

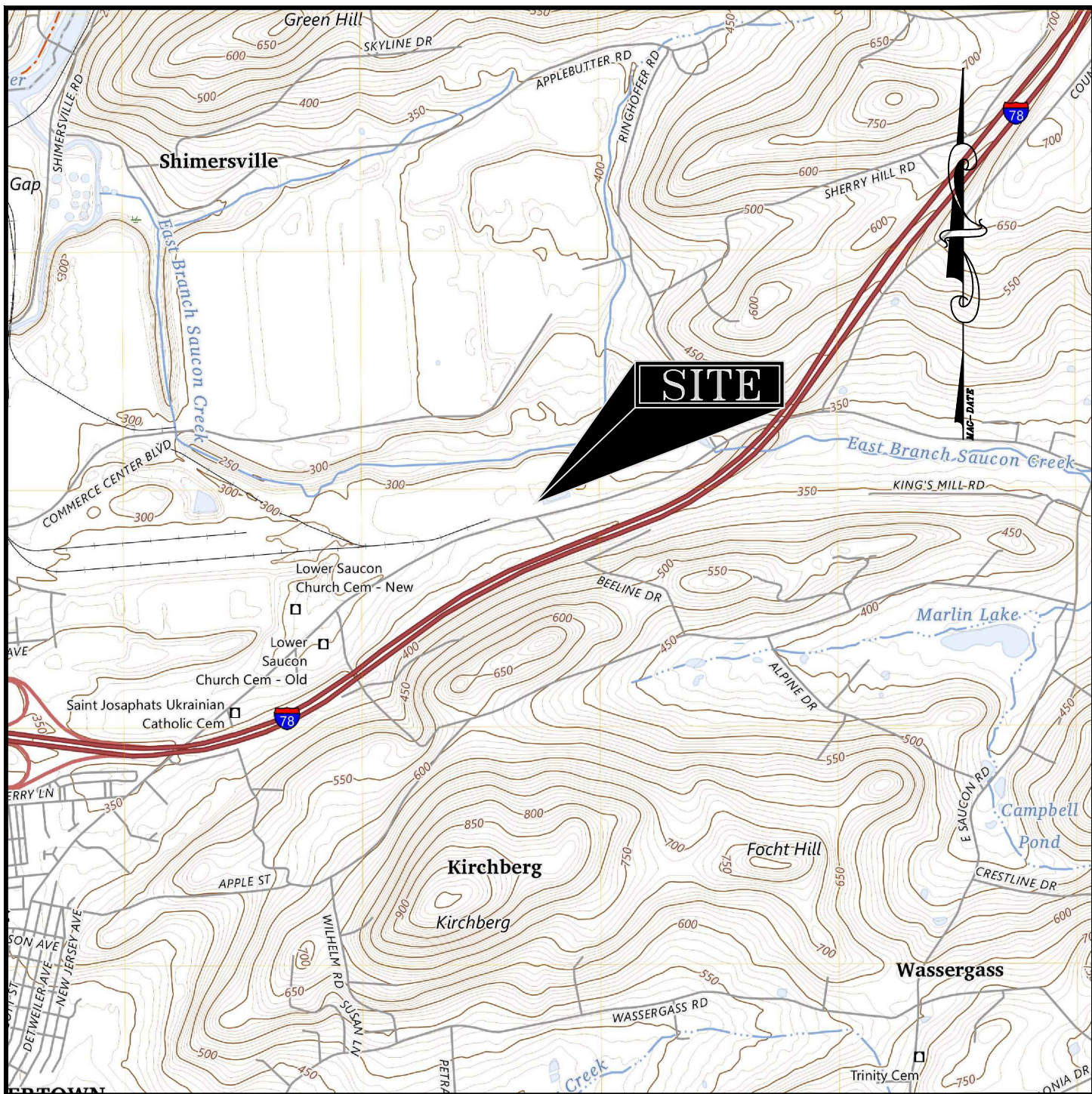
PRELIMINARY/FINAL

2

LVIP VII LOTS 53 & 54
LAND DEVELOPMENT

CITY OF BETHLEHEM, NORTHAMPTON COUNTY
PENNSYLVANIA

MAY 31, 2024



LOCATION MAP

SCALE: 1" = 2000'

GRAPHIC SCALE

1 IN = 2,000 FT



SOURCE: A PORTION OF THE HELLERTOWN, PA U.S.G.S. 7.5 MIN. QUADRANGLE

PREPARED BY:

reuther+bowen
Engineering, Design, Construction Services

2980 LINDEN ST., UNIT C2

BETHLEHEM, PA 18017

PHONE (484)403-1560

FAX (570)496-7021

ENGINEER CERTIFICATION

THE UNDERSIGNED HEREBY CERTIFIES THAT THE SUBJECT PLAN AND RELATED DRAWINGS, REPORTS, ETC. BEARING HIS SEAL ARE TRUE AND ACCURATE AND WERE PREPARED BY HIM OR UNDER HIS DIRECT SUPERVISION AND FOR WHICH THE UNDERSIGNED ACCEPTS FULL AND COMPLETE RESPONSIBILITY. THE UNDERSIGNED FURTHER CERTIFIES THAT THE ABOVE ARE OF ADEQUATE DESIGN IN ACCORDANCE WITH ACCEPTED ENGINEERING STANDARDS AND THAT, TO THE BEST OF HIS KNOWLEDGE, ALL REQUIREMENTS OF THE CITY OF BETHLEHEM SUBDIVISION AND LAND DEVELOPMENT ORDINANCE HAVE BEEN MET.

MARC BOWEN, PE053608-E

DATE

OWNERSHIP AND DEDICATIONS

I, PETER WONG OF BEACON ROCK REALTY, LLC BEING DULY SWORN ACCORDING TO LAW, AND ACTING IN MY CAPACITY AS MANAGING MEMBER DEPOSE AND SAY THAT THE ABOVE NAMED CORPORATION IS THE TRUE AND LAWFUL OWNER OF PROPERTY KNOWN AS LVIP LOTS 53 & 54 (P7 22 53 0704, 1355 EASTON ROAD); 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

ATTEST:

NOTARIZATION: COMMONWEALTH OF PENNSYLVANIA

COUNTY OF SWORN TO AND SUBSCRIBED TO

BEFORE ME THIS THE DAY OF, 20xx.

NOTARY SEAL

MY COMMISSION EXPIRES

NOTARY PUBLIC

SURVEYOR CERTIFICATION

I HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL LAND SURVEYOR, LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS IS A TRUE AND ACCURATE SURVEY MADE ON THE GROUND COMPLETED BY ME IN OCTOBER OF 2023. THE PROPERTY BOUNDARIES AS SHOWN ARE FROM TIES TO A PRIOR SURVEY TITLED, 'LVIP VII AT EASTON ROAD - PHASE 2/ LOTS 53-56, RECORDED IN INSTRUMENT 2016-5 224.

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, ALL OF THE REQUIREMENTS OF THIS ORDINANCE HAVE BEEN MET.

REGISTERED SURVEYOR

DATE

STATEMENT OF INTENT

APPLICANT PROPOSES TO CONSTRUCT A 104,238 SF ADDITION TO AN EXISTING 315,643 SF MANUFACTURING AND WAREHOUSING FACILITY FOR ECOPAX ON A 24.41 ACRE PARCEL.

APPLICANT:
BEACON ROCK REALTY, LLC
3600 GLOVER ROAD
EASTON, PA 18040

DRAWING INDEX	
DRAWING NUMBER	DRAWING NAME
C0.1	COVER SHEET
C0.2	GENERAL NOTES & LEGEND
C1.1	EXISTING CONDITIONS PLAN
C2.1	SITE LAYOUT PLAN
C2.2	TURNING TEMPLATE PLAN
C3.1	GRADING & PCSM PLAN
C3.2	PCSM BOUNDARIES
C4.1	E&S PLAN
C5.1	UTILITY PLAN
C6.1	PROFILES
C7.1	LANDSCAPE PLAN
C7.2	LIGHTING PLAN
D1.1	SITE DETAILS
D1.2	SITE DETAILS
D1.3	SITE DETAILS
D2.1	E&S NOTES
D2.2	E&S NOTES & DETAILS
D3.1	PCSM NOTES
DA1.3	DRAINAGE AREA TO INLETS
DA1.5	PRE-DEVELOPMENT DISTURBED ACREAGE
DA1.6	POST-DEVELOPMENT DISTURBED ACREAGE

REVIEWED BY LEHIGH VALLEY PLANNING COMMISSION

DAY OF, 2024.

REVIEWER

DATE

APPROVED BY THE CITY OF BETHLEHEM-
PLANNING COMMISSION

DAY OF, 2024.

CHAIRPERSON

DATE

SECRETARY

DATE

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

NORTHAMPTON COUNTY RECORDER OF DEEDS

RB PROJECT NO.: 6637.23
DATE ISSUED: 05/31/2024

2

01/16/2025

PER CITY COMMENTS

1

11/08/2024

PER LCOD AND CITY COMMENTS

DATE

DESCRIPTION

C0.1

GENERAL NOTES:

1. THE OWNER/APPLICANT FOR THIS PROJECT IS:
BEACON ROCK REALTY, LLC
3600 GLOVER ROAD
EASTON, PA 18040
CONTACT PETER WONG
PHONE NUMBER 484-546-0700
2. THE PROJECT ENGINEER IS:
REUTHER+BOWEN
2980 LINDEN ST., UNIT C2
BETHLEHEM, PA 18017
(484) 403-1560
CONTACT LAURA EBERLY
LEBERLY@REUTHERBOWEN.COM
3. SITE DATA:
OWNER: BEACON ROCK REALTY LLC
TMP # P7-22-53 0704
WARD 16 BLOCK SM18, SM25
DEED 2016-1 139265
1355 EASTON ROAD
CITY OF BETHLEHEM
NORTHAMPTON COUNTY
24.41 ACRES
4. ZONING DATA:
ZONING CLASSIFICATION: IN (INDUSTRIAL DISTRICT)
ZONING REQUIREMENT REQUIRED (TMP) REQUIRED (LVP) PROVIDED
MIN. LOT AREA 1 AC 150 FT 24.41 AC
MIN. LOT WIDTH 150 FT 1,170.90'
MIN. FRONT YARD 20' 50' 1,170.90'
MIN. REAR YARD 15' 15' 102.01'
MIN. SIDE 1 15' 15' 53.6'
PARKING, LOADING AND DRIVEWAY SETBACK 10 FT 10' 25'/5'/5'
PARKING SETBACK (FRONT/SIDE/REAR) 25'/5'/5'
MAX. BUILDING COVERAGE 65% 70% 40%
MAX. IMPERVIOUS COVERAGE 90% 90% 60%
MAX. BUILDING HEIGHT 80' 59' 60'
PARKING SPACE SIZE 9'x18' 9'x18' 9'x18'
REQUIRED PARKING 97 SPACES 115 SPACES
EXISTING IMPERVIOUS COVER PRIOR TO LOT 54 DEVELOPMENT 692,291 SQ FT
EXISTING IMPERVIOUS COVER CURRENT CONDITION 504,314 SQ FT
PROPOSED IMPERVIOUS COVER 642,768 SQ FT
5. REQUIRED PARKING - 1 SPACE/10,000 SF PLUS 1 SPACE/1.5 EMPLOYEES
420,387 SF BUILDINGS - 1 SPACE/10,000 SF = 43 SPACES
80 EMPLOYEES ON MAXIMUM SHIFT - 1 SPACE/1.5 EMPLOYEES = 54 SPACES
TOTAL SPACES REQUIRED = 97
6. REQUIRED BICYCLE PARKING - 5% OF OFF STREET VEHICLE PARKING REQUIREMENT.
97 SPACES REQUIRED X .05 = 5 BICYCLE SPACES REQUIRED
7. THIS PROJECT PROPOSES AN 104,238 SF EXPANSION OF THE EXISTING 315,643 SF MANUFACTURING BUILDING ON THE 24.41 ACRE SITE FOR THE USE OF MANUFACTURING WITH ASSOCIATED PARKING AND LOADING AREAS.
8. THE PURPOSE OF THESE PLANS ARE TO OBTAIN FINAL LAND DEVELOPMENT APPROVAL, AND ARE NOT INTENDED FOR CONSTRUCTION.
9. PLANAMETRIC AND TOPOGRAPHICAL DATA OBTAINED IN PART FROM PRIOR DEVELOPMENT PLANS TITLED PRELIMINARY/FINAL LAND DEVELOPMENT PLAN FOR BEACON ROCK REALTY, LLC LVP VII, LOT 53-54 (2020) AND LAND DEVELOPMENT PLAN LVP-LOT 53 (2015). ADDITIONAL DATA PROVIDED IN SEPTEMBER 2023 BY DONALD JULIAN, P.L.S. OF ESC DESIGN, LOCATED IN MOSCOW, PENNSYLVANIA.
10. CONTRACTOR SHALL PROTECT ALL BENCHMARKS (SURVEY CONTROL POINTS, EXISTING STRUCTURES, MONUMENTATION, ETC.) FROM DAMAGE OR DISPLACEMENT. CONTRACTOR TO RESTORE/REPLACE ALL DISTURBED BENCHMARKS.
11. THE SURVEYOR HAS MADE NO INVESTIGATIONS OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
12. THESE PLANS ARE ONE PART OF THE CONSTRUCTION DOCUMENTS. THE CONSTRUCTION DOCUMENTS INCLUDE: CONSTRUCTION PLANS, E&S PLANS, PCSM PLANS, HOP PLANS, NOTES, DETAILS, SECTIONS, PROFILES, NPDES PERMIT DOCUMENTS, E&S NARRATIVES, PCSM NARRATIVES, PA DEP PERMIT DOCUMENTS, ETC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF ALL PARTS OF THE CONSTRUCTION DOCUMENTS AND COORDINATE ALL REQUIRED WORK.
13. THESE PLANS ARE SUBJECT TO ANY AND ALL RIGHT-OF-WAY, EASEMENTS AND COVENANTS OF RECORD.
14. ACCORDING TO FEMA MAP NUMBERS 42095C0335E AND 42095C0327E (FEMA FIRM PANEL 0335E), EFFECTIVE DATE 7/16/2014, THE MAJORITY OF THE SITE IS LOCATED IN ZONE "X" DESIGNATED AS AN AREA OF MINIMAL FLOOD HAZARD. A SMALL PORTION OF THE PROJECT SITE IS LOCATED IN ZONE "A" DESIGNATED AS WITHOUT BASE FLOOD ELEVATION.
15. THE PROJECT SITE IS PART OF THE EAST BRANCH SAUCON CREEK WATERSHED WHICH HAS A CURRENT ACT 167 PLAN. THE CHAPTER 93 DESIGNATION IS COLD WATER FISHES - MIGRATORY FISH (CWF-MF).
16. NO TOPSOIL SHALL BE REMOVED FROM THE SITE UNLESS AUTHORIZED BY THE CITY AND/OR NCCD.
17. ALL DISTURBED AREAS OF THE SITE NOT COVERED BY TREES SHALL RECEIVE TOPSOIL AMENDMENTS.
18. THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON FIELD LOCATIONS OF OBSERVABLE SURFACE STRUCTURES AND RECORDS BY UTILITY USERS FOLLOWING A CALL TO PENNSYLVANIA ONE CALL SYSTEM, SERIAL #20233132087 LOCATIONS AND DEPTHS ARE APPROXIMATE. REUTHER+BOWEN DOES NOT GUARANTEE THE ACCURACY OF UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS.
19. CONTRACTORS ARE REQUIRED TO CONTACT THE PENNSYLVANIA ONE-CALL SYSTEM (1-800) 272-1775 AT LEAST 3 DAYS PRIOR TO BEGINNING ANY WORK. PRIOR TO BEGINNING ANY EXCAVATION OF DEMOLITION WORK, AND TO COMPLY WITH ALL OTHER REQUIRED PROCEDURES OF PENNSYLVANIA ACT 38, AS MOST CURRENTLY AMENDED. INFORMATION CONCERNING UTILITIES IS NOT INTENDED FOR CONSTRUCTION PURPOSES.
20. THE CONTRACTOR SHALL CONDUCT EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS AS NECESSARY. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES OF UTILITY LINE LOCATIONS ARE DISCOVERED.
21. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS WITHOUT FIRST OBTAINING PRIOR WRITTEN AUTHORIZATION FOR SUCH DEVIATIONS FROM THE ENGINEER, CONTRACTOR SHALL BE RESPONSIBLE FOR THE PAYMENT OF ALL COSTS TO CORRECT ANY WORK DONE. ALL FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CORRECT ANY SUCH WORK AND FROM ALL FINES, PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.
22. IN ALL CASES, WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL NOT USE SCALED DIMENSIONS FOR CONSTRUCTION WITHOUT CONFIRMATION BY REUTHER+BOWEN. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS ON THE PROJECT SITE. REUTHER+BOWEN MUST BE NOTIFIED IN WRITING OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS
23. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.
24. THE CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) STANDARDS AND REQUIREMENTS.
25. PUBLIC AND COMMON USE AREAS, INCLUDING ADA DESIGNATED PARKING AREAS, SIDEWALKS, AND BUILDING ACCESSSES SHALL COMPLY WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
26. NO EARTH MOVING ACTIVITIES MAY TAKE PLACE ON THIS SITE UNTIL AN EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN HAS BEEN APPROVED BY THE COUNTY CONSERVATION

DISTRICT AND THE CITY.

27. DEBRIS SHALL NOT BE BURIED ON SITE. ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS OR APPLICABLE CODES.
28. CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES AT NO ADDITIONAL COSTS TO THE OWNER.
29. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE AND COORDINATE ALL INSPECTIONS WITH THE CITY OF BETHLEHEM AND MUNICIPAL AUTHORITY. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 24 HOURS NOTICE AND TO COORDINATE WITH THE CITY OF BETHLEHEM OR CITY OF BETHLEHEM ENGINEER REGARDING ALL MUNICIPAL INSPECTION WORK REQUIRED ON THE PROJECT SITE.
30. ON-SITE STORAGE OF HAZARDOUS MATERIALS IS NOT PERMITTED DURING CONSTRUCTION. IF ON-SITE STORAGE IS NECESSARY, CONTRACTOR IS REQUIRED TO PREPARE AND SUBMIT A PPC PLAN TO THE COUNTY CONSERVATION DISTRICT.
31. CONTRACTOR SHALL SEPARATE STORED DIFFERING MATERIALS WITH DIVIDERS OR STOCKPILE APART TO PREVENT MIXING.
32. ALL CONSTRUCTION ACTIVITIES SHALL REMAIN CONFINED WITHIN THE AREA DESIGNATED THE "LIMIT OF DISTURBANCE" AS SHOWN ON THE EROSION AND SEDIMENT POLLUTION CONTROL PLANS.
33. BY APPROVAL OF THIS PLAN, THE CITY OF BETHLEHEM HAS NEITHER CONFIRMED NOR DENIED THE EXISTENCE AND/OR EXTENT OF ANY WETLAND AREAS. ANY ENCROACHMENT INTO WETLAND AREAS SHALL BE SUBJECT TO THE JURISDICTION OF THE ARMY CORP OF ENGINEERS AND THE SAID ENCROACHMENT SHALL CONFORM TO THE RULES AND REGULATIONS OF THE JURISDICTIONAL AGENCIES. THERE ARE NO KNOWN WETLAND AREAS WITHIN THE DEVELOPMENT AREA.
34. CONTRACTOR SHALL PROTECT TREES, PLANT GROWTH AND FEATURES DESIGNATED TO REMAIN, AS FINAL LANDSCAPING.
35. CONTRACTOR IS RESPONSIBLE TO KEEP EXISTING ROADWAYS, PARKING AREAS AND LOCAL ROADS FREE OF CONSTRUCTION MATERIALS. ANY DIRT OR DEBRIS TRACKED ONTO SUCH AREAS MUST BE IMMEDIATELY REMOVED.
36. CONSTRUCTION VEHICLES, MATERIALS OR ACTIVITIES SHALL NOT INTERFERE WITH PUBLIC ACCESS EXCEPT WHERE SHOWN ON THE PLANS. CONTROL VEHICULAR PARKING TO PREVENT INTERFERENCE WITH PUBLIC TRAFFIC AND PARKING, ACCESS BY EMERGENCY VEHICLES AND OWNER'S OPERATIONS.
37. IN THE EVENT THAT ROCK IS ENCOUNTERED WITHIN AN EXCAVATION CONTRACTOR SHALL CONTACT THE OWNER FOR VERIFICATION AND REMOVE ROCK TO 12" BELOW TARGET ELEVATION AND BACKFILL WITH APPROVED MATERIAL.
38. ANY ITEMS NOT SPECIFICALLY MENTIONED THAT ARE REQUIRED TO MAKE THE WORK COMPLETE AND OPERATIONAL SHALL BE INCLUDED BY THE CONTRACTOR. THIS INCLUDES WOOD BLOCKING, CAULKING, SEALING AND FLASHING. CONTRACTOR TO FOLLOW MFG'S INSTALLATION PROCEDURES AND STANDARD INDUSTRY PRACTICES.
39. CONVEYANCE SYSTEMS SHALL BE OWNED, MANAGED, AND MAINTAINED BY THE PROPERTY OWNER. THE CITY OF BETHLEHEM WILL RETAIN THE RIGHTS TO ENTER AND INSPECT STORMWATER MANAGEMENT FACILITIES TO ENSURE PROPER MAINTENANCE.
40. THE CONTRACTOR SHALL REMOVE ANY DEBRIS AND FLUSH OUT ALL EXISTING AND PROPOSED STORM DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS AT THE COMPLETION OF CONSTRUCTION.
41. CONTRACTOR SHALL COMPILE AND SUBMIT AS-BUILT SURVEY PLANS FOR ALL STORM AND UTILITY FACILITIES PRIOR TO THE RELEASE OF THE FINANCIAL SECURITIES FOR SUCH FACILITIES.
42. THIS PROJECT WILL REQUIRE APPROVAL FROM THE FOLLOWING ENTITIES:
ISSUING ENTITY: NORTHAMPTON COUNTY CONSERVATION DISTRICT PERMITS REQUIRED: EROSION AND SEDIMENTATION CONTROL PLAN
PA DEP INDIVIDUAL NPDES PERMIT MODIFICATION
LEHIGH VALLEY PLANNING COMMISSION LAND DEVELOPMENT
43. ALL DRIVEWAYS SHALL BE BUILT IN ACCORDANCE THE CITY OF BETHLEHEM AND PENNSYLVANIA DEPARTMENT OF TRANSPORTATION STANDARDS.
44. ALL PROPOSED SIGNS, EXCEPT FOR THE REQUIRED TRAFFIC CONTROL/REGULATORY SIGNS MUST COMPLY WITH THE APPLICABLE SECTIONS OF THE ZONING ORDINANCE. SIGN DETAILS SHALL BE SUBMITTED TO THE BOROUGH CONCURRENTLY WITH THE BUILDING PLANS. A SEPARATE SIGN PERMIT APPLICATION SHALL BE SUBMITTED TO THE CITY OF BETHLEHEM AS REQUIRED.
45. THE DEVELOPER SHALL ENSURE THAT THE REQUIRED EROSION AND SEDIMENTATION CONTROLS WILL BE IMPLEMENTED IN ACCORDANCE WITH PA CODE, TITLE 25, CHAPTER 102-EROSION AND SEDIMENT CONTROL.
46. ACCESS TO ANY HIGHWAY UNDER THE JURISDICTION OF THE DEPARTMENT OF TRANSPORTATION SHALL BE ONLY AUTHORIZED BY A HIGHWAY OCCUPANCY PERMIT PURSUANT TO SECTION 420 OF THE ACT OF JUNE 1, 1945 *P.L. 1242, NO. 428), KNOWN AS THE "STATE HIGHWAY LAW".
47. AN ADDITIONAL KNOW BOX FOR THE CITY OF BETHLEHEM FIRE DEPARTMENT ACCESS MUST BE INSTALLED. THE LOCATION OF THE KNOW BOX IS TO BE DETERMINED.
48. CHAPTER 33 OF THE IFC "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION" WILL BE ENFORCED FOR THE DURATION OF THE CONSTRUCTION PROJECT.
49. 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.
50. 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.
51. 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 SUBMITTED TO THE CITY ENGINEER'S OFFICE. ALL FINAL DRAWINGS SHALL SHOW NORTH AMERICAN DATUM (NAD) 1983 STATE PLANE COORDINATE IN FEET (PENNSYLVANIA SOUTH FIPS ZONE 3700) AND THE DIGITAL FILE SHALL BE 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. THE DIGITAL FILES SHALL RESIDE ON PC COMPATIBLE CD ROM CONTAINING THE DIGITAL REPRESENTATION OF THE FINAL PLAN AS PRESENTED ON TWENTY-FOUR (24) INCH BY THIRTY-SIX (36) INCH SHEET. THE DIGITAL MAP SHALL BE AUTOCAD COMPATIBLE. ALL LAYERS INCLUDED IN THE DIGITAL MAPS SHALL BE 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.
52. PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY, PERMITS MUST BE OBTAINED FROM THE CITY ENGINEERING OFFICE.

GENERAL SITE NOTES:

1. 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 WITH THE DRAWINGS AND DOCUMENTS 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. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS, SPECIFICATIONS AND REFERENCED DOCUMENTS IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
2. LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVEGROUND INSPECTION AND MARK OUT 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 121 OF 2008, 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. 20233132087 WAS PLACED FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE PA ONE CALL SYSTEM BEFORE BEGINNING ANY EXCAVATION WORK.
3. 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.
4. THIS PLAN SHALL NOT BE USED FOR BUILDING STAKEOUT PURPOSES. PROPOSED BUILDING LOCATION AS DEPICTED IS WITHIN ACCEPTABLE TOLERANCES FOR SITE WORK ONLY. PLEASE REFER TO ARCHITECTURAL/STRUCTURAL PLANS FOR EXACT BUILDING PLACEMENT.
5. THE BUILDING FOOTPRINTS DEPICTED HEREON HAVE BEEN TRANSPOSED FROM ARCHITECTURAL PLANS. FINAL BUILDING DIMENSIONS MAY VARY BUT SHALL ULTIMATELY CONFORM TO ALL APPLICABLE ZONING SETBACKS, IMPERVIOUS SURFACE COVERAGE RATIOS, ETC. UNLESS OTHERWISE NOTED. FINAL BUILDING FOOTPRINTS WHICH SUBSTANTIALLY VARY FROM THE FOOTPRINTS HEREON SHALL BE SUBMITTED TO THE MUNICIPAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO REQUESTING A BUILDING PERMIT.
6. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH PENNDOT SPECIFICATION "PUBLICATION FORM 408", LATEST EDITION AND WITH THE CITY OF BETHLEHEM STANDARDS WHERE APPLICABLE. ALL IMPROVEMENTS WITHIN THE PUBLIC RIGHT OF WAY MUST COMPLY WITH CITY OF BETHLEHEM STANDARDS AND SPECIFICATIONS.
7. ALL CITY OF BETHLEHEM PERMITS MUST BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
8. CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS AND COMPLETE ALL WORK INDICATED OR IMPLIED ON THE PROJECT PLANS AND/OR SPECIFICATIONS THAT ARE NOT EXISTING ON THE PROJECT SITE AND THAT ARE NOT SPECIFICALLY NOTED AS "FUTURE" OR "NOT IN CONTRACT (NIC)", "BY OTHERS", OR "BY OTHER CONTRACTORS".
9. 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 IF ACTUAL SITE CONDITIONS DIFFER FROM THAT SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER EXISTING SITE FEATURES.
10. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL/BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATION, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
11. 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 LAWS AND APPLICABLE CODES. CONTRACTOR SHALL PROPERLY REMOVE AND DISPOSE OF HAZARDOUS/UNSUITABLE MATERIAL OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES AND LAWS.
12. 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.
13. 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.
14. 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 AS A RESULT OF THEIR WORK. 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.
15. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH AT 28 DAYS AS INDICATED IN SPECIFICATIONS AND REFERENCE DOCUMENTS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
16. 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 FORM 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.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND PROTECTION OF TRAFFIC AND JOB SAFETY.
18. ALL UTILITIES DAMAGED OR DESTROYED SHALL BE BROUGHT TO THE ATTENTION OF THE SPECIFIC UTILITY. ALL COST INCURRED TO FIX OR REPLACE THE UTILITY SHALL BE BORNE BY THE CONTRACTOR.
19. ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR IN THE FIELD.
20. THE CONTRACTOR SHALL MAINTAIN INGRESS AND EGRESS AT ALL TIMES TO THE JOB SITE.
21. THE PLAN IS SUBJECT TO ANY AND ALL RIGHTS-OF-WAY, EASEMENTS AND COVENANTS OF RECORD.
22. IN ALL CASES, WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL NOT USE SCALED DIMENSIONS FOR CONSTRUCTION WITHOUT CONFIRMATION BY DESIGN ENGINEER. THE DESIGN ENGINEER MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS.
23. ANY EXCESS EXCAVATION AT THE END OF THE JOB SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN APPROVED MANNER AT NO ADDITIONAL COST TO THE OWNER.

