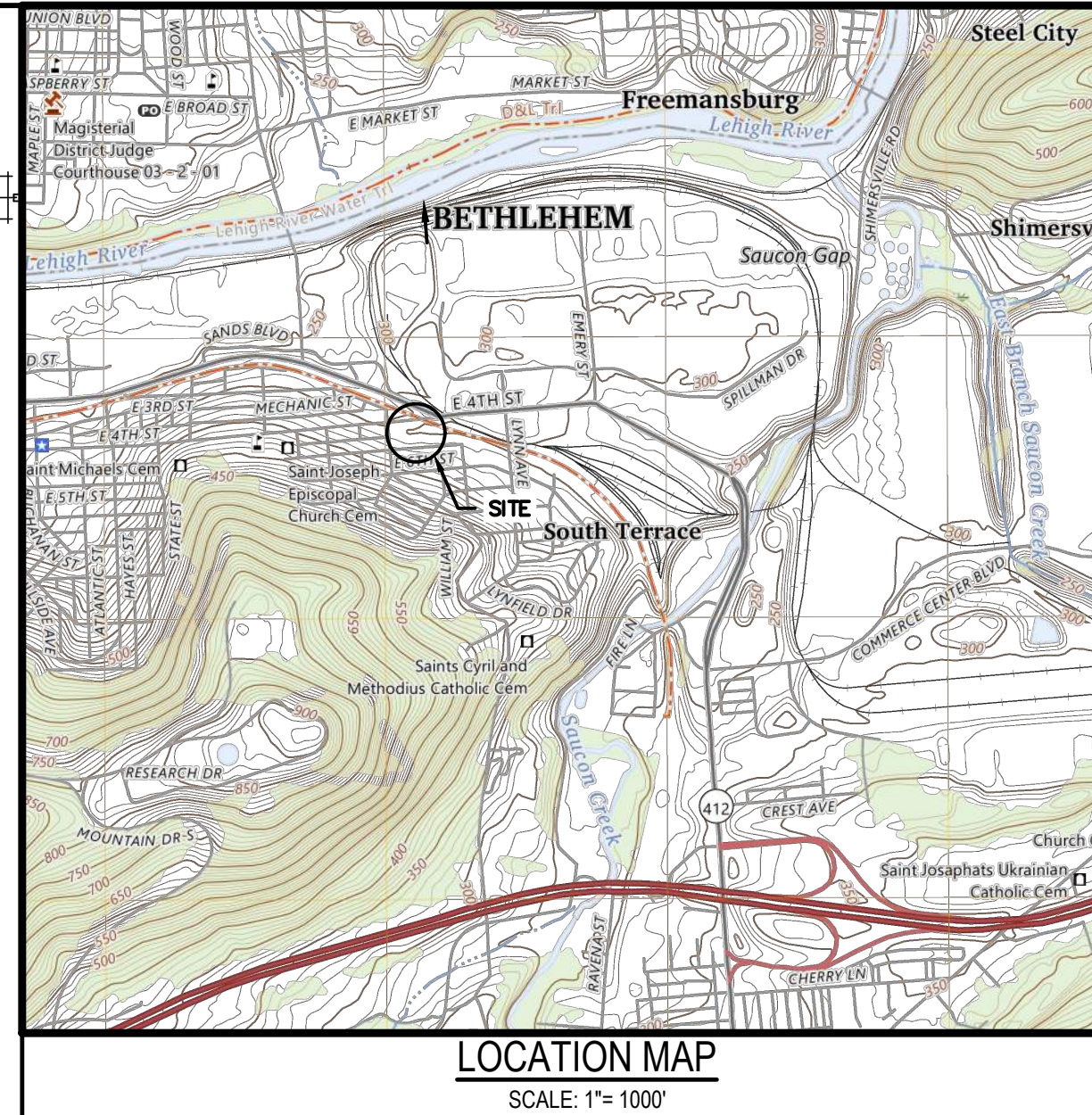
PIPE TABLE			
NAME	SIZE	LENGTH	SLOPE
PIPE 14	18"HDPE Pipe	116.25'	0.50%
PIPE 15	18"HDPE Pipe	43.12'	0.50%
PIPE 15 - 1	18"HDPE Pipe	118.25'	0.61%
PIPE 16	18"HDPE Pipe	75.98'	0.75%
PIPE 17	18"HDPE Pipe	54.42'	4.63%
PIPE 18	15"HDPE Pipe	78.21'	1.74%
PIPE 19	18"HDPE Pipe	5.86'	2.03%
PIPE 20	18"HDPE Pipe	80.47'	2.20%
PIPE 21	18"HDPE Pipe	20.00'	2.20%
PIPE 22	15"HDPE Pipe	45.82'	5.61%
PIPE 23	15"HDPE Pipe	14.75'	0.50%
PIPE 24	15"HDPE Pipe	24.09'	0.50%
PIPE 25	15"HDPE Pipe	14.44'	5.00%

STRUCTURE TABLE	
NAME	STRUCTURE DETAILS
EX. IN	RIM=293.21 PIPE 12 INV IN = 290.00
IN A-1	RIM=305.00 PIPE 14 INV OUT = 299.92
IN A-2	RIM=303.00 PIPE 14 INV IN = 299.34 PIPE 15 INV OUT = 299.24
IN A-7	RIM=301.90 PIPE 20 INV OUT = 297.60 PIPE 19 INV OUT = 298.67
IN B-1	RIM=301.18 PIPE 24 INV OUT = 296.12
IN B-2	RIM=301.22 PIPE 24 INV IN = 296.00 PIPE 23 INV OUT = 295.90
IN C-1	RIM=302.90 PIPE 8 INV IN = 297.52 PIPE 5 INV IN = 297.52 PIPE 9 INV OUT = 297.42
IN C-2	RIM=299.80 PIPE 9 INV IN = 296.84 PIPE 10 INV OUT = 296.74
IN C-3	RIM=299.00 PIPE 10 INV IN = 296.27 PIPE 11 INV OUT = 296.17

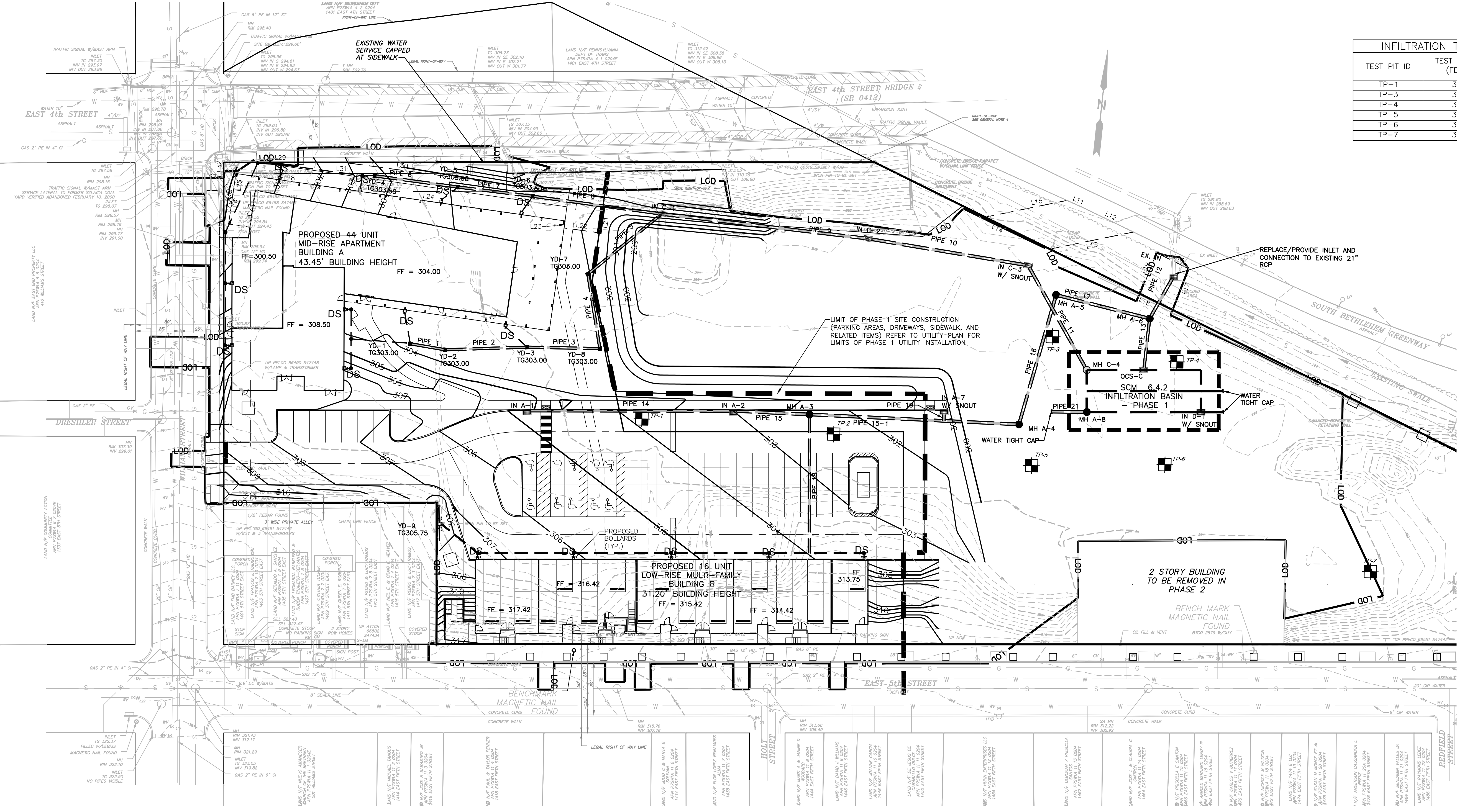
STRUCTURE TABLE	
NAME	STRUCTURE DETAILS
IN D-1	RIM=300.00
MH A-3	RIM=302.40 PIPE 15 INV IN = 299.02 PIPE 18 INV IN = 299.34 PIPE 15 - 1 INV OUT = 299.02
MH A-4	RIM=300.91 PIPE 15 - 1 INV IN = 298.30 PIPE 16 INV OUT = 294.34
MH A-5	RIM=300.15 PIPE 16 INV IN = 293.77 PIPE 17 INV OUT = 293.67
MH A-6	RIM=299.56 PIPE 13 INV IN = 294.35 PIPE 17 INV IN = 291.15 PIPE 12 INV OUT = 291.05
MH A-8	RIM=300.29 PIPE 20 INV IN = 295.83 PIPE 21 INV IN = 295.83
MH B-3	RIM=300.99 PIPE 23 INV IN = 295.83
MH C-4	RIM=299.75 PIPE 11 INV IN = 295.83
MH E-1	RIM=298.39 PIPE 22 INV IN = 295.83

STRUCTURE TABLE	
NAME	STRUCTURE DETAILS
OCS-C	RIM=300.34 PIPE 13 INV OUT = 294.50
YD-1	RIM=303.00 PIPE 1 INV OUT = 298.95
YD-2	RIM=303.00 PIPE 1 INV IN = 298.85 PIPE 2 INV OUT = 298.75
YD-3	RIM=303.00 PIPE 2 INV IN = 298.52 PIPE 3 INV OUT = 298.42
YD-4	RIM=301.72 PIPE 6 INV OUT = 298.62
YD-5	RIM=305.20 PIPE 6 INV IN = 298.30 PIPE 7 INV OUT = 298.20
YD-6	RIM=303.00 PIPE 7 INV IN = 297.99 PIPE 8 INV OUT = 297.89
YD-7	RIM=303.00 PIPE 4 INV IN = 297.90 PIPE 5 INV OUT = 297.80
YD-8	RIM=303.00 PIPE 3 INV IN = 298.21 PIPE 4 INV OUT = 298.11

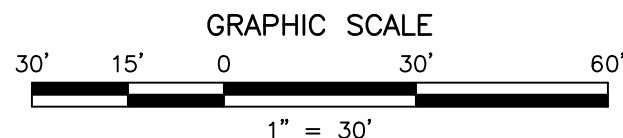
LEGEND	
	PROPERTY LINE
	BUILDING OUTLINE
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	EXISTING DRIVEWAY/PARKING
	BUILDING SETBACK LINE
	RIGHT-OF-WAY LINE
	CONCRETE CURB
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	WATER LINE
	GAS LINE
	SEWER LINE
	EXISTING DECIDUOUS TREE (TBR)
	IRON PIN, REBAR OR IRON PIPE (FOUND)
	IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
	WATER VALVE/WATER CURB BOX
	TEST PIT LOCATIONS
	BORING LOCATIONS
	NEW CONCRETE CURB LINE
	NEW BELGIAN BLOCK CURB LINE
	NEW FENCE LINE
	NEW TREELINE
	INDEX CONTOUR
	EVEN CONTOUR
	ODD CONTOUR
	NEW BUILDING OVERHANG
	NEW CONCRETE AREA
	PHASE 1/PHASE 2 CONSTRUCTION BOUNDARY
	LIMIT OF DISTURBANCE
	NPDES BOUNDARY



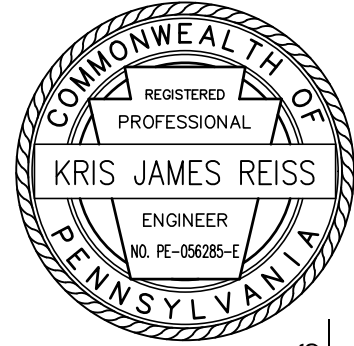
INFILTRATION TESTING CHART		
TEST PIT ID	TEST DEPTH (FEET)	INFILTRATION RATE (INCHES/HOUR)
TP-1	3.5	0.0
TP-3	3.5	19.8
TP-4	3.0	12.4
TP-5	3.5	0.0
TP-6	3.5	19.8
TP-7	3.0	1.2



PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION



NO.	DATE	REVISIONS	BY	CHKD
4	06/01/26	REVISED PER CITY COMMENTS	BAK/ELH	KJR
3	05/15/26	REVISED FOR NPDES SUBMISSION	BAK/ELH	KJR
2	05/08/26	ISSUED FOR 90% CONTRACT DRAWINGS	BAK/ELH	KJR
1	2/28/2026	REVISED FOR NPDES SUBMISSION	BAK	KJR



KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 060285

GATEWAY ON FOURTH PHASE 1 LLC

GATEWAY ON 4TH

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA

PHASE 1 GRADING AND DRAINAGE PLAN
(PCSM PLAN)



OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY	KJR	DRAWING	PCSM
CHECKED BY	KJR	SHEET	05
DRAWN BY	BAK	OF	29
DATE	02-20-2026		
SCALE	1"=30'		
PROJ. NO.	PENR00169		

PIPE TABLE			
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PIPE 12	18"HDPE Pipe	27.11'	3.87%
PIPE 13	15"HDPE Pipe	29.21'	0.50%

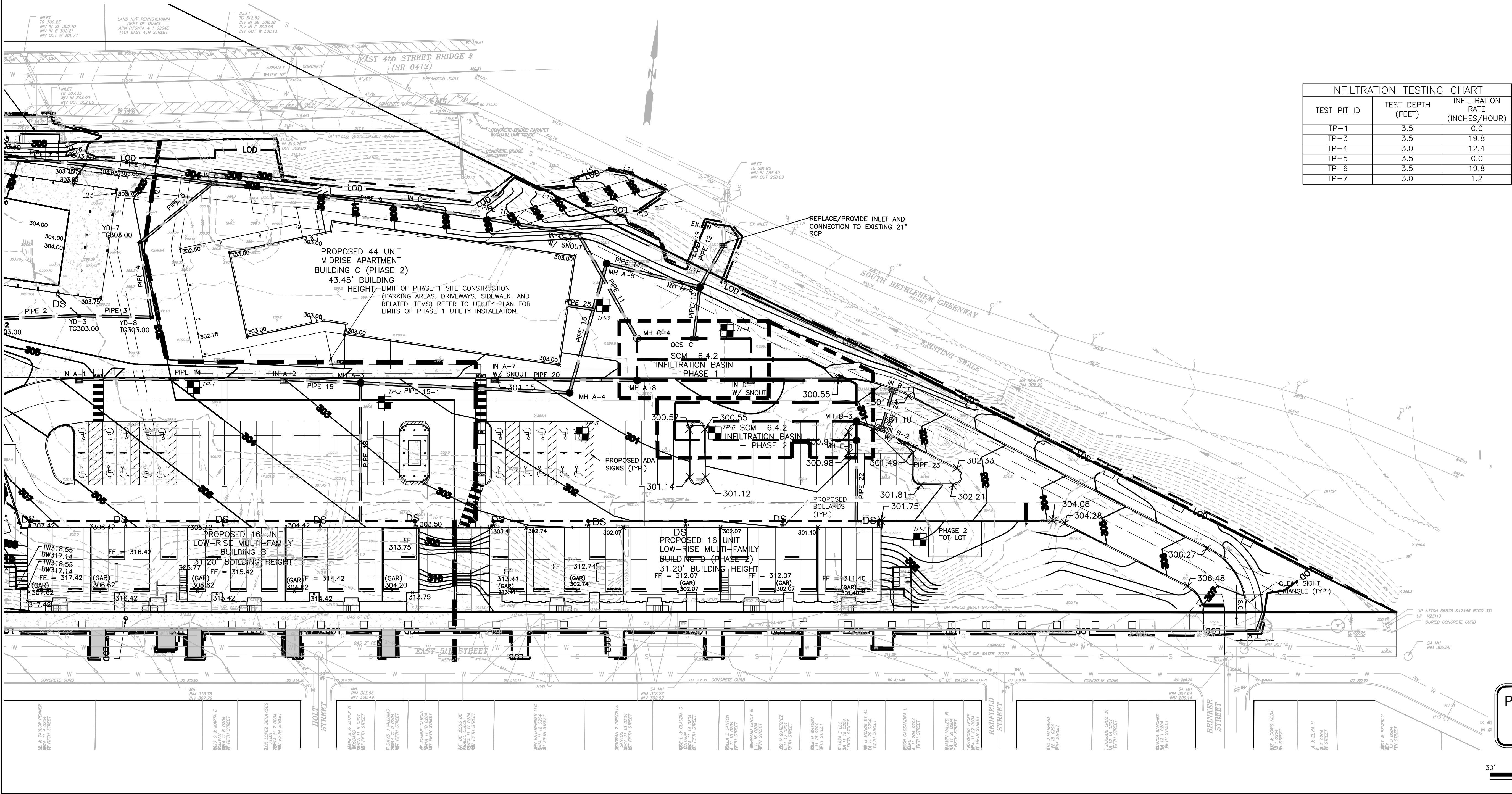
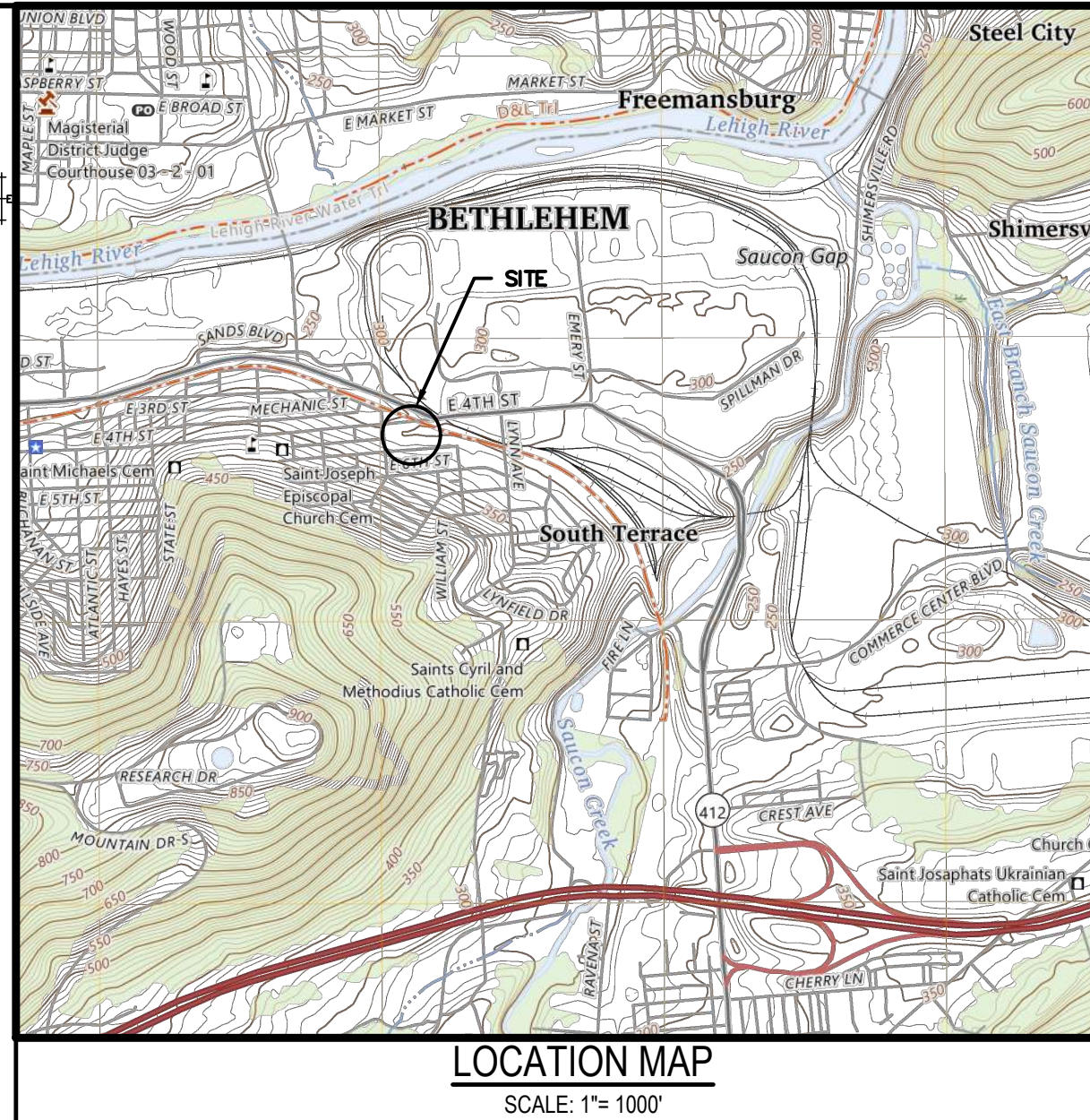
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IN B-1	RIM=301.18 PIPE 24 INV OUT = 296.12
IN B-2	RIM=301.22 PIPE 24 INV IN = 296.00 PIPE 23 INV OUT = 295.90
IN C-1	RIM=302.90 PIPE 8 INV IN = 297.52 PIPE 5 INV IN = 297.52 PIPE 9 INV OUT = 297.42
IN C-2	RIM=299.80 PIPE 9 INV IN = 296.84 PIPE 10 INV OUT = 296.74
IN C-3	RIM=299.00 PIPE 10 INV IN = 296.27 PIPE 11 INV OUT = 296.17

STRUCTURE TABLE	
NAME	STRUCTURE DETAILS
IN D-1	RIM=300.00
MH A-3	RIM=302.40 PIPE 15 INV IN = 299.02 PIPE 18 INV IN = 299.34 PIPE 15 -1 INV OUT = 299.02
MH A-4	RIM=300.91 PIPE 15 -1 INV IN = 298.30 PIPE 16 INV OUT = 294.34
MH A-5	RIM=300.15 PIPE 16 INV IN = 293.77 PIPE 17 INV OUT = 293.67
MH A-6	RIM=299.56 PIPE 13 INV IN = 294.35 PIPE 17 INV IN = 291.15 PIPE 12 INV OUT = 291.05
MH A-8	RIM=300.29 PIPE 20 INV IN = 295.83 PIPE 21 INV IN = 295.83
MH B-3	RIM=300.99 PIPE 23 INV IN = 295.83
MH C-4	RIM=299.75 PIPE 11 INV IN = 295.83
MH E-1	RIM=298.39 PIPE 22 INV IN = 295.83

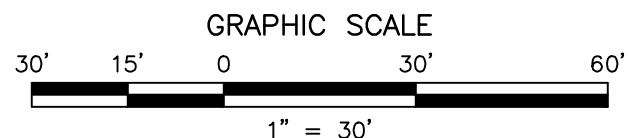
STRUCTURE TABLE	
NAME	STRUCTURE DETAILS
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YD-6	RIM=303.00 PIPE 7 INV IN = 297.99 PIPE 8 INV OUT = 297.89
YD-7	RIM=303.00 PIPE 4 INV IN = 297.90 PIPE 5 INV OUT = 297.80
YD-8	RIM=303.00 PIPE 3 INV IN = 298.21 PIPE 4 INV OUT = 298.11

LEGEND	
	PROPERTY LINE
	BUILDING OUTLINE
	ADJ. PROPERTY LINE
	EXISTING DRIVEWAY/PARKING
	BUILDING SETBACK LINE
	RIGHT-OF-WAY LINE
	CONCRETE CURB
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	WATER LINE
	GAS LINE
	SEWER LINE
	EXISTING DECIDUOUS TREE (TBR)
	IRON PIN, REBAR OR IRON PIPE (FOUND)
	IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
	WATER VALVE/WATER CURB BOX
	TEST PIT LOCATIONS
	BORING LOCATIONS
	NEW CONCRETE CURB LINE
	NEW BELGIAN BLOCK CURB LINE
	NEW FENCE LINE
	NEW TREELINE
	INDEX CONTOUR
	EVEN CONTOUR
	ODD CONTOUR
	NEW BUILDING OVERHANG
	NEW CONCRETE AREA
	PHASE 1/PHASE 2 CONSTRUCTION BOUNDARY
	LIMIT OF DISTURBANCE
	NPDES BOUNDARY

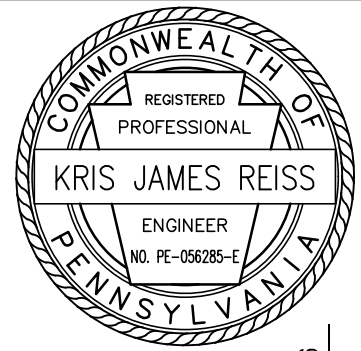


INFILTRATION TESTING CHART		
TEST PIT ID	TEST DEPTH (FEET)	INFILTRATION RATE (INCHES/HOUR)
TP-1	3.5	0.0
TP-3	3.5	19.8
TP-4	3.0	12.4
TP-5	3.5	0.0
TP-6	3.5	19.8
TP-7	3.0	1.2

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION



REVISIONS		DATE	BY	CHKD
4	REVISED PER CITY COMMENTS	06/01/2026	KJR	
3	REVISED FOR NPDES SUBMISSION	05/15/2026	BAK/ELH	
2	ISSUED FOR RFP CONTRACT DRAWINGS	05/08/2026	BAK/ELH	
1	REVISED FOR NPDES SUBMISSION	2/28/2026	BAK	



KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

06/01/2026
DATE
COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 060285E

GATEWAY ON FOURTH PHASE 1 LLC

GATEWAY ON 4TH

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA

PHASE 2 GRADING AND DRAINAGE PLAN
(PCSM PLAN)



OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY	KJR	DRAWING	PCSM
CHECKED BY	KJR	SHEET	06
DRAWN BY	BAK	OF	29
DATE	02-20-2026		
SCALE	1"=30'		
PROJ. NO.	PENR00169		

PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	
PIPE 1	15"HDPE Pipe	19.91'	0.50%	
PIPE 2	15"HDPE Pipe	46.17'	0.50%	
PIPE 3	15"HDPE Pipe	41.09'	0.50%	
PIPE 4	15"HDPE Pipe	42.59'	0.50%	
PIPE 5	15"HDPE Pipe	53.62'	0.52%	
PIPE 6	15"HDPE Pipe	47.25'	0.67%	
PIPE 7	15"HDPE Pipe	42.58'	0.50%	
PIPE 8	15"HDPE Pipe	73.29'	0.50%	
PIPE 9	18"HDPE Pipe	117.43'	0.49%	
PIPE 10	18"HDPE Pipe	91.40'	0.51%	
PIPE 11	18"HDPE Pipe	67.61'	0.50%	
PIPE 12	18"HDPE Pipe	27.11'	3.87%	
PIPE 13	15"HDPE Pipe	29.21'	0.50%	

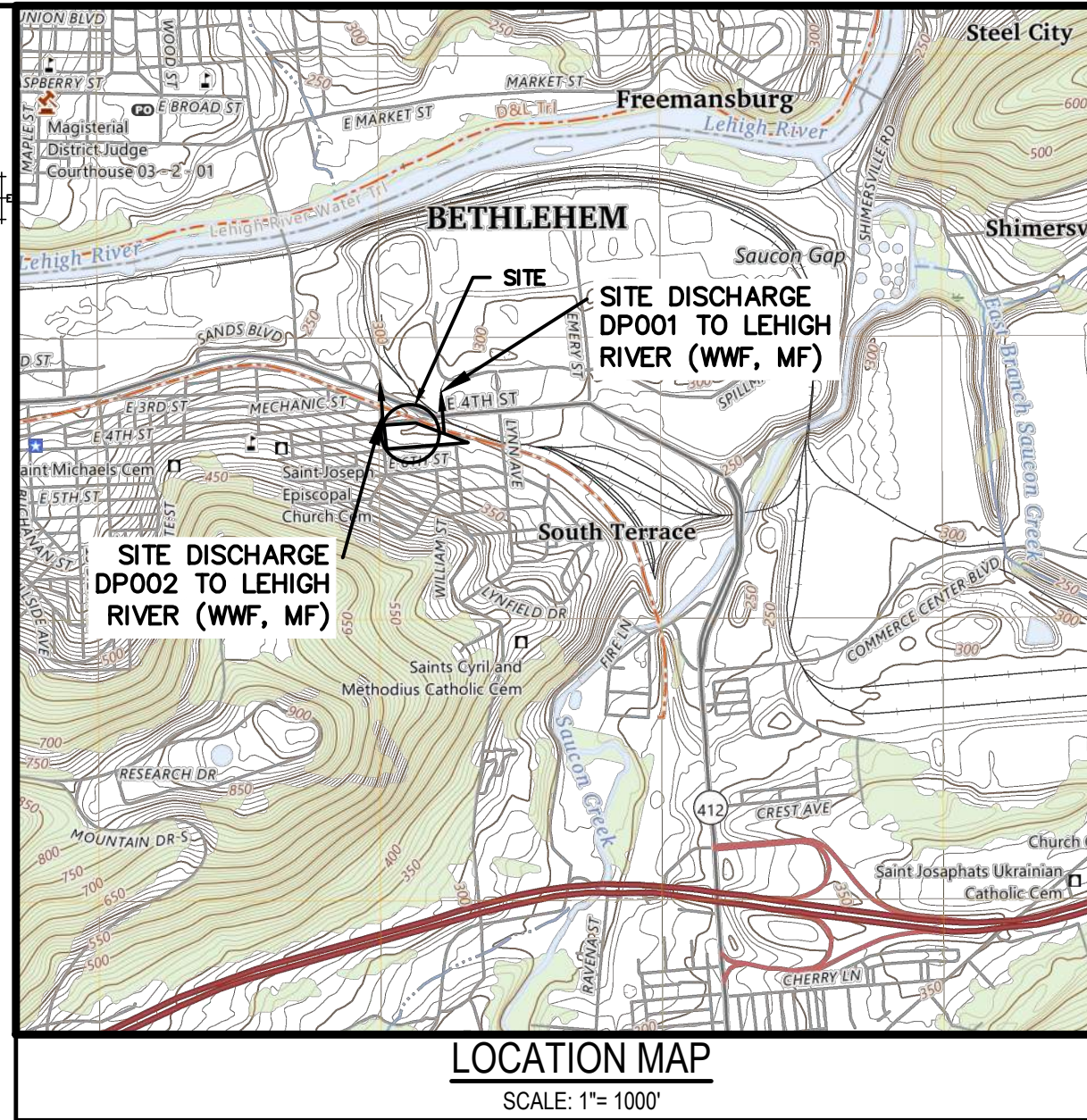
PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	
PIPE 14	18"HDPE Pipe	116.25'	0.50%	
PIPE 15	18"HDPE Pipe	43.12'	0.50%	
PIPE 15 -1	18"HDPE Pipe	118.25'	0.61%	
PIPE 16	18"HDPE Pipe	75.98'	0.75%	
PIPE 17	18"HDPE Pipe	54.42'	4.63%	
PIPE 18	15"HDPE Pipe	78.21'	1.74%	
PIPE 19	18"HDPE Pipe	5.86'	2.03%	
PIPE 20	18"HDPE Pipe	80.47'	2.20%	
PIPE 21	18"HDPE Pipe	20.00'	2.20%	
PIPE 22	15"HDPE Pipe	45.82'	5.61%	
PIPE 23	15"HDPE Pipe	14.75'	0.50%	
PIPE 24	15"HDPE Pipe	24.09'	0.50%	
PIPE 25	15"HDPE Pipe	14.44'	5.00%	

STRUCTURE TABLE	
NAME	STRUCTURE DETAILS
EX. IN	RIM=293.21 PIPE 12 INV IN = 290.00
IN A-1	RIM=305.00 PIPE 14 INV OUT = 299.92
IN A-2	RIM=303.00 PIPE 14 INV IN = 299.34 PIPE 15 INV OUT = 299.24
IN A-7	RIM=301.90 PIPE 20 INV OUT = 297.60 PIPE 19 INV OUT = 298.67
IN B-1	RIM=301.18 PIPE 24 INV OUT = 296.12
IN B-2	RIM=301.22 PIPE 24 INV IN = 296.00 PIPE 23 INV OUT = 295.90
IN C-1	RIM=302.90 PIPE 8 INV IN = 297.52 PIPE 5 INV IN = 297.52 PIPE 9 INV OUT = 297.42
IN C-2	RIM=299.80 PIPE 9 INV IN = 296.84 PIPE 10 INV OUT = 296.74
IN C-3	RIM=299.00 PIPE 10 INV IN = 296.27 PIPE 11 INV OUT = 296.17

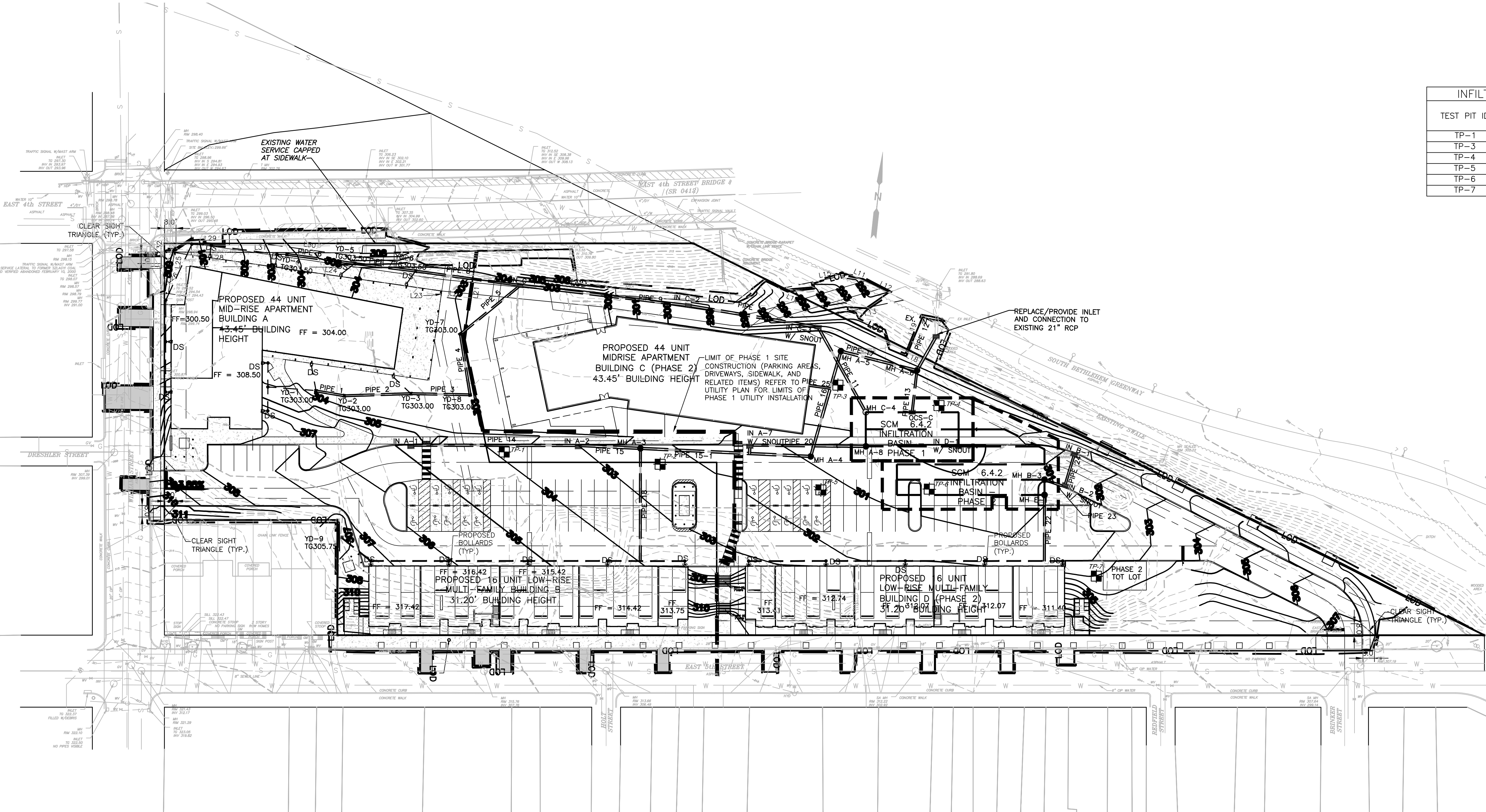
STRUCTURE TABLE	
NAME	STRUCTURE DETAILS
IN D-1	RIM=300.00
MH A-3	RIM=302.40 PIPE 15 INV IN = 299.02 PIPE 18 INV IN = 299.34 PIPE 15 -1 INV OUT = 299.02
MH A-4	RIM=300.91 PIPE 15 -1 INV IN = 298.30 PIPE 16 INV OUT = 294.34
MH A-5	RIM=300.15 PIPE 16 INV IN = 293.77 PIPE 17 INV OUT = 293.67
MH A-6	RIM=299.56 PIPE 13 INV IN = 294.35 PIPE 17 INV IN = 291.15 PIPE 12 INV OUT = 291.05
MH A-8	RIM=300.29 PIPE 20 INV IN = 295.83 PIPE 21 INV IN = 295.83
MH B-3	RIM=300.99 PIPE 23 INV IN = 295.83
MH C-4	RIM=299.75 PIPE 11 INV IN = 295.83
MH E-1	RIM=298.39 PIPE 22 INV IN = 295.83

STRUCTURE TABLE	
NAME	STRUCTURE DETAILS
OCS-C	RIM=300.34 PIPE 13 INV OUT = 294.50
YD-1	RIM=303.00 PIPE 1 INV OUT = 298.95
YD-2	RIM=303.00 PIPE 2 INV IN = 298.85 PIPE 2 INV OUT = 298.75
YD-3	RIM=303.00 PIPE 2 INV IN = 298.52 PIPE 3 INV OUT = 298.42
YD-4	RIM=301.72 PIPE 6 INV OUT = 298.62
YD-5	RIM=305.20 PIPE 6 INV IN = 298.30 PIPE 7 INV OUT = 298.20
YD-6	RIM=303.00 PIPE 7 INV IN = 297.99 PIPE 8 INV OUT = 297.89
YD-7	RIM=303.00 PIPE 4 INV IN = 297.90 PIPE 5 INV OUT = 297.80
YD-8	RIM=303.00 PIPE 3 INV IN = 298.21 PIPE 4 INV OUT = 298.11

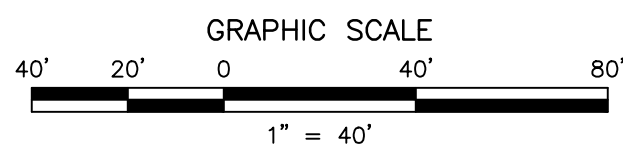
LEGEND	
	PROPERTY LINE
	BUILDING OUTLINE
	ADJACENT PROPERTY LINE
	EXISTING DRIVEWAY/PARKING
	BUILDING SETBACK LINE
	RIGHT-OF-WAY LINE
	CONCRETE CURB
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	WATER LINE
	GAS LINE
	SEWER LINE
	EXISTING DECIDUOUS TREE (TBR)
	IRON PIN, REBAR OR IRON PIPE (FOUND)
	IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
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PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION



DESIGNED BY KJR		DRAWING PCSM	
CHECKED BY KJR		SHEET 07	
DRAWN BY BAK		DATE 02-20-2026	
DATE 02-20-2026		SCALE 1"=40'	
PROJ. NO. PENR00169		OF 29	

COMMONWEALTH OF PENNSYLVANIA
Kris J. Reiss, P.E.
ENGINEER
NO. PE-060285-1
DATE
06/01/2026

COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 060285E

GATEWAY ON FOURTH PHASE 1 LLC
GATEWAY ON 4TH
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA
OVERALL GRADING AND DRAINAGE PLAN
(PCSM PLAN)

