WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

REFERENCES AND CONTACTS

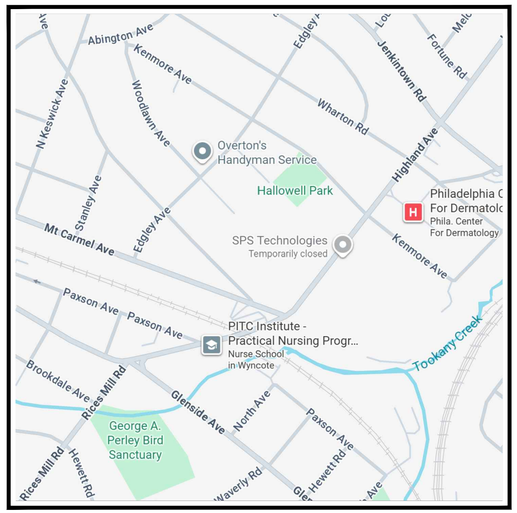
REFERENCES

♦BOUNDARY & TOPOGRAPHIC SURVEY:
CONTROL POINT ASSOCIATES, INC.
1600 MANOR DRIVE, SUITE 210
CHALFONT, PA 18914
DATED: 10/09/2025 (REV. 0)
FILE NO. 02-250286-00
ELEVATIONS: NAVD 1988

♦GEOTECHNICAL INVESTIGATION REPORT:
ECS MID-ATLANTIC, LLC
11000 COMMERCE PARKWAY, SUITE B
MT LAUREL, NJ 08054
DATED: 12/17/2025

♦ARCHITECTURAL PLAN:
PRECIS ENGINEERING + ARCHITECTURE
201 S MAPLE AVENUE, SUITE 200
AMBLER, PA 19002
DATED: 12/19/2025

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.



LOCATION MAP
SCALE: 1" = 500'
SOURCE: GOOGLE

AERIAL MAP
SCALE: 1" = 200'
SOURCE: NEARMAP

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OWNER
SPS TECHNOLGIES, INC.
1900 KENMORE AVE
JENKINTOWN, PA 19046
(215) 572-3000

DEVELOPER
PRECIS ENGINEERING, INC.
20 SOUTH MAPLE STREET
AMBLER, PA 19002
(215) 540-9800

PREPARED BY

BOHLER

CONTACT: AYESHA SOHAIL

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS 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 ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS. LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. WWW.PA1CALL.ORG

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-CNDS

PROJECT:

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1515 MARKET STREET, SUITE 920
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COMMONWEALTH OF PENNSYLVANIA
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

ORG. DATE - 12/19/2025

I:\BOHLER\ENG\NETSHARES\PA-PROJECTS\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAC250142.00-0C---LAYOUT: C-101 COVR

JB

GENERAL NOTES

(Rev. 1/2023)

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING PA, LLC. (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE PROFESSIONAL OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER , IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE PROFESSIONAL OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME.
6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
8. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING PROFESSIONAL OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) PROFESSIONAL OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
12. PROFESSIONAL OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE.
14. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.
16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
17. THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
18. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF PROFESSIONAL OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.
19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING, TO THE PROFESSIONAL OF RECORD AND BOHLER , ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.
20. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO AND MUST JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT PROFESSIONAL OF RECORD AND BOHLER SUFFER AND ANY AND ALL COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS RELATED TO SAME.
21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER , AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S), ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY PROFESSIONAL OF RECORD, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
22. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE, THESE NOTES OR ANY NOTES IN THE PLAN SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
24. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE PROFESSIONAL OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN PROFESSIONAL OF RECORD'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.
26. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY.
27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN; AND, FURTHER, THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
28. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. PROFESSIONAL OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD PROFESSIONAL OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT PROFESSIONAL OF RECORD SUFFERS AND COSTS THAT PROFESSIONAL OF RECORD INCURS AS A RESULT OF SAID FAILURE.
31. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.
32. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE PROFESSIONAL OF RECORD AND BOHLER, THE USE OF THE WORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE PROFESSIONAL OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

DEMOLITION NOTES

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS.
4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.
   - A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
   - B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.
5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, COMPLYING WITH ALL OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEAR TO THE SAME.
7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF ALL UNAUTHORIZED PERSONS AT ANY TIME, TO OR NEAR THE DEMOLITION AREA.
8. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE APPLICABLE SAFETY STANDARDS, AND/OR THE SAFETY OF THE CONTRACTOR AND/OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT. ANY SUCH CONCERNS MUST BE CONVEYED TO THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING AND MUST ADDRESS ALL ISSUES AND ITEMS RESPONDED TO, BY THE PROFESSIONAL OF RECORD AND BY BOHLER, IN WRITING. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.
9. THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AND/OR DISCONNECTION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED, REMOVED AND/OR ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
10. PRIOR TO COMMENCING ANY DEMOLITION, THE CONTRACTOR MUST:
    - A. OBTAIN ALL REQUIRED PERMITS AND MAINTAIN THE SAME ON SITE FOR REVIEW BY THE PROFESSIONAL OF RECORD AND ALL PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK.
    - B. NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION JURISDICTION, AT LEAST 72 BUSINESS HOURS PRIOR TO THE COMMENCEMENT OF WORK.
    - C. INSTALL THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE, AND MAINTAIN SAID CONTROLS UNTIL SITE IS STABILIZED
    - D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT, IN ADVANCE OF ANY EXCAVATION.
    - E. LOCATE AND PROTECT ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL UNDERGROUND UTILITIES.
    - F. PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ANY DEMOLITION ACTIVITIES.
    - G. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS REGARDING THE METHODS AND MEANS TO CONSTRUCT SAME. THESE ARE NOT THE PROFESSIONAL OF RECORD'S OR BOHLER RESPONSIBILITY. IN THE EVENT OF ABANDONMENT, THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WITH IMMEDIATE WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
    - H. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS NECESSARY OR AS REQUIRED TO MINIMIZE THE IMPACT ON, OF, AND TO THE AFFECTED PARTIES. WORK REQUIRED TO BE PERFORMED "OFF-PEAK" IS TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
    - I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS OR THE CONTRACT WITH THE OWNER/DEVELOPER, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK IN THE AREA OF DISCOVERY, AND IMMEDIATELY NOTIFY, IN WRITING AND VERBALLY, THE OWNER, PROFESSIONAL OF RECORD AND BOHLER, THE DISCOVERY OF SUCH MATERIALS TO PURSUE PROPER AND COMPLIANT REMOVAL OF SAME.
11. THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE, UNLESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, OR PURSUANT TO THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
12. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE OR INCLUDE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT SPECIFIC WRITTEN PERMISSION AND AUTHORITY OF AND FROM THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION.
13. THE CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL MUST BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS AND MUST BE SUFFICIENTLY COMPACTED TO SUPPORT ALL NEW IMPROVEMENTS AND MUST BE PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE ARTICULATED IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES AND MUST BE PERFORMED SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING AND MUST SUBMIT SUCH REPORTS AND RESULTS TO THE PROFESSIONAL OF RECORD AND THE OWNER.
14. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT FROM BOTH THE OWNER AND ALL APPLICABLE, NECESSARY AND REQUIRED GOVERNMENTAL AUTHORITIES. PRIOR TO COMMENCING ANY EXPLOSIVE PROGRAM AND/OR ANY DEMOLITION ACTIVITIES, THE CONTRACTOR MUST ENSURE AND OVERSEE THE INSTALLATION OF ALL OF THE REQUIRED PERMIT AND EXPLOSIVE CONTROL MEASURES THAT THE FEDERAL, STATE, AND LOCAL GOVERNMENTS REQUIRE. THE CONTRACTOR IS ALSO RESPONSIBLE TO CONDUCT AND PERFORM ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES AND THE LIKE.
15. IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS, THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR. AFTER THE DEMOLITION IS COMPLETE, THE CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS WHICH THE DEMOLITION OPERATIONS CAUSE. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION AT CONTRACTOR'S SOLE COST.
16. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS OUTSIDE OF APPROVED AREAS WILL NOT BE PERMITTED, INCLUDING BUT NOT LIMITED TO, THE PUBLIC RIGHT-OF-WAY.
17. THE CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS WHICH INDICATES THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK, ALL OF WHICH IS AT THE CONTRACTOR'S SOLE COST.
18. THE CONTRACTOR MUST EMPTY, CLEAN AND REMOVE FROM THE SITE ALL UNDERGROUND STORAGE TANKS, IF ENCOUNTERED, IN ACCORDANCE WITH FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, PRIOR TO CONTINUING CONSTRUCTION IN THE AREA AROUND THE TANK WHICH EMPTYING, CLEANING AND REMOVAL ARE AT THE CONTRACTOR'S SOLE COST.

SOIL EROSION & SEDIMENT CONTROL PLAN NOTES

(Rev. 12/2024)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN AND CONTRACTOR MUST REFER TO THEM. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. INSTALLATION OF EROSION CONTROL DEVICES MUST BE IN ACCORDANCE WITH ALL OF THE MANUFACTURER'S RECOMMENDATIONS.
3. CONTRACTOR MUST INSTALL ADDITIONAL EROSION CONTROL MEASURES IF ENGINEER OR JURISDICTIONAL AGENCY SO REQUIRES, TO PREVENT THE DISCHARGE OF SEDIMENT LADEN RUNOFF FROM EXITING THE SITE.
4. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES ON THE SITE UNTIL PERMANENT STABILIZATION IS ESTABLISHED UNLESS INDICATED OTHERWISE IN LOCAL, STATE AND/OR FEDERAL PROJECT APPROVALS. THE COST OF INSTALLING AND MAINTAINING THE EROSION CONTROL MEASURES MUST BE INCLUDED IN THE BID PRICE FOR THE SITE WORK AND THE CONTRACTOR IS RESPONSIBLE FOR ALL SUCH COSTS.

SITE LAYOUT NOTES

(Rev. 1/2020)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. PRIOR TO THE COMMENCEMENT OF GENERAL CONSTRUCTION, THE CONTRACTOR MUST INSTALL SOIL EROSION CONTROL AND ANY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES NECESSARY, AS INDICATED ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN AND IN ACCORDANCE WITH APPLICABLE AND/OR APPROPRIATE AGENCIES' GUIDELINES TO PREVENT SEDIMENT AND/OR LOOSE DEBRIS FROM WASHING ONTO ADJACENT PROPERTIES OR THE RIGHT OF WAY.
3. ALL DIRECTIONAL/TRAFFIC SIGNING AND PAVEMENT STRIPING MUST CONFORM TO THE LATEST STANDARDS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY APPLICABLE STATE OR LOCALLY APPROVED SUPPLEMENTS, GUIDELINES, RULES, REGULATIONS, STANDARDS AND THE LIKE.
4. THE LOCATIONS OF PROPOSED UTILITY POLES AND TRAFFIC SIGNS SHOWN ON THE PLANS ARE SCHEMATIC AND PRELIMINARY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FIELD-VERIFYING THEIR LOCATION. THE CONTRACTOR MUST COORDINATE THE RELOCATION OF TRAFFIC SIGNS WITH THE ENTITY WITH JURISDICTION OVER THE PROJECT.
5. ALL DIMENSIONS SHOWN ARE TO BOTTOM FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, EXCEPT WHEN DIMENSION IS TO A PROPERTY LINE, STAKE OUT OF LOCATIONS OF INLETS, LIGHT POLES, ETC. MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE DETAILS, UNLESS NOTED CLEARLY OTHERWISE.

GRADING NOTES

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AS REFERENCED IN THIS PLAN SET. IF NO GEOTECHNICAL REPORT HAS BEEN REFERENCED, THE CONTRACTOR MUST HAVE A GEOTECHNICAL ENGINEER PROVIDE WRITTEN SPECIFICATIONS AND RECOMMENDATIONS PRIOR TO THE CONTRACTOR COMMENCING THE GRADING WORK. THE CONTRACTOR MUST FOLLOW THE REQUIREMENTS OF ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, WHICH HAVE JURISDICTION OVER THIS PROJECT.
3. THE CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. THE CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO THE PROFESSIONAL OF RECORD, BOHLER AND THE OWNER PRIOR TO THE CONTRACTOR COMMENCING ANY WORK.
4. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. SHOULD DISCREPANCIES BETWEEN THE PLANS AND INFORMATION OBTAINED THROUGH FIELD VERIFICATIONS BE IDENTIFIED OR EXIST, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING.
5. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ALL UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. THE CONTRACTOR MUST COMPACT ALL EXCAVATED OR FILLED AREAS IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT'S GUIDANCE. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED. THIS REPORT MUST VERIFY THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES WHICH ARE IN EFFECT AND WHICH ARE APPLICABLE TO THE PROJECT. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE MUST BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL, COMPACTED AS THE GEOTECHNICAL REPORT DIRECTS. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO.
6. IN THE EVENT OF A DISCREPANCY(IES) AND/OR A CONFLICT(S) BETWEEN PLANS, OR RELATIVE TO OTHER PLANS, THE GRADING PLAN TAKES PRECEDENCE AND CONTROLS. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY DISCREPANCY(IES) AND/OR CONFLICT(S).
7. THE CONTRACTOR IS RESPONSIBLE TO IMPORT FILL OR EXPORT EXCESS MATERIAL AS NECESSARY TO CONFORM TO THE PROPOSED GRADING, AND TO BACKFILL EXCAVATIONS FOR THE INSTALLATION OF UNDERGROUND IMPROVEMENTS.

ACCESSIBILITY DESIGN GUIDELINES

(Rev. 1/2023)

1. ALL ACCESSIBLE (A.K.A. ADA) COMPONENTS AND ACCESSIBLE ROUTES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF: (A) THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 ET SEQ. AND 42 U.S.C. § 4151 ET SEQ.); AND (B) ANY APPLICABLE LOCAL AND STATE GUIDELINES, AND ANY AND ALL AMENDMENTS TO BOTH, WHICH ARE IN EFFECT WHEN THESE PLANS WERE COMPLETED.
2. THE CONTRACTOR MUST REVIEW ALL DOCUMENTS REFERENCED IN THESE NOTES FOR ACCURACY, COMPLIANCE AND CONSISTENCY WITH INDUSTRY GUIDELINES.
3. THE CONTRACTOR MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ACCESSIBLE (ADA) COMPONENTS AND ACCESSIBLE ROUTES FOR THE SITE. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACES, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, AND INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THE ACCESSIBLE GUIDELINES AND REQUIREMENTS WHICH INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   - A. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SLOPES MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION.
   - B. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 36-INCHES MINIMUM WIDTH (48-INCHES PREFERRED), OR AS SPECIFIED BY THE GOVERNING AGENCY. UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS) MUST NOT REDUCE THIS MINIMUM WIDTH. THE SLOPE MUST NOT EXCEED 1:20 (5.0%) IN THE DIRECTION OF TRAVEL AND MUST NOT EXCEED 1:50 (2.0%) IN CROSS SLOPE. WHERE ACCESSIBLE PATH OF TRAVEL IS GREATER THAN 1:20 (5.0%), AN ACCESSIBLE RAMP MUST BE PROVIDED. ALONG THE ACCESSIBLE PATH OF TRAVEL, OPENINGS MUST NOT EXCEED 1/2-INCH IN WIDTH. VERTICAL CHANGES OF UP TO 1/2-INCH ARE PERMITTED ONLY IF THEY INCLUDES A 1/4-INCH BEVEL AT A SLOPE NOT STEEPER THAN 1:2. NO VERTICAL CHANGES OVER 1/4-INCH ARE PERMITTED.
   - C. ACCESSIBLE RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) AND A RISE OF 30-INCHES. LEVEL LANDINGS MUST BE PROVIDED AT EACH END OF ACCESSIBLE RAMPS. LANDING MUST PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES, AND MUST NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS MUST HAVE A CLEAR LANDING OF A MINIMUM OF 60-INCHES BY 60-INCHES. HAND RAILS ON BOTH SIDES OF THE RAMP MUST BE PROVIDED ON AN ACCESSIBLE RAMP WITH A RISE GREATER THAN 6-INCHES.
   - D. ACCESSIBLE CURB RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%). WHERE FLARED SIDES ARE PROVIDED, THEY MUST NOT EXCEED 1:10 (10%) SLOPE. LEVEL LANDING MUST BE PROVIDED AT RAMPS TOP AT A MINIMUM OF 36-INCHES LONG (48-INCHES PREFERRED). IN ALTERATIONS, WHEN THERE IS NO LANDING AT THE TOP, FLARE SIDES SLOPES MUST NOT EXCEED A SLOPE OF 1:12 (8.3%).
   - E. DOORWAY LANDINGS AREAS MUST BE PROVIDED ON THE EXTERIOR SIDE OF ANY DOOR LEADING TO AN ACCESSIBLE PATH OF TRAVEL. THIS LANDING MUST BE SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO FEWER THAN 60-INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE CLEARLY PERMITTED BY ACCESSIBLE STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2009 AND OTHER REFERENCES INCORPORATED BY CODE).
   - F. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ACCESSIBLE COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, THE CONTRACTOR MUST VERIFY ALL EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR IN ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS BEFORE COMMENCING ANY WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ACCESSIBLE GUIDELINES.
   - G. THE CONTRACTOR MUST VERIFY ALL OF THE SLOPES OF THE CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE EXISTS OR IS OBSERVED OR DISCOVERED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, PRIOR TO POURING CONCRETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND/OR REPLACE NON-CONFORMING CONCRETE AND/OR PAVEMENT SURFACES.
4. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION TO ENSURE SAME IS CONSISTENT WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCING CONSTRUCTION.

DRAINAGE AND UTILITY NOTES

(Rev. 3/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE, AND THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM THOSE LOCATIONS AND SERVICES WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY CONSTRUCTION OR EXCAVATION. THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM ALL SANITARY CONNECTION POINTS AND ALL OTHER UTILITY SERVICE CONNECTION POINTS IN THE FIELD, PRIOR TO COMMENCING ANY CONSTRUCTION. THE CONTRACTOR MUST REPORT ALL DISCREPANCIES, ERRORS AND OMISSIONS IN WRITING, TO THE PROFESSIONAL OF RECORD AND BOHLER.
3. THE CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL OF THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES WHICH OCCUR DURING CONSTRUCTION, AT NO COST TO THE OWNER AND AT CONTRACTOR'S SOLE COST AND EXPENSE. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES WHICH OCCURS DURING CONSTRUCTION.
4. THE CONTRACTOR MUST FIELD VERIFY THE PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES BY USING A TEST PIT TO CONFIRM EXACT DEPTH, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS, SIZE, AND MATERIAL OF SAME BASED UPON FINAL ARCHITECTURAL PLANS.
6. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SITE PLAN DOCUMENTS AND ARCHITECTURAL PLANS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS; GREASE TRAP REQUIREMENTS; AND DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITY SERVICES WITH THE INDIVIDUAL COMPANIES TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS OF THE APPLICABLE JURISDICTION AND REGULATORY AGENCIES AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE DOCUMENTS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, AND PRIOR TO CONSTRUCTION, MUST RESOLVE SAME.
7. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE EXACTLY AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND THE CONTRACTOR MUST COORDINATE SAME WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST COMPLY WITH APPLICABLE REQUIREMENTS AND SPECIFICATIONS. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR DESIGN OF TRENCH BACKFILL OR FOR COMPACTION REQUIREMENTS
8. DURING THE INSTALLATION OF SANITARY, STORM, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE, IN ANY RESPECT, FROM THE INFORMATION CONTAINED IN THESE PLANS. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE APPROPRIATE PLAN(S), WHICH THE CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER IMMEDIATELY UPON THE COMPLETION OF WORK.
9. THE CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SANITARY, WATER AND STORM SYSTEMS, ARE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND OR STATE DOT DETAILS AS APPLICABLE. THE CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME.
10. FINAL LOCATIONS OF PROPOSED UTILITY POLES, AND/ OR POLES TO BE RELOCATED ARE AT THE SOLE DISCRETION OF THE RESPECTIVE UTILITY COMPANY, REGARDLESS OF WHAT THIS PLAN DEPICTS.
11. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. THE CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION.
12. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED FINISHED GRADES WITH NO TRIPPING OR SAFETY HAZARD IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

OUTSIDE SOURCE NOTES

(Rev. 11/2023)

ANY INFORMATION, DRAWINGS, DATA, PLANS, SPECIFICATIONS, MATERIALS, FIGURES, DOCUMENTATION, REPORTS, AND THE LIKE WHICH IS INDICATED TO HAVE BEEN PREPARED "BY OTHERS" (HEREIN, "BY OTHERS REPORTS, DOCUMENTS AND DETAILS") HAS BEEN OR WILL BE CREATED, DEVELOPED, PREPARED, PERFORMED, AND ANALYZED BY AN ENTITY OR PARTY OTHER THAN THE "BOHLER" ENTITY INVOLVED WITH THIS PROJECT. THE "BOHLER" ENTITY IS NOT IN ANY WAY RESPONSIBLE FOR THE BY OTHERS REPORTS, DOCUMENTS AND DETAILS EVEN IF/WHERE INCLUDED IN THE "BOHLER" ENTITY'S PLANS, REPORTS, ETC. SAME HAS BEEN INCLUDED ON THIS PLAN FOR THE CONVENIENCE, ONLY, OF THE PROJECT OWNER, DEVELOPERS, CONTRACTORS AND CONSULTANTS AND IN ORDER TO COORDINATE THE "BOHLER" ENTITY'S DESIGN WITH THAT OF "OTHERS". THE "BOHLER" ENTITY HAS ASSUMED, FOR PURPOSES OF THIS PLAN, THAT THE BY OTHERS REPORTS, DOCUMENTS AND DETAILS ARE CURRENT AND, IF APPLICABLE, PREPARED IN STRICT ACCORDANCE WITH ALL APPLICABLE COUNTY, STATE, FEDERAL AND OTHER STATUTES, LAWS, RULES, REGULATIONS, ORDINANCES AND THE LIKE. THE "BOHLER" ENTITY SPECIFICALLY DISCLAIMS ANY AND ALL LIABILITY AND RESPONSIBILITY FOR BY OTHERS REPORTS, DOCUMENTS AND DETAILS. THE ENTITY OR PERSON WHO CREATED THE INFORMATION CONTAINED IN THE BY OTHERS REPORTS, DOCUMENTS AND DETAILS (EXCLUDING INFORMATION AND/OR DETAILS SOLELY SUPPLIED BY A JURISDICTION AND/OR GOVERNING BODY) AGREES BY PARTICIPATING IN THIS PROJECT, RECEIVING, REVIEWING, USING AND/OR RELYING UPON THIS DOCUMENT, AND/OR BY AGREEING TO THE PROJECT OWNER/DEVELOPER'S CONTRACT DOCUMENTS, TO DEFEND, INDEMNIFY, PROTECT AND HOLD HARMLESS THE "BOHLER" ENTITY THAT PREPARED THIS DOCUMENT AND ITS EMPLOYEES FOR ANY AND ALL DAMAGES, INJURIES, COSTS, EXPENSES AND THE LIKE, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, WHICH THE "BOHLER" ENTITY AND/OR ITS EMPLOYEES SUFFER OR INCUR AS A RESULT OF INCLUDING ANY BY OTHERS REPORTS, DOCUMENTS AND DETAILS IN AND ON OR IN THIS PLAN. ANYONE OR ANY ENTITY WHO RECEIVED, RELIES UPON AND/OR USES THIS PLAN, AGREES TO HOLD THE "BOHLER" ENTITY AND ITS EMPLOYEES HARMLESS FROM ANY CLAIMS, DAMAGES, INJURIES, COSTS AND EXPENSES, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR ANY DAMAGES, INJURIES, COSTS, EXPENSES AND THE LIKE, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, WHICH IT OR THEY SUFFER OR INCUR AS A RESULT OF THE ANY BY OTHERS REPORTS, DOCUMENTS AND DETAILS INCORPORATED IN THE PLAN, AND EXPRESSLY CONFIRMS THAT BY RECEIVING, RELYING UPON AND/OR USING SAME, THE "BOHLER" ENTITY SHALL HAVE NO LIABILITY RELATED TO SAME. WITH RESPECT TO ALL BY OTHERS REPORTS, DOCUMENTS AND DETAILS, CONTRACTOR MUST VERIFY ALL INFORMATION CONTAINED IN THE SCOPE OF ALL PARTIES INVOLVED IN PREPARING THE BY OTHERS REPORTS, DOCUMENTS AND DETAILS PRIOR TO COMMENCING ANY CONSTRUCTION AND MUST VERIFY THAT THE INFORMATION IS THE LATEST, THE MOST RECENT AND THE MOST CURRENT REPORT, DOCUMENT AND DETAIL. REFERENCES ON THIS PLAN TO INFORMATION PREPARED OR CONTAINED IN BY OTHERS REPORTS, DOCUMENTS AND DETAILS DEPICTING AN OFF-SITE AREA WHERE NO DETAIL IS INCLUDED IS A REFERENCE TO AN AREA, DETAIL, SPECIFICATION OR DESIGN THAT HAS NOT BEEN DESIGNED OR CONSTRUCTED BY THE "BOHLER" ENTITY AND REGARDING WHICH THE "BOHLER" ENTITY HAS NO CONTROL OVER OR LIABILITY REGARDING, BUT IS ADDED TO THIS PLAN FOR INFORMATIONAL PURPOSES, ONLY.