ADJOINING OWNERS

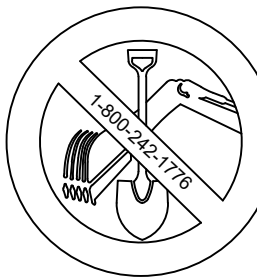
	N/F FIEGEL GORDON JOHN JR & MELISSA LEE 2334 EASTON ROAD BETHLEHEM, PA 18015-5921 ZONING: R-40 AREA: 2.91 ACRES PARCEL ID: P7 25 0 0719
1	N/F BELTZNER DONNA L & EARL W JR 2314 EASTON ROAD BETHLEHEM, PA 18015 ZONING: R-40 AREA: 1.04 ACRES PARCEL ID: P7 26 4 0719
2	N/F MASON JAMES & JOANN 2310 EASTON ROAD BETHLEHEM, PA 18015 ZONING: R-40 AREA: 0.88 ACRES PARCEL ID: P7 26 3 0719
3	N/F YELOVICH MICHAEL E 2306 EASTON ROAD BETHLEHEM, PA 18015-5921 ZONING: R-40 AREA: 1.04 ACRES PARCEL ID: P7 26 2 0719
4	N/F SCHAFER RICHARD C & BARBARA 2333 BEECHWOOD CT BETHLEHEM, PA 18015 ZONING: R-40 AREA: 1.00 ACRES PARCEL ID: P7 26 1 0719
5	N/F REICHARD LELAND R & MARY ANN 2332 BEECHWOOD CT BETHLEHEM, PA 18015 ZONING: R-40 AREA: 1.21 ACRES PARCEL ID: P7 25 178 0719
6	N/F RODGERS LISA ANN 2294 EASTON ROAD BETHLEHEM, PA 18015-5920 ZONING: R-40 AREA: 0.20 ACRES PARCEL ID: P7 25 16 0719
7	N/F SNYDER BRADLEY S 2290 EASTON ROAD BETHLEHEM, PA 18015-5920 ZONING: R-40 AREA: 0.35 ACRES PARCEL ID: P7 25 15 0719
8	N/F BENDUIS JOHN & MARY 2284 EASTON ROAD BETHLEHEM, PA 18015 ZONING: R-40 AREA: 1.81 ACRES PARCEL ID: P7 25 14 0719
9	N/F SWETT FRANK G 2280 EASTON ROAD BETHLEHEM, PA 18015 ZONING: R-40 AREA: 0.94 ACRES PARCEL ID: P7 25 13 0719
10	N/F FRAZIER DAVID ALLEN 2278 EASTON ROAD BETHLEHEM, PA 18015-5920 ZONING: R-40 AREA: 0.97 ACRES PARCEL ID: P7 25 12 0719
11	N/F UROGI JOHN & LILLIE H 2276 EASTON ROAD BETHLEHEM, PA 18015-9803 ZONING: R-40 AREA: 0.95 ACRES PARCEL ID: P7 25 11 0719
12	N/F DELEON JOHN A 2272 EASTON ROAD BETHLEHEM, PA 18015-5920 ZONING: R-40 AREA: 1.03 ACRES PARCEL ID: P7 25 10 0719E
13	N/F CABRERA ROBERT & LINDA 2270 EASTON ROAD BETHLEHEM, PA 18015 ZONING: R-40 AREA: 1.24 ACRES PARCEL ID: P7 25 9 0719
14	N/F VANBUSKIRK DENISE M 2268 EASTON ROAD BETHLEHEM, PA 18015-5920 ZONING: R-40 AREA: 0.25 ACRES PARCEL ID: P7 25 8 0719
15	N/F RUIF EASTON ROAD SPE LLC 1245 EASTON ROAD BETHLEHEM, PA 18015 ZONING: INDUSTRIAL AREA: 44.98 ACRES PARCEL ID: P7 22 52 0704
16	N/F BETHLEHEM EARTH LP 3700 COMMERCE CENTER BLVD BETHLEHEM, PA 18015 ZONING: INDUSTRIAL AREA: 68.09 ACRES PARCEL ID: P7 15 2C 0704
17	N/F UGI BETHLEHEM LNG LLC 1475 EASTON ROAD BETHLEHEM, PA 18015 ZONING: INDUSTRIAL AREA: 14.75 PARCEL ID: P7 22 53-55 0704
18	

GENERAL UTILITIES NOTES:

1. UTILITIES ARE ASSUMED TO BE EXTENDED FROM THE EXISTING BUILDINGS. ANY NEW UTILITIES/SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
2. THE LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, REMOVAL OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINT CONFLICTS SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER.
3. ALL UTILITY EXTENSIONS FROM THE BUILDING BY OTHER TRADES SHALL BE CONNECTED TO THE CONTINUATION UTILITY LINES ON THE SITE. THE GENERAL CONTRACTOR SHALL MAKE THE CONNECTIONS AT A POINT 5' FROM THE BUILDING WALL. WHERE OTHER TRADES HAVE ENDED THEIR WORK, THE CONTRACTOR SHALL COORDINATE SCHEDULING OF THESE CONNECTIONS WITH OTHER TRADES TO ASSURE THE SYSTEM IS COMPLETE WHEN FLOW WILL BEGIN IN THE LINES.
4. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE NOT TO REMAIN. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
6. EXISTING VALVES, RIMS, GRATES, CLEANOUTS AND LIDS SHALL BE FIELD RESET TO PROPOSED GRADE.
7. STRUCTURE LOCATION (STATION) AND PIPE LENGTHS ARE MEASURED FROM THE CENTER OF STRUCTURE.
8. WHENEVER POSSIBLE, SEWER MAINS SHOULD BE LAID AT LEAST 10' HORIZONTAL FROM ANY EXISTING OR PROPOSED WATER MAIN. SHOULD LOCATION CONDITIONS PREVENT A LATERAL SEPARATION OF 10', A SEWER MAY BE LAID CLOSER THAN 10' TO A WATER MAIN IF:
- 8.1. IT IS LAID IN A SEPARATE TRENCH
8.2. IT IS LAID IN THE SAME TRENCH WITH THE WATER MAIN LOCATED AT ONE SIDE OF A BENCH OF UNDISTURBED EARTH.
- 8.3. IN EITHER CASE, THE ELEVATION OF THE TOP OF THE SEWER IS AT LEAST 18" BELOW THE BOTTOM (INVERT) OF THE WATER MAIN.
9. WHENEVER SEWERS MUST CROSS WATER MAINS OR UTILITIES, A MINIMUM OF 18" OF VERTICAL CLEARANCE MUST BE MAINTAINED, IF NOT ATTAINABLE, A 6" CONCRETE ENCASEMENT MUST BE PROVIDED. DUCTILE IRON PIPE MUST BE UTILIZED AT CROSSINGS WITH CONCRETE ENCASEMENTS. THIS PIPE MUST CONSISTENTLY BE DUCTILE IRON PIPE BETWEEN THE TWO MANHOLES OF THE AFFECTED AREA.
10. THE MINIMUM DISTANCE BETWEEN THE PLACEMENT OF TREES TO LIGHT POLES AND UTILITY SERVICE LINES SHALL BE 10 FEET.
11. ALL SANITARY AND STORM SEWERS WITH A SLOPE LESS THAN 1.0% ARE TO BE CONSTRUCTED USING A LASER BEAM DEVICE TO ASSURE PROPER LINE AND GRADE, UNLESS OTHERWISE DIRECTED.
12. ALL EXISTING UTILITY LINES TO BE ABANDONED SHALL EITHER BE REMOVED OR FILLED WITH SAND/SMALL STONE AND ADEQUATELY CAPPED/PLUGGED.
13. DEPTHS 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.
14. THE MAINTENANCE OF STORMWATER FACILITIES NOT DEDICATED TO AND ACCEPTED BY THE CITY, 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 STORMWATER FACILITIES ON AT LEAST AN ANNUAL SCHEDULE TO ENSURE THAT ANY NECESSARY CORRECTIVE WORK IS PERFORMED IN A TIMELY MANNER.
15. THE PROPOSED BUILDING SHALL BE SERVED BY PUBLIC WATER AND PUBLIC SEWER.
16. WATER SERVICE PROVIDED BY CITY OF BETHLEHEM.
17. ANY CHANGE IN THE LOCATION OF THE FIRE DEPARTMENT CONNECTION MUST BE APPROVED BY THE CITY OF BETHLEHEM FIRE DEPARTMENT.
18. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON THE SITE.

UTILITY CONTACT LIST

COMPANY:	COLUMBIA GAS TRANSMISSION ELLWOOD
ADDRESS:	1470 POORHOUSE ROAD DOWNTOWN, PA 19335
CONTACT:	TYLER CALDWELL TYLER.CALDWELL@TCENERGY.COM 610-458-8018
COMPANY:	USIC LOCATION SERVICES LLC
ADDRESS:	9045 N RIVER RIDGE SUITE 300 INDIANAPOLIS, IN 46240
CONTACT:	USIC DISPATCH 800-778-8914
COMPANY:	PPL ELECTRIC UTILITIES CORPORATION
ADDRESS:	437 BLUE CHURCH ROAD PAVONOS, PA 17860
CONTACT:	DOUG HAUPT DLHAUP@PPLWEB.COM 570-490-0568
COMPANY:	CITY OF BETHLEHEM DEPARTMENT OF WATER AND SEWER RESOURCES
ADDRESS:	10 E CHURCH STREET BETHLEHEM, PA 18018
CONTACT:	ROBERT TAYLOR RTAYLOR@BETHLEHEM-PA.GOV 610-428-8021
COMPANY:	SERVICE ELECTRIC CABLE TV INC
ADDRESS:	2260 AVENUE A LVP BETHLEHEM, PA 18017
CONTACT:	RICH PERICH RPERICH@SECTV.COM 610-625-5850
COMPANY:	UGI UTILITIES INC
ADDRESS:	2121 CITY LINE ROAD BETHLEHEM, PA 18017
CONTACT:	TIMOTHY STEWARD TSTEWARD@UGI.COM 610-807-7316



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PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS
NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING
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PA1System Inc. SERIAL # 20233132087

REVISIONS			
REV. NO.	DATE	DESCRIPTION	BY
1	11/08/24	PER NCCD AND CITY COMMENTS	LME
2	01/16/24	PER CITY COMMENTS	LME

GRAPHIC SCALE:

BEACON ROCK REALTY,
LLC

3600 GLOVER ROAD
EASTON, PA 18040

LVP1 VII LOTS 53 & 54

CITY OF BETHLEHEM, NORTHAMPTON COUNTY
PENNSYLVANIA

reuther+bowen
Engineering, Design, Construction Services

2980 LINDEN ST., UNIT C2 BETHLEHEM, PA 18017
PHONE (484)403-1560 FAX (670)496-7021

SEAL:

GENERAL NOTES & LEGEND

DATE ISSUED: 05/31/2024	DRAWN BY: JT	DWG. NO.
SCALE: AS SHOWN	REVIEWED BY: LME	
PROJECT NO: 6637.23	CHECKED BY: MB	

C0.2

GENERAL DEMOLITION AND EARTHWORK NOTES:

- 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.
- THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS AND OTHER FEDERAL, STATE, AND LOCAL REGULATIONS, TO ENSURE THE PUBLIC AND CONTRACTOR SAFETY.
- PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR/TO:
 - ENSURE COPIES OF ALL PERMITS AND APPROVALS ARE ON SITE FOR REVIEW.
 - 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 USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
 - THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO SITE DISTURBANCE.
 - PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED DURING DEMOLITION ACTIVITIES. THERE SHALL BE NO DISRUPTION TO EXISTING UTILITIES DURING CONSTRUCTION.
 - 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 THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
 - COORDINATE WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT OF THE AFFECTED PARTIES.
 - A COMPLETE INSPECTION FOR CONTAMINANTS, BY A LICENSED ENVIRONMENTAL TESTING AGENCY, OF ALL BUILDINGS AND/OR STRUCTURES TO BE REMOVED SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS. ALL CONTAMINANTS SHALL BE REMOVED AND DISPOSED OF BY A FEDERALLY LICENSED CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. ALL ENVIRONMENTAL WORK INCLUDING HAZARDOUS MATERIAL, SOILS, ASBESTOS, OR OTHER REFERENCED OR IMPLIED HEREIN IS SOLELY THE RESPONSIBILITY OF THE OWNER'S ENVIRONMENTAL CONSULTANT.
- 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.
- IN ABSENCE OF SPECIFIC SPECIFICATION, THE CONTRACTOR SHALL PERFORM EARTH-MOVING ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S ENGINEER.
- 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 AND ROADWAY RIGHT-OF-WAYS.
- CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AGENCY.
- 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 CLEANED 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 THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
- THE 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 METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL 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 REPAIR SHALL RESTORE THE ITEM TO 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 LAWS AND APPLICABLE CODES. CONTRACTOR SHALL PROPERLY REMOVE AND DISPOSE OF HAZARDOUS/UNSUITABLE MATERIAL OFFSITE 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.

LEGEND

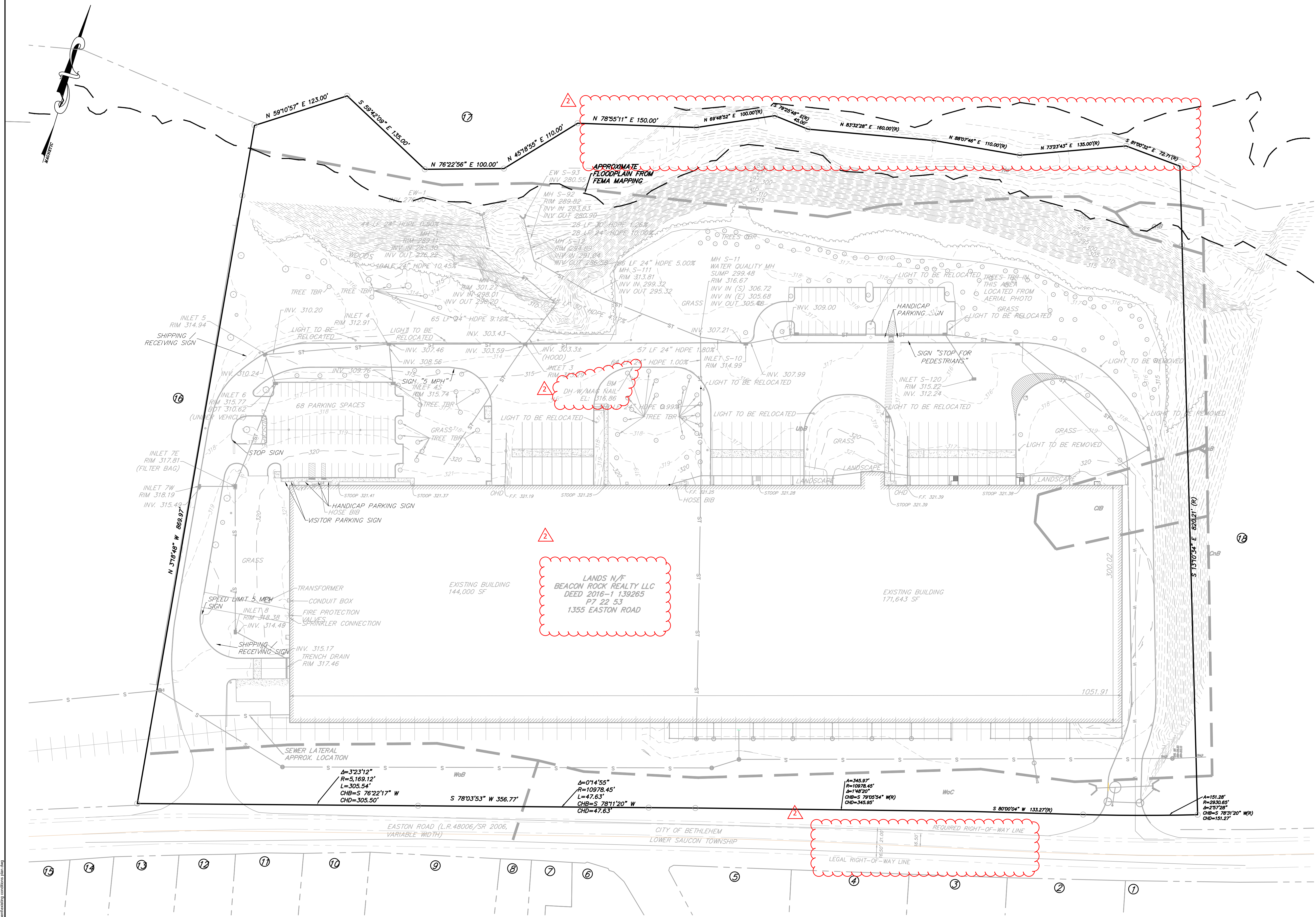
SITE PROPERTY LINE	
ADJACENT PROPERTY LINE	
EXISTING BUILDING	
EXISTING CONTOURS	
SOIL BOUNDARY & IDENTIFICATION	
EXISTING FIRE HYDRANT	
EXISTING SIGNS	
EXISTING TREELINE	
EXISTING STORM STRUCTURES & SEWER	
EXISTING SAN. MANHOLE & SEWER	
EXISTING GAS LINE	
EXISTING OVERHEAD ELECTRIC & POLE	
EXISTING UNDERGROUND ELECTRIC	
EXISTING WATER LINE	

SOIL DESCRIPTIONS:

CIB - CLARKSBURG SILT LOAM, 3 TO 8 PERCENT SLOPES, HYDROLOGIC SOIL GROUP C
CnB - COKEBURY SILT LOAM, 3 TO 8 PERCENT SLOPES, HYDROLOGIC SOIL GROUP D
Ho - HOLLY SILT LOAM, HYDROLOGIC SOIL GROUP B/D
U6B - UDORTHENTS, LIMESTONE, 0 TO 8 PERCENT SLOPES, HYDROLOGIC SOIL GROUP D
W6c - WASHINGTON SILT LOAM, 8 TO 15 PERCENT SLOPES, HYDROLOGIC SOIL GROUP B

RECEIVING WATERSHED AND CHAPTER 93 DESIGNATION

WATERSHED: EAST BRANCH SAUCON CREEK
DESIGNATION: COLD WATER FISHES - MIGRATORY FISH (CWF-MF)



REVISIONS				
REV. NO.	DATE	DESCRIPTION	BY	
1	11/08/24	PER NCCD AND CITY COMMENTS	LME	
2	01/16/24	PER CITY COMMENTS	LME	

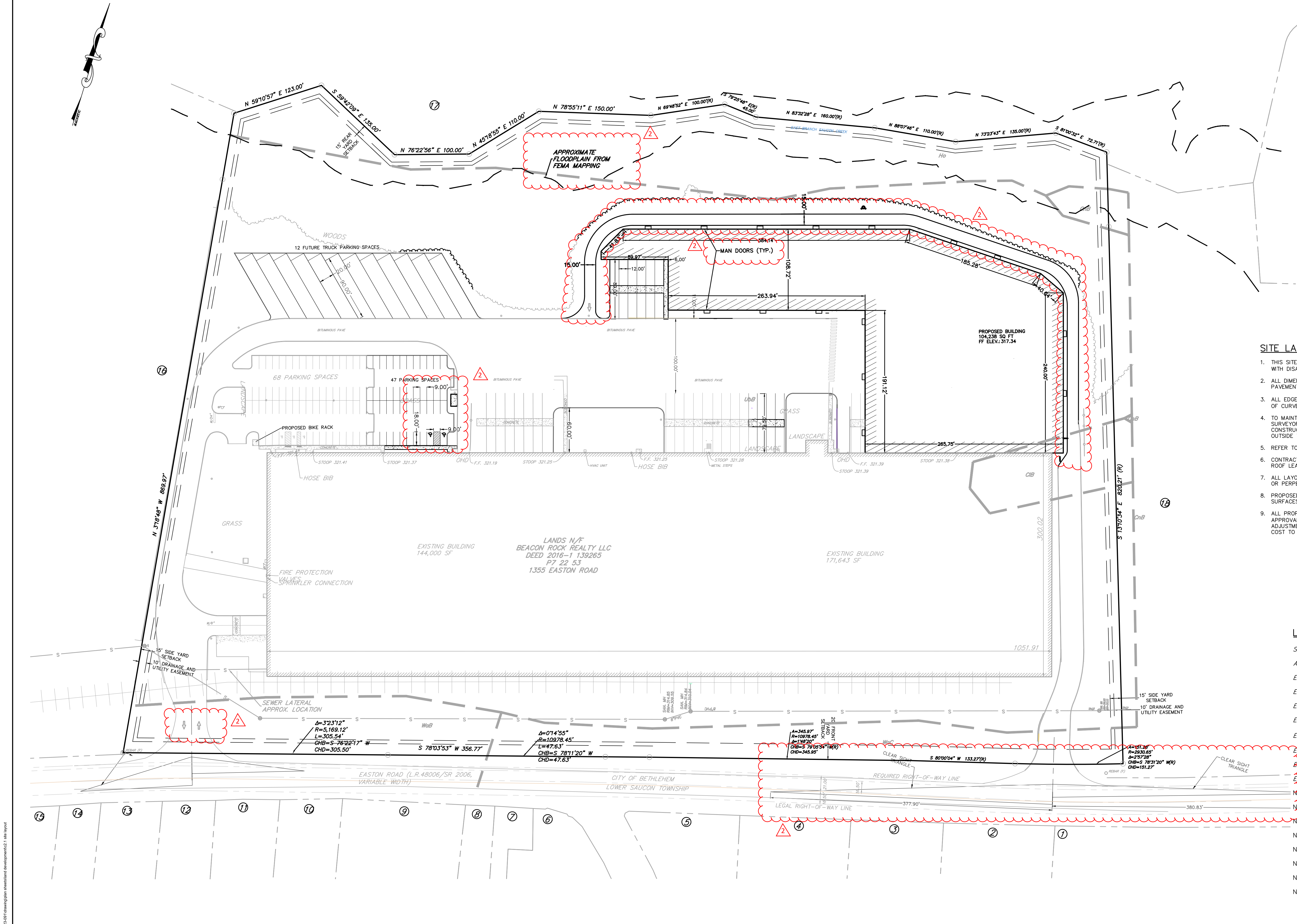
GRAPHIC SCALE: 1 IN = 60 FT 0' 60' 120' 180'	
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OWNER: BEACON ROCK REALTY, LLC 3600 GLOVER ROAD EASTON, PA 18040	PROJECT TITLE: LVIP VII LOTS 53 & 54 CITY OF BETHLEHEM, NORTHAMPTON COUNTY PENNSYLVANIA
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PREPARED BY: reuther+bowen Engineering, Design, Construction Services 2980 LINDEN ST., UNIT C2 PHONE (484)403-1560	BETHLEHEM, PA 18017 FAX (670)496-7021
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SEAL:	TITLE: EXISTING CONDITIONS PLAN
DATE ISSUED: 05/31/2024	DRAWN BY: JT
SCALE: AS SHOWN	REVIEWED BY: LME
PROJECT NO: 6637.23	CHECKED BY: MB