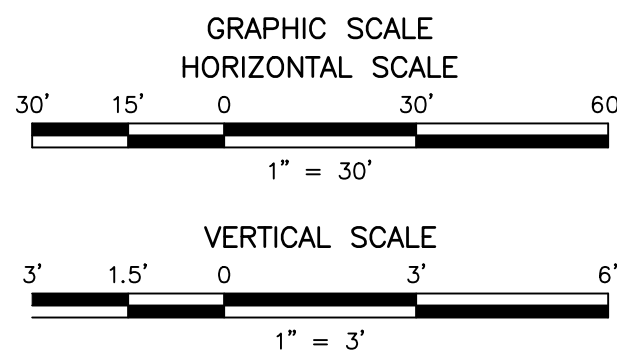
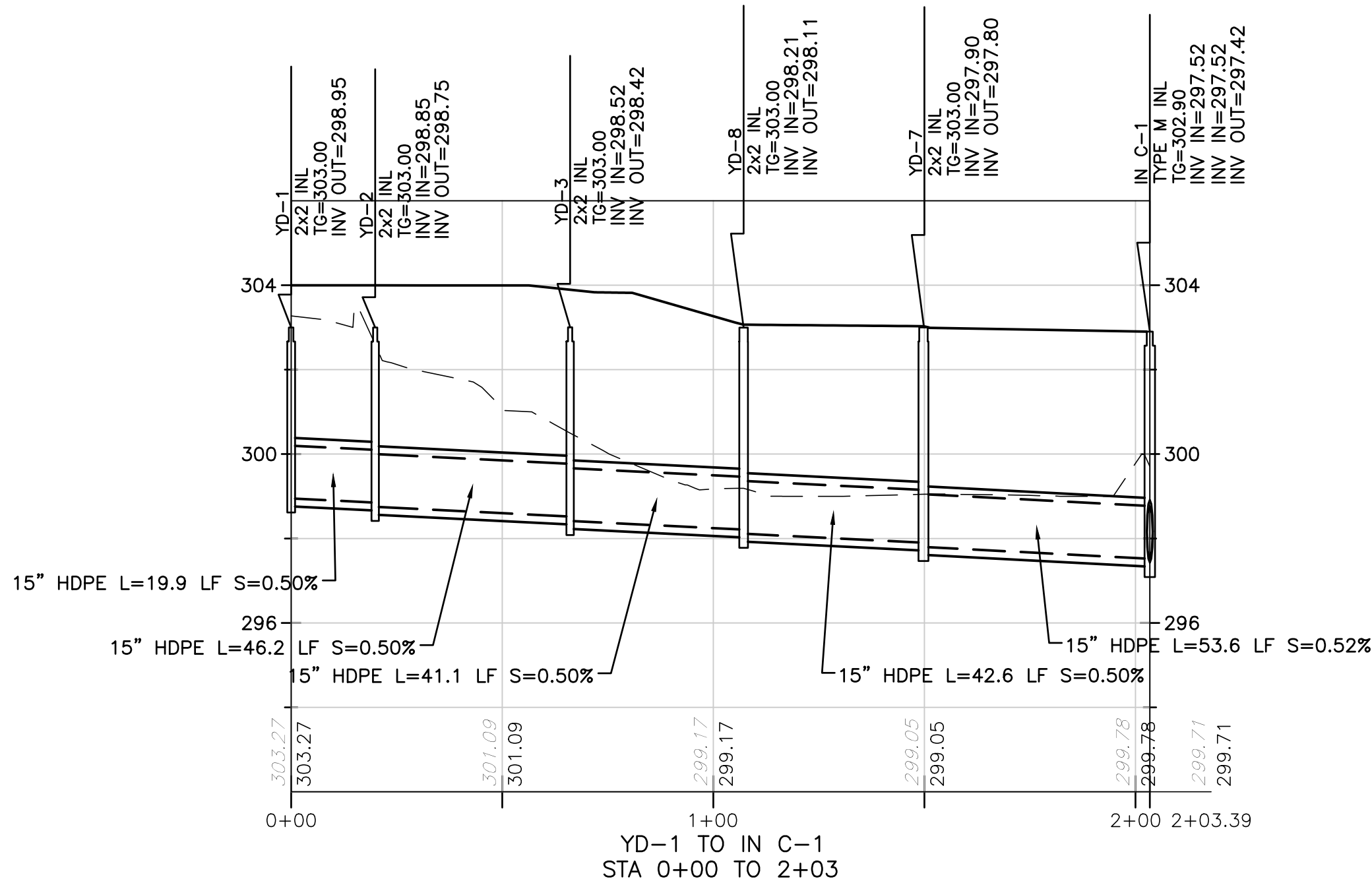
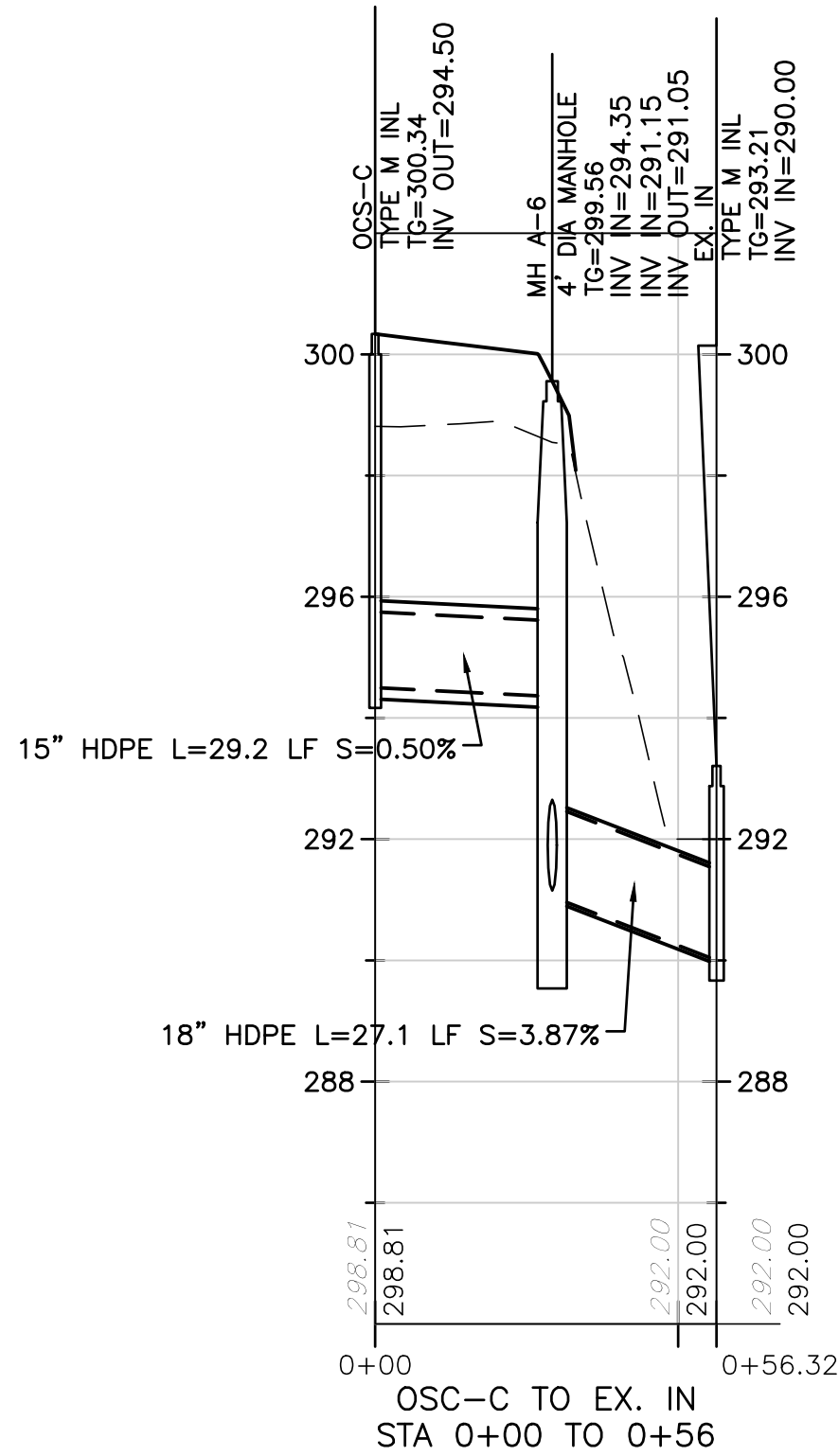
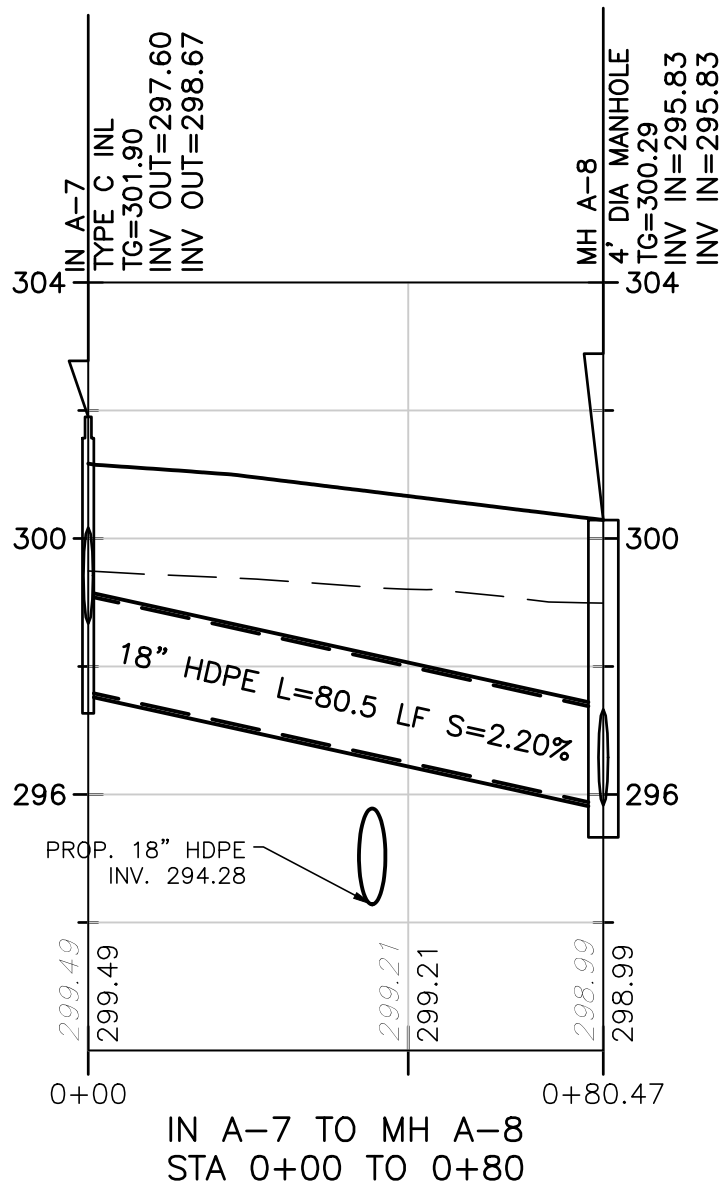
AND
YOUR GOALS. OUR MISSION.
74 WEST BROAD STREET, STE 300
BETHLEHEM, PA 18018
TEL 610-625-2999
FAX 610-625-2969
www.tandmassociates.com

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

PROJECT INFORMATION:
FILE PATH: C:\Projects\PENR00169\Plans\PCSM-GRD.dwg
FILE NAME: PENR00169_SHT005-007_PCSM-GRD.dwg
LAST SAVE BY: bkeough
LAST SAVE DATE: 09 Jun 2026, 10:54AM

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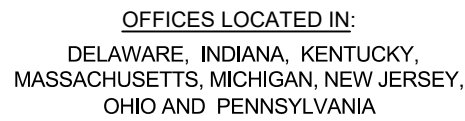
PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION

GATEWAY ON FOURTH PHASE 1 LLC

GATEWAY ON 4TH

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA

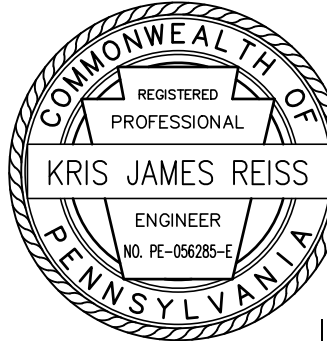
STORM SEWER PROFILES



DRAW
SHEET

08
OF 2

KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

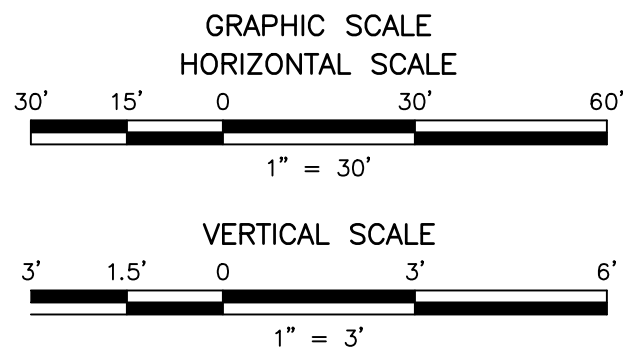
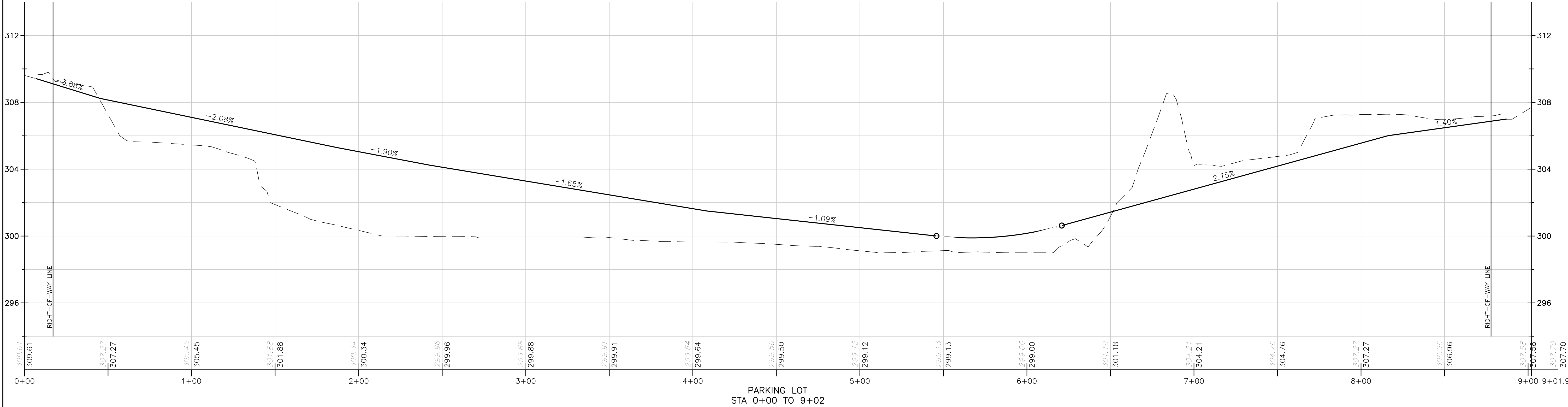


COMMONWEALTH OF PENNSYLVANIA
 LICENSE NO. 056285E
 DATE

NO.	DATE	REVISIONS	BY	CHKD
1	2/26/2028	REVISED FOR NPDES SUBMISSION	BAW/ELH	
2	05/08/26	ISSUED FOR 90% CONTRACT DRAWINGS	BAW/ELH	
3	05/15/26	REVISED FOR NPDES SUBMISSION	BAW/ELH	
4	06/01/26	REVISED PER CITY COMMENTS	BAW/ELH	

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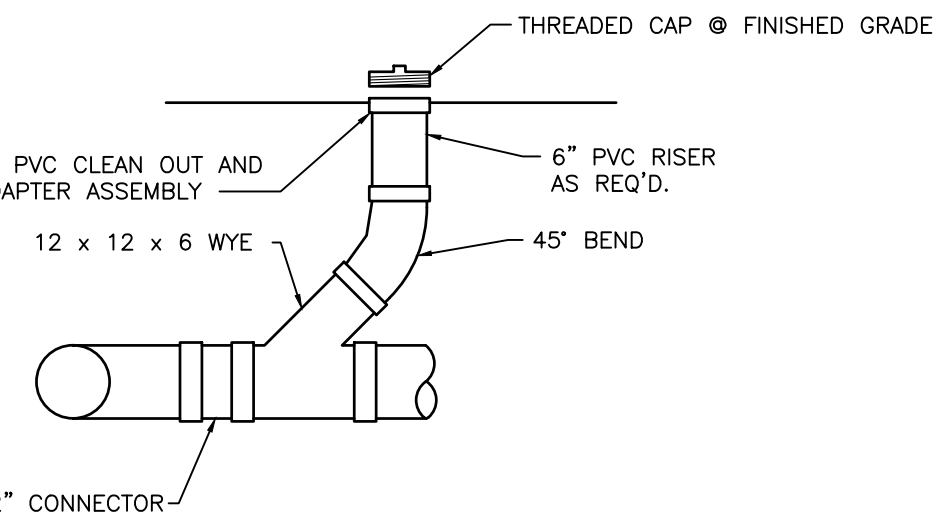
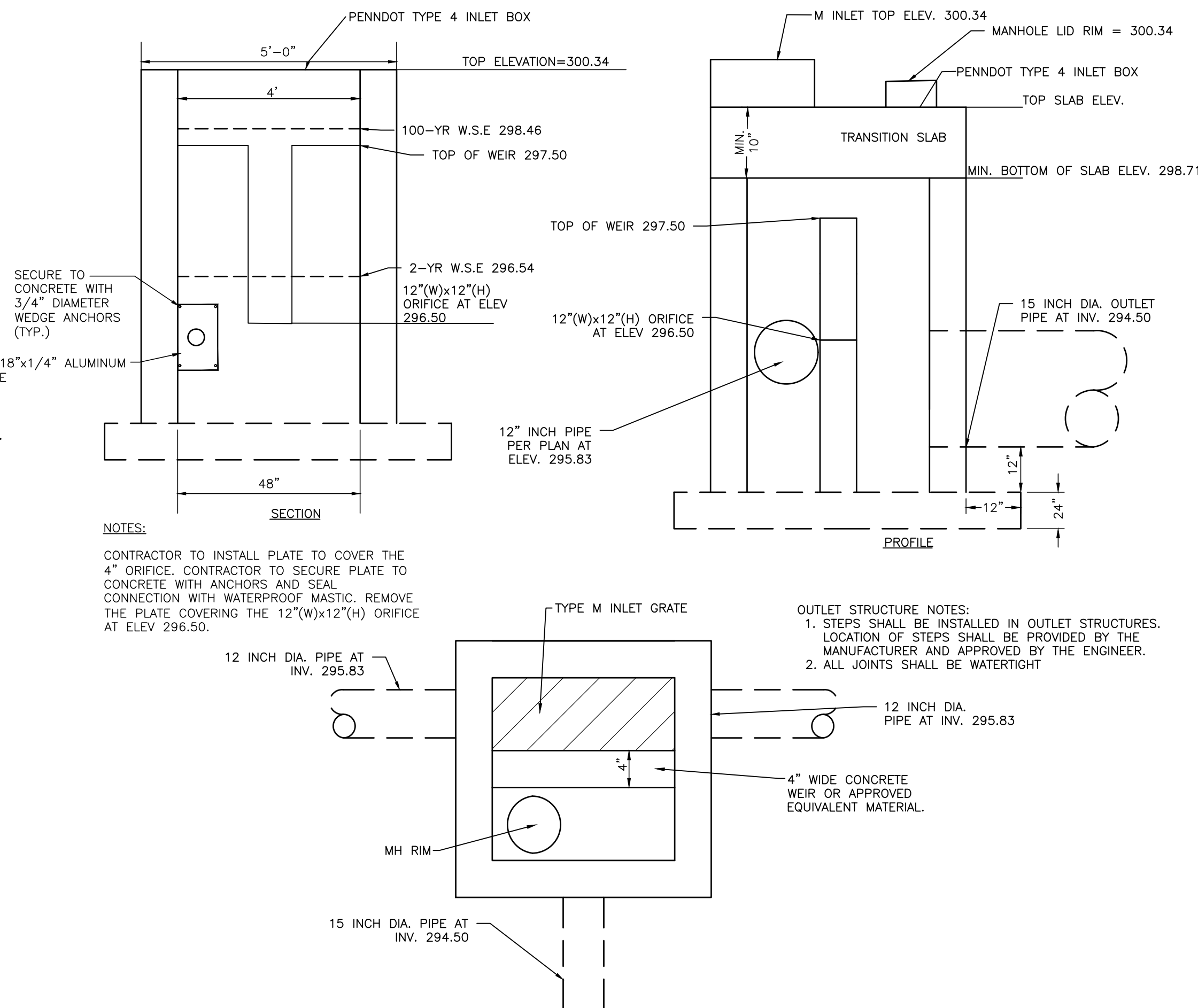
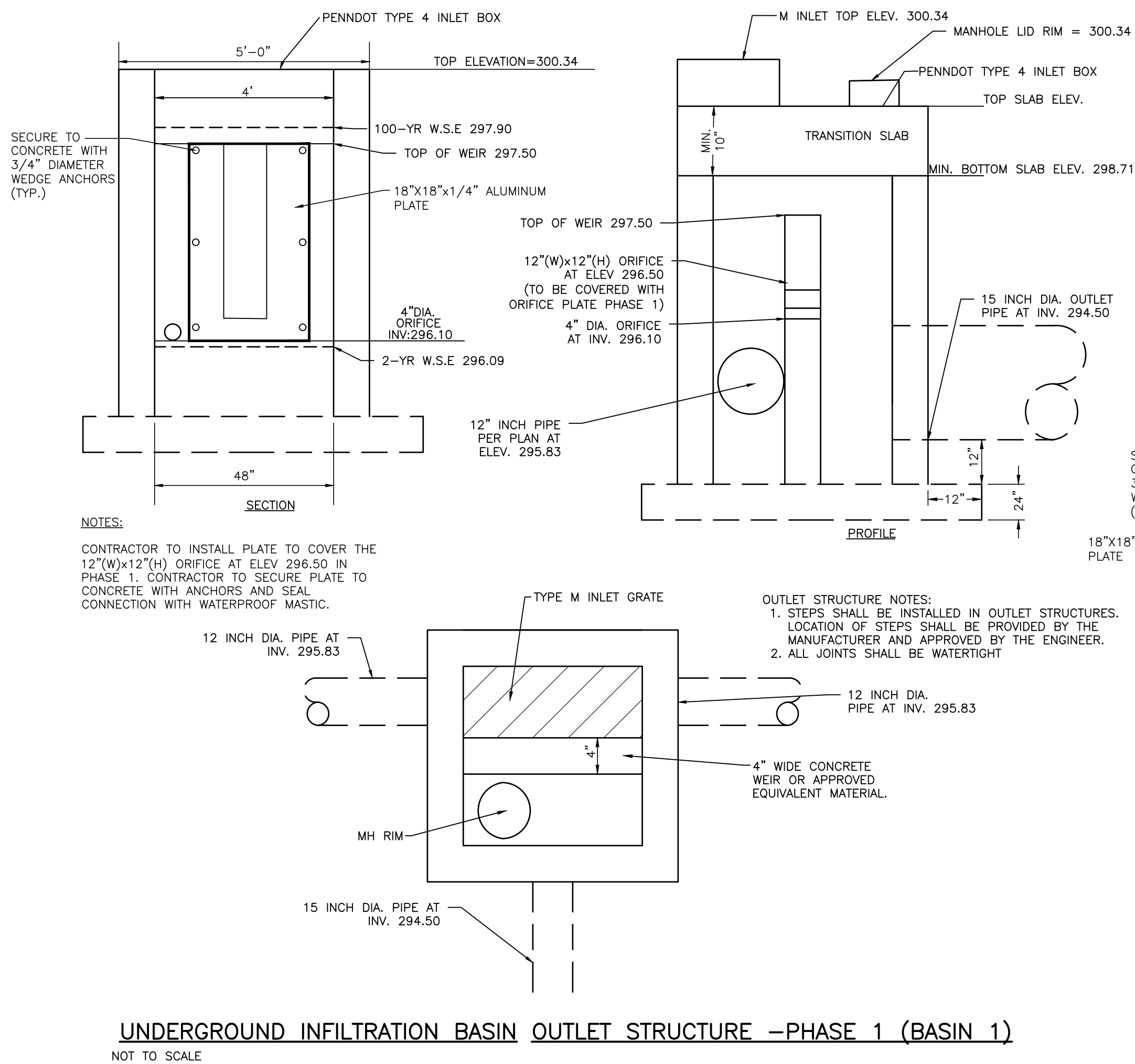
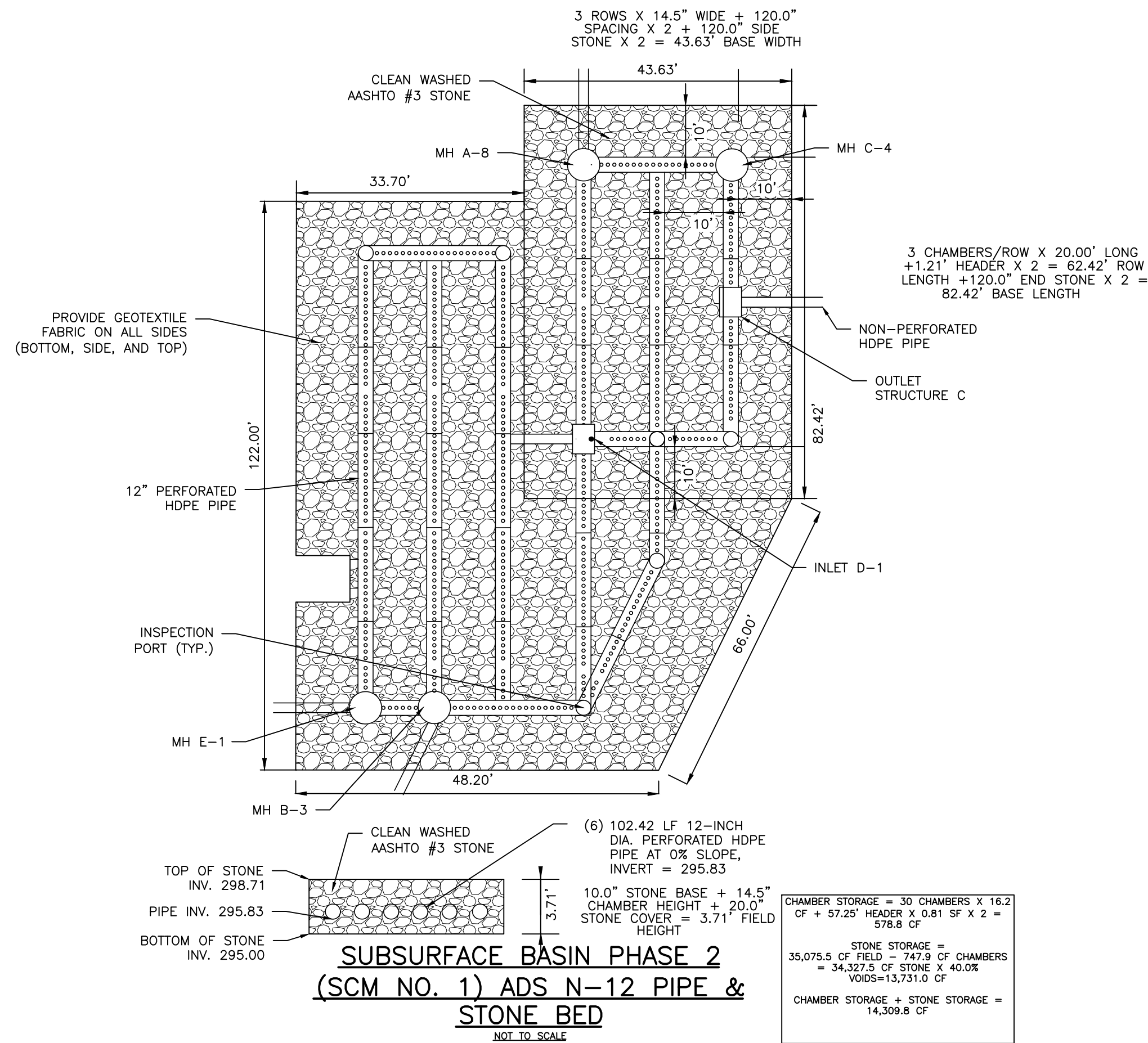
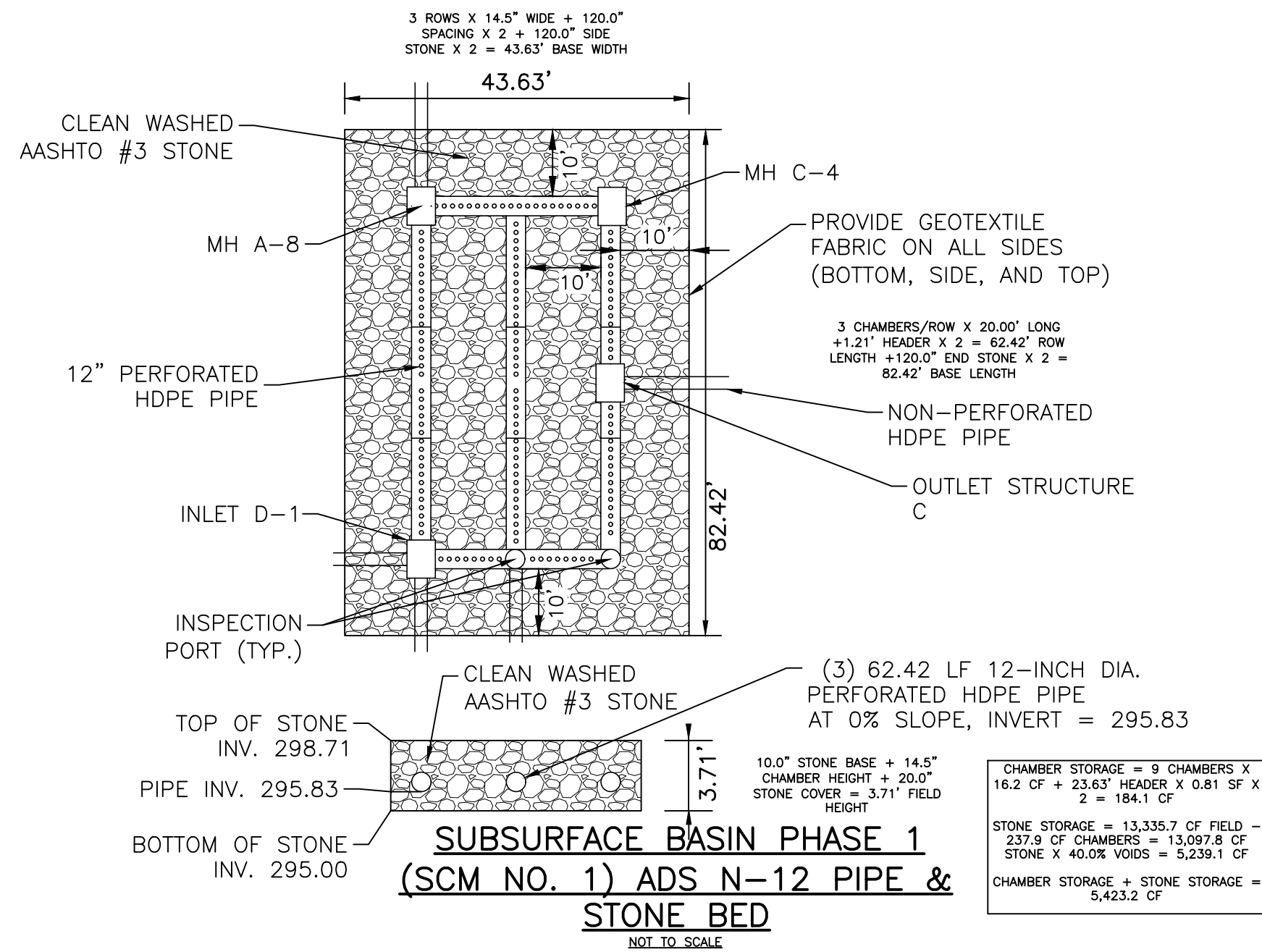


PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION

GATEWAY ON FOURTH PHASE 1 LLC		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
GATEWAY ON 4TH		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
SANITARY SEWER LATERAL PROFILE & PARKING LOT PROFILE		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
74 WEST BROAD STREET, STE 300 BETHLEHEM, PA 18018 TEL 610-625-2999 FAX 610-625-2969 www.tandmassociates.com		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
OFFICES LOCATED IN: DELAWARE, INDIANA, KENTUCKY, MASSACHUSETTS, MICHIGAN, NEW JERSEY, OHIO AND PENNSYLVANIA		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
DESIGNED BY KJR		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
CHECKED BY KJR		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
DRAWN BY BAK		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
DATE 02-20-2026		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
SCALE AS NOTED		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
PROJ. NO. PENR00169		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
09		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	
29		Kris J. Reiss, P.E. Licensed Professional Engineer		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056285E		06/01/2026 DATE	

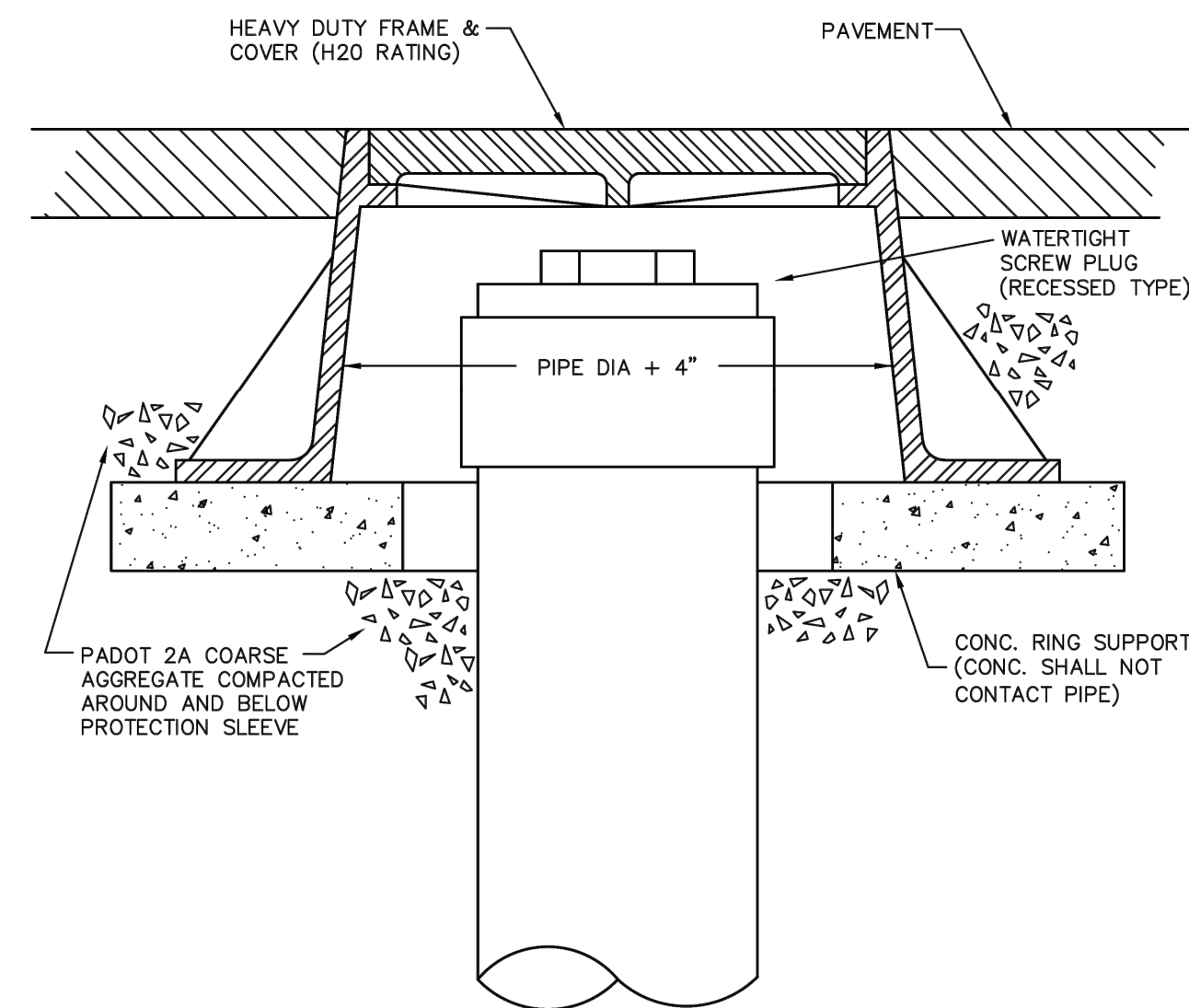
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FILE NAME: PENR00169_SHT010-012_PCSM.dwg
LAST SAVED DATE AND TIME: 09 Jun 2026, 9:12AM
LAST SAVE BY: bshahrough

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STORMWATER CLEAN OUT ASSEMBLY DETAIL
NOT TO SCALE

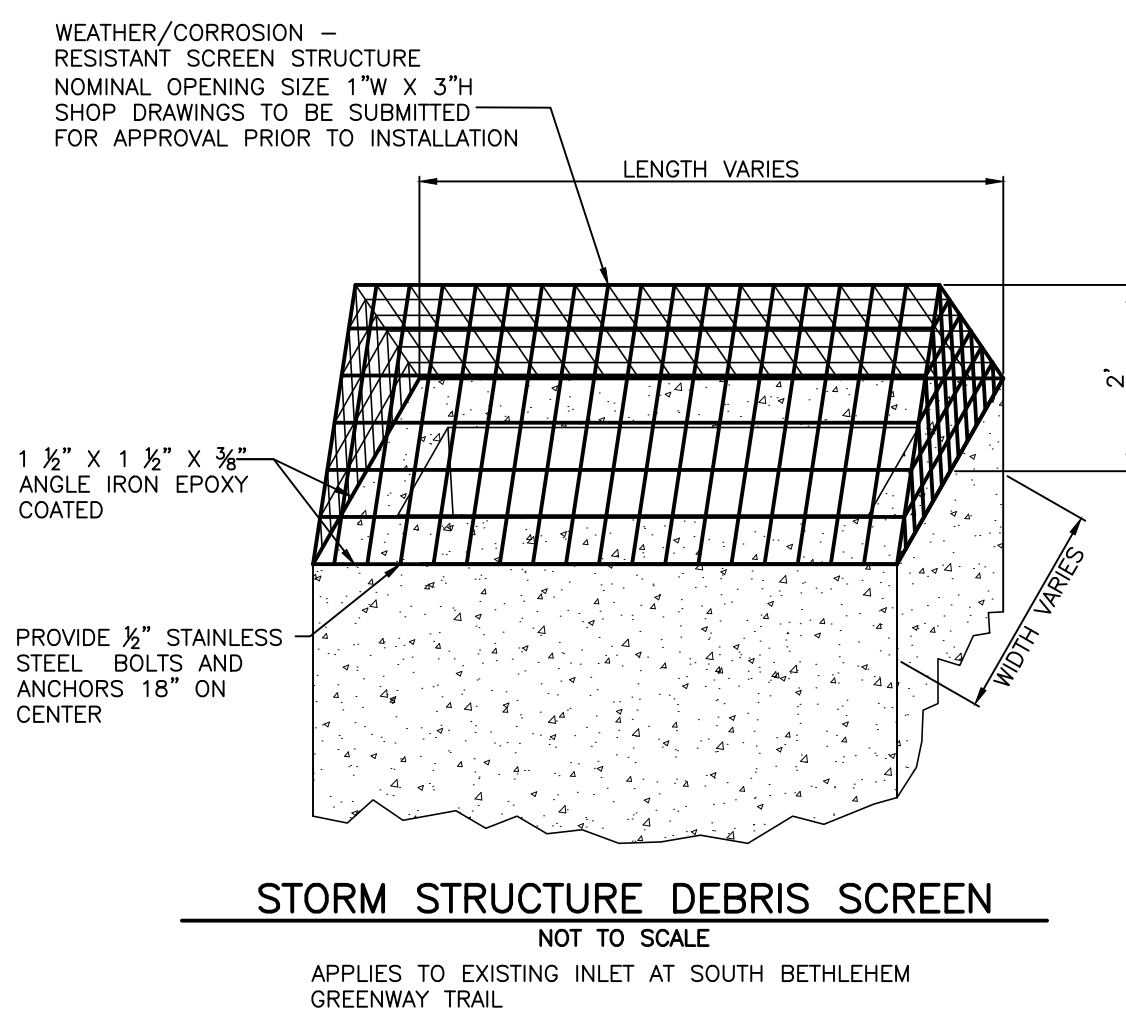
NOTE 1: REFER TO CLEANOUT PROTECTION SLEEVE DETAIL WHEN REQUIRED IN PAVED AREAS.
NOTE 2: REFER TO PLANS FOR DRAIN COLLECTOR PIPE SIZES.



CLEANOUT PROTECTION SLEEVE
NTS

NOTES:

- FRAME AND COVER SHALL BE NEENAH FOUNDRY COMPANY MODEL R-1976 OR APPROVED EQUAL
- CLEANOUT PROTECTION SLEEVES ARE TO BE INSTALLED FOR CLEANOUTS LOCATED IN PAVED AREAS, OR LESS THAN 3 FEET FROM A PAVED AREA.