STANDARD ABBREVIATIONS

FOR ENTIRE PLAN SET

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AC	ACRE / ACRES
AD	AREA DRAIN
ADA	ACCESSIBLE / AMERICANS WITH DISABILITIES ACT
AG	ABOVE GROUND
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASPH	ASPHALT
ASSF	AREA SUBJECT TO STORMWATER FLOWAGE
ASSOC	ASSOCIATION
BC	BOTTOM OF CURB
BF	BASEMENT FLOOR
BIO	BIOGARDEN
BIT	BITUMINOUS
BK	BLOCK
BL	BASELINE
BLDG	BUILDING
BM	BENCH MARK
BRL	BUILDING RESTRICTION LINE
BVW	BORDERING VEGETATIVE WETLAND
CB	CATCH BASIN
CF	CUBIC FEET
CI	CURB INLET
CIT	CHANGE IN TYPE
CL	CENTER LINE
CMP	CORRUGATED METAL PIPE
C/O	CLEAN OUT
CONC	CONCRETE
CONN	CONNECTION
COORD	COORDINATE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARD
DEC	DECORATIVE
DEP	DEPARTMENT OF ENVIRONMENTAL PROTECTION
DET	DETENTION
DIA	DIAMETER
DMH	DRAINAGE MANHOLE
DOM	DOMESTIC
DOT	DEPARTMENT OF TRANSPORTATION
DP	DESIGN POINT
DWL	DASHED WHITE LINE
DYL	DOUBLE YELLOW LINE
EG	EXISTING GRADE
ELEC	ELECTRIC
ELEV	ELEVATION
EOR	ENGINEER OF RECORD
EP / EOP	EDGE OF PAVEMENT
ES / EOS	EDGE OF SHOULDER
EW	END WALL
EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
FES	FLARED END SECTION
FF	FINISH / FIRST FLOOR
FFE	FINISH / FIRST FLOOR ELEVATION
FG	FINISH GRADE
FH	FIRE HYDRANT
FM	FORCE MAIN
FO	FIBER OPTIC
G	GRADE
GC	GENERAL CONTRACTOR
GEO	GEOTECH/GEOTECHNICAL
GF / GFE	GARAGE FLOOR ELEVATION (AT DOOR)
GFA	GROSS FLOOR AREA
GH	GRADE HIGH (WALL)
GL	GRADE LOW (WALL)
GRT	GRATE
GT	GREASE TRAP
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HOR	HORIZONTAL
HP	HIGH POINT
HW	HEADWALL
ICS	INLET CONTROL STRUCTURE
INF	INFILTRATION
INT	INTERSECTION
INV	INVERT
LF	LINEAR FOOT
LOC	LIMIT OF CLEARING
LOD	LIMIT OF DISTURBANCE
LOS	LINE OF SIGHT
LOW	LIMIT OF WORK
LP	LOW POINT
LS	LANDSCAPE
LSA	LANDSCAPE AREA
MAX	MAXIMUM
ME	MATCH EXISTING
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NRCS	NATIONAL RESOURCE CONSERVATION SERVICE
O&M	OPERATIONS AND MAINTENANCE
OC	ON CENTER
OCS	OUTLET CONTROL STRUCTURE
OGS	OIL AND GRIT SEPARATOR
ORD	ORDINANCE
PA / POA	POINT OF ANALYSIS
PC	POINT OF CURVATURE
PCCR	POINT OF CURVATURE, CURB RETURN
PERF	PERFORATED
PG	PROPOSED GRADE
PI	POINT OF INTERSECTION
POG	POINT OF GRADE
PP	POLYPROPYLENE PIPE
PROP	PROPOSED
PT	POINT OF TANGENCY
PTCR	POINT OF TANGENCY, CURB RETURN
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS / RADII
R/W	RIGHT-OF-WAY / RIGHTS-OF-WAY
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REGS	REGULATIONS
RELO	TO BE RELOCATED
REQ	REQUIRED
RET	RETENTION
RET WALL	RETAINING WALL
RETO	TO BE RETURNED TO OWNER
RG	RAIN GARDEN
S	SLOPE
SAN	SANITARY SEWER
SESC	SOIL EROSION AND SEDIMENT CONTROL
SF	SQUARE FEET
SHLO	STATE HIGHWAY LAYOUT
SMH	SANITARY MANHOLE
STA	STATION
STM	STORM WATER / STORM SEWER
SWL	SINGLE/SOLID WHITE LINE
SWPPP	STORMWATER POLLUTION PREVENTION PLAN
TBA	TO BE ABANDONED
TBR	TO BE REMOVED
TBV	TO BE VACATED
TC	TOP OF CURB
Tc	TIME OF CONCENTRATION
TD	TRENCH DRAIN
TELE	TELECOMMUNICATIONS / TELEDATA
TPF	TREE PROTECTION FENCE
TR	TO REMAIN
TRANS	TRANSITION
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
USGS	UNITED STATES GEOLOGICAL SURVEY
VERT	VERTICAL
VIF	VERIFY IN FIELD
W	WIDE / WIDTH
W/L	WATER LINE
WM	WATER METER
WQU	WATER QUALITY UNIT
YD	YARD DRAIN
#	NUMBER
#:#	SLOPE EXPRESSED IN HORIZONTAL:VERTICAL IN FEET
±	PLUS OR MINUS
°	DEGREE
Ø	DIAMETER
'	FEET/FOOT
"	INCHES

PROP LINE LEGEND

PROPERTY LINE	━━ ━ ━ ━━
RIGHT-OF-WAY LINE	━━ - - - ━━
INTERIOR PROPERTY LINE	—— – – ——
LEASE LINE	—— – ——
EASEMENT LINE	— — — —
SETBACK LINE	— — — —
LIMIT OF WORK	▬▬LOW▬▬
LIMIT OF DISTURBANCE	▬▬LOD▬▬
SAWCUT LINE	━ - · - - · ━
OVERHEAD WIRE	——OH——
ELECTRIC LINE	——E——
TELEPHONE LINE	——T——
CABLE LINE	——C——
GAS LINE	——G——
STORM SEWER	▬ ▭ ▬ ▭ ▬
SANITARY MAIN 12" OR GREATER	▬▭▭▬
SANITARY MAIN	——S——
SANITARY LATERAL	——SL——
SANITARY FORCE MAIN	——FM——
WATER MAIN 12" OR GREATER	▬▬▬▬
WATER MAIN	——W——
WATER LATERAL	——WL——
WATER FIRE LINE	——F——

PROP SYMBOL LEGEND

TYPICAL SIGN	▽
TYPICAL BOLLARD	○
UTILITY POLE WITH LIGHT	●——○
UTILITY POLE	●
TYPICAL LIGHT	⊕▭
FIRE HYDRANT	▽
CLEANOUT	°C/O
SANITARY MANHOLE	Ⓢ
STORM MANHOLE	Ⓓ
WATER METER	⊗WM
WATER VALVE	⋈
GAS VALVE	▢GV
TEST PIT	▚ T-#
BORING	◐ B-#

PROP CURB LEGEND

CURB AND GUTTER	═
SPILL CURB AND GUTTER	▬
TRANSITION CURB AND GUTTER	┼┼┼
DEPRESSED CURB AND GUTTER	- - -
VERTICAL CURB	═
BELGIAN BLOCK	═

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PROJECT No.: PAC250142.00-0C
DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVL-CNDS

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

— FOR —

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

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M. J. KEARSE
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE09[illegible]

SHEET TITLE:

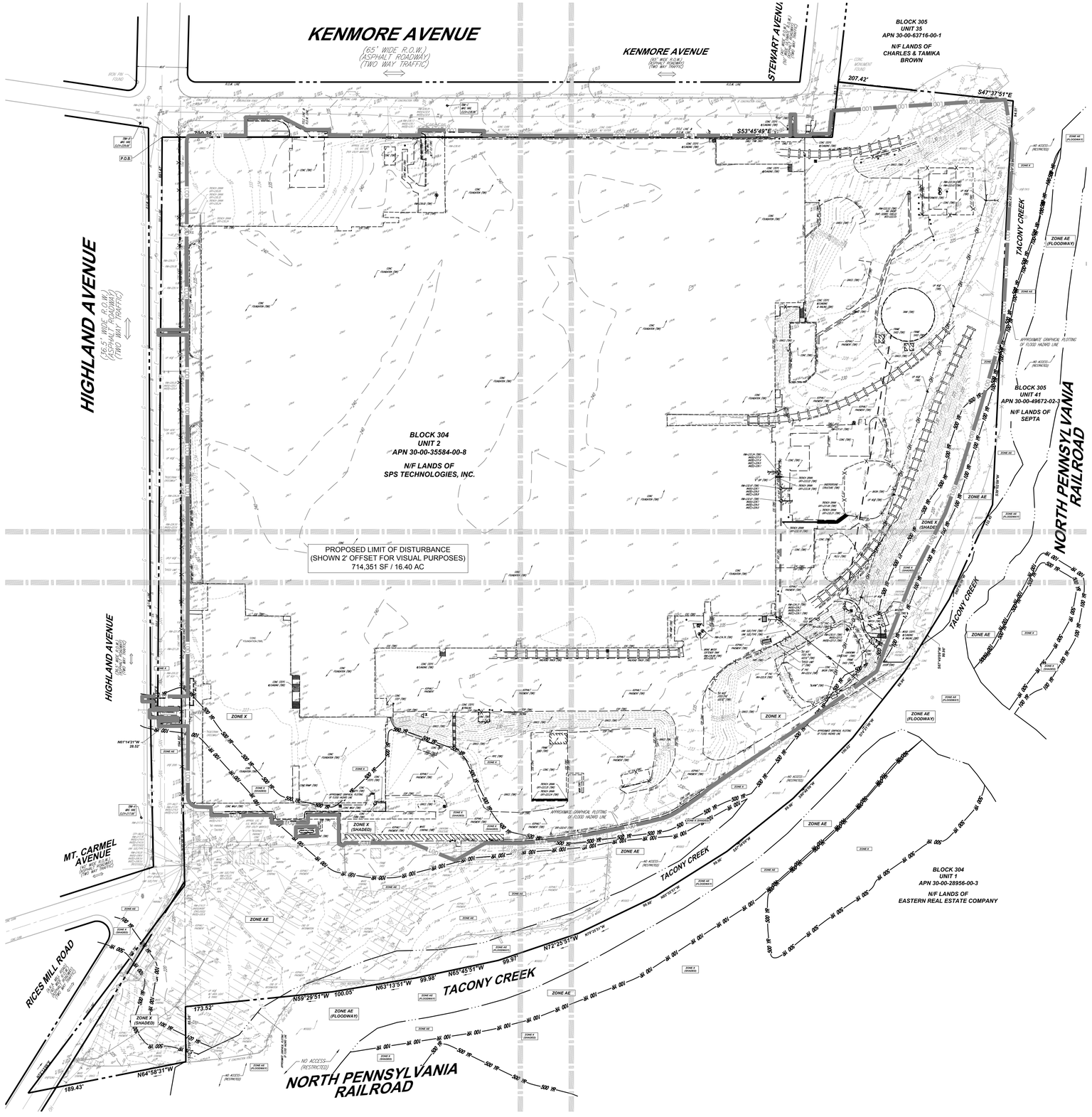
GENERAL NOTES AND LEGEND

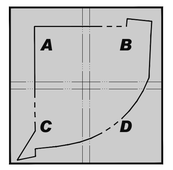
SHEET NUMBER:

C-102

ORG. DATE - 12/19/2025

Dec 19, 2025
\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAC250142.00-0C----->LAYOUT: C-102 NOTE
JB





KEY MAP
SCALE 1" = 600'

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60 30 15 0 60
SCALE: 1" = 60'

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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-SITE

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

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PROPOSED INDUSTRIAL REDEVELOPMENT

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MATTHEW JOHN KEARSE
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PROFESSIONAL ENGINEER
PENNSYLVANIA

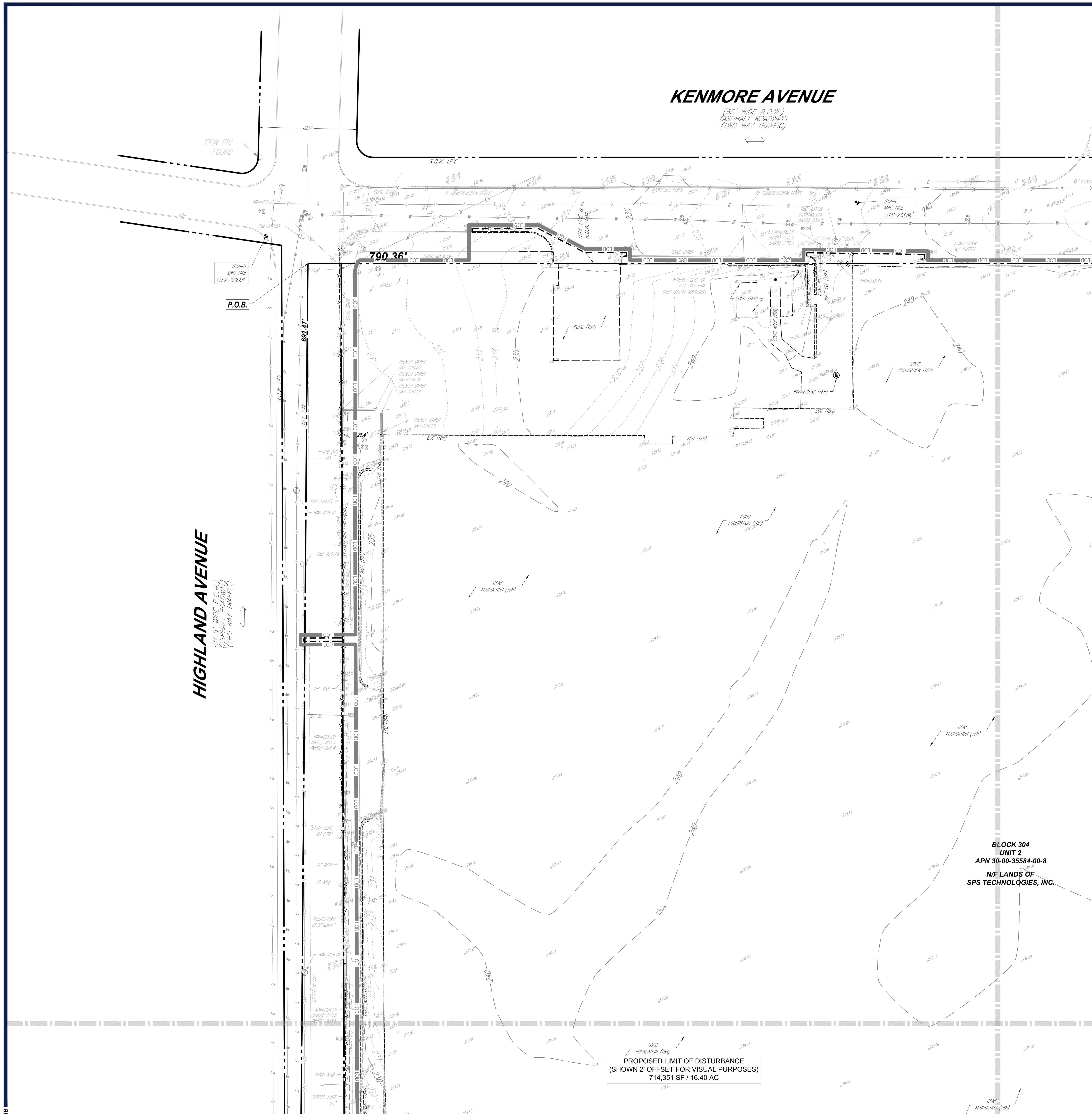
SHEET TITLE:

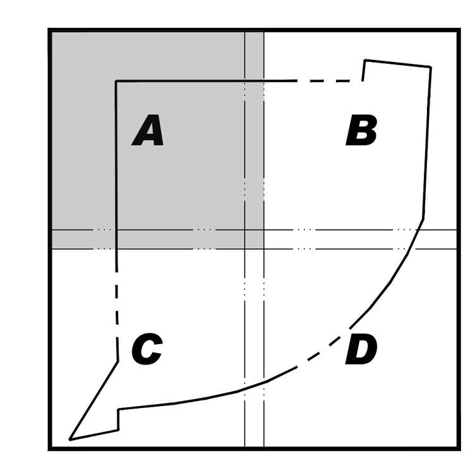
OVERALL DEMOLITION PLAN

SHEET NUMBER:

C-200

ORG. DATE - 12/19/2025





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30 15 7.5 0 30

SCALE: 1" = 30'

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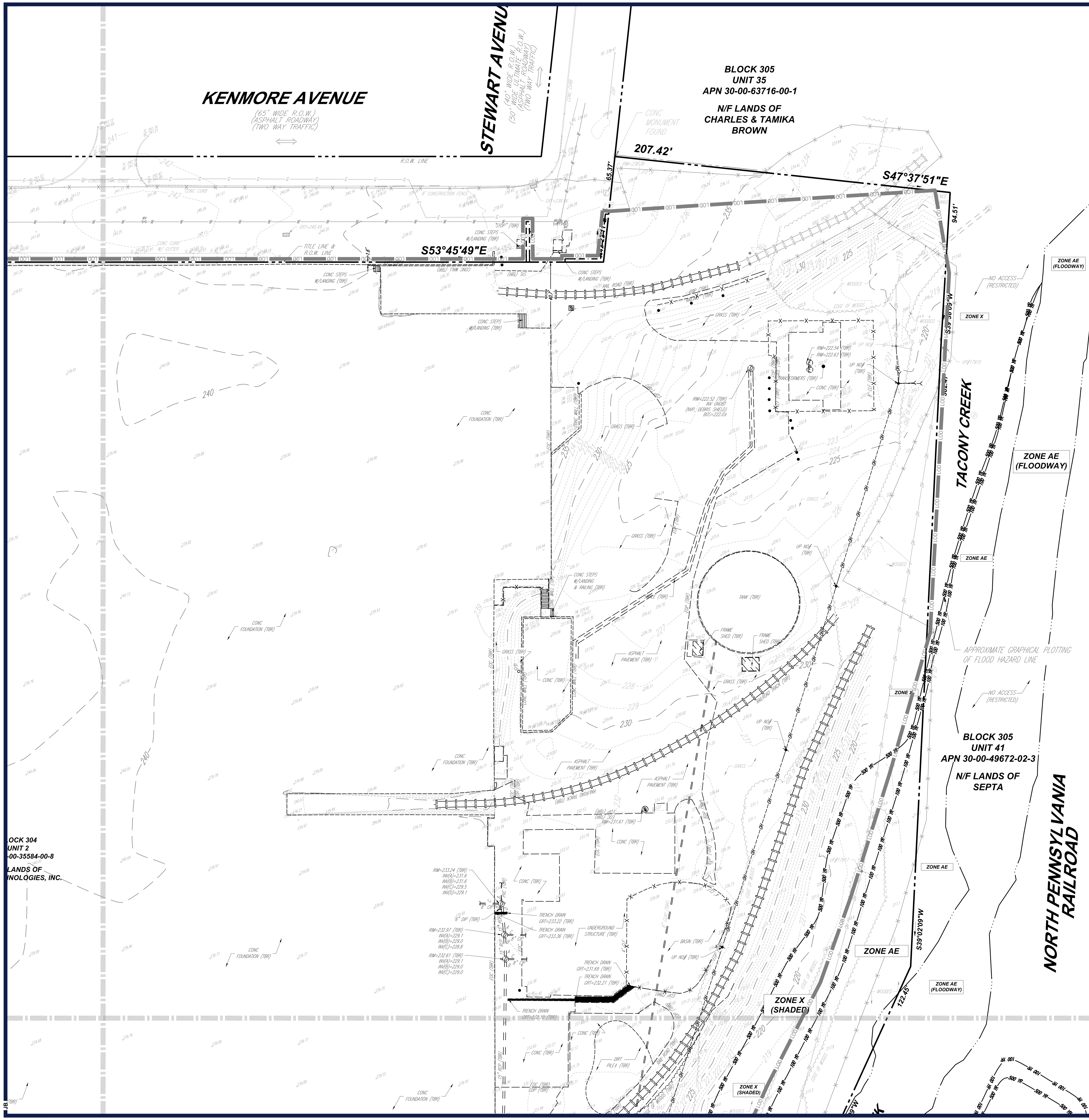
SHEET TITLE:

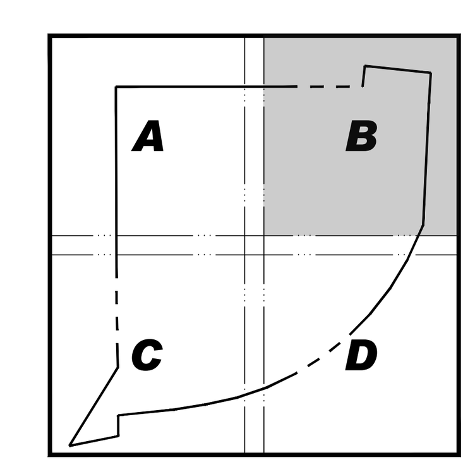
EXISTING CONDITIONS/ DEMOLITION PLAN 'A'

SHEET NUMBER:

C-201

ORG. DATE - 12/19/2025





KEY MAP
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SCALE: 1" = 30'

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PROJECT No.: PAC250142.00-0C
DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVL-SITE

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

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PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

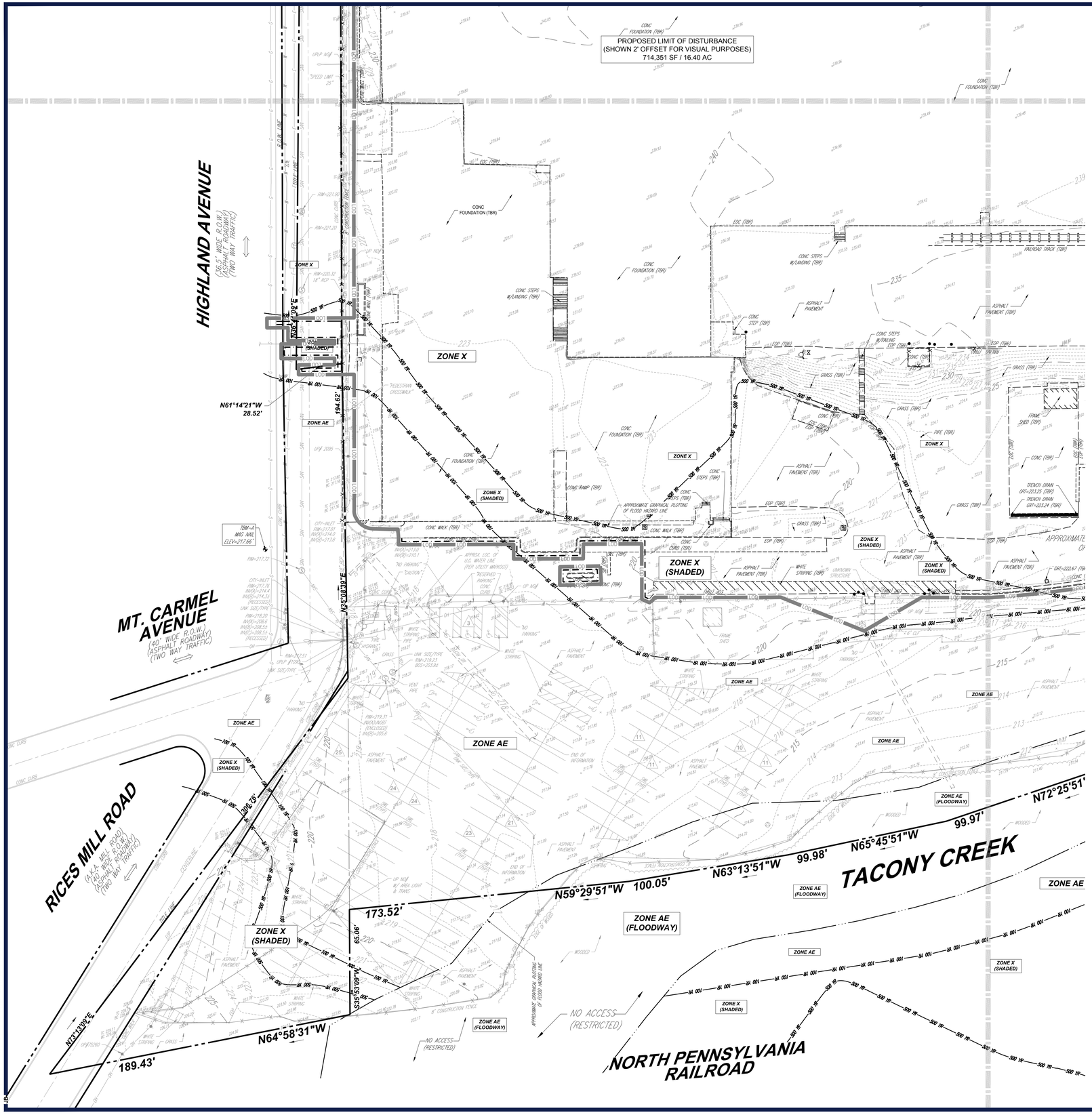
SHEET TITLE:

EXISTING CONDITIONS/ DEMOLITION PLAN 'B'

SHEET NUMBER:

C-202

ORG. DATE - 12/19/2025



KEY MAP

SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR DEMOLITION PURPOSES ONLY

SCALE: 1" = 30'

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M. KEARSE
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER

SHEET TITLE:

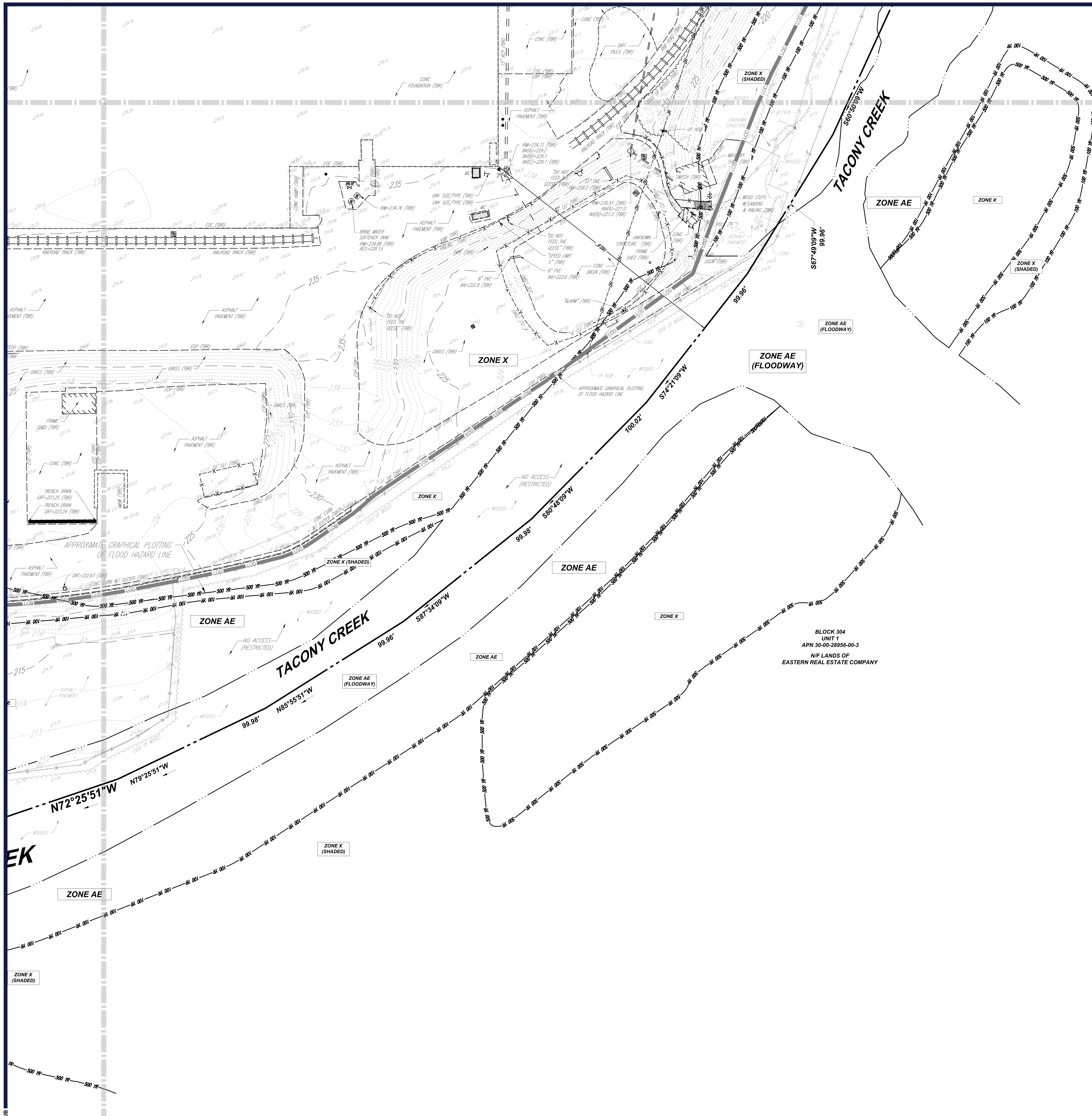
EXISTING CONDITIONS/ DEMOLITION PLAN 'C'

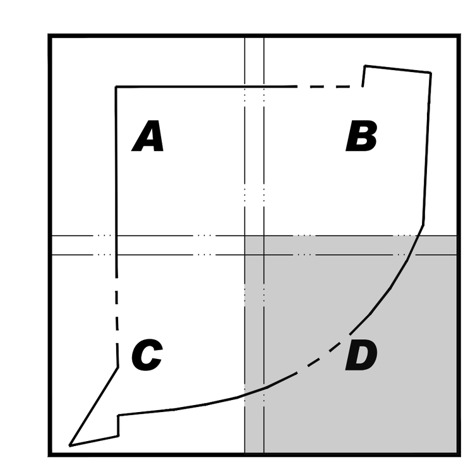
SHEET NUMBER:

C-203

ORG. DATE - 12/19/2025

\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-SITE-PAC250142.00-0C----->LAYOUT: C-203 EXDM 'C'
JB





KEY MAP

SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR DEMOLITION PURPOSES ONLY

SCALE: 1" = 30'

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PROJECT:

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FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
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APN 30-00-35584-00-8

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www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
MATTHEW JOHN KEARSE

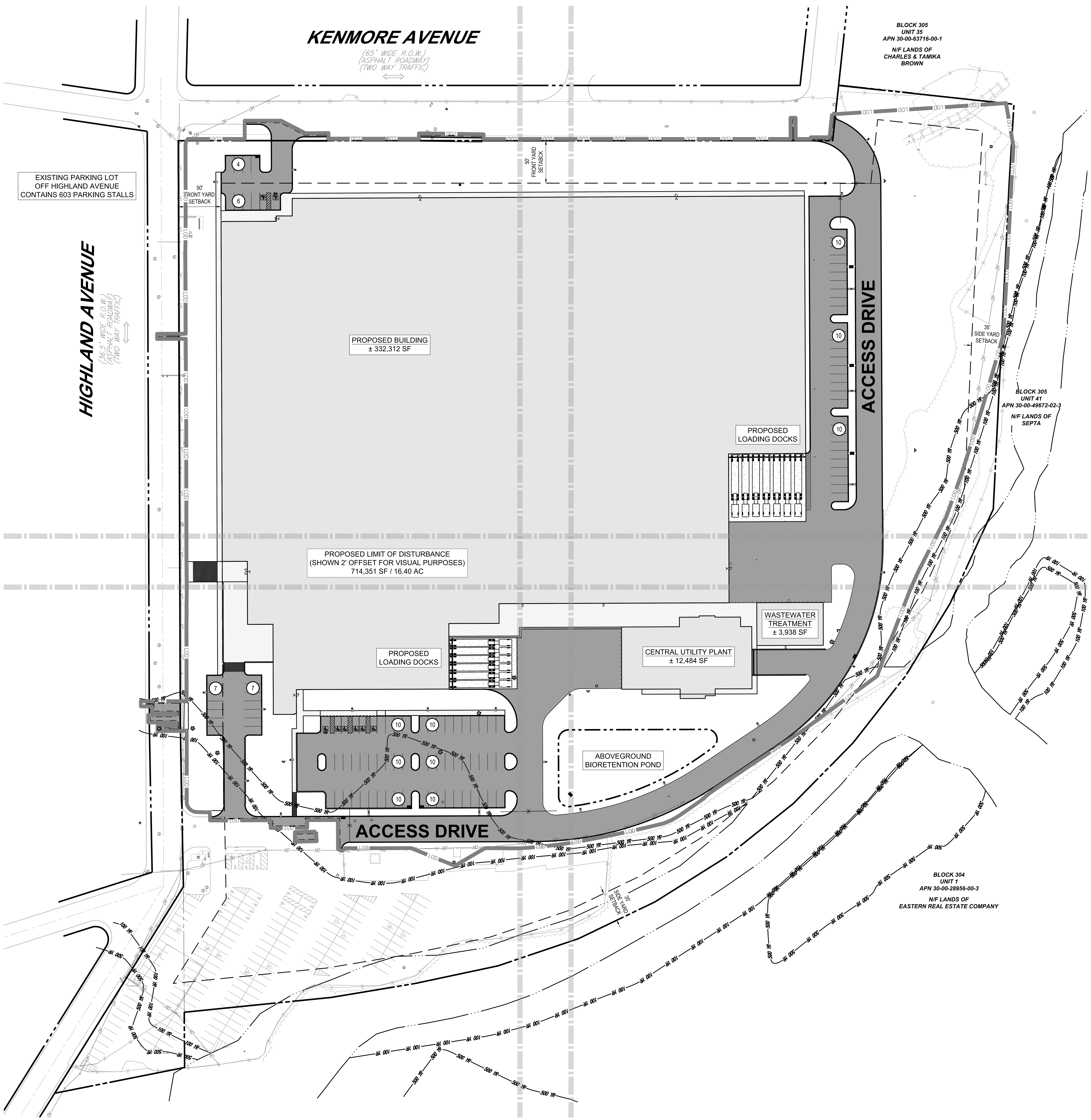
SHEET TITLE:

EXISTING CONDITIONS/ DEMOLITION PLAN 'D'

SHEET NUMBER:

C-204

ORG. DATE - 12/19/2025



ZONING TABLE

ZONE: SI-G (SUBURBAN INDUSTRIAL GLENSIDE)
USE: D-9 (MANUFACTURING/ASSEMBLY)
APN 30-00-35584-00-8

APPLICANT/ OWNER INFORMATION

APPLICANT:	PRECIS ENGINEERING, INC. 20 SOUTH MAPLE STREET AMBLER, PA 19002
PROPERTY OWNER:	SPS TECHNOLOGIES, INC. 1900 KENMORE AVENUE JENKINTOWN, PA 19046

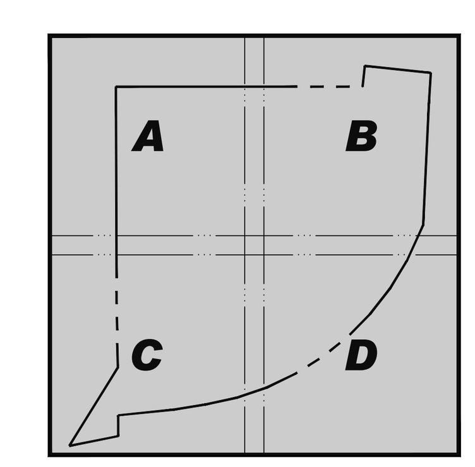
BULK REQUIREMENTS

ITEM	CODE	PERMITTED	EXISTING	PROPOSED
MIN TRACT AREA	FIGURE 12.2	174,240 SF (4.00 AC)	886,014 SF (20.34 AC)	866,133 SF (19.88 AC)
MIN LOT WIDTH	FIGURE 12.2	200.0'	1,020.0'	1,020.0'
MIN LOT DEPTH	FIGURE 12.2	200.0'	936.0'	910.0'
MIN YARD SETBACKS				
FRONT YARD	FIGURE 12.2	50.0' FROM STREET R/W	1.2' (ENC)	50.0'
SIDE YARD	FIGURE 12.2	35.0' FROM SIDE LOT LINE	160.6'	98.4'
REAR YARD	FIGURE 12.2	35.0' FROM REAR LOT LINE	N/A	N/A
MAX PERMITTED HEIGHT	FIGURE 12.2	TBD	TBD	TBD
MAX BUILDING COVERAGE	FIGURE 12.2	70.0%	46.8% (414,940 SF)	40.3% (348,868 SF)
MAX IMPERVIOUS COVERAGE	FIGURE 12.2	80.0%	77.4% (685,390 SF)	69.5% (601,927 SF)
MIN ACCESS DRIVEWAY WIDTH	§ 146-28.C	24.0'	24.0'	24.0'

PARKING REQUIREMENTS

ITEM	CODE	PERMITTED	EXISTING	PROPOSED
MIN STALL SIZE	§ 146-28.A	10' X 20'	9' X 18'	10' X 20'
MIN ADA STALL SIZE	§ 146-28.A	8' X 20'	8' X 18'	8' X 20'
MIN AISLE WIDTH	§ 146-28.C	24.0'	24.0'	24.0'
MIN NUMBER OF STALLS	§ 000-000	739 STALLS	766 STALLS	880 STALLS
MIN NUMBER OF ADA STALLS	§ 000-000	18 STALLS	17 STALLS	25 STALLS

ALL INDUSTRIAL USES:
1 PARKING SPACE FOR EVERY 1,000 SQUARE FEET OF GROSS LEASABLE FLOOR AREA AREA DEVOTED TO INDUSTRIAL USE, INCLUDING STORAGE AREA; PLUS 1 PARKING SPACE FOR EVERY 300 SQUARE FEET OF GROSS LEASABLE FLOOR AREA DEVOTED TO OFFICE USE
REQUIRED PARKING = (489,000 SF) / (1,000 SF) + (75,000 SF) / (300 SF) = 489 + 250 = 739 STALLS REQUIRED



KEY MAP
SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

SCALE: 1" = 60'

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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-SITE

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
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APN 30-00-35584-00-8

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Phone: (267) 402-3400
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www.BohlerEngineering.com

M. KEARSE
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER

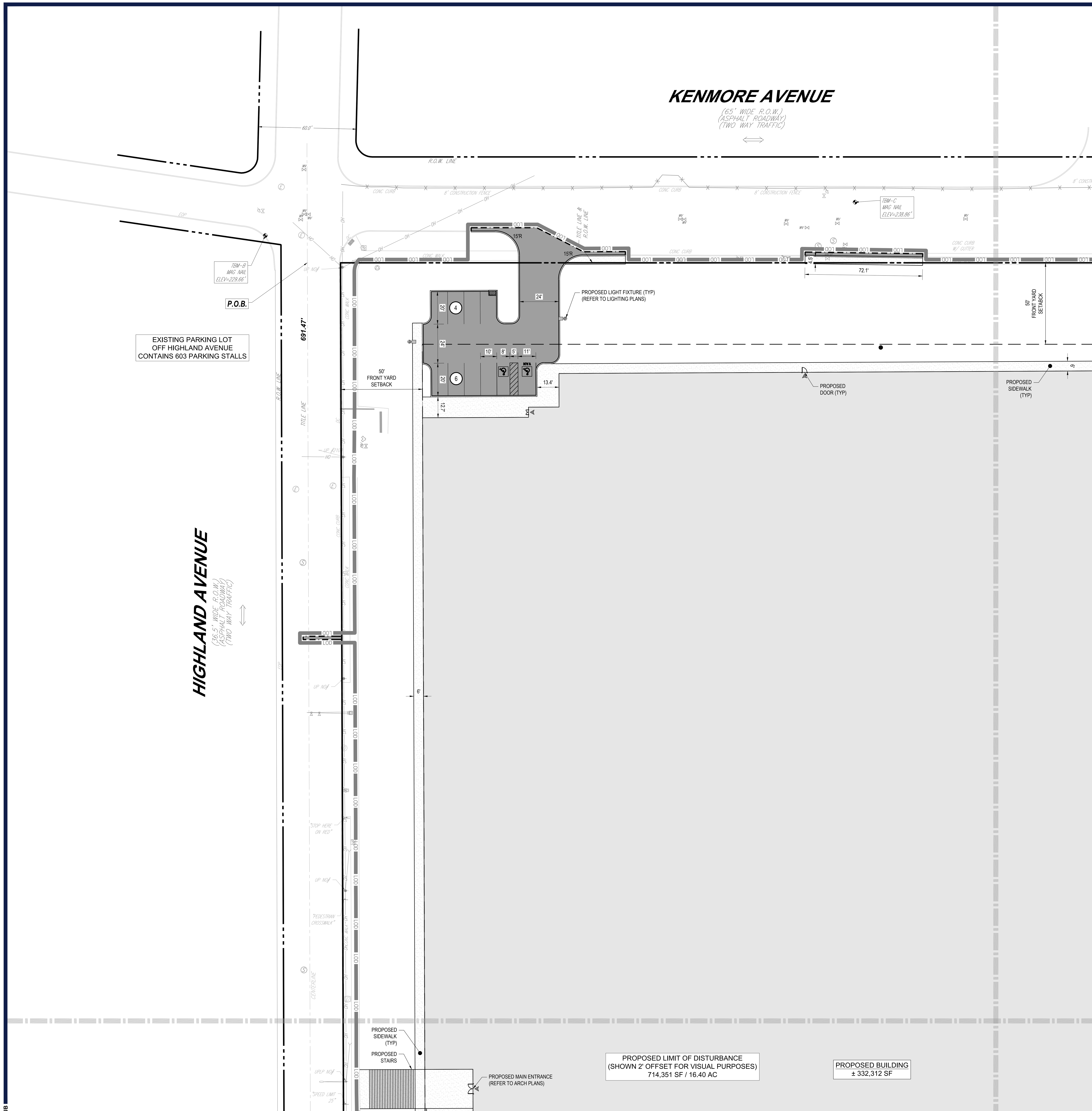
SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

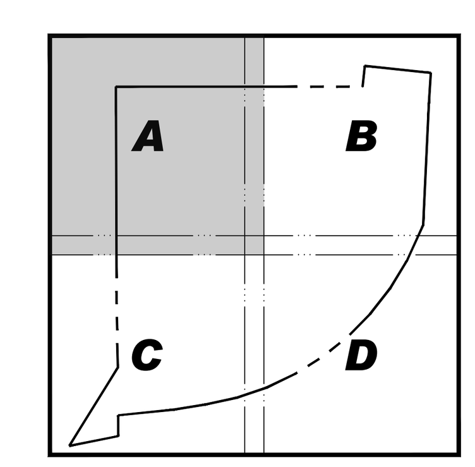
C-300

ORG. DATE - 12/19/2025



NOTES

1. ALL CURB AND PAVEMENT RADII ON THE PLANS ARE TO BE 5' UNLESS NOTED OTHERWISE.



KEY MAP
SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

SCALE: 1" = 30'

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M. J. KEARSE
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
COMMONWEALTH OF PENNSYLVANIA

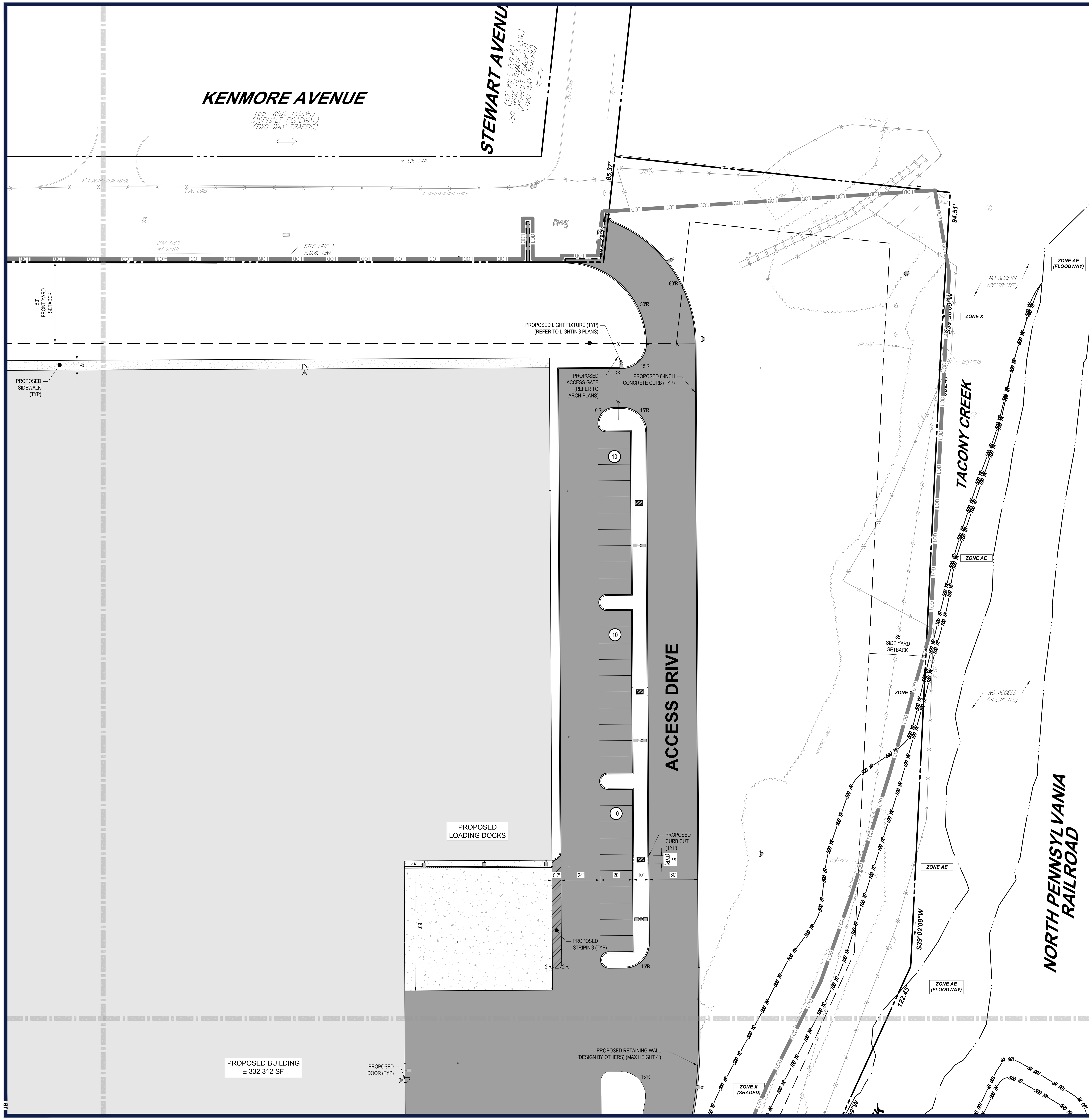
SHEET TITLE:

SITE PLAN 'A'

SHEET NUMBER:

C-301

ORG. DATE - 12/19/2025



NOTES

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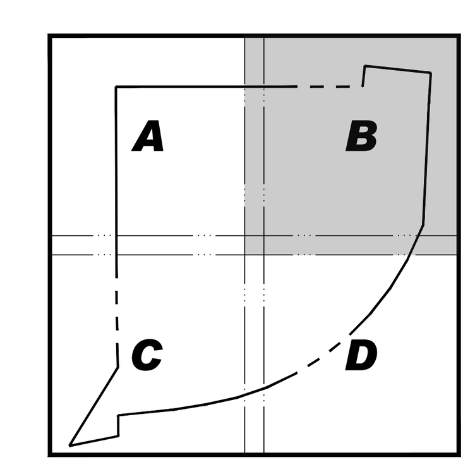

KEY MAP
SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

30 15 7.5 0 30
SCALE: 1" = 30'

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COMMONWEALTH OF PENNSYLVANIA PROFESSIONAL ENGINEER MATTHEW JOHN KEARSE

SHEET TITLE:

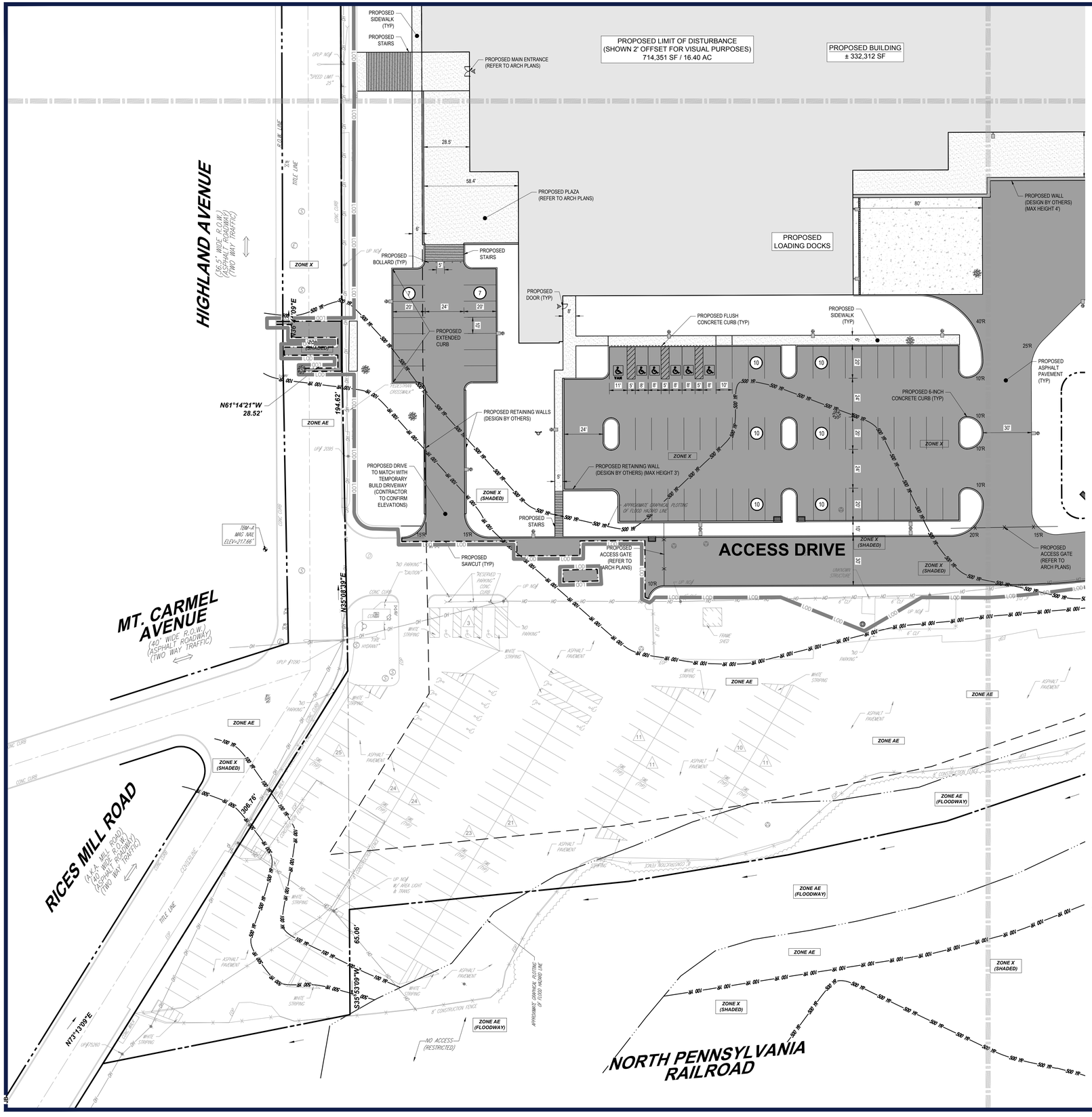
SITE PLAN 'B'

SHEET NUMBER:

C-302

ORG. DATE - 12/19/2025

\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-SITE-PAC250142.00-0C-----LAYOUT: C-302 SITE 'B'
JB



NOTES

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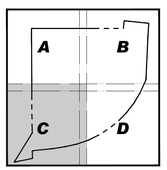

KEY MAP
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SCALE: 1" = 30'

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COMMONWEALTH OF PENNSYLVANIA
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE

SHEET TITLE:

SITE PLAN 'C'

SHEET NUMBER:

C-303

ORG. DATE - 12/19/2025

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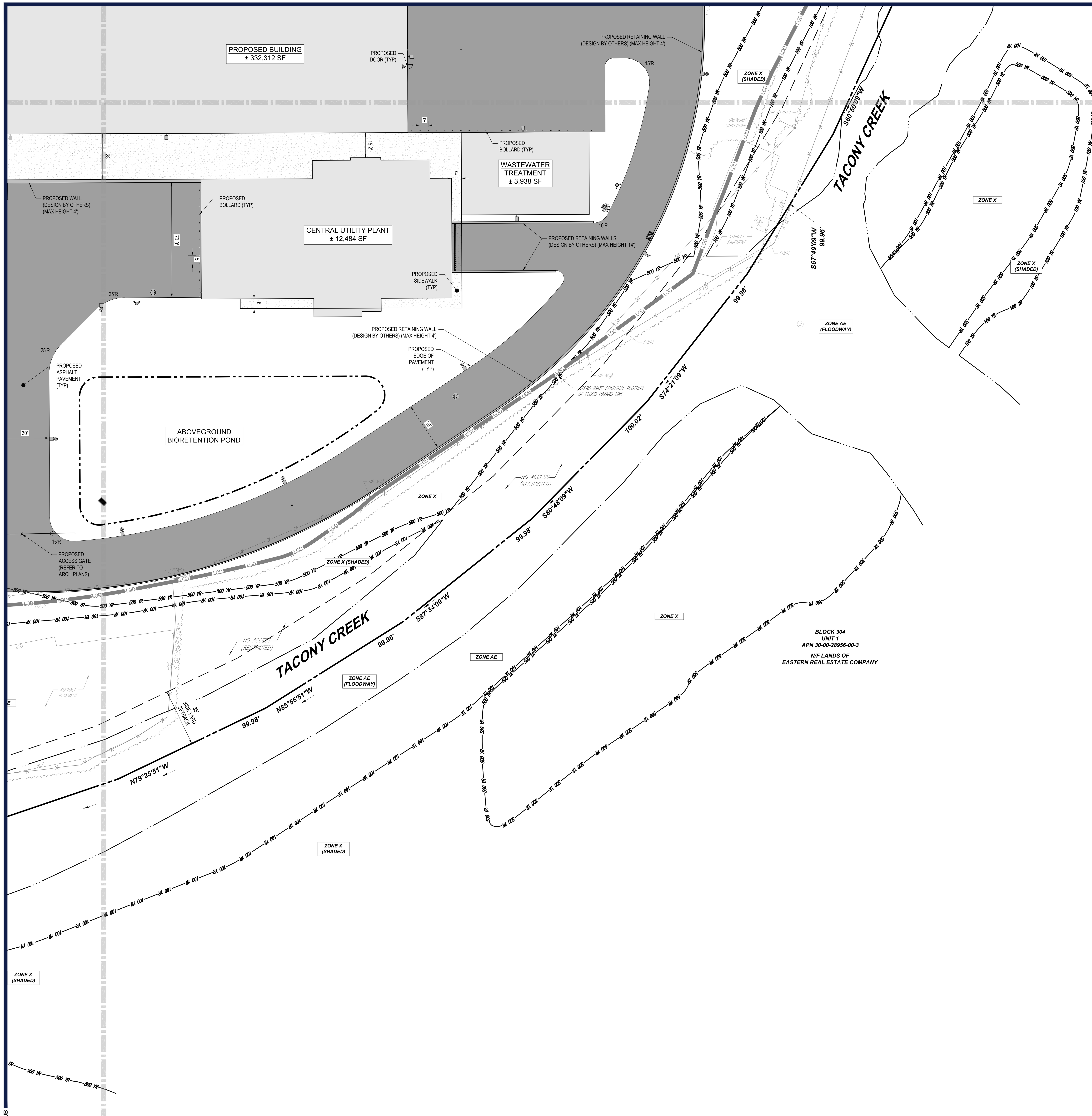

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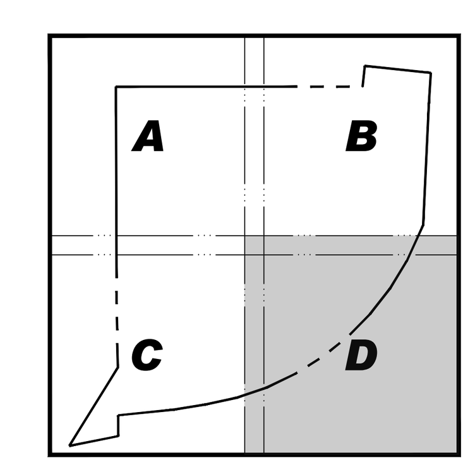

KEY MAP
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30 15 7.5 0 30
SCALE: 1" = 30'

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M. KEARSE
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER

SHEET TITLE:

SITE PLAN 'D'

SHEET NUMBER:

C-304

ORG. DATE - 12/19/2025

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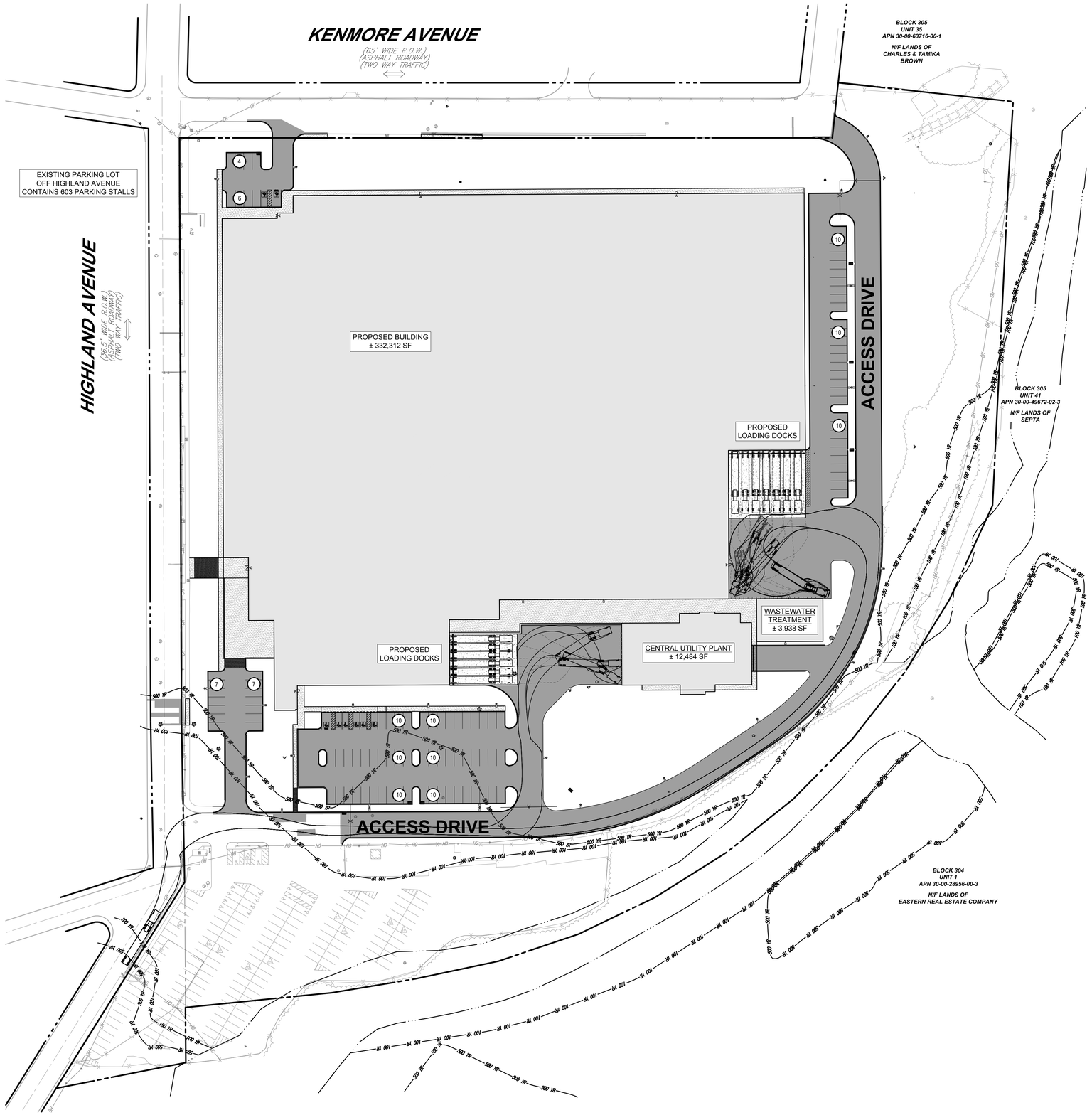
JB



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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-SITE

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

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PHILADELPHIA, PA 19102
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COMMONWEALTH OF PENNSYLVANIA
MATTHEW JOHN KEARSE
PROFESSIONAL
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE090238
COMMONWEALTH OF PENNSYLVANIA

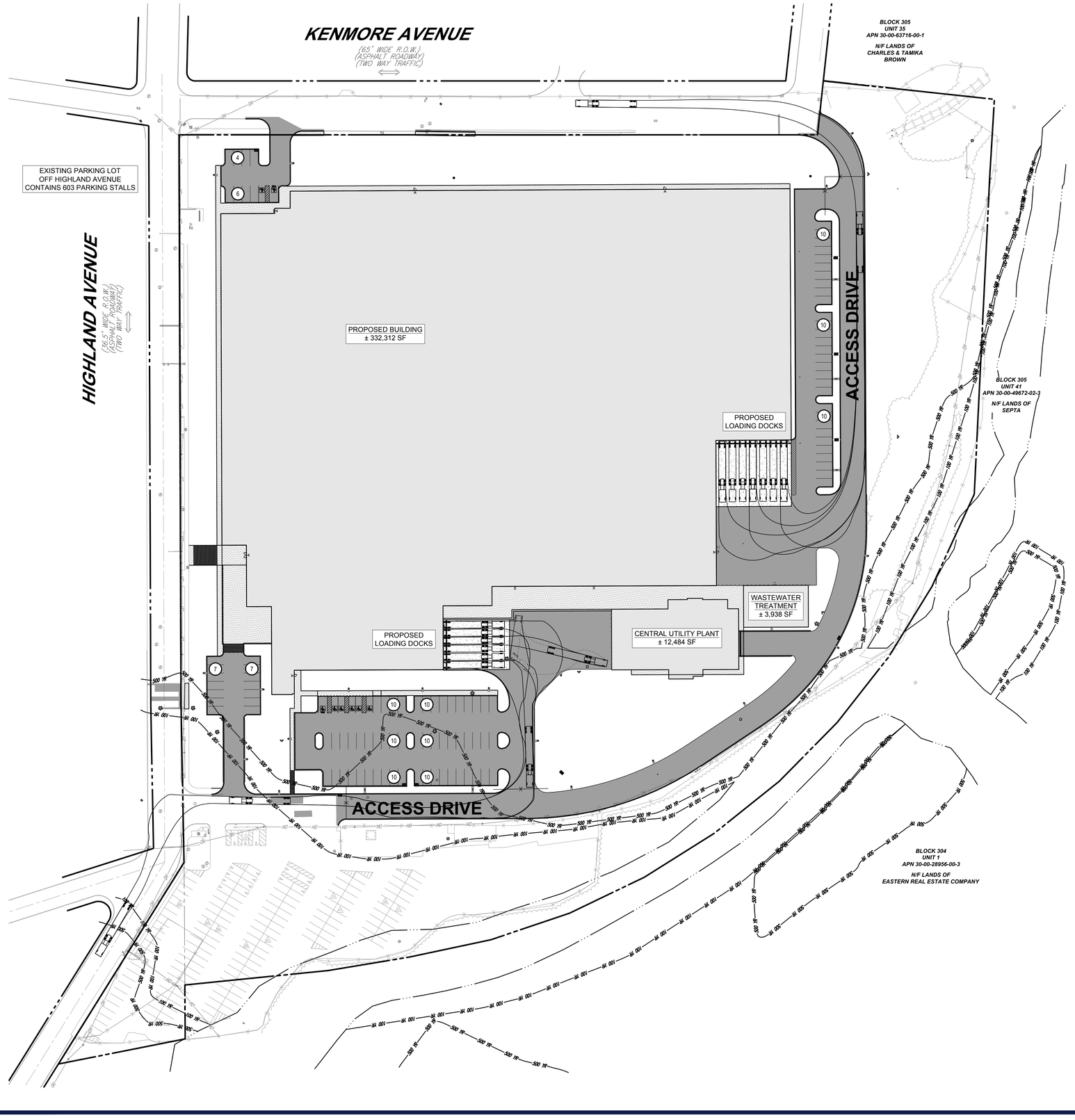
SHEET TITLE:

TRUCK CIRCULATION PLAN

SHEET NUMBER:

C-310

ORG. DATE - 12/19/2025



60 30 15 0 60

SCALE: 1" = 60'

I:\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-SITE-PAC250142.00-0C-----LAYOUT: C-311 TRCK

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CAD I.D.:	P-CIVL-SITE

PROJECT:

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FOR

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MATTHEW JOHN KEARSE
PROFESSIONAL
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE090238

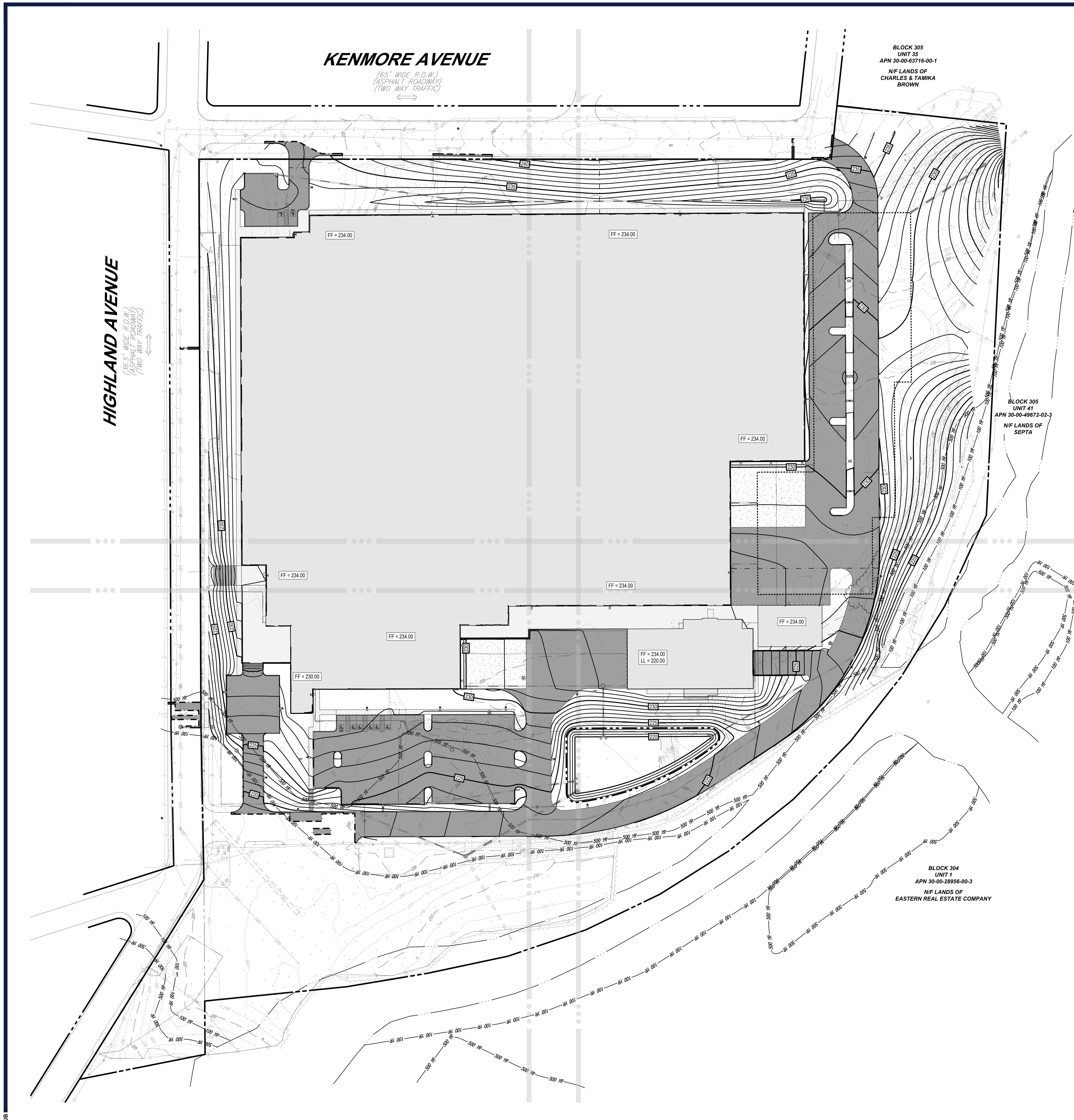
SHEET TITLE:

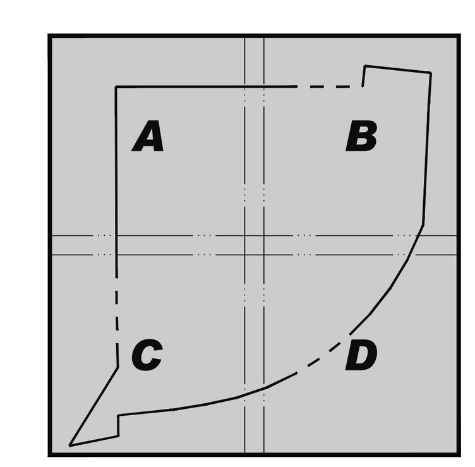
TRUCK CIRCULATION PLAN

SHEET NUMBER:

C-311

ORG. DATE - 12/19/2025





KEY MAP

SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY

60 30 15 0 60

SCALE: 1" = 60'

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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-GDUL

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER

SHEET TITLE:

OVERALL GRADING PLAN

SHEET NUMBER:

C-400

ORG. DATE - 12/19/2025

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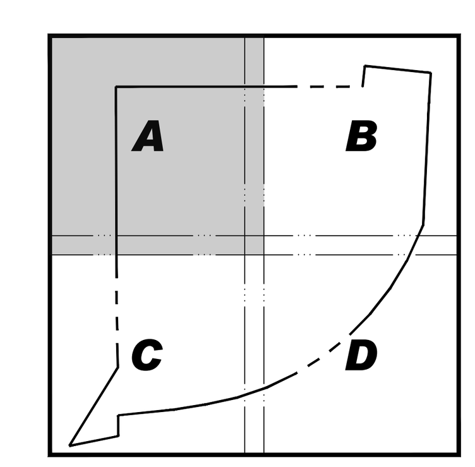
JB



KEY MAP

SCALE 1" = 600'

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30 15 7.5 0 30

SCALE: 1" = 30'

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MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
COMMONWEALTH OF PENNSYLVANIA

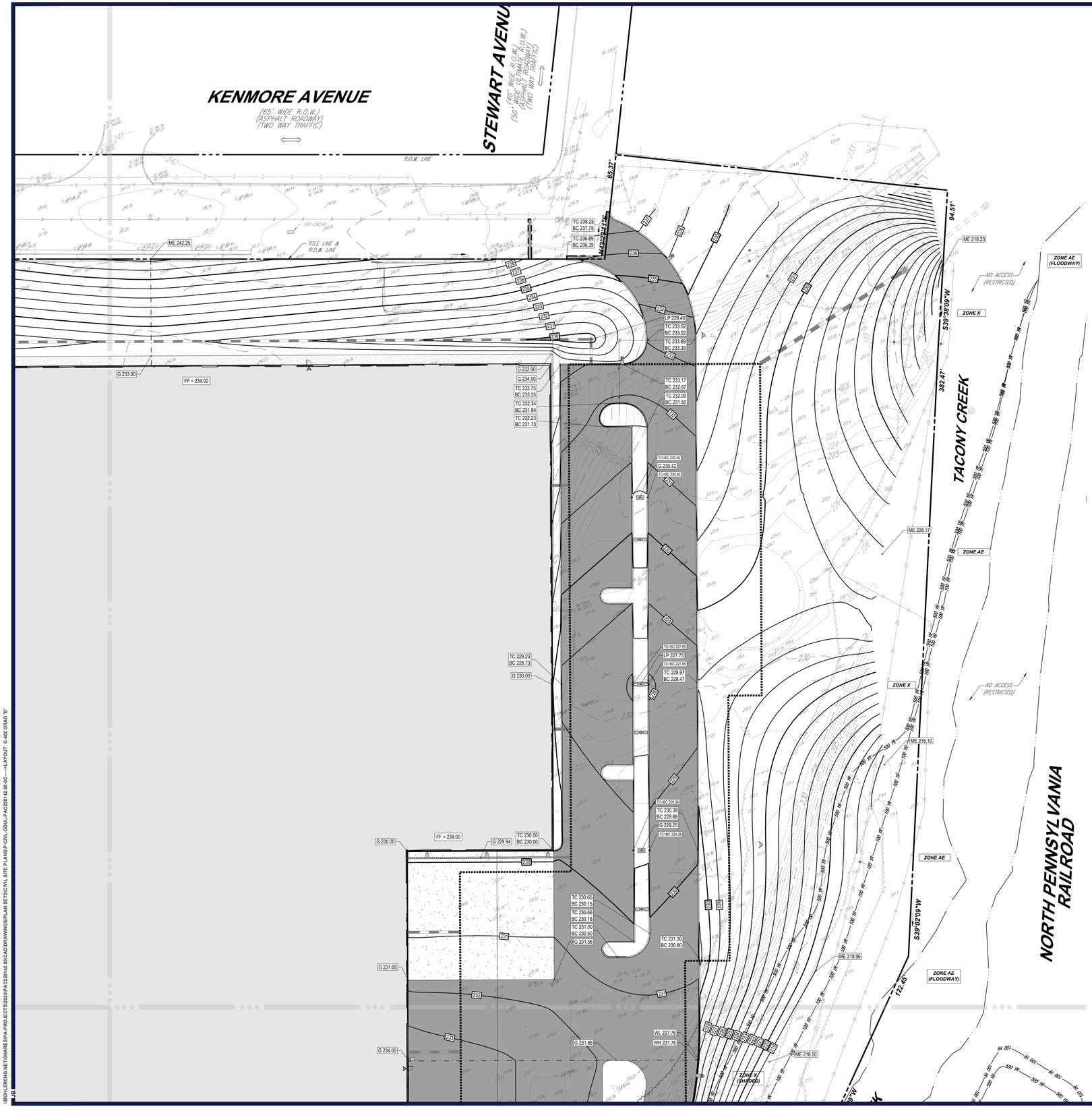
SHEET TITLE:

GRADING PLAN 'A'

SHEET NUMBER:

C-401

ORG. DATE - 12/19/2025



KEY MAP
SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY

30 15 7.5 0 30
SCALE: 1" = 30'

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MATTHEW JOHN KEARSE
PROFESSIONAL
PROFESSIONAL ENGINEER
PENNSYLVANIA

SHEET TITLE:

GRADING PLAN 'B'

SHEET NUMBER:

C-402

ORG. DATE - 12/19/2025

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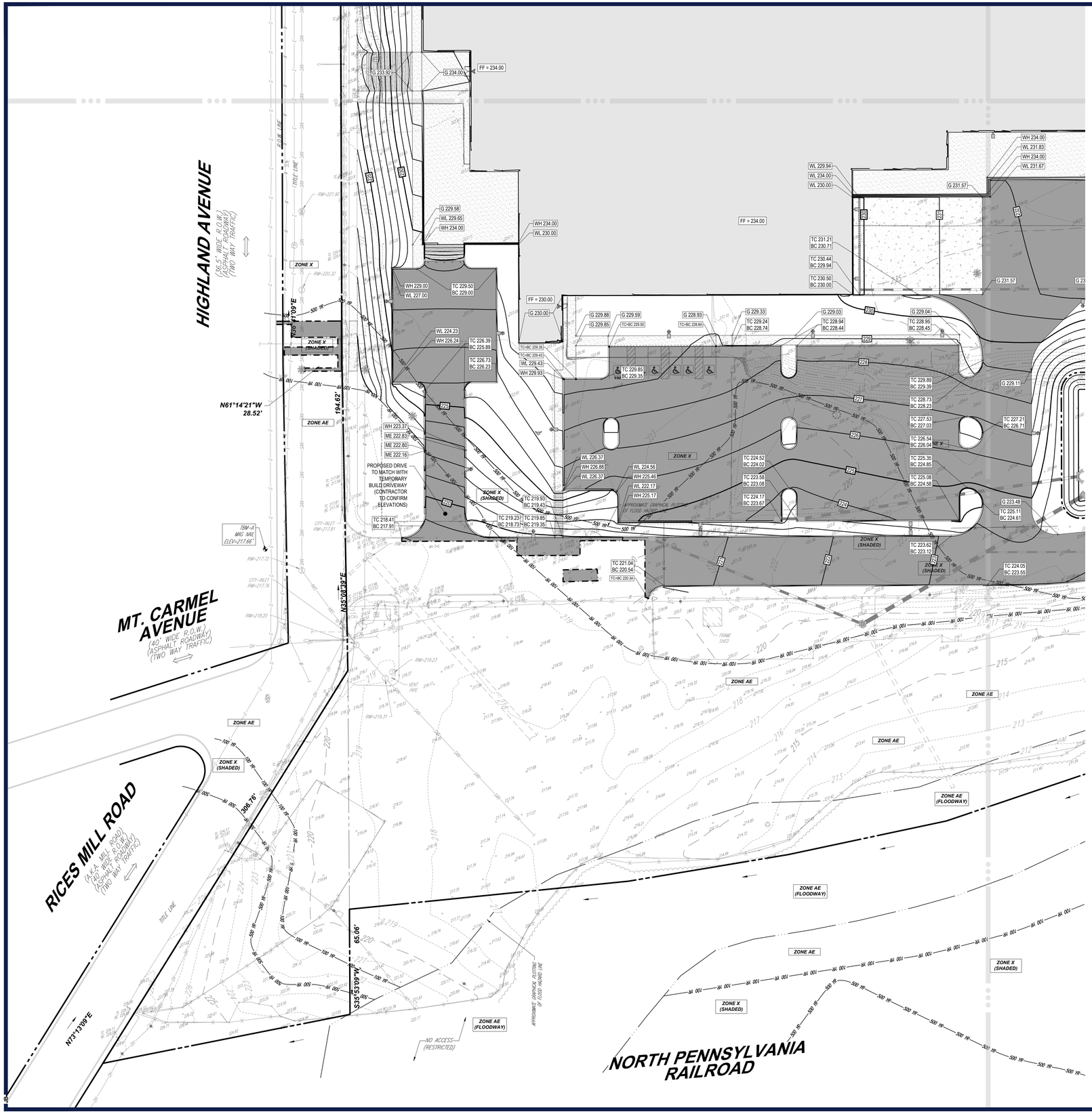

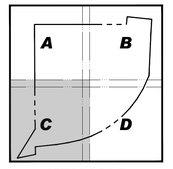

KEY MAP
SCALE 1" = 600'

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30 15 7.5 0 30
SCALE: 1" = 30'

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JB

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DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-GDUL