C1.1

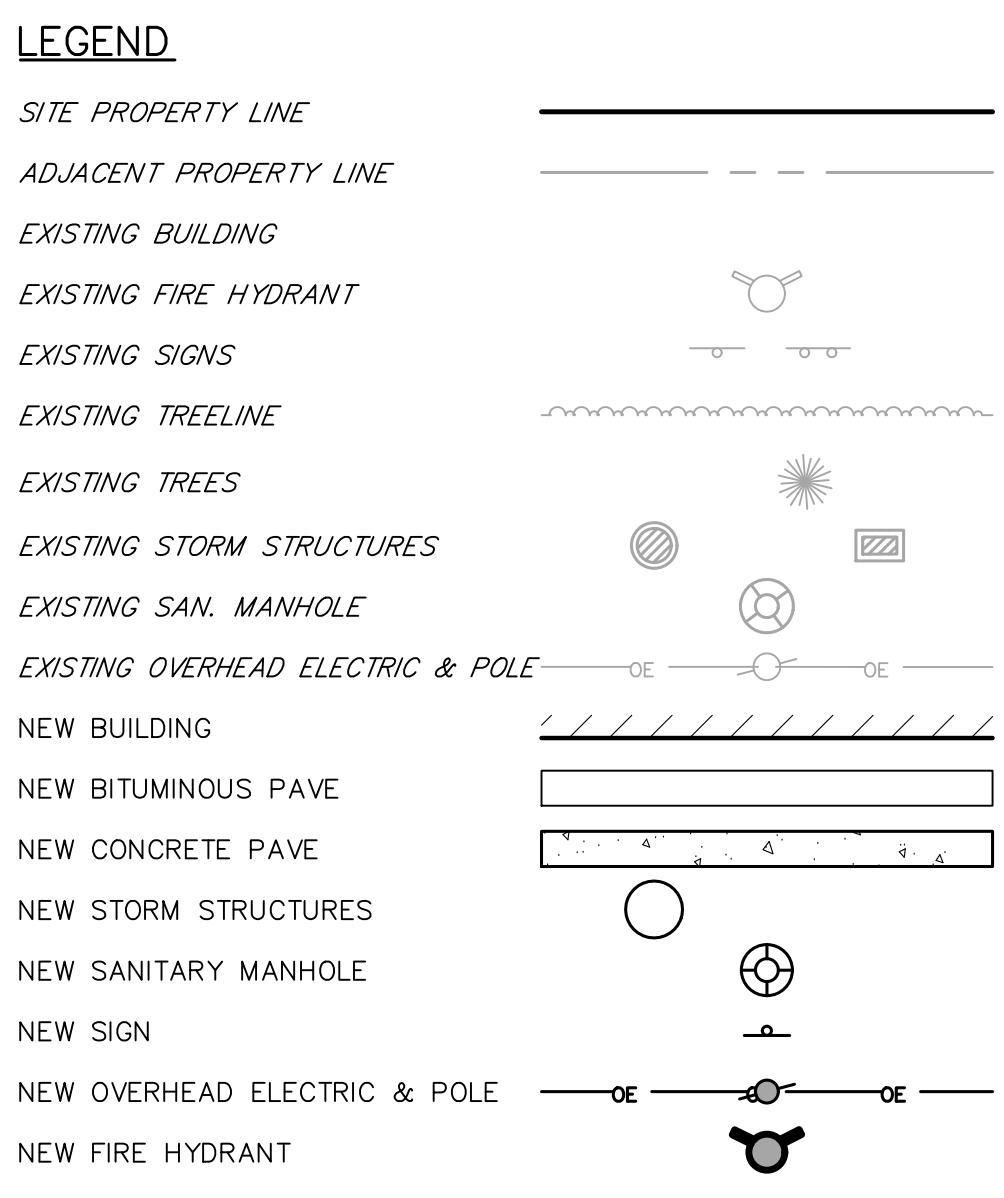
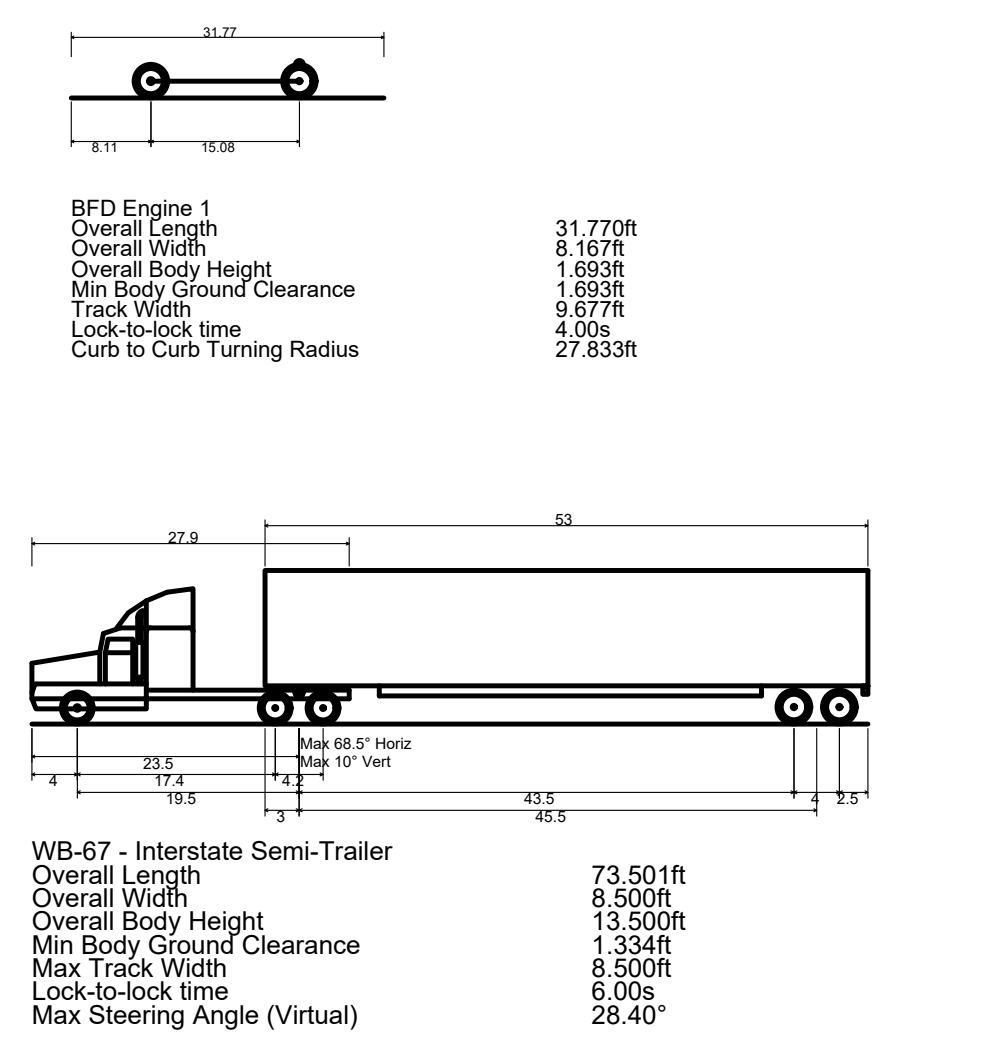
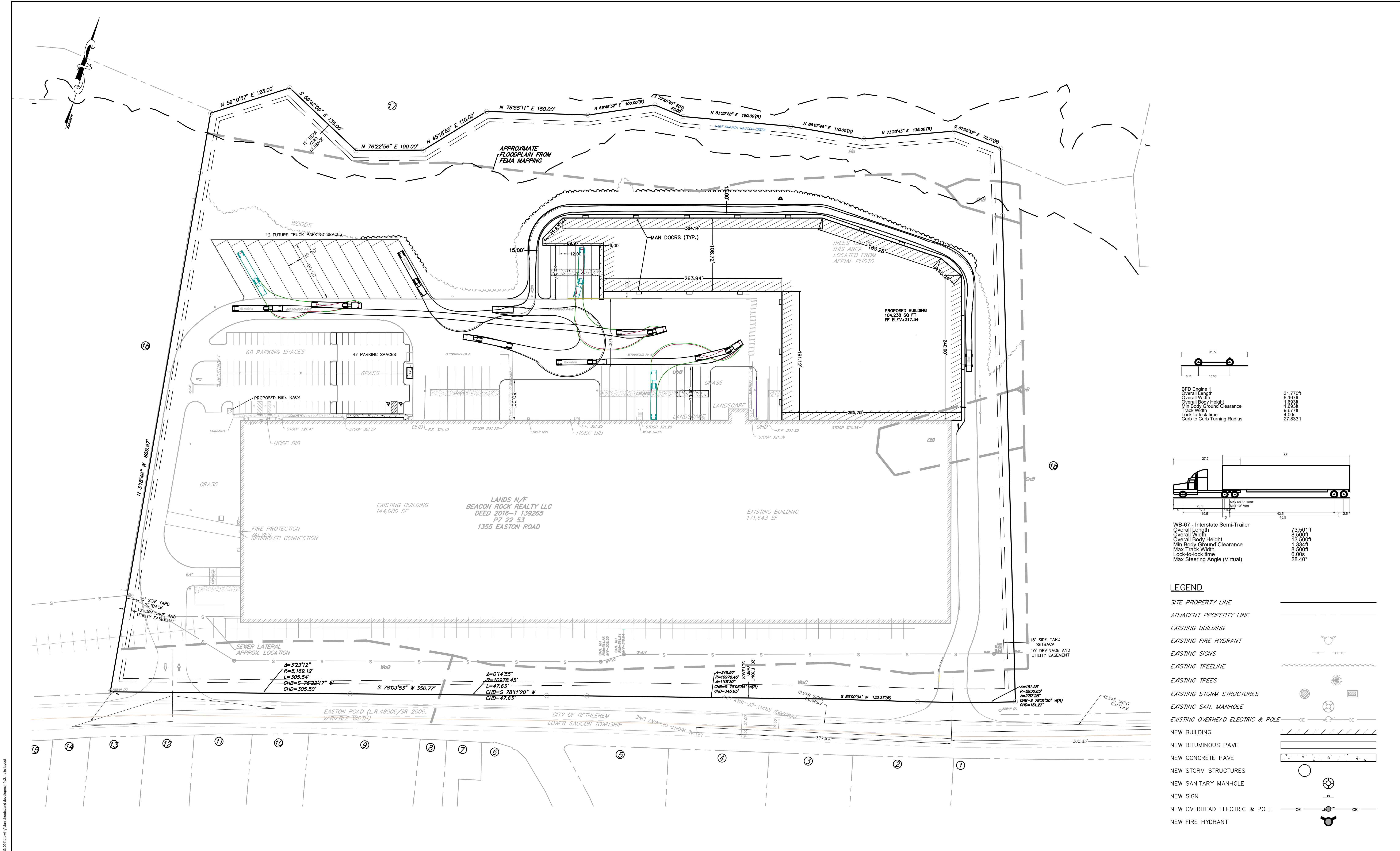


- SITE LAYOUT NOTES:**
- THIS SITE PLAN HAS BEEN DESIGNED TO COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDE (ADAAG) FOR BUILDING AND FACILITIES.
 - ALL DIMENSIONS ARE TO THE FACE OF BUILDING, FACE OF WALL, FACE OF CURB, EDGE OF PAVEMENT, CENTERLINE OF PAVEMENT.
 - ALL EDGES OF PAVEMENT ARE TO BE STRAIGHT (OR OF CONSISTENT RADIUS IN THE CASE OF CURVES) AS SHOWN HEREON; NO UNSPECIFIED TANGENTS OR KINKS WILL BE APPROVED.
 - TO MAINTAIN THE INTEGRITY OF HORIZONTAL AND VERTICAL CONTROL FOR THE SITE, THE SURVEYOR OR PROFESSIONAL ENGINEER EMPLOYED BY THE CONTRACTOR TO PERFORM CONSTRUCTION LAYOUT STAKING SHALL SET AND PROTECT ADDITIONAL TRAVERSE POINTS OUTSIDE THE AREAS OF CONSTRUCTION ACTIVITY.
 - REFER TO GRADING & DRAINAGE PLAN FOR ELEVATION AND VERTICAL LAYOUT DATA.
 - CONTRACTOR SHALL REFER TO BUILDING ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF ROOF LEADERS, CONCRETE SLABS, VESTIBULE, UTILITY LOCATIONS, ETC....
 - ALL LAYOUT LINES, OFFSETS OR REFERENCES TO LOCATING OBJECTS ARE EITHER PARALLEL OR PERPENDICULAR UNLESS OTHERWISE DESIGNATED WITH ANGLE OFFSETS.
 - PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVING SURFACES AND SHALL BE TREATED WITH TACK COAT AT POINT OF CONNECTION.
 - ALL PROPOSED SITE FEATURES SHALL BE LAID OUT AND STAKED FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. ANY REQUIRED ADJUSTMENTS TO THE LAYOUT SHALL BE UNDERTAKEN AS DIRECTED AT NO ADDITIONAL COST TO THE OWNER.

LEGEND

SITE PROPERTY LINE	—————
ADJACENT PROPERTY LINE	- - - - -
EXISTING BUILDING	
EXISTING FIRE HYDRANT	
EXISTING SIGNS	
EXISTING TREELINE	
EXISTING TREES	
EXISTING STORM STRUCTURES	
EXISTING SAN. MANHOLE	
EXISTING OVERHEAD ELECTRIC & POLE	
NEW BUILDING	
NEW BITUMINOUS PAVE	
NEW CONCRETE PAVE	
NEW STORM STRUCTURES	
NEW SANITARY MANHOLE	
NEW SIGN	
NEW OVERHEAD ELECTRIC & POLE	
NEW FIRE HYDRANT	

REVISIONS				GRAPHIC SCALE:	OWNER:	PROJECT TITLE:	PREPARED BY:	SEAL:	TITLE:		
REV. NO.	DATE	DESCRIPTION	BY						SITE LAYOUT PLAN		
1	11/08/24	PER NCCD AND CITY COMMENTS	LME		BEACON ROCK REALTY, LLC 3600 GLOVER ROAD EASTON, PA 18040	LVIP VII LOTS 53 & 54 CITY OF BETHLEHEM, NORTHAMPTON COUNTY PENNSYLVANIA	reuther+bowen Engineering, Design, Construction Services 2980 LINDEN ST., UNIT C2 PHONE (484)403-1560	BETHLEHEM, PA 18017 FAX (670)496-7021	DATE ISSUED:	DRAWN BY:	DWG. NO.
2	01/16/24	PER CITY COMMENTS	LME						05/31/2024	JT	C2.1
									SCALE:	REVIEWED BY:	
									AS SHOWN	LME	
									PROJECT NO:	CHECKED BY:	
									6637.23	MB	

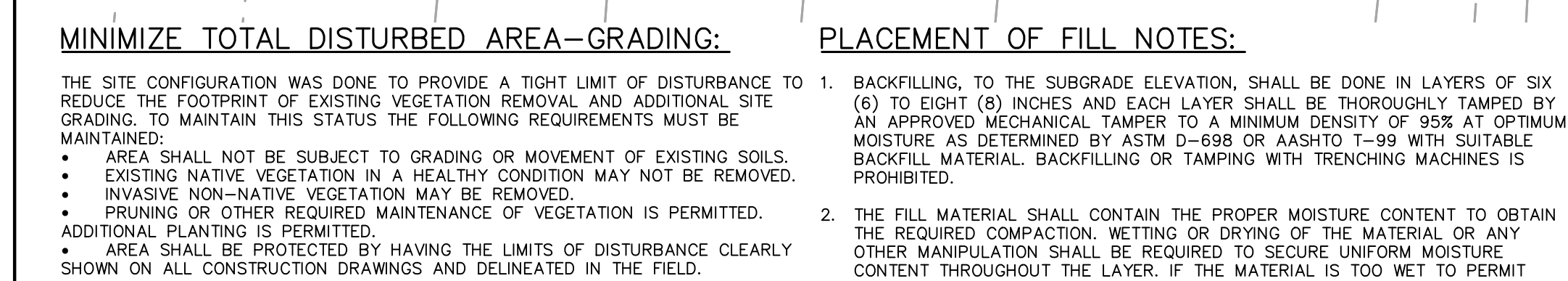


REVISIONS				BY	LME
REV. NO.	DATE	DESCRIPTION			
1	11/08/24	PER NCCD AND CITY COMMENTS			
2	01/16/24	PER CITY COMMENTS			

GRAPHIC SCALE: 1 IN = 60 FT 0' 60' 120' 180'	OWNER: BEACON ROCK REALTY, LLC 3600 GLOVER ROAD EASTON, PA 18040	PROJECT TITLE: LVIP VII LOTS 53 & 54 CITY OF BETHLEHEM, NORTHAMPTON COUNTY PENNSYLVANIA	PREPARED BY: reuther+bowen Engineering, Design, Construction Services 2980 LINDEN ST., UNIT C2 BETHLEHEM, PA 18017 PHONE (484)403-1560 FAX (670)496-7021	SEAL:
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TURNING TEMPLATE PLAN		
TITLE: DATE ISSUED: 05/31/2024 SCALE: AS SHOWN PROJECT NO: 6637.23	DRAWN BY: JT REVIEWED BY: LME CHECKED BY: MB	DWG. NO. C2.2

n:\h4\2024\0637.23 1355 eastern road warehouse 003\01\Drawings\plan sheet\plan sheet.dwg 1:180 layout



TOT
REC
WATER
DESIGN

GRADING NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF BETHLEHEM AND PENNDOT PUBLICATION 408, LATEST EDITION.
2. STORM SEWER PIPES SHALL ENTER THE SIDES OF THE INLET BOXES AND SHALL NOT ENROACH INTO BOX CORNERS. MODIFIED (EXPANDED) INLET BOXES SHALL BE USED WHERE NECESSARY.
3. THE MINIMUM SLOPE IN GRASSED AREAS SHALL NOT BE LESS THAN 2% AND THE MINIMUM IN PAVED AREAS SHOULD NOT BE LESS THAN 1%.
4. PAVEMENT SHALL BE SAWCUT 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.
5. 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.
6. THE CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS (INCLUDING PADEP, ETC.) FOR ALL OFFSITE HAIL AND/OR BORROW SITES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK.
7. EXISTING INLETS AND STORM SEWER SHOWN FILLED WITH DEBRIS SHALL BE CLEANED AND FLUSHED. NEW INLETS AND PIPES SHALL BE CHECKED FOR SILT/DEBRIS AFTER CONSTRUCTION AND FLUSHED/CLEANED IF NECESSARY.
8. ALL STORMWATER DRAINAGE FACILITIES AND CONSTRUCTION PROCEDURES SHALL CONFORM TO THE PENNDOT STANDARDS AND MANUFACTURER SPECIFICATIONS WHEN APPLICABLE.
9. DEPTHS OF EXISTING UTILITIES IN PORTIONS OF THE SITE ARE UNKNOWN. WHERE EXISTING UTILITIES ARE TO REMAIN AND ARE FOUND TO HAVE INADEQUATE COVER AFTER FINAL PROTECTION GRADE HAS BEEN ESTABLISHED, THE DESIGN ENGINEER SHALL BE CONTACTED IMMEDIATELY AND PRIOR TO FURTHER CONSTRUCTION ACTIVITIES IN THE AREA OF SAID CONFLICT.
10. ALL DESIGNERS AND CONTRACTORS UTILIZING THIS PLAN AND THE INFORMATION CONTAINED THEREON ARE CAUTIONED TO COMPLY WITH THE REQUIREMENTS OF PENNSYLVANIA ACT 287. LOCATIONS 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. UTILITY HAND EXCAVATION AS REQUIRED. WORK IS ALSO TO BE DONE IN ACCORDANCE WITH THE UTILITY COMPANIES WHOSE FACILITIES ARE IN THE PROXIMITY OF THE WORK. OTHER UTILITIES MAY BE REQUIREMENTS OF PENNSYLVANIA ACT 38 (1991). THE CONTRACTOR SHALL CONTRACT THE PENNSYLVANIA ONE CALL SYSTEM AT 1-800-242-1776, AT LEAST 3 DAYS PRIOR TO EXCAVATION.
11. CONTRACTORS SHALL HAVE ALL REQUIRED SUBMITTAL APPROVALS PRIOR TO BEGINNING WORK OR ORDERING MATERIALS.
12. CONTRACTORS SHALL VERIFY ALL DIMENSIONS, INVERTS, ELEVATIONS, AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH THE WORK. VARIATIONS BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY, PROCEDURES, MEANS AND METHODS, SEQUENCING, AND COORDINATION.
14. ALL WORK SHALL BE PERFORMED BY QUALIFIED, EXPERIENCED PERSONNEL.
15. CONTRACTOR SHALL NOTIFY THE OWNER OF PREEXISTING CONDITIONS OF DETERIORATION IN AREAS OF WORK THAT ARE UNCOVERED OR EXPOSED DURING THE WORK.
16. FIELD CHANGES REQUIRE PRIOR ENGINEERING REVIEW AND WRITTEN CONFIRMATION.
17. CONTRACTOR SHALL PROVIDE LAYOUT, LINE AND GRADE UNLESS OTHERWISE NOTED.
18. CONTRACTOR SHALL PROVIDE TEMPORARY Dewatering OF EXCAVATIONS THROUGHOUT THE DURATION OF CONTRACT AT NO ADDITIONS COST.
19. REMOVE AREAS OF FINISHED SUBGRADE FOUND TO HAVE INSUFFICIENT COMPACTION DENSITY TO DEPTH NECESSARY AND REPLACE IN A MANNER THAT WILL COMPLY WITH COMPACTION REQUIREMENTS BY USE OF MATERIAL EQUAL TO OR BETTER THEN BEST SUBGRADE MATERIAL ONSITE. SURFACE OF SUBGRADE AFTER COMPACTION ON SHALL BE HARD, UNIFORM, SMOOTH, STABLE, AND TRUE TO GRADE AND CROSS SECTION.
20. CONTRACTOR TO PROTECT SUBGRADE FROM EXCESSIVE WHEEL LOADING DURING CONSTRUCTION, INCLUDING DUMP TRUCKS AND CONCRETE TRUCKS.
21. REFER TO THE SITE LAYOUT/RECORD PLAN FOR ADDITIONAL NOTES.

SITE PROPERTY LINE

ADJACENT PROPERTY LINE

EXISTING BUILDING

EXISTING CONTOURS

SOIL BOUNDARY & IDENTIFICATION

EXISTING FIRE HYDRANT

EXISTING SIGNS

EXISTING TREELINE

EXISTING TREES

EXISTING STORM STRUCTURES & SEWER

EXISTING SAN. MANHOLE & SEWER

EXISTING GAS LINE

EXISTING OVERHEAD ELECTRIC & POLE

EXISTING UNDERGROUND ELECTRIC

EXISTING WATER LINE

LIMIT OF DISBURSANCE

NEW BUILDING

NEW CONTOURS

NEW STORM STRUCTURES & SEWER

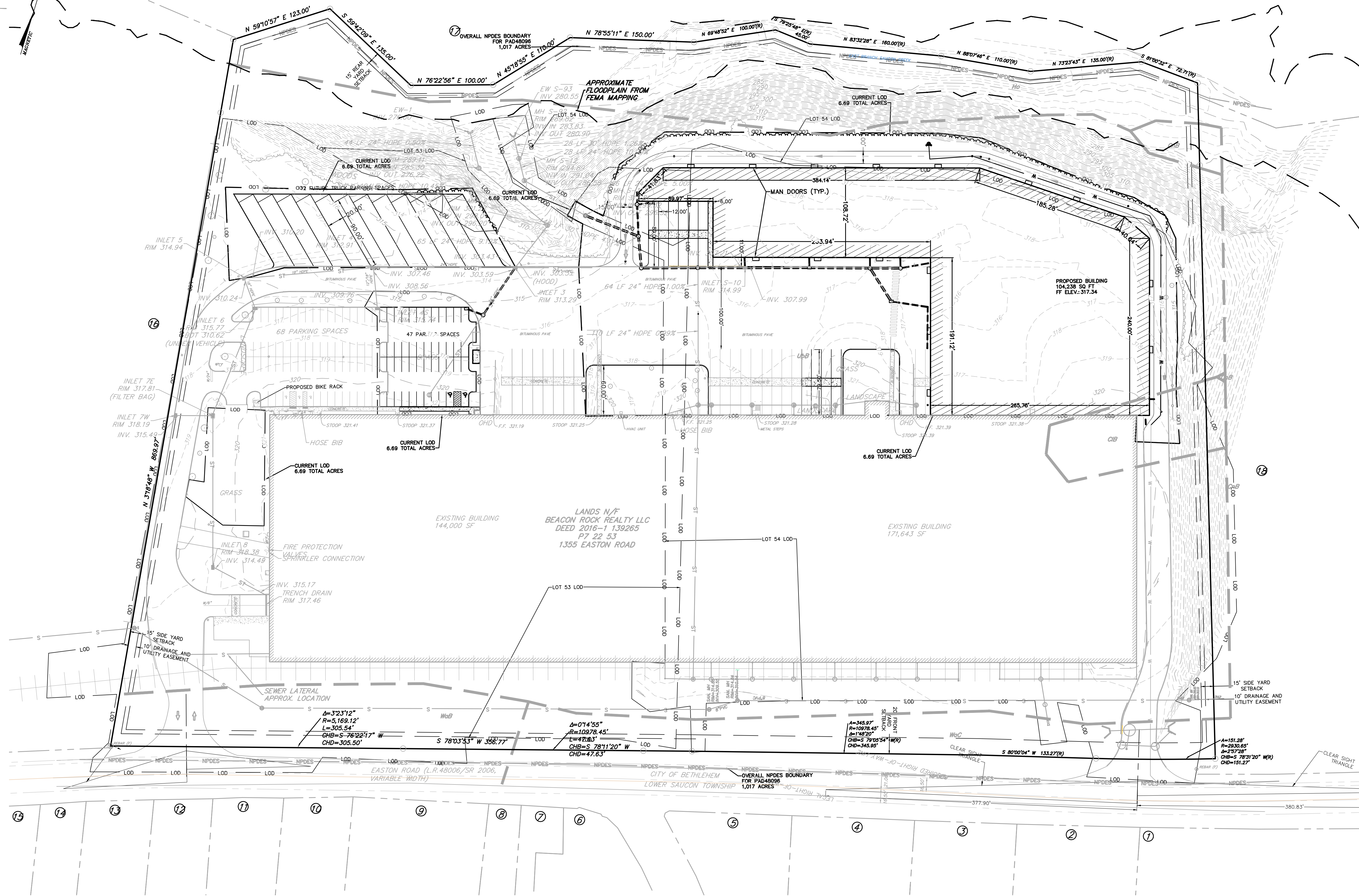
NEW SANITARY MANHOLE & SEWER

NEW GAS LINE

NEW OVERHEAD ELECTRIC & POLE

NEW UNDERGROUND ELECTRIC

NEW WATER LINE & FIRE HYDRANT



TOTAL DISTURBED AREA = 6.69 ACRES

TOTAL NPDES BOUNDARY = 1017 ACRES

RECEIVING WATERSHED AND CHAPTER 93 DESIGNATION

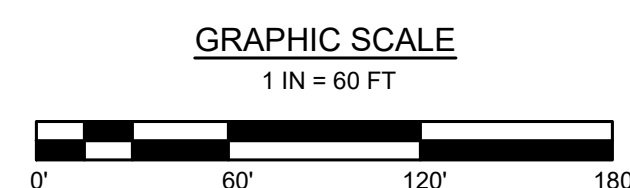
WATERSHED: EAST BRANCH SAUCON CREEK
DESIGNATION: COLD WATER FISHES - MIGRATORY FISH (CWF-MF)

THE PURPOSE OF THIS PLAN IS TO SHOW THE RELATIONSHIP OF
PREVIOUS LOD ON THE SITE AND THE CURRENT LOD.

LEGEND

- SITE PROPERTY LINE
 ADJACENT PROPERTY LINE
 EXISTING BUILDING
 EXISTING CONTOURS
 SOIL BOUNDARY & IDENTIFICATION
 EXISTING FIRE HYDRANT
 EXISTING SIGNS
 EXISTING TREELINE
 EXISTING TREES
 EXISTING STORM STRUCTURE'S & SEWER
 EXISTING SAN. MANHOLE & SEWER
 EXISTING GAS LINE
 EXISTING OVERHEAD ELECTRIC & POLE
 EXISTING UNDERGROUND ELECTRIC
 EXISTING WATER LINE
 LIMIT OF DISTURBANCE
 NEW BUILDING
 NEW CONTOURS
 NEW STORM STRUCTURES & SEWER
 NEW SANITARY MANHOLE & SEWER
 NEW GAS LINE
 NEW OVERHEAD ELECTRIC & POLE
 NEW UNDERGROUND ELECTRIC
 NEW WATER LINE & FIRE HYDRANT

REVISIONS			
REV. NO.	DATE	DESCRIPTION	BY
1	11/08/24	PER NCCD AND CITY COMMENTS	LME
2	01/16/24	PER CITY COMMENTS	LME



OWNER:

BEACON ROCK REALTY,
LLC

3600 GLOVER ROAD
EASTON, PA 18040

LVIP VII LOTS 53 & 54
CITY OF BETHLEHEM, NORTHAMPTON COUNTY
PENNSYLVANIA

PREPARED BY:

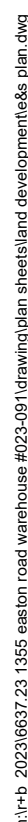
reuther+bowen
Engineering, Design, Construction Services

2980 LINDEN ST., UNIT C2 BETHLEHEM, PA 18017
PHONE (484)403-1560 FAX (570)496-7021

PCSM BOUNDARIES

DATE ISSUED: 05/31/2024	DRAWN BY: JT	DWG. NO.
SCALE: AS SHOWN	REVIEWED BY: LME	
PROJECT NO: 6637.23	CHECKED BY: MB	

C3.2



1. WATER SERVICE WILL BE FROM THE EXISTING BUILDING.
2. ALL WORK RELATING TO THE INSTALLATION OF THE WATER SERVICE LINES SHALL BE PERFORMED IN ACCORDANCE WITH THE UTILITY COMPANY'S CURRENT STANDARD SPECIFICATIONS AND REQUIREMENTS FOR THE CONSTRUCTION OF WATER MAINS AND APPURTENANCES.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER PRIOR TO ORDERING MATERIALS FOR THE PROJECT.
4. THRUST BLOCKING SHALL BE UTILIZED AT ANY CHANGE OF DIRECTION (HORIZONTAL OR VERTICAL), INCLUDING ALL WYES/TEES FOR LATERAL PIPING.
5. THE CONTRACTOR SHALL PRESSURE TEST ALL WATER MAINS AND APPURTENANCES IN ACCORDANCE WITH AWWA STANDARDS (LATEST EDITION).
6. THE CONTRACTOR SHALL DISINFECT AND FLUSH ALL WATER MAINS AND APPURTENANCES IN ACCORDANCE WITH AWWA STANDARDS (LATEST EDITION).
7. ALL MATERIALS AND CONSTRUCTION PRACTICES FOR THE INSTALLATION OF WATER MAINS AND APPURTENANCES SHALL CONFORM TO THE MOST RECENT AWWA STANDARDS AND PADEP PUBLIC WATER SUPPLY STANDARDS.
8. ALL WATER MAINS AND SERVICE LATERALS SHALL HAVE A MINIMUM OF 4 FEET OF COVER.
9. ALL NEW FIRE HYDRANTS SHALL MEET THE SPECIAL THREAD DIMENSIONS AS REQUIRED BY THE LOCAL FIRE DEPARTMENT AND APPROVED BY THE FIRE CHIEF.
10. PLASTIC SHEETS SHALL BE PLACED BETWEEN CONCRETE AND PIPE/FITTINGS FOR THRUST BLOCKS, VALVES AND HYDRANT ENCASEMENTS.