STORM STRUCTURE DEBRIS SCREEN
NOT TO SCALE

APPLIES TO EXISTING INLET AT SOUTH BETHLEHEM GREENWAY TRAIL

DESIGNED BY		DRAWING	
KJR		PCSM	
CHECKED BY		SHEET	
KJR		12	
DRAWN BY		OF 29	
BAK			
DATE		02-20-2026	
SCALE		AS NOTED	
PROJ. NO.		PENR00169	

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
Kris James Reiss
No. PE-060285-C
DATE 06/01/2026

Kris J. Reiss, P.E.
LICENSED PROFESSIONAL ENGINEER

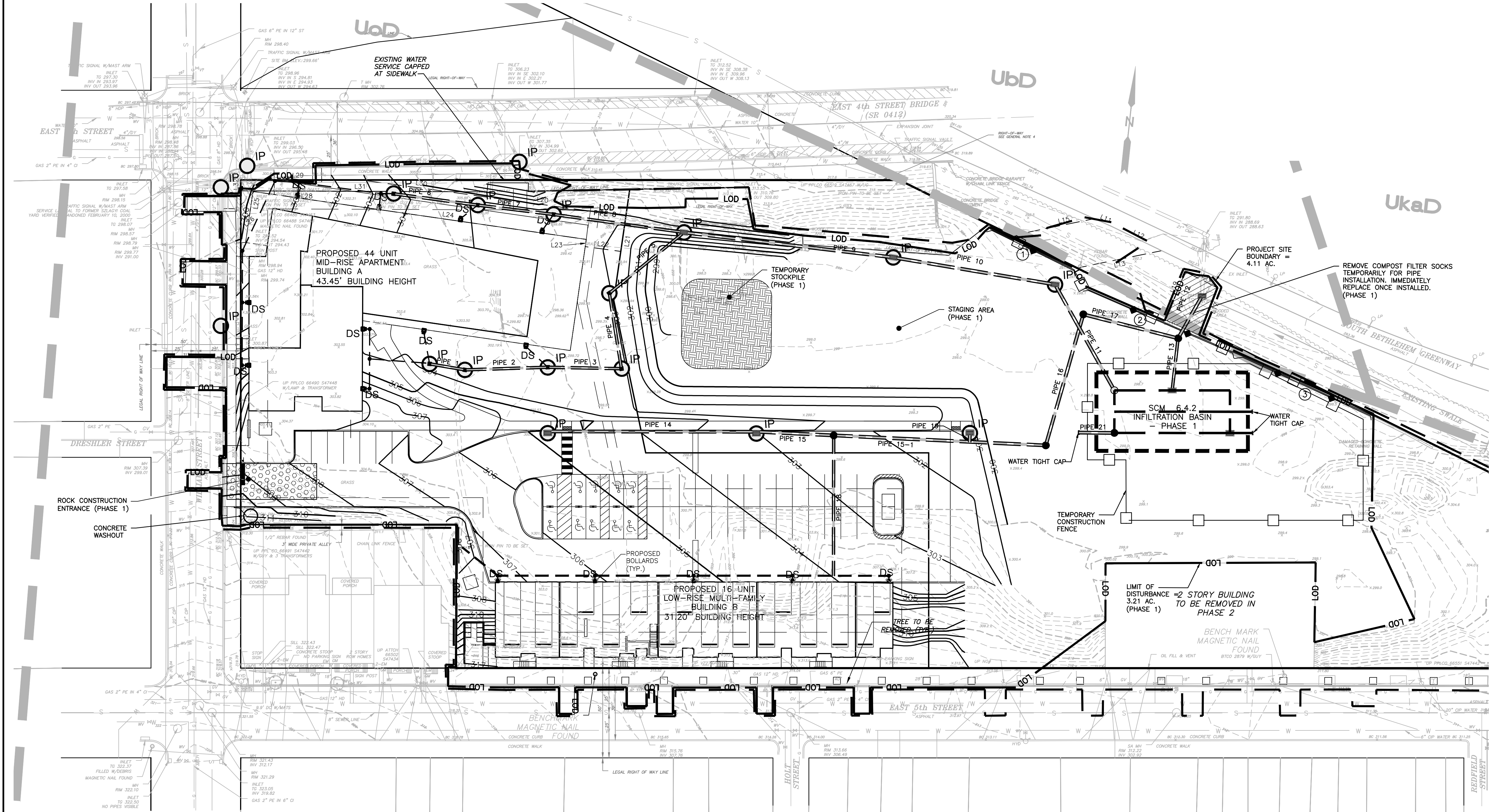
GATEWAY ON FOURTH PHASE 1 LLC
GATEWAY ON 4TH
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA
POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

YOUR GOALS. OUR MISSION.
74 WEST BROAD STREET, STE 300
BETHLEHEM, PA 18018
TEL 610-625-2999
FAX 610-625-2969
www.tandmassociates.com

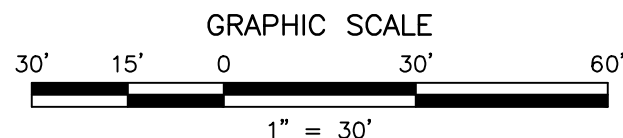
OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

PROJECT INFORMATION:
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FILE NAME: PENR00169_SHT03-014_SEP.dwg
DATE: 09 Jun 2026, 10:37AM
LAST SAVE BY: bkeough

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PRELIMINARY/FINAL
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CONSTRUCTION

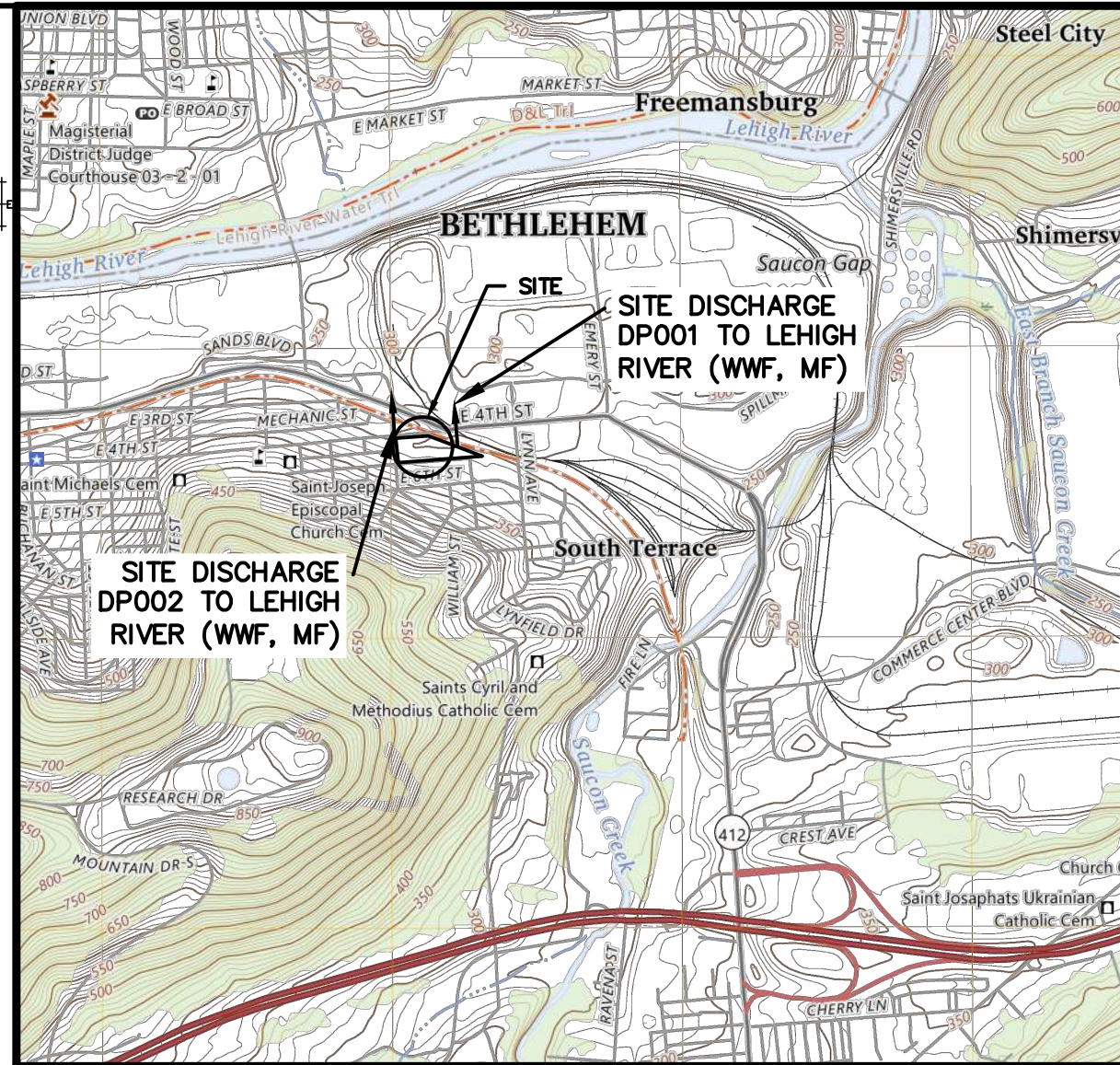


SOILS RESOLUTIONS

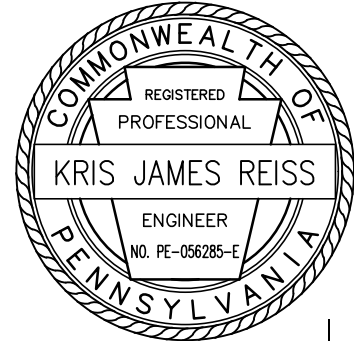
- A. SOILS EXHIBITING LOW STRENGTH AND ARE SUSCEPTIBLE TO CAVING OF CUT BANKS AS WELL AS LANDSLIDES APPROPRIATE PRECAUTIONS SHOULD BE TAKEN TO SAFEGUARD WORKERS DURING ALL TRENCHING AND EXCAVATION OPERATIONS. ALL APPLICABLE OSHA STANDARDS AND REGULATIONS MUST BE IMPLEMENTED AT ALL TIMES. SOILS ARE PRONE TO SLOPE FAILURES, AND SITE SHALL BE GRADED TO PROVIDE MANAGEABLE SLOPES AS SHOWN ON THE PLANS.
- B. SOILS EXHIBITING LOW SHEAR STRENGTH AND POOR COHESION SHALL BE BLENDED WITH OTHER ON-SITE SOILS OR OTHERWISE TREATED UNTIL THEY MEET THE CONTRACT SPECIFICATIONS. ALTERNATIVELY LOW SHEAR STRENGTH SOILS MAY BE DISPOSED OF OFF-SITE.
- C. SOILS CORROSIVE TO CONCRETE AND STEEL - SUITABLE PRECAUTIONS SHALL BE TAKEN TO PROTECT ALL UNDERGROUND PIPES, CONDUITS, AND STORAGE TANKS.
- D. SOILS PRONE TO WETNESS, SLOW PERCOLATION, AND SEASONALLY HIGH WATER TABLES/SHALLOW DEPTH TO SATURATED ZONE - EXCAVATION IN THESE SOILS MAY ENCOUNTER WATER AND HAVE THE PRESENCE OF HYDRIC SOILS OR HYDRIC INCLUSIONS. WHEN NECESSARY, TEMPORARY DEWATERING FACILITIES SHALL BE PROVIDED TO MINIMIZE THE IMPACT OF HIGH OR SEASONAL WATER.
- E. SOILS DEEMED UNSUITABLE FOR CONSTRUCTION (E.G., ORGANIC SOILS, OVERLY WET SOILS, BOULDERS, ETC.), SHALL BE TREATED, BLENDED OR MODIFIED UNTIL SUITABLE, OR DISPOSED OF OFF-SITE.
- F. SOILS THAT ARE MOISTURE SENSITIVE AND PRONE TO FROST ACTION - WINTER GRADING IS A CONCERN DUE TO THE FINE GRAIN/COHESIVE NATURE OF THE SITE SOILS. FROZEN SOIL SHALL NOT BE USED AS FILL MATERIAL, UNLESS THAWED AND PROVEN ACCEPTABLE FOR USE AS FILL IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. PRECAUTIONS SHOULD BE TAKEN TO PREVENT ALL CONSTRUCTION FROM DAMAGE DUE TO FROST CYCLE ACTION.
- G. ERODIBLE SOILS EXIST AT THE SITE - SOILS PRONE TO EROSION SHALL BE CONTROLLED BY THE MEASURES AND FACILITIES PRESENTED HEREIN.
- H. SOILS ARE PRONE TO PIPING, CULVERTS PASSING THROUGH EMBANKMENTS SHALL BE PROVIDED WITH ANTI-SEEP PROTECTION TO PROTECT AGAINST PIPING.
- I. SOILS THAT ARE POOR SOURCES OF TOPSOIL, SUCH AS BEING TOO DROUGHTY OR TOO WET - SOIL TESTS ARE RECOMMENDED TO DETERMINE THE PROPER APPLICATION OF SOIL AMENDMENTS TO PROMOTE THE GROWTH OF THE DESIRED VEGETATION. WHEREVER SOILS THAT ARE FAIR OR GOOD SOURCES OF TOPSOIL MAY EXIST ON A SITE, THEY SHOULD BE CAREFULLY PRESERVED AND STORED FOR LATER USE IN RESTORATION.

SOILS SCHEDULE

UoD - URBAN LAND-DUFFIELD COMPLEX, 8 TO 25 PERCENT SLOPES



LOCATION MAP
SCALE: 1"= 1000'



KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 056285E

GATEWAY ON FOURTH PHASE 1 LLC

GATEWAY ON 4TH

PHASE 1 EROSION AND SEDIMENT
CONTROL PLAN



OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY

CHECKED BY

DRAWN BY

DATE

SCALE

PROJ. NO.

DRAWING

SEP

SHEET

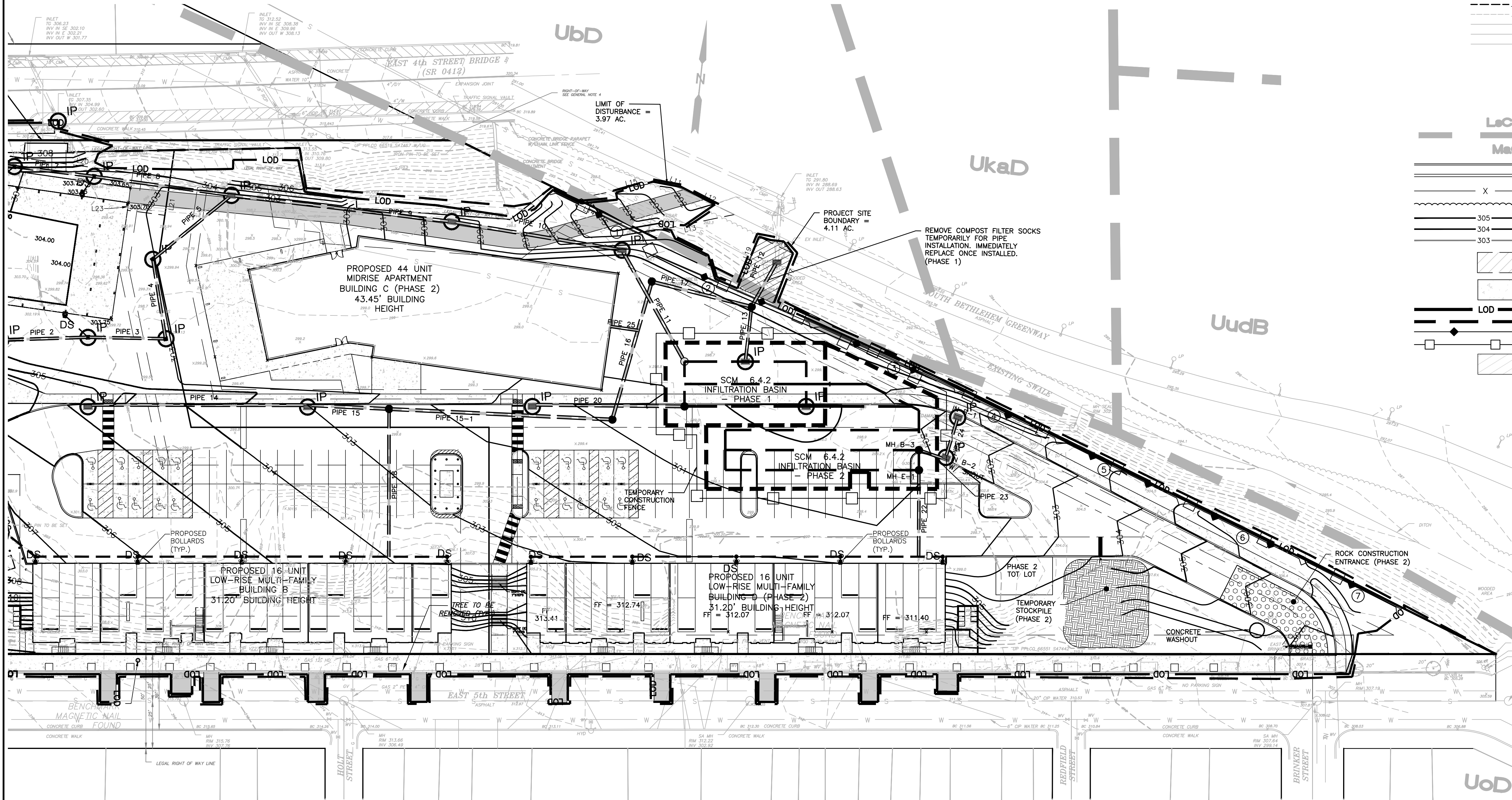
13

OF

29

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DATE: 09 Jun 2026, 10:37AM
LAST SAVE BY: bkrprouph

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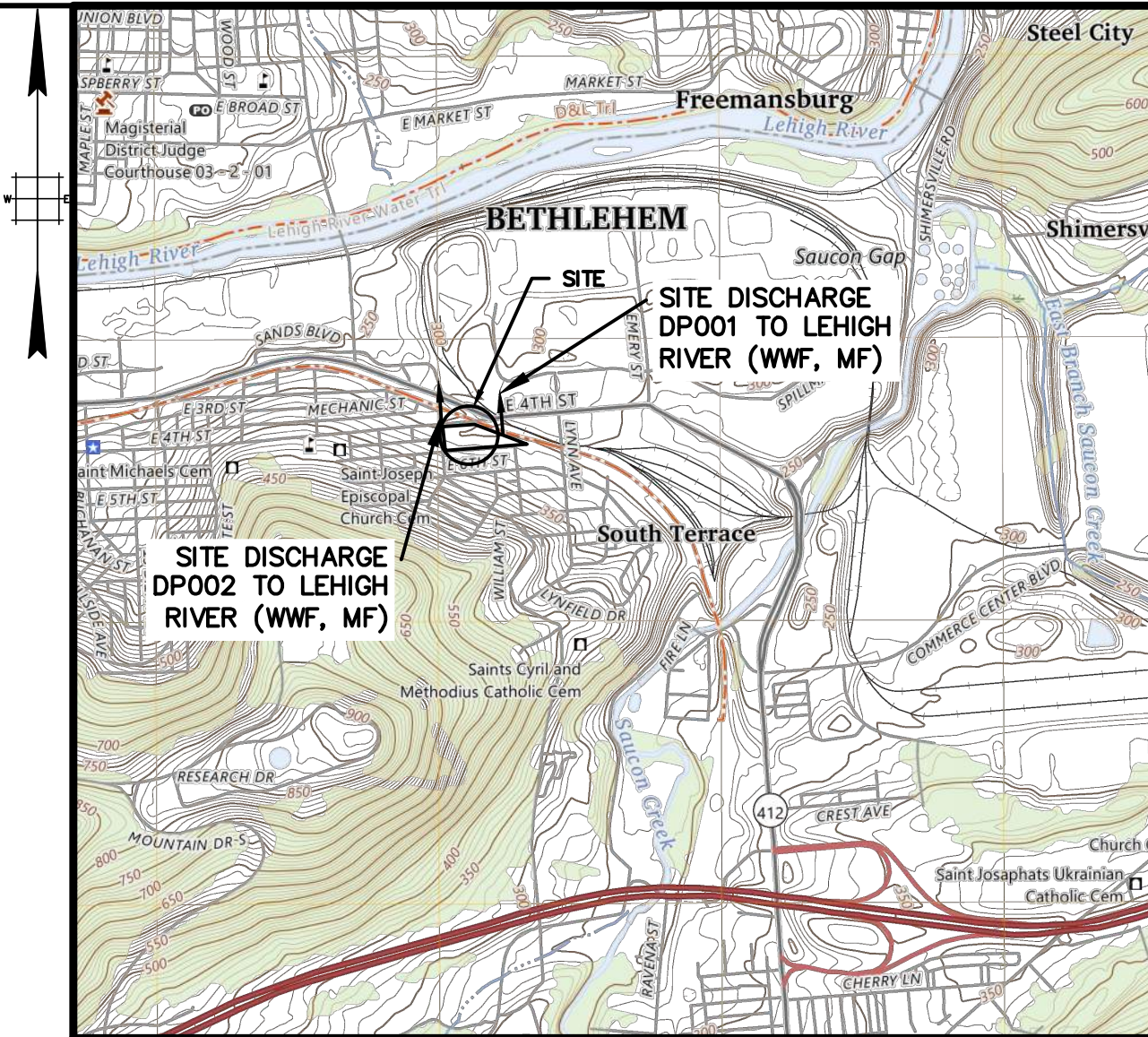
SOILS RESOLUTIONS

- A. SOILS EXHIBITING LOW STRENGTH AND ARE SUSCEPTIBLE TO CAVING OF CUT BANKS AS WELL AS LANDSLIDES - APPROPRIATE PRECAUTIONS SHOULD BE TAKEN TO SAFEGUARD WORKERS DURING ALL TRENCHING AND EXCAVATION OPERATIONS. ALL APPLICABLE OSHA STANDARDS AND REGULATIONS MUST BE IMPLEMENTED AT ALL TIMES. SOILS ARE PRONE TO SLOPE FAILURES, AND SITE SHALL BE GRADED TO PROVIDE MANAGEABLE SLOPES AS SHOWN ON THE PLANS.
- B. SOILS EXHIBITING LOW SHEAR STRENGTH AND POOR COHESION SHALL BE BLENDED WITH OTHER ON-SITE SOILS OR OTHERWISE TREATED UNTIL THEY MEET THE CONTRACT SPECIFICATIONS. ALTERNATIVELY LOW SHEAR STRENGTH SOILS MAY BE DISPOSED OF OFF-SITE.
- C. SOILS CORROSIVE TO CONCRETE AND STEEL - SUITABLE PRECAUTIONS SHALL BE TAKEN TO PROTECT ALL UNDERGROUND PIPES, CONDUITS, AND STORAGE TANKS.
- D. SOILS PRONE TO WETNESS, SLOW PERCOLATION, AND SEASONALLY HIGH WATER TABLES/SHALLOW DEPTH TO SATURATED ZONE - EXCAVATION IN THESE SOILS MAY ENCOUNTER WATER AND HAVE THE PRESENCE OF HYDRIC SOILS OR HYDRIC INCLUSIONS. WHEN NECESSARY, TEMPORARY DEWATERING FACILITIES SHALL BE PROVIDED TO MINIMIZE THE IMPACT OF HIGH OR SEASONAL WATER.
- E. SOILS DEEMED UNSUITABLE FOR CONSTRUCTION (E.G., ORGANIC SOILS, OVERLY WET SOILS, BOULDERS, ETC.), SHALL BE TREATED, BLENDED OR MODIFIED UNTIL SUITABLE, OR DISPOSED OF OFF-SITE.
- F. SOILS THAT ARE MOISTURE SENSITIVE AND PRONE TO FROST ACTION - WINTER GRADING IS A CONCERN DUE TO THE FINE GRAIN/COHESIVE NATURE OF THE SITE SOILS. FROZEN SOIL SHALL NOT BE USED AS FILL MATERIAL, UNLESS THAWED AND PROVEN ACCEPTABLE FOR USE AS FILL IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. PRECAUTIONS SHOULD BE TAKEN TO PREVENT ALL CONSTRUCTION FROM DAMAGE DUE TO FROST CYCLE ACTION.
- G. ERODIBLE SOILS EXIST AT THE SITE - SOILS PRONE TO EROSION SHALL BE CONTROLLED BY THE MEASURES AND FACILITIES PRESENTED HEREIN.
- H. SOILS ARE PRONE TO PIPING. CULVERTS PASSING THROUGH EMBANKMENTS SHALL BE PROVIDED WITH ANTI-SEEP PROTECTION TO PROTECT AGAINST PIPING.
- I. SOILS THAT ARE POOR SOURCES OF TOPSOIL, SUCH AS BEING TOO DROUGHTY OR TOO WET - SOIL TESTS ARE RECOMMENDED TO DETERMINE THE PROPER APPLICATION OF SOIL AMENDMENTS TO PROMOTE THE GROWTH OF THE DESIRED VEGETATION. WHEREVER SOILS THAT ARE FAIR OR GOOD SOURCES OF TOPSOIL MAY EXIST ON A SITE, THEY SHOULD BE CAREFULLY PRESERVED AND STORED FOR LATER USE IN RESTORATION.

SOILS SCHEDULE

UoD - URBAN LAND-DUFFIELD COMPLEX, 8 TO 25 PERCENT SLOPES

HSG
B



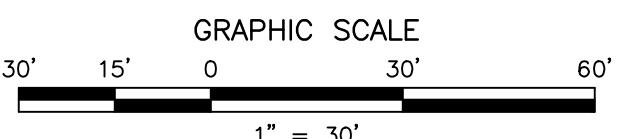
LOCATION MAP

SCALE: 1"= 100'

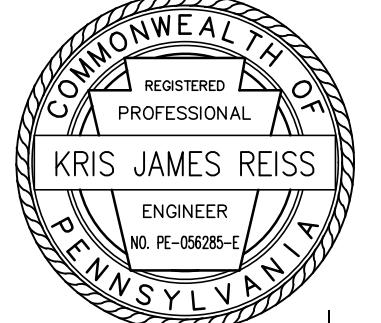
LEGEND

- PROPERTY LINE
BUILDING OUTLINE
ADJOINER PROPERTY LINE
EXISTING DRIVEWAY/PARKING
BUILDING SETBACK LINE
RIGHT-OF-WAY LINE
CONCRETE CURB
EXISTING CONTOUR MAJOR
EXISTING CONTOUR MINOR
WATER LINE
GAS LINE
SEWER LINE
EXISTING DECIDUOUS TREE (TBR)
IRON PIN, REBAR OR IRON PIPE (FOUND)
IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
WATER VALVE/WATER CURB BOX
- SOILS BOUNDARY AND DESIGNATOR
- NEW CONCRETE CURB LINE
NEW BELGIAN BLOCK CURB LINE
NEW FENCE LINE
NEW TREELINE
INDEX CONTOUR
EVEN CONTOUR
ODD CONTOUR
- NEW BUILDING OVERHANG
NEW CONCRETE AREA
LIMIT OF DISTURBANCE
NPDES BOUNDARY
COMPOST FILTER SOCK
TREE PROTECTION FENCE
STEEP SLOPE MATTING
COMPOST FILTER SOCK DESIGNATION

**PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION**



NO.	DATE	REVISIONS	BY	CHKD
4	06/01/26	REVISED PER CITY COMMENTS	KJR	
3	05/15/26	REVISED FOR NPDES SUBMISSION	BAK/ELH	
2	05/08/26	ISSUED FOR 90% CONTRACT DRAWINGS	BAK/ELH	
1	2/28/2026	REVISED FOR NPDES SUBMISSION	BAK	



KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

06/01/2026
DATE
COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 056285E

GATEWAY ON FOURTH PHASE 1 LLC
GATEWAY ON 4TH
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA
PHASE 2 EROSION AND SEDIMENT
CONTROL PLAN



OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY	KJR	DRAWING	SEP
CHECKED BY	KJR	SHEET	14
DRAWN BY	BAK	OF	29
DATE	02-20-2026		
SCALE	1"=30'		
PROJ. NO.	PENR00169		

[illegible]

THE PERMITTEE AND/OR CONTRACTOR/COPERMITTEE SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT, THE COUNTY DEPARTMENT OF ENVIRONMENTAL AND NATURE RESOURCES, AND THE COUNTY BOARD OF SUPERVISORS HAVING JURISDICTION OVER THE PROJECT SHALL BE INVITED TO A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR UNDERTAKING THE EARTHMOVING ACTIVITY.

UNLESS SPECIFICALLY NOTED, EACH STEP OF THE CONSTRUCTION SEQUENCE MUST BE COMPLETED PRIOR TO STARTING WORK ON THE FOLLOWING STEP IN THE SEQUENCE. THE CONTRACTOR SHALL MINIMIZE THE AREA OF EROSION PERMITTEE SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE.

PRIOR TO THE START OF OPERATIONS AT ANY SPOIL, BORROW OR OTHER WORK AREA NOT DETAILED ON THE ESDC PLAN, WHETHER WITHIN OR OUTSIDE OF THE INDICATED LIMIT OF EARTH DISTURBANCE, THE PERMITTEE OR CO-PERMITTEE SHALL DEVELOP AND HAVE APPROVED BY THE PROCESSING ENTITY, A SEPARATE ESDC PLAN FOR EACH SITE.

ON COMPLETION OR TEMPORARY CLOSURE OF THE EARTH DISTURBANCE ACTIVITY OR ANY STAGE THEREOF, THE PROJECT SITE SHOULD BE IMMEDIATELY STABILIZED AS OUTLINED SPECIFIED ON THE SEED RATE TABLES ON THE DETAIL SHEET.

ALL MATERIALS REMOVED FROM THE SITE SHALL BE DISPOSED OF AT A SITE WITH AN APPROVED ESDC PLAN.

ALL EARTH DISTURBANCE ACTIVITIES SHALL BE COMPLETED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION. CLEARING, GRUBBING, AND TOPSOIL REMOVAL SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE.

GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.

1. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S AND PCSM PLAN PREPARERS, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL CENTER SHALL BE NOTIFIED AT 1-800-242-1778 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

PHASE 1

2. REFER TO ESDC STAGE 1 PLANS. INSTALL STABILIZED CONSTRUCTION ENTRANCES AS SHOWN ON THE ESDC PLANS. INSTALL ORANGE CONSTRUCTION/TREE PROTECTION FENCE AS SHOWN ON THE ESDC PLANS.
3. INSTALL COMPOST FILTER SOCK AROUND PROJECT PERIMETER AS SHOWN ON PLANS.
4. ESTABLISH STAGING AREAS AND STOCKPILE AREA.
5. ONCE THE PERIMETER FILTER SOCKS ARE INSTALLED, CLEAR AND GRUB AND STRIP TOPSOIL AND STOCKPILE IN THE AREAS OF DEVELOPMENT FOR PHASE 1. IN CONJUNCTION WITH CLEARING AND GRUBBING FOR PHASE 1, REMOVE GRAVEL AREAS ALONG THE ENTIRETY OF THE SITE (PHASE 1 AND PHASE 2) AND SEED AND TOP SOIL AREAS THAT ARE OUTSIDE OF PHASE 1 DEVELOPMENT.
6. CUT AND FILL SITE TO THE LIMITS SHOWN ON THE PLAN. ALL FILL SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SURFACE SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS AND IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. ANY PERIMETER BMPs INCLUDING CONSTRUCTION FENCE OR COMPOST FILTER SOCKS SHALL BE IMMEDIATELY REPAIRED IF IMPACTED BY DEMOLITION ACTIVITIES.
7. INSTALL CONCRETE WASHOUT AREA. THE WASHOUT AREA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
8. WORKING DOWNSTREAM TO UPSTREAM AND IN CONJUNCTION WITH THE SITE GRADING, INSTALL STORMWATER PIPES AND INLETS FROM THE EXISTING INLET AT THE BETHLEHEM GREENWAY TRAIL TO THE NEW PARKING AREA AND BUILDING, INCLUDING STRUCTURES A-5, A-4, A-3, A-2, A-1, AND C-1. INSTALL INLET 1, YD-7, YD-8, YD-3, YD-2, YD-1 AND YD-4, YD-5 AND YD-6 IMMEDIATELY INSTALL INLET PROTECTION.
9. BUILDING CONSTRUCTION OF BUILDING A AND BUILDING B MAY BEGIN. COMPLETE GRADING AND EARTHWORK. INSTALL STONE SUBBASE FOR PARKING AREA FOR PHASE 1.
10. CONSTRUCT INFILTRATION BASIN TO THE EXTENTS AS SHOWN IN PHASE 1, OUTLET STRUCTURE, AND CONNECTION TO EXISTING INLET.
11. IN CONJUNCTION WITH THE BUILDING CONSTRUCTION AND SITE WORK, INSTALL ALL WATER, SEWER, ELECTRIC, LIGHTING, AND OTHER UTILITIES, AND CURBING AND SIDEWALK (THAT IS NOT IMPACTED BY ANY CONSTRUCTION ACTIVITIES). ANY PERIMETER BMPs INCLUDING CONSTRUCTION FENCE OR COMPOST FILTER SOCKS SHALL BE IMMEDIATELY REPAIRED IF IMPACTED BY UTILITY INSTALLATION.
12. COMPLETE ANY REMAINING CURB AND SIDEWALK.
13. PAVE SITE WITH PAVEMENT BASE AND ASPHALT. INSTALL LANDSCAPING AND STABILIZE ALL OTHER AREAS WITH TOP SOIL SEED AND/OR MULCH AS APPROPRIATE.
14. PAVE ENTIRE SITE WITH PAVEMENT WEARING COURSE.
15. AFTER ALL AREAS ARE 70% STABILIZED WITH UNIFORM VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES OR GRAVEL AS APPROPRIATE HAS BEEN ACHIEVED, EROSION CONTROL MEASURES, INLET PROTECTION, ROCK FILTERS, SEDIMENT CONTROL FENCE, ETC. CAN BE REMOVED. ALL DISTURBANCE ASSOCIATED WITH BMP REMOVAL SHALL BE IMMEDIATELY STABILIZED WITH FINAL TOP SOIL, SEED AND MULCH.
16. ALL MATERIALS, WHETHER NATURAL OR SYNTHETIC, SHALL BE DISPOSED OF IN ACCORDANCE WITH THE PA DEP'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. AND ANY OTHER APPROPRIATE LOCAL, STATE OR FEDERAL CODE, REGULATION OR LAW. ANY SOIL REMOVED FROM THIS SITE MUST BE DISPOSED OF AT A SITE WITH AN APPROVED ESDC PLAN. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIALS OR WASTES.

PHASE 2

1. REFER TO ESDC STAGE 2 PLANS. INSTALL STABILIZED CONSTRUCTION ENTRANCES AS SHOWN ON THE ESDC PLANS. INSTALL ORANGE CONSTRUCTION/TREE PROTECTION FENCE AS SHOWN ON THE ESDC PLANS.
2. INSTALL COMPOST FILTER SOCK AROUND PROJECT PERIMETER AS SHOWN ON PLANS.
3. ESTABLISH STAGING AND STOCKPILE AREAS.
4. ONCE THE PERIMETER FILTER SOCKS ARE INSTALLED, CLEAR AND GRUB AND STRIP TOPSOIL AND STOCKPILE IN THE AREAS OF DEVELOPMENT FOR PHASE 2. CUT AND FILL SITE TO THE LIMITS SHOWN ON THE PLAN. ALL FILL SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SURFACE SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS AND IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. ANY PERIMETER BMPs INCLUDING CONSTRUCTION FENCE OR COMPOST FILTER SOCKS SHALL BE IMMEDIATELY REPAIRED IF IMPACTED BY DEMOLITION ACTIVITIES.
5. INSTALL CONCRETE WASHOUT AREA. THE WASHOUT AREA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
6. WORKING DOWNSTREAM TO UPSTREAM AND IN CONJUNCTION WITH THE SITE GRADING, INSTALL STORMWATER PIPES AND INLETS FOR PHASE 2 INCLUDING STRUCTURES B-1 AND IMMEDIATELY INSTALL INLET PROTECTION. INSTALL PIPE 20 FROM EXISTING INLET A-6 TO THE EXISTING STUB COMING OUT OF THE EXISTING INFILTRATION SYSTEM.
7. BUILDING CONSTRUCTION OF BUILDINGS C AND D MAY BEGIN. COMPLETE GRADING AND EARTHWORK. INSTALL STONE SUBBASE FOR PARKING AREA FOR PHASE 1.
8. EXPAND INFILTRATION BASIN TO THE EXTENTS AS SHOWN IN PHASE 2, CONNECT TO THE EXISTING INFILTRATION BASIN, MODIFY THE EXISTING OUTLET CONTROL STRUCTURE WHICH INCLUDES REMOVAL OF THE ORIFICE PLATE OVER THE 12"x12" WEIR ON THE OUTLET STRUCTURE AND PUT A PLATE OVER THE 4" ORIFICE. REMOVE THE TEE CONNECTION FROM INLET A-6 TO PIPE 15-1.
9. IN CONJUNCTION WITH THE BUILDING CONSTRUCTION AND SITE WORK, INSTALL ALL WATER, SEWER, ELECTRIC, LIGHTING, AND OTHER UTILITIES, AND CURBING AND SIDEWALK (THAT IS NOT IMPACTED BY ANY CONSTRUCTION ACTIVITIES). ANY PERIMETER BMPs INCLUDING CONSTRUCTION FENCE OR COMPOST FILTER SOCKS SHALL BE IMMEDIATELY REPAIRED IF IMPACTED BY UTILITY INSTALLATION.
10. COMPLETE ANY REMAINING CURB AND SIDEWALK.
11. PAVE SITE WITH PAVEMENT BASE AND ASPHALT. INSTALL LANDSCAPING AND STABILIZE ALL OTHER AREAS WITH TOP SOIL SEED AND/OR MULCH AS APPROPRIATE.
12. PAVE ENTIRE SITE WITH PAVEMENT WEARING COURSE.
13. AFTER ALL AREAS ARE 70% STABILIZED WITH UNIFORM VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES OR GRAVEL AS APPROPRIATE HAS BEEN ACHIEVED, EROSION CONTROL MEASURES, INLET PROTECTION, ROCK FILTERS, SEDIMENT CONTROL FENCE, ETC. CAN BE REMOVED. ALL DISTURBANCE ASSOCIATED WITH BMP REMOVAL SHALL BE IMMEDIATELY STABILIZED WITH FINAL TOP SOIL, SEED AND MULCH.
14. ALL MATERIALS, WHETHER NATURAL OR SYNTHETIC, SHALL BE DISPOSED OF IN ACCORDANCE WITH THE PA DEP'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. AND ANY OTHER APPROPRIATE LOCAL, STATE OR FEDERAL CODE, REGULATION OR LAW. ANY SOIL REMOVED FROM THIS SITE MUST BE DISPOSED OF AT A SITE WITH AN APPROVED ESDC PLAN. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIALS OR WASTES.

TERMAL IMPACTS

CONSTRUCTION OF THIS PROJECT INCLUDES THE CONSTRUCTION OF A NEW BUILDING AND PAVING THE SITE WILL USE COMPOST FILTER SOCKS TO PROMOTE SHEET FLOW OF STORMWATER DURING CONSTRUCTION, WHICH WILL DISPERSE WARM WATER TO THE GROUND SURFACE, LIMITING SOURCES OF THERMAL POLLUTION. POST-CONSTRUCTION THERMAL IMPACTS WILL BE MINIMIZED BY THE INSTALLATION OF A PROTECTED SUBSURFACE INFILTRATION BASIN, WHICH ALLOW COOLING AND INFILTRATION OF RUNOFF. LANDSCAPING, INCLUDING MANY TREES, WILL ASSIST THROUGHOUT THE SITE, TO SHADE AREAS, INCLUDING PARKING AREAS AND WAYS.

GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 12 INCHES TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT THE TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 12 INCHES ON FILL OUTSLOPES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE, IRREGULARITIES IN THE SOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS PART OF THE POST PLAN.			3. THE TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO THE PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONSTRUCTION SEEDING.					
TABLE 11.1 Cubic Yards of Topsoil Required for Application to Various Depths"			Soil Amendment Application Rate Equivalents					
Depth (in)	Per 1,000 Square Feet	Per Acre	Soil Amendment	Permanent Seeding Application Rate				
				Per Acre	Per 1,000 sq. ft.			
1.00	3.10	134.00	Agricultural lime	6 tons	240 lb.			
2.00	6.20	268.00						
3.00	9.30	402.00						
4.00	12.40	536.00						
5.00	15.50	670.00	Temporary Seeding Application Rate					
6.00	18.60	804.00	Agricultural lime	1 ton	40 lb.			
7.00	21.70	938.00						
8.00	24.80	1072.00						
			NOTE: A compost blanket which meets the standards of the PA DEP ESPC Program Manual of March 2012 may be substituted for the soil amendments shown above					
RESPONSIBILITIES FOR FILL MATERIALS								
1. THE OPERATOR MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT ANY NECESSARY FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH PADEP'S POLICY "MANAGEMENT OF FILL", DOCUMENT NUMBER 258-2182-773. A COPY OF THIS POLICY IS AVAILABLE ONLINE AT WWW.DEWPEB.STATE.PA.US.								
2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSED, NOT SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DRESSED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM THE WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).								
3. CLEAN FILL ASPECT BY SPILL OR RELEASE OF A REGULATED SUBSTANCE THAT: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES PP-1A AND PP-1B FOUND IN PADEP'S POLICY "MANAGEMENT OF FILL".								
4. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE PADEP FORM PP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL, AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM PP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM PP-001 CAN BE FOUND AT WWW.DEWPEB.STATE.PA.US.								
5. ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREEN, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.								
6. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF PADEP'S POLICY "MANAGEMENT OF FILL".								
7. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL WASTE AND FILL BY PRODUCT IN ACCORDANCE WITH THE MUNICIPAL OR RESIDUAL WASTE REGULATIONS IN 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.								
8. ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLUMPING, EROSION OR EXCESS STABILIZATION.								
9. REFER TO SITE / RECORD PLAN FOR ADDITIONAL NOTES.								
Permanent Stabilization Seed Mixtures								
Seed Number	Species	Seeding Rate Pure Live Seed ¹						
1 ²	Spring oats (spring), or	64						
	Annual ryegrass (spring or fall), or	10						
	Winter rye (fall), or	90						
	Winter rye (fall)	56						
2 ³	Tall fescue, or	60						
	Fine fescue, or	35						
	Kentucky bluegrass	25						
	Redtop, or	3						
	Perennial ryegrass	15						
¹ is the product of the percentage of pure seed times percentages for germination divided by 100. For example, to secure the actual planting rate for a mixture of 12 pounds PLS should be the seed lot. Thus, if the PLS of a given lot is 35%, divide 12 PLS by 0.35 to obtain 34.3 pounds of seed required to plant one acre. All mixtures in this table are shown in terms of pure seed.								
² high-quality seed is used, for most sites seed spring oats at a rate of 2 bushels per acre, winter wheat at 11.5 bushels per acre, and winter rye at 11.5 bushels per acre. If germination is below 90%, increase these suggested seedings by 0.5 bushel per acre.								
³ mixture is suitable for frequent mowing. Do not cut shorter than 4 inches.								
disturbed areas shall be stabilized with stone, erosion control matting and seed and mulch during winter months to prevent soil erosion until spring or for final seeding								
Mulch Application Rates								
Soil Type	Application Rate (Min.)		Notes					
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.					
Grass	3 tons	140 lb.	1,240 lb.	Either wheat or oat straw, free of weeds, not chopped or finely broken				
Grass	3 tons	140 lb.	1,240 lb.	Timothy, mixed clover and timothy or other native forage grasses				
Chips	4 - 6 tons	185 - 275 lb.	1,650 - 2,500 lb.	May prevent germination of grasses and legumes				
Grass								

[illegible]

PUBLIC UTILITIES NOTES

1. ALL PUBLIC UTILITIES REQUIRED TO SERVICE THIS LAND DEVELOPMENT SHALL BE PLACED UNDERGROUND EXCEPT FOR THOSE EXCEPTIONS NECESSARY TO PERMIT THE OVERALL INSTALLATION OF THE UTILITIES - OR - EXCEPT FOR TEMPORARY CONSTRUCTION SERVICE.
2. UTILITY CONNECTIONS:
- SEWER SERVICE:
EXISTING - CITY OF BETHLEHEM
PROPOSED - CITY OF BETHLEHEM
- WATER SERVICE:
EXISTING - CITY OF BETHLEHEM
PROPOSED - CITY OF BETHLEHEM
- ELECTRIC SERVICE:
TO BE PROVIDED BY PPL

SANITARY SEWER NOTES

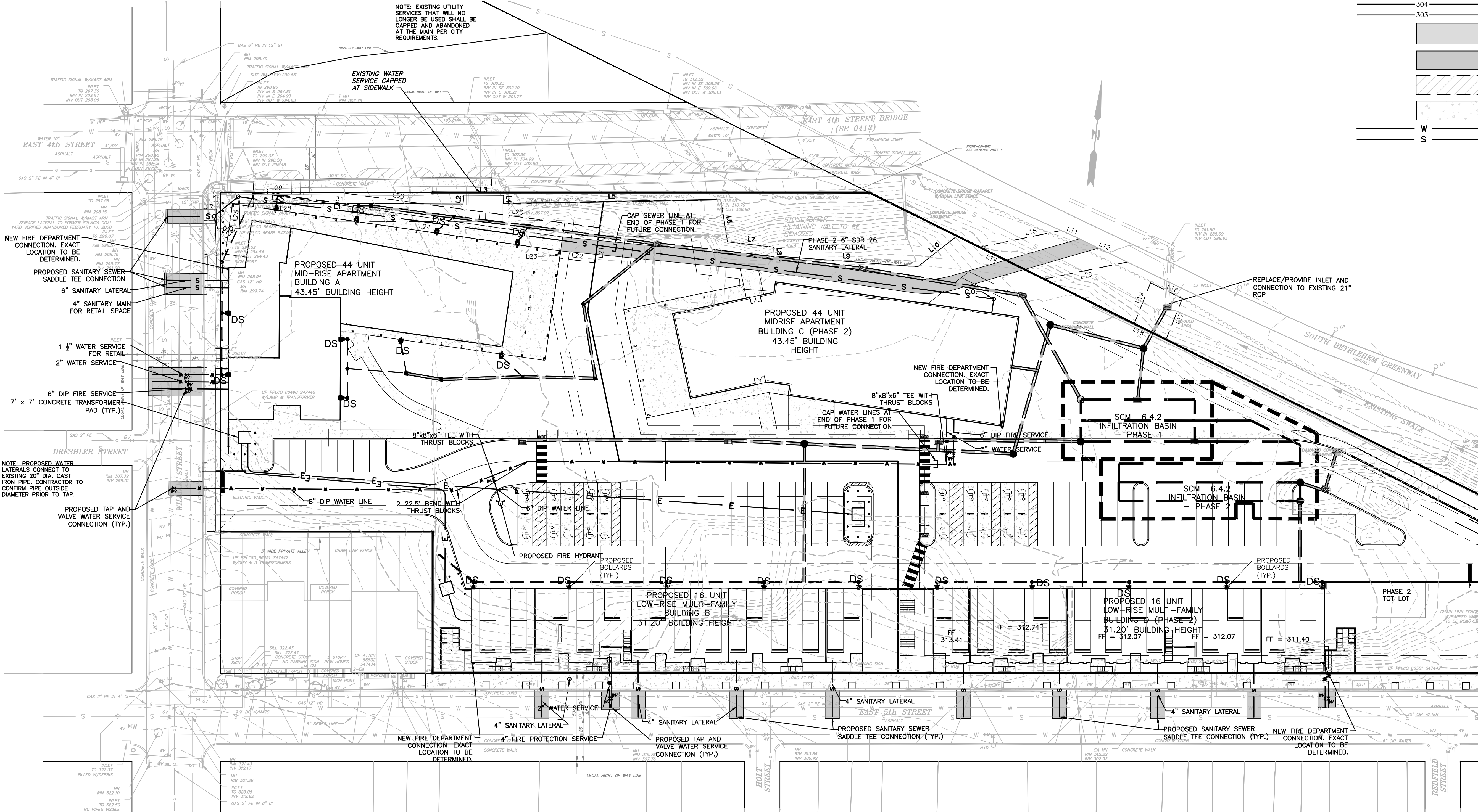
1. SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF WATER AND SEWER RESOURCES ("SANITARY UTILITY OWNER") REQUIREMENTS, STANDARDS, AND SPECIFICATIONS AND IS SUBJECT TO INSPECTION BY THE SANITARY UTILITY OWNER AND ITS ENGINEER. THE SANITARY UTILITY OWNER WILL BE RESPONSIBLE FOR THE APPROVAL OF ALL MATERIALS IN CONNECTION WITH THE SANITARY SEWER.
2. SHOP DRAWINGS FOR ALL SANITARY SEWER APPURTENANCES WILL BE REQUIRED TO BE SUBMITTED FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING:
- A. A LIST OF THE PROPOSED SUPPLIERS FOR ALL MATERIALS TO BE USED IN CONNECTION WITH THE SEWER CONSTRUCTION.
- B. SHOP DRAWINGS OF THE PRECAST MANHOLES, MANHOLE STEPS AND MANHOLE FRAMES AND COVERS TO BE USED.
- C. CERTIFICATION FROM THE PIPE MANUFACTURER THAT THE PIPE MEETS OR EXCEEDS THE REQUIREMENT OF THE SANITARY UTILITY OWNER'S SPECIFICATIONS.
3. ALL SANITARY SEWER LINES SHALL BE SDR-26 PVC AS NOTED AND ALL LATERALS SHALL BE SCHEDULE 40 PVC EXCEPT AS NOTED. ALL SANITARY LINES AND LATERALS SHALL BE BEDDED TO MEET MANUFACTURER'S SPECIFICATIONS AND/OR APPROVAL OF THE SANITARY UTILITY OWNER, WHICHEVER IS MORE RESTRICTIVE.
4. CONTRACTOR TO ENSURE THAT ALL SANITARY MAINS AND LATERALS HAVE A MINIMUM OF 18-INCH VERTICAL CLEARANCE OR 10 FT HORIZONTAL CLEARANCE BETWEEN ANY OTHER UTILITY CROSSING. OTHERWISE CONTRACTOR SHALL ENCASE MAIN OR LATERAL IN CONCRETE WITH A MINIMUM OF 10 LF ON EACH SIDE OF THE CROSSING. CLEANOUTS ARE TO BE PLACED AT MAXIMUM INTERVALS OF 100'-FT AND AT ALL BENDS.
5. CONTRACTOR SHALL VERIFY ALL SIZES, MATERIALS, AND CONDITION OF EXISTING PIPES OR MANHOLES, TO BE REPLACED OR CONNECTED TO, PRIOR TO ORDERING MATERIALS.
6. ALL EXISTING MANHOLES SHALL BE TESTED PER SANITARY UTILITY OWNER STANDARDS TO ASSURE NO LEAKS EXIST WITHIN THE STRUCTURES.
7. SANITARY LATERALS SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4' AND AT A MIN. 0.5% SLOPE.