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

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MATTHEW JOHN KEARSE
PROFESSIONAL
PROFESSIONAL ENGINEER
PENNSYLVANIA

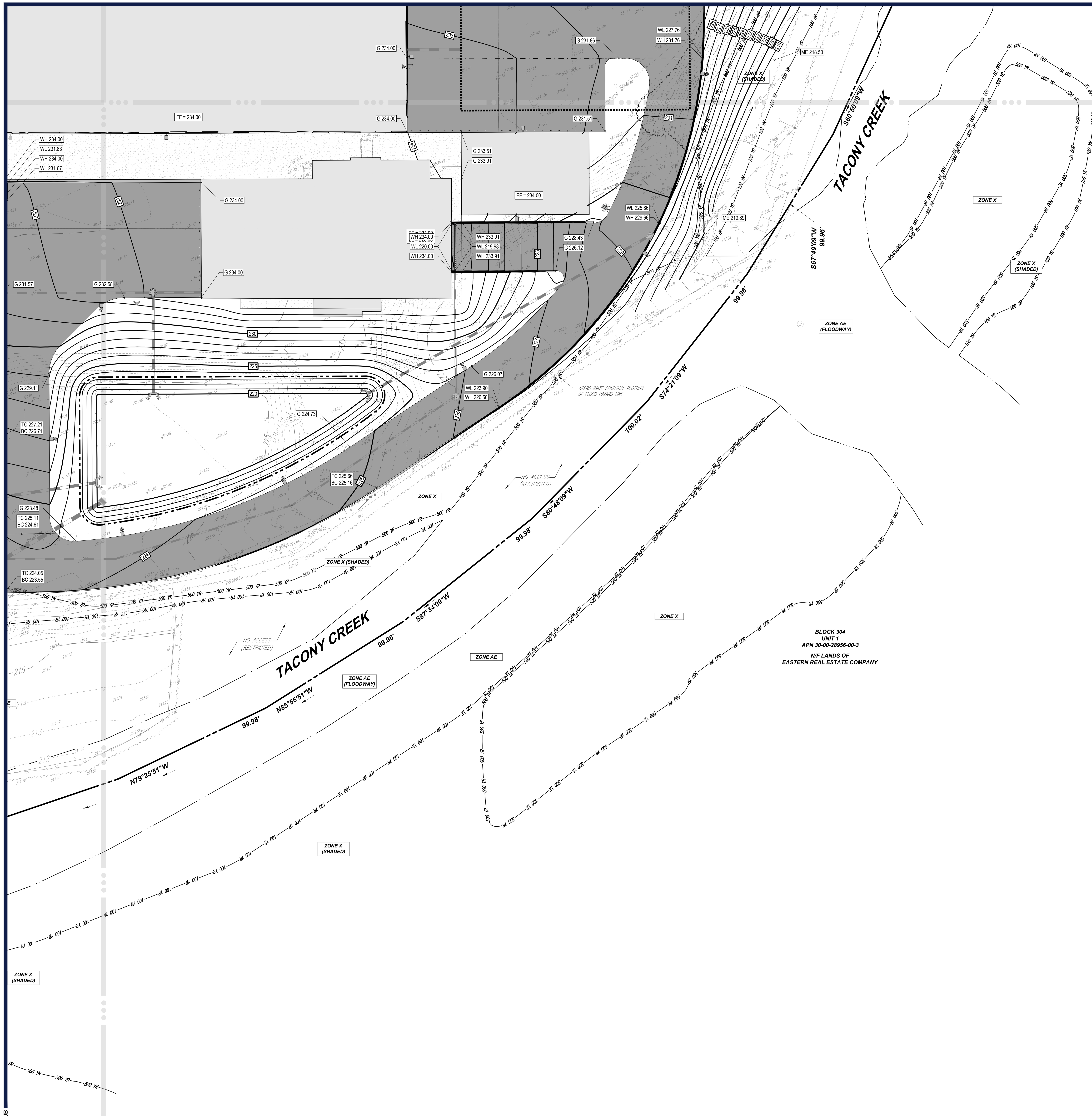
SHEET TITLE:

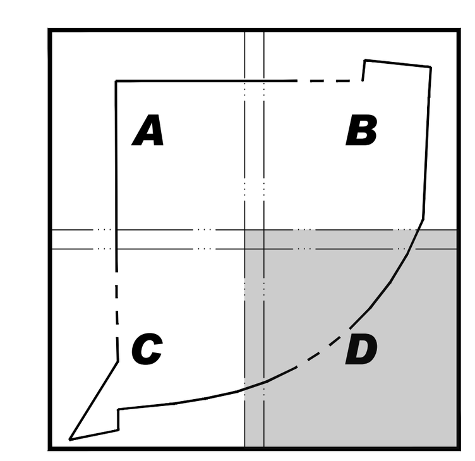
GRADING PLAN 'C'

SHEET NUMBER:

C-403

ORG. DATE - 12/19/2025





KEY MAP

SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY

30 15 7.5 0 30

SCALE: 1" = 30'

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PROJECT No.:	PAC250142.00-0C
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CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-GDUL

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
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M. KEARSE
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER

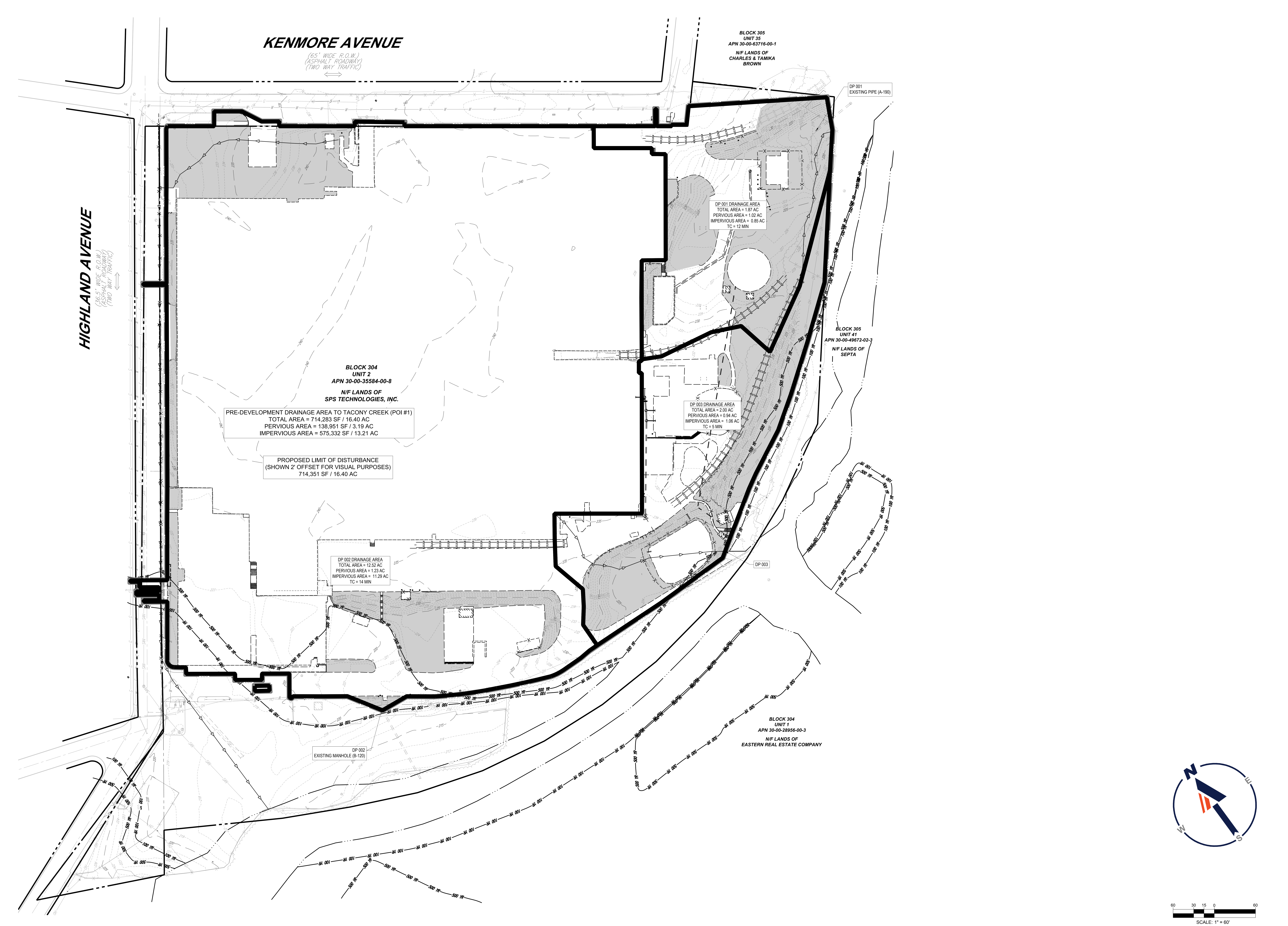
SHEET TITLE:

GRADING PLAN 'D'

SHEET NUMBER:

C-404

ORG. DATE - 12/19/2025



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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-SWMP

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
MATTHEW JOHN KEARSE
M. KEARSE
PROFESSIONAL ENGINEER

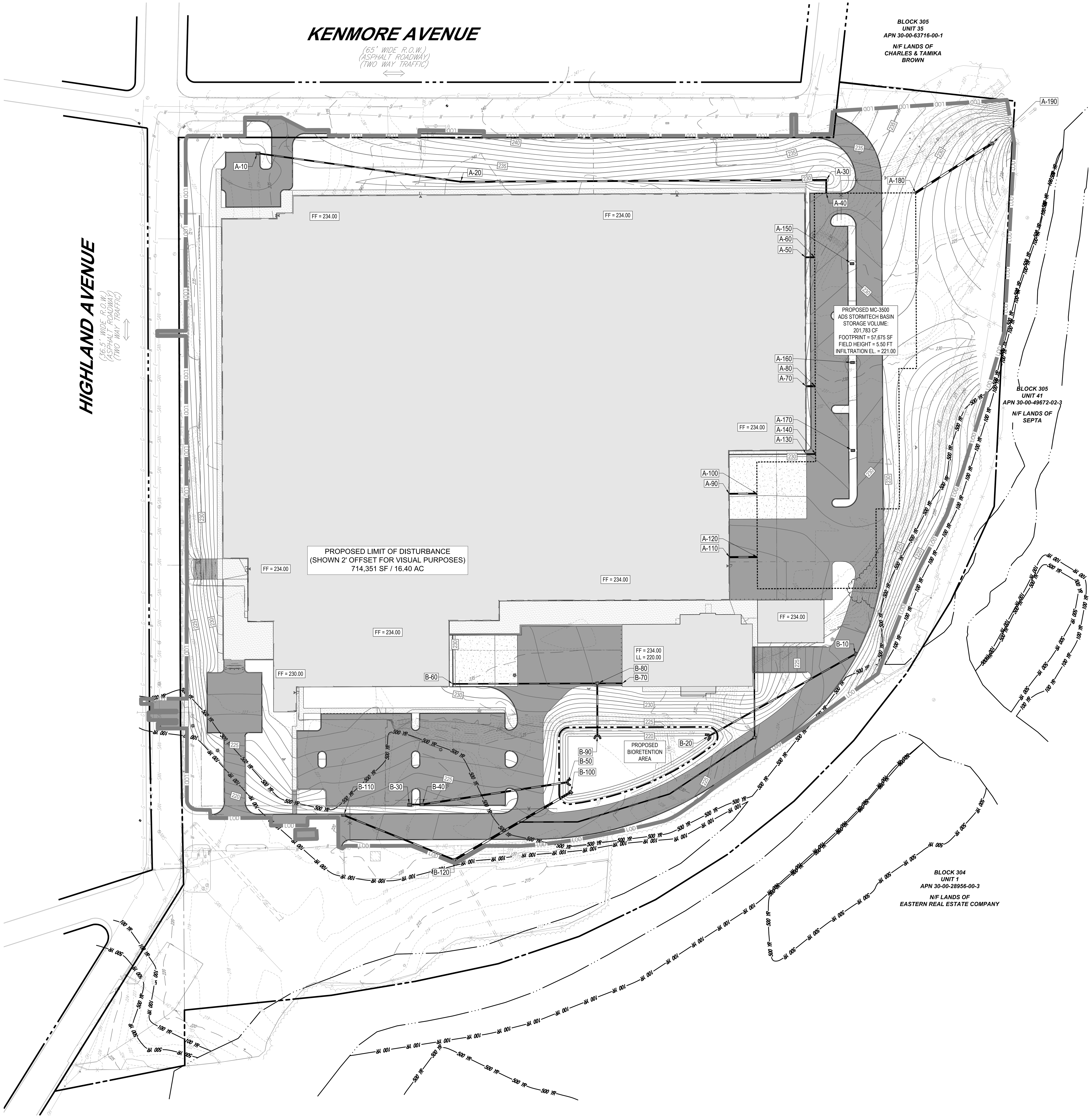
SHEET TITLE:

PRE DEVELOPMENT DRAINAGE AREA MAP

SHEET NUMBER:

C-410

ORG. DATE - 12/19/2025



NOTES

1. ALL PROPOSED INLETS AND YARD DRAINS SHALL BE FITTED WITH A WATER QUALITY DEVICE.

60 30 15 0 60

SCALE: 1" = 60'

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M. KEARSE
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE092388

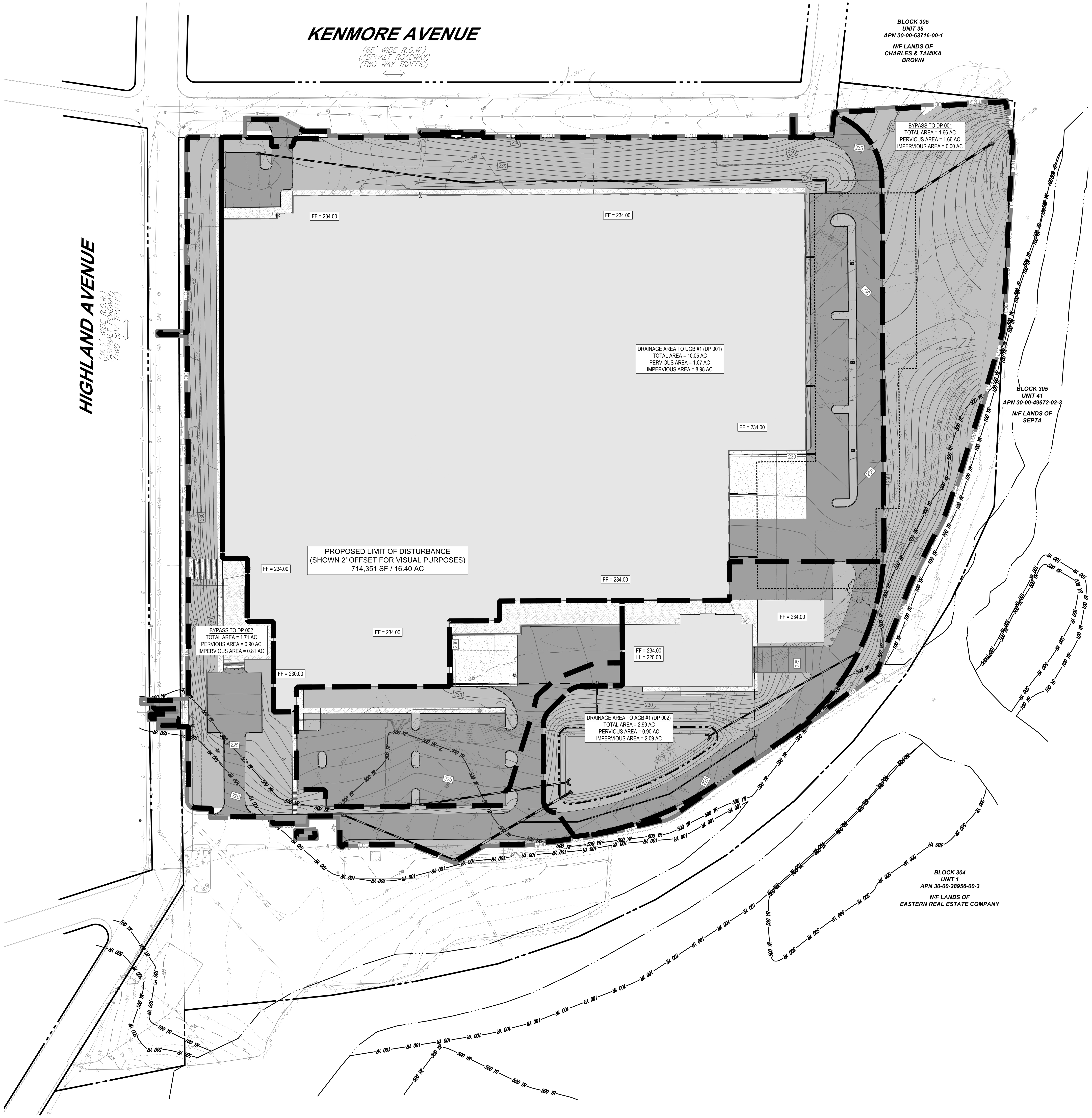
SHEET TITLE:

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

SHEET NUMBER:

C-420

ORG. DATE - 12/19/2025



N E S W

60 30 15 0 60

SCALE: 1" = 60'

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PROJECT No.: PAC250142.00-0C
DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVL-SWMP

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
MATTHEW JOHN KEARSE

SHEET TITLE:

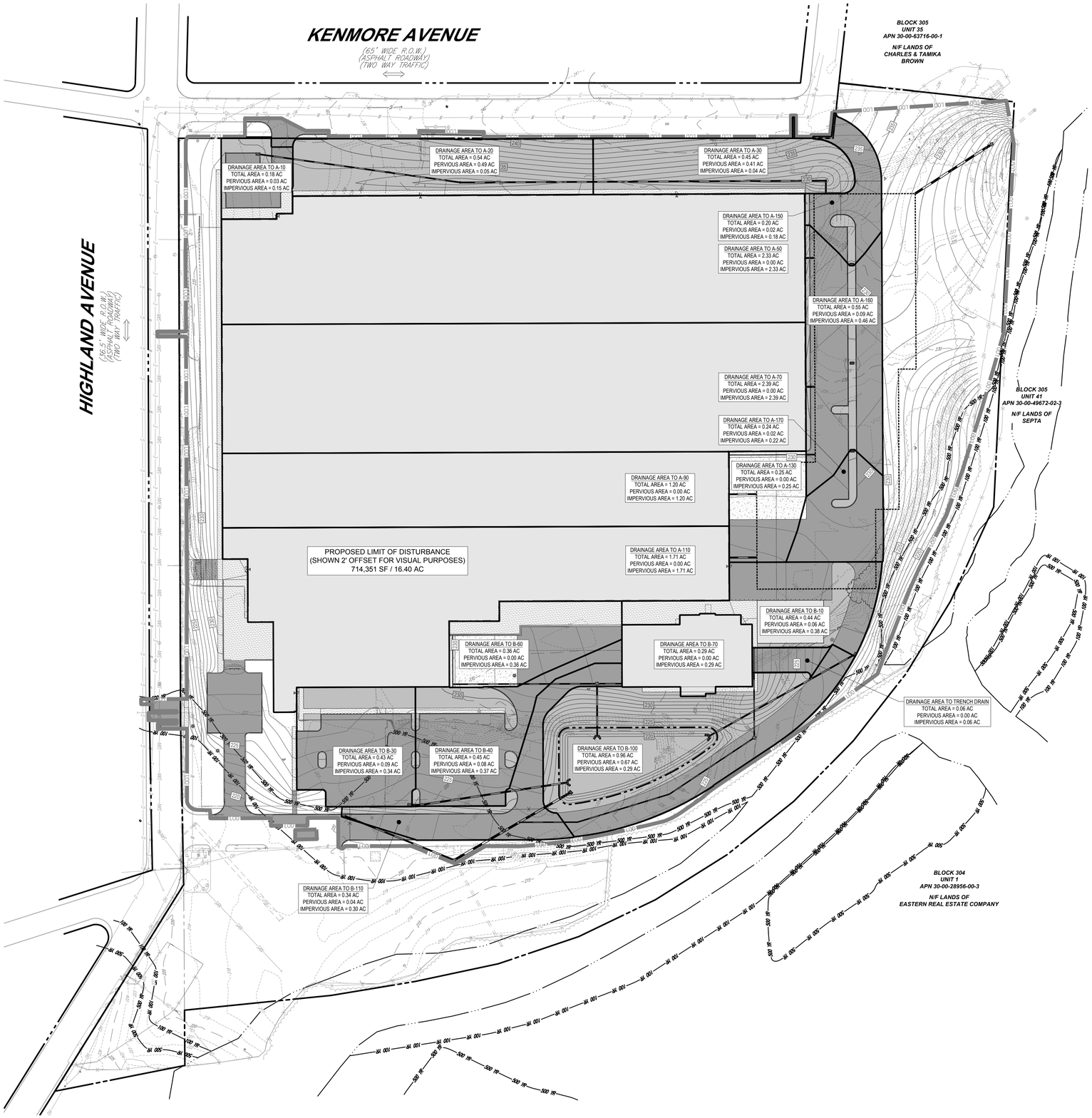
POST DEVELOPMENT DRAINAGE AREA MAP

SHEET NUMBER:

C-421

ORG. DATE - 12/19/2025

\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-SWMP PAC250142.00-0C----LAYOUT: C-421 PSTD
JB



60 30 15 0 60

SCALE: 1" = 60'

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PROFESSIONAL
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE090238
COMMONWEALTH OF PENNSYLVANIA

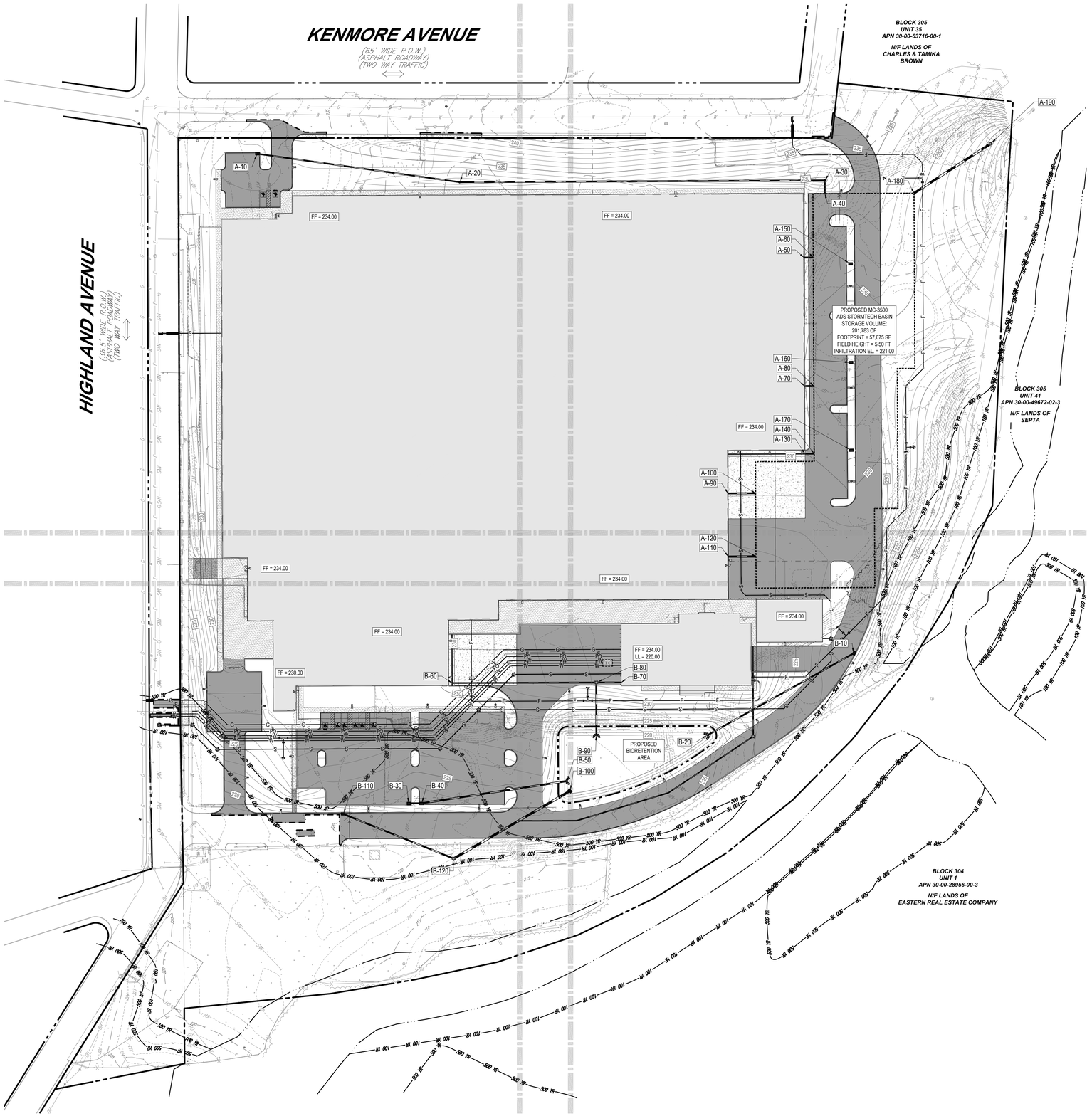
SHEET TITLE:

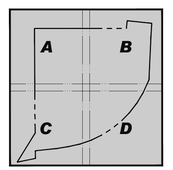
INLET DRAINAGE AREA MAP

SHEET NUMBER:

C-422

ORG. DATE - 12/19/2025





KEY MAP
SCALE 1" = 600'

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60 30 15 0 60
SCALE: 1" = 60'

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PROFESSIONAL
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE090238
COMMONWEALTH OF PENNSYLVANIA

SHEET TITLE:

OVERALL UTILITY PLAN

SHEET NUMBER:

C-500

ORG. DATE - 12/19/2025

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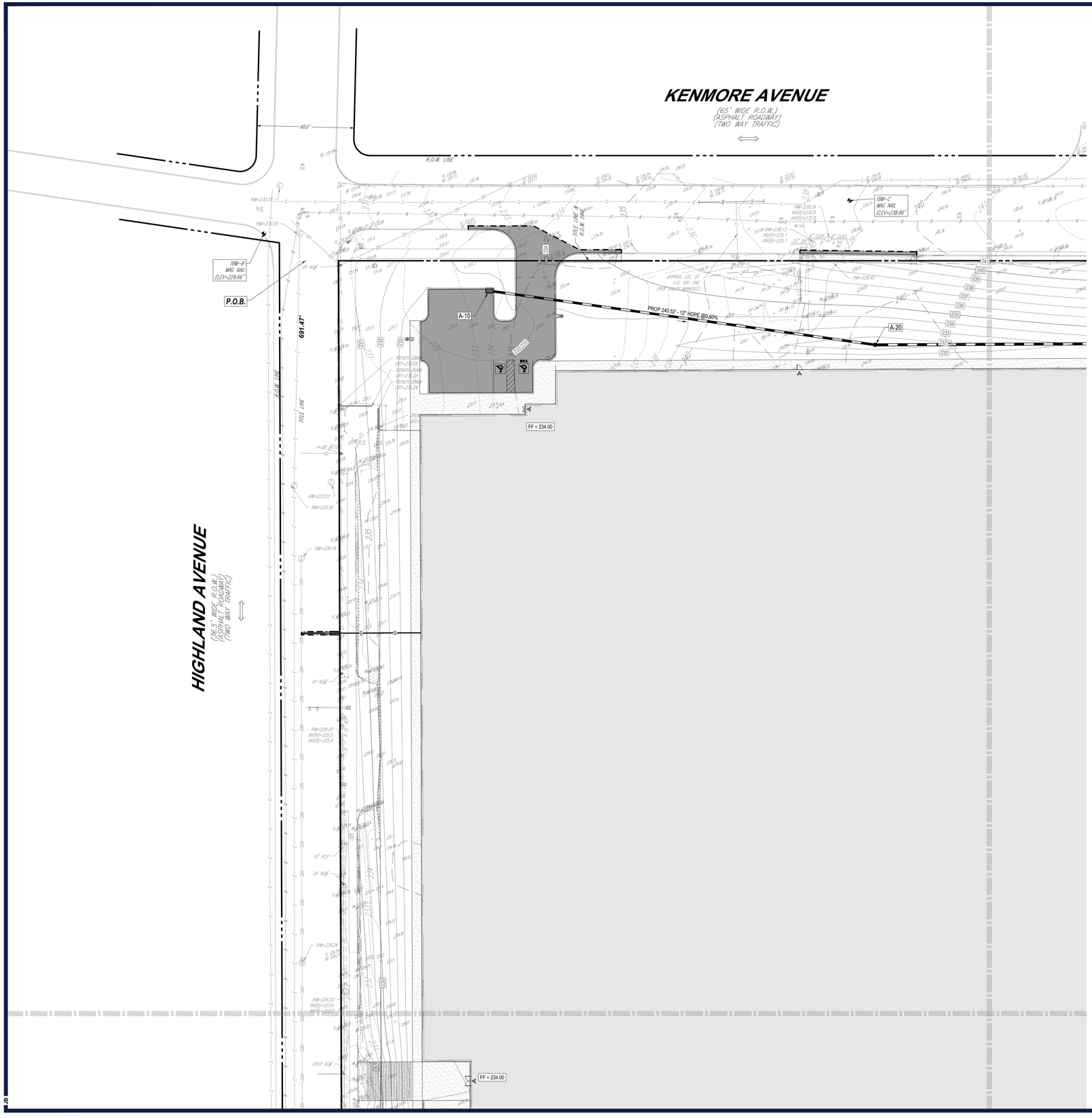

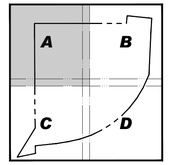

KEY MAP
SCALE 1" = 600'

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30 15 7.5 0 30
SCALE: 1" = 30'

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MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA

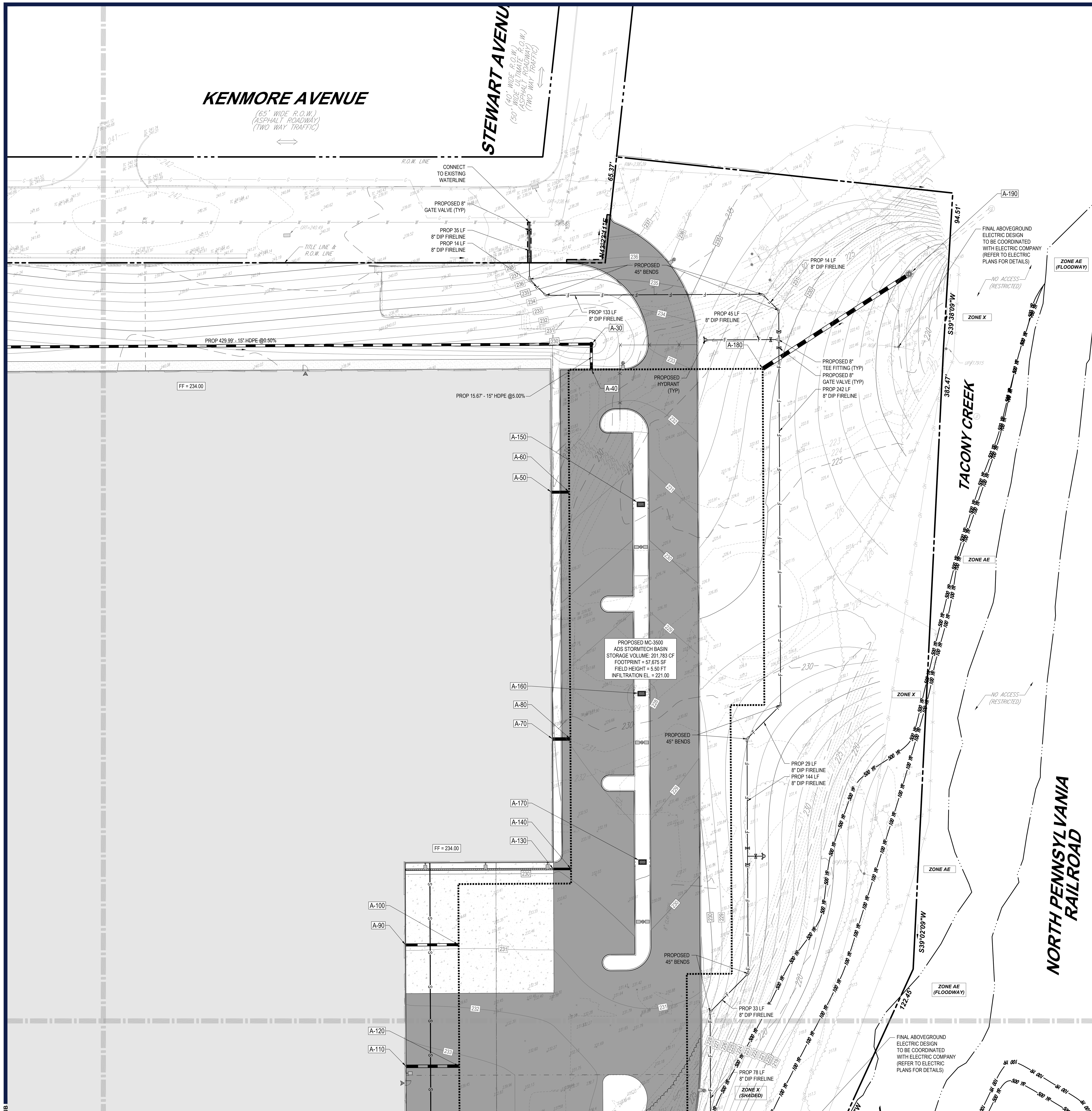
SHEET TITLE:

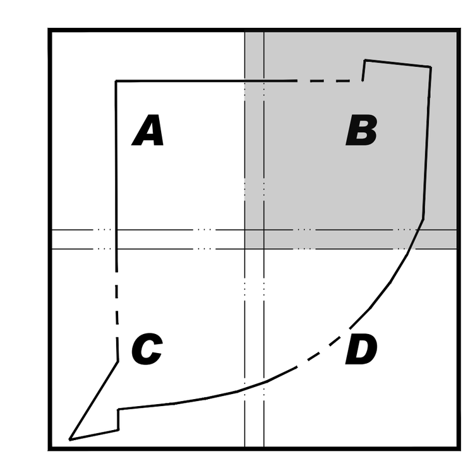
UTILITY PLAN 'A'

SHEET NUMBER:

C-501

ORG. DATE - 12/19/2025





KEY MAP

SCALE 1" = 600'

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30 15 7.5 0 30

SCALE: 1" = 30'

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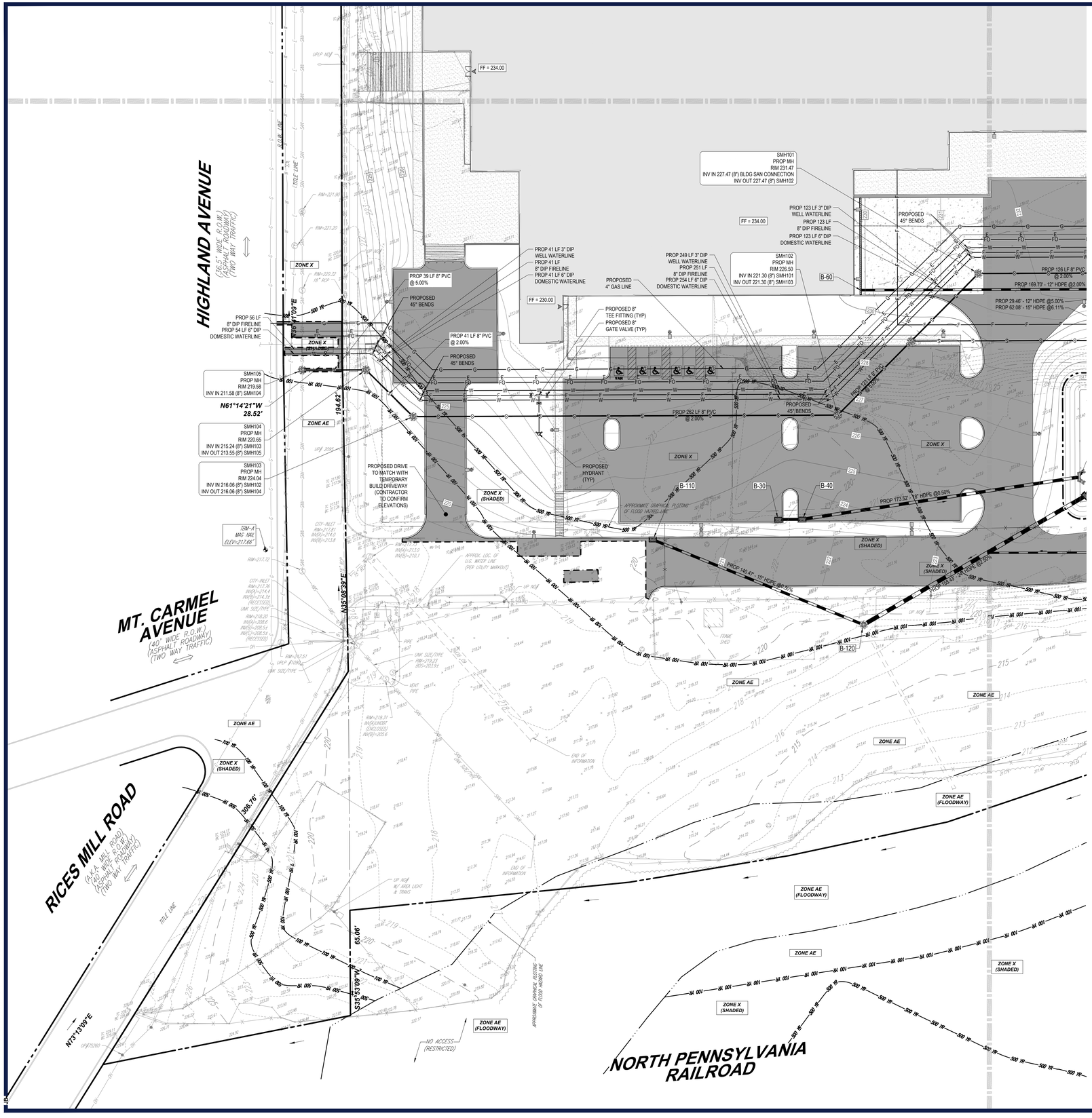
SHEET TITLE:

UTILITY PLAN 'B'

SHEET NUMBER:

C-502

ORG. DATE - 12/19/2025



KEY MAP

SCALE 1" = 600'

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30 15 7.5 0 30

SCALE: 1" = 30'

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M. KEARSE
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE092338

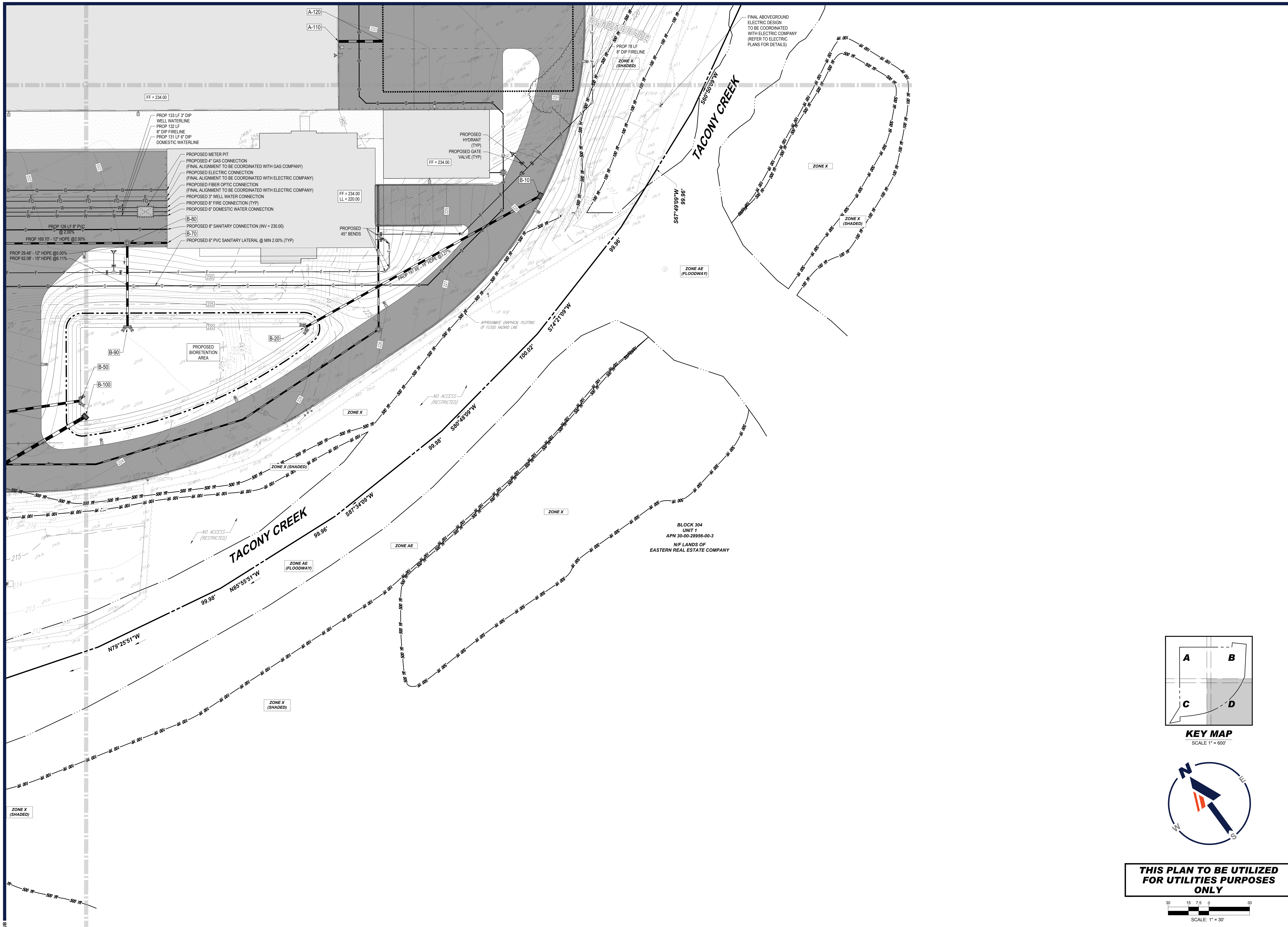
SHEET TITLE:

UTILITY PLAN 'C'

SHEET NUMBER:

C-503

ORG. DATE - 12/19/2025



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PROFESSIONAL ENGINEER
MATTHEW JOHN KEARSE

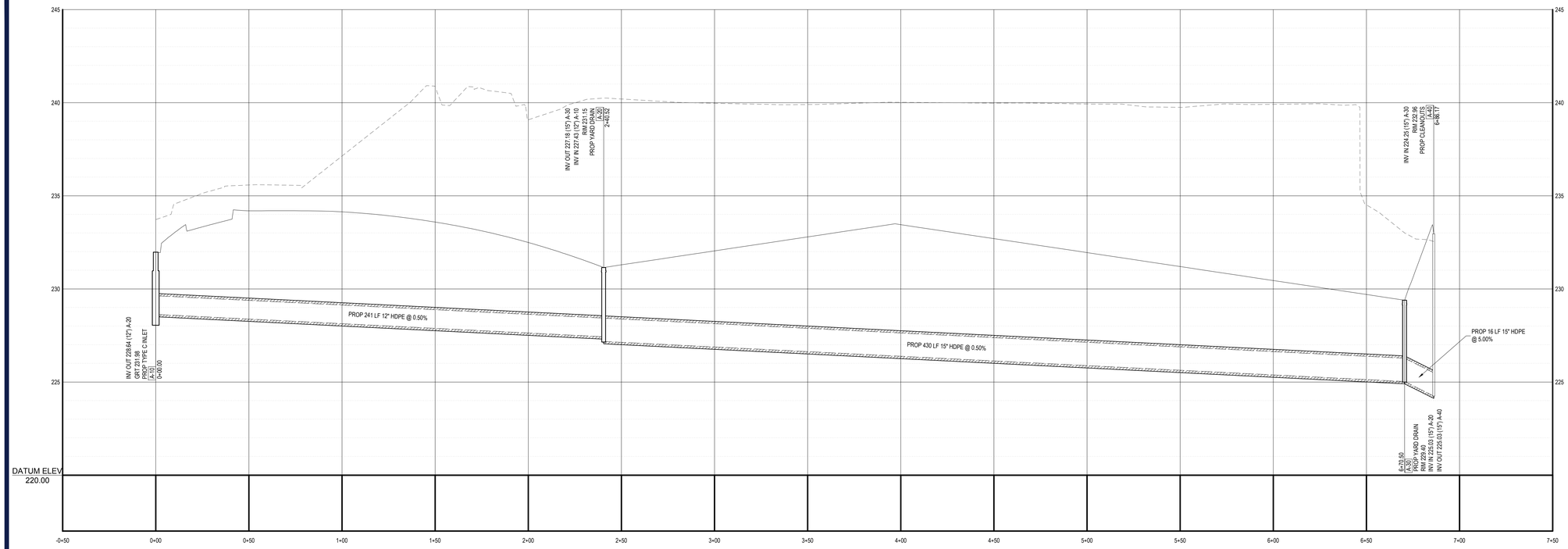
SHEET TITLE:

UTILITY PLAN 'D'

SHEET NUMBER:

C-504

ORG. DATE - 12/19/2025

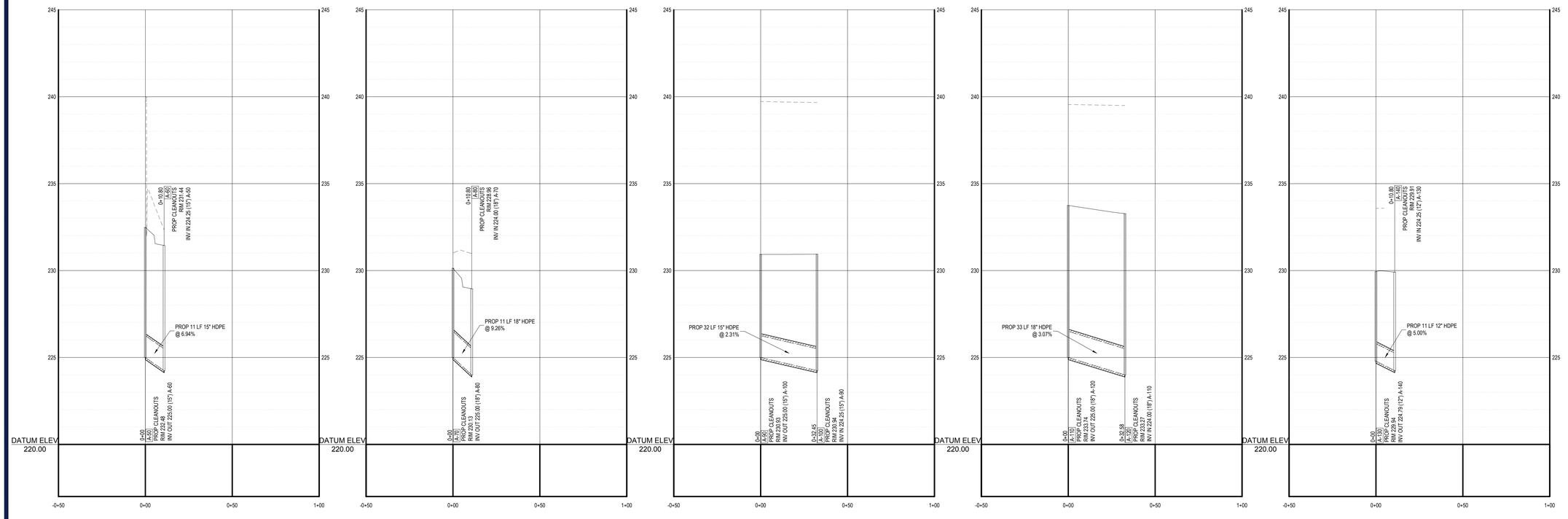


PROFILE

EXISTING GRADE	
PROPOSED GRADE	

PROPOSED STORM PROFILE (A-10 - A-40)

SCALE: 1"= 30 ' HORIZONTAL
1"= 3 ' VERTICAL



PROPOSED STORM PROFILE (A-50 - A-60)

SCALE: 1"= 30 ' HORIZONTAL
1"= 3 ' VERTICAL

PROPOSED STORM PROFILE (A-70 - A-80)

SCALE: 1"= 30 ' HORIZONTAL
1"= 3 ' VERTICAL

PROPOSED STORM PROFILE (A-90 - A-100)

SCALE: 1"= 30 ' HORIZONTAL
1"= 3 ' VERTICAL

PROPOSED STORM PROFILE (A-110 - A-120)

SCALE: 1"= 30 ' HORIZONTAL
1"= 3 ' VERTICAL

PROPOSED STORM PROFILE (A-130 - A-140)

SCALE: 1"= 30 ' HORIZONTAL
1"= 3 ' VERTICAL

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MATTHEW JOHN KEARSE
PROFESSIONAL
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE090238
PENNSYLVANIA

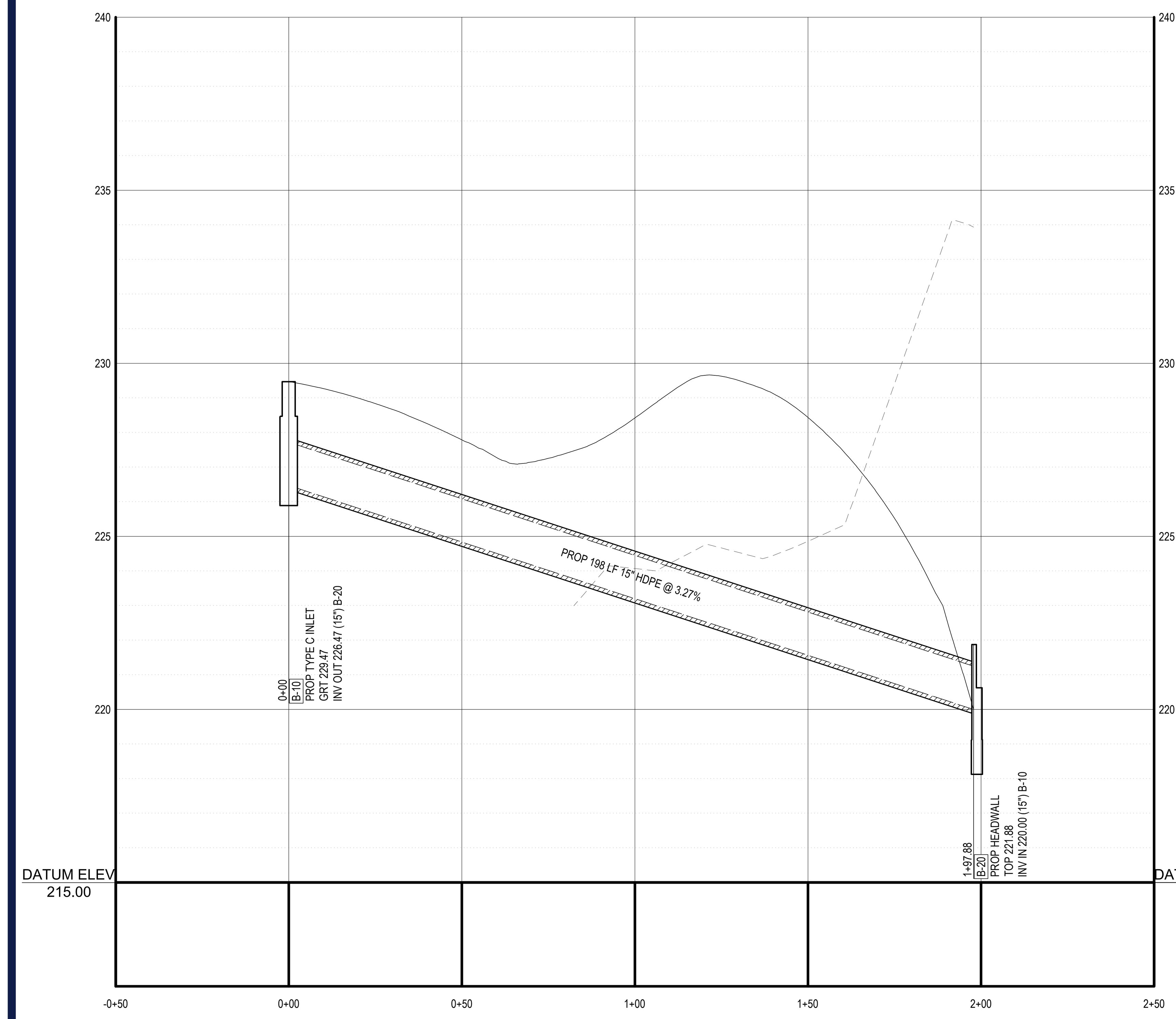
SHEET TITLE:

STORM PROFILES

SHEET NUMBER:

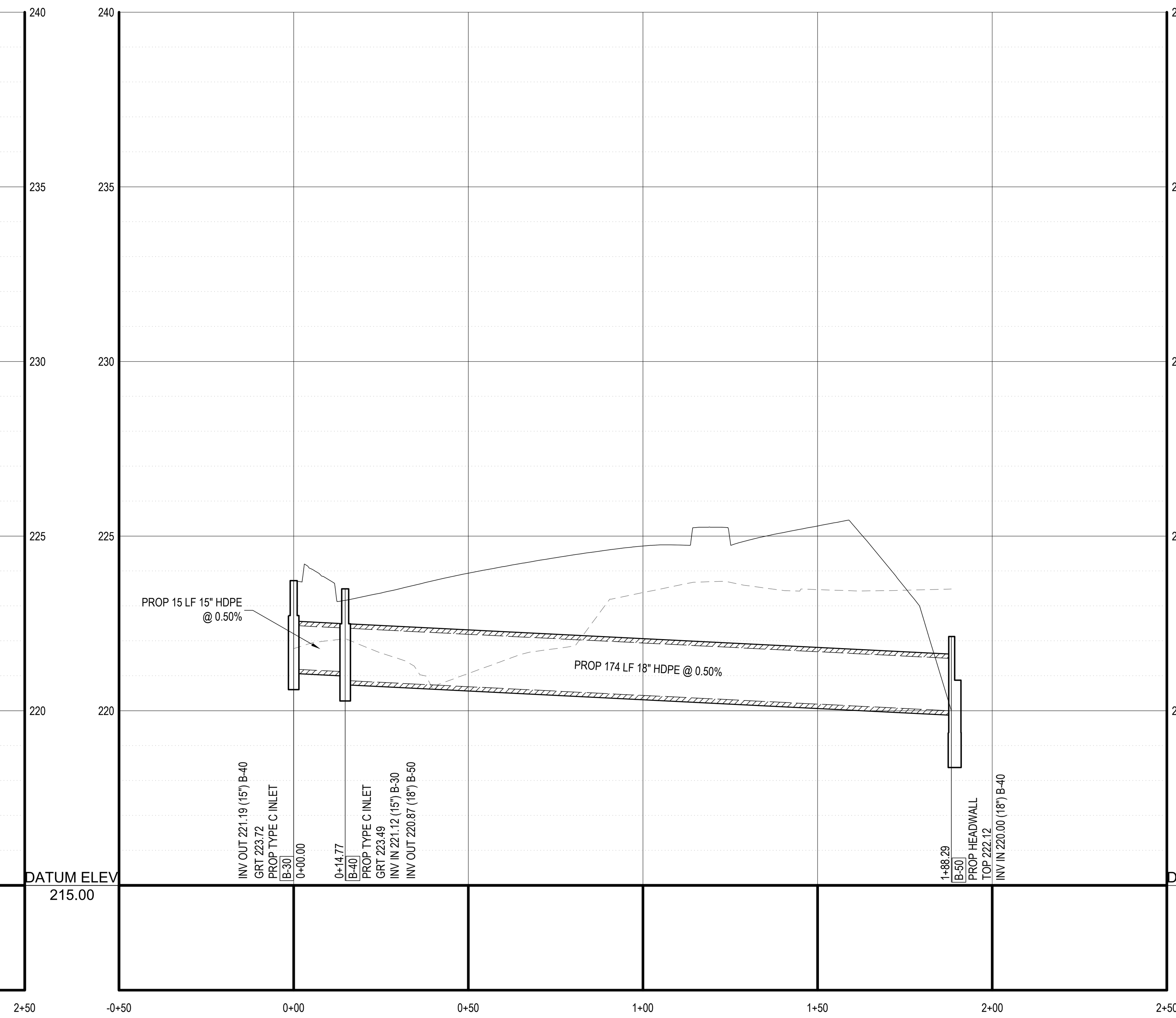
C-601

ORG. DATE - 12/19/2025



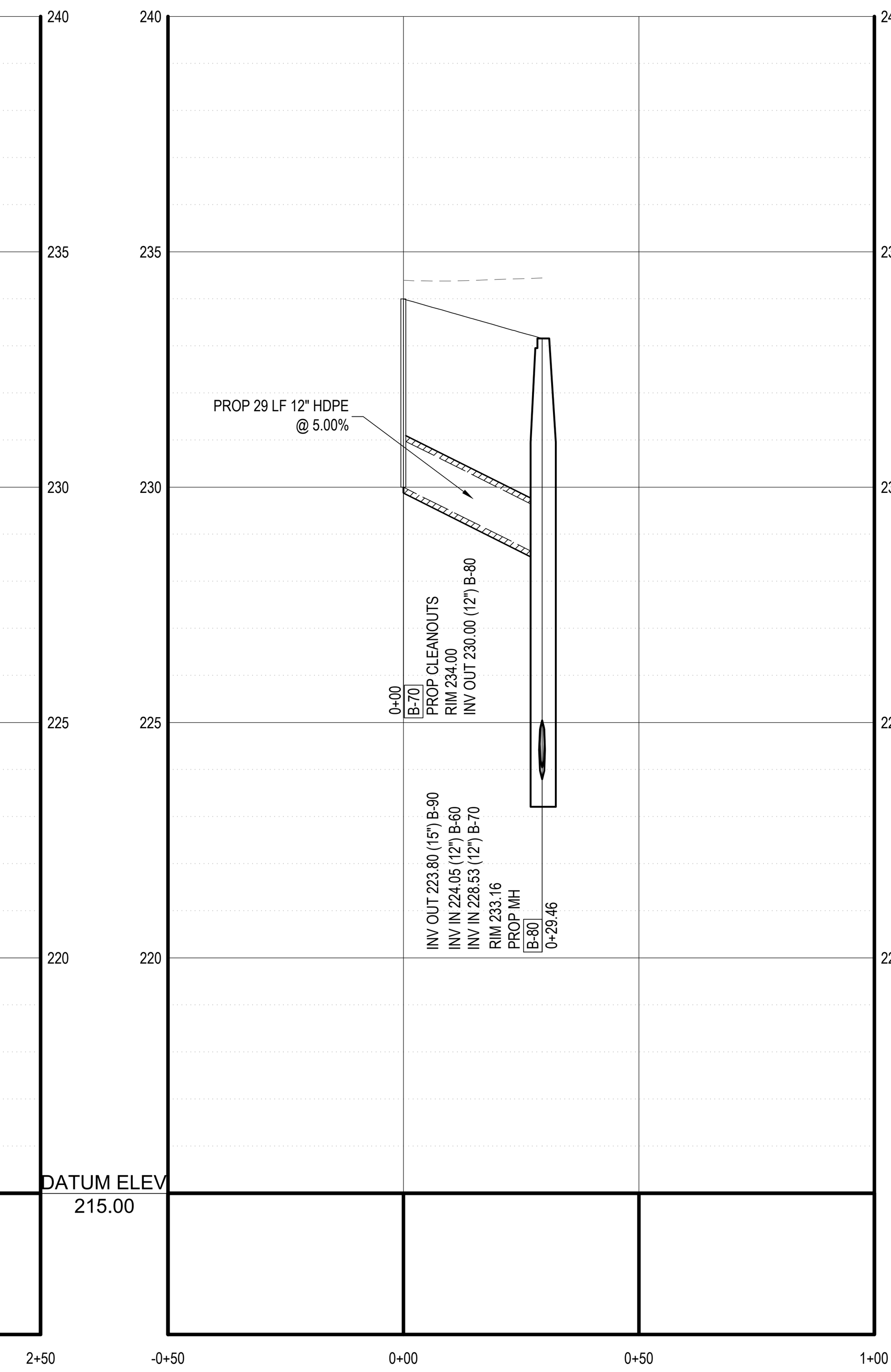
PROPOSED STORM PROFILE (B-10 - B-20)

SCALE: 1"= 30' HORIZONTAL
1"= 3' VERTICAL



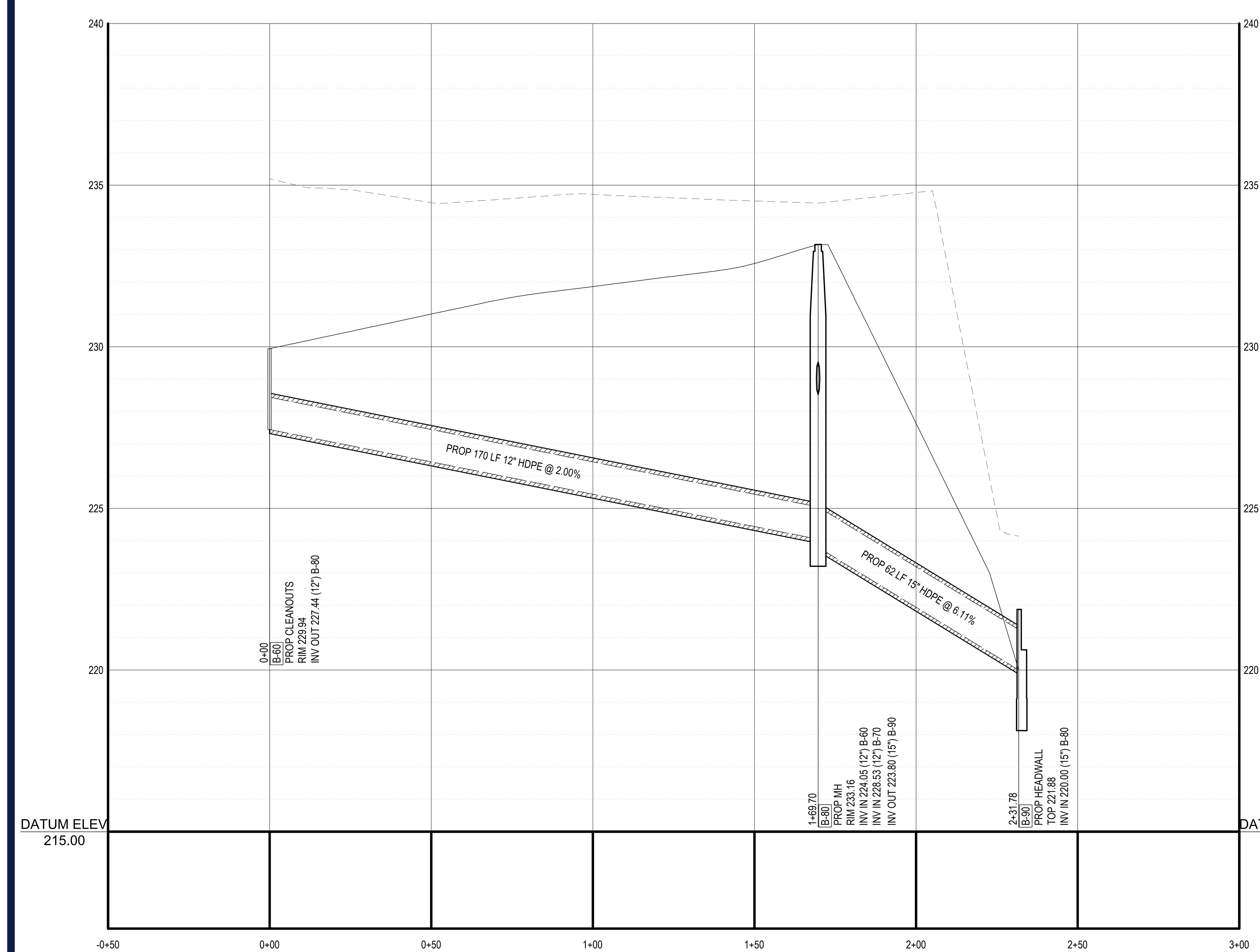
PROPOSED STORM PROFILE (B-30 - B-50)

SCALE: 1"= 30' HORIZONTAL
1"= 3' VERTICAL



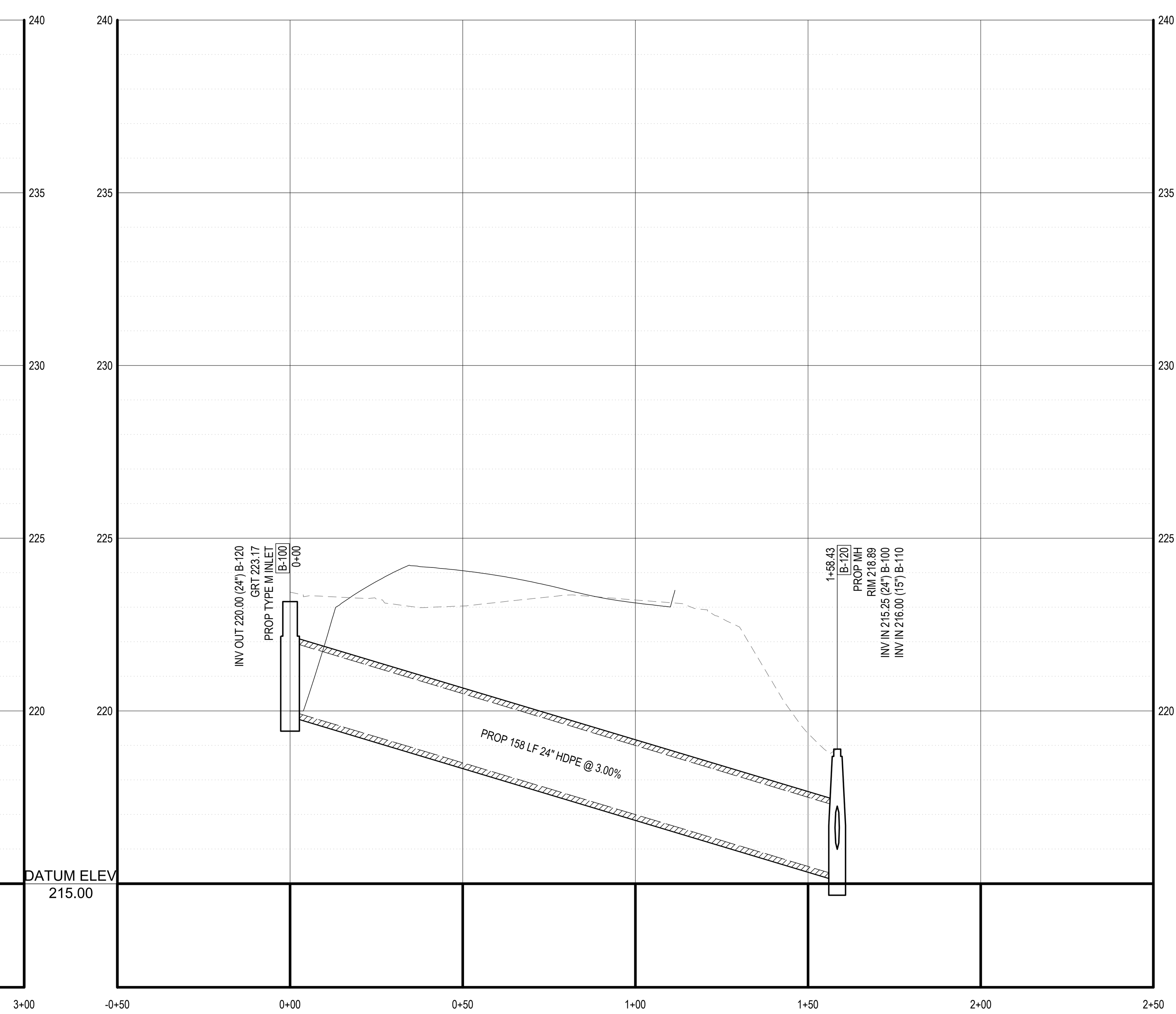
PROPOSED STORM PROFILE (B-70 - B-80)

SCALE: 1"= 30' HORIZONTAL
1"= 3' VERTICAL



PROPOSED STORM PROFILE (B-60 - B-90)

SCALE: 1"= 30' HORIZONTAL
1"= 3' VERTICAL



PROPOSED STORM PROFILE (B-100 - B-120)

SCALE: 1"= 30' HORIZONTAL
1"= 3' VERTICAL

PROFILE	
EXISTING GRADE	
PROPOSED GRADE	

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PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
MATTHEW JOHN KEARSE

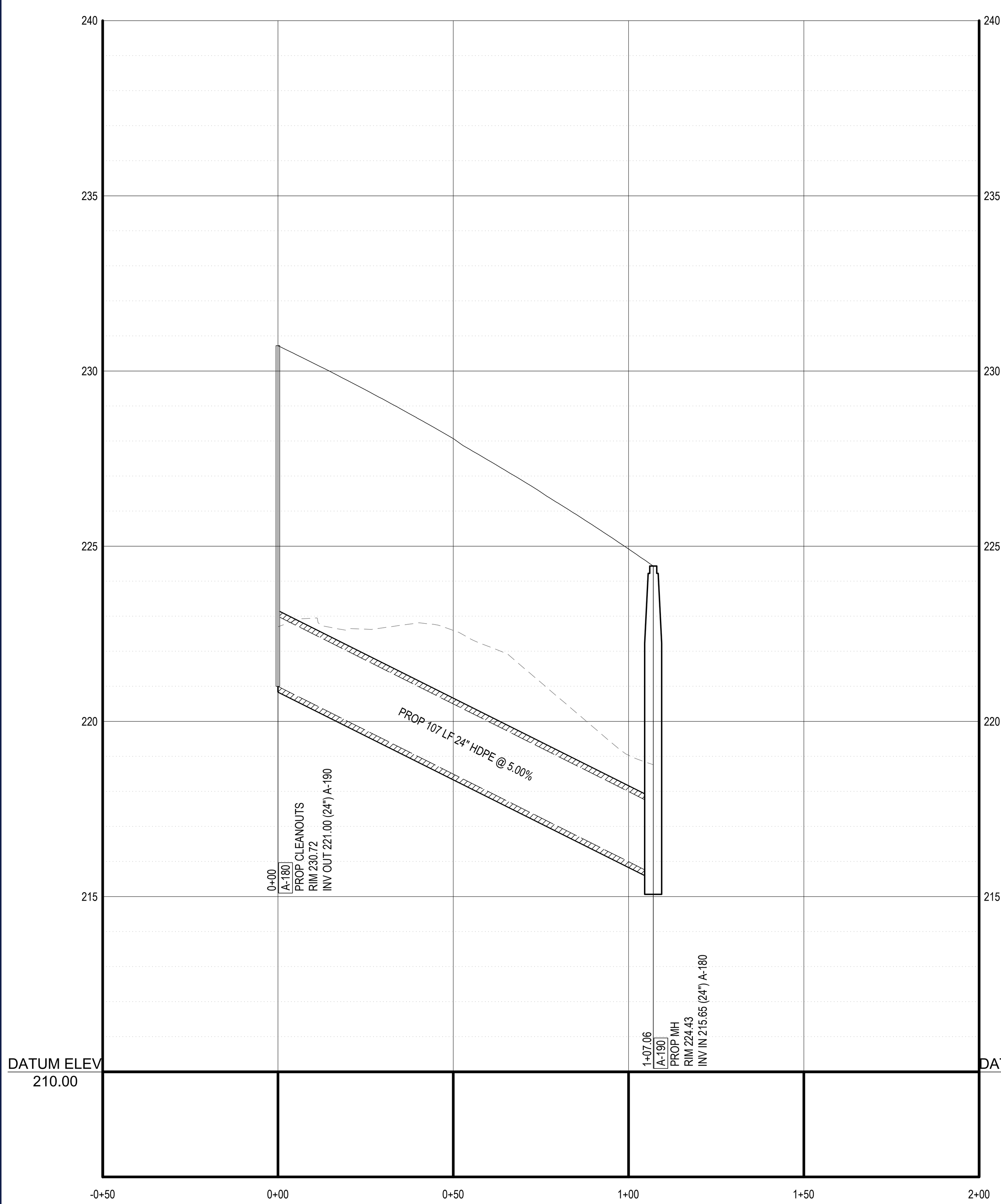
SHEET TITLE:

STORM PROFILES

SHEET NUMBER:

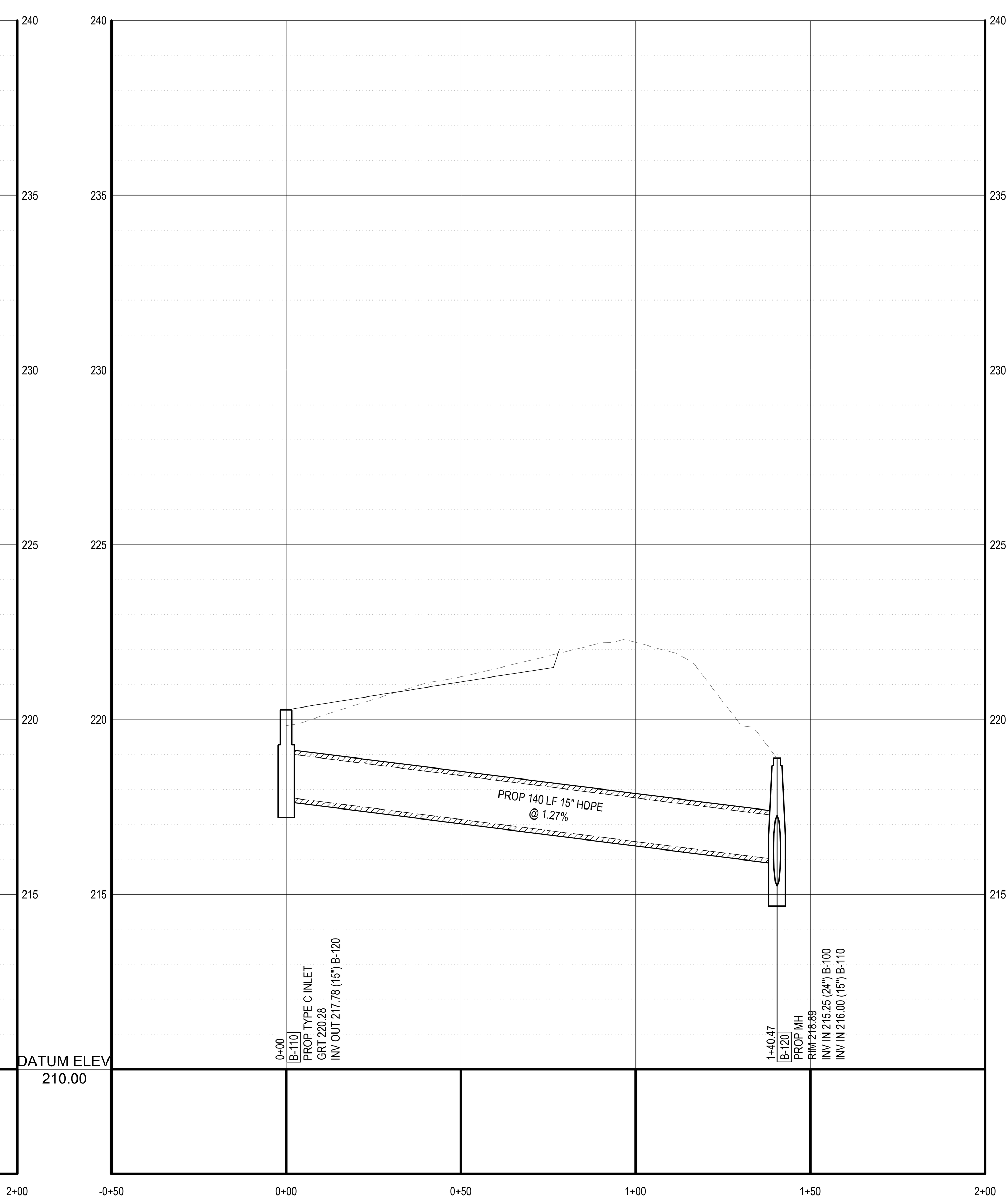
C-602

ORG. DATE - 12/19/2025



PROPOSED STORM PROFILE (A-180 - A-190)

SCALE: 1"= 30 ' HORIZONTAL
1"= 3 ' VERTICAL



PROPOSED STORM PROFILE (B-110 - B-120)

SCALE: 1"= 30 ' HORIZONTAL
1"= 3 ' VERTICAL

PROFILE	
EXISTING GRADE	- - - - - - -
PROPOSED GRADE	———

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LAND SURVEYING
PROGRAM MANAGEMENT
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SUSTAINABLE DESIGN
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-PROF