1. SANITARY SEWER SERVICE WILL BE FROM THE EXISTING BUILDING.
2. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS OF CITY OF BETHLEHEM.
3. FIRST CLASS BEDDING SHALL BE USED IN ALL PIPE INSTALLATIONS UNLESS NOTED OTHERWISE.
4. CONTRACTOR SHALL FURNISH, INSTALL AND TEST ALL MATERIALS IN ACCORDANCE WITH CITY OF BETHLEHEM STANDARD SPECIFICATIONS AND SHALL SUBMIT SHOP DRAWINGS AND TESTING SPECIFICATIONS TO THE CITY OF BETHLEHEM FOR APPROVAL PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER PRIOR TO ORDERING MATERIALS FOR THE PROJECT.
6. ALL GRAVITY SEWER MAINS SHALL BE PVC, SD 35, PRESSURE MAINS SHALL BE PVC, SD 21 OR HDPE, DR-17 IN ACCORDANCE WITH CITY OF BETHLEHEM SPECIFICATIONS.
7. ALL SANITARY SEWER LATERALS SHALL BE 6" PVC WITH 2% MINIMUM SLOPE FROM BUILDING. INSTALL CLEANOUTS AND TEST IN ACCORDANCE WITH THE SENIOR AUTHORITY'S SPECIFICATIONS.
8. PIPE SHALL BE LAID TO A UNIFORM LINE AND GRADE BETWEEN MANHOLES OR CLEANOUTS, SOCKET ENDS UPGRADE, WITH A FIRM AND EVEN BEARING ALONG THE BARREL OF THE PIPE. THE INTERIOR OF EACH PIPE SHALL BE CLEANED OF ALL EXCESS JOINT AND FOREIGN MATERIAL PRIOR TO THE NEXT LAY. THE PIPE SHALL BE LAID IN THE BEDDING MATERIAL AS SPECIFIED. PIPE-LAYING SHALL COMMENCE AT THE LOWEST POINT AND PROCEED UPGRADE. AT THE CLOSE OF EACH DAY'S WORK AND AT TIMES WHEN THE PIPE IS NOT BEING INSTALLED, THE OPEN END OF THE PIPE SHALL BE PROTECTED WITH A FITTING STOPPER/PLUG.
9. PIPE BEDDING SHALL BE PLACED IN LAYERS NOT EXCEEDING SIX INCHES, AND COMPACTED TO 95% PROCTOR. BACK FILLING ACTIVITIES SHALL NOT DISTURB OR DAMAGE ANY WORK.
10. THE CONTRACTOR SHALL TEST EACH SECTION OF SEWER BETWEEN MANHOLES AND ALL LATERALS TO THE LIMIT OF THIS CONTRACT USING LOW PRESSURE AIR AND MANDREL TESTING TO THE AUTHORITY'S STANDARD SPECIFICATIONS. TESTING SHALL NOT BE PERFORMED UNTIL ALL BACK FILLING HAS BEEN COMPLETED. THE CONTRACTOR MAY AT HIS OPTION TEST A SECTION OF SEWER PRIOR TO BACKFILLING FOR HIS OWN PURPOSES, HOWEVER THE REQUIREMENTS OF THE TESTING SHALL NOT BE DEEMED TO BE COMPLETED UNTIL THE LINES HAVE BEEN TESTED AFTER THE BACK FILLING HAS BEEN COMPLETED AND TRENCH SETTLEMENT HAS BEEN STABILIZED. THE COSTS OF ANY TESTING INCURRED PRIOR TO AUTHORIZATION FROM THE ENGINEER AFTER BACK FILLING HAS BEEN COMPLETE SHALL BE BORNE BY THE CONTRACTOR.
11. A CLEANOOUT SHALL BE INSTALLED AT ALL CHANGES IN DIRECTION OF ANY GRAVITY SEWER/LATERAL LINE.
12. ALL MATERIALS AND TESTING SHALL BE IN ACCORDANCE WITH CITY OF BETHLEHEM REQUIREMENTS AND THE PA WASTEWATER FACILITIES MANUAL.

SITE PROPERTY LINE

ADJACENT PROPERTY LINE

EXISTING BUILDING

EXISTING CONTOURS

SOIL BOUNDARY & IDENTIFICATION

EXISTING FIRE HYDRANT

EXISTING SIGNS

EXISTING TREELINE

EXISTING TREES

EXISTING STORM STRUCTURES & SEWER

EXISTING SAN. MANHOLE & SEWER

EXISTING GAS LINE

EXISTING OVERHEAD ELECTRIC & POLE

EXISTING UNDERGROUND ELECTRIC

EXISTING WATER LINE

LIMIT OF DISTURBANCE

NEW BUILDING

NEW CONTOURS

NEW STORM STRUCTURES & SEWER

NEW SANITARY MANHOLE & SEWER

NEW GAS LINE

NEW OVERHEAD ELECTRIC & POLE

NEW UNDERGROUND ELECTRIC

NEW WATER LINE & FIRE HYDRANT

GRAPHIC SCALE:

GRAPHIC SCALE
1 IN = 60 FT

A horizontal scale bar with alternating black and white segments. Below the bar, tick marks indicate distances of 0', 60', 120', and 180'.

PROJECT TITLE:

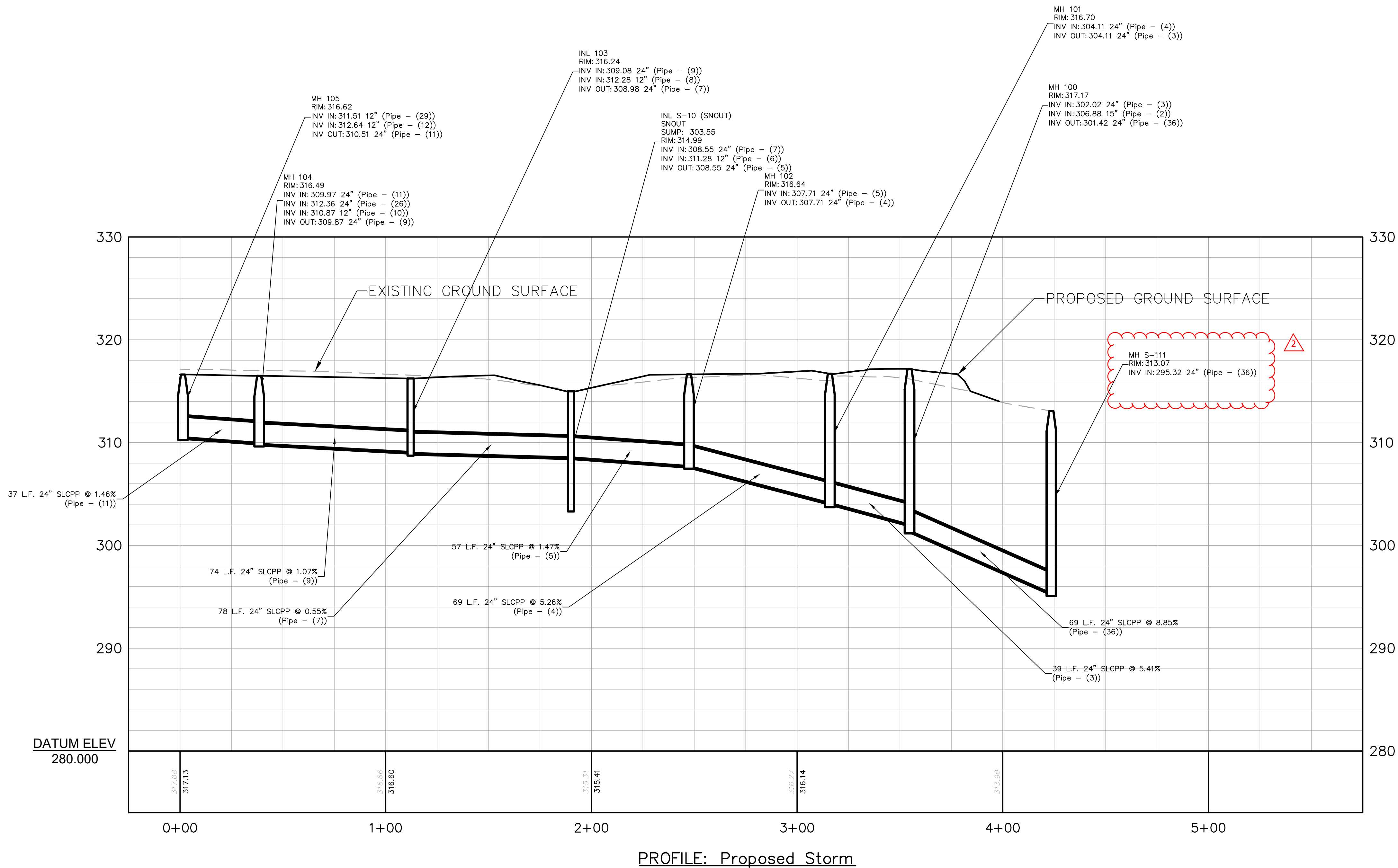
LVIP VII LOTS 53 & 54

CITY OF BETHLEHEM, NORTHAMPTON COUNTY

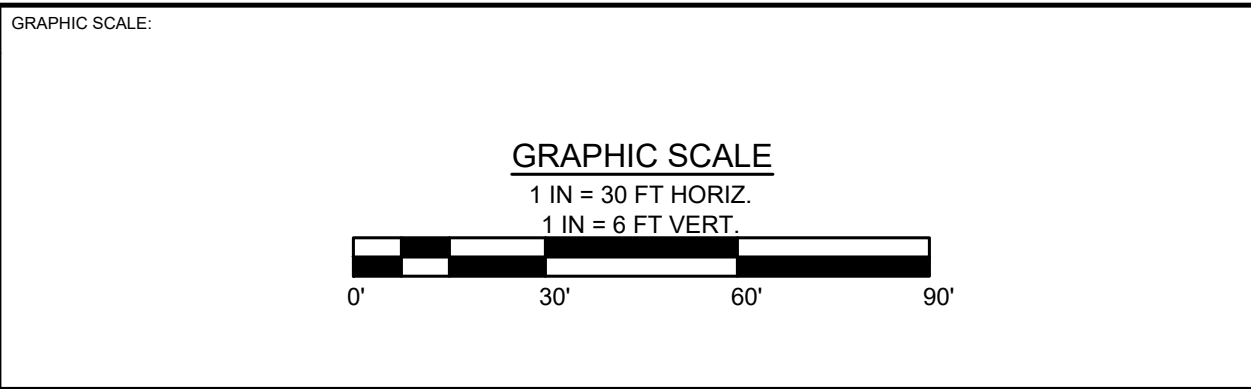
PENNSYLVANIA

SEAL:	TITLE: UTILITY PLAN		
	DATE ISSUED: 05/31/2024	DRAWN BY: JT	DWG. NO. C5.1
	SCALE: AS SHOWN	REVIEWED BY: LME	
	PROJECT NO: 6637.23	CHECKED BY: MB	

n:\4\2024\0817.23 135 eastern road warehouse 603.031\dwg\gds sheet\std development\std 1 road profile.dwg



REVISIONS			
REV. NO.	DATE	DESCRIPTION	BY
1	11/08/24	PER NCCD AND CITY COMMENTS	LME
2	01/16/24	PER CITY COMMENTS	LME



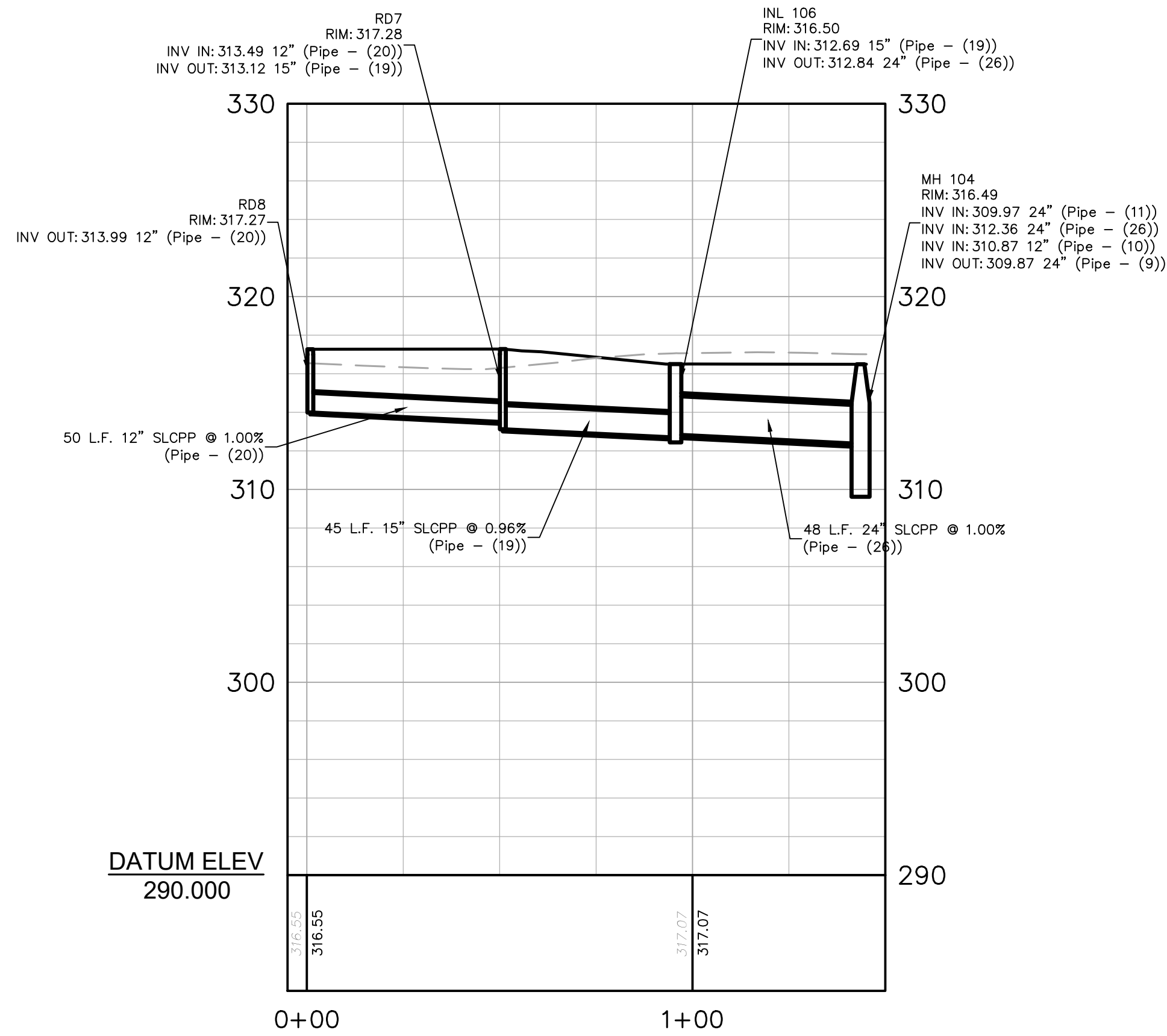
OWNER:
BEACON ROCK REALTY, LLC
3600 GLOVER ROAD
EASTON, PA 18040

PROJECT TITLE:
LVIP VII LOTS 53 & 54
CITY OF BETHLEHEM, NORTHAMPTON COUNTY
PENNSYLVANIA

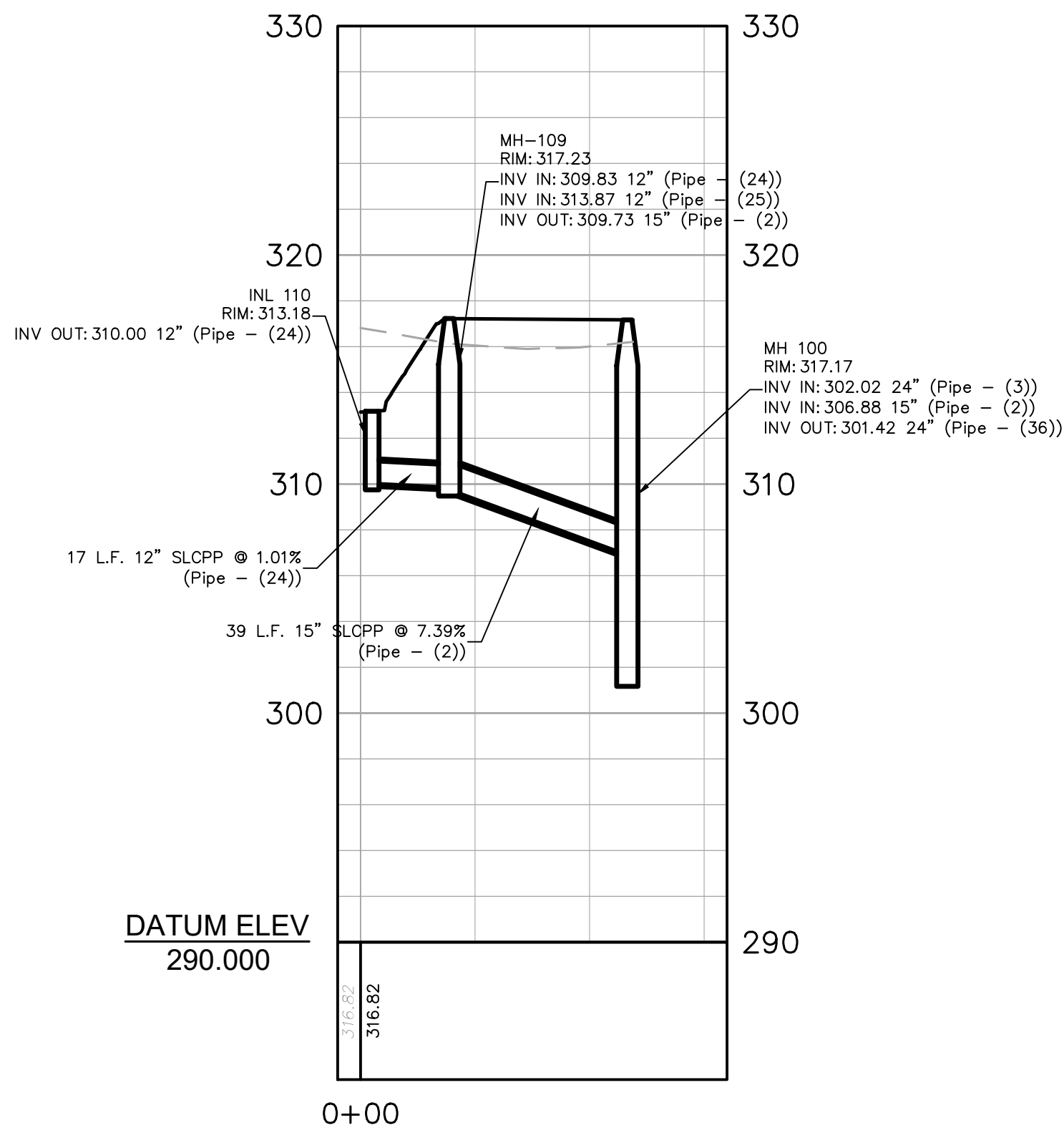
PREPARED BY:
reuther+bowen
Engineering, Design, Construction Services
2980 LINDEN ST., UNIT C2 BETHLEHEM, PA 18017
PHONE (484)403-1560 FAX (670)496-7021

SEAL:

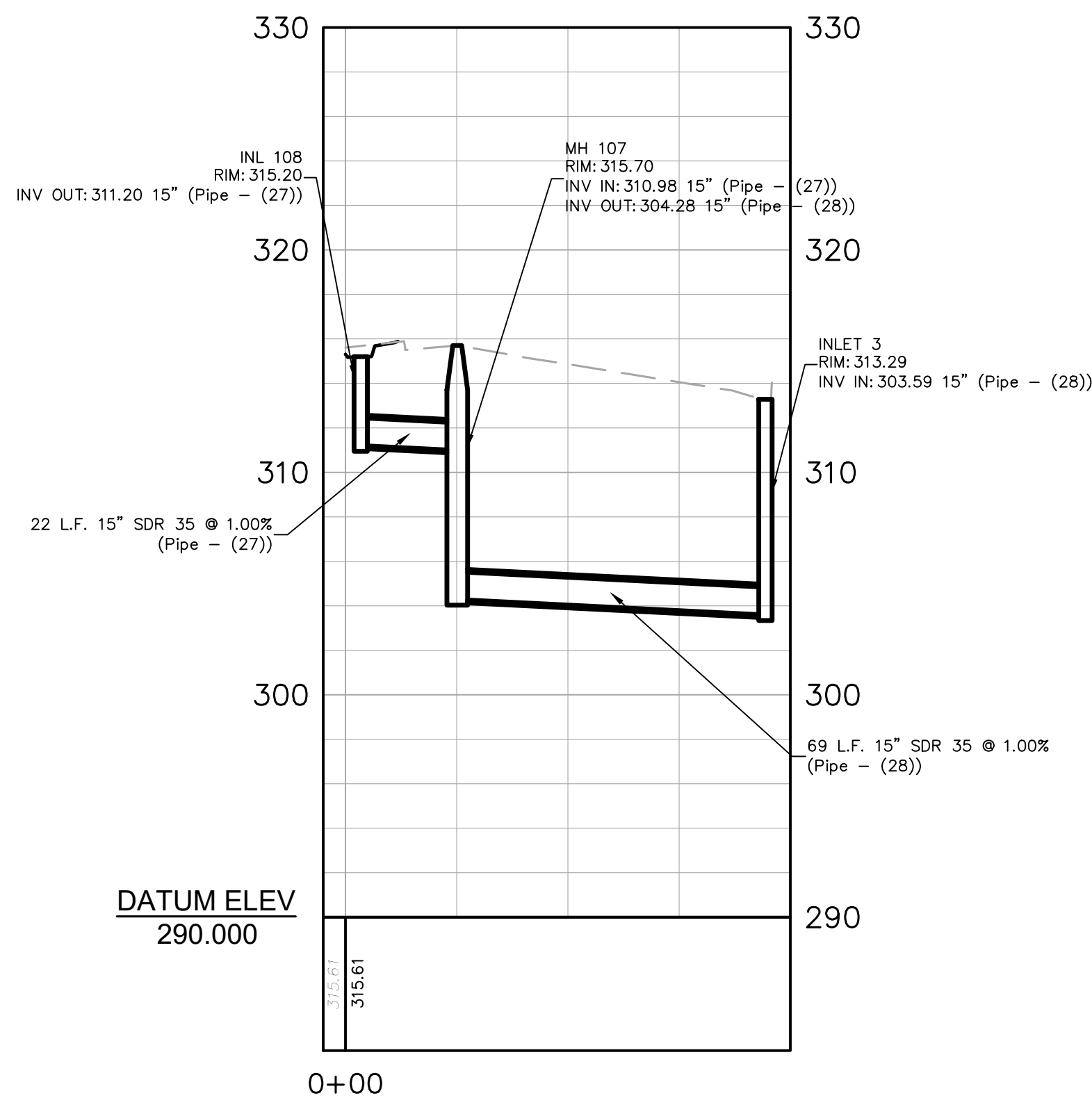
PROFILES		
DATE ISSUED: 05/31/2024	DRAWN BY: JT	C6.1
SCALE: AS SHOWN	REVIEWED BY: LME	
PROJECT NO: 6637.23	CHECKED BY: MB	



PROFILE: RD8 to MH 104

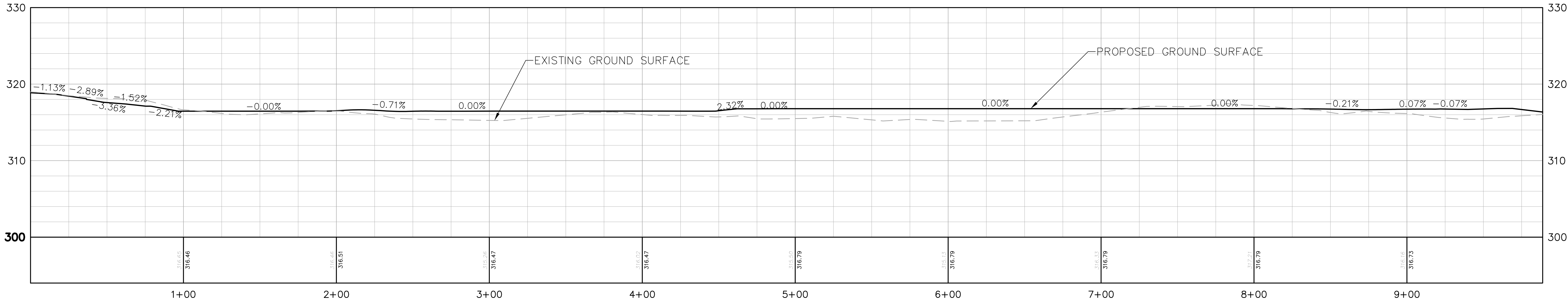


PROFILE: Inlet 110 to MH 100



PROFILE: Inlet 108 to Inlet 3

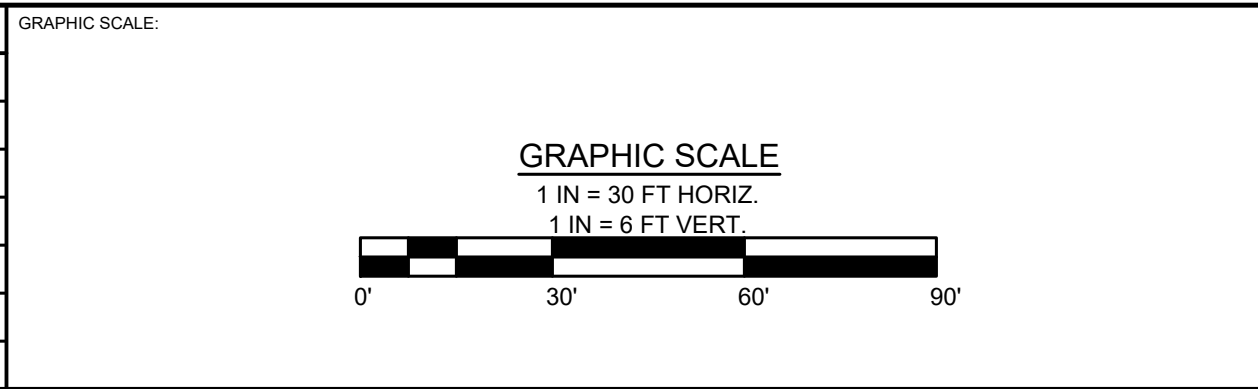
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PROFILE: FIRE LANE

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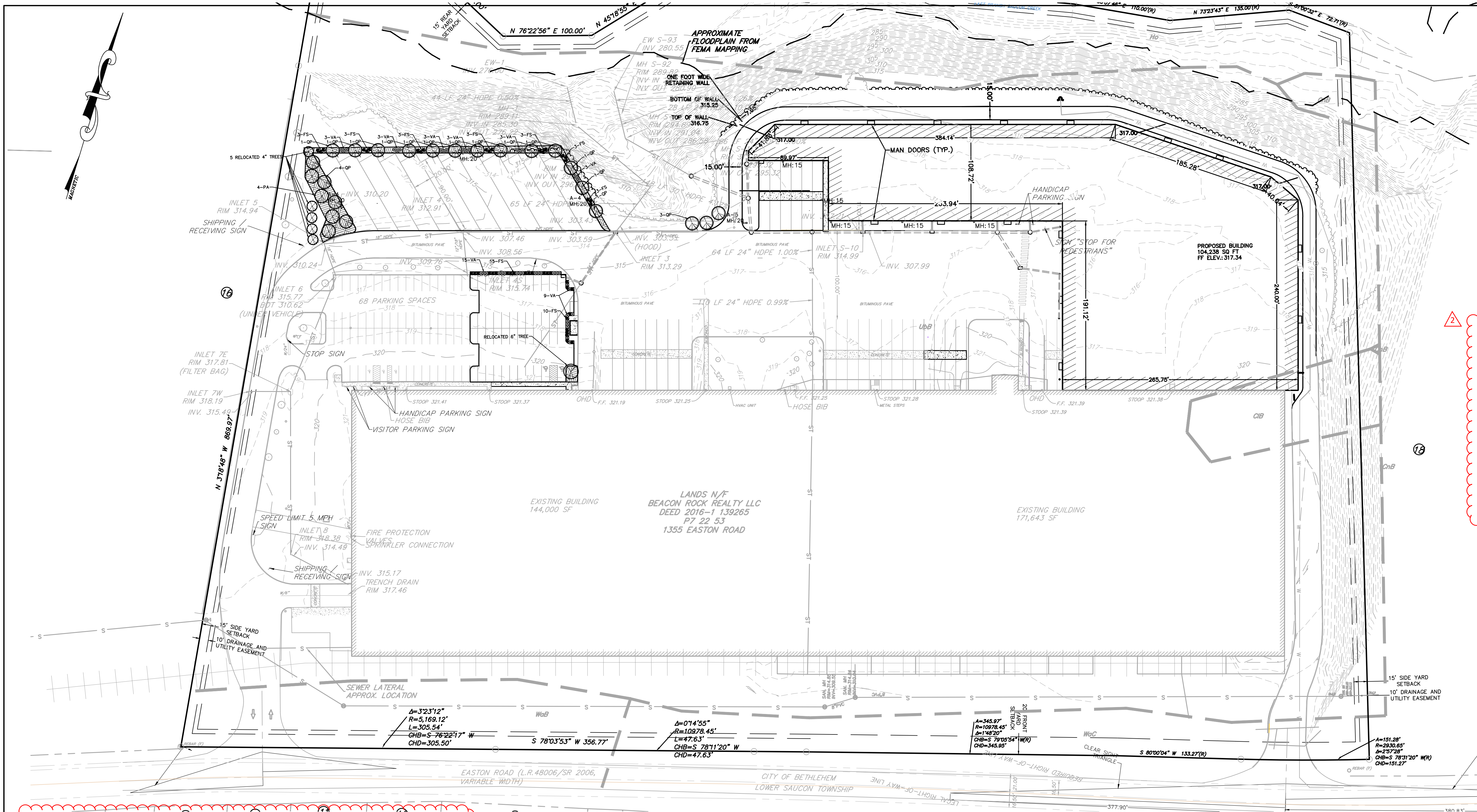
REVISIONS			
REV. NO.	DATE	DESCRIPTION	BY
1	11/08/24	PER NCCD AND CITY COMMENTS	LME
2	01/16/24	PER CITY COMMENTS	LME



OWNER: BEACON ROCK REALTY, LLC 3600 GLOVER ROAD EASTON, PA 18040	PROJECT TITLE: LVIP VII LOTS 53 & 54 CITY OF BETHLEHEM, NORTHAMPTON COUNTY PENNSYLVANIA
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PREPARED BY: reuther+bowen Engineering, Design, Construction Services 2980 LINDEN ST., UNIT C2 PHONE (484)403-1560	BETHLEHEM, PA 18017 FAX (610)496-7021
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SEAL:	TITLE: PROFILES		
	DATE ISSUED: 05/31/2024	DRAWN BY: JT	DWG. NO. C6.2
	SCALE: AS SHOWN	REVIEWED BY: LME	
	PROJECT NO: 6637.23	CHECKED BY: MB	



PLANTING NOTES:

1. PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED INCLUDING ALL LABOR, MATERIALS, PLANTS EQUIPMENT, INCIDENTALS AND CLEAN UP.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT.
3. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, BE DENSELY FOLIATED, HAVE VIGOROUS ROOT SYSTEMS AND BE FREE FROM DEFECTS AND INJURIES.
4. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF THE PLANT MATERIAL.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISIONS SHALL BE MADE FOR A GUARANTEE OF AT LEAST ONE (1) YEAR FOR TREES AND A SHRUBS. REPLACEMENT SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
6. INsofar as it is PRACTICABLE, PLANT MATERIALS SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE (3) DAY PERIOD AFTER DELIVERY.
7. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE 1990 "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN INC., OR LATEST EDITION.
8. ALL PLANTS SHALL BE PLANTED IN TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACKFILLING PROGRESSES. NOTHING BUT SUITABLE TOPSOIL, FREE OF DRY SOD, STIFF CLAY, LITTER, ETC., SHALL BE USED FOR PLANTING.
9. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE.
10. SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH A LEVEL THAT AFTER SETTLEMENT, A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PLANTING PIT.
11. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF THE PLANT. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
12. LANDSCAPING CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO PLACEMENT OF LANDSCAPING MATERIAL. CONTRACTOR SHALL NOT PLACE LANDSCAPING MATERIAL ON TOP OF CITY PIPING.
13. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND.
14. DISTURBANCE IS ALLOWED IN THE TREE PROTECTION ZONE UNLESS INDICATED ON THE PLAN.
15. BARRICADES MUST BE INSTALLED PRIOR TO ANY DESTRUCTION AND/OR CONSTRUCTION ACTIVITY.
16. 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.
17. VIOLATIONS OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO PENALTY PER CITY ORDINANCE.
18. 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.
19. ALL PLANT MATERIALS ARE TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
20. 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.
21. ALL LANDSCAPING SHALL CONFORM TO THE CURRENT EDITION OF THE ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE OF THE CITY OF BETHLEHEM.
22. THERE ARE NO EXISTING TREES HAVING 8" TRUNK DIAMETER PROPOSED TO BE REMOVED.