WATER LINE NOTES

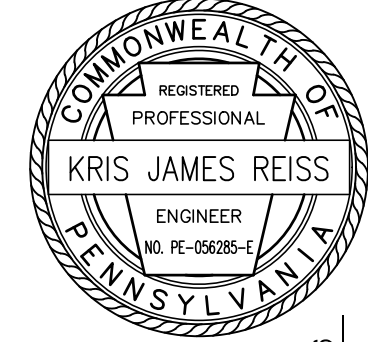
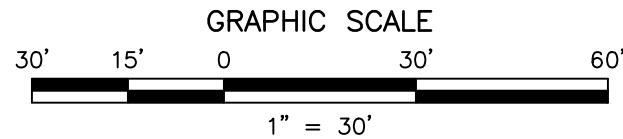
1. CONTRACTOR SHALL VERIFY ALL SIZES OF EXISTING PIPES, TO BE REPLACED OR CONNECTED TO, PRIOR TO ORDERING MATERIALS.
2. ALL WATER LINES MUST BE SURVEY STAKED PRIOR TO CONSTRUCTION, WITH STAKES PROVIDED AT INTERVALS OF 50 FEET, AS WELL AS AT ALL FITTING LOCATIONS AND UTILITY CROSSINGS. STAKES SHALL BE MARKED WITH WRITTEN ELEVATIONS FOR BOTTOM OF WATER PIPE (INCLUDES BOTTOM OF OTHER UTILITY PIPE ELEVATIONS AND PIPE SIZE AT ALL UTILITY CROSSINGS TO VERIFY CLEARANCE).
3. ALL WATER MAINS MUST BE CONSTRUCTED WITH DOUBLE CEMENT LINED, THICKNESS CLASS 52 DUCTILE IRON PIPE WITH TYTON JOINTS AND WITH AN INTERNAL SEAL COAT AND EXTERNAL ASPHALT SEAL COAT IN ACCORDANCE WITH AWWA C104.
4. ALL WATER LINE VALVES, FITTINGS, ETC. SHALL BE INSTALLED WITH MECHANICAL JOINTS AND MEGALUG RESISTANT GLANDS.
5. ALL WATER LINE CONSTRUCTION TO BE COMPLETED IN ACCORDANCE WITH THE UTILITY OWNER'S LATEST STANDARDS AND SPECIFICATIONS.
6. ALL POTABLE WATER PIPES SHALL HAVE A MINIMUM COVER OF FOUR (4) FEET. POTABLE WATER AND SANITARY SEWER LINE CROSSINGS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF EIGHTEEN (18) INCHES OR A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET. IF THESE CLEARANCES CANNOT BE MET, THE WATER LINE MUST THEN BE ENCASED IN CONCRETE FOR 10 LF ON EACH SIDE OF THE CROSSING. IF THE POTABLE WATER PASSES BENEATH THE SANITARY, NO MATTER HOW MUCH CLEARANCE, THE POTABLE WATER MUST BE ENCASED IN CONCRETE FOR 10 LF ON EACH SIDE OF THE CROSSING.
7. ALL WATER LINES ARE TO BE PRESSURE TESTED TO 1.5 TIMES THE WORKING PRESSURE OR 150 P.S.I., WHICHEVER IS GREATER, IN SECTIONS BETWEEN VALVES. THE TEST PRESSURE SHALL BE MAINTAINED FOR A PERIOD NOT LESS THAN 2 HOURS. SHOULD ANY PRESSURE TEST DISCLOSE AN INABILITY TO HOLD THE TEST PRESSURE, THE CONTRACTOR SHALL LOCATE AND CORRECT DEFECTS AND RETEST TO THE SATISFACTION OF THE UTILITY OWNER.
8. THE INSTALLATION OR REPAIR OF ANY UNDERGROUND FACILITIES OR PIPING WHICH CONNECTS TO OR FURNISHES WATER FOR THE FIRE PROTECTION SPRINKLER SYSTEM SHALL BE PERFORMED ONLY BY A LICENSED UTILITY CONTRACTOR, FIRE PROTECTION SPRINKLER CONTRACTOR, OR LICENSED PLUMBER. A COPY OF THE LICENSE OR CERTIFICATE OF COMPETENCY SHALL BE PROVIDED TO THE INSPECTOR AT THE FINAL INSPECTION.
9. REFER TO THE SITE/RECORD PLAN & GENERAL INFORMATION SHEET FOR ADDITIONAL NOTES.

LEGEND

	PROPERTY LINE
	BUILDING OUTLINE
	ADJOINER PROPERTY LINE
	EXISTING DRIVEWAY/PARKING
	BUILDING SETBACK LINE
	RIGHT-OF-WAY LINE
	CONCRETE CURB
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	WATER LINE
	GAS LINE
	SEWER LINE
	EXISTING DECIDUOUS TREE (TBR)
	IRON PIN, REBAR OR IRON PIPE (FOUND)
	IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
	WATER VALVE/WATER CURB BOX
	NEW CONCRETE CURB LINE
	NEW BELGIAN BLOCK CURB LINE
	NEW FENCE LINE
	NEW TREELINE
	INDEX CONTOUR
	EVEN CONTOUR
	ODD CONTOUR
	NEW ASPHALT
	NEW BUILDING
	NEW BUILDING OVERHANG
	NEW CONCRETE AREA
	PROPOSED WATER SERVICE LINE
	PROPOSED SANITARY LINE



PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION



KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

GATEWAY ON FOURTH PHASE 1 LLC
GATEWAY ON 4TH
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA

UTILITY PLAN

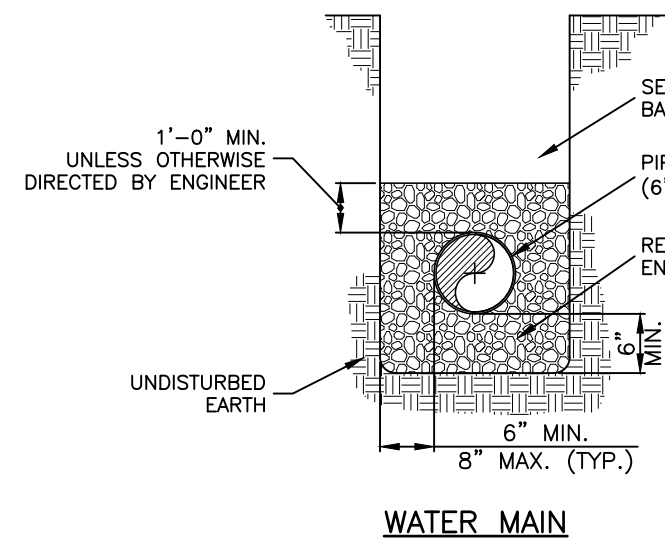
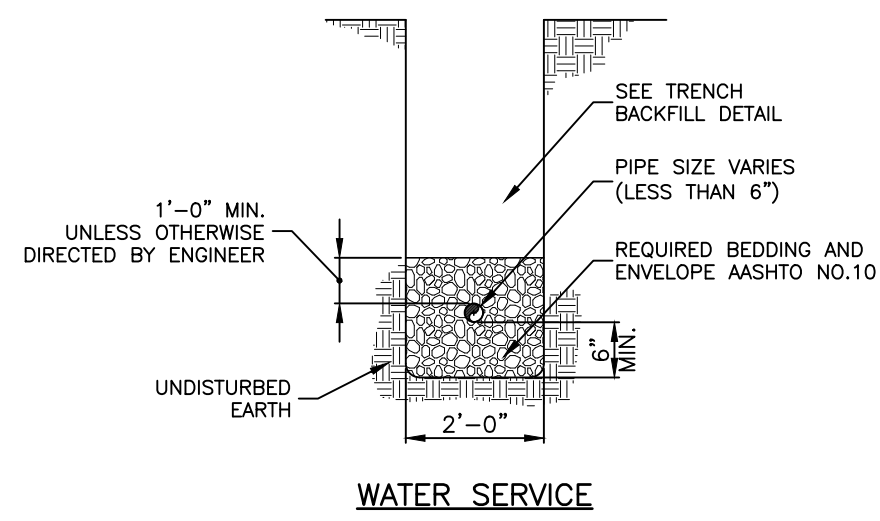


OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

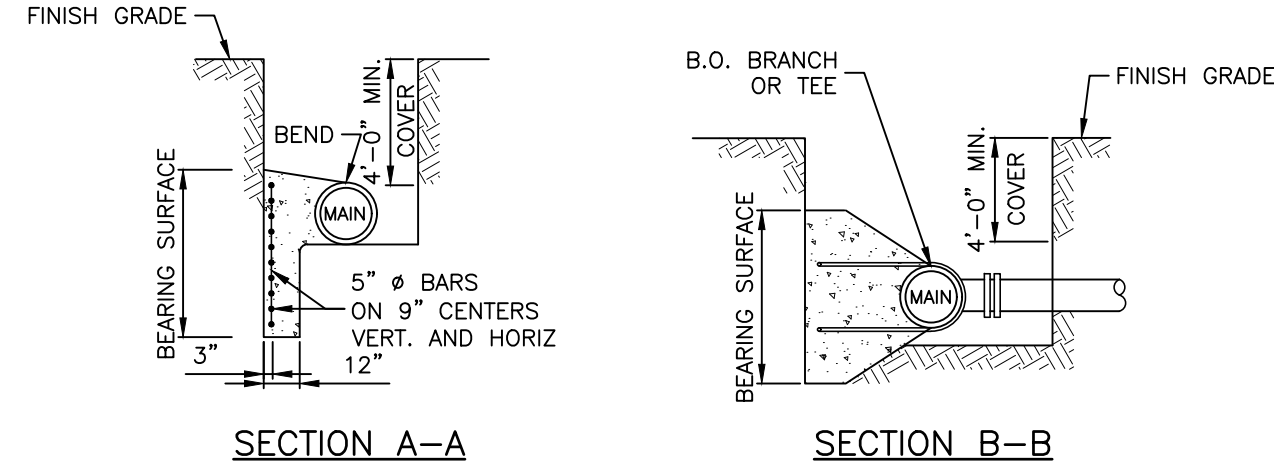
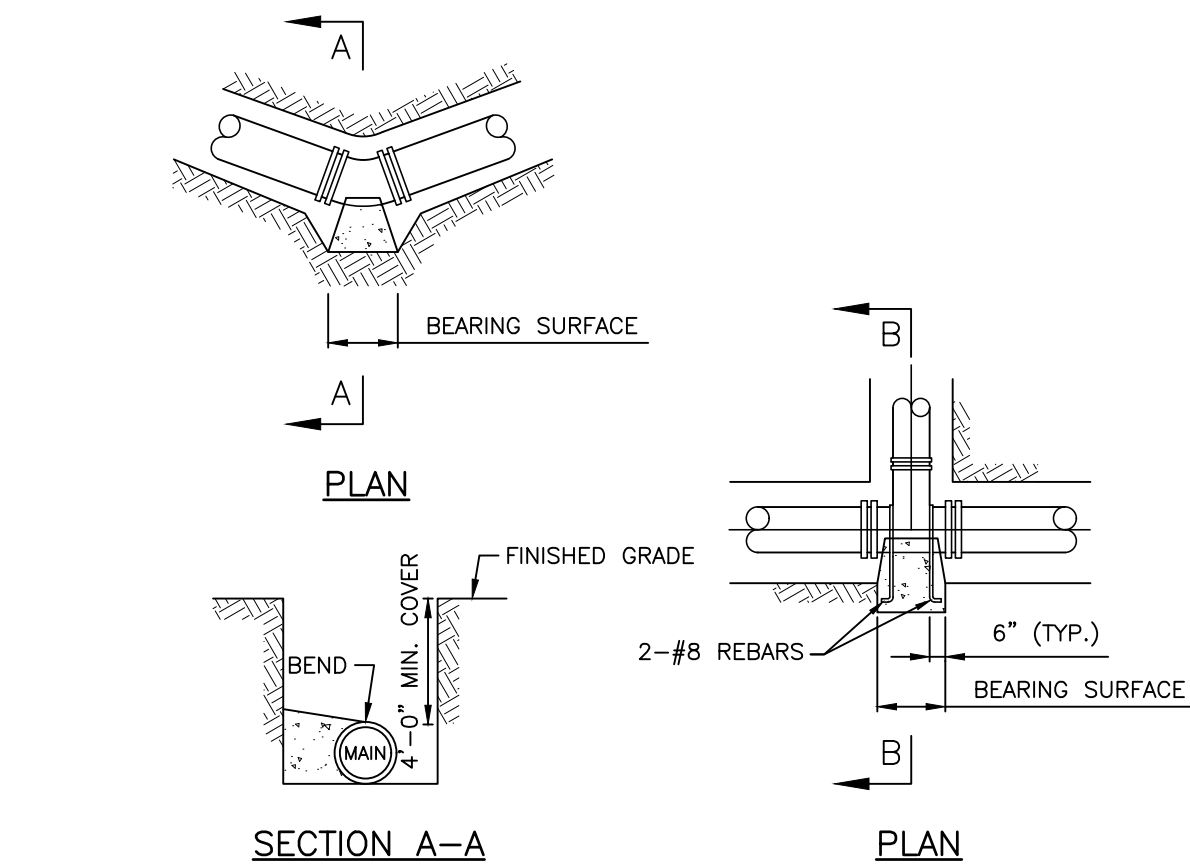
DESIGNED BY	KJR	DRAWING	UTL
CHECKED BY	KJR	SHEET	17
DRAWN BY	BAK	OF	29
DATE	02-20-2026		
SCALE	1"=30'		
PROJ. NO.	PENR00169		

PROJECT INFORMATION:
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FILE NAME: PENR00169_SHT017-019_UTILITY.dwg
DATE: 08 Jun 2026, 10:48AM
LAST SAVE BY: Bkgbrough

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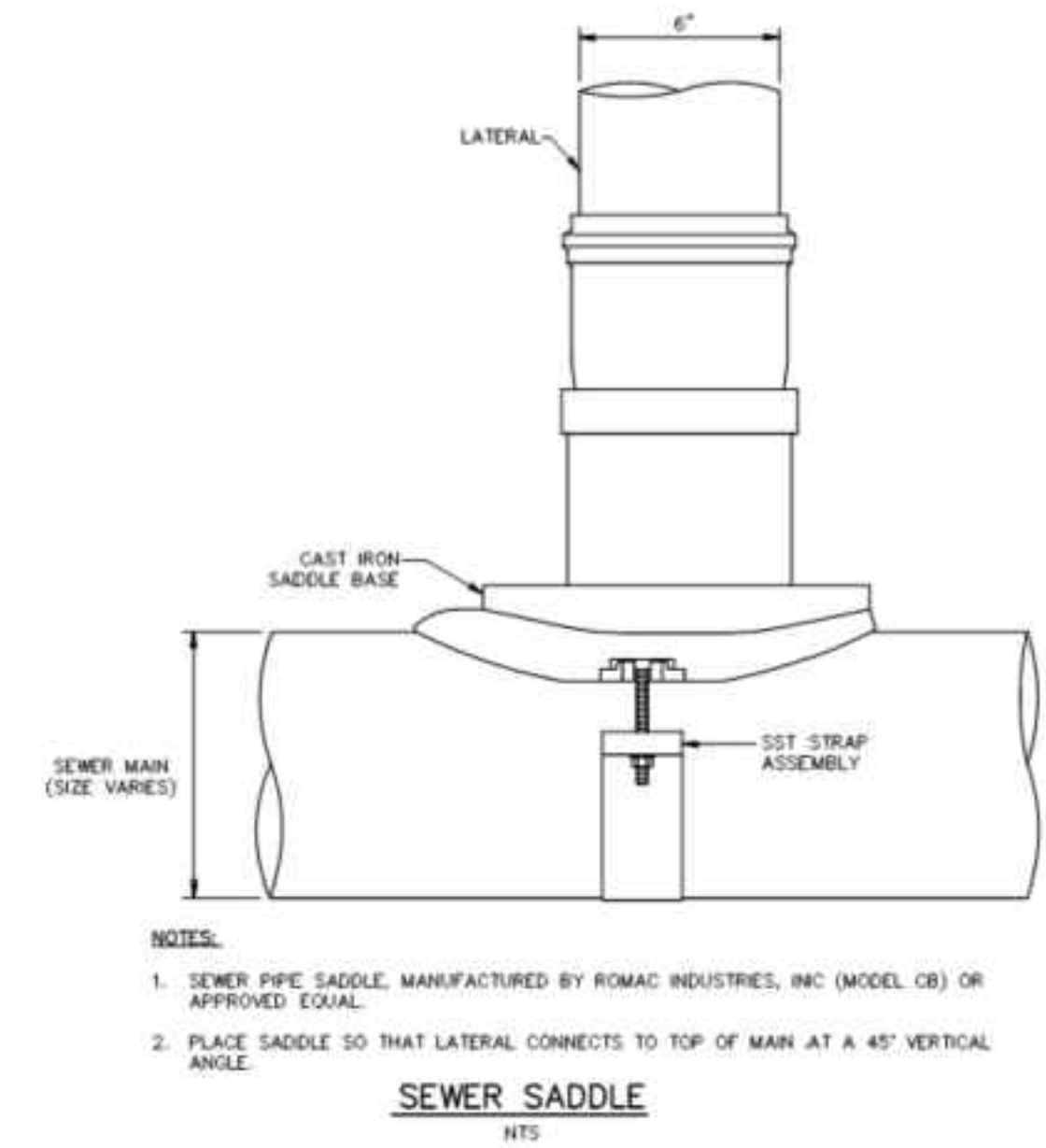


PIPE BEDDING (WATER MAIN AND SERVICE)



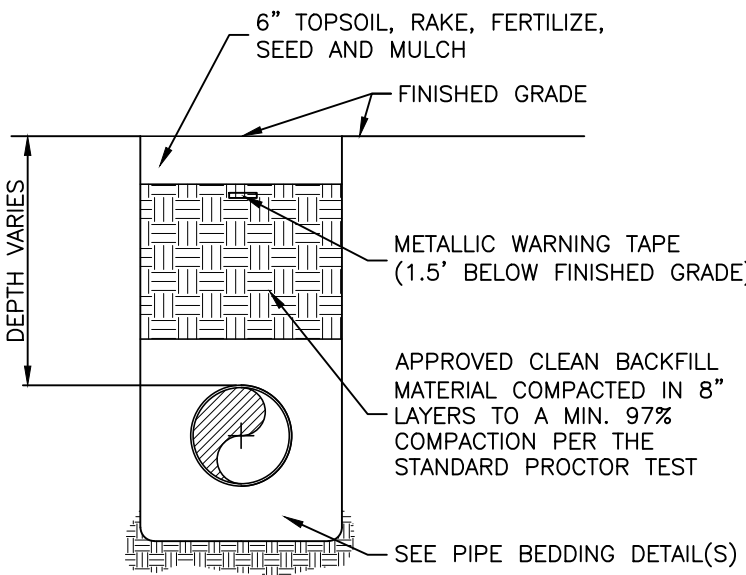
- NOTES:
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
 - ALL REINFORCING STEEL SHALL BE DEFORMED BARS (ASTM GRADE 60).
 - ALL FITTINGS AND JOINTS SHALL BE COVERED WITH POLYETHYLENE FILM BEFORE PLACING OF CONCRETE.
 - PAIN ALL EXPOSED STEEL WITH TWO COATS OF BITUMASTIC PAINT OR EPOXY COATING.
 - FOR THE REQUIRED BEARING SURFACE SEE STANDARD THRUST BLOCKING DETAIL.
 - BEARING SURFACE MUST BE UNDISTURBED EARTH.

WATER-HORIZONTAL THRUST BLOCKING

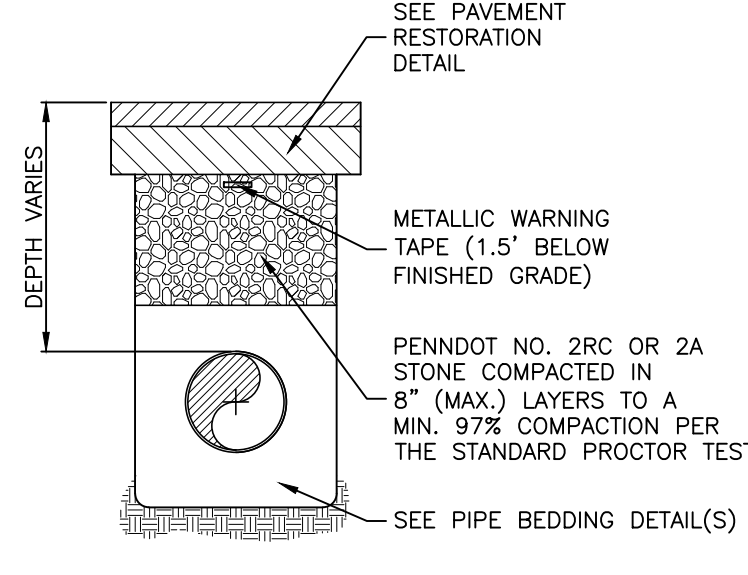


- NOTES:
- SEWER PIPE SADDLE, MANUFACTURED BY ROMAC INDUSTRIES, INC. (MODEL CB) OR APPROVED EQUAL.
 - PLACE SADDLE SO THAT LATERAL CONNECTS TO TOP OF MAIN AT A 45° VERTICAL ANGLE.

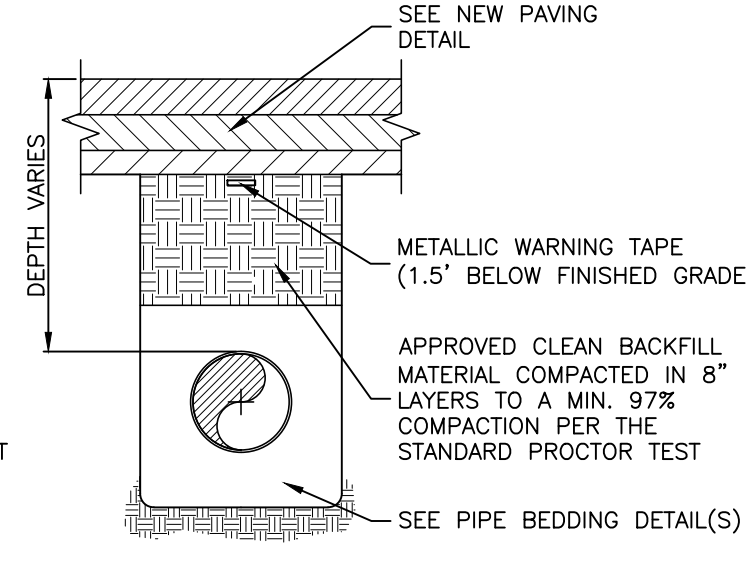
SEWER SADDLE



UNPAVED AREAS



EXISTING PAVED AREAS



NEW ROADWAYS & PARKING AREAS

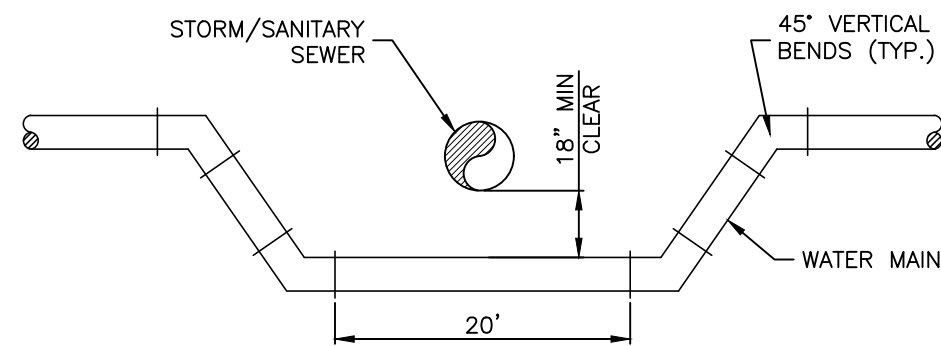
- NOTES:
- TRENCH COMPACTION TO BE TESTED, AT THE DEVELOPER'S EXPENSE, IN ACCORDANCE WITH PENNDOT PUB 408, LATEST REVISION, AS REQUIRED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION.
 - CLEAN FILL MUST BE APPROVED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION PRIOR TO PLACEMENT IN THE TRENCH.
 - AREAS AROUND MANHOLES, INLETS, AND OTHER APPURTENANCES SHALL BE HAND COMPACTED AS DIRECTED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION.
 - NO SLAG MATERIAL PERMITTED.
 - IF WATER IS ENCOUNTERED IN THE EXCAVATION TRENCH, AASHTO #57 AGGREGATE MUST BE USED.
 - ALL MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH PENNDOT SPECIFICATIONS, PUBLICATION 408 AND 67 PA CODE SECTION 459.
 - UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO COLLECT IN EXCAVATED TRENCHES. ANY WATER IN THE TRENCHES SHALL BE REMOVED THROUGH A PUMPED WATER FILTER BAG.

BACKFILL (TRENCH)

BEARING SURFACE REQUIRED - SQ.FT. HORIZONTAL THRUST BLOCKING & VERTICAL THRUST DOWNWARD 125 P.S.I. WORKING PRESSURE																	
PIPE SIZE	6" & 8"				10" & 12"				16" 18" 20"				24"				
TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS	DEGREE OF BEND OR DEFLECTION																
	22.5'	45'	90'	D.E.	22.5'	45'	90'	D.E.	22.5'	45'	90'	D.E.	22.5'	45'	90'	D.E.	
SAND 0.75 TON/SQ.FT.	3.4	6.0	11.0	6.4	6.7	12.8	23.4	14.2	14.8	28.8	52.9	34.4	26.1	48.3	89.7	64.0	
SOFT CLAY 1 TON/SQ.FT.	2.6	4.6	8.2	4.8	5.0	9.6	17.5	10.7	11.2	21.7	39.7	28.2	19.6	36.3	67.3	48.0	
SAND AND GRAVEL 2 TON/SQ.FT.	1.3	2.3	4.1	2.4	2.5	4.8	8.8	5.3	5.6	10.8	20.0	14.1	9.8	13.1	33.6	24.0	
CLAY 4 TON/SQ.FT.	1.0	1.2	2.1	1.3	1.3	2.4	4.4	2.7	2.8	5.4	10.0	7.2	4.9	9.1	16.8	12.0	
SOFT ROCK 5 TON/SQ.FT.	1.0	1.0	1.6	1.0	1.0	1.9	3.5	2.2	1.6	4.4	8.0	5.7	3.9	7.3	13.5	9.6	
ROCK 15 TON/SQ.FT.	-	-	1.0	0.4	-	1.0	1.2	0.8	1.0	1.4	2.6	1.9	1.3	2.4	4.5	3.2	
PIPE SIZE	30"				36"				42"				48"				
TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS	DEGREE OF BEND OR DEFLECTION																
	22.5'	45'	90'	D.E.	22.5'	45'	90'	D.E.	22.5'	45'	90'	D.E.	22.5'	45'	90'	D.E.	
SAND 0.75 TON/SQ.FT.	40.3	76.5	139.0	99.1	55.5	107.5	197.5	140.0	74.3	144.7	266.5	188.7	83.2	182.3	336.2	238.0	
SOFT CLAY 1 TON/SQ.FT.	30.2	57.4	104.3	74.3	41.6	80.6	148.0	105.0	55.7	108.5	200.0	141.6	70.0	136.7	252.2	178.0	
SAND AND GRAVEL 2 TON/SQ.FT.	15.1	28.7	52.1	37.2	20.8	40.3	74.0	52.5	27.9	54.3	100.0	70.8	35.0	68.3	126.1	89.2	
CLAY 4 TON/SQ.FT.	7.6	14.6	26	18.6	10.4	20.2	37.0	26.3	14.0	27.0	50.0	35.3	17.5	34.2	63.0	44.6	
SOFT ROCK 5 TON/SQ.FT.	6.0	11.5	20.9	14.9	8.3	16.1	29.6	21.0	11.2	21.7	40.0	28.3	14.0	27.3	50.4	35.7	
ROCK 15 TON/SQ.FT.	2.0	3.8	7.0	5.0	1.4	2.8	5.4	7.0	3.7	7.2	13.3	9.4	4.7	9.1	16.8	12.0	

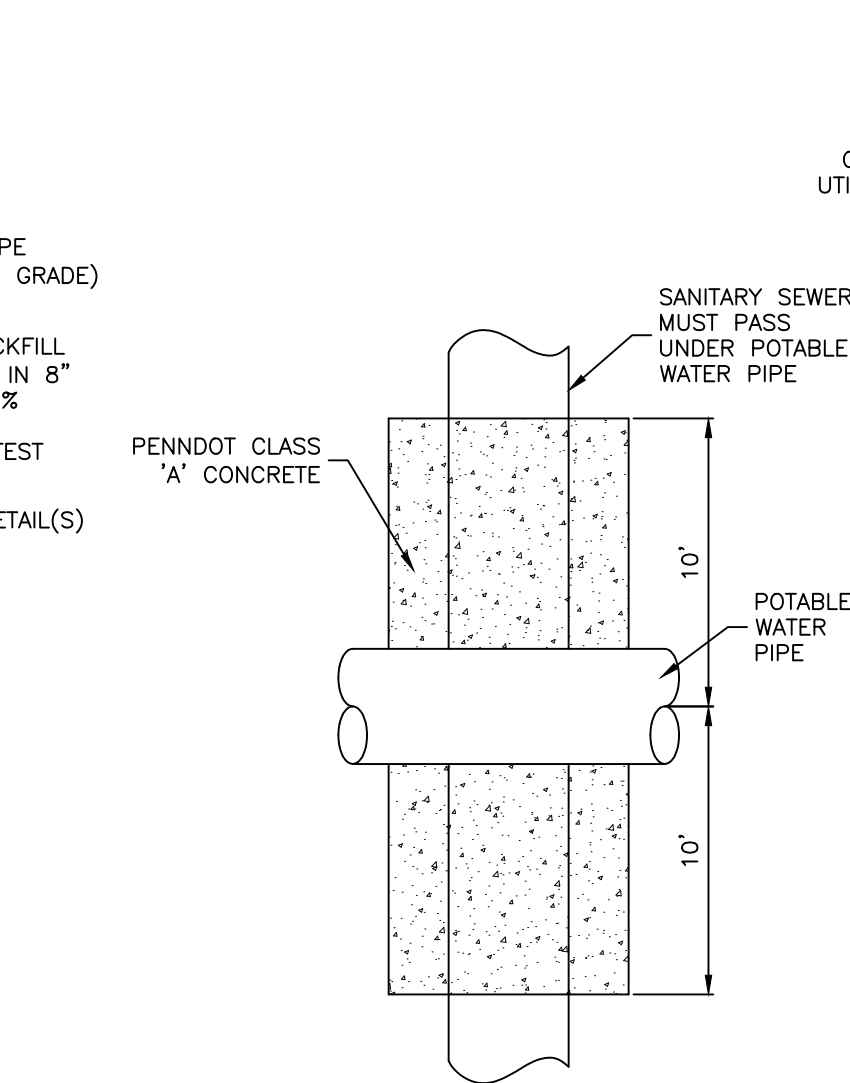
- NOTES:
- D.E. DENOTES DEAD END.

WATER-THRUST BLOCKING TABLE



- NOTES:
- ALL PIPE AND FITTINGS SHALL BE RESTRAINED PER AUTHORITY SPECIFICATIONS AND BY DIRECTION OF THE ENGINEER.
 - THE USE OF CONCRETE THRUST BLOCK SHALL BE PER THE DIRECTION OF THE AUTHORITY AND ENGINEER.

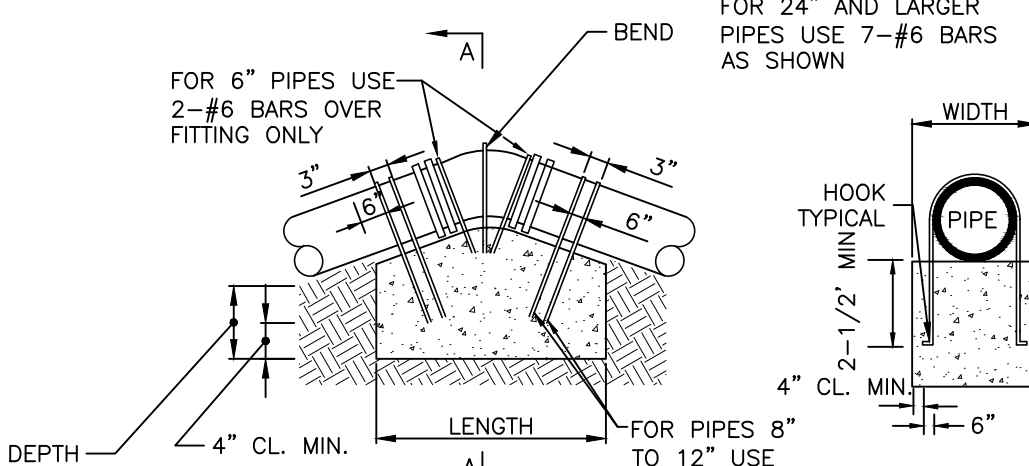
STORM SEWER - SANITARY SEWER WATER CROSSING



WATER CROSSINGS

- NOTES:
- PROVIDE REINFORCEMENT AT UTILITY CROSSINGS OR AS DIRECTED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION.

UTILITY CROSSING (CONCRETE ENCASEMENT)

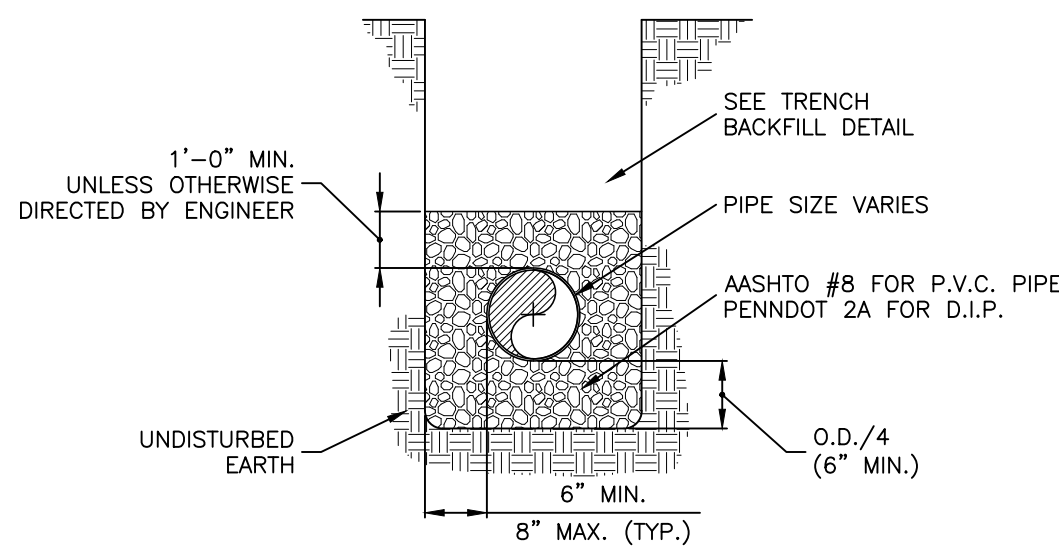


TYPICAL SECTION - VERTICAL THRUST UPWARD SECTION A-A

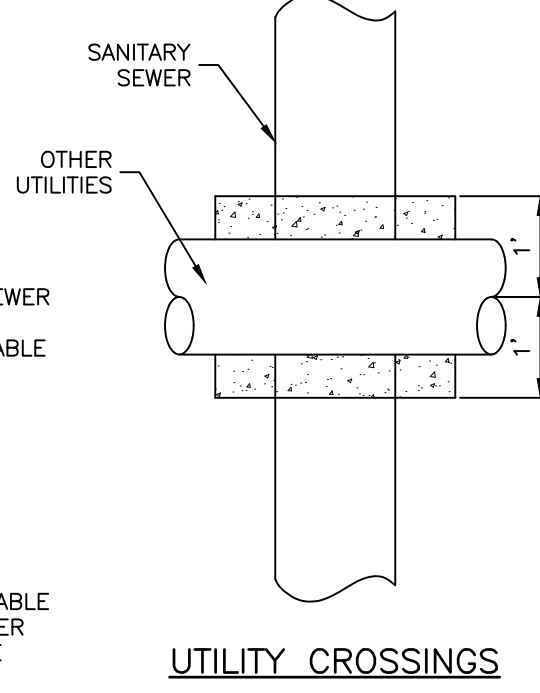
PIPE SIZES	CONCRETE BLOCKING DIMENSIONS, VERTICAL THRUST UPWARD 150 P.S.I. WORKING PRESSURE														
	LENGTH					WIDTH					DEPTH				
6" & 8"	11 1/4"	22 1/4"	45"	11 1/4"	22 1/4"	45"	11 1/4"	22 1/4"	45"	11 1/4"	22 1/4"	45"	11 1/4"	22 1/4"	45"
10" & 12"	3'	4'	6'	3'	4'	6'	3'	4'	6'	3'	4'	6'	3'	4'	6'
14" & 16"	4'	6'	9'	4'	6'	9'	4'	6'	9'	4'	6'	9'	4'	6'	9'
18" & 20"	5'	6.5'	11.5'	5'	6.5'	11.5'	5'	6.5'	11.5'	5'	6.5'	11.5'	5'	6.5'	11.5'
24"	5'	9'	12.5'	5'	9'	12.5'	5'	9'	12.5'	5'	9'	12.5'	5'	9'	12.5'
30"	5.5'	9'	13.5'	5.5'	9'	13.5'	5.5'	9'	13.5'	5.5'	9'	13.5'	5.5'	9'	13.5'
36"	6.5'	11'	14'	6.5'	11'	14'	6.5'	11'	14'	6.5'	11'	14'	6.5'	11'	14'
42"	9'	13.5'	15'	9'	13.5'	15'	9'	13.5'	15'	9'	13.5'	15'	9'	13.5'	15'
48"	10'	14'	16'	10'	14'	16'	10'	14'	16'	10'	14'	16'	10'	14'	16'

- NOTES:
- ALL CONC. SHALL HAVE MIN. COMPRESSIVE STRENGTH OF 3000 PSI AT THE END OF 28 DAYS.
 - ALL REINFORCING STEEL SHALL BE DEFORMED BARS. (ASTM GRADE 60)
 - ALL FITTINGS AND JOINTS SHALL BE COVERED WITH POLYETHYLENE FILM BEFORE PLACING CONC.
 - PAINT ALL EXPOSED STEEL WITH TWO COATS OF VALDURA PAINT OR APPROVED EQUAL.
 - REINFORCING BARS SHALL BE U-SHAPE AROUND THE PIPE.

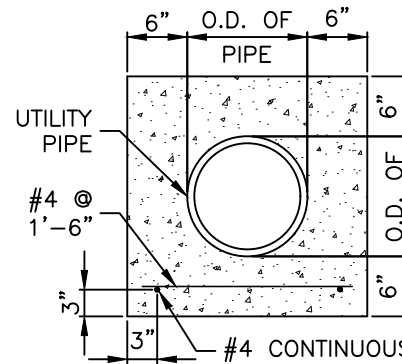
THRUST BLOCKING TABLE-VERTICAL-UPWARD



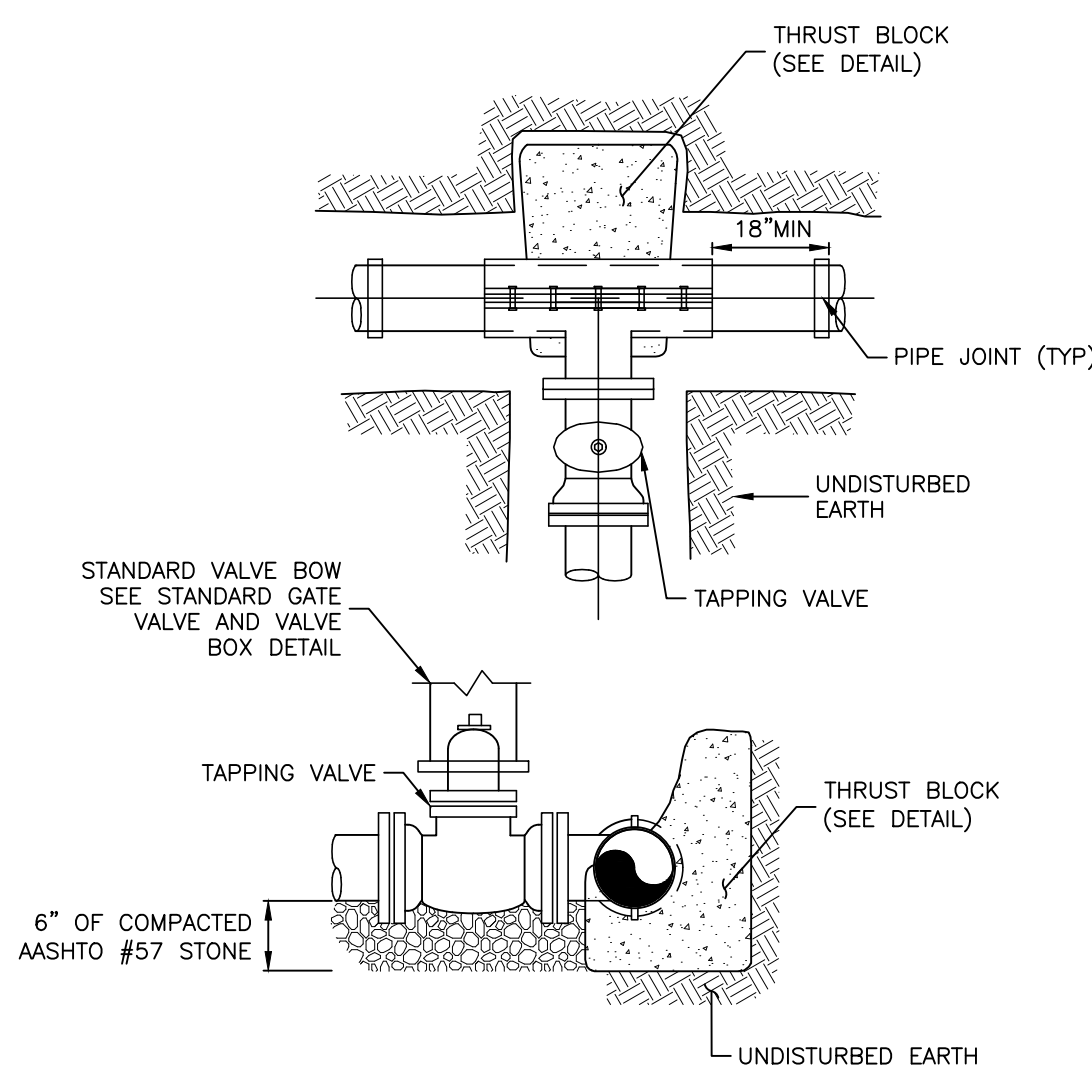
PIPE BEDDING (SANITARY MAIN AND LATERAL)



UTILITY CROSSINGS

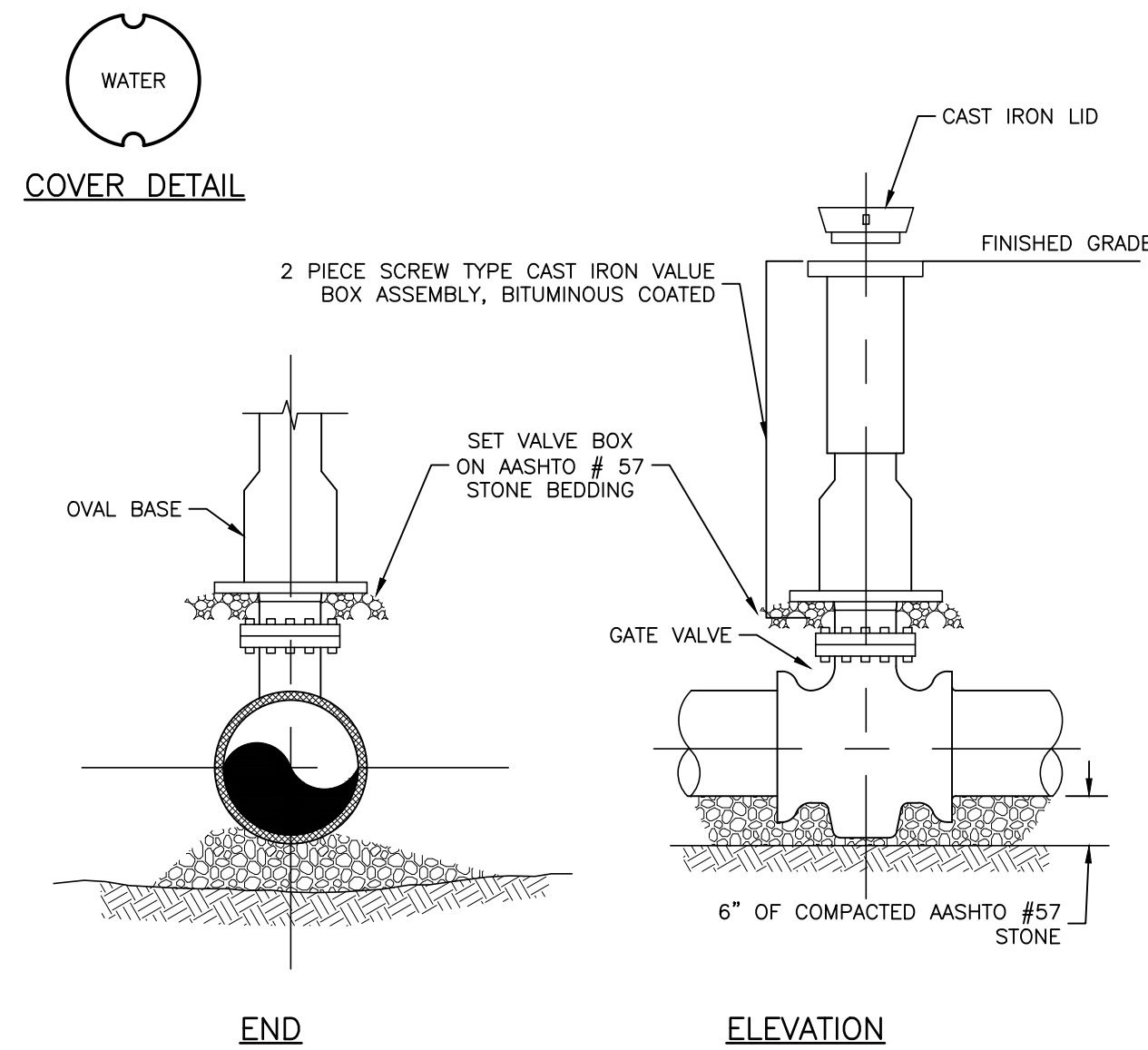


ENCASEMENT SECTION



- NOTES:
- TAPPING SLEEVE SHALL BE AIR-TESTED PRIOR TO THE LIVE MAIN BEING TAPPED.

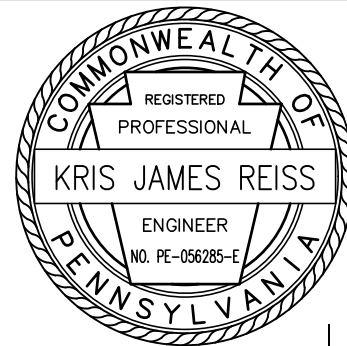
TAPPING SLEEVE AND VALVE



- NOTES:
- VALVE SHALL NOT COME INTO CONTACT WITH VALVE.

STANDARD GATE VALVE AND VALVE BOX

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION



KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 056285E

GATEWAY ON FOURTH PHASE 1 LLC

GATEWAY ON 4TH

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA

UTILITY DETAILS

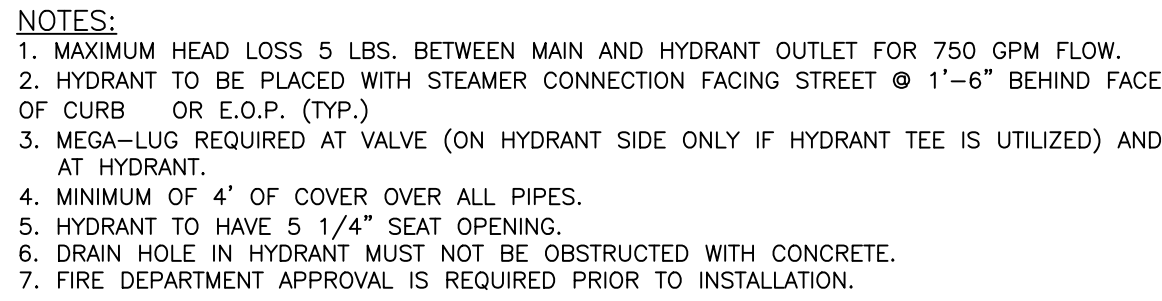


74 WEST BROAD STREET, STE 300
BETHLEHEM, PA 18018
TEL 610-625-2999
FAX 610-625-2969
www.tandmassociates.com

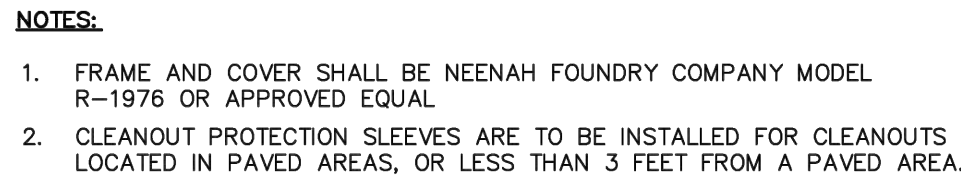
OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY
CHECKED BY
DRAWN BY
DATE
SCALE
PROJ. NO.

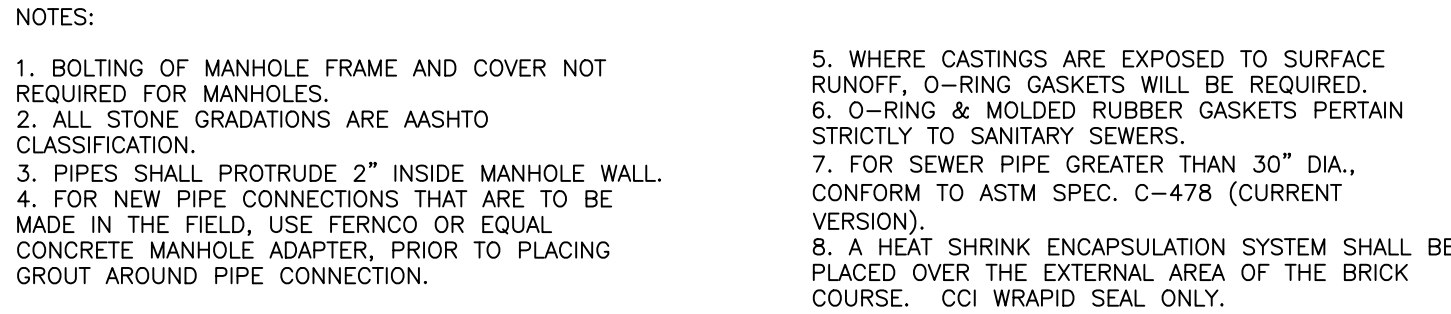
DRAWING
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SHEET
18
OF 29



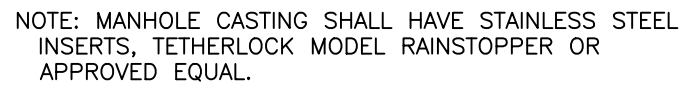
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NTS



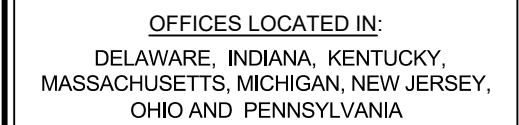
NOT TO SCALE



NOT TO SCALE

KRIS J. REISS, P.E. LICENSED PROFESSIONAL ENGINEER		DATE _____
		COMMONWEALTH OF PENNSYLVANIA LICENSE NO. 056265E

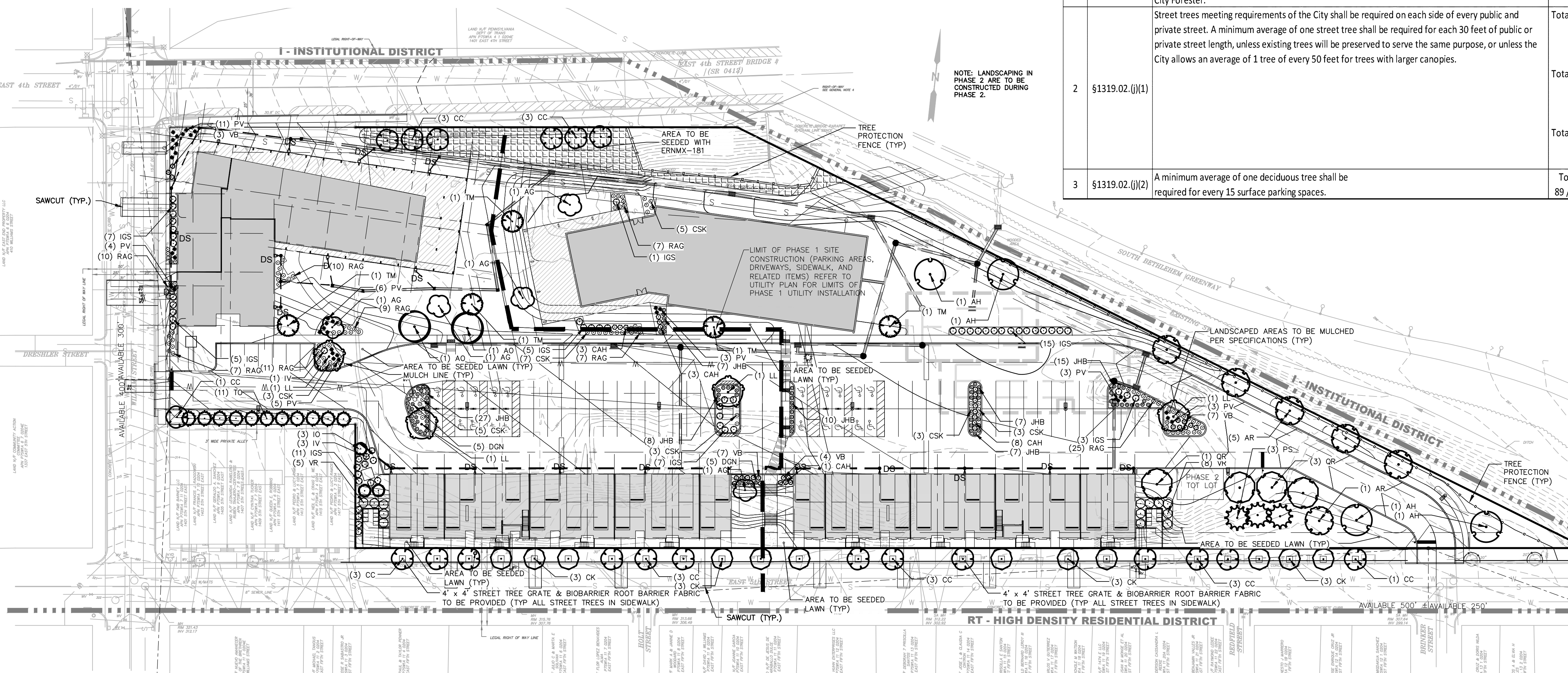
UTILITY DETAILS



DESIGNED BY	KJR	DRAWING	UTL
CHECKED BY	KJR		
DRAWN BY	BAK	SHEET	19
DATE	02-20-2026		
SCALE	AS NOTED		
PROJ. NO.	PENR00169	OF	29

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION

<u>SYMBOL</u>	<u>CODE</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>CONT.</u>	<u>CALIPER</u>	<u>HEIGHT</u>	<u>REMARKS</u>
IMPERVIOUS AREA DECIDUOUS TREES								
	TM	5	ACER BUERGERANUM	TRIDENT MAPLE	B & B	2" - 2 1/2" CAL.		
	AG	5	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	B & B	2" - 2 1/2" CAL.		
	QR	4	QUERCUS RUBRA	RED OAK	B & B	2" - 2 1/2" CAL.		
IMPERVIOUS AREA EVERGREEN TREES								
	IO	3	ILEX OPACA	AMERICAN HOLLY	B & B		6-8'	
	PS	3	PINUS STROBUS	WHITE PINE	B & B		8'-10'	
	TO	11	THUJA OCCIDENTALIS 'TECHNY'	TECHNY ARBORVITAE	B & B		6-8'	
PARKING LOT TREES								
	AO	2	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	B & B	2" - 2 1/2" CAL.	14' MIN.	
	LL	4	TILIA CORDATA 'GREENSPIRE'	LITTLELEAF LINDEN	B & B	2" - 2 1/2" CAL.	14' MIN.	
REPLACEMENT TREES								
	AR	6	ACER RUBRUM	RED MAPLE	B & B	2" - 2 1/2" CAL.		
	AH	4	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	B & B	2" - 2 1/2" CAL.		
STREET TREES								
	CC	20	CERCIS CANADENSIS	EASTERN REDBUD	B & B	2" - 2 1/2" CAL.	14' MIN.	
	CK	12	CORNUS KOUSA	KOUSA DOGWOOD	B & B	2" - 2 1/2" CAL.	14' MIN.	
<u>SYMBOL</u>	<u>CODE</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>CONT.</u>	<u>-</u>	<u>HEIGHT</u>	<u>REMARKS</u>
SHRUBS								
	CAH	15	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET (DWARF)	5 GAL		24"-30"	HEAVY SPECIMENS
	CSK	29	CORNUS SERICEA 'KELSEY'	KELSEY'S DWARF RED TWIG DOGWOOD	#3		18"-24"	
	DGN	10	DEUTZIA GRACILIS 'NIKKO'	NIKKO DEUTZIA	#3		18"-24"	
	IGS	54	ILEX GLABRA 'SHAMROCK'	INKBERRY	#7		24"-30"	HEAVY SPECIMENS
	IV	4	ITEA VIRGINICA 'HENRY'S GARNET'	HENRY'S GARNET SWEETSPICE	#5		18"-24"	HEAVY SPECIMENS
	VR	13	VIBURNUM RHYTIDOPHYLLUM 'ALLEGHANY'	LEATHERLEAF VIBURNUM	#7		30"-36"	HEAVY SPECIMENS
GROUND COVER SHRUBS								
	JHB	81	JUNIPERUS HORIZONTALIS 'BLUE RUG'	BLUE RUG JUNIPER	2 GAL		12"-15"	
	RAG	86	RHUS AROMATICA 'GRO-LOW'	'GRO-LOW' FRAGRANT SUMAC	2 GAL		12"-18"	
	VB	21	VACCINIUM ANGUSTIFOLIUM 'BRUNSWICK'	LOWBUSH GROUND COVER BLUEBERRY	5 GAL		12"-18"	
PERENNIALS/GRASSES								
	PV	35	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	1 GAL			



1. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBANCE IS ALLOWED IN THE TREE PROTECTION ZONE UNLESS INDICATED ON THE PLAN.
2. BARRICADES MUST BE INSTALLED PRIOR TO ANY DESTRUCTION AND/OR CONSTRUCTION ACTIVITY.
3. THE ROOT PROTECTION ZONE SHALL BE THE AREA ENCOMPASSED BY A CIRCLE WITH A RADIUS EXTENDING 1.25 FT. FROM THE TRUNK OF THE TREE FOR EVERY INCH DBH (DIAMETER AT BREAST HEIGHT) OF THE TREE.
4. VIOLATIONS OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO PENALTY PER CITY ORDINANCE.
5. ALL TREES ON PUBLIC PROPERTY ARE PROTECTED BY ORDINANCE: NO PRUNING, ROOT PRUNING OF ROOTS OVER ONE INCH IN DIAMETER, AND/OR TREE REMOVAL IS TO BE PERFORMED WITHOUT A PERMIT AND WORK MUST BE PERFORMED BY A CITY LICENSED TREE CONTRACTOR.
6. ALL PLANT MATERIALS ARE TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
7. STREET AND PARKING LOT TREES SHALL BE A MINIMUM OF 14' IN HEIGHT AND HAVE A SINGLE STRAIGHT TRUNK WITH THE FIRST LATERAL BRANCH AT 7' ABOVE THE ROOT BALL. TREES WITH AN UPRIGHT BRANCHING HABIT, SUCH AS ZELKOVA, MAY HAVE THE FIRST LATERAL BRANCH AT 6' ABOVE THE ROOT BALL.
8. ALL LANDSCAPING SHALL CONFORM TO THE CURRENT EDITION OF THE ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE OF THE CITY OF BETHLEHEM.
9. A ROOT-CONTROL SYSTEM IS REQUIRED WHEN INSTALLING STREET TREES. THE ROOT BARRIER SHALL BE OF THE BIO-BARRIER TYPE AND A MINIMUM OF EIGHTEEN (18") INCHES WIDE. ANY SUBSTITUTION SHALL BE APPROVED BY THE CITY FORESTER. THE ROOT-CONTROL SYSTEM IS TO BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. TREE OPENINGS IN THE SIDEWALK SHALL HAVE THE BIO-BARRIER INSTALLED ALONG THE FACE OF THE TREE OPENING THAT IS PARALLEL TO THE STREET AND CLOSEST TO THE PROPERTY LINE, OVERLAPPING THE NEAREST TWO CORNERS BY APPROXIMATELY FOUR (4") INCHES. WHERE TREES ARE TO BE PLANTED IN A PARKWAY OR PLANTING STRIP BETWEEN THE CURB AND SIDEWALK, THE BARRIER SHALL BE INSTALLED ALONG THE SIDEWALK EDGE CLOSEST TO THE CURB AND CENTERED ON THE ROOT SOURCE. THE LENGTH OF THE BARRIER SHALL BE A MINIMUM EQUAL TO THE SPREAD OF THE TREE CANOPY AT MATURITY PLUS TEN (10') FEET.
10. ALL LANDSCAPING, AS APPROVED ON FINAL SITE PLANS, SHALL BE COMPLETED AND MAINTAINED, INCLUDING THE REPLACEMENT OF DEAD PLANTINGS BY THE APPLICANT OR THEIR SUCCESSORS AND ASSIGNS.

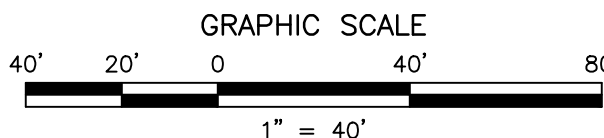
Landscape Requirements - SALDO					
No.	Section		Requirement	Proposed	Waiver
1	§1349.19.G.	An average minimum of one deciduous or evergreen tree shall be required to be planted and then maintained for every 4,000 square feet of impervious surface. This requirement shall be in addition to required street trees and buffer yard plantings required by the Zoning Ordinance.	Total Impervious Area = 119,790 sf 119,790 / 4,000 = 29.9 or 30 Evergreen/Deciduous Trees Required	Total Impervious Area Trees Provided = 30 Evergreen/Deciduous Trees	No
2	§1349.19.H.1.	On principal commercial, industrial, institutional and multi-family apartment lots, a minimum of 10 percent of the lot area shall be landscaped in trees and shrubs, and with a vegetated ground cover. These plantings shall be in addition to any buffer yards which may be necessary. Parking lot trees required in Section 1319 of the Zoning Ordinance can be counted towards fulfilling this 10 percent requirement. This 10 percent requirement shall not apply in the CB district. Where an entity owns adjacent lots, the 10 percent requirement may be averaged across two or more lots, provided the resulting requirement is established on a City-approved plan.	Total Lot Area = 159,865 sf 159,865 x 0.10 = 15,986.5 Landscape Area (10%)	Total Landscape Area Provided = 40,075 sf (25%)	No

Landscape Requirements - ZONING					
No.	Section		Requirement	Proposed	Variance
1	§1318.28.(a)	Where any existing healthy tree(s) that has a trunk diameter of 8 inches or greater (measured 4.5 feet above the ground level) are removed from a site as part of or in preparation for a development project, 1 new tree shall be planted for each such tree that is removed. The new trees shall have a minimum trunk diameter of 2.5 inches measured 6 inches above the ground level and shall meet the City species requirements that would apply to street trees, unless other species are approved by the City Forester.	Total existing trees 8" or greater to proposed to be removed on site = 10 trees	Proposed replacement trees = 10 Trees	No
2	§1319.02.(j)(1)	Street trees meeting requirements of the City shall be required on each side of every public and private street. A minimum average of one street tree shall be required for each 30 feet of public or private street length, unless existing trees will be preserved to serve the same purpose, or unless the City allows an average of 1 tree of every 50 feet for trees with larger canopies.	Total Length of Improvements along East 5th Street = 750 lf 750 / 30 = 25 Street Trees Total Length of Improvements along William Street = 150 lf 120 / 30 = 4 Street Trees Total Length of Improvements along 4th Street = 325 lf 325 / 30 = 11 Street Trees	Total Street Trees Provided Along East 5th Street = 25 Street Trees Total Street Trees Provided Along William Street = 1 Street Tree (Partial Variance) Total Street Trees Provided Along 4th Street = 6 Street Trees (Partial Variance)	Partial
3	§1319.02.(j)(2)	A minimum average of one deciduous tree shall be required for every 15 surface parking spaces.	Total Parking Spaces = 89 Spaces 89 / 15 = 5.9 or 6 Parking Lot Trees	Total Proposed Parking Lot Trees = 6 Parking Lot Trees	No

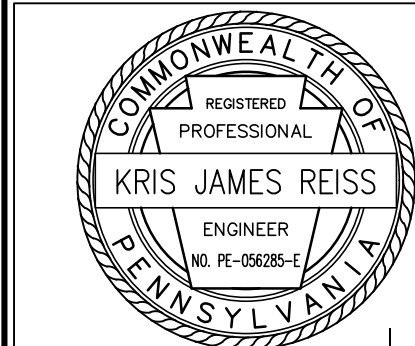
LEGEND

	PROPERTY LINE
	BUILDING OUTLINE
	ADJOINER PROPERTY LINE
	EXISTING DRIVEWAY/PARKING
	BUILDING SETBACK LINE
	RIGHT-OF-WAY LINE
	CONCRETE CURB
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	WATER LINE
	GAS LINE
	SEWER LINE
	EXISTING DECIDUOUS TREE (TBR)
	IRON PIN, REBAR OR IRON PIPE (FOUND)
	IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
	WATER VALVE/WATER CURB BOX
	NEW CONCRETE CURB LINE
	NEW BELGIAN BLOCK CURB LINE
	NEW FENCE LINE
	NEW TREELINE
	INDEX CONTOUR
	EVEN CONTOUR
	ODD CONTOUR
	NEW ASPHALT
	NEW BUILDING
	NEW CONCRETE AREA
	PHASE 1 / PHASE 2 CONSTRUCTION

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION



NO.	DATE	REVISIONS	BY	CHD
1	2/25/2028	REVISED FOR NPDES SUBMISSION	BAK	KJR
2	05/08/26	ISSUED FOR 90% CONTRACT DRAWINGS	BAK/ELH	KJR
3	05/15/26	REVISED FOR NPDES SUBMISSION	BAK/ELH	KJR
4	06/01/26	REVISED PER CITY COMMENTS	BAK/ELH	KJR



CHRISTOPHER J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

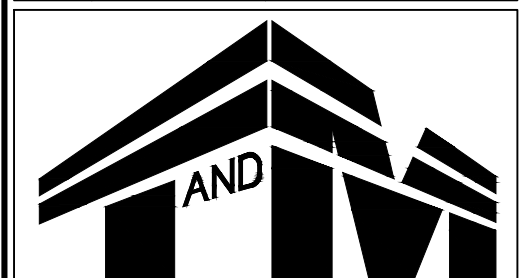
COMMONWEALTH OF PENNSYLVANIA
LICENSE NO 056285E

GATEWAY ON FOURTH PHASE 1 LLC

GATEWAY ON 4TH

LANDSCAPING PLAN

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA



4 WEST BROAD STREET, STE 300
BETHLEHEM, PA 18018
TEL 610-625-2999
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OHIO AND PENNSYLVANIA

DESIGNED BY KJR	DRAWING SLS
CHECKED BY KJR	SHEET 20 OF 29
DRAWN BY BAK	
DATE 02-20-2026	
SCALE 1"=40'	
PROJ. NO. PENR00169	

PROJECT INFORMATION:
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LAST SAVE BY: bkrishbaugh

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Anchor Base Pole:
RSS
ROUND STRAIGHT STEEL

Accessories: Order as separate catalog number.

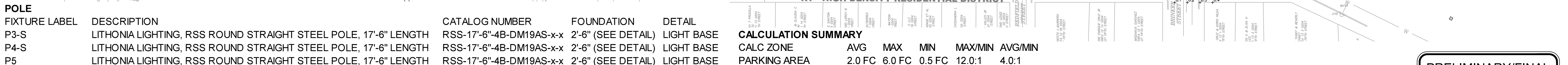
PL D720	Plugs for ESX drillings
PL D7B	Plugs for DMbaaS drillings
FVD xofT	Field installed vibration damper (snake stop)

- [illegible]

LITHONIA LIGHTING

OUTDOOR: One Lithonia Way Conners, GA 30012 Phone: 800-705-SEVY (7378) TechSupport: Lighting@allcitybrands.com www.lithonia.com © 1998-2025 Acuity Brands Lighting, Inc. All rights reserved. Rev. 01/09/25

	PROPERTY LINE
	BUILDING OUTLINE
	ADJOINER PROPERTY LINE
	EXISTING DRIVEWAY/PARKING
	BUILDING SETBACK LINE
	RIGHT-OF-WAY LINE
	CONCRETE CURB
	375 EXISTING CONTOUR MAJOR
	377 EXISTING CONTOUR MINOR
	WATER LINE
	GAS LINE
	SEWER LINE
	EXISTING DECIDUOUS TREE (TBR)
	IRON PIN, REBAR OR IRON PIPE (FOUND)
	IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
	WATER VALVE/WATER CURB BOX
	NEW CONCRETE CURB LINE
	NEW BELGIAN BLOCK CURB LINE
	NEW FENCE LINE
	NEW TREELINE
	305 INDEX CONTOUR
	304 EVEN CONTOUR
	303 ODD CONTOUR
	NEW ASPHALT
	NEW BUILDING
	NEW BUILDING OVERHANG
	NEW CONCRETE AREA
	PHASE 1/PHASE 2 CONSTRUCTION BOUNDARY

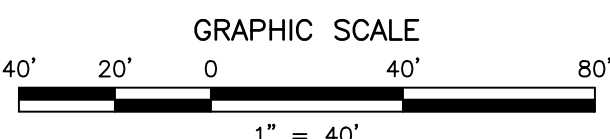


LUMINAIRE SCHEDULE									
LABEL	QUANTITY	MOUNTING	NOMINAL MOUNTING HEIGHT	DESCRIPTION	CATELOG NUMBER	.IES FILE	LAMP LUMENS	LLF	WATTS PER LUMINAIRE
P3-S	2	SINGLE	20'-0" AFG (17'-6" POLE)	LITHONIA LIGHTING, D-SERIES SIZE 2 LED AREA LUMINAIRE, ZERO UP-LIGHT, TYPE 3, HOUSESIDE SHIELD	DSX2 LED-P2-30K-70CRI-T3M-x-RPA-x-x-HS-x-x	DSX2 LED P2 30K 70CRI T3M HS.ies	23,915	0.9	179.2
P4-S	1	SINGLE	20'-0" AFG (17'-6" POLE)	LITHONIA LIGHTING, D-SERIES SIZE 2 LED AREA LUMINAIRE, ZERO UP-LIGHT, TYPE 4, HOUSESIDE SHIELD	DSX2 LED-P2-30K-70CRI-T4M-x-RPA-x-x-HS-x-x	DSX2 LED P2 30K 70CRI T4M HS.ies	24,272	0.9	179.2
P5	4	SINGLE	20'-0" AFG (17'-6" POLE)	LITHONIA LIGHTING, D-SERIES SIZE 2 LED AREA LUMINAIRE, ZERO UP-LIGHT, TYPE 5	DSX2 LED-P2-30K-70CRI-T5M-x-RPA-x-x-x-x-x	DSX2 LED P2 30K 70CRI T5M.ies	24,972	0.9	179.2

PRELIMINARY/FINAL
 PLANS - NOT FOR
 CONSTRUCTION

GRAPHIC SCALE
 40' 20' 0 40' 80'

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION



KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

COMMONWEALTH OF PENNSYLVANIA

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA
GATEWAY ON 4TH
NORTHAMPTON COUNTY, PA 18040

LIGHTING PLAN

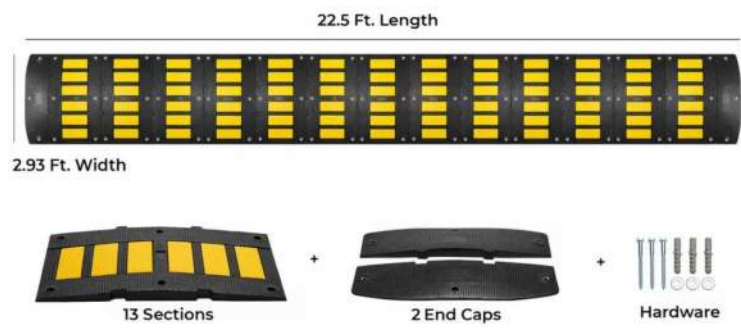
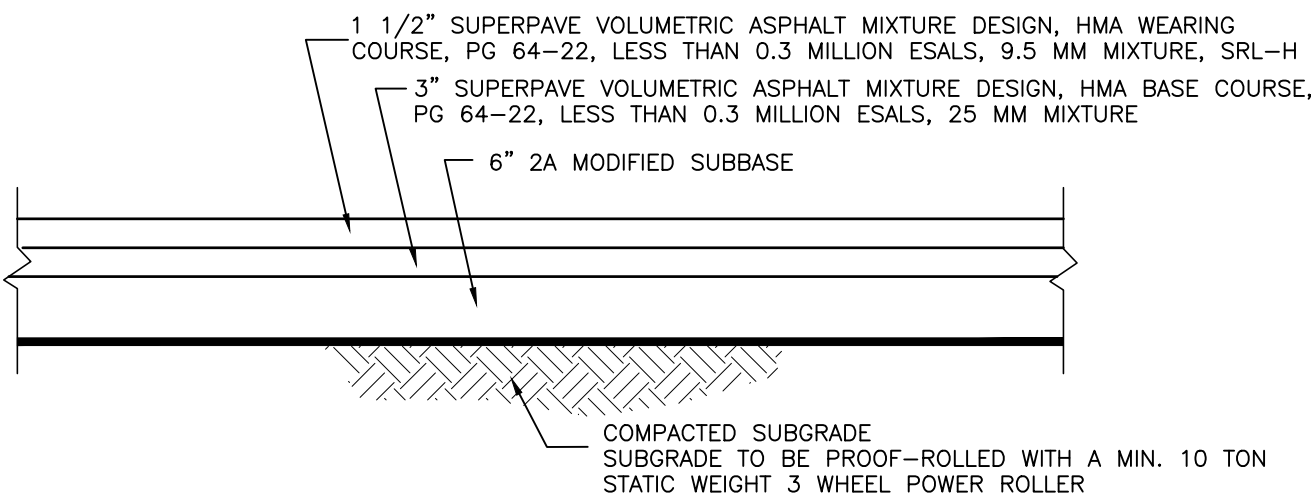
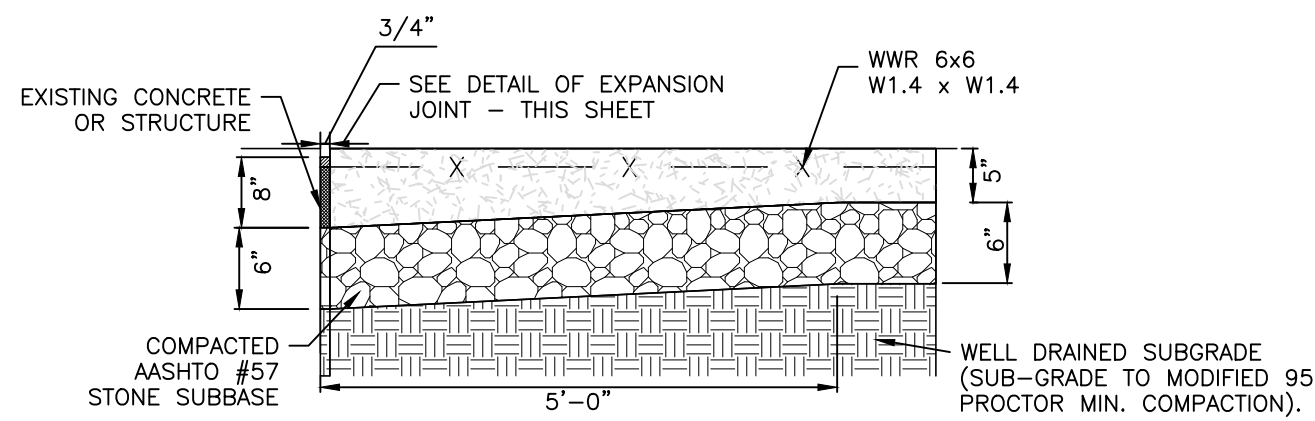
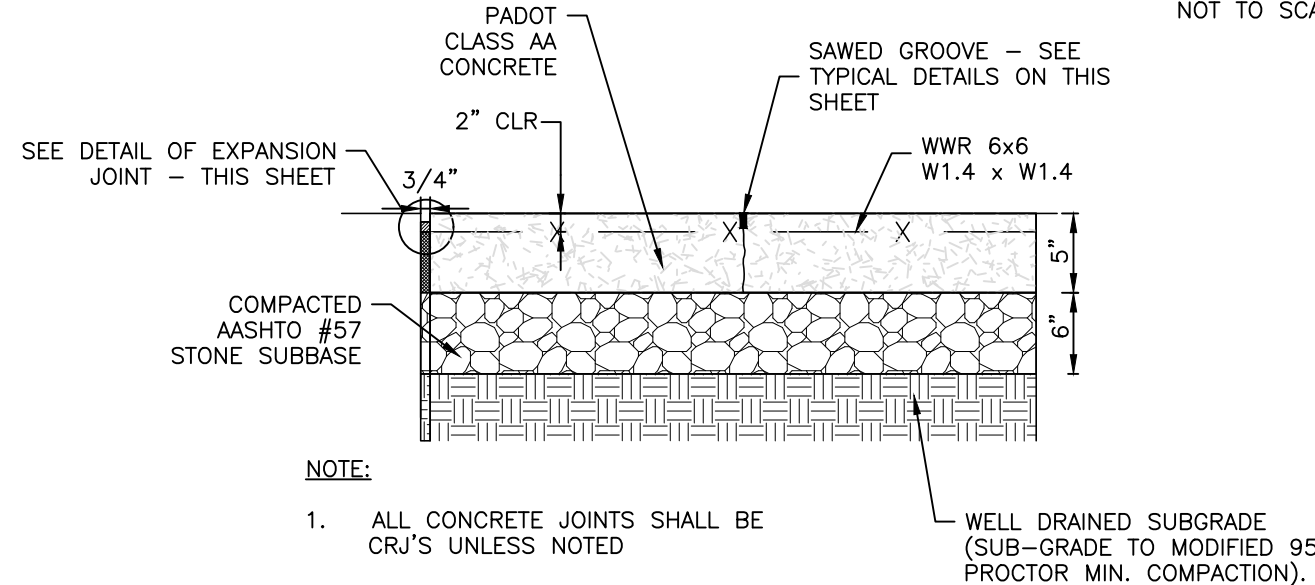
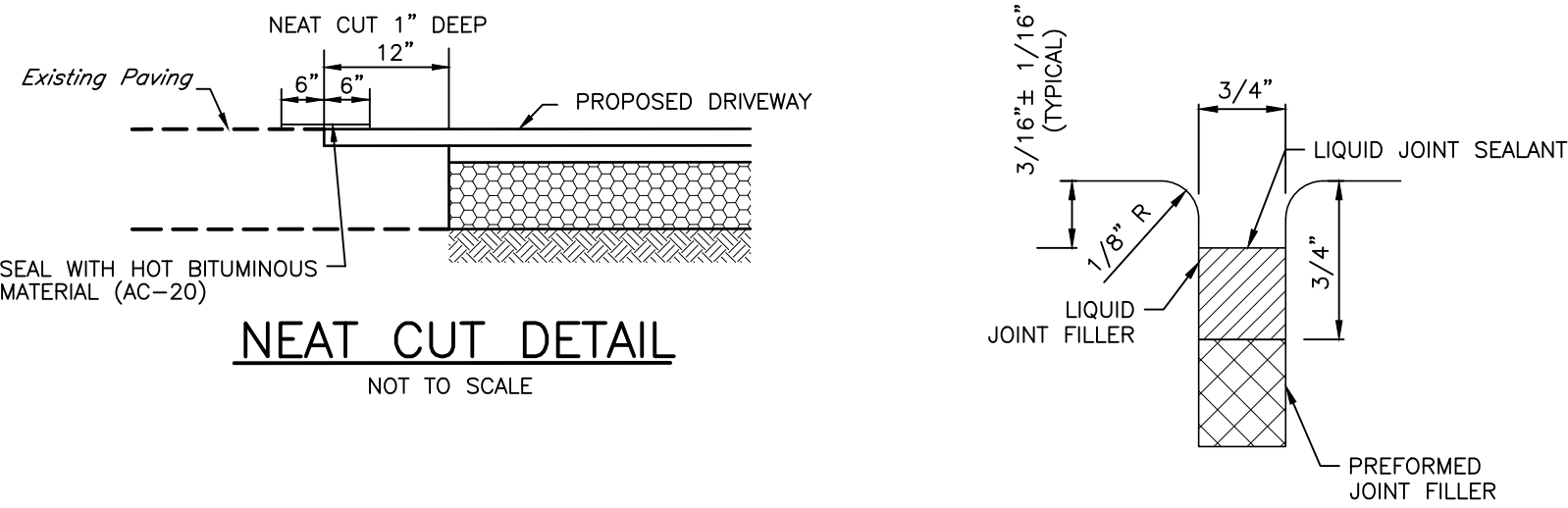


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OHIO AND PENNSYLVANIA

DESIGNED BY	KJR	DRAWING	SLP
CHECKED BY	KJR		
DRAWN BY	BAK	SHEET	22
DATE	02-20-2026		
SCALE	1"=40'		
PROJ. NO.	REN004160		
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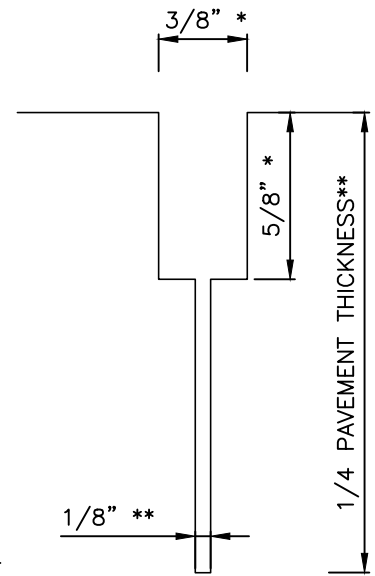
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 LAST SAVE DATE AND TIME: 06 Jun 2026, 3:11PM
 LAST SAVE BY: Bkshidoo



NOTE: PROVIDE 22.5 FOOT WIDE STANDARD SPEED HUMPS AS PROVIDED BY BARCO PRODUCTS, BATAVIA, ILLINOIS, OR APPROVED EQUAL.