PROJECT INFORMATION:

- ZONING DISTRICT - IN INDUSTRIAL DISTRICT
1. REQUIRED PARKING - 1 SPACE/10,000 SF PLUS 1 SPACE/1.5 EMPLOYEES
420,387 SF BUILDINGS - 1 SPACE/10,000 SF = 43 SPACES
80 EMPLOYEES ON MAXIMUM SHIFT - 1 SPACE/1.5 EMPLOYEES = 54 SPACES
TOTAL SPACES REQUIRED = 97, SPACES PROVIDED = 115
ADA SPACES PROVIDED = 5
TRUCK LOADING SPACES = 28, TRUCK PARKING SPACES = 12
 2. BICYCLE PARKING CALCULATION - 5% OF REQUIRED SPACES
SPACES REQUIRED = 5% X 97 = 5 SPACES
SPACES PROVIDED = 7 SPACES

LANDSCAPE CALCULATIONS

ZONING 1319.02(j).2. PARKING LOT TREES REQUIRED
1 TREE (1 1/2 INCH CALIPER) PER 15 PARKING SPACES
47 PROPOSED CAR SPACES + 12 TRUCK SPACES / 10 = 5.9
REQUIRED: TREES REQUIRED 6
PROVIDED: TREES PROVIDED 6

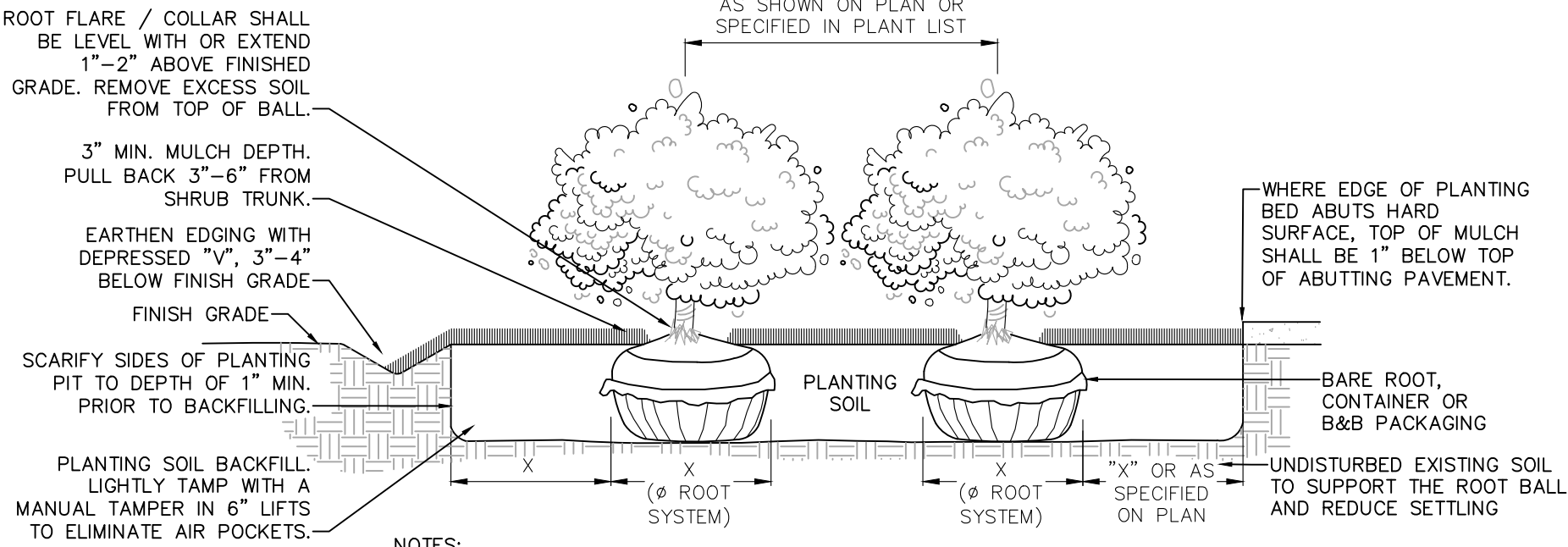
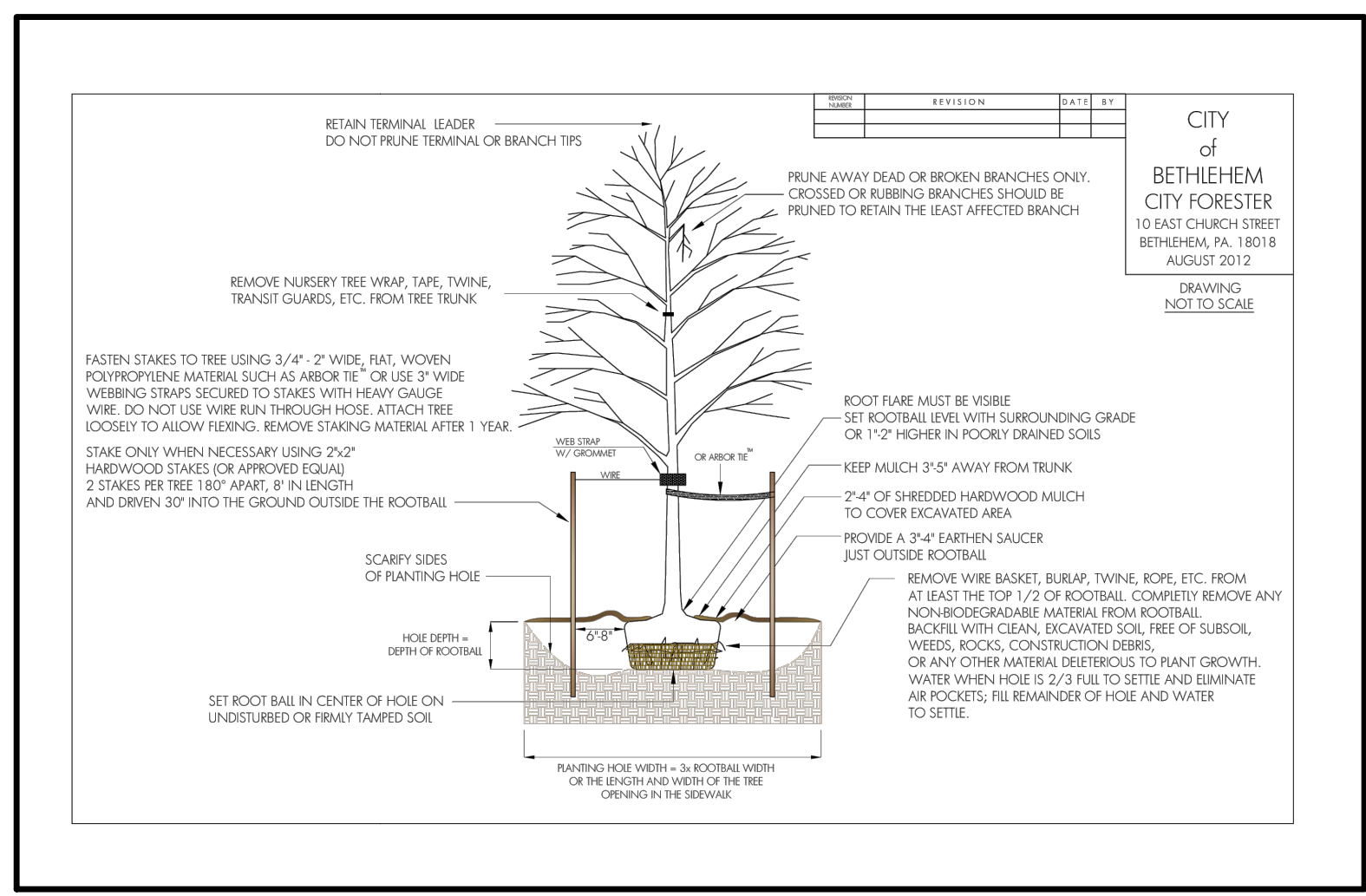
SALDO 1349.08(F)1 OFF-STREET PARKING AND LOADING
10% OF PARKING LOT FACILITY SHALL BE DEVOTED TO LANDSCAPE
43,203 SF NEW CAR AND TRUCK PARKING AND LOADING AREA x 0.1%
= 4,320.30 SF
PROVIDED: 25.3% (5,475 SF)

LVP VII EASTON ROAD PROTECTIVE COVENANTS
SITE ACREAGE 24.41
RESULTANT ACREAGE = 24.41/5 = 5
DECIDUOUS TREES REQUIRED = 4 TREES X 5 ACRES = 20 TREES
EVERGREEN TREES REQUIRED = 5 TREES X 5 ACRES = 25 TREES

CURRENTLY PROPOSED: 23 DECIDUOUS TREES
PREVIOUSLY PROPOSED AND INSTALLED (LOT 54): 64 EVERGREEN TREES

LANDSCAPE PLANTING SCHEDULE

TREES						
KEY	QUAN.	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	PACKAGE	REMARKS
QP	14	QUERCUS RUBRA	RED OAK	2.5" CAL MIN	B&B	REQUIRED AREA PLANTINGS
QP	6	QUERCUS RUBRA	RED OAK	2.5" CAL MIN	B&B	PARKING LOT SHADE TREE
PA	4	PICEA ABIES	NORWAY SPRUCE	6' HEIGHT MIN	B&B	REQUIRED AREA PLANTINGS
SHRUBS						
VA	42	VIBURNUM DENTATUM 'AUTUMN JAZZ'	SOUTHERN ARROWWOOD		24—30" MIN.	REQUIRED AREA PLANTINGS
FS	46	FORSYTHIA SUSPENS A 'SIEBOLDII'	WEeping FORSYTHIA		24—30" MIN.	REQUIRED AREA PLANTINGS



- NOTES:
- PRUNE SHRUBS ONLY TO REMOVE DEAD, DAMAGED OR INTERFERING LIMBS. DO NOT REMOVE ALL BRANCH TIPS.
 - B&B: REMOVE WIRE, CUT AND REMOVE ROPE OR BURLAP FROM TOP HALF OF BALL.
 - CONTAINER: REMOVE PLANT FROM POT, GENTLY SEPARATE ROOTS THAT ARE CROWDED OR COILED ON THE BOTTOM TO PREVENT GIRDLING.
 - BARE ROOT: SPREAD ROOTS OVER A CONE OF UNDISTURBED SOIL, ROOT FLARE TO BE 1"-2" ABOVE FINISH GRADE. (AN ADDITIONAL INCH IF THE SOIL HAS BEEN DISTURBED, TO ALLOW FOR SETTLING.)

SHRUB PLANTING DETAIL

NOT TO SCALE

REVISIONS			
REV. NO.	DATE	DESCRIPTION	BY
1	11/08/24	PER NCCD AND CITY COMMENTS	LME
2	01/16/24	PER CITY COMMENTS	LME

GRAPHIC SCALE:

GRAPHIC SCALE

1 IN = 60 FT



OWNER:

BEACON ROCK REALTY, LLC

3600 GLOVER ROAD
EASTON, PA 18040

PROJECT TITLE:

LVP VII LOTS 53 & 54

CITY OF BETHLEHEM, NORTHAMPTON COUNTY
PENNSYLVANIA

PREPARED BY:

reuther+bowen
Engineering, Design, Construction Services

2980 LINDEN ST., UNIT C2 BETHLEHEM, PA 18017
PHONE (484)403-1560 FAX (670)496-7021

SEAL:

TITLE:

LANDSCAPE PLAN

DATE ISSUED:

05/31/2024

DRAWN BY:

JT

SCALE:

AS SHOWN

REVIEWED BY:

LME

PROJECT NO:

6637.23


CHECKED BY:

MB

C7.1

[illegible]

GRAPHIC SCALE
1 IN = 60 FT



A horizontal graphic scale bar with alternating black and white segments. Below the bar are tick marks and labels for 0', 60', 120', and 180'.

BEACON ROCK REALTY,
LLC
3600 GLOVER ROAD
EASTON, PA 18040

LVIP VII LOTS 53 & 54
CITY OF BETHLEHEM, NORTHAMPTON COUNTY
PENNSYLVANIA

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LIGHTING PLAN

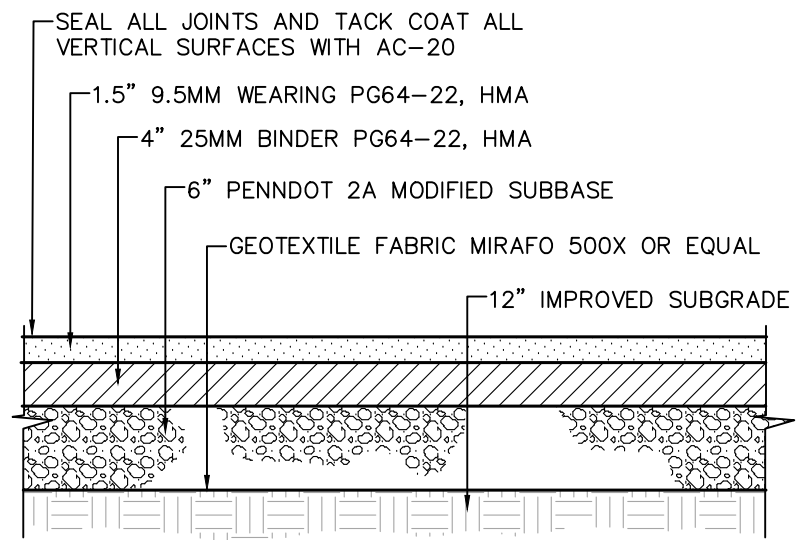
DATE ISSUED:	05/31/2024
SCALE:	AS SHOWN
PROJECT NO:	6637.23

DRAWN BY: IT

REVIEWED BY:	LME
CHECKED BY:	MB

D/WG. NC

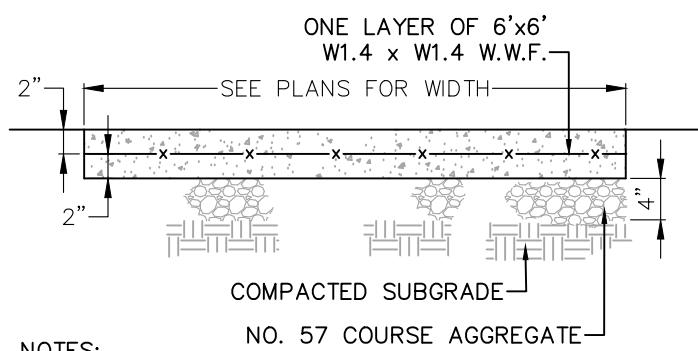
C7.2



PAVING SECTION

NOT TO SCALE

NOTE: PAVING SECTION TO MATCH EXISTING PAVING CROSS SECTION

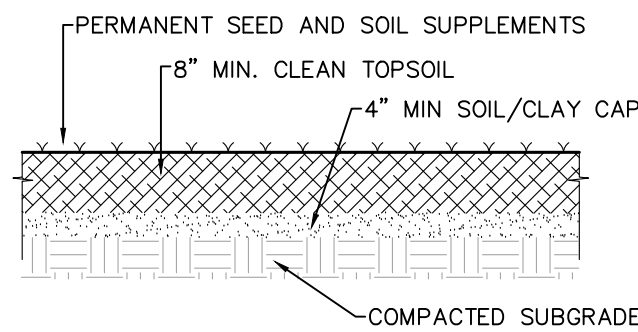


NOTES:

1. SIDEWALK NOTES NEW CONCRETE WALK TO HAVE 2 1/2" TROWELED EDGES, SCORE JOINTS APPROXIMATELY 5' O.C.
2. PROVIDE A 1/2" THICK PREFORMED EXPANSION JOINT W/ 1/2" DEEP SEALANT APPROXIMATELY 50' O.C.
3. OR WHERE WALK CHANGES OR ABUTS A STRUCTURE FLOAT WALKS AND PROVIDE A LIGHT BROOM FINISH

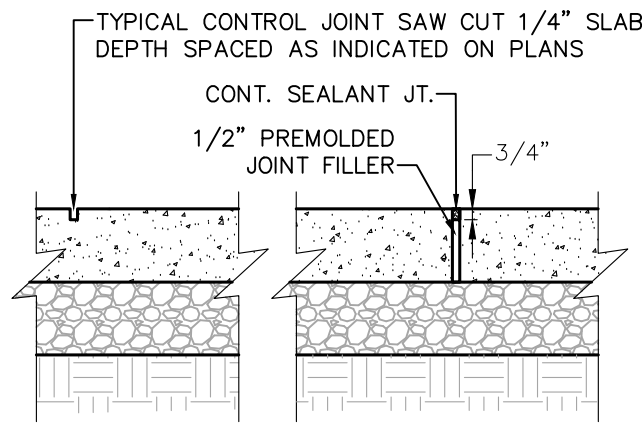
CONCRETE SIDEWALK DETAIL

NOT TO SCALE



SOIL CAPPING DETAIL

NOT TO SCALE



ELEVATION VIEW

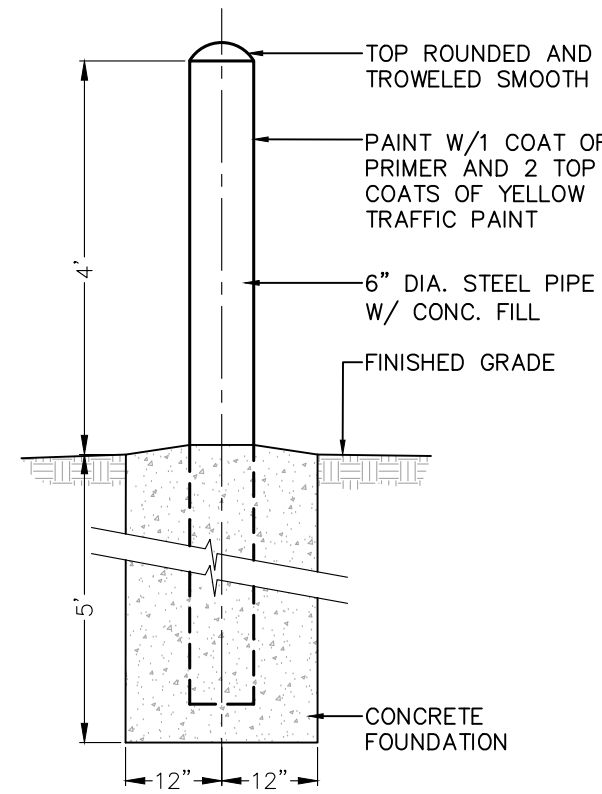
NOT TO SCALE

PLAN VIEW

- EXPANSION JOINTS SHALL BE PLACED EVERY 200 S.F. OF CONCRETE AREA OR EVERY 25 FT OF WALK
- CONTRACTOR TO CONFORM WITH LATEST PENNDOT 408 SPECIFICATIONS

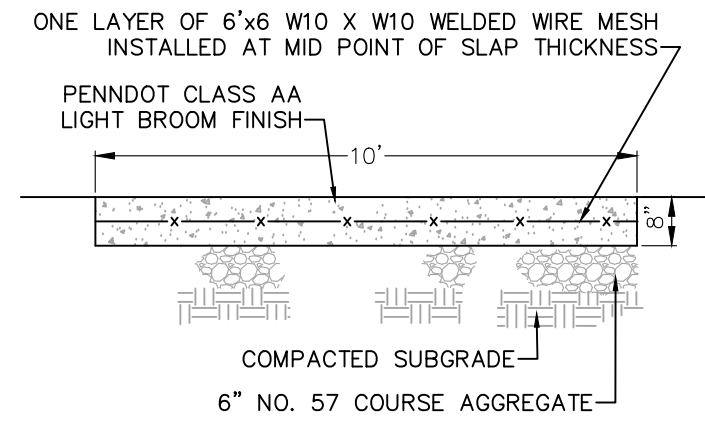
TYPICAL CONCRETE CONTROL & EXPANSION JOINT

NOT TO SCALE



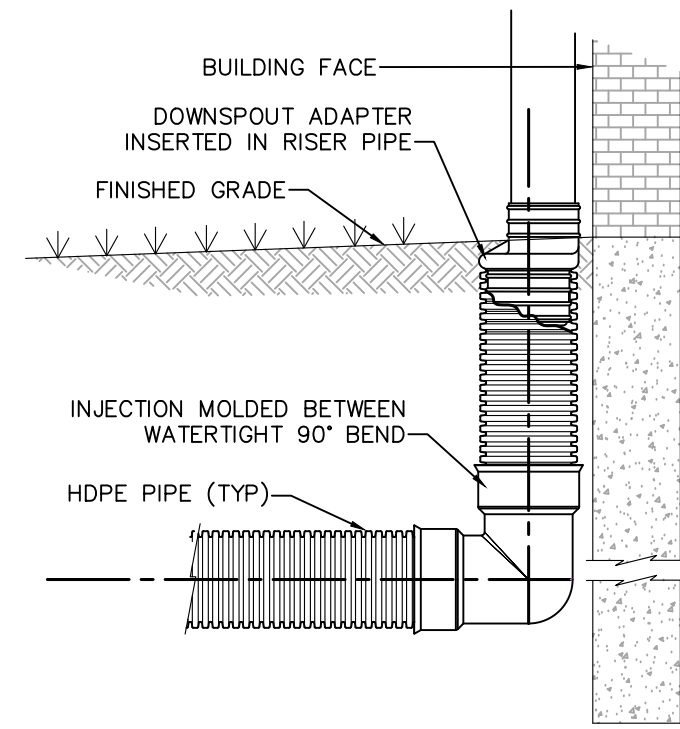
PIPE BOLLARD DETAIL

NOT TO SCALE



CONCRETE LOADING PAD DETAIL

NOT TO SCALE



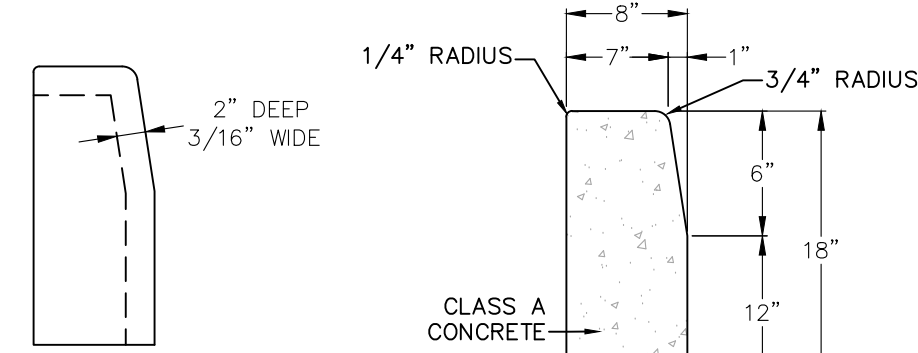
NOTE:

INJECTION MOLDED FITTING ARE AVAILABLE IN TEES, WYES, REDUCERS, 45° BENDS AND BELL/BELL COUPLERS.

WATERTIGHT (WT) JOINTS SHOWN. SOIL-TIGHT (ST) FILLINGS ARE ALSO AVAILABLE.