SPEED HUMP DETAIL

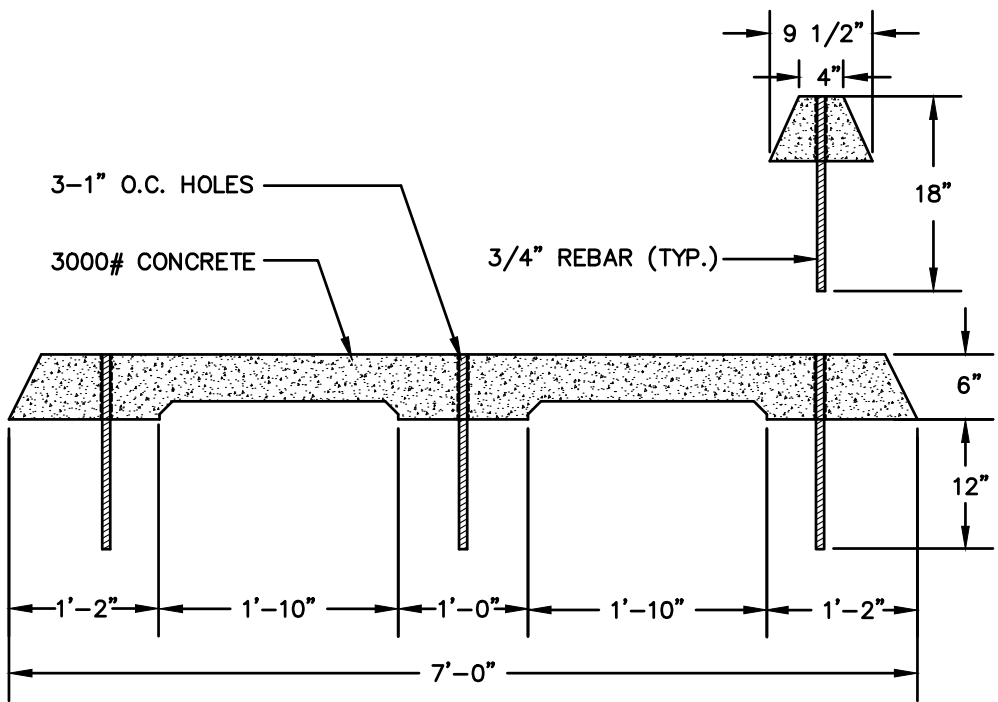
NOT TO SCALE



- NOTES:
- **FIRST SAWCUT
 - **SECOND SAWCUT

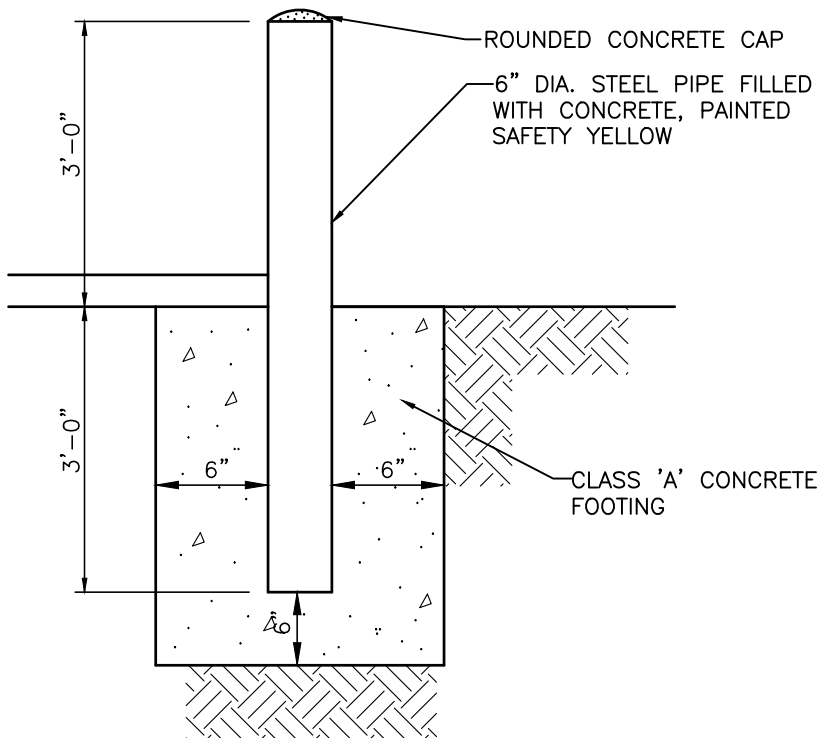
TYPICAL DETAIL OF SAWED GROOVE

NOT TO SCALE



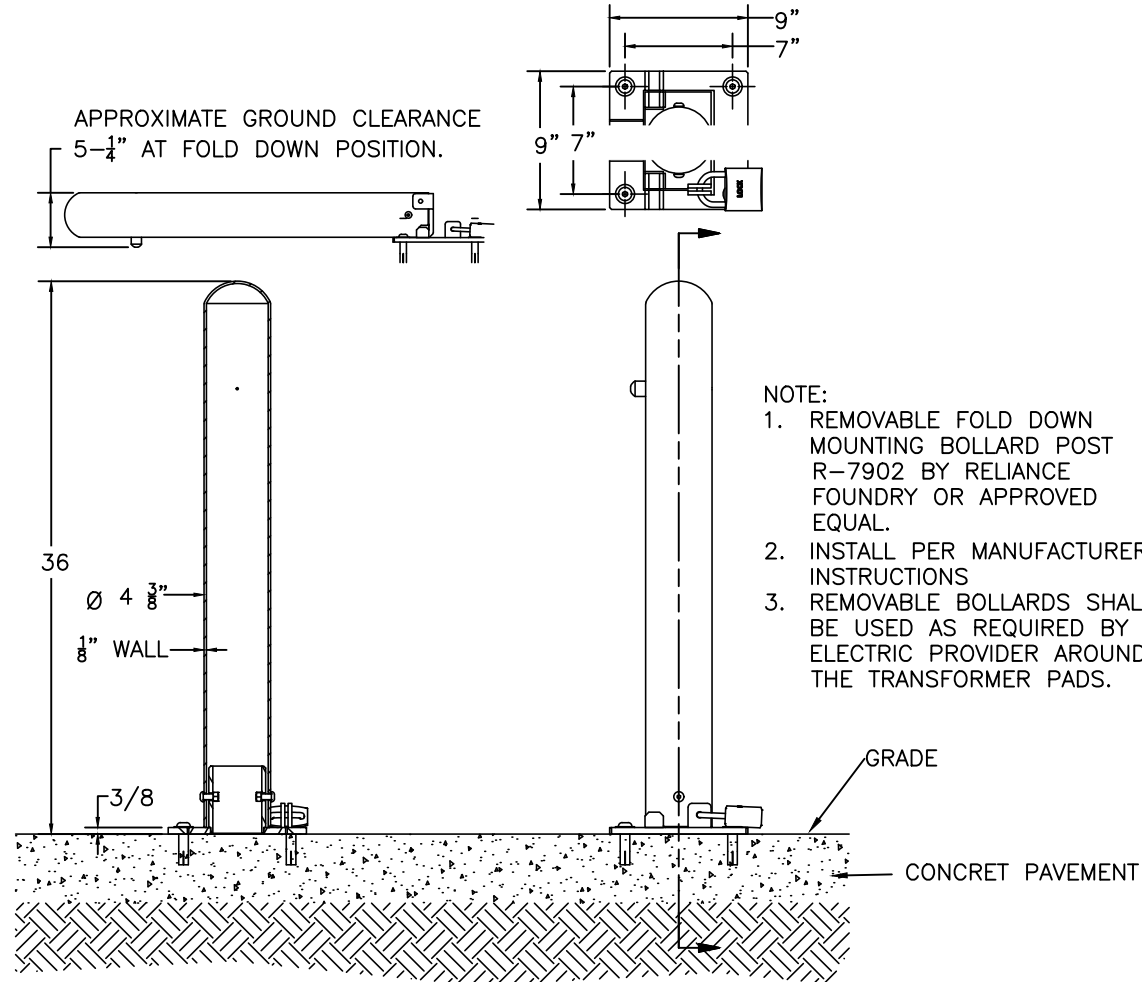
CONCRETE WHEELSTOP

N.T.S.



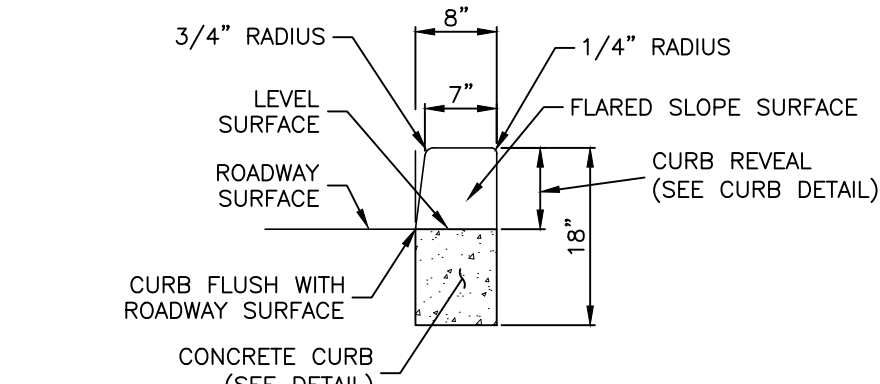
BOLLARD DETAIL

NOT TO SCALE



REMOVABLE BOLLARD

NOT TO SCALE



NOTE:

- DIMENSIONS SHOWN ARE FOR 8" CONCRETE CURB. ALL DIMENSIONS SHALL BE ADJUSTED ACCORDINGLY FOR VARYING SIZE/TYPE OF CURB.
- DEPRESSED CURB FOR CURB RAMPS MUST BE FLUSH TO ADJACENT ROADWAY. EDGE OF ROAD ELEVATIONS AT THE FLOW LINE SHALL BE GRADED TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING.

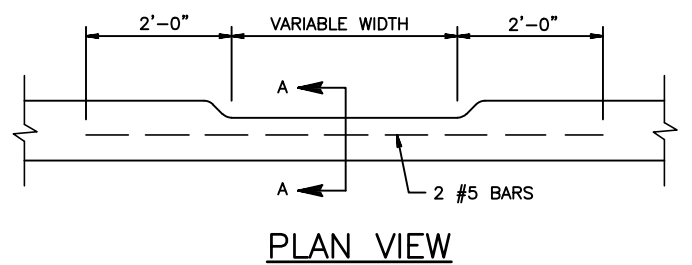
DEPRESSED CURB AT SIDEWALK CURB RAMPS

NOTES:

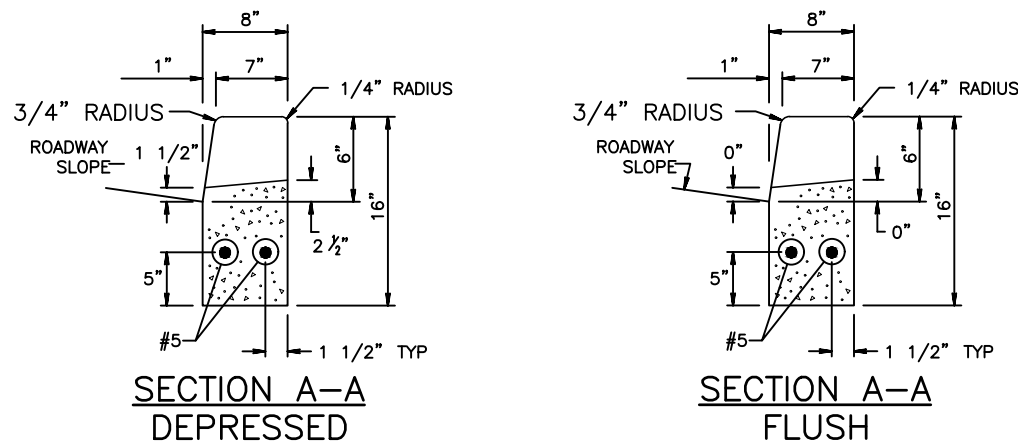
- PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PENNDOT PUBLICATION 408. SECTIONS 350, 408, 630, 676, AND 694.
- PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
- IF PEDESTRIAN CROSSWALKS ARE NOT WIDE ENOUGH TO PROVIDE MINIMUM 4'-0" X 4'-0" WIDE WHEELCHAIR OVERRUN ZONE AT THE BOTTOM OF THE RAMP, POSITION CROSSWALKS AS INDICATED IN PENNDOT PUBLICATION 72M - RC-67M - DETAIL A, ON SHEET 7.
- SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
- PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF CURB RAMP INCLUDING FLARED SIDE RAMPS.
- MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB ALTERATIONS WHERE THE CURB IS LESS THAN THE STANDARD 8" HEIGHT.
- CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE. IT MAY BE NECESSARY TO LIMIT THE RUN OF A PARALLEL OR PERPENDICULAR CURB RAMP IN ORDER TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB. RAMP LENGTH NOT TO EXCEED 15'-0", ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT POSSIBLE.
- WHENEVER POSSIBLE, CONSTRUCT THE TRANSITION SLOPE FROM THE CURB RAMP AND FLARE SIDES TO ADJOINING SURFACES WITH A GRADUAL ROUNDED SHAPE RATHER THAN AN ABRUPT ANGLE. ENSURE CONSTRUCTION IS WITHIN MAXIMUM SLOPE.
- ALIGN DETECTABLE WARNING DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB.
- PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP. DETECTABLE WARNING SURFACES SHALL COMPLY WITH THE REQUIREMENTS OF PENNDOT PUBLICATION 72M - RC-67M AND ADA REQUIREMENTS.
- FOR NEW CONSTRUCTION, DO NOT EXCEED 2.0% CROSS SLOPE ON THE CURB RAMP OR ACCESSIBLE ROUTE.
- CONSTRUCT RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. IT IS STRONGLY RECOMMENDED TO USE THE SLOPES LISTED ABOVE TO ALLOW FOR CONSTRUCTION TOLERANCES.

CURB RAMP - GENERAL INFORMATION

NOT TO SCALE



PLAN VIEW



NOTES:

- PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 630, FOR PLAIN CEMENT CONCRETE CURB AND DEPRESSED CURB.
- SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
- PLACE 1/2" THICK PREMOLOD EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY, CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
- SEE RC-SOM FOR PLAIN CEMENT CONCRETE CURB SLOPED TOP TREATMENT AT END OF STRUCTURES.
- ALL DIMENSIONS ARE IN U.S. CUSTOMARY UNITS.

DEPRESSED AND FLUSH CURB

NOT TO SCALE

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION

NO.	DATE	REVISIONS	BY	CHKD
4	06/01/26	REVISED PER CITY COMMENTS	BAK	KJR
3	05/15/26	REVISED FOR NPDES SUBMISSION	BAK	KJR
2	05/08/26	ISSUED FOR 90% CONTRACT DRAWINGS	BAK	KJR
1	2/26/2026	REVISED FOR NPDES SUBMISSION	BAK	KJR

KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

COMMONWEALTH OF PENNSYLVANIA
ENGINEER
NO. PE-09628-C
DATE 06/01/2026
LICENSE NO. 066285E

GATEWAY ON FOURTH PHASE 1 LLC
GATEWAY ON 4TH
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA
CONSTRUCTION DETAILS

AND
YOUR GOALS. OUR MISSION.
74 WEST BROAD STREET, STE 300
BETHLEHEM, PA 18018
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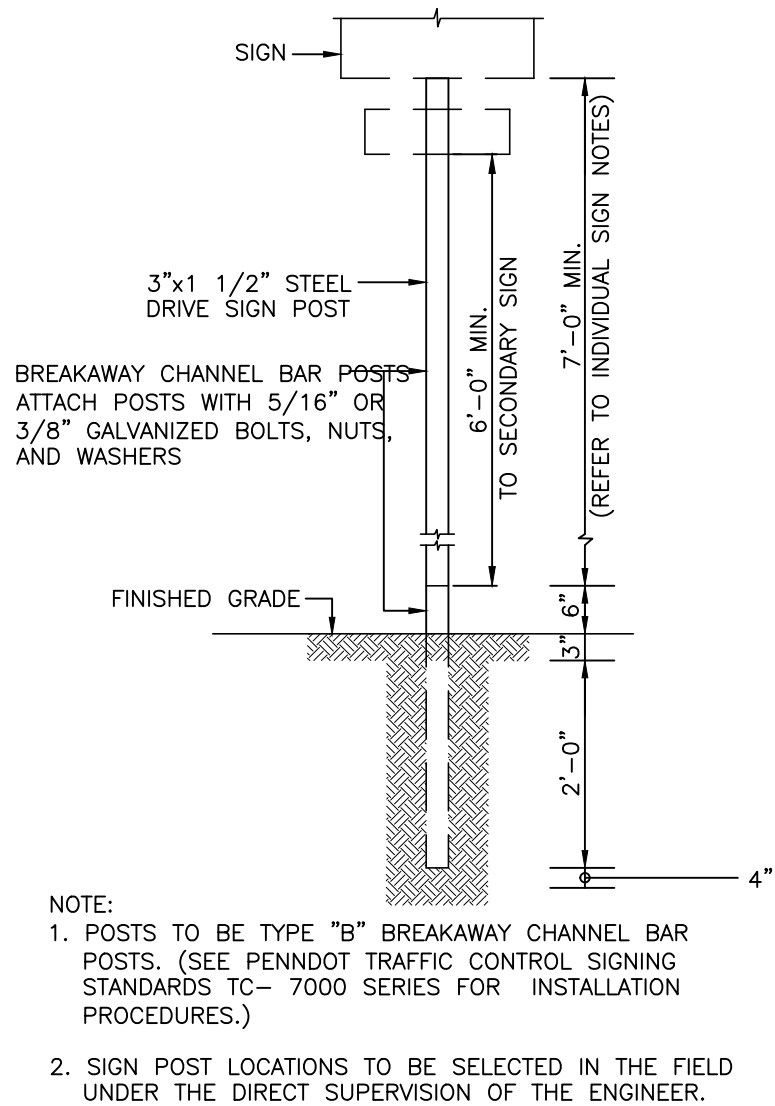
DESIGNED BY	KJR	DRAWING	DTL
CHECKED BY	KJR	SHEET	23
DRAWN BY	BAK	OF	29
DATE	02-20-2026		
SCALE	AS NOTED		
PROJ. NO.	PENR00169		

PROJECT INFORMATION:
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FILE NAME: PENR00169-SHT023-025.DTL.dwg
LAST SAVED DATE AND TIME: 08 Jun 2026, 10:35AM
LAST SAVE BY: B. Bralough

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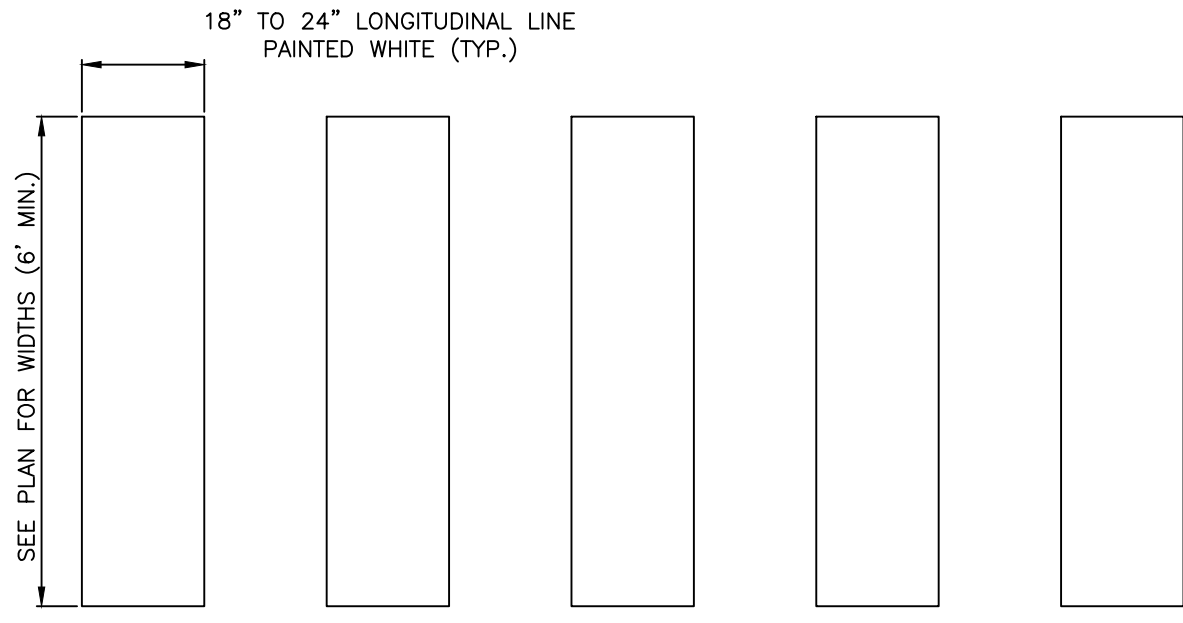
PROJECT INFORMATION:
FILE PATH: G:\Projects\PENR\00169\Plans\
FILE NAME: PENR00169_SHT023-025.DTL.dwg
LAST SAVED DATE AND TIME: 08 Jun 2026, 10:35AM
USER: JAVI B. BRADSHAW

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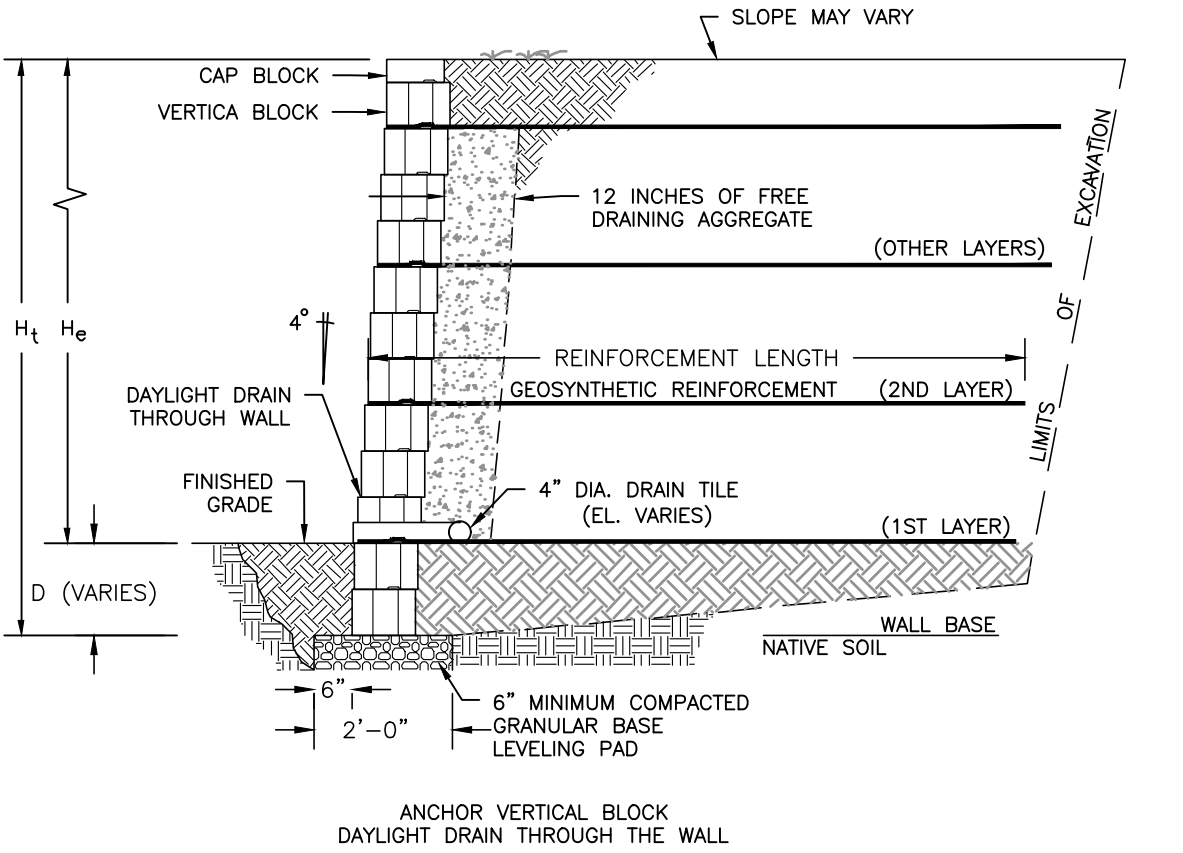
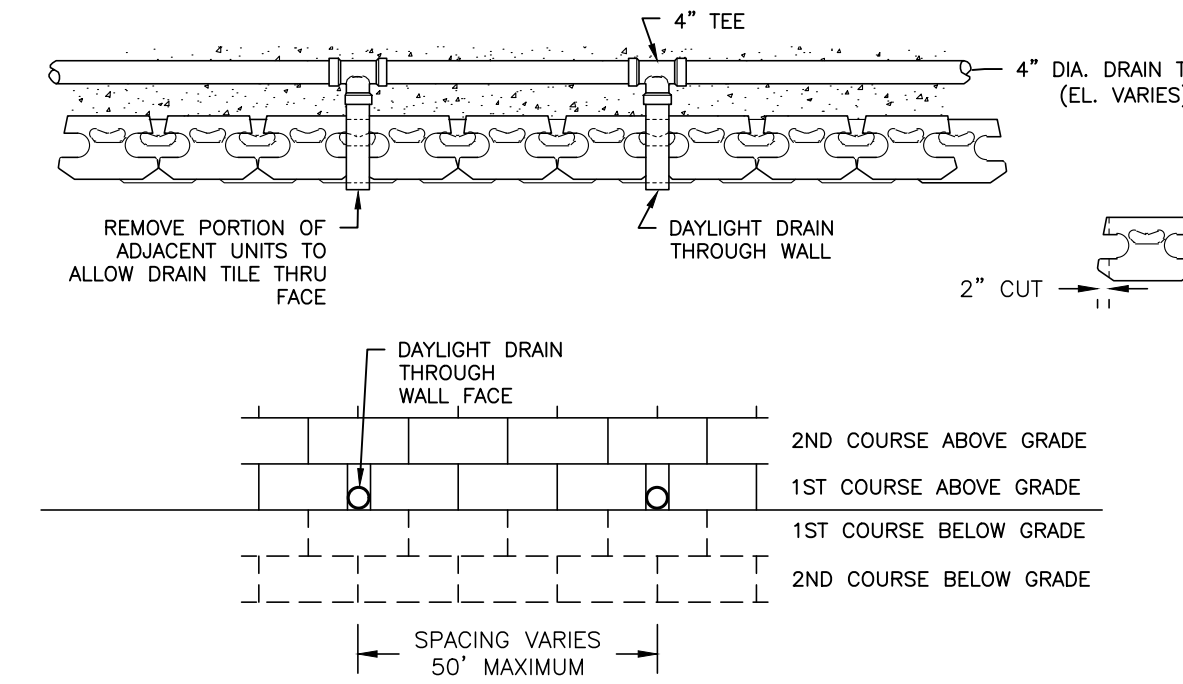
NOTE:
1. POSTS TO BE TYPE "B" BREAKAWAY CHANNEL BAR POSTS. (SEE PENNDOT TRAFFIC CONTROL SIGNING STANDARDS TO-7000 SERIES FOR INSTALLATION PROCEDURES.)
2. SIGN POST LOCATIONS TO BE SELECTED IN THE FIELD UNDER THE DIRECT SUPERVISION OF THE ENGINEER.

SIGN POST DETAIL
NOT TO SCALE



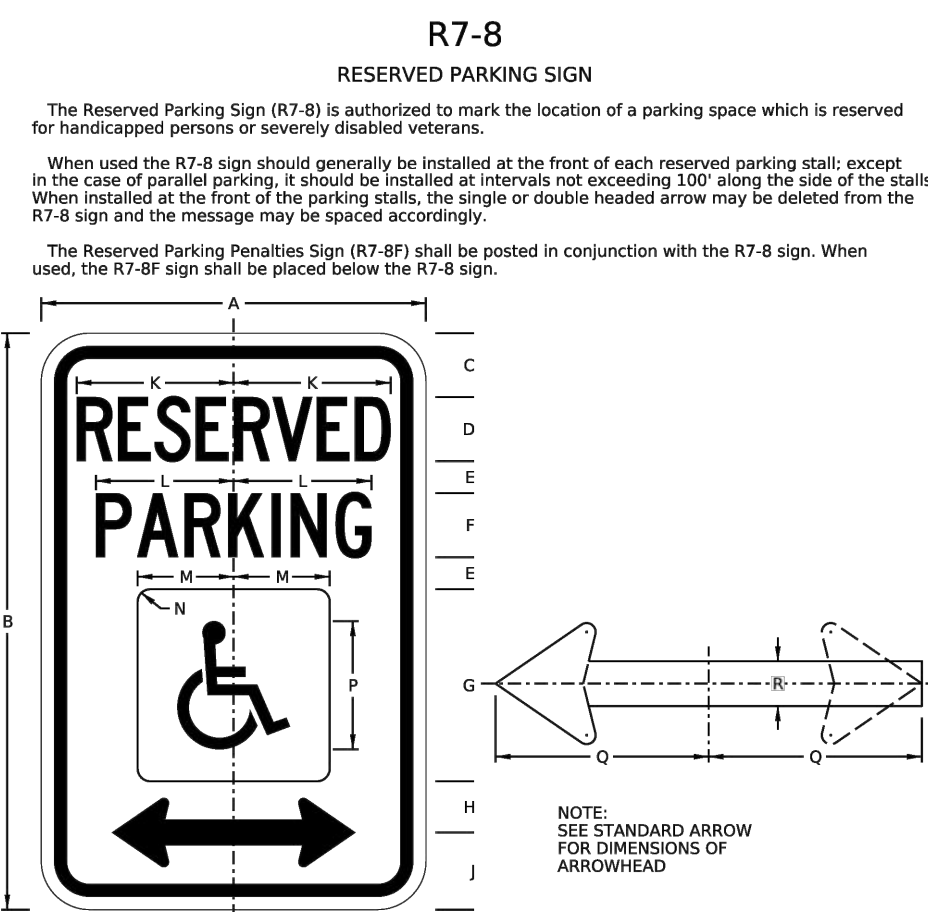
- NOTES:
1. THIS TYPE OF MARKING SHOULD BE USED AT LOCATIONS WHERE SUBSTANTIAL NUMBERS OF PEDESTRIANS CROSS WITHOUT ANY OTHER TRAFFIC CONTROL DEVICES AT LOCATIONS WHERE PHYSICAL CONDITIONS ARE SUCH THAT ADDED VISIBILITY OF THE CROSSWALK IS NECESSARY OR AT PLACES WHERE PEDESTRIANS MIGHT NOT BE EXPECTED.
2. ALL CROSSWALKS SHALL COMPLY WITH THE FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS AMENDED.
3. LONGITUDINAL LINES SHALL BE PERPENDICULAR TO TRAVELED WAY THE EXTEND ACROSS THE FULL WIDTH OF PAVEMENT OR TO THE EDGE OF THE INTERSECTING CROSSWALK TO DISCOURAGE DIAGONAL WALKING BETWEEN CROSSWALKS.
4. ALL CROSSWALK LONGITUDINAL LINES SHALL BE WHITE THERMOPLAST, ALL LINES AND NEUTRAL AREAS SHALL BE OF EQUAL WIDTHS.
5. WARNING SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH MUTCD, AS AMENDED.
6. THE SPACING OF THE LINES SHALL BE SELECTED TO AVOID THE WHEEL PATH.

CROSSWALK STRIPING DETAIL
NOT TO SCALE



- NOTES:
1. RETAINING WALL TO BE BY ANCHOR WALL SYSTEMS, OR APPROVED EQUAL.
2. THE FACIAL STYLE OF THE BLOCKS SHALL BE APPROVED BY THE OWNER.
3. THE DETAILS OF THE RETAINING WALL HAVE BEEN PROVIDED TO SHOW THE PROPOSED GENERAL CONSTRUCTION TO BE COMPLETED FOR THE WALL. SITE SPECIFIC SHOP DRAWINGS AND DESIGN CALCULATIONS SHALL BE SEALED BY A PROFESSIONAL ENGINEER AND SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO INSTALLATION.

RETAINING WALL DETAILS
NOT TO SCALE



R7-8 RESERVED PARKING SIGN

The Reserved Parking Sign (R7-8) is authorized to mark the location of a parking space which is reserved for handicapped persons or severely disabled veterans.

When used the R7-8 sign should generally be installed at the front of each reserved parking stall; except in the case of parallel parking, it should be installed at intervals not exceeding 100' along the side of the stalls. When installed at the front of the parking stalls, the single or double-headed arrow may be deleted from the R7-8 sign and the message may be spaced accordingly.

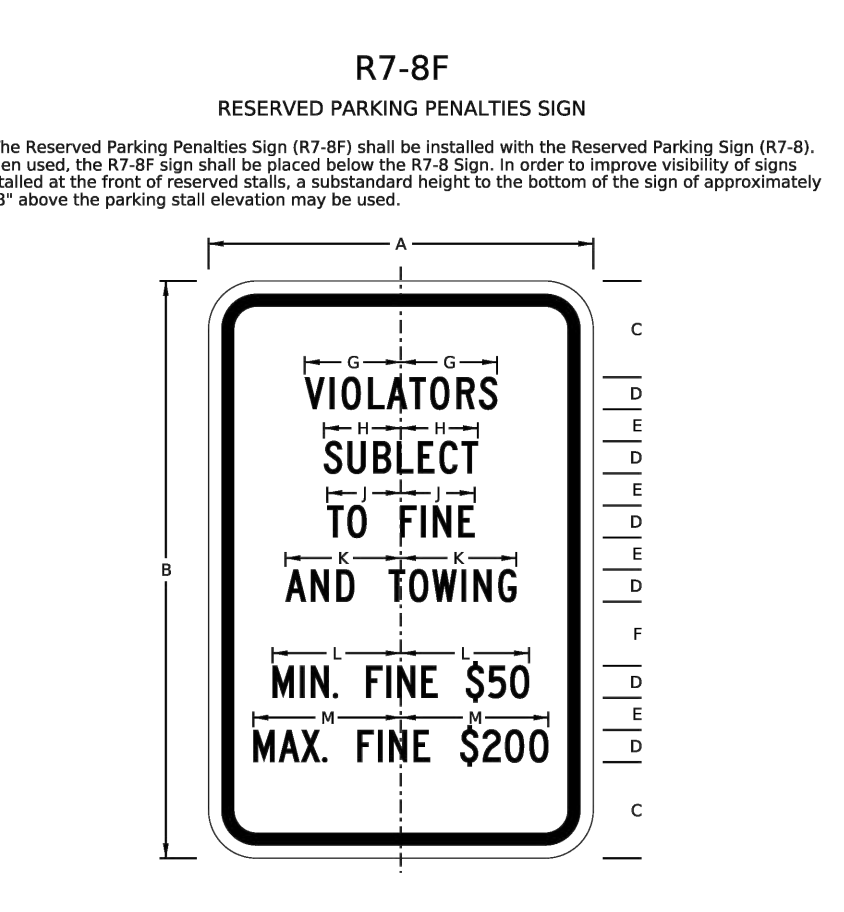
The Reserved Parking Penalties Sign (R7-8F) shall be posted in conjunction with the R7-8 sign. When used, the R7-8F sign shall be placed below the R7-8 sign.

NOTE: SEE STANDARD ARROW FOR DIMENSIONS OF ARROWHEAD

LEGEND, ARROW AND BORDER:
GREEN (REFLECTORIZED)
BACKGROUND AND SYMBOL:
WHITE (REFLECTORIZED)
SYMBOL BACKGROUND:
BLUE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION
By: [Signature] Date: 03-16-26
Manager, Traffic Engineering and Permits Section,
Bureau of Operations

DIMENSIONS - IN																	
SIGN SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	MARK. BORDER
12" x 18"	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0



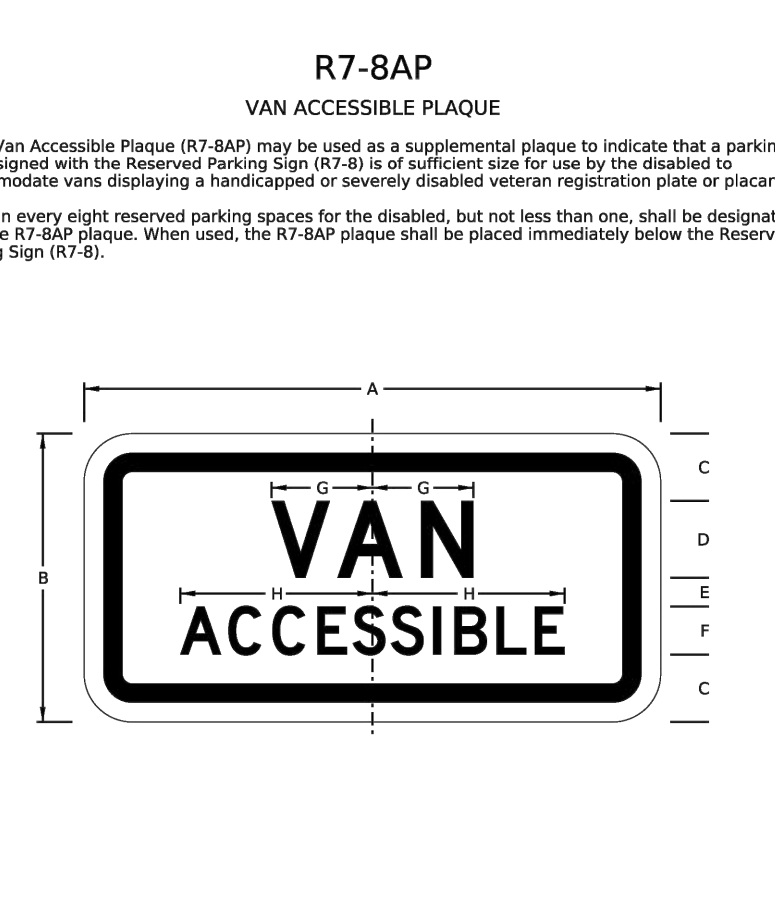
R7-8F RESERVED PARKING PENALTIES SIGN

The Reserved Parking Penalties Sign (R7-8F) shall be installed with the Reserved Parking Sign (R7-8). When used, the R7-8F sign shall be placed below the R7-8 sign. In order to improve visibility of signs installed at the front of reserved stalls, a substandard height to the bottom of the sign of approximately 3'-6" above the parking stall elevation may be used.

LEGEND AND BORDER:
GREEN (REFLECTORIZED)
BACKGROUND:
WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION
By: [Signature] Date: 03-16-26
Manager, Traffic Engineering and Permits Section,
Bureau of Operations

DIMENSIONS - IN																	
SIGN SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	MARK. BORDER
12" x 18"	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0



R7-8AP VAN ACCESSIBLE PLAQUE

The Van Accessible Plaque (R7-8AP) may be used as a supplemental plaque to indicate that a parking space signed with the Reserved Parking Sign (R7-8) is of sufficient size for use by the disabled to accommodate vans displaying a handicapped or severely disabled veteran registration plate or placard.

One in every eight reserved parking spaces for the disabled, but not less than one, shall be designated with the R7-8AP plaque. When used, the R7-8AP plaque shall be placed immediately below the Reserved Parking Sign (R7-8).

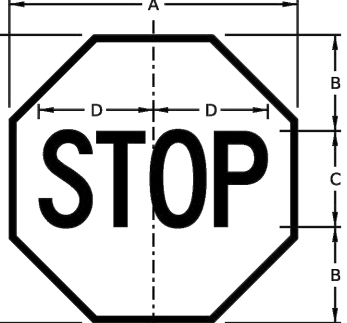
LEGEND AND BORDER:
GREEN (REFLECTORIZED)
BACKGROUND:
WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION
By: [Signature] Date: 03-16-26
Manager, Traffic Engineering and Permits Section,
Bureau of Operations

DIMENSIONS - IN																	
SIGN SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	MARK. BORDER
12" x 18"	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

R1-1 STOP SIGN

- (a) Justification. The Stop Sign (R1-1) is authorized for use on those streets or highways which intersect with a through highway or at a stop intersection so designated by the Department with reference to State-designated highways or local authorities with reference to highways under their jurisdiction. The R1-1 sign is also authorized for use in work zones involving one-lane, two-way roadways. At intersections where all approaches are controlled by an R1-1 sign, a supplemental ALL-WAY plaque (R1-5P) shall be mounted below each R1-1 sign.
- (b) Authorization. Before local authorities designate any highway as a through highway or stop intersection which will intersect or affect a State-designated highway, approval of such designation shall first be obtained from the Department. Approval to install R1-1 signs in work areas shall not require the approval of the Department or local authorities when the conditions stipulated in the Department's Temporary Traffic Control Guidelines are satisfied.
- (c) Size. The standard size R1-1 sign shall be 30" x 30" for single lane conventional highways and 36" x 36" for multi-lane conventional highways. The 24" x 24" size shall only be used for alleys with restrictive physical conditions and vehicle usage that prohibits the installation of the standard size R1-1. A sign that is mounted back-to-back with an R1-1 sign should stay within the edges of the R1-1 sign. If necessary, the size of the R1-1 sign should be increased so that any other sign installed back-to-back with it remains within the edges of the R1-1 sign.

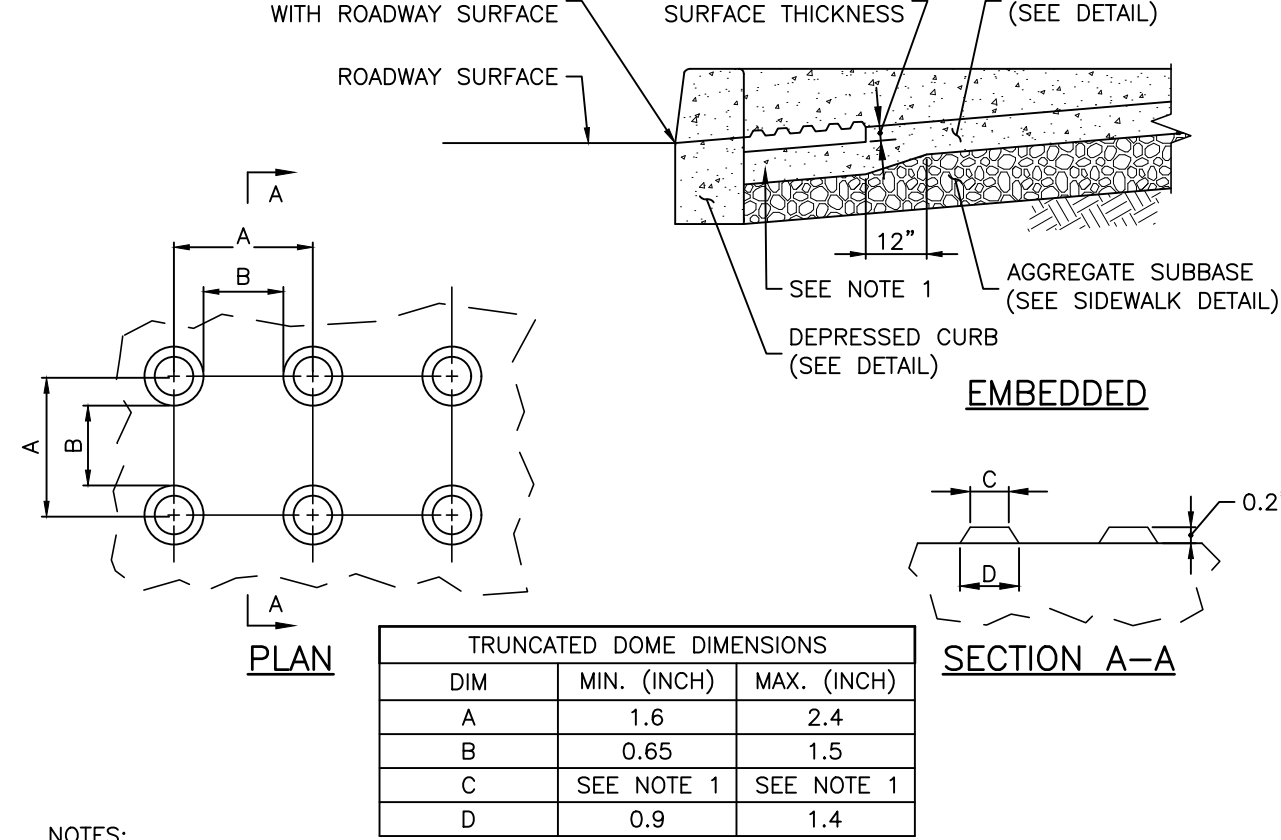


R1-1 STOP SIGN

LEGEND AND BORDER:
WHITE (REFLECTORIZED)
BACKGROUND:
RED (REFLECTORIZED)

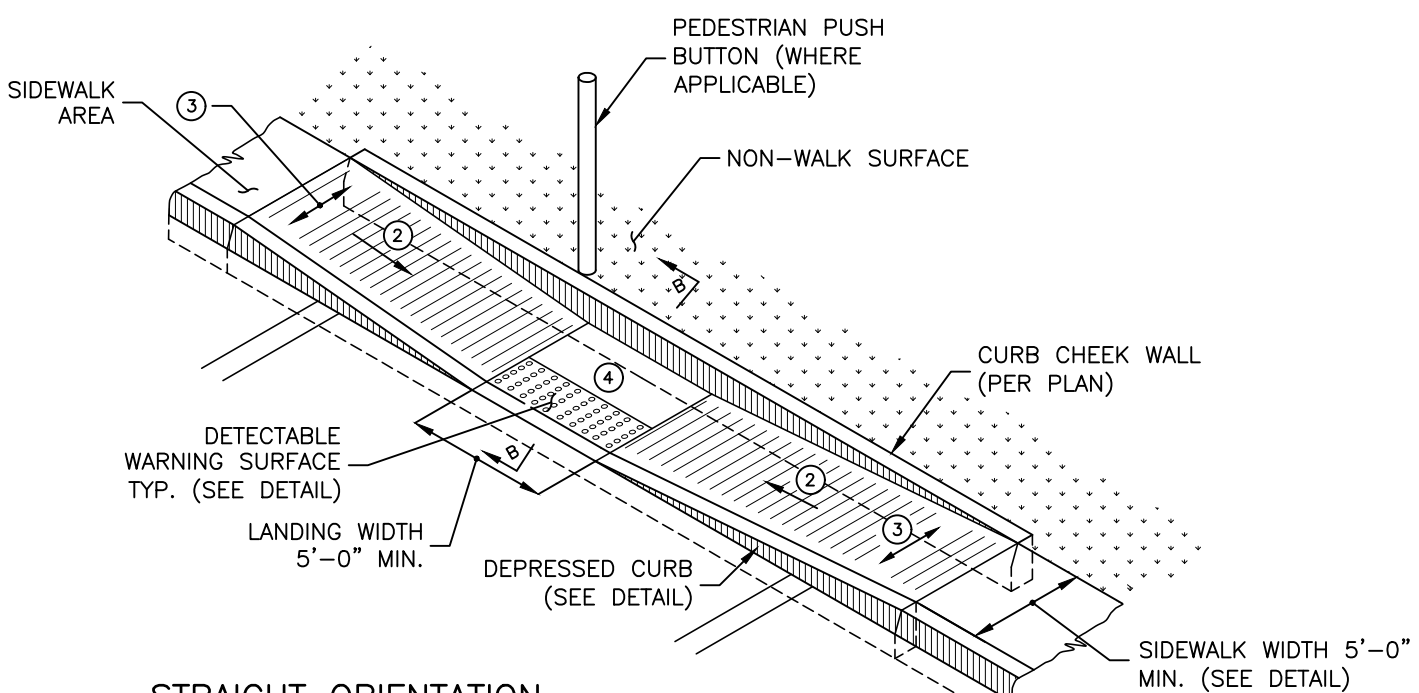
APPROVED FOR THE SECRETARY OF TRANSPORTATION
By: [Signature] Date: 03-16-26
Manager, Traffic Engineering and Permits Section,
Bureau of Operations

DIMENSIONS - IN									
SIGN SIZE	A	B	C	D	E	F	G	H	I
18" x 18"	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
24" x 24"	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
30" x 30"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
36" x 36"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
48" x 48"	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0

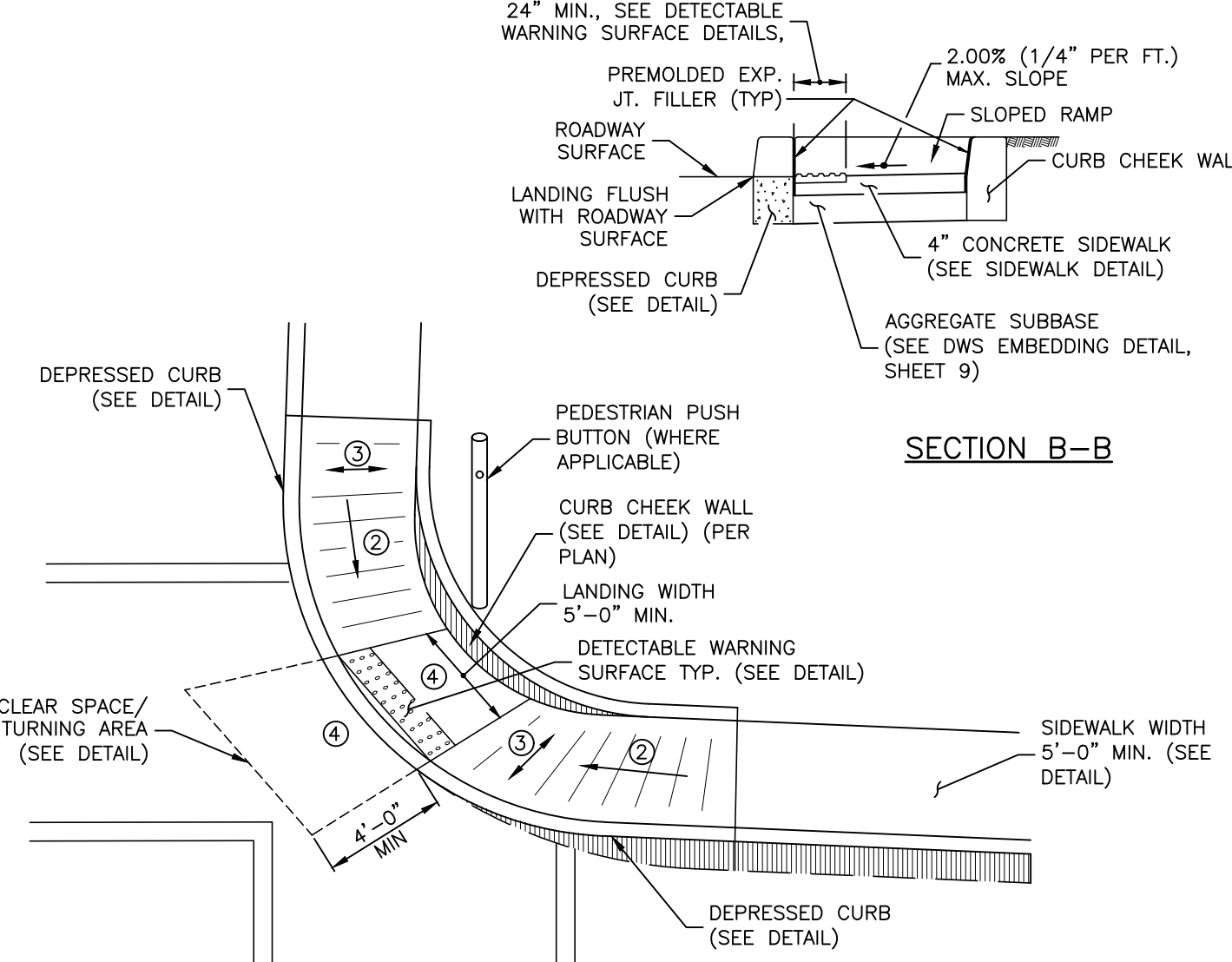


- NOTES:
1. CONSTRUCT NOTCH AS SHOWN TO PROVIDE FULL THICKNESS SIDEWALK UNDER DETECTABLE WARNING.
2. THE "C" DIMENSION SHALL BE 50% TO 65% OF THE "D" DIMENSION.
3. DETECTABLE WARNING SURFACES SHALL COMPLY WITH ALL REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND PENNDOT PUBLICATION 72M - RC-67M.
4. DETECTABLE WARNINGS SHALL BE PROVIDED AT ALL LOCATIONS WHERE A PEDESTRIAN WALK CROSSES OR ADJOINS A VEHICULAR WAY AND THE WALKING SURFACES ARE NOT SEPARATED BY CURBS, RAILINGS, OR OTHER ELEMENTS.
5. DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE WALKING PATH AND BE A MINIMUM OF TWO FEET (2') IN DEPTH.
6. DETECTABLE WARNINGS SHALL BE ARMOR-TILE (TM) TACTILE SYSTEM - CAST IN PLACE SYSTEM, OR APPROVED EQUAL (WWW.ARMOR-TILE.COM)
7. COLOR SHALL BE BRICK RED. COLOR SHALL BE SUBMITTED FOR OWNER'S APPROVAL PRIOR TO ORDERING MATERIAL.