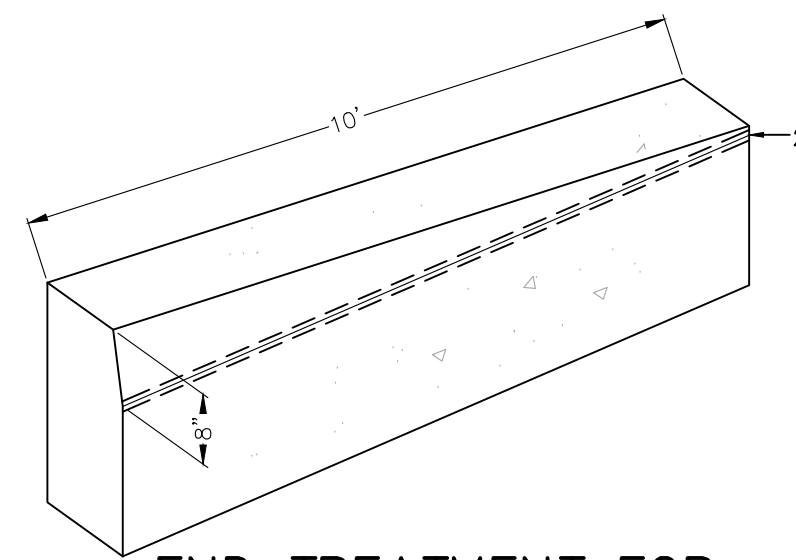
DOWNSPOUT COLLECTOR CLOSED SYSTEM

NOT TO SCALE



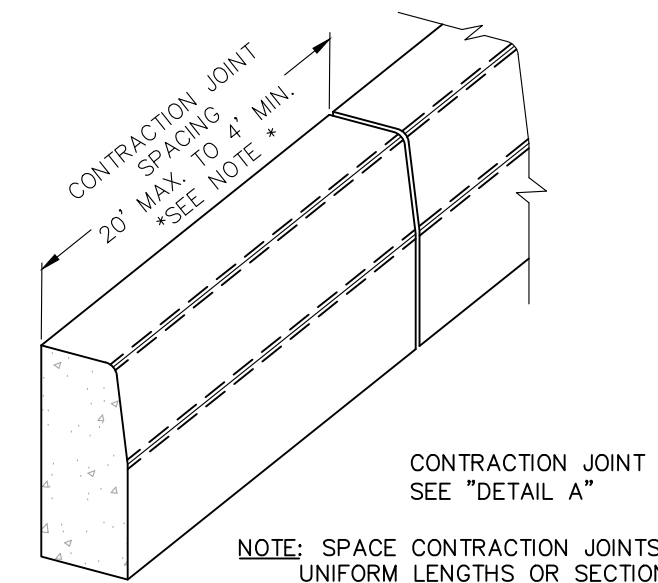
DETAIL A CONTRACTION JOINT

TYPICAL CROSS SECTION



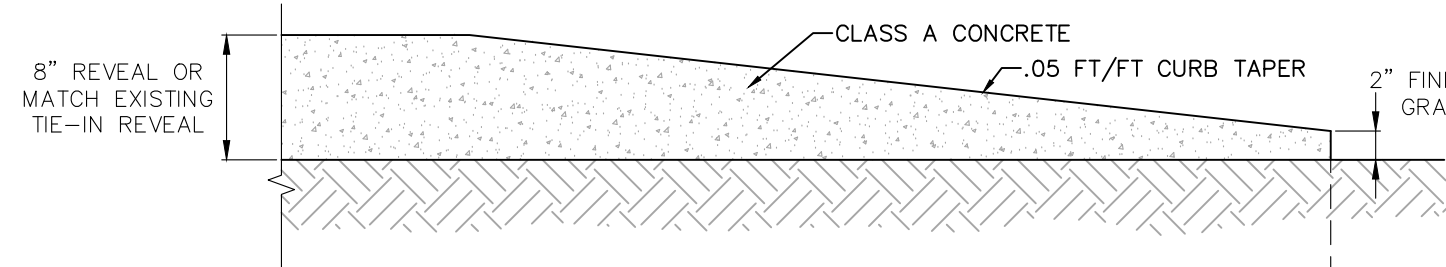
END TREATMENT FOR PROPOSED CONCRETE CURB

NOT TO SCALE



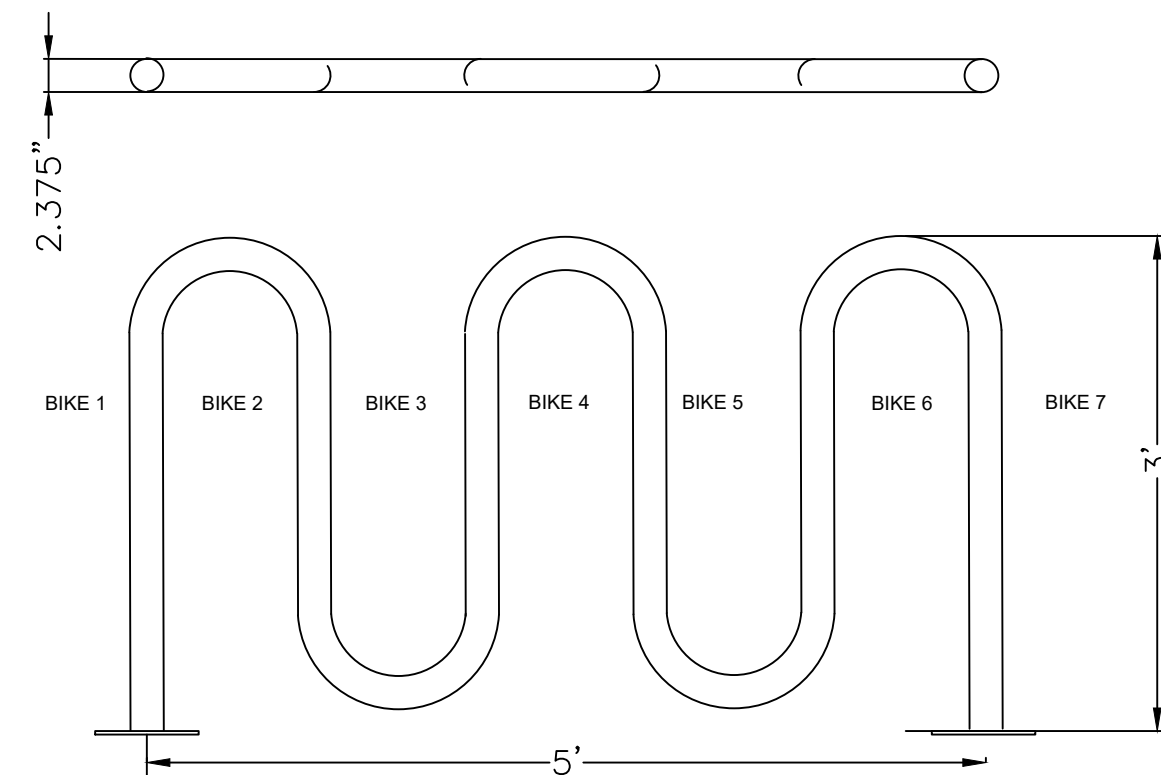
PLAIN CONCRETE CURB

NOT TO SCALE



CURB TAPER DETAIL

NOT TO SCALE

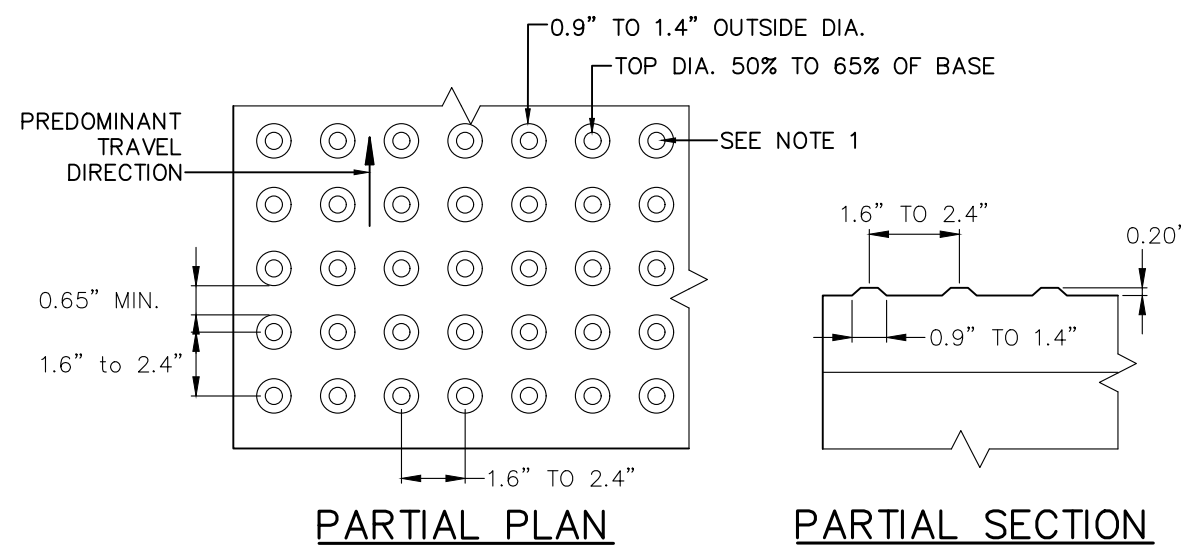


NOTES:

- ORIGINAL CYCLOOPS BICYCLE RACK MODEL NO. 2170-7-C (7 BIKES)
- EMBEDMENT MOUNTING COLOR SHALL BE BLACK MANUFACTURED BY COLUMBIA CASCADE, 1-800-547-1940 OR APPROVED EQUAL

7 BIKE -- BIKE RACK DETAIL

NOT TO SCALE



PARTIAL PLAN

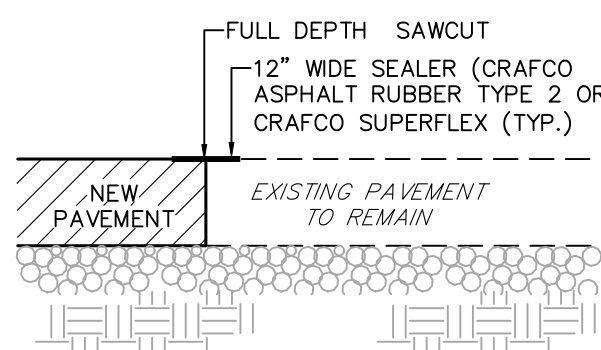
PARTIAL SECTION

NOTES:

1. THE TRUNCATED DOME SURFACE SHALL CONTRAST VISUALLY WITH ADJOINING WALKING SURFACES EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE TRUNCATED DOME SURFACE.
2. DETECTABLE WARNING SHALL BE LOCATED SO THAT THE EDGE OF WARNING FIELD NEAREST TO THE ROADWAY OR STREET SURFACE IS 6" TO 8" FROM THE EDGE OF ROADWAY/STREET, OR FROM THE BACK OF THE DROPPED CURB, WHERE A DROPPED CURB CONTINUES ACROSS THE BOTTOM OF THE SIDEWALK CURB RAMP. THE DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
3. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL.

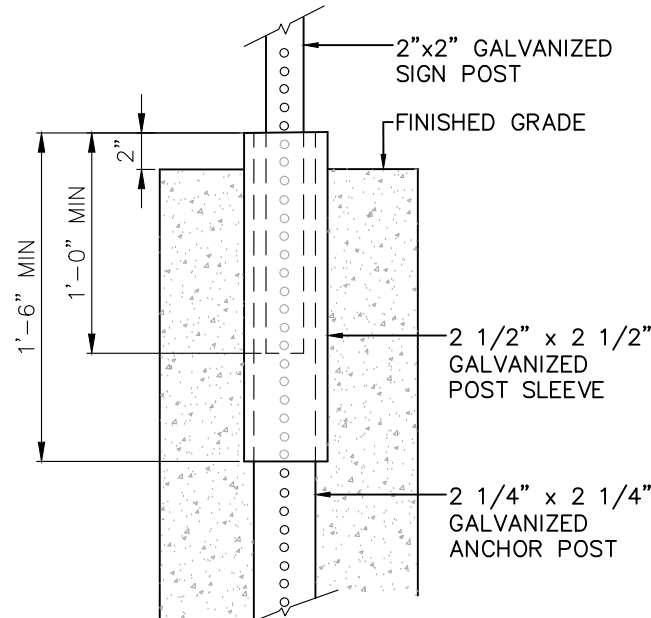
DETECTABLE WARNING SURFACE DETAIL

NOT TO SCALE



PAVEMENT SAWCUT DETAIL

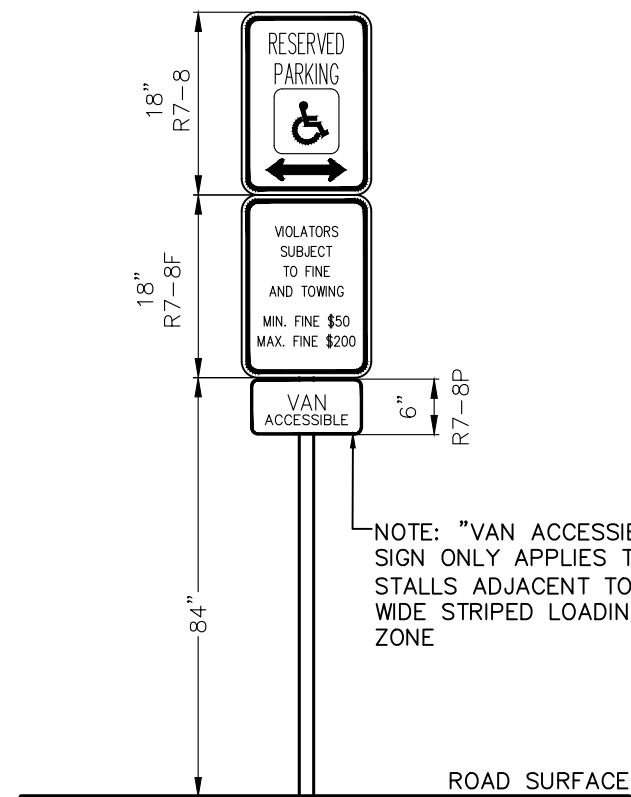
NOT TO SCALE



DETAIL "A"

BREAKAWAY POST DETAIL

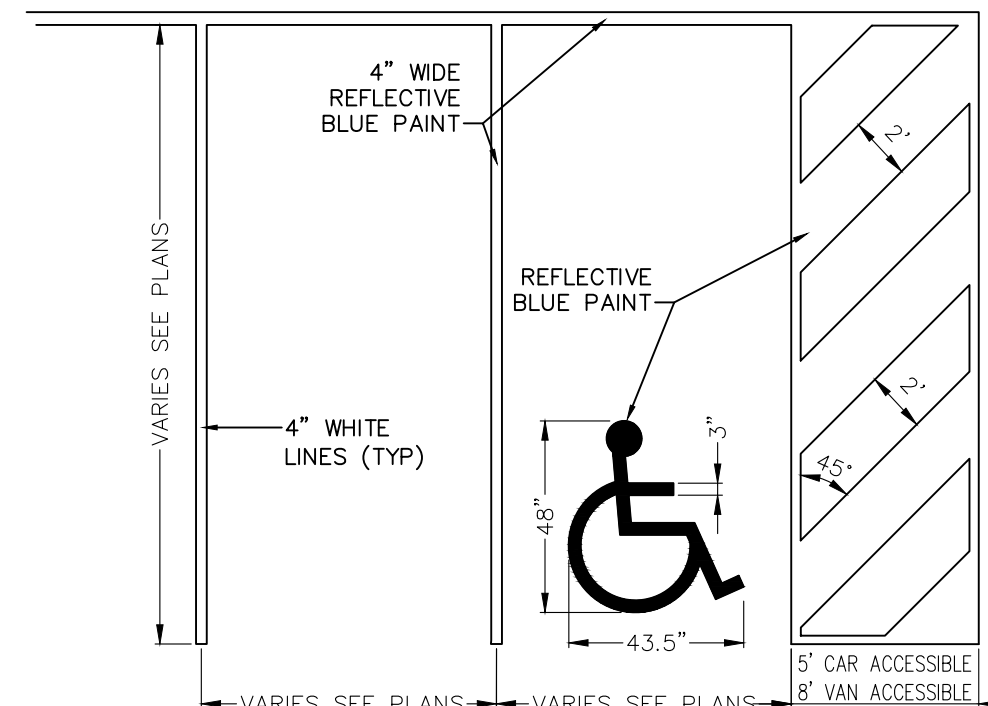
NOT TO SCALE



NOTES:
REFER TO PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 236 HANDBOOK OF APPROVED SIGNS FOR ADDITIONAL INFORMATION.

HANDICAP PARKING SIGN POST MOUNTING DETAIL

NOT TO SCALE



ACCESSIBLE PARKING STALL STRIPING DETAIL

NOT TO SCALE

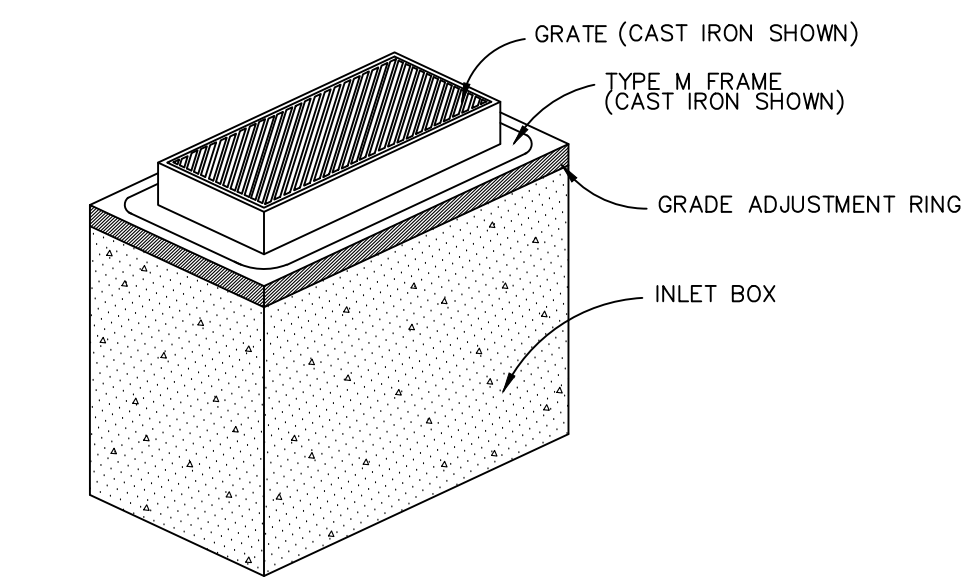
REVISIONS			
REV. NO.	DATE	DESCRIPTION	BY
1	11/08/24	PER NCCD AND CITY COMMENTS	LME
2	01/16/24	PER CITY COMMENTS	LME

GRAPHIC SCALE:

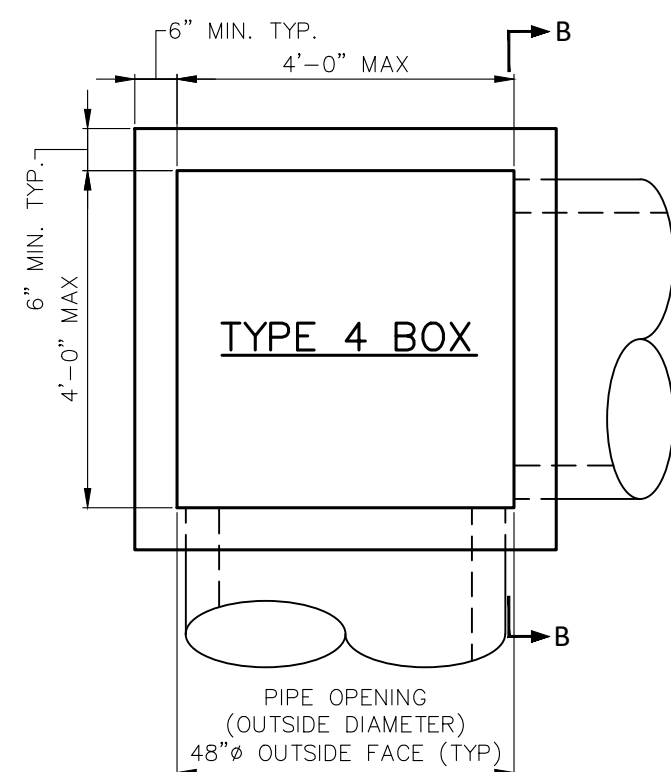
OWNER: BEACON ROCK REALTY, LLC 3600 GLOVER ROAD EASTON, PA 18040	PROJECT TITLE: LVIP VII LOTS 53 & 54 CITY OF BETHLEHEM, NORTHAMPTON COUNTY PENNSYLVANIA
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PREPARED BY: reuther+bowen Engineering, Design, Construction Services 2980 LINDEN ST., UNIT C2 PHONE (484)403-1560	BETHLEHEM, PA 18017 FAX (670)496-7021
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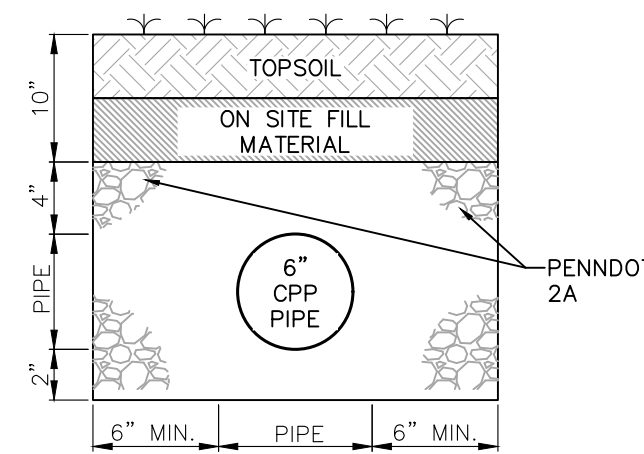
SEAL:	TITLE:		
	SITE DETAILS		
	DATE ISSUED:	DRAWN BY:	DWG. NO.
	05/31/2024	JT	
	SCALE:	REVIEWED BY:	
AS SHOWN	LME		
PROJECT NO:	CHECKED BY:		
6637.23	MB		



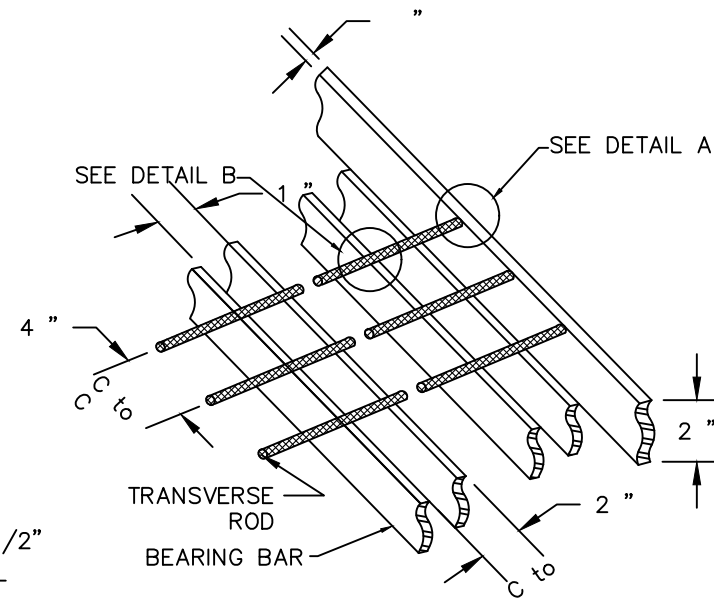
TYPE M INLET DETAIL (RC-46)
NOT TO SCALE



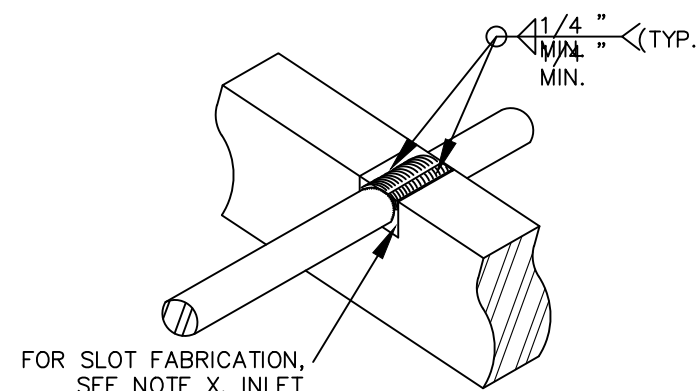
INLET BOX - TYPE 4
(RC-46)
NOT TO SCALE



ROOF LEADER STORM
LINE TRENCH DETAIL
NOT TO SCALE

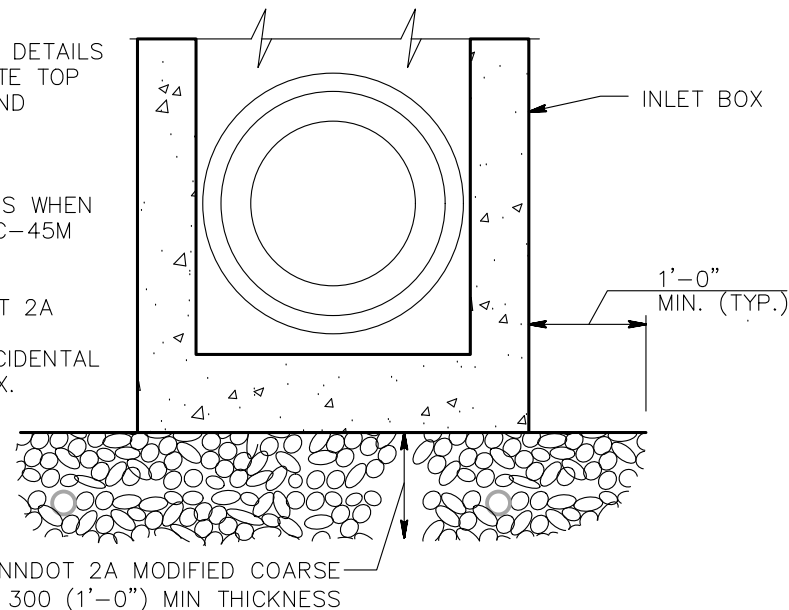


BAR & ROD SPACING DETAIL



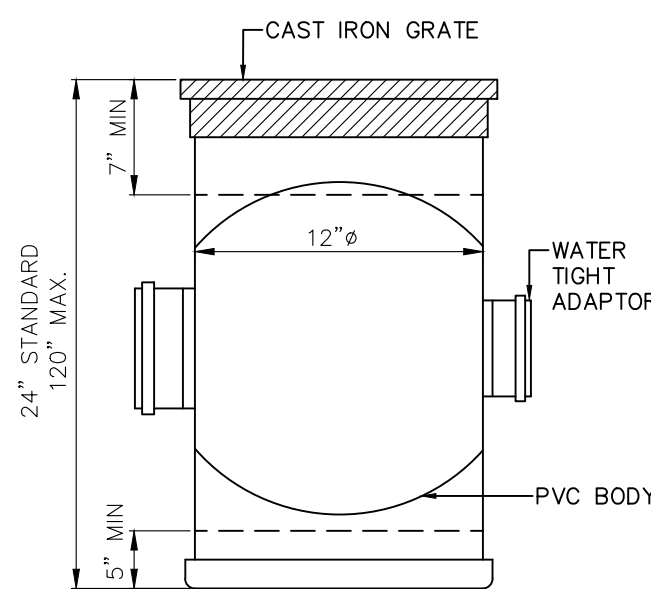
SEE RC-45M FOR
FOR THE CONCRETE
UNITS, FRAMES AND
GRATES.

PROVIDE GRADE
ADJUSTMENT RINGS
REQUIRED. SEE RC-
FOR DETAILS.

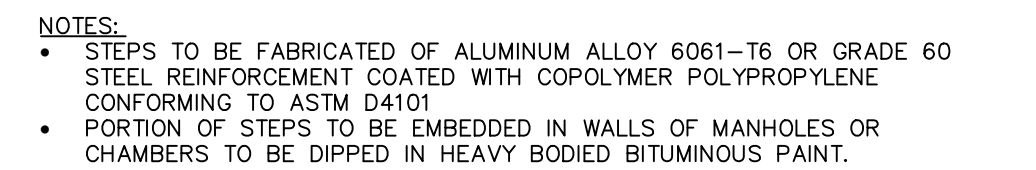


- PROVIDE INLET IN ACCORDANCE WITH PENNDOT RC-46M LATEST EDITION.
- INLET BOX SHALL BE PLACED ON COMPACTED PENNDOT 2A PLACED IN 4" LIFTS
- BACKFILL MATERIAL AROUND STRUCTURE SHALL BE PLACED IN 6" LOOSE UNIFORM LIFTS AND COMPACTED TO REQUIRED DENSITY BY MEANS OF MECHANICAL TAMPER
- PLACE CONCRETE BOTTOM OF THE INLET TO CREATE A FLOW CHANNEL TOWARD OUTLET PIPE
- THE VOIDS BETWEEN THE PIPE AND INLET BOX SHALL BE SEALED WITH MORTAR OR WATERTIGHT RUBBER FLEXIBLE CONNECTOR.