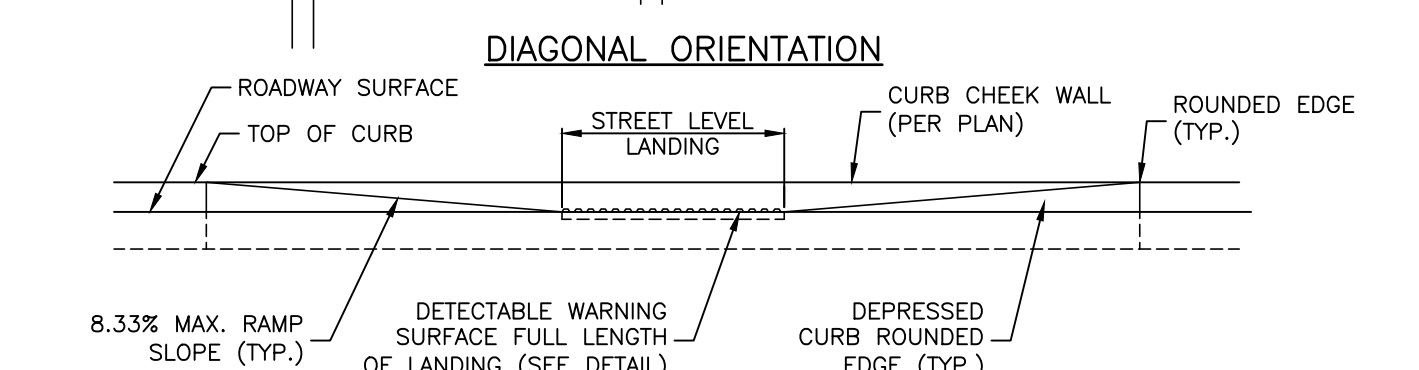
DETECTABLE WARNING SURFACE
NOT TO SCALE



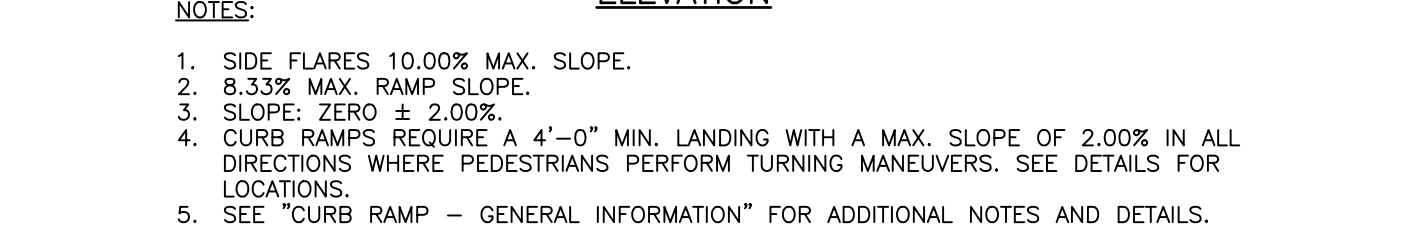
STRAIGHT ORIENTATION



SECTION B-B



DIAGONAL ORIENTATION



ELEVATION

- NOTES:
1. SIDE FLARES 10.00% MAX. SLOPE.
2. 8.33% MAX. RAMP SLOPE.
3. SLOPE: ZERO ± 2.00%.
4. CURB RAMP SLOPE: 4" ± 0" MIN. LANDING WITH A MAX. SLOPE OF 2.00% IN ALL DIRECTIONS WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS.
5. SEE "CURB RAMP - GENERAL INFORMATION" FOR ADDITIONAL NOTES AND DETAILS.

CURB RAMP - TYPE 2
NOT TO SCALE

**PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION**

- NOTES:
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PENNDOT PUBLICATION 40B, SECTIONS 350, 409, 630, 676, AND 694.
2. PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK, OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
3. IF PEDESTRIAN CROSSWALKS ARE NOT WIDE ENOUGH TO PROVIDE MINIMUM 4'-0" X 4'-0" WIDE WHEELCHAIR OVERRUN ZONE, AT THE BOTTOM OF THE RAMP, POSITION CROSSWALKS AS INDICATED IN PENNDOT PUBLICATION 72M - RC-67M - DETAIL A, ON SHEET 7.
4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF CURB RAMP INCLUDING FLARED SIDE RAMP.
6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB ALTERATIONS WHERE THE CURB IS LESS THAN THE STANDARD 8" HEIGHT.
7. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
8. IT MAY BE NECESSARY TO LIMIT THE RUN OF A PARALLEL OR PERPENDICULAR CURB RAMP IN ORDER TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB. RAMP LENGTH NOT TO EXCEED 15'-0", ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT POSSIBLE.
9. WHENEVER POSSIBLE, CONSTRUCT THE TRANSITION SLOPE FROM THE CURB RAMP AND FLARE SIDES TO ADJOINING SURFACES WITH A GRADUAL ROUNDED SHAPE RATHER THAN AN ABRUPT ANGLE. ENSURE CONSTRUCTION IS WITHIN MAXIMUM SLOPE.
10. ALIGN DETECTABLE WARNING DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB.
11. PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP. DETECTABLE WARNING SURFACES SHALL COMPLY WITH THE REQUIREMENTS OF PENNDOT PUBLICATION 72M - RC-67M AND ADA REQUIREMENTS.
12. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.0% CROSS SLOPE ON THE CURB RAMP OR ACCESSIBLE ROUTE.
13. CONSTRUCT RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. IT IS STRONGLY RECOMMENDED TO USE THE SLOPES LISTED ABOVE TO ALLOW FOR CONSTRUCTION TOLERANCES.

CURB RAMP - GENERAL INFORMATION
NOT TO SCALE

NO.	DATE	REVISIONS	BY	CHKD
4	06/01/26	REVISED PER CITY COMMENTS	BAK/ELH	KJR
3	05/15/26	REVISED FOR NPDES SUBMISSION	BAK/ELH	KJR
2	05/08/26	ISSUED FOR 90% CONTRACT DRAWINGS	BAK/ELH	KJR
1	2/26/2026	REVISED FOR NPDES SUBMISSION	BAK	KJR

KRIS J. REISS, P.E.
LICENSED PROFESSIONAL ENGINEER

COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 065285E

06/01/2026
DATE

06/01/2026
DATE

GATEWAY ON FOURTH PHASE 1 LLC
GATEWAY ON 4TH

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA

CONSTRUCTION DETAILS

TAM ASSOCIATES
YOUR GOALS. OUR MISSION.

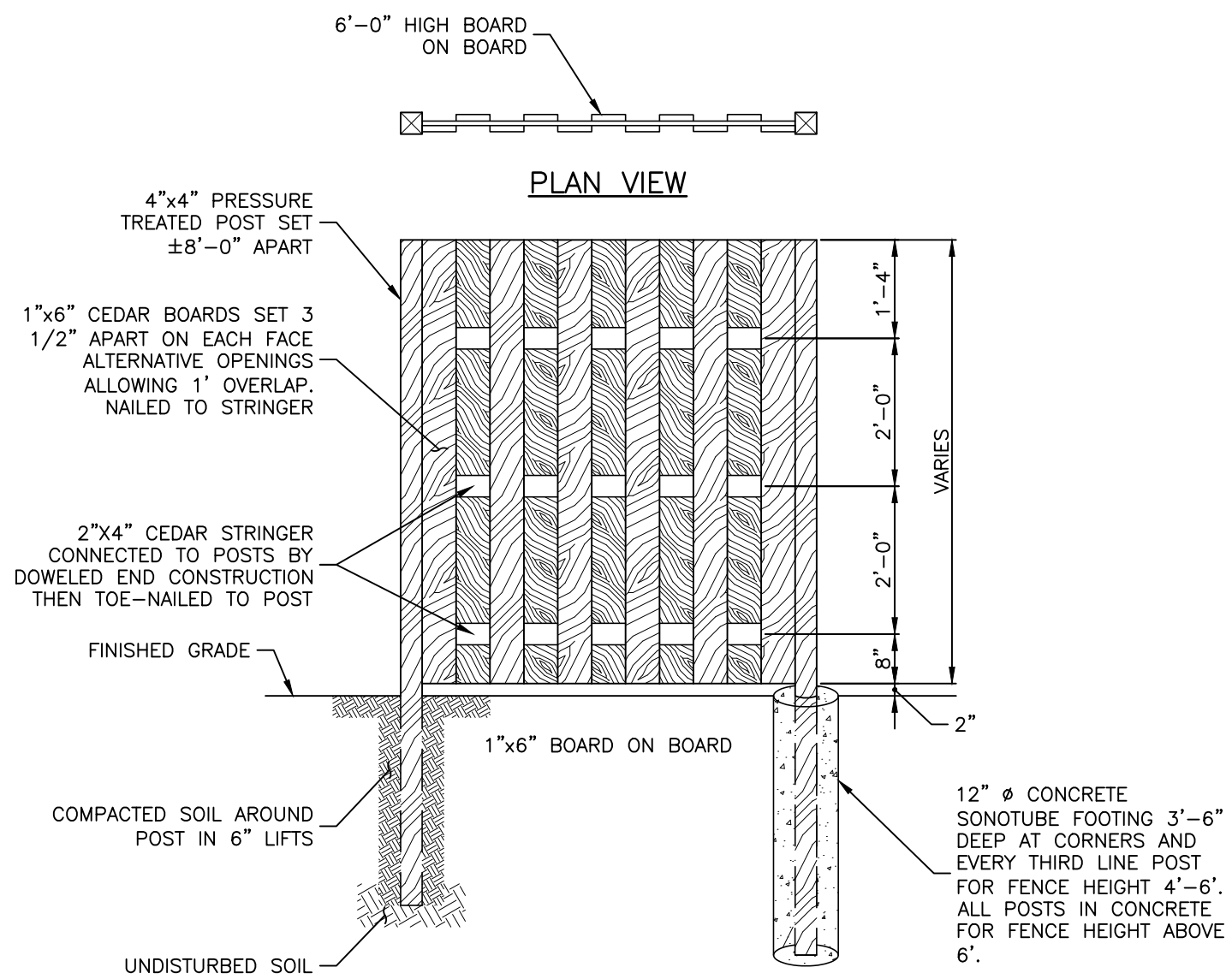
74 WEST BROAD STREET, STE 300
BETHLEHEM, PA 18018
TEL 610-625-2999
FAX 610-625-2969
www.tamassociates.com

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

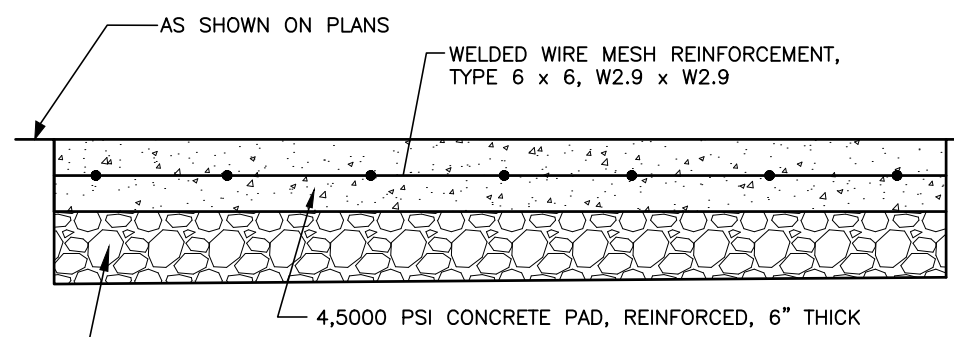
DESIGNED BY	KJR	DRAWING	DTL
CHECKED BY	KJR	SHEET	24
DRAWN BY	BAK	OF	29
DATE	02-20-2026		
SCALE	AS NOTED		
PROJ. NO.	PENR00169		

PROJECT INFORMATION:
FILE PATH: G:\Projects\PENR\00169\Plans\X
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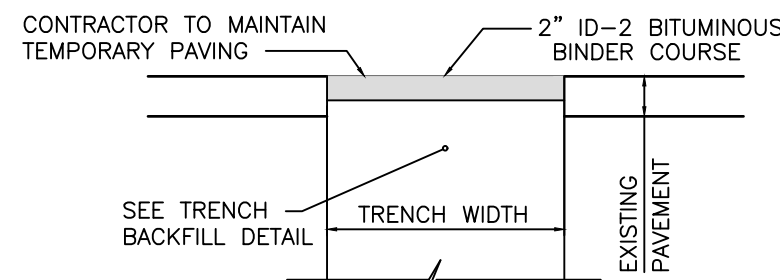
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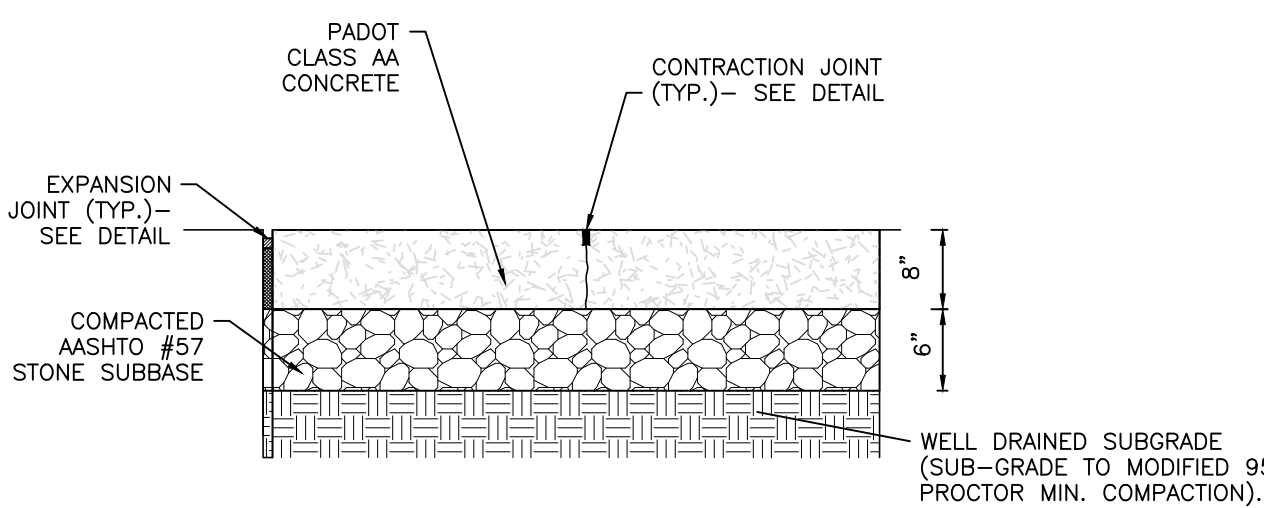
SHADOWBOX FENCE
NOT TO SCALE



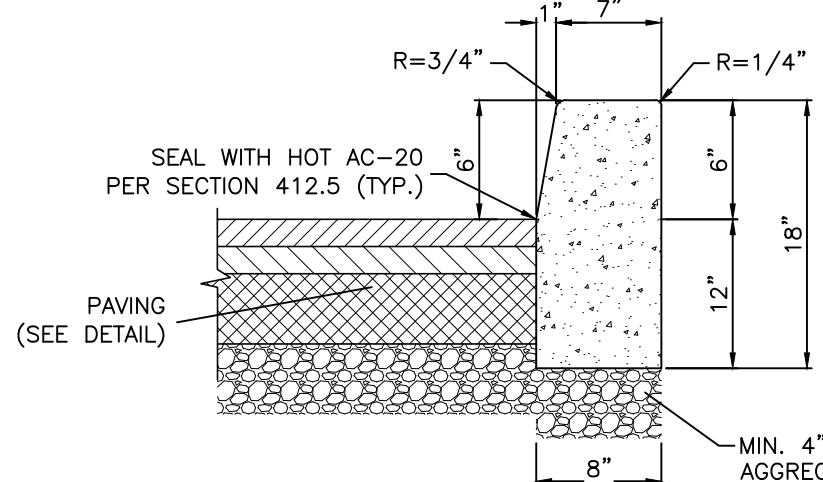
CONCRETE PAD, REINFORCED
NOT TO SCALE



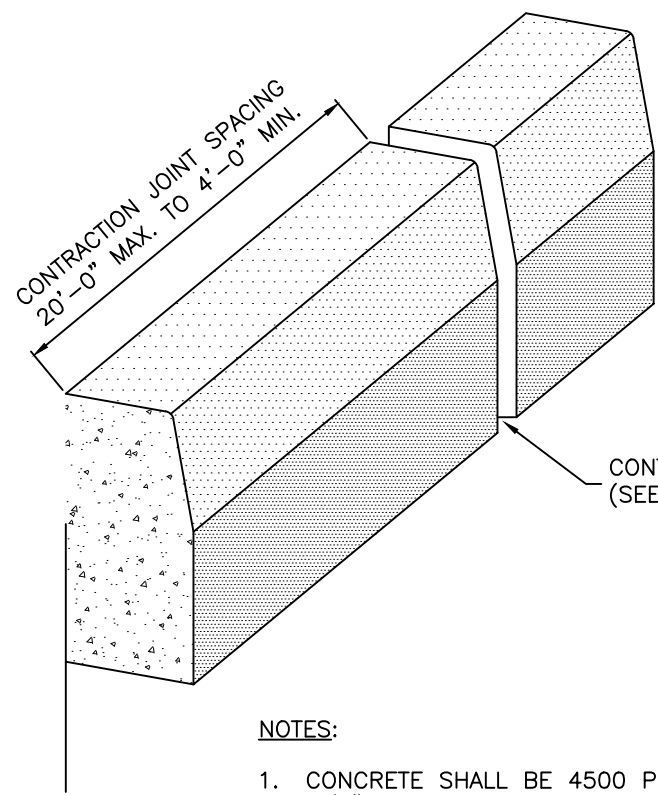
TEMPORARY TRENCH RESTORATION
N.T.S.



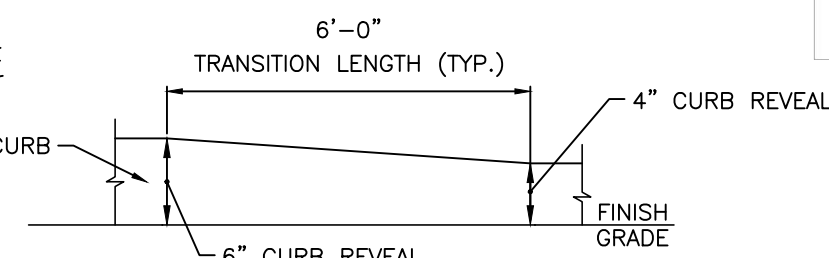
CONCRETE PAVEMENT DETAIL - PARKING LOT
NOT TO SCALE



6" REVEAL CURB



DETAIL A

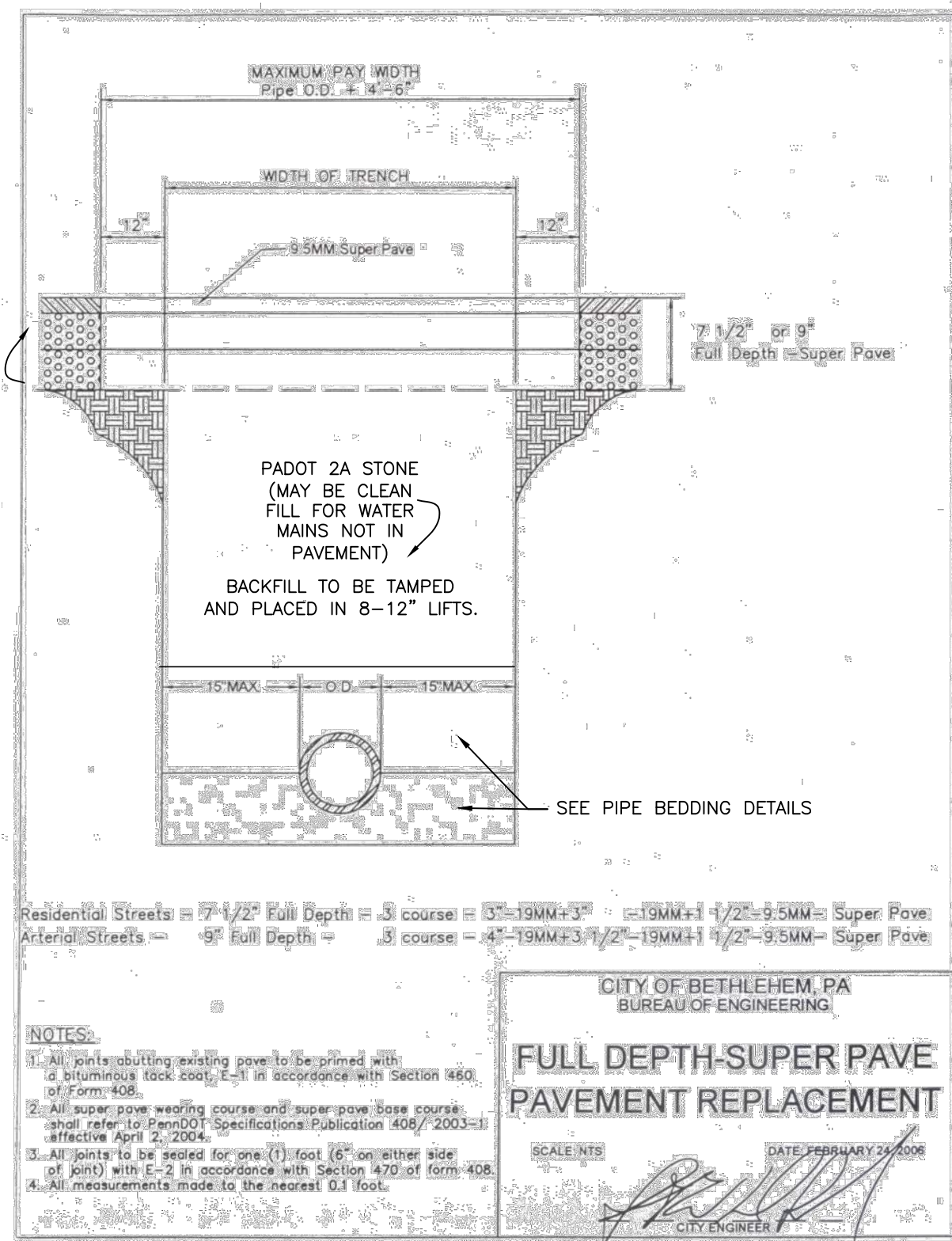


CURB TAPERS

NOTES:

1. CONCRETE SHALL BE 4500 PSI CEMENT CONCRETE (MIN.).
2. 3/4" PREMOLDED EXPANSION JOINTS SHALL BE PLACED AT STRUCTURES AND AT THE END OF THE WORK DAY.
3. FLEXIBLE FORMS SHALL BE REQUIRED FOR ALL CURB RADI WITH A RADIUS OF LESS THAN 150 FEET.
4. SEAL JOINT WITH 1" WIDE PG64-22 SEALANT OR APPROVED EQUAL (2" UP FACE OF CURB, 10" AWAY FROM CURB).
5. ALL EXPOSED CONCRETE SHALL BE SEALED WITH AQUORON CPT-2000 OR APPROVED EQUAL.
6. ALL CONSTRUCTION PRACTICES AND MATERIALS TO MEET PennDOT PUB. 408 SPECIFICATIONS UNLESS OTHERWISE NOTED.
7. EXPOSED CURB FACES SHALL HAVE A BRUSHED FINISH.

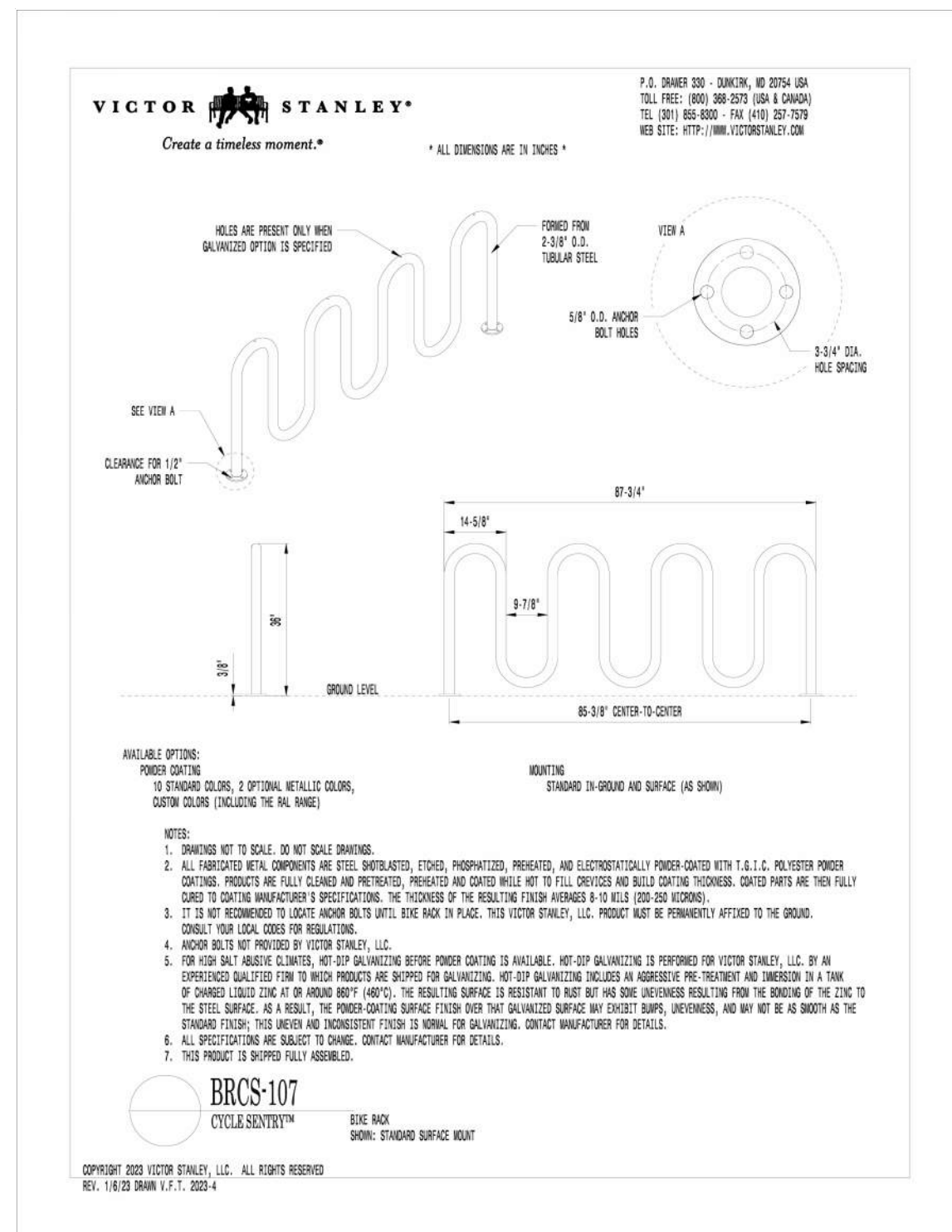
CONCRETE CURB (WITHIN PROPERTY)
NOT TO SCALE



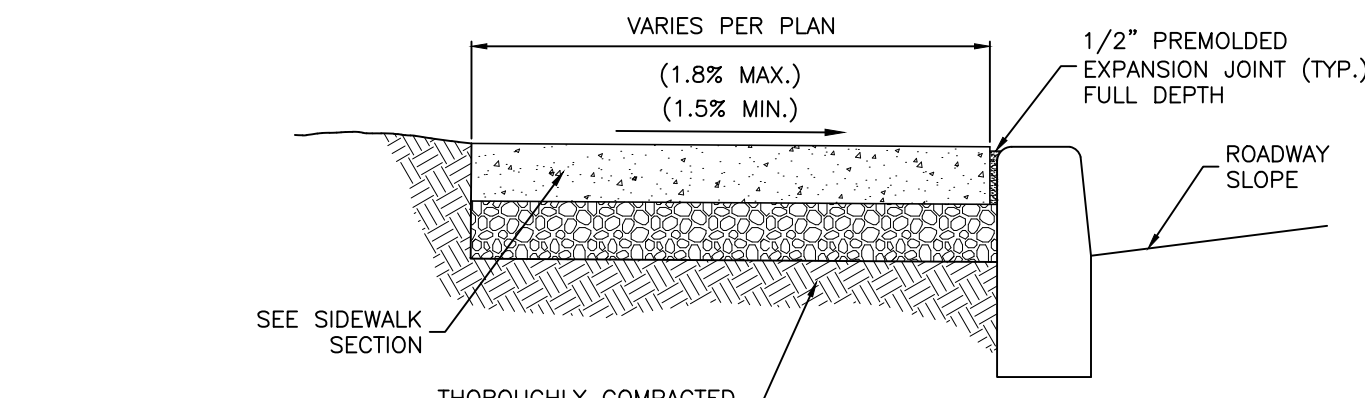
NOTES:

1. MATCH EXISTING PAVEMENT AND AGGREGATE THICKNESS, IF GREATER THAN SHOWN IN DETAIL.
2. PATCHING ON CONCRETE ROADWAYS MUST BE DOWELED INTO EXISTING CONCRETE.

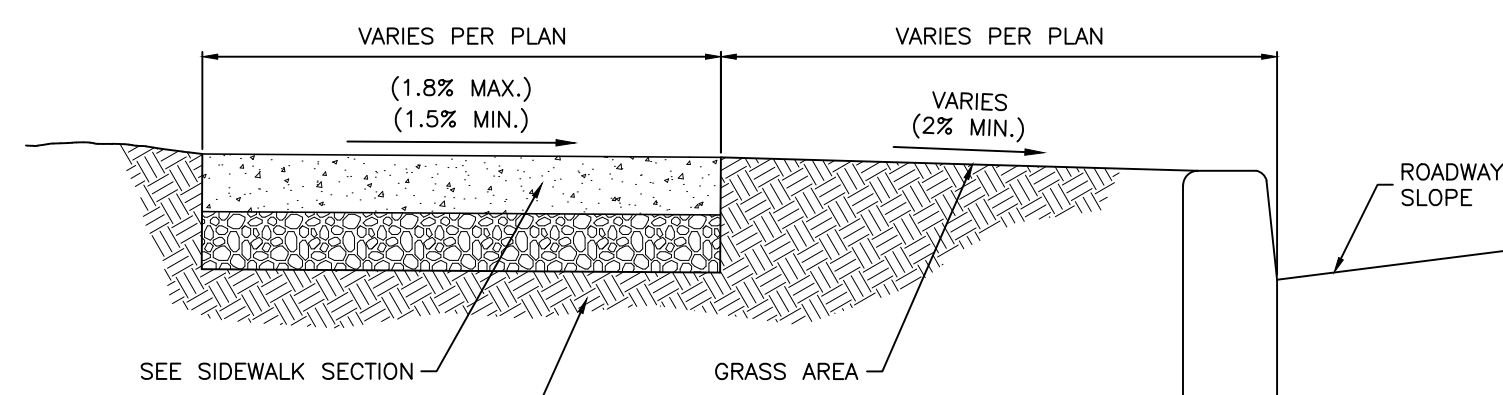
FULL DEPTH-SUPER PAVE
PAVEMENT REPLACEMENT



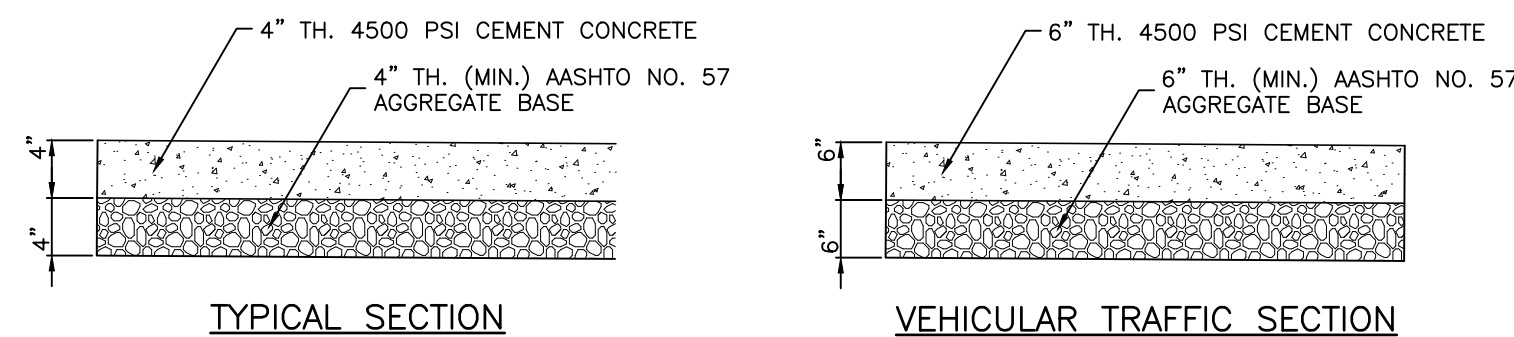
BIKE RACK



ELEVATION (W/O GRASS)

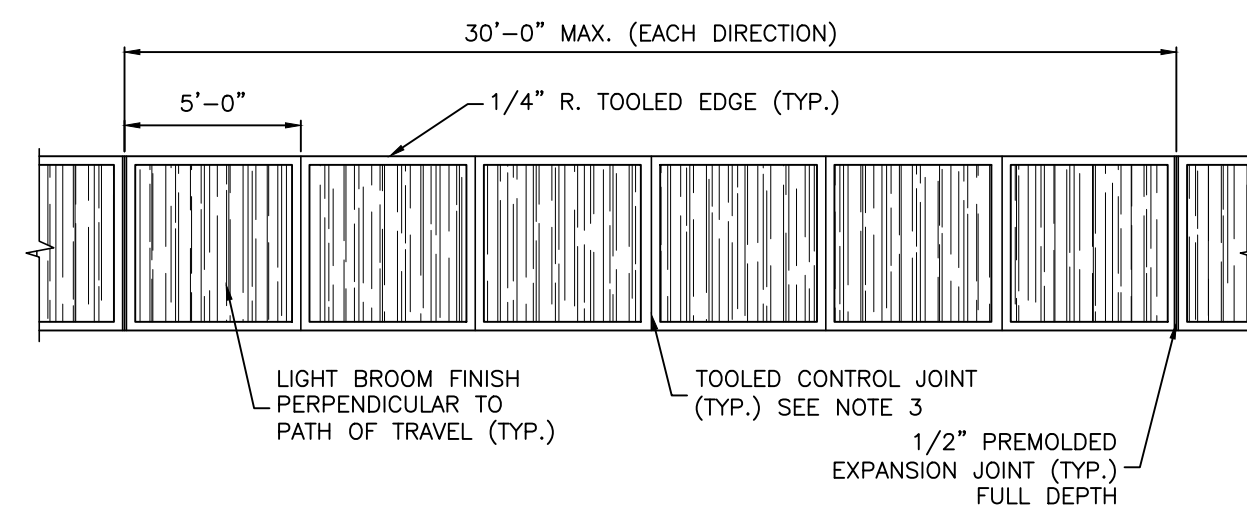


ELEVATION (WITH GRASS)



TYPICAL SECTION

VEHICULAR TRAFFIC SECTION

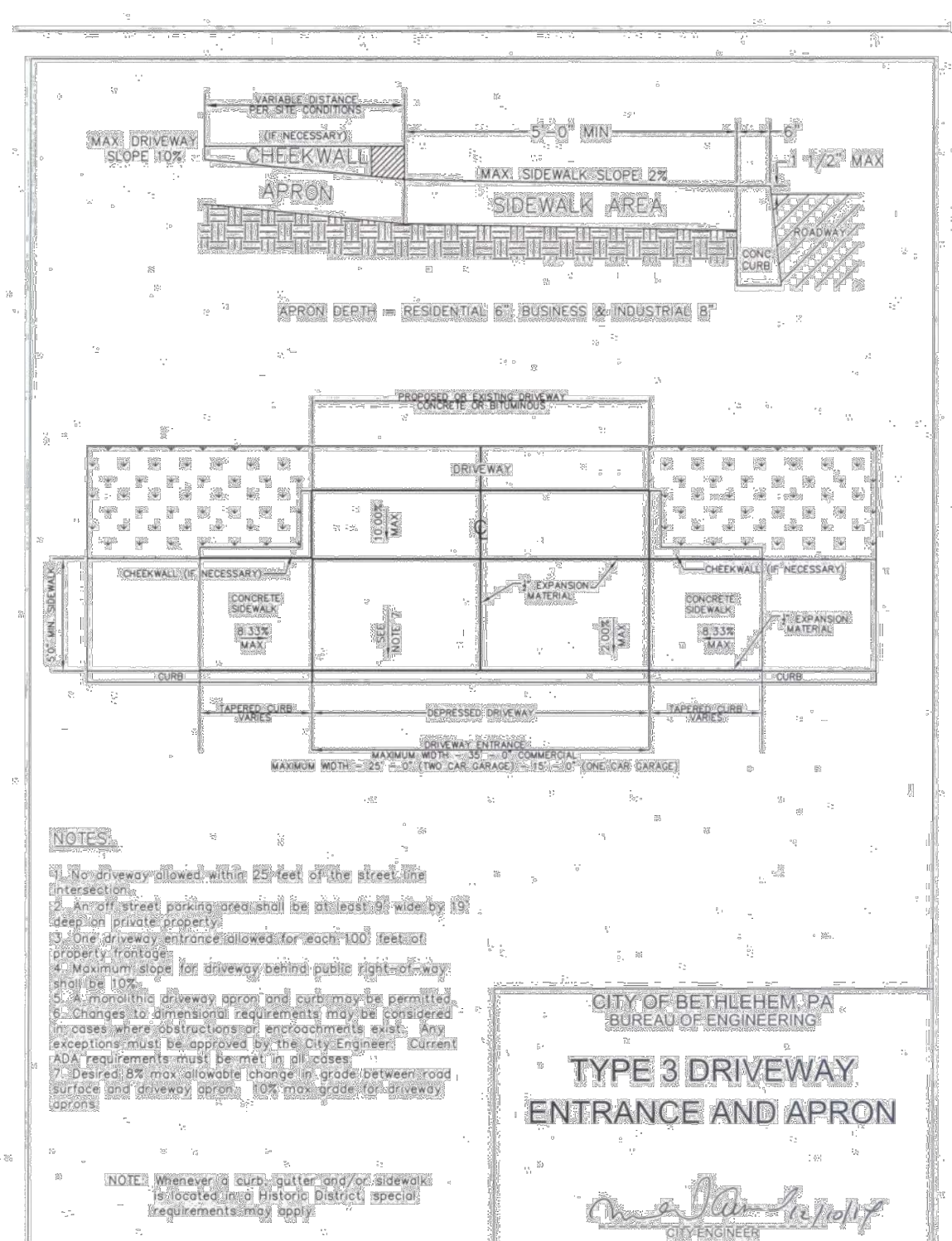


PLAN

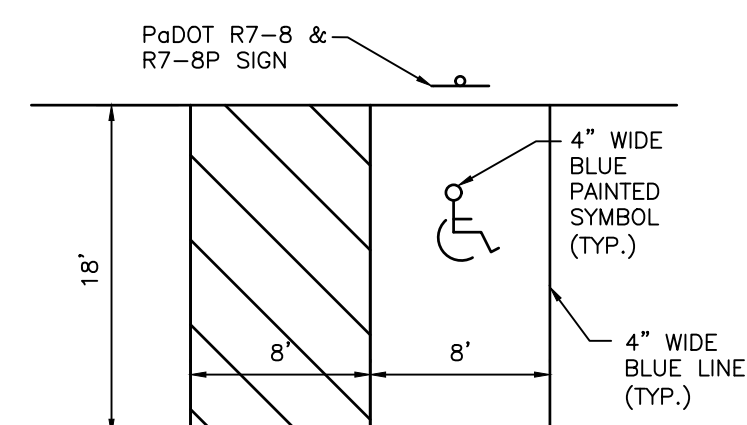
NOTES:

1. ALL CONSTRUCTION, MATERIALS, METHODS OF CONSTRUCTION AND CONTROL OF WORK TO BE GOVERNED BY THE CURRENT EDITION OF PENNDOT SPECIFICATIONS, PUBLICATION 408.
2. PLACE 1/2" PREMOLDED EXPANSION JOINT MATERIAL FOR THE FULL DEPTH OF THE SIDEWALK AT 30' INTERVALS OPPOSITE EXPANSION JOINTS IN ADJACENT CURB, BETWEEN THE SIDEWALK AND CURB AND BETWEEN THE SIDEWALK AND ANY RIGID STRUCTURES.
3. FORM TRANSVERSE TOOLED CONTROL JOINTS AT 5 FOOT INTERVALS, APPROXIMATELY 1/8" WIDE AND AT LEAST 1" DEEP OR PER SCORING DETAIL PLANS WHEN PROVIDED.
4. ALL EXPOSED CONCRETE SHALL BE SEALED WITH AQUORON CPT-2000 OR APPROVED EQUAL.
5. EXISTING CONCRETE TO BE REMOVED, ADJACENT TO EXISTING CONCRETE TO REMAIN, SHALL BE SAW CUT FULL DEPTH AT AN EXISTING CONTROL JOINT.
6. FOR USE WITH PEDESTRIAN TRAVEL AREAS.