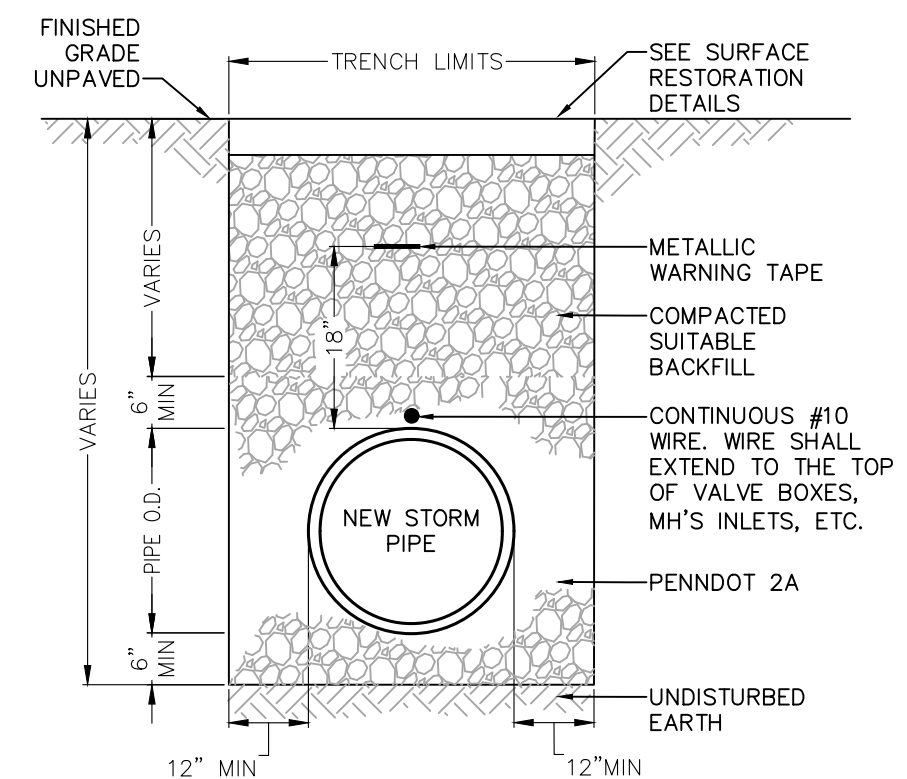
INLET BOX SUBBASE PREPARATION DETAIL
NOT TO SCALE



12" DRAIN BASIN
NOT TO SCALE



MANHOLE STEP DETAIL
NOT TO SCALE



STORM PIPE TRENCH BEDDING
AND BACKFILL
NOT TO SCALE

STORM STRUCTURE TABLE				
STRUCTURE NAME	RIM ELEV.	SUMP ELEVATION	INVERT IN	INVERT OUT
INL 103	316.240	308.98	309.08 (Pipe – (9)) 312.28 (Pipe – (8))	308.98 (PIPE – (7))
INL 106	316.500	312.69	312.69 (Pipe – (19))	312.84 (PIPE – (26))
INL 108	315.202	311.20		311.20 (PIPE – (27))
INL 110	313.179	310.00		310.00 (PIPE – (24))
INL S-10 (SNOUT)	314.990	303.55	308.55 (Pipe – (7)) 311.28 (Pipe – (6))	308.55 (PIPE – (5))
Inlet 3	313.288	303.59	303.59 (Pipe – (28))	
MH-109	317.231	309.73	309.83 (Pipe – (24)) 313.87 (Pipe – (25))	309.73 (PIPE – (2))
MH 100	317.172	301.42	302.02 (Pipe – (3)) 306.88 (Pipe – (2))	301.42 (PIPE – (36))
MH 101	316.698	303.96	304.11 (Pipe – (4))	304.11 (PIPE – (3))
MH 102	316.636	307.71	307.71 (Pipe – (5))	307.71 (PIPE – (4))
MH 104	316.490	309.87	309.97 (Pipe – (11)) 312.36 (Pipe – (26)) 310.87 (Pipe – (10))	309.87 (PIPE – (9))
MH 105	316.620	310.51	311.51 (Pipe – (29)) 312.64 (Pipe – (12))	310.51 (PIPE – (11))
MH 107	315.701	304.28	310.98 (Pipe – (27))	304.28 (PIPE – (28))
MH S-111	313.073	295.32	295.32 (Pipe – (36))	
RD1	317.238	314.00		314.00 (PIPE – (25))
RD2	317.290	312.22		312.22 (PIPE – (6))
RD3	317.297	312.68		312.68 (PIPE – (8))
RD4	317.305	311.05		311.05 (PIPE – (10))
RD5	317.328	313.62		313.62 (PIPE – (12))
RD6	317.211	311.94		311.94 (PIPE – (29))
RD7	317.277	313.12	313.49 (Pipe – (20))	313.12 (PIPE – (19))
RD8	317.268	313.99		313.99 (PIPE – (20))
RD10(0)	316.540	313.73		

[illegible]

GRAPHIC SCALE:

OWNER

BEACON ROCK REALTY,
LLC
3600 GLOVER ROAD
EASTON, PA 18040

PROJECT TITLE:

LVIP VII LOTS 53 & 54
CITY OF BETHLEHEM, NORTHAMPTON CO
PENNSYLVANIA

PREPARED BY:	
--------------	--

reuther+bowen
Engineering, Design, Construction Services

2980 LINDEN ST., UNIT C2 BETHLEHEM, PA 18017
PHONE (484)403-1560 FAX (570)496-7021

SEAL:	
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TITLE:	
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SITE DETAILS

DATE ISSUED:	05/31/2024
SCALE:	AS SHOWN
PROJECT NO:	6637.23

DRAWN BY:	JT
REVIEWED BY:	LME
CHECKED BY:	MB

D1.2

1. Custom lenses and wedge packages available; consult factory. Values are within industry standard tolerances but not DUC listed.
2. Not available on "Type SW" distribution.
3. Control device or shunting cap must be ordered separately. See Accessory Ordering Information.
4. Motion sensors are field configurable via the LSI app that can be downloaded from your smartphone's native app store.
5. Accessories are shipped separately and field installed.
6. "CLR" denotes finish. See Finish options.
7. Fusing must be located in hand hole of pole. See [Fusing Accessory Guide](#) for compatibility.

1 Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DLC listed.
2 When high voltage (HV) is specified, IMSEI and ALBCS control options are limited to 6L and 8L lumen packages.
3 IMSEI is field configurable via the LSI app that can be downloaded from your smartphone's native app store.
4 Universal Voltage Only (UD-277V). 20W Battery Backup only available 2L - 6L.
5 For applications with surface conduit.

GRAPHIC SCALE:

PREPARED BY:	
reuther+bowen Engineering, Design, Construction Services	
2980 LINDEN ST., UNIT C2 PHONE (484)403-1560	BETHLEHEM, PA 18017 FAX (570)496-7021

D1.3

STANDARD E&S PLAN NOTES:

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- 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 PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
- AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED 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.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING 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.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ. AND 271.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. EXAMPLE OF WASTE MATERIAL INCLUDE BUT IS NOT LIMITED TO: EXCESS SOIL MATERIAL, CONCRETE WASH WATER, PLASTIC ORANGE SAFETY FENCE, REMNANT PIECES OF PIPING, SCRAPS OF GEOTEXTILE, WOODEN STAKES.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM PP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- A LOG SHOWING DATES THAT E&S BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEP INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES --- 6 TO 12 INCHES ON COMPACTED AREAS --- PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 12 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 12 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUIITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIALS OR SOFT, MUOXY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIAL REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- E&S BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
- FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
- ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
- EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
- FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS.

TOPSOIL APPLICATION:

- PRIOR TO INITIATING PERMANENT STABILIZATION PROCEDURES, THE DISTURBED AREAS SHOULD BE PROPERLY PREPARED AND COVERED WITH TOPSOIL AS FOLLOWS:
- GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN THE SLOPE.
- TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 12 INCHES, AND A MINIMUM OF 12 INCHES OF FILL ON OUTSLOPES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PRODUCE A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM FORM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PERVENT FORMATION OF DEPRESSIONS.
- TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDED PREPARATION. COMPACTED SOIL SHOULD BE SCARIFIED TO 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING.
- SUITABLE TOPSOIL CONSISTS OF ACCEPTABLE FRIABLE LOAM THAT IS REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH, ROOTS, WEEDS, OTHER OBJECTIONABLE VEGETATION, STONES, OTHER FOREIGN MATERIAL LARGER THAN 2 INCHES IN ANY DIMENSION, LITTER, AND/OR OTHER MATERIAL UNSUITABLE OR HARMFUL TO PLANT GROWTH. TOPSOIL SHALL BE CONTAINED NOT LESS THAN 2.0% OR MORE THAN 10.0% ORGANIC MATTER. TOPSOIL SHALL MEET THE FOLLOWING GRADING ANALYSIS:
 - 2" SIEVE -- MINIMUM 100% PASSING
 - NO. 4 SIEVE -- MINIMUM 75% PASSING
 - NO. 10 SIEVE -- MINIMUM 60% PASSING
- SAND, SILT, AND CLAY MATERIAL PASSING THE NO. 10 SIEVE SHALL BE WITHIN THE FOLLOWING RANGES:
 - SAND: 5 TO 70%
 - SILT: 10 TO 70%
 - CLAY: 5 TO 36%

TEMPORARY SEEDING SPECIFICATIONS:
SPECIES: PA DOT FORMULA E
% PURE LIVE SEED: 80%
APPLICATION RATE: 50 LBS/ACRES
LIMING RATE: 1 TON/ACRE
MULCH: STRAW
MULCHING RATE: 3 TONS/ACRE
10-10-10 FERTILIZER 500 LBS/ACRE

PERMANENT SEEDING SPECIFICATIONS:
SPECIES: PA DOT FORMULA B (SLOPES 3:1 OR FLATTER)
% PURE LIVE SEED: SEE TABLE A
APPLICATION RATE: SEE TABLE A
LIMING RATE: 6 TON/ACRE
MULCH: STRAW
MULCHING RATE: 3 TONS/ACRE
10-20-20 FERTILIZER: 1,000 LBS/ACRE
SEEDING SEASON DATES: 3/15 TO 6/1
6/1 TO 10/15

PERMANENT-STEEP SLOPE SEEDING SPECIFICATIONS:
SPECIES: PA DOT FORMULA D (SLOPES GREATER THAN 3:1)
% PURE LIVE SEED: SEE TABLE A
APPLICATION RATE: SEE TABLE A
LIMING RATE: 6 TON/ACRE
MULCH: STRAW
MULCHING RATE: 3 TONS/ACRE
10-20-20 FERTILIZER 1,000 LBS/ACRE
SEEDING SEASON DATES: 3/15 TO 6/1
6/1 TO 10/15

TABLE A						
Formula and Species	% by Weight	Minimum %		Max. %	Seeding Rate lb/1000 Yd²	
		Purity	Germination			
Formula B * Perennial Ryegrass Mixture (Lolium perenne). A combination of improved certified varieties with no one variety exceeding 50% of the total Ryegrass component. * Creeping Red Fescue or Chewing Fescue (Festuca rubra or asp commutata) improved and Certified. * Kentucky Bluegrass Mixture (Poa pratensis). A combination of improved certified varieties with no one variety exceeding 50% of the total Bluegrass component.	20 30 50	97 97 97	90 85 80	0.10 0.10 0.15	42.0 Total 8.5 12.5 21.0	
Formula C * Crownvetch (Coronilla varia) * Perennial Ryegrass Mixture (Lolium multiflorum)	45 55	99 95	70+ 90	0.10 0.10	5.5 8.5	12.0 Total
Formula D * Tall Fescue (Festuca arundinacea var. Kentucky 31) * Creeping Red Fescue or Chewing Fescue (Festuca rubra or asp commutata) improved and Certified. * Annual Ryegrass (Lolium multiflorum)	60 30 10	96 97 95	85 85 90	0.10 0.10 0.10	50.0 Total 30.0 15.0 5.0	
Formula E * Annual Ryegrass (Lolium multiflorum)	100	95	90	0.10	10.0 Total 10.0	
Formula F * Hard Fescue Mixture (Festuca longifolia) A combination of improved certified varieties with no one variety exceeding 50% of the total Hard Fescue component. * Creeping Red Fescue (Festuca rubra) (Improved and Certified). * Annual Ryegrass (Lolium Multiflorum)	55 35 10	97 98 95	85 85 90	0.10 0.10 0.10	48.0 Total 26.4 16.8 4.8	
Formula G * Tall Fescue (Festuca arundinacea var. Kentucky 31) * Birdfoot Trefoil Mixture (Lotus corniculatus) * Redtop (Agrostis alba) * Virginia Wild Rye (Syrinus virginicus) * Tioga Deertongue (Panicum clandestinum) * Fox Sedge (Carex vulpinoidea)	30 10 10 24 14 12	96 92 92 95 95 85	85 80+ 80 80 80 60	0.10 0.10 0.20 0.20 0.20 0.20	15.0 Total 4.5 1.5 3.6 2.1 2.1 1.8	

NOTE: MULCH RATE FOR INTERIM AND FINAL SEEDING SHALL BE 3 TONS PER ACRE.

+ Including hardseed and normal seedlings

SEQUENCE OF CONSTRUCTION:

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE OF CONSTRUCTION ACTIVITIES. EACH STAGE SHALL BE COMPLETED BEFORE A SUBSEQUENT STAGE IS INITIATED. UPON THE COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES; THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE CONSERVATION DISTRICT TO AN ON-SITE MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT (800) 242-1776 AND THE NORTHAMPTON COUNTY CONSERVATION DISTRICT AT (610) 829-6276.

NOTES:

- STORMWATER FACILITIES SHOULD BE INSTALLED STARTING AT THE OUTLET AREAS AND PROGRESS UPSTREAM, INSTALLING BMPs AND LININGS AS WORK PROGRESSES.
- REFER TO TRENCH EXCAVATION NOTES FOR ALL TRENCHING OPERATIONS.
- A PUMPED WATER FILTER BAG SHALL BE UTILIZED TO DEWATER EXCAVATIONS AS NEEDED.
- STOCKPILE ALL SUITABLE MATERIAL FOR REUSE WITHIN AN APPROVED STOCKPILE LOCATION AND HAUL ALL UNSUITABLE MATERIAL OFF-SITE TO AN APPROVED DISPOSAL LOCATION.

SEQUENCE OF CONSTRUCTION:

- AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES; THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND A REPRESENTATIVE FROM NORTHAMPTON COUNTY 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 UNMARKED, PA ONE CALL SYSTEM SHALL BE NOTIFIED AT 1 800 242 1776.
- THE CONTRACTOR SHALL CLEARLY MARK OUT THE LIMIT OF DISTURBANCE IN THE FIELD TO ENSURE ONLY THE MINIMUM AREA REQUIRED FOR CONSTRUCTION WILL BE CLEARED AND GRADED.
- INSTALL ROE 1, ROE 2, ROE 3, AND CONCRETE WASHOUT AREA AS SHOWN ON THE APPROVED PLANS.
- INSTALL COMPOST FILTER SOCKS CFS-4 THRU CFS-16. REMOVE EXISTING PARKING LOT AND ENTRANCE DRIVE IN THE AREA OF THE PROPOSED BUILDING AS SHOWN ON THE APPROVED PLANS.
- REMOVE STORM SEWERS AND STRUCTURES FROM INL S-8 TO S-114 AND FROM S-120 TO S-114.
- INSTALL STORM SEWERS FROM MH S-111 TO MH100, MH109 TO RD1, MH109 TO INL110, MH100 TO RO8 AND FROM MH104 TO RO6. INSTALL INLET FILTERS ON INLET S-10 AND INL 103 AFTER INLETS ARE REPLACED/CONSTRUCTED.
- CONSTRUCT BUILDING AND TRUCK DOCKS.
- CONCURRENT WITH STEP 7, INSTALL CFS-1 THRU CFS-3.
- CONSTRUCT THE CAR PARKING LOT AND THE TRUCK PARKING LOT.
- COMPLETE THE LANDSCAPING PER THE APPROVED PLANS.
- ONCE THE PROPOSED STRUCTURES NO LONGER REQUIRE HEAVY EQUIPMENT FOR CONSTRUCTION, THE CONTRACTOR SHALL SWEEP ALL PAVEMENT AND PARKING AREAS AND PAVE WITH FINAL WEARING COURSE. PERFORM PAVEMENT LINE STRIPING AS INDICATED ON THE APPROVED PLANS.
- UPON FINAL STABILIZATION OF UPSLOPE AREAS, REMOVE TEMPORARY CONTROLS SUCH AS COMPOST FILTER SOCKS. ALL DISTURBED AREAS SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

TRENCH EXCAVATION NOTES:

- LIMIT THE LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME TO THE AMOUNT OF PIPE THAT CAN BE INSTALLED AND BACKFILLED IN ONE WORKING DAY.
- NOT MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN UTILITY INSTALLATION CEASES AT THE END OF THE WORKDAY.
- ALL EXCAVATED MATERIAL SHALL BE STOCKPILED A MINIMUM OF THREE (3) FEET AWAY FROM THE EXCAVATED TRENCH.
- EXCAVATED MATERIAL SHOULD BE INCORPORATED AS FILL.
- BACKFILL AND STABILIZE TRENCHES AT THE END OF EACH WORK DAY. STABILIZE WITH SUB-BASE MATERIAL IN PAVEMENT AREAS, AND WITH SEED AND MULCH IN VEGETATED AREAS.
- MAINTAIN PUMPED WATER FILTER BAG ON-SITE TO DEWATER TRENCHES AS NECESSARY. FILTER BAGS MUST DISCHARGE TO AN INLET OR TO A WEEDED AREA AT GRADE.

E & S BMP INSPECTION AND MAINTENANCE

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL ANY AND ALL INTERIM MEASURES AS REQUIRED TO PREVENT EROSION AND SEDIMENTATION.
- ANY EXPOSED GRADED AREAS IN WHICH WORK HAS CEASED FOR A PERIOD OF FOUR (4) DAYS OR MORE SHALL BE SEEDED WITH TEMPORARY SEEDING AND MULCH.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL DEVICES UNTIL COMPLETION OF THE PROJECT AND THE PERMANENT STABILIZATION OF DISTURBED AREAS.
- THE CONTRACTOR SHALL INSPECT EROSION AND SEDIMENTATION CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. BMP SPECIFIC MAINTENANCE AND REPAIR SPECIFICATIONS ARE PROVIDED IN THE NOTES ON THE PLANS ACCOMPANYING THEIR CONSTRUCTION DETAILS.
- THE CONTRACTOR SHALL CLEAN AND REMOVE SEDIMENT CONTROL DEVICES WHEN IT BECOMES ONE-THIRD FULL, OR AS OTHERWISE SPECIFIED IN THE PLAN DETAILS. THE SEDIMENT REMOVED SHALL BE BURIED OR DISPOSED OF IN LANDSCAPED AREAS, AREAS TO BE VEGETATED, STOCKPILES, OR DISPOSED OF IN A LANDFILL AS WASTE.
- THE CONTRACTOR IS REQUIRED TO KEEP WRITTEN LOGS OF ALL E & S BMP INSPECTION AND MAINTENANCE ACTIVITIES.
- IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- THE CONTRACTOR SHALL IMMEDIATELY STABILIZE ANY DISTURBANCES WHICH MAY OCCUR AS PART OF SEDIMENT REMOVAL AND BMP MAINTENANCE.

ENVIRONMENTAL DUE DILIGENCE AND CLEAN FILL

THE CONTRACTOR IS RESPONSIBLE FOR IMPORTING (OR EXPORTING, AS APPROPRIATE) CLEAN FILL TO THE PROJECT FROM THE PROJECT SITE. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL" DOCUMENT NUMBER 258-2182-773.

"CLEAN FILL" IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER 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).

CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: 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 THE DEPARTMENTS POLICY "MANAGEMENT OF FILL".

ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM PP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULT 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 AND MUST BE KEPT ON SITE AND MADE AVAILABLE UPON REQUEST OF THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. FAILURE TO PRODUCE THE FORM UPON REQUEST MAY RESULT IN REVOKING, SUSPENSION OR TERMINATION OF YOUR PERMIT COVERAGE. A COPY OF FORM PP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.

ENVIRONMENTAL DUE DILIGENCE:

INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. 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 SUBJECT TO A SPILL OR RELEASE OF 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 THE DEPARTMENTS POLICY "MANAGEMENT OF FILL". FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENTS MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTER 252 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE(S) RECEIVING SPOIL SOILS MATERIAL FROM THIS SITE HAS AN ACTIVE NPDES PERMIT OR E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT, AS APPLICABLE. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THESE PERMITS/PLAN APPROVALS IF NONE EXIST.

SOIL DESCRIPTIONS:

CIB - CLARKSBURG SILT LOAM, 3 TO 8 PERCENT SLOPES, HSG C
CnB - COKEBURY SILT LOAM, 3 TO 8 PERCENT SLOPES, HSG D
Ho - HOLLY SILT LOAM, HSG B/D
UoB - UDORTHENS, LIMESTONE, 0 TO 8 PERCENT SLOPES, HSG D
WoC - WASHINGTON SILT LOAM, 8 TO 15 PERCENT SLOPES, HSG B

SOIL LIMITATIONS AND RESOLUTIONS:

- CUTBANKS/CAVE. STABILIZE DISTURBED AREAS WITH SEED, MULCH AND SOIL SUPPLEMENTS ON SLOPES 3:1 OR GREATER PROVIDED SLOPE MATING.
- CORROSIVE TO STEEL. STEEL BURIED IN CONSTRUCTION INCLUDES REBAR WHICH WILL BE ENCASED IN CONCRETE.
- CORROSIVE TO CONCRETE. SOIL WITH HIGH SULPHATE CONTENT IS CORROSIVE TO CONCRETE. USE SULPHATE-RESISTANT BLAST-FURNACE CEMENT, COAT CONCRETE WITH BITUMEN OR USE PRECAST CONCRETE STRUCTURES WHEN CONCRETE IS BURIED.
- DROUGHTY- PROVIDE PROPER SOIL SUPPLEMENTS TO PROMOTE VEGETATIVE GROWTH.
- HYDRIC/HYDRIC INCLUSIONS - AERATE SOIL FOR VEGETATIVE GROWTH.
- SLOW PERCOLATION - AVOID COMPACTION WITHIN INFILTRATION AREAS.
- FROST ACTION - LIMIT CONSTRUCTION TO NON-OBJECTIVE MEASURES DURING WINTER MONTHS.

E & S BMP

PROVED BY THE LOCAL CONSERVATION DISTRICT, AS APPLICABLE. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THESE PERMITS/PLAN APPROVALS IF NONE EXIST.

RECYCLING OR DISPOSAL OF WASTE MATERIALS

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

SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPE, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.

MAINTENANCE REQUIREMENTS

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. MAINTENANCE REQUIREMENTS SPECIFIC TO EACH EROSION AND SEDIMENTATION BMP, WHERE APPLICABLE, CAN BE FOUND ACCOMPANYING THE CONSTRUCTION DETAILS FOR THAT DEVICE. E&S BMP DETAILS CAN BE FOUND ON THE E&S PLAN DRAWINGS.

RECYCLING OR DISPOSAL OF MATERIALS:

SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE. EXAMPLES OF CONSTRUCTION WASTES FROM THIS PROJECT MAY INCLUDE THE FOLLOWING:
CONCRETE WASH WATER
EXCESS SOIL MATERIAL
PLASTIC ORANGE SAFETY FENCE
REMANANT PIECES OF PIPING
SCRAPS OF GEOTEXTILE AND EROSION CONTROL BLANKETS
WOODEN STAKES

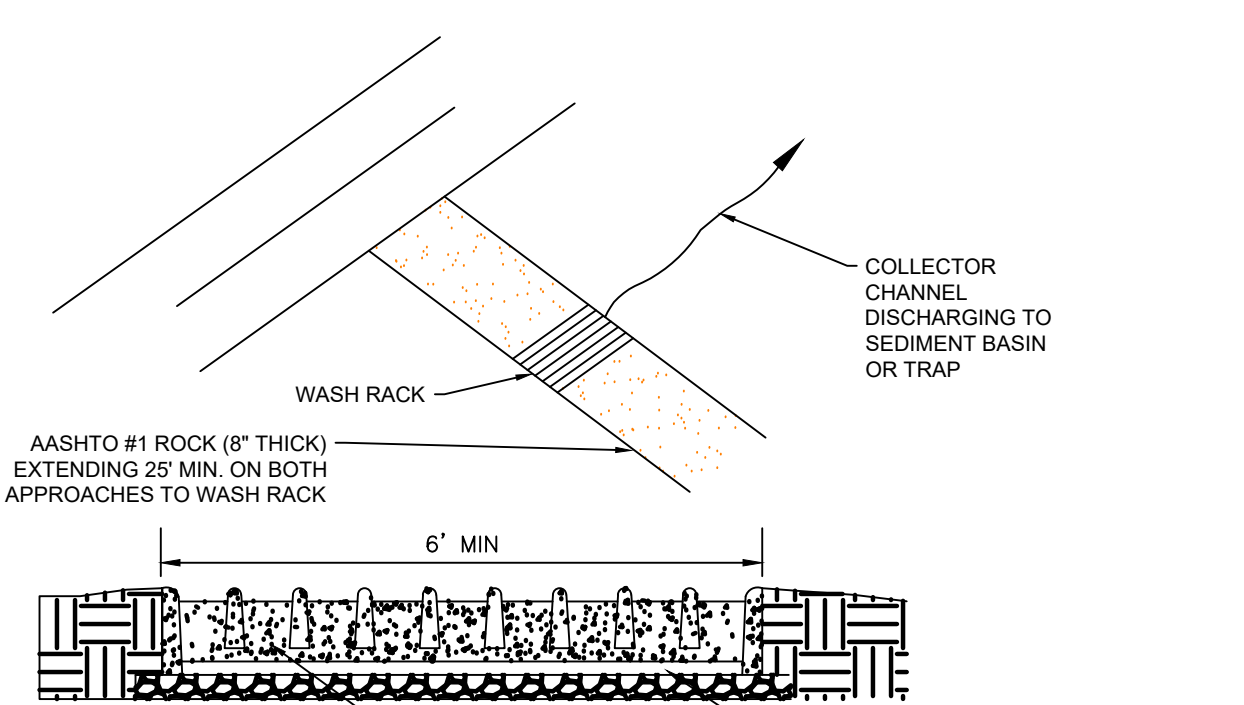
MAINTENANCE PROGRAM:

THE CONTRACTOR IS REQUIRED TO INCORPORATE ALL TEMPORARY AND PERMANENT CONTROL MEASURES AND FACILITIES INDICATED ON THE APPROVED PLAN SET, INTO THE PROJECT AT THE EARLIEST PRACTICABLE TIME. THE CONTRACTOR IS RESPONSIBLE FOR APPLYING, CLEANING, AND MAINTAINING ALL CONTROL FEATURES DURING CONSTRUCTION. APPROPRIATE EROSION AND SEDIMENT POLLUTION CONTROL FEATURES SHALL BE APPLIED TO SECTIONS SUCH AS BORROW PITS AND MATERIAL STORAGE AREAS UNFORESEEN PRIOR TO CONSTRUCTION. PERMANENT EROSION CONTROL FACILITIES WILL BE MAINTAINED BY THE OWNER.

THE TEMPORARY FACILITIES FOR EROSION AND SEDIMENT POLLUTION CONTROL SHALL BE INSPECTED A MINIMUM OF ONCE A WEEK AND AFTER EVERY RAINFALL EVENT. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF COMPOST SOCKS AND 1/3 THE ABOVE GROUND HEIGHT OF ROCK FILTERS. ANY COMPOST SOCK SECTION THAT HAS BEEN UNDERMINED OR OVERTOPPED MUST BE IMMEDIATELY REPLACED, AS CONSTRUCTION PROGRESSES AND DISTURBED AREAS HAVE BEEN STABILIZED, TEMPORARY EROSION CONTROL STRUCTURES ARE TO BE CLEANED AND REMOVED.

PPC PLAN:

IF THE CONTRACTOR INTENDS ON STORING, USING OR TRANSPORTING WASTE MATERIALS, FUELS OR CHEMICALS ON OR FROM THE PROJECT SITE DURING CONSTRUCTION A PPC PLAN MUST BE PREPARED BY THE CONTRACTOR AND MADE AVAILABLE ON SITE AT ALL TIMES.