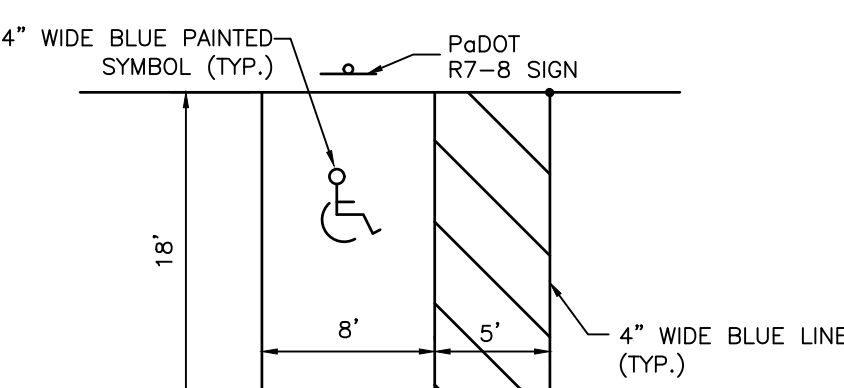
CONCRETE SIDEWALK (WITHIN PROPERTY)
NOT TO SCALE



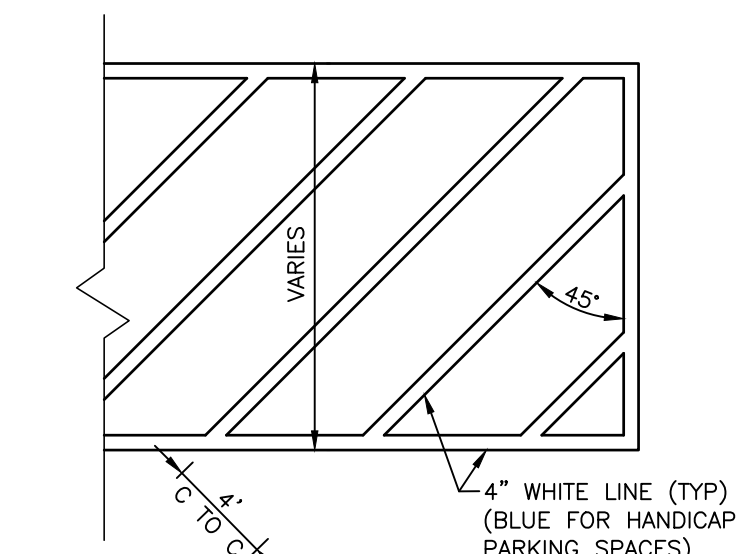
TYPE 3 DRIVEWAY
ENTRANCE AND APRON



VAN ACCESSIBLE HANDICAP
PARKING SPACE LAYOUT
NOT TO SCALE



HANDICAP PARKING
SPACE LAYOUT
NOT TO SCALE



ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL CONFORM TO THE CURRENT 'MUTCD' STANDARDS.

STRIPING DETAIL

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION

NO.	DATE	BY	REVISIONS
4	06/01/26	KJR	REVISED PER CITY COMMENTS
3	05/15/26	KJR	REVISED FOR NPDES SUBMISSION
2	05/08/26	KJR	ISSUED FOR 90% CONTRACT DRAWINGS
1	2/26/2026	BAK	REVISED FOR NPDES SUBMISSION

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
KRIS J. REISS
ENGINEER
NO. PE-046285-C
06/01/2026
DATE
COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 066285E

GATEWAY ON FOURTH PHASE I LLC
GATEWAY ON 4TH
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA
CONSTRUCTION DETAILS

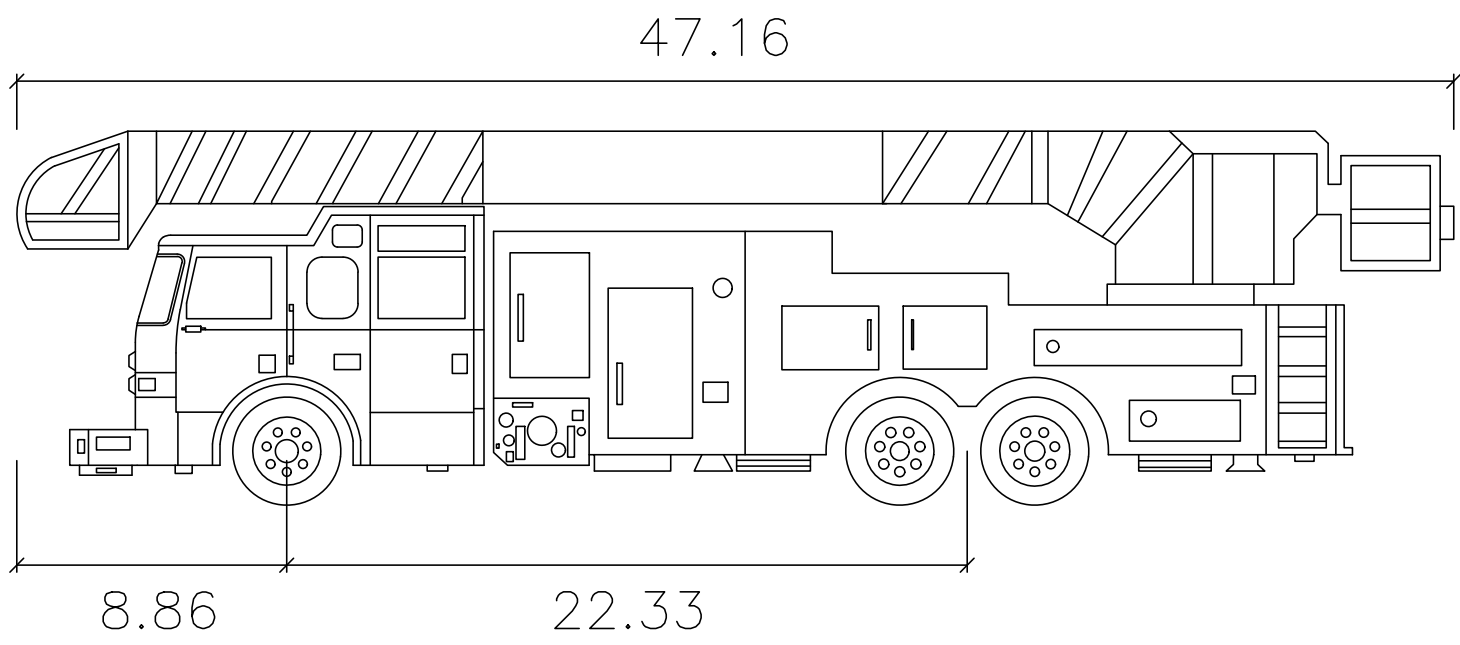
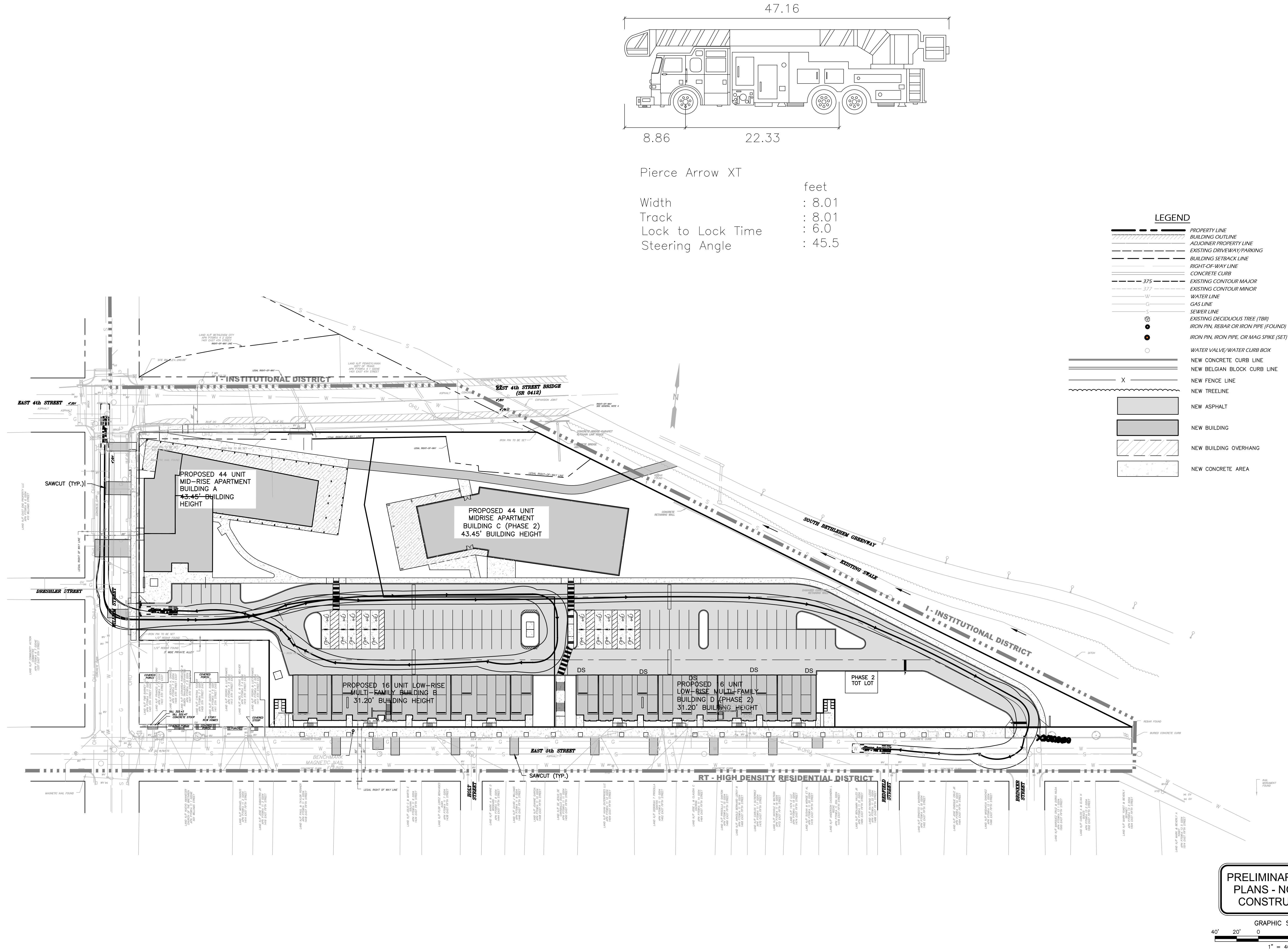
AND
YOUR GOALS. OUR MISSION.
74 WEST BROAD STREET, STE 300
BETHLEHEM, PA 18018
TEL 610-625-2999
FAX 610-625-2969
www.tandmassociates.com

DESIGNED BY
KJR
CHECKED BY
KJR
DRAWN BY
BAK
DATE
02-20-2026
SCALE
AS NOTED
PROJ. NO.
PENR00169

DRAWING
DTL
SHEET
25
OF
29

PROJECT INFORMATION:
FILE PATH: G:\Projects\PENR\00169\Plans\
FILE NAME: PENR00169_SHT026_Vehicle Circulation Plan.dwg
LAST SAVED DATE AND TIME: 08 Jun 2026, 3:13PM
LAST SAVE BY: bsharbaugh

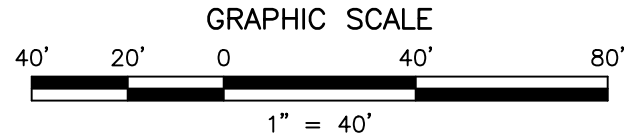
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Pierce Arrow XT
Width : 8.01 feet
Track : 8.01 feet
Lock to Lock Time : 6.0 seconds
Steering Angle : 45.5 degrees

- LEGEND**
- PROPERTY LINE
 - BUILDING OUTLINE
 - ADJOINER PROPERTY LINE
 - EXISTING DRIVEWAY/PARKING
 - BUILDING SETBACK LINE
 - RIGHT-OF-WAY LINE
 - CONCRETE CURB
 - 375
 - 377
 - W
 - G
 - S
 - EXISTING CONTOUR MAJOR
 - EXISTING CONTOUR MINOR
 - WATER LINE
 - GAS LINE
 - SEWER LINE
 - EXISTING DECIDUOUS TREE (TBR)
 - IRON PIN, REBAR OR IRON PIPE (FOUND)
 - IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
 - WATER VALVE/WATER CURB BOX
 - NEW CONCRETE CURB LINE
 - NEW BELGIAN BLOCK CURB LINE
 - NEW FENCE LINE
 - NEW TREELINE
 - NEW ASPHALT
 - NEW BUILDING
 - NEW BUILDING OVERHANG
 - NEW CONCRETE AREA

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION



DESIGNED BY		DRAWING	
CHECKED BY		VEH	
DRAWN BY		SHEET	
DATE		26	
SCALE		1"=40'	
PROJ. NO.		OF 29	

COMMONWEALTH OF PENNSYLVANIA
Kris J. Reiss, P.E.
LICENSED PROFESSIONAL ENGINEER
06010206
DATE
COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 060285E

GATEWAY ON FOURTH PHASE 1 LLC
GATEWAY ON 4TH
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA
VEHICLE CIRCULATION PLAN

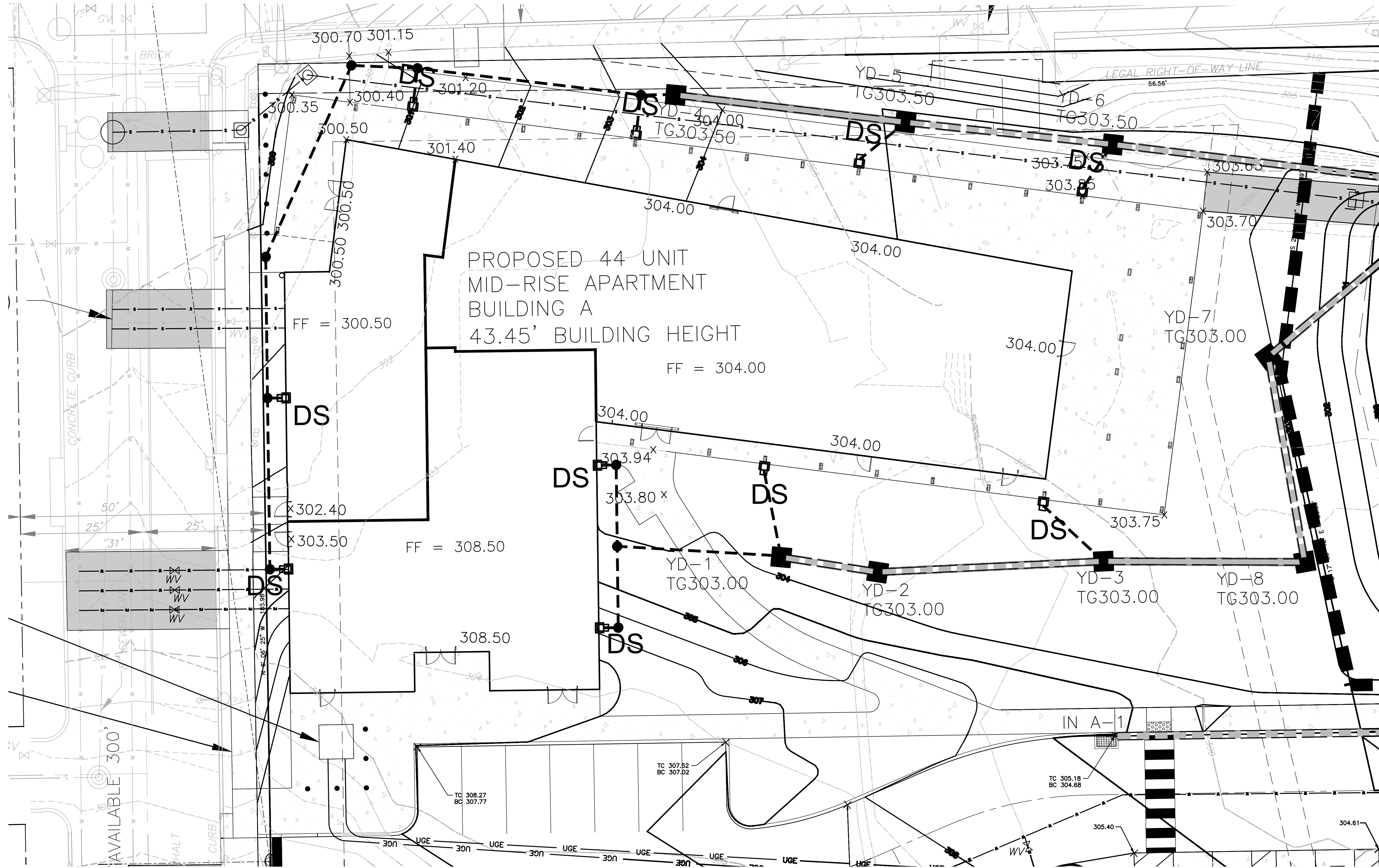
T&M ASSOCIATES
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BETHLEHEM, PA 18018
TEL 610-625-2999
FAX 610-625-2969
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OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
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OHIO AND PENNSYLVANIA

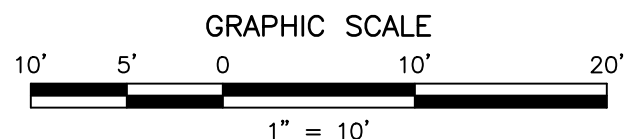
4	06/01/26	REVISED PER CITY COMMENTS	BAK/ELH	KJR
3	05/15/26	REVISED FOR NPDES SUBMISSION	BAK/ELH	KJR
2	05/08/26	ISSUED FOR 90% CONTRACT DRAWINGS	BAK/ELH	KJR
1	2/26/2026	REVISED FOR NPDES SUBMISSION	BAK	KJR
NO.		DATE		BY
1		2/26/2026		BAK
NO.		DATE		BY
1		2/26/2026		BAK
NO.		DATE		BY
1		2/26/2026		BAK

PROJECT INFORMATION:
DRAWN BY: KJR
FILE NAME: PENR00169-SHT028-029 Building Layout.dwg
LAST SAVED DATE AND TIME: 09 Jun 2026, 10:34AM
LAST SAVE BY: ehoines

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PLANS - NOT FOR
CONSTRUCTION



NO.	DATE	BY	CHKD	REVISIONS
4	06/01/26	BAK/ELH	KJR	REVISED PER CITY COMMENTS
3	05/15/26	BAK/ELH	KJR	REVISED FOR NPDES SUBMISSION
2	05/09/26	BAK/ELH	KJR	ISSUED FOR 90% CONTRACT DRAWINGS
1	2/26/2026	BAK	KJR	REVISED FOR NPDES SUBMISSION

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
Kris James Reiss
No. PE-056285-E
DATE 06/01/2026
Kris J. Reiss, P.E.
LICENSED PROFESSIONAL ENGINEER
COMMONWEALTH OF PENNSYLVANIA
LICENSE NO. 056285E

GATEWAY ON FOURTH PHASE I LLC
GATEWAY ON 4TH
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA
BUILDING A BLOW-UP

T&M
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BETHLEHEM, PA 18018
TEL 610-625-2999
FAX 610-625-2969
www.tandmassociates.com

DESIGNED BY	KJR	DRAWING	BLDG
CHECKED BY	KJR	DRAWN BY	BAK
DATE	02-20-2026	SCALE	1"=10'
PROJ. NO.	PENR00169	SHEET	28 OF 29



DATE 01/2026

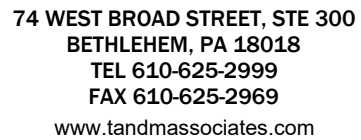
252

COMMONWEALTH OF PENNSYLVANIA

GATEWAY ON 4TH

CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA

BUILDING B BLOW-UP



OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DRA

[illegible]

SHE

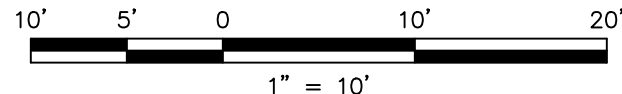
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OF 2

29

GRAPHIC SCALE



PROJECT INFORMATION:
FILE PATH: G:\Projects\PENR\00169\Plans\
FILE NAME: PENR00169_SHT028-029_Building Layout.dwg
LAST SAVE DATE AND TIME: 09 Jun 2026, 10:34AM
LAST SAVE BY: ehaines

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RECORDING ACKNOWLEDGEMENTS

REGISTERED SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN CORRECTLY AND ACCURATELY REPRESENTS THE EXTERIOR METES AND BOUNDS, AND, WHERE APPLICABLE, THE EXISTING LOTS, BUILDINGS, STREETS, PARKING AREAS, WALKWAYS, AND OTHER STRUCTURES AND IMPROVEMENTS SHOWN THEREON.

(SIGNATURE - REGISTERED SURVEYOR)

REGISTRATION NO. _____

(SEAL)

REGISTERED SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN CORRECTLY AND ACCURATELY REPRESENTS THE INTERIOR METES AND BOUNDS, AND, WHERE APPLICABLE, THE PROPOSED LOTS, STRUCTURES AND IMPROVEMENTS SHOWN THEREON.

(SIGNATURE - REGISTERED SURVEYOR)

REGISTRATION NO. _____

(SEAL)

APPROVAL/REVIEW BLOCK

REVIEWED BY THE CITY PLANNING BUREAU

CITY PLANNING BUREAU STAFF (DATE)

CERTIFICATION OF OWNERSHIP

I, _____ OF _____ BEING DULY SWORN ACCORDING TO LAW, AND ACTING IN MY CAPACITY AS _____ TITLE _____ DEPOSE AND SAY THAT THE

ABOVE NAMED CORPORATION IS THE TRUE AND LAWFUL EQUITABLE OWNER OF THE PROPERTY KNOWN AS GATEWAY ON 4TH; THAT THE ABOVE DESCRIBED PROPERTY IS IN PEACEFUL POSSESSION OF SAID CORPORATION AND THAT THERE ARE NO SUITS OR LIENS PENDING AFFECTING THE TITLE THEREOF.

CORPORATION _____

BY: _____ CORPORATION OFFICIAL _____ DATE _____

NOTARY

SWORN AND SUBSCRIBED TO BEFORE ME ON THIS _____ DAY OF _____, 20____ A.D.

NOTARY PUBLIC

MY COMMISSION EXPIRES ON THIS _____ DAY OF _____, 20____.

RECORDER OF DEEDS OFFICE

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF NORTHAMPTON COUNTY, PENNSYLVANIA ON _____, 20____ IN MAP BOOK VOLUME _____, PAGE NUMBER _____

RECORDER OF DEEDS

LEHIGH VALLEY PLANNING COMMISSION

REVIEWED BY THE LEHIGH VALLEY PLANNING COMMISSION

LVPC STAFF RESPONSIBLE FOR

VIEW DATE

ZONING DATA

- ZONING DISTRICT CLASSIFICATION:
CL - LIMITED COMMERCIAL DISTRICT
(FOR ALLOWED RESIDENTIAL USES, THE RT DISTRICT REQUIREMENTS SHALL APPLY)
- PROPOSED USE:
RESIDENTIAL - MULTI-FAMILY - OVER 2.5 STORY (PROPOSED AS A SEPARATE LAND DEVELOPMENT PLAN)
- ZONING REQUIREMENTS TABLE

	REQUIRED (RT DISTRICT APPLIES UNLESS NOTED OTHERWISE-MULTI-FAMILY DWELLING >2.5 STORIES)	EXISTING LOT 1 (RT DISTRICT APPLIES UNLESS NOTED OTHERWISE-MULTI-FAMILY DWELLING >2.5 STORIES)	EXISTING LOT 2 (RT DISTRICT APPLIES UNLESS NOTED OTHERWISE-MULTI-FAMILY DWELLING >2.5 STORIES)	PROPOSED LOT 1 (RT DISTRICT APPLIES UNLESS NOTED OTHERWISE-MULTI-FAMILY DWELLING >2.5 STORIES)	PROPOSED LOT 2 (RT DISTRICT APPLIES UNLESS NOTED OTHERWISE-MULTI-FAMILY DWELLING >2.5 STORIES)
MINIMUM LOT AREA	9,000 SF	22,287.91 SF, 0.5117 AC	136,935.34 SF, 3.1436 AC	67,824.64 SF, 1.5570 AC	91,398.61 SF, 2.0982 AC
MAXIMUM UNIT DENSITY ALLOWED	1,200 SF PER UNIT	N/A	N/A	N/A	N/A
MINIMUM LOT WIDTH	90 FT	185.94 FT	185.94 FT	185.94 FT	185.94 FT
MAXIMUM BUILDING/LOT COVERAGE	80%	6.97%	10.17%	9.83%	9.70%
MAXIMUM IMPERVIOUS COVERAGE	NONE	<100%	<100%	<100%	<100%
MINIMUM FRONT YARD	10' (SEE NOTE A)	38.09 FT (SEE NOTE A)	0 FT (SEE NOTE A)	0 FT (SEE NOTE A)	0 FT (SEE NOTE A)
MINIMUM SIDE YARD	15 FT + 5FT (NOTE 1)	N/A	18.81 FT	0 FT	0 FT
MINIMUM REAR YARD	20 FT + 5FT (NOTE 1)	33.81 FT	78.2 FT	0 FT	0 FT
MAXIMUM BUILDING HEIGHT	5 STORIES/60 FT (CL DISTRICT ALL USES)	4 STORIES/45 FT	4 STORIES/45 FT	4 STORIES/45 FT	4 STORIES/45 FT

NOTE A - THE ZONING HEARING BOARD GRANTED A VARIANCE FROM SECTION 1318.13A OF THE ZONING ORDINANCE FOR THE REQUIRED SETBACKS ALONG ALL STREET LINES.

* NOTE f - FOR EVERY FOOT OVER 35 FT THE SIDE AND REAR YARD SHALL BE INCREASED BY 1/2 FOOT.

LEGEND

---	PROPERTY LINE
---	BUILDING OUTLINE
---	ADJOINER PROPERTY LINE
---	EXISTING DRIVEWAY/PARKING
---	BUILDING SETBACK LINE
---	RIGHT-OF-WAY LINE
---	CONCRETE CURB
---	EXISTING CONTOUR MAJOR
---	EXISTING CONTOUR MINOR
---	WATER LINE
---	GAS LINE
---	SEWER LINE
---	EXISTING DECIDUOUS TREE (TBR)
---	IRON PIN, REBAR OR IRON PIPE (FOUND)
---	IRON PIN, IRON PIPE, OR MAG SPIKE (SET)
---	WATER VALVE/WATER CURB BOX
---	PROPERTY LINE
---	BUILDING SETBACK LINE
---	MONUMENT TO BE SET

GENERAL NOTES:

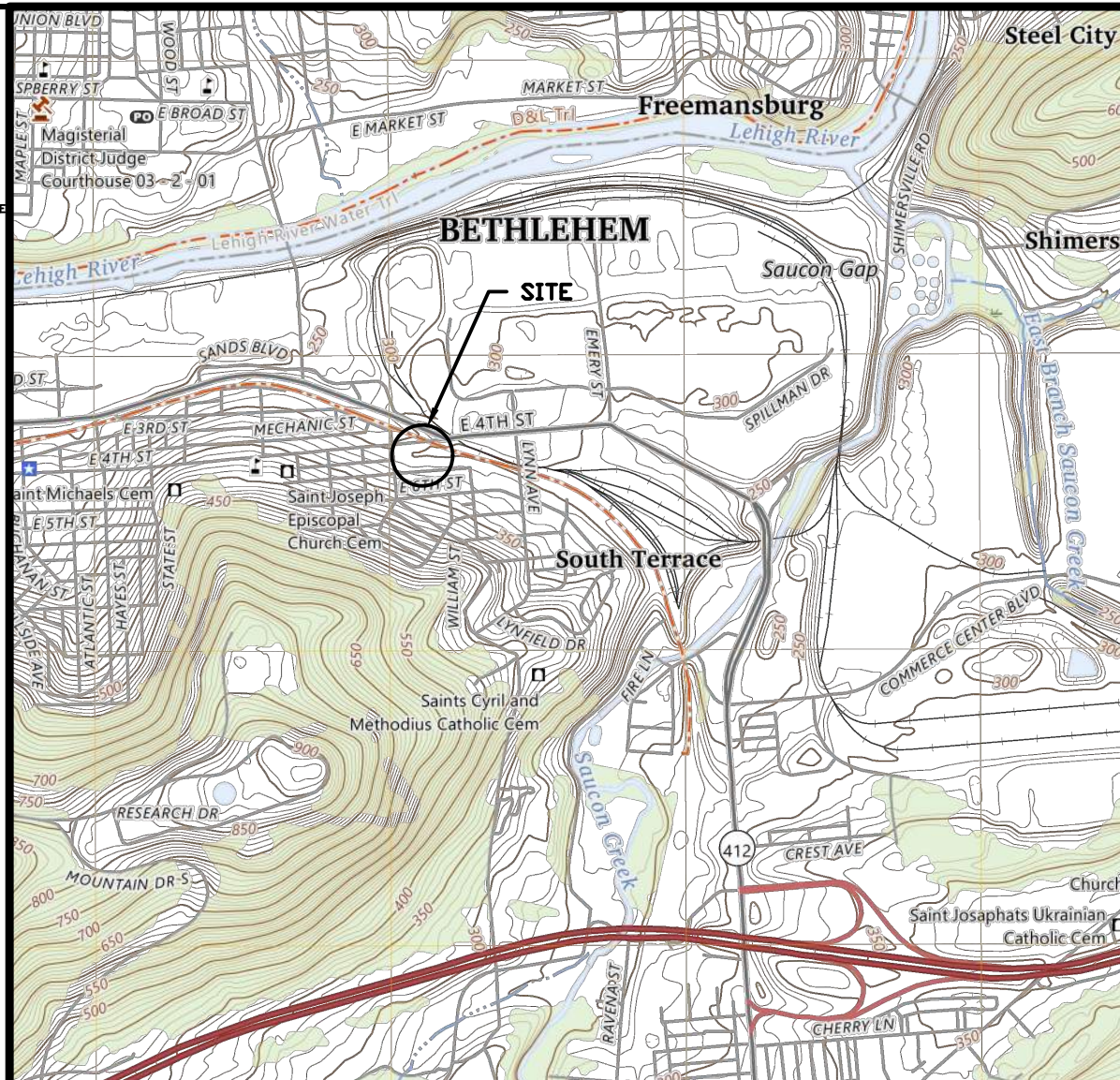
- TOPOGRAPHIC FEATURES SHOWN FROM ACTUAL FIELD SURVEY BY ASH ASSOCIATES COMPLETED MAY 12, 2024 AND IS LIMITED TO SHOWING FEATURES OF INTEREST ONLY.
- VERTICAL DATUM IS NAVD 1988 AND ESTABLISHED BY GPS OBSERVATIONS REFERENCED TO THE NGS CORS NETWORK. SITE BENCHMARK IS A MAGNETIC NAIL FOUND AS SHOWN. SITE BENCHMARK ELEVATION=299.66'.
- HORIZONTAL DATUM IS NAD 83. STATE PLANE COORDINATES OF PENNSYLVANIA AND ESTABLISHED GPS OBSERVATIONS REFERENCED TO THE NGS CORS NETWORK. BOTH DEED BEARINGS AND NAD 83 PENNSYLVANIA STATE PLANE BEARINGS ARE SHOWN. PARENTHESIS () INDICATES DEED BEARINGS.
- RIGHT-OF-WAY WIDTHS SHOWN FROM CALCULATED FIELD SURVEYED BOUNDARY CORNER EVIDENCE AND DEEDS OF RECORD. PENNDOT PLANS WERE NOT REVIEWED. REQUEST FOR PLANS HAS BEEN MADE WITH DISTRICT 5.
- THIS PLAN WAS MADE AS PER INSTRUCTIONS OF APPLICANT AND WITH THE BENEFIT OF A TITLE REPORT PREPARED BY FIRST AMERICAN TITLE DATED MAY 23, 2024, FILE NUMBER PAF24-2534 MM.
- THIS PLAN DOES NOT SHOW ENVIRONMENTAL HAZARDS, OR ARCHEOLOGICAL SITES.
- BUILDING DIMENSIONS ARE EXTERIOR AND MAY INCLUDE COVERED ENTRANCES AND ORNAMENTAL FACADES.
- ENTIRE SITE IS LOCATED IN FLOOD ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. PER FEMA FLOOD INSURANCE RATE MAP (FIRM) OF NORTHAMPTON COUNTY, PANEL 326 OF 355, MAP # 42095C0326E, REVISED JULY 16, 2014.

LEGAL RIGHT-OF-WAY

LINE	BEARING	DISTANCE
L1	N 84°07'38" E	137.19'
L2	N 00°02'06" E	5.08'
L3	N 84°02'08" E	22.50'
L4	S 04°57'52" E	4.68'
L5	N 82°51'19" E	122.90'
L6	S 15°20'49" E	24.19'
L7	S 89°28'34" E	26.31'
L8	S 08°13'16" E	5.00'
L9	N 88°07'05" E	81.50'
L10	N 45°54'28" E	28.16'

STATEMENT OF INTENT

THE INTENT OF THIS PLAN IS TO CONSOLIDATE TWO EXISTING LOTS AND SUBDIVIDE INTO TWO NEW LOTS. NO ADDITIONAL LOTS ARE BEING CREATED. NO IMPROVEMENTS ARE PROPOSED AS PART OF THIS PLAN; HOWEVER, LAND DEVELOPMENT ON THE PARCELS IS PROPOSED AS PART OF A SEPARATE PLAN.

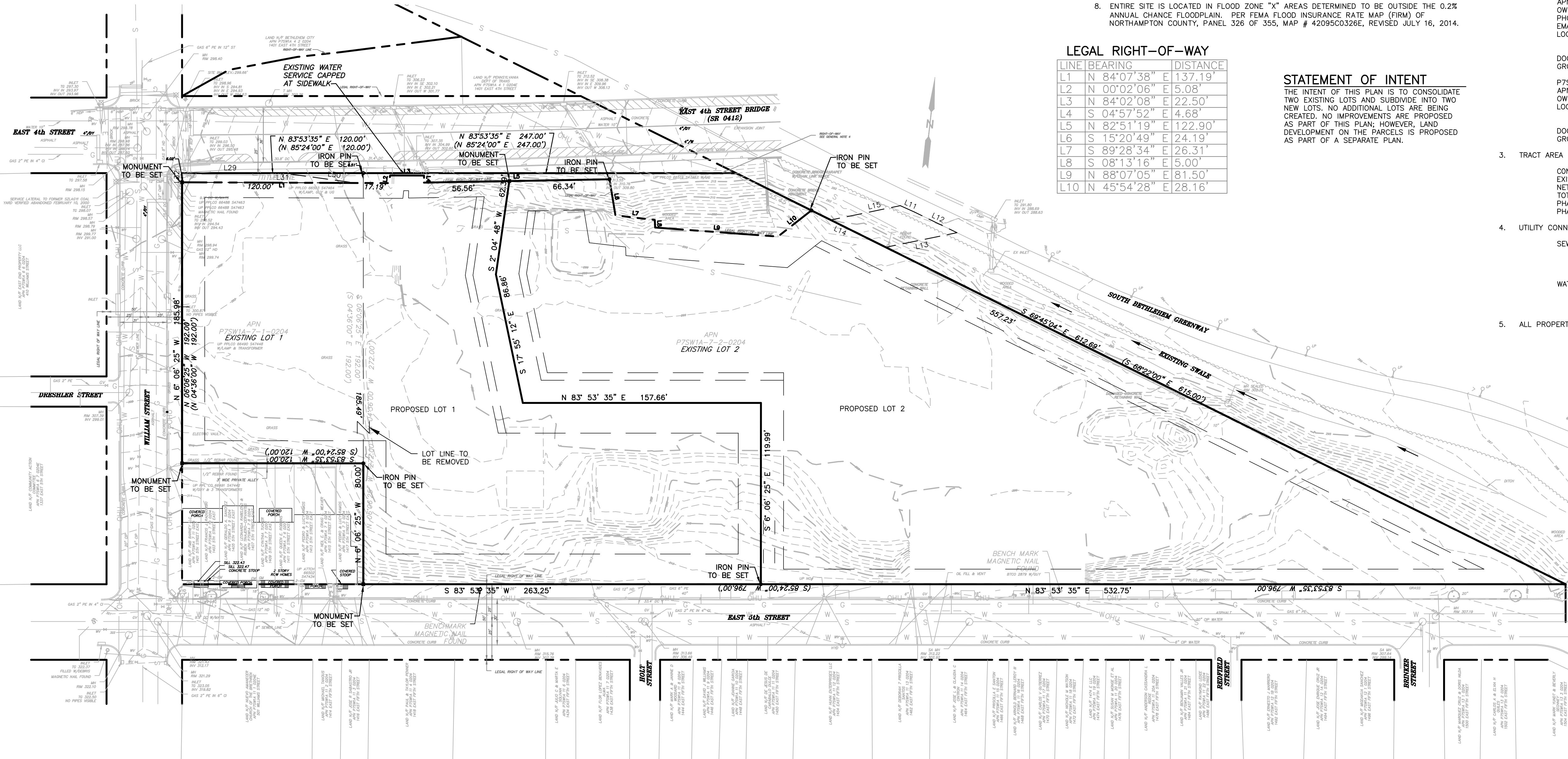


LOCATION MAP

SCALE: 1"= 1000'

SITE STATISTICS

- APPLICANT/EQUITABLE OWNER:
GATEWAY ON FOURTH PHASE 1 LLC
1301 N. 31ST ST
PHILADELPHIA, PA 19121
PHONE: 267-386-8719
EMAIL: KYAN@PENROSE.COM
- OWNER OF RECORD/EXISTING PROPERTY IDENTIFICATION:
P7SW1A-7-1-0204-ACA PARCEL A
APN: P7SW1A-7-1-0204
OWNER: LEHIGH VALLEY INDUSTRIAL PARK INC
PHONE: 610-866-4600
EMAIL: JRYAN@LVIP.ORG
LOCATION: 1400 EAST FOURTH STREET
BETHLEHEM, PA 18018
CITY OF BETHLEHEM, NORTHAMPTON COUNTY
DOCUMENT: 2025-1-057740
GROSS AREA: 23,040.00 SQ FT
P7SW1A-7-2-0204-ACA PARCEL B
APN: P7SW1A-7-2-0204
OWNERS: LEHIGH VALLEY INDUSTRIAL PARK INC
LOCATION: 1414 EAST FOURTH STREET
BETHLEHEM, PA 18018
CITY OF BETHLEHEM, NORTHAMPTON COUNTY
DOCUMENT: 2025-1-057638
GROSS AREA: 141,848.00 SQ FT
- TRACT AREA SUMMARY:
CONSOLIDATED GROSS TRACT AREA (PARCEL A & B) = 3.7853 AC, 164,888.00 SF
EXISTING PENNDOT LEGAL R-O-W DEDICATION = 0.1300 AC, 5,664.75 SF
NET TRACT AREA TO BE DEVELOPED = 3.6553 AC, 159,223.25 SF
TOTAL NUMBER OF PROPOSED LOTS = 2 LOTS
PHASE 1 LOT AREA = 1.5570 AC, 67,824.64 SF
PHASE 2 LOT AREA = 2.0982 AC, 91,398.61 SF
- UTILITY CONNECTIONS:
SEWER SERVICE:
EXISTING - PUBLIC PROVIDED BY CITY OF BETHLEHEM
PROPOSED - PUBLIC PROVIDED BY CITY OF BETHLEHEM
WATER SERVICE:
EXISTING - PUBLIC PROVIDED BY CITY OF BETHLEHEM
PROPOSED - PUBLIC PROVIDED BY CITY OF BETHLEHEM
- ALL PROPERTIES ARE IN WARD 17 CITY BLOCK 13.

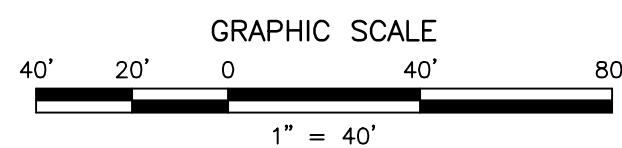


Pennsylvania 811



ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 124 OF 2024, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. ONE CALL SERIAL NO. 20241024325 WAS PLACED FOR SURVEY AND/OR DESIGN PURPOSES ONLY.

PRELIMINARY/FINAL
PLANS - NOT FOR
CONSTRUCTION



DESIGNED BY	CHECKED BY	DRAWN BY	DATE	SCALE	PROJ. NO.	REVISIONS	BY	DATE
KJR	KJR	BAK	02-20-2026	1"=40'	PENR0169			
						1	3/4/2026	GENERAL REVISIONS
						2	6/9/2026	REVISED PER CITY COMMENTS
								BAK
								KJR
								CHWD

JON S. TRESSLAR, P.L.S.
LICENSED PROFESSIONAL LAND SURVEYOR

GATEWAY ON FOURTH PHASE 1 LLC
GATEWAY ON 4TH
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, COMMONWEALTH OF PENNSYLVANIA
SUBDIVISION PLAN

AND
YOUR GOALS. OUR MISSION.
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BETHLEHEM, PA 18018
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FAX 610-625-2969
www.landmassassociates.com

OFFICES LOCATED IN:
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MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY	KJR	DRAWING	SUB
CHECKED BY	KJR	SHEET	01
DRAWN BY	BAK		
DATE	02-20-2026		
SCALE	1"=40'		
PROJ. NO.	PENR0169		