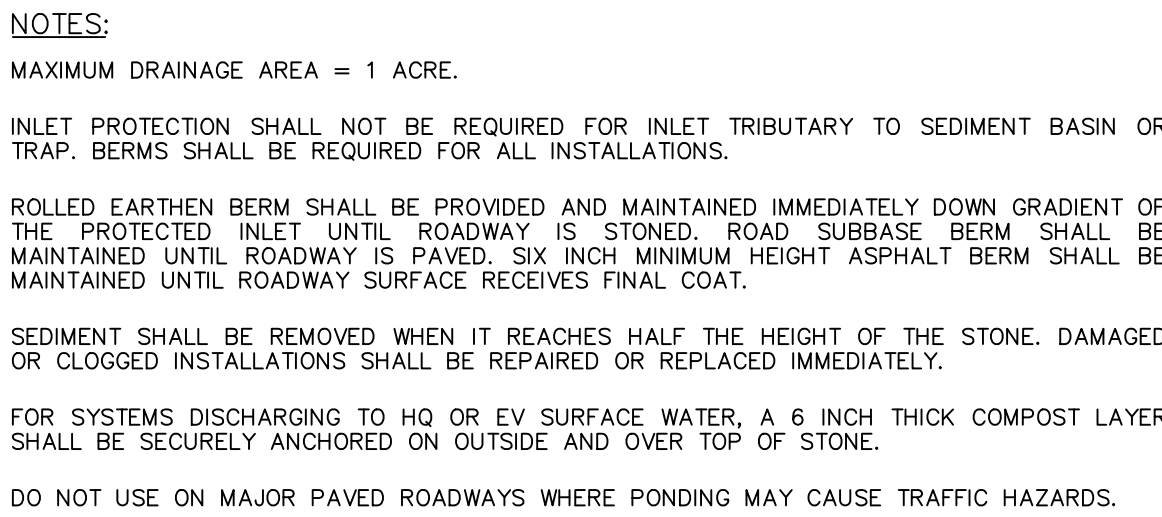


- NOTES:
- WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
 - WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.
 - A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.

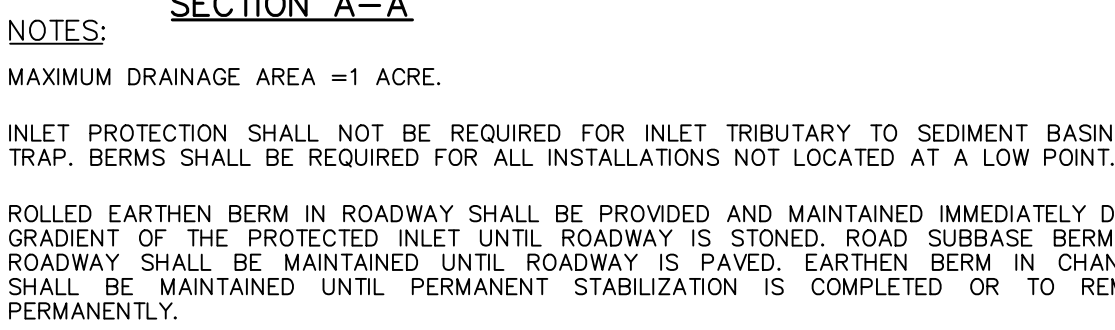
MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK TO A STOCKPILE OF ROCK MATERIALS SHOWN MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIME. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE ROADWAYS AND ROADWAY DITCHES, SEWERS, CULVERTS, AND OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-2
ROCK CONSTRUCTION ACCESS WITH WASH RACK

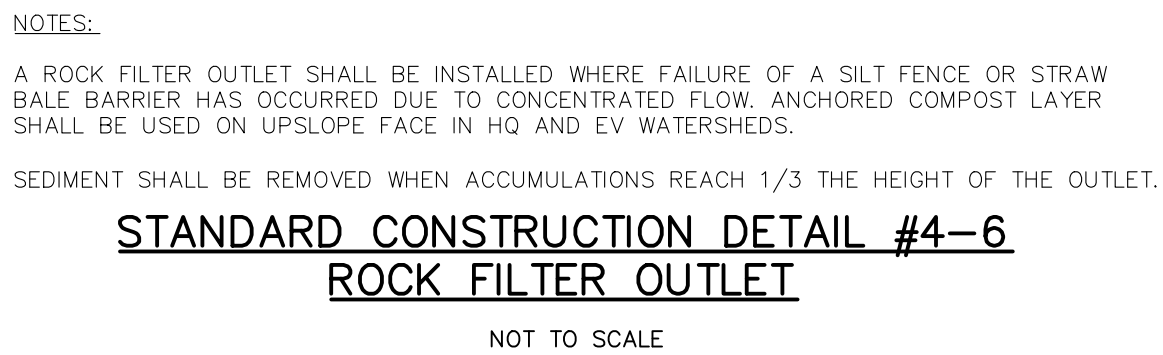
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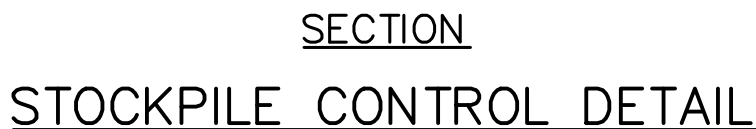
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NOTES:

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

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

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

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

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

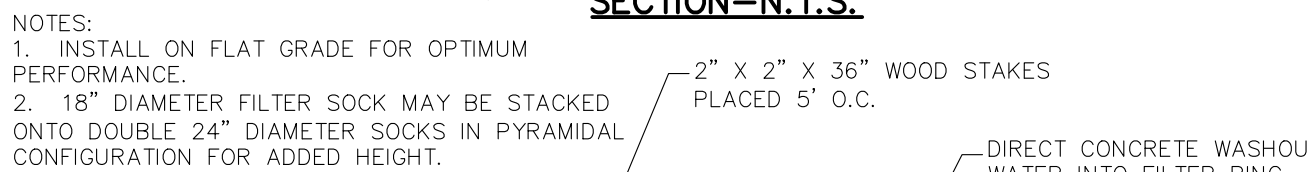
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

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

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

NOT TO SCALE

NOT TO SCALE



A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACES AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

MAINTENANCE:
ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR
LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED
IMMEDIATELY.

ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY

PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

NOT TO SCALE

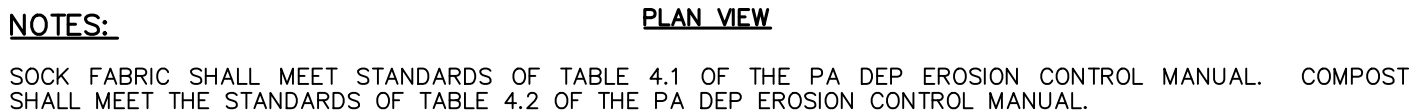
MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPF)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPF)
MATERIAL CHARACTERISTICS	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE	BIO- DEGRADABLE	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS

TWO-PLY SYSTEMS	
INNER CONTAINMENT NETTING	HDPE, BIAXIAL NET
	CONTINUOUSLY WOUND
	FUSION-WELDED JUNCTURES
	3/4" x 3/4" MAX. APERTURE SIZE
	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNTURE)
OUTER FILTRATION MESH	3/16" MAX. APERTURE SIZE

SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS
--

Filtrex & JMC

ORGANIC MATTER CONTENT	25% - 100% (DRY WEIGHT BASIS)
ORGANIC PH	FIBROUS AND ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30%-50% PASS THROUGH 3/8" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 ds/m (mmhos/cm) MAXIMUM



COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTO-DEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

NOT TO SCALE

REVISIONS			
REV. NO.	DATE	DESCRIPTION	BY
1	11/08/24	PER NCCD AND CITY COMMENTS	LME
2	01/16/24	PER CITY COMMENTS	LME

GRAPHIC SCALE:

OWNER

3600 GLOVER ROAD
EASTON, PA 18040

PROJECT TITLE:

CITY OF BETHLEHEM, NORTHAMPTON COUNTY
PENNSYLVANIA

PREPARED BY:

2980 LINDEN ST., UNIT C2 BETHLEHEM, PA 18017
PHONE (484)403-1560 FAX (570)496-7021

SEAL:

TITLE:

DATE ISSUED: 05/31/2024	DRAWN BY: JT	DWG. NO.
SCALE: AS SHOWN	REVIEWED BY: LME	
PROJECT NO: 6637.23	CHECKED BY: MB	

D2.2

OWNERSHIP AND MAINTENANCE RESPONSIBILITIES

OPERATION AND MAINTENANCE

1. **STORMWATER INLETS:** INSPECT STORMWATER INLETS ANNUALLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT. REMOVE SEDIMENT BUILD UP IN STORMWATER INLETS WHEN SEDIMENT REACHES A DEPTH OF 6-INCHES. REMOVE ANY DEBRIS FROM INLET GRATE TO MAINTAIN RUNOFF CAPTURE EFFICIENCY. REPAIR OR REPLACE STORMWATER INLET COMPONENTS (BOX, TOP UNIT, GRATE, ETC.) IMMEDIATELY AS NEEDED.

- [illegible]

CIB - CLARKSBURG SILT LOAM, 3 TO 8 PERCENT SLOPES, HSG C

CnB - COKESBURY SILT LOAM, 3 TO 8 PERCENT SLOPES, HSG D

H₀ - HOLLY SILT LOAM, HSG B/D

U6B - UDORTHENTS. LIMESTONE.

WdC = WASHINGTON SILT LOAM, 8 TO 15 PERCENT SLOPES, HSG.

1999 International Street Journal, 9 to 15 February 2000, 2000, 2001

- CUTBANKS/CAVE: STABILIZE DISTURBED AREAS WITH SEED, MULCH AND SOIL SUPPLEMENTS ON SLOPES 3:1 OR GREATER PROVIDED SOIL MATING.
- CORROSION TO STEEL: STEEL BURIED IN CONSTRUCTION INCLUDES REBAR WHICH WILL BE ENCASED IN CONCRETE.
- CORROSION TO CONCRETE: SOIL WITH HIGH SULPHATE CONTENT IS CORROSIVE TO CONCRETE. USE SULPHATE-RESISTANT BLAST-FURNACE CEMENT, COTR CONCRETE WITH BITUMEN OR USE PRECAST CONCRETE STRUCTURES WHEN CONCRETE IS BURIED.
- DROUGHTY - PROVIDE PROPER SOIL SUPPLEMENTS TO PROMOTE VEGETATIVE GROWTH.
- HYDRIC/HYDRIC INCLUSIONS - AERATE SOIL FOR VEGETATIVE GROWTH.
- SLOW PERCOLATION - AVOID COMPACTION WITHIN INFILTRATION AREAS.
- FROST ACTION - LIMIT CONSTRUCTION TO NON-OBSTRUCTIVE MEASURES DURING WINTER MONTHS.

THE FOLLOWING STEPS OF THE SITE CONSTRUCTION WILL BE CONSIDERED A CRITICAL STAGE INSPECTION WHERE A LICENSED PROFESSION MUST BE PRESENT ONSITE TO ENSURE THE BMPs ARE INSTALLED CORRECTLY.

- 1 - A PRE-CONSTRUCTION MEETING HELD PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
- 2 - INSPECTION PRIOR TO REMOVAL OF E&S CONTROLS
- 3 - FINAL INSPECTION AT PROJECT COMPLETION

UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER § 102.22(A)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMPs IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH §§ 102.4 AND 102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS; AND PCSM REQUIREMENTS), THE PERMITEE OR CO-PERMITEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.

THE NOTICE OF TERMINATION MUST INCLUDE:

- (1) THE FACILITY NAME, ADDRESS AND LOCATION.
- (2) THE OPERATOR NAME AND ADDRESS.
- (3) THE PERMIT NUMBER.
- (4) THE REASON FOR PERMIT TERMINATION.
- (5) IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS IN ACCORDANCE WITH § 102.8(M) AND PROOF OF COMPLIANCE WITH § 102.8(M)(2).

PCSM REPORTING AND RECORDKEEPING: THE PCSM PLAN, INSPECTION REPORTS AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.

LICENSED PROFESSIONAL OVERSIGHT OF CRITICAL STAGES. A LICENSED PROFESSIONAL OR A DESIGNEE SHALL BE PRESENT ONSITE AND BE RESPONSIBLE DURING CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN.

FINAL CERTIFICATION. THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS:

"I (NAME) DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 P.A.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

- (2) THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPs.

POLLUTION CAUSING MATERIAL NOTE:

THE SITE IS UNDERLAIN BY CARBONATE GEOLOGY WHICH IS PRONE TO SINKHOLES. A SINKHOLE MITIGATION DETAIL IS PROVIDED ON THE EROSION AND SEDIMENT CONTROL PLANS AND POST CONSTRUCTION STORMWATER MANAGEMENT PLANS.

1. SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN LANDSCAPED AREA OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACE IN TOPSOIL STOCKPILES

2. SEDIMENT SHALL BE REMOVED FROM SILT SOX WHEN REACHING ONE HALF THE HEIGHT OF THE SOX.

3. THE CONTRACTOR SHALL INSPECT ALL ROAD CONSTRUCTION ENTRANCES ON DAILY BASIS AND SHALL ENSURE THAT SEDIMENT IS NOT BEING TRACKED ONTO PUBLIC STREETS. SEDIMENT THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE COLLECTED AND RETURNED TO THE SITE OR OTHERWISE PROPERLY REMOVED BY A STREET SWEEPER.

3. SHOULD UNFORESEEN EROSION CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO MINIMIZE SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS WELL AS TO THE PROJECT. RUNOFF AND/OR SEDIMENT FROM THE PROJECT SHALL BE COLLECTED IN A BAILER, CRUSHED STONE AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL, REVEGETATION, AND SEDIMENTATION, AND THE APPENDIX 65, EROSION CONTROL, REVEGETATION, AND SEDIMENTATION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.

4. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURE TO PROTECT EXISTING TREES AND SHRUBS WHICH ARE TO REMAIN IN PLACE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGES, INCLUDING REPLACING TREES OR SHRUBS IN KIND IF NECESSARY.

5. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING REGULARLY TRACKED ONTO PUBLIC STREETS, THE CONTRACTOR SHALL BE PREPARED TO TAKE IMMEDIATE ACTION AS GIVEN BY THE MUNICIPALITY OR THE COUNTY CONSERVATION DISTRICT, TO PROVIDE TIE WASHING FACILITIES AT ALL ROCK CONSTRUCTION ENTRANCES.

THE POST CONSTRUCTION STORMWATER MANAGEMENT DESIGN HAS BEEN IMPLEMENTED BY A DESIGN ENGINEER THAT IS FAMILIAR WITH DESIGN CONTROL GUIDELINES AND PROCEDURES. THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAS BEEN DESIGNED TO PRESERVE THE INTEGRITY OF STREAM CHANNELS AND MAINTAIN AND PROTECT THE SURROUNDING WETLANDS AND FORESTED AREAS. THE SITE DESIGN HAS MINIMIZED THE IMPERVIOUS AREAS, MAXIMIZED THE PROTECTION OF THE EXISTING DRAINAGE FEATURES AND EXISTING VEGETATION, MINIMIZED LAND CLEARING AND GRADING AND SOIL COMPACTION, THE SITE UTILIZED CAPTURE AND REUSE SYSTEM AND REVEGETATION/REFORESTATION TO MINIMIZE THE CHANGE IN STORMWATER RUNOFF.

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

SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL EXCESSIVE MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S ENVIRONMENTAL PROTECTION AND SOLID WASTE MANAGEMENT REGULATIONS AT 25 P.A. CODE 260.01, SECS. 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.

UNTIL THE PERMITEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE OF ALL PCSM BMPs ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE. THE DEPARTMENT OR CONSERVATION DISTRICT WILL CONDUCT A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION WITHIN 30 DAYS.

THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPs UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPs.

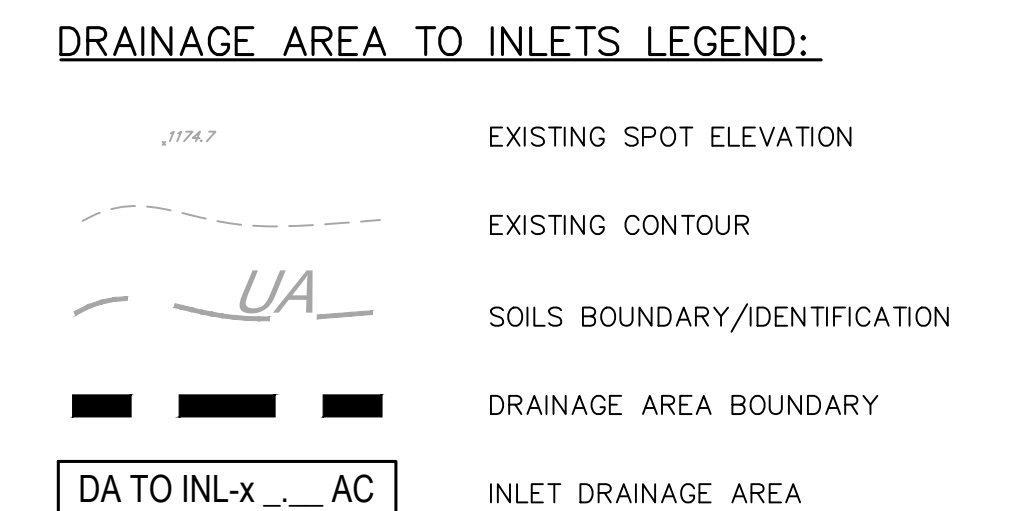
FOR ANY PROPERTY CONTAINING A PCSM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS TO THE PCSM BMP, AND PROVIDE FOR THE MAINTENANCE OF THE PCSM BMP. THE PERMITTEE SHALL HAVE THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP AS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT OWNERS, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER § 102.7(B)(5) (RELATING TO PERMIT TERMINATION).

THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM BMPS OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT.

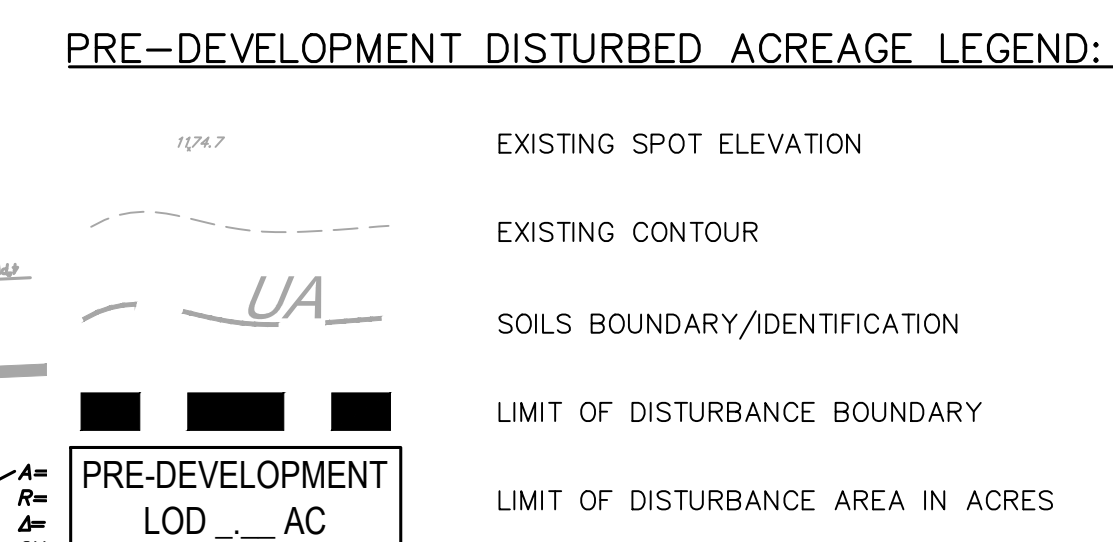
A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPs LOCATED ON THE PROPERTY.

PERMANENT SEEDING SPECIFICATIONS: SPECIES: PA DOT FORMULA B (SLOPES 3:1 OR FLATTER) % PURE LIVE SEED: SEE TABLE A APPLICATION RATE: SEE TABLE A LIMING RATE: 6 TON/ACRE MULCH: STRAW MULCHING RATE: 3 TONS/ACRE 10-20-20 FERTILIZER: 1,000 LBS/ACRE SEEDING SEASON DATES: 3/15 TO 6/1 8/1 TO 10/15		PERMANENT STEEP SLOPE SEEDING SPECIFICATIONS: SPECIES: PA DOT FORMULA D (SLOPES GREATER THAN 3:1) % PURE LIVE SEED: SEE TABLE A APPLICATION RATE: SEE TABLE A LIMING RATE: 6 TON/ACRE MULCH: STRAW MULCHING RATE: 3 TONS/ACRE 10-20-20 FERTILIZER: 1,000 LBS/ACRE SEEDING SEASON DATES: 3/15 TO 6/1 8/1 TO 10/15			
TABLE A					
Formula and Species	% by Weight	Minimum %		Max. %	Seeding Rate lb/1000 Yd ²
		Purity	Germination		
Formula B * Perennial Ryegrass Mixture (Lolium perenne). A combination of improved certified varieties with no one variety exceeding 50% of the total Ryegrass component. * Creeping Red Fescue or Chewink Fescue (Festuca rubra or ssp. commutata) Improved and Certified) * Kentucky Bluegrass Mixture (Poa pratensis). A combination of improved certified varieties with no one variety exceeding 50% of the total Bluegrass component.	20 30 50	97 97 97	90 85 80	0.10 0.10 0.15	42.0 Total
Formula C * Crownvetch (Coronilla varia) * Perennial Ryegrass Mixture (Lolium multiflorum)	45 55	99 95	70+ 90	0.10 0.10	12.0 Total
Formula D * Tall Fescue (Festuca arundinacea var. Kentucky 31) * Creeping Red Fescue or Chewink Fescue (Festuca rubra or ssp. commutata) Improved and Certified * Annual Ryegrass (Lolium multiflorum)	60 30 10	96 97 95	85 85 90	0.10 0.10 0.10	50.0 Total
Formula E * Annual Ryegrass (Lolium multiflorum)	100	95	90	0.10	10.0 Total
Formula L * Hard Fescue Mixture (Festuca longifolia) A combination of improved certified varieties with no one variety exceeding 50% of the total Hard Fescue component. * Creeping Red Fescue (Festuca rubra) (Improved and Certified) * Annual Ryegrass (Lolium Multiflorum)	55 35 10	97 98 95	85 85 90	0.10 0.10 0.10	48.0 Total
Formula W * Tall Fescue (Festuca arundinacea var. Kentucky 31) * Birdsfoot Trefoil Mixture (Lotus corniculatus) * Redtop (Agrostis alba) * Virginia Wild Ry (Elymus virginicus) * Tooa Deertongue (Panicum clandestinum) * Fox Sedge (Carex vulpinoidea)	30 10 10 24 14 12	96 92 92 85 80 85	85 80 80 70 80 60	0.10 0.10 0.10 0.20 0.20 0.20	15.0 Total
NOTE: MULCH RATE FOR INTERIM AND FINAL SEEDING SHALL BE 3 TONS PER ACRE.					

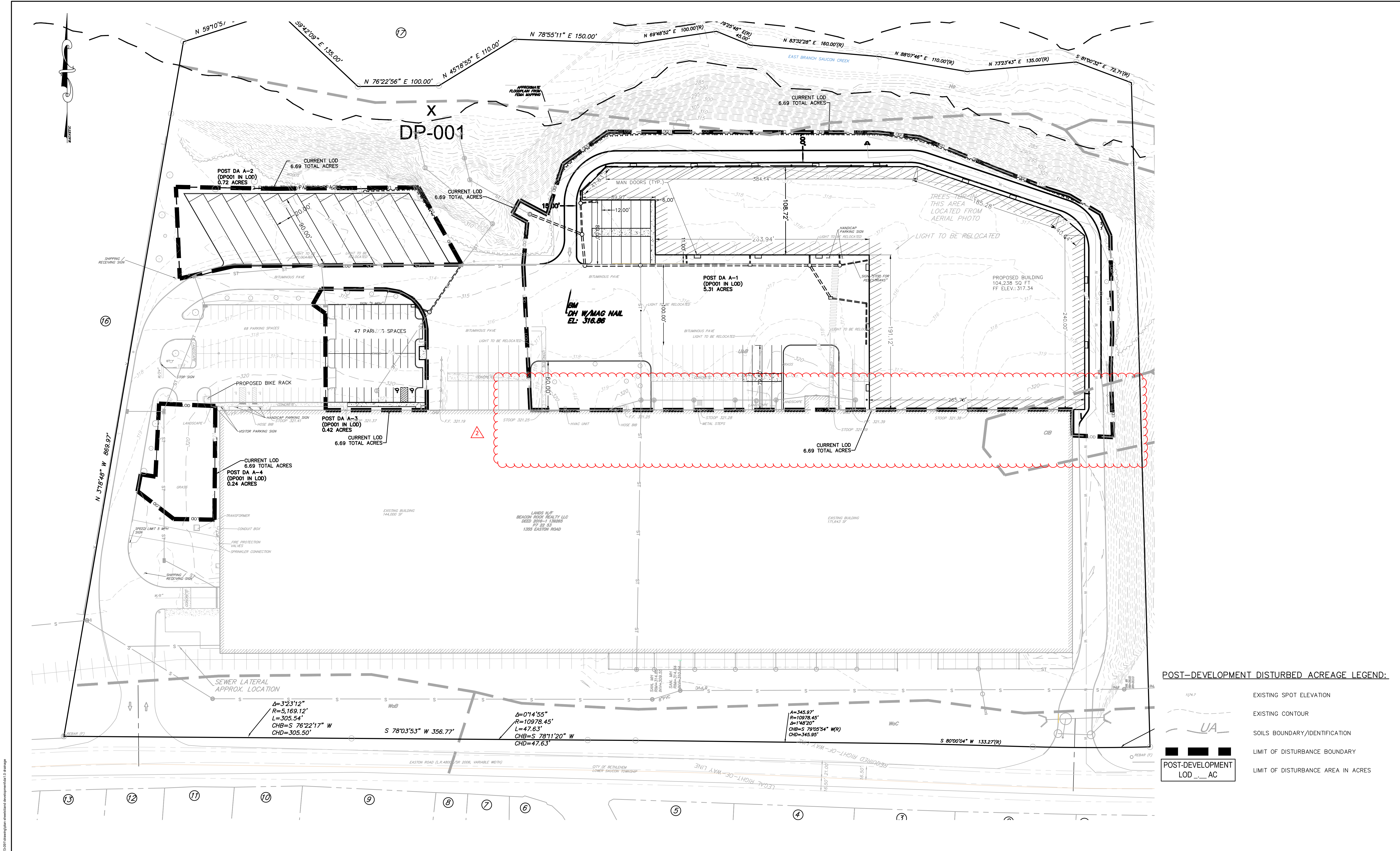
+ Including hardseed and normal seedlings



TITLE: DRAINAGE AREA TO INLETS		
DATE ISSUED: 05/31/2024	DRAWN BY: JT	DWG. NO: DA1.3
SCALE: AS SHOWN	REVIEWED BY: LME	
PROJECT NO: 6637.23	CHECKED BY: MB	





SEAL:	TITLE: PRE-DEVELOPMENT DISTURBED ACREAGE		
	DATE ISSUED: 05/31/2024	DRAWN BY: JT	DWG. NO. DA1.5
	SCALE: AS SHOWN	REVIEWED BY: LME	
	PROJECT NO: 6637 23	CHECKED BY: MB	



POST-DEVELOPMENT DISTURBED ACREAGE LEGEND:

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- SOILS BOUNDARY/IDENTIFICATION
- LIMIT OF DISTURBANCE BOUNDARY
- LIMIT OF DISTURBANCE AREA IN ACRES

POST-DEVELOPMENT LOD 1.6 AC

REVISIONS				GRAPHIC SCALE <div>GRAPHIC SCALE 1 IN = 50 FT</div> 	OWNER <div>BEACON ROCK REALTY, LLC 3600 GLOVER ROAD EASTON, PA 18040</div>	PROJECT TITLE <div>LVPV VII LOTS 53 & 54 CITY OF BETHLEHEM, NORTHAMPTON COUNTY PENNSYLVANIA</div>	PREPARED BY <div> Engineering, Design, Construction Services 2980 LINDEN ST., UNIT C2 BETHLEHEM, PA 18017 PHONE (484)403-1560 FAX (570)496-7021</div>	SEAL	TITLE POST-DEVELOPMENT DISTURBED ACREAGE		
REV. NO.	DATE	DESCRIPTION	BY						DATE ISSUED 05/31/2024	DRAWN BY JT	DWG. NO.
1	11/08/24	PER NCCD AND CITY COMMENTS	LME						SCALE AS SHOWN	REVIEWED BY LME	DA1.6
2	01/16/24	PER CITY COMMENTS	LME								