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER

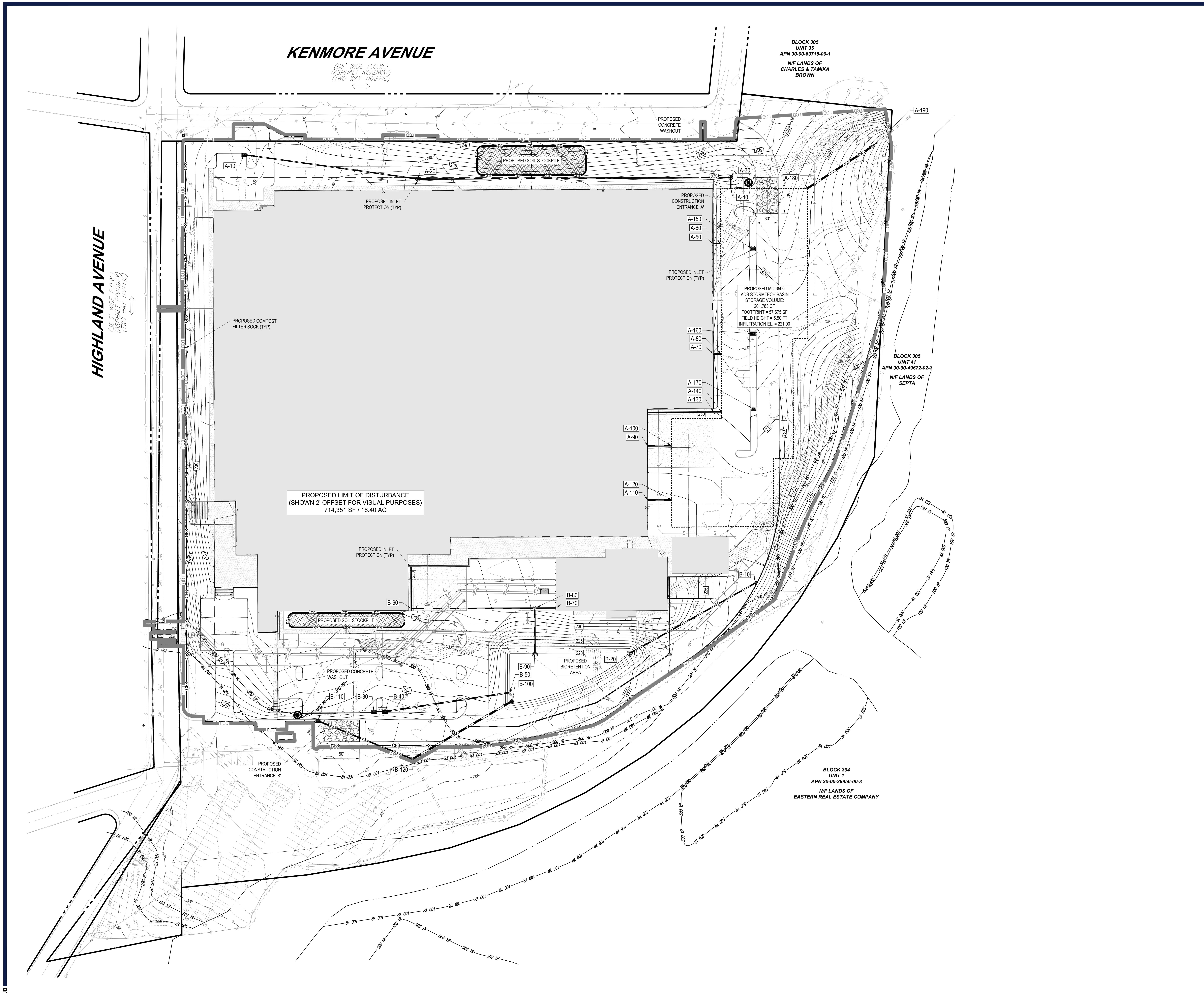
SHEET TITLE:

STORM PROFILES

SHEET NUMBER:

C-603

ORG. DATE - 12/19/2025



LEGEND

EROSION SEDIMENT

- LIMIT OF DISTURBANCE — LOD
- COMPOST FILTER SOCK — CFS
- INLET PROTECTION
- CONCRETE WASHOUT — FS
- TEMPORARY STOCKPILE
- ROCK CONSTRUCTION ENTRANCE
- TEST PIT — T-#
- TEST BORING — B-#

N E S W

THIS PLAN TO BE UTILIZED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY

60 30 15 0 60

SCALE: 1" = 60'

\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-EROS-PAC250142.00-0C------LAYOUT: C-801 EROS

JB

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SITE CIVIL AND CONSULTING ENGINEERING
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PROJECT:

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M. KEARSE
MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER
COMMONWEALTH OF PENNSYLVANIA

SHEET TITLE:

SOIL EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-801

ORG. DATE - 12/19/2025

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

I. GENERAL INFORMATION

A. THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE AT THE SITE.
B. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST BEING PROPERLY FILTERED.
C. ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY.
D. DISTURBED AREAS ON WHICH EARTHMOVING ACTIVITIES HAVE CEASED AND WHICH WILL REMAIN EXPOSED SHALL BE STABILIZED IMMEDIATELY, EITHER TEMPORARILY OR PERMANENTLY, INCLUDING THE RESTORATION OF DRIVEWAYS, STOCKPILES, OFF-SITE UNDERGROUND UTILITY LINES AND GRADED PERIMETER AREAS. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION.
E. AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED OR MULCHED.
F. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD SEED AND MULCH IN PLACE; THIS IS ESPECIALLY IMPORTANT AROUND WATERCOURSES, IN SWALES AND AREAS OF CONCENTRATED FLOWS, STEEP SLOPES.
G. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. IF AT ANY TIME PRIOR TO SITE STABILIZATION ANY E&SP PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS.
H. THE CONTRACTOR MUST DEVELOP AND COORDINATE WITH OWNER AND HAVE APPROVED BY THE COUNTY CONSERVATION DISTRICT, A SEPARATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH SPOIL, BORROW OR OTHER WORK AREA NOT DETAILED ON THE PERMITTED PLANS, WHETHER LOCATED WITHIN OR OUTSIDE OF THE LIMITS OF CONSTRUCTION.
I. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF MATERIALS (IF ANY) TO BE REMOVED FROM SITE.
J. ALL MATERIALS TO BE RECYCLED OR DISPOSED OF MUST DO SO IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS. STOCKPILES TO BE HAULED OFF SITE MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AT THE DESTINATION LOCATION.
K. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SOIL STABILIZATION THROUGHOUT CONSTRUCTION. ADDITIONAL MEASURES REQUIRED TO ENSURE ON-SITE AND OFF-SITE STABILIZATION IN AND ADJACENT TO CONSTRUCTION ACTIVITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT NO COST TO THE OWNER. IMMEDIATE NOTIFICATION SHALL BE GIVEN TO THE OWNER AND ENGINEER SHOULD ADDITION STABILIZATION MEASURES BE NECESSARY; IN ACCORDANCE WITH THE NPDES AND/OR SWPPP REQUIREMENTS FOR THE PROJECT.

II. STANDARD FOR LAND GRADING

A. DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLAN GRADES, WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT.
  A.1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR SUITABLE WATER COURSES AND TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FULL SLOPES.
  A.2. ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS.
B. INSTALLATION REQUIREMENTS
  B.1. TIMBER, LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETABLE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OR FILL AREAS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH STANDARD FOR DISPOSAL OF MATERIALS.
  B.2. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER, LOGS, VEGETATIVE MATTER AND STUMPS IN AMOUNTS THAT WILL BE DETRIMENTAL TO CONSTRUCTING STABLE FILLS.
  B.3. ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.
  B.4. ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED FROM EROSION.
  B.5. (SEE I. D.)

III. STANDARD FOR UTILITY TRENCH EXCAVATION

A. LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
B. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR A MAX. OF SIX DAYS FOR CERTAIN CASES REQUIRING TESTING OF THE INSTALLED PIPE.
C. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A FACILITY FOR REMOVAL OF SEDIMENT (SEDIMENT FILTER BAG, SEE DETAIL) BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS.
D. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES / FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE IMMEDIATELY.
E. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FORM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
F. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

IV. STANDARD FOR TEMPORARY STABILIZATION

A. STANDARD FOR TEMPORARY STABILIZATION WITH FIBERMULCH
  A.1. MULCHING IS MOST APPLICABLE TO THOSE AREAS SUBJECT TO PERIODIC DISTURBANCE AND REWORKING IN ADDITION, STABILIZATION WITH FIBER MULCH SHALL BE USED DURING NON-GERMINATION PERIODS.
  A.2. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO THE SLOPE.
  A.3. GRADE AS NEED AND FEASIBLE. SEE STANDARD FOR LAND GRADING.
  A.4. PROTECTIVE MATERIALS TO BE USED:
    A.4.a. UNROTTED SMALL-GRAIN UN-CHOPPED STRAW OR HAY AT 3.0 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1 AND MARCH 1) SPREAD UNIFORMLY AND ANCHORED WITH LIQUID MULCH BINDER. BINDER PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
    A.4.b. HYDROMULCHER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL. LIQUID MULCH BINDERS: APPLY IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. PRODUCTS TO BE INSTALLED AT A RATE OF 1 TON PER ACRE (MINIMUM) OR PER MANUFACTURER'S SPECIFICATIONS.

B. STANDARD FOR TEMPORARY STABILIZATION WITH SEED
  B.1. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN TWELVE (12) MONTHS MUST BE SEEDED AND MULCHED IMMEDIATELY WITH A TEMPORARY COVER.
  B.2. ALL AREAS TO BE PERMANENTLY SEEDED SHALL ALSO RECEIVE TEMPORARY SEEDING CONCURRENTLY.
  B.3. SEEDBED PREPARATION FOR TEMPORARY SEEDING
    B.3.A. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
    B.3.B. APPLY AGRICULTURAL LIME AT A RATE OF 1 TONE PER ACRE
    B.3.C. APPLY 10-10-10 FERTILIZER A RATE OF 500 POUNDS PER ACRE
    B.3.D. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF FOUR (4) INCHES.

C. SEEDING: SEE SEEDING SPECIFICATIONS

V. STANDARD FOR PERMANENT STABILIZATION

A. SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER
  A.1. SITE PREPARATION
    A.1.a. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
    A.1.b. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL PH TO BETWEEN 5.5 AND 7 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
    A.1.c. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3-5 INCHES TO PROVIDE A GOOD BOND WITH THE TOPSOIL.
  A.2. APPLYING TOPSOIL
    A.2.a. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
    A.2.b. ALL DISTURBED TOPSOIL ON-SITE IS TO BE REDISTRIBUTED ON-SITE IN AREAS NOT COVERED BY IMPERVIOUS SURFACES. NO REMOVAL OF TOPSOIL IS ALLOWED UNLESS APPROVED BY THE TOWNSHIP. UNIFORM APPLICATION TO A DEPTH OF 6-8 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE.
  A.3. SEEDBED PREPARATION
    A.3.a. A SOIL TEST SHALL BE CONDUCTED TO ACCURATELY DETERMINE NECESSARY SOIL AMENDMENTS.
    A.3.b. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
    A.3.c. SOIL MODIFICATIONS:
      A.3.c.1. APPLY 10-20-20 RATED FERTILIZER AT A RATE OF 1000 POUNDS PER ACRE OR 25 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST.
      A.3.c.2. APPLY AGRICULTURAL LIME AT A RATE OF 6 TONS PER ACRE OR 240 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST.
    A.3.d. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDBED IS PREPARED.
    A.3.e. REMOVE FROM THE SURFACE ALL STONES ONE INCH (1") OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
    A.3.f. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.
  A.4. SEEDING: SEE SEEDING SPECIFICATIONS
  A.5. SEED BED AREAS SHALL ALSO BE STABILIZED USING AN APPROVED METHOD (EG: HYDROMULCHING) AS OUTLINED IN ITEM IV.A. HEREIN.

B. STANDARD FOR PERMANENT STABILIZATION WITH SOD
  B.1. METHODS AND MATERIALS
    B.1.a. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
    B.1.b. SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES.
    B.1.c. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH).
    B.1.d. SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 0% OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.
    B.1.e. A SOD OF KENTUCKY 31 TALL FESCUE WITH BLUEGRASS, OR A FESCUE BLEND IS PREFERRED.
    B.1.f. ONLY MOIST, FRESH UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS.
  B.2. SITE PREPARATIONS: SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER (ITEM V.A. ABOVE)
  B.3. SOD PLACEMENT
    B.3.a. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
    B.3.b. PLACE SOD STRIPS WITH SNUG EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES INVITE EROSION.
    B.3.c. ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS, WHICH WOULD CAUSE DRYING OF THE ROOTS.
    B.3.d. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES OR A BIODEGRADABLE FASTENER.
    B.3.e. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.
    B.3.f. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.
  B.4. FOLLOW-UP INSPECTION: AFTER THE FIRST GROWING SEASON, THE SOD SHOULD BE INSPECTED TO DETERMINE IF ADDITIONAL FERTILIZATION OR LIMING IS NEEDED.

LOCATION OF ALL SURFACE WATERS AND THEIR CLASSIFICATION UNDER CHAPTER 93

§102.4(b)(5)(v)

THE SUBJECT SITE IS LOCATED WITHIN THE COBBS CREEK WATERSHED, WHICH HAS A WWF (WARM WATER FISHES) CHAPTER 93 CLASSIFICATION.

RECYCLING OR DISPOSAL OF MATERIALS

§102.4(b)(5)(xi)

THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EXIST ON-SITE:
- CONCRETE CURB AND SIDEWALK
- ASPHALT
- E&S BMP - COMPOST FILTER SOCKS
- E&S BMP - PUMPED WATER FILTER BAG

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 Pa. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. BELOW IS A LIST OF METHODS FOR THE PROPER RECYCLING/DISPOSAL OF VARIOUS MATERIALS:

1.) DUST CONTROL - CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE. THE PURPOSE IS TO TRAP DUST AND MUD THAT WOULD OTHERWISE BE CARRIED OFF-SITE BY CONSTRUCTION TRAFFIC. WATER TRUCKS WILL BE USED AS NEEDED DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE CONTRACTOR TO A DEGREE THAT IS ACCEPTABLE TO THE LOCAL CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.

2.) SOLID WASTE DISPOSAL - NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, ARE ALLOWED TO BE DISCHARGED FROM THE SITE WITH STORMWATER. ALL SOLID WASTE, INCLUDING DISPOSABLE MATERIALS INCIDENTAL TO THE MAJOR CONSTRUCTION ACTIVITIES, MUST BE COLLECTED AND PLACED IN CONTAINERS. THE CONTAINERS WILL BE EMPTIED AS NECESSARY BY A CONTRACT TRASH DISPOSAL SERVICE AND HAULED AWAY FROM THE SITE.

3.) SANITARY FACILITIES - ALL PERSONNEL INVOLVED WITH CONSTRUCTION ACTIVITIES MUST COMPLY WITH STATE AND LOCAL SANITARY OR SEPTIC SYSTEM REGULATIONS. TEMPORARY SANITARY FACILITIES WILL BE PROVIDED AT THE SITE THROUGHOUT THE CONSTRUCTION PHASE. THEY MUST BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND WILL BE SERVICED BY A LICENSED COMMERCIAL OPERATOR.

4.) WATER SOURCE - NON-STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE.

5.) CONCRETE WASTE FROM CONCRETE READY-MIX TRUCKS - DISCHARGE OF EXCESS OR WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS WILL BE ALLOWED ON THE CONSTRUCTION SITE, BUT ONLY IN SPECIFICALLY DESIGNATED DIKED AREAS PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH WATER AND STORMWATER THAT WILL BE DISCHARGED FROM THE SITE.

GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION

§102.4(b)(5)(xii)

THERE ARE NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT COULD CAUSE CONTAMINANT POLLUTION DURING EARTH DISTURBANCE ACTIVITIES.

POTENTIAL THERMAL IMPACTS TO SURFACE WATERS

§102.4(b)(5)(xiii)

A POTENTIAL FOR THERMAL IMPACTS EXISTS IN INSTANCES WHERE SURFACE RUNOFF IS DIRECTLY CONVEYED TO COBBS CREEK WITHOUT ADEQUATE ATTENUATION OR COOLING. TO AVOID THERMAL IMPACTS, THE FOLLOWING ARE PROPOSED: UNDERGROUND INFILTRATION BASIN. ALL OF THOSE MEASURES WILL HELP TO CONTROL RUNOFF VOLUME AND RATE AND THEREBY PROVIDE ADDITIONAL COOLING TIME, THEREBY MINIMIZING THERMAL IMPACTS TO COBBS CREEK.

SEEDING SPECIFICATIONS

1. SEEDING DATES
   A. SEEDING SHALL OCCUR BETWEEN MARCH 1ST AND MAY 15TH OR BETWEEN AUGUST 15TH AND NO LATER THAN OCTOBER 15TH.
   B. IF SEEDING CANNOT BE CONDUCTED DURING THE TIMEFRAMES NOTED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL CONSERVATION DISTRICT AND ALL APPROPRIATE AGENCIES TO DETERMINE AN ACCEPTABLE MEANS IN WHICH TO STABILIZE THE SITE THROUGH THE NEXT GROWING SEASON.
2. SEED MIXTURES: SEED MIXTURE TO BE USED ON THIS SITE SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE NOTED ON THE PLANS. RATES ARE IN THE FORM OF POUNDS PER ACRE (LB/A) PER PURE LIVE SEED (POUNDS / ACRE PLS). CONTRACTOR WILL NEED TO ADJUST ACCORDINGLY BASED ON THE SEED GERMINATION AND PURITY RATING (SEE ITEM #3 BELOW).
   A. TEMPORARY SEED MIXTURES: DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE DISTURBED AGAIN WITHIN TWELVE (12) MONTHS MUST BE SEEDED WITH A TEMPORARY SEED MIXTURE AS FOLLOWS:
      ANNUAL RYE (40 POUNDS / ACRE PLS)
      OR SPRING OATS (96 POUNDS / ACRE PLS)
      OR WINTER RYE (168 POUNDS / ACRE PLS)
      (REFERENCE: PENN STATE "EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND", TABLE 5)
   B. PERMANENT SEEDING SHALL CONSIST OF A NURSE CROP PLUS A PERMANENT SEED MIXTURE, AS FOLLOWS:
      I. NURSE CROP (SELECT ONE):
         ANNUAL RYE (10 POUNDS / ACRE PLS)
         OR SPRING OATS (64 POUNDS / ACRE PLS)
         OR WINTER RYE (56 POUNDS / ACRE PLS)
         (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #1)
      II. PERMANENT SEED MIX:
         TALL FESCUES (60 POUNDS / ACRE PLS)
         OR FINE FESCUE (35 POUNDS / ACRE PLS)
         OR KENTUCKY BLUEGRASS (25 POUNDS / ACRE PLS) PLUS REDTOP (3 POUNDS / ACRE PLS)
         OR PERENNIAL RYEGRASS (15 POUNDS / ACRE PLS)
         (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #2)
3. PURE LIVE SEED: MINIMUM PLS RATING ACCEPTED SHALL BE 85% PLS. SEED RATE MAY NEED TO BE ADJUSTED BASED ON THE PLS RATING OF THE SEED.
   A. SEED USED FOR THE PURPOSE OF PERMANENT STABILIZATION SHALL BE LABELED WITH GERMINATION AND PURITY PERCENTAGES. UNLABELED SEED WILL BE REJECTED. SEED SHALL NOT BE USED MORE THAN ONE (1) YEAR BEYOND THE LABEL DATE.
   B. DETERMINING THE PERCENT PURE LIVE SEED (PERCENT PLS) OF A LABELED SEED: MULTIPLY BY THE PERCENTAGE OF PURE SEED BY THE PERCENTAGE OF GERMINATION AND DIVIDE THE RESULT BY 100 ((%PURE X %GERMINATION) / 100)
   C. DETERMINING THE ACTUAL SEED RATE: SIMPLY DIVIDE THE PERCENT PLS RATING OF THE SEED INTO THE PLS REQUIRED, AS NOTED ABOVE. THE RESULT IS THE POUNDS OF SEED REQUIRED. FOR EXAMPLE: IF THE REQUIRED RATE IS 64 POUNDS PLS, AND THE SEED IS RATED AT 35% PLS, DIVIDE 64 BY 0.35 TO GET 182.9 POUNDS, WHICH IS THE AMOUNT OF THAT SEED REQUIRED PER ACRE.
4. APPLICATION OF SEED: SEEDING SHALL BE APPLIED AND ESTABLISHED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" AS PUBLISHED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER QUALITY PROTECTION (MOST RECENT EDITION).
   A. SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 - OCTOBER 15.
   B. SEED SHALL BE APPLIED IN A NON-COMPACTED, ROUGHENED TOPSOIL.
   C. SEED MAY BE APPLIED THROUGH ANY OF THE FOLLOWING MEANS AND METHODS, OR OTHER ACCEPTED INDUSTRY PRACTICES, UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS:
      I. DRILL SEEDING
      II. BROADCAST SEEDING (TWO DIRECTIONS)
      III. HYDROSEEDING (TWO DIRECTIONS)
   D. ALL SEED SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED UNTIL A 70% PERENNIAL COVER IS ACHIEVED:
      I. TEMPORARY STABILIZATION WITH STRAW:
         1. STRAW MULCH SHALL BE APPLIED ON TOP OF THE FRESHLY SEEDED AREAS AT A RATE OF 3 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1ST AND MARCH 1ST).
         2. STRAW SHALL BE STABILIZED WITH A WOOD OR PAPER FIBER MULCH AND TACKIFIER SOLUTION IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
      II. TEMPORARY/PERMANENT STABILIZATION WITH EROSION CONTROL MATTING/BLANKETS (WHERE SPECIFIED):
         1. MATTING/BLANKETS SHALL BE INSTALLED IN AREAS AS NOTED ON THE EROSION & SEDIMENT CONTROL PLAN OR WITHIN 50 FEET OF PONDS, STREAMS OR WETLANDS. THE PRODUCT SHALL BE INSTALLED AND STAPLED ON TOP OF THE SEEDING IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
         2. AREAS WITH MATTING/BLANKETS SHALL NOT BE TRACKED (CATWALKED) AFTER INSTALLATION.
         3. MATTING/BLANKETS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT THE PRODUCT IS FUNCTIONING PROPERLY, IS HELD FAST TO THE SOIL SURFACE AND IS IN GOOD CONDITION.
   E. ONCE SEED HAS BEEN SET, VEHICULAR TRAFFIC OR OTHER SOURCES OF COMPACTION SHALL BE AVOIDED
5. IRRIGATION: NEW SEED APPLICATIONS SHOULD BE SUPPLIED WITH ADEQUATE WATER, A MINIMUM OF ¼" TWICE A DAY, UNTIL VEGETATION IS WELL ESTABLISHED (A MINIMUM OF 75% COVER).

TYPES, DEPTH, SLOPE, LOCATIONS, AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

DESCRIPTION	SOIL GROUP
- URBAN LAND	B

SOIL USE LIMITATIONS AND THEIR RESOLUTIONS PROVIDED

CONTRACTOR SHALL CONSULT WITH GEOTECHNICAL ENGINEER TO DETERMINE SOIL LIMITATIONS AND RESOLUTIONS SPECIFIC TO THIS PROJECT.

1. SOIL TYPES POORLY SUITED AS SOURCES OF TOPSOIL RESTRICT OR PLACE CONDITIONS ON PLANNING VEGETATIVE STABILIZATION. ACIDIC, LOW FERTILITY, EXCESSIVE DRYNESS AND EXCESSIVE WETNESS LIMIT PLANT GROWTH.

RESOLUTIONS: IDENTIFYING AND RESOLVING CHARACTERISTICS, THAT RENDER THE SOIL TYPES POORLY, SUITED AS TOPSOIL. PLEASE REFERENCE THE GENERAL CONSERVATION NOTES AND SPECIFICATION (SECTION V) FOR STANDARDS REGARDING TOPSOIL FOR PERMANENT STABILIZATION.

2. ACIDIC SOIL TYPES EXHIBITING PH REACTION VALUES LOWER THAN ABOUT 5.5, LIMIT VEGETATIVE STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC PH REACTION.

RESOLUTIONS: APPLYING LIME CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTING VEGETATIVE SPECIES TOLERANT TO ACIDIC SOIL CONDITIONS; AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

3. LOW FERTILITY SOIL TYPES LACKING IN SUFFICIENT AMOUNTS OF ESSENTIAL PLANT NUTRIENTS SUCH AS: NITRPGEN, PHOSPHOROUS, POTASSIUM, SULFER, MAGNESIUM, CALCIUM, IRON, MANGANESE, BORON, CHLORINE, ZINC, COPPER AND MOLYBDENUM, LIMIT VEGETATION STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC SOIL FERTILITY. PLEASE REFERENCE THE GENERAL CONSERVATION NOTES AND SPECIFICATION (SECTION V) FOR STANDARDS REGARDING SOIL FERTILITY.

RESOLUTIONS: INCORPORATING SOIL NUTRIENTS CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTIVE VEGETATIVE SPECIES TOLERANT TO LOW FERTILITY SOIL CONDITIONS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

4. ERODIBLE SOIL TYPES EXHIBITING K VALUES GREATER THAN 0.36 OR PLASTICITY INDEX VALUES LOWER THAN 10, LIMIT VEGETATIVE STABILIZATION OF CHANNELS.

RESOLUTIONS: TEMPORARY CHANNEL LINING, PROVIDING PERMANENT CHANNEL LINING, DECREASING CHANNEL GRADE, INCREASING CHANNEL WIDTH, SELECTING VEGETATIVE WITH GREATER RETARDANCE, SELECTING PERMANENT LININGS OTHER THAN GRASSES, AND IMPLEMENTING COMBINATION OF THESE AND/OR METHODS. VEGETATIVE RETARDANCE INFORMATION IS PROVIDED IN TABLES 6 AND 7 OF THE EROSION AND SEDIMENT POLLUTION CONTROL MANUAL PUBLISHED BY PADEP.

5. WET SOIL TYPES HAVE EXCESSIVE ROOT ZONE AND SOIL MOISTURES. SOME SOIL SURVEYS INDICATE WETNESS, HIGH WATER TABLE AND FLOODING. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY THE PENN STATE.

6. DRY SOIL TYPES LACK SUFFICIENT ROOT ZONE SOIL MOISTURES. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO DRY CONDITIONS, IRRIGATING VEGETATED AREAS AND IMPLEMENTING COMBINATION OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

7. SOIL TYPES THAT EXHIBIT INSTABILITY IN POND EMBANKMENTS OR SUSCEPTIBILITY TO PIPING AND SEEPING POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SLOPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

8. SOIL THAT ARE DIFFICULT TO COMPACT, UNSUITABLE FOR WINTER GRADING, OR SUSCEPTIBLE TO FROST ACTION POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, NOT CONSTRUCTING EMBANKMENTS DURING PERIODS PRONE TO FROST AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS

SEQUENCE OF BMP INSTALLATION AND REMOVAL

§102.4(b)(5)(vii)

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO: THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE DESIGNATED LICENSED PROFESSIONAL AND A REPRESENTATIVE OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION 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 INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.

BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE MONTGOMERY COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

1. INSTALL CONSTRUCTION ENTRANCE 'A' AS DESIGNATED ON THE PLANS.
2. INSTALL ALL PERIMETER [COMPOST FILTER SOCK AND CONSTRUCTION FENCING] WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED.
3. COMMENCE BUILDING DEMOLITION AND DEMOLITION OF ANY STRUCTURES INDICATED TO BE REMOVED (TBR) ON THE PLANS. AREAS TO BE DISTURBED MUST BE IMMEDIATELY STABILIZED WITH STONE. EXISTING INLETS BEING REMOVED SHOULD BE SEALED SO THERE IS NO OPEN HOLE ONCE REMOVED. IF PONDING WATER OCCURS, A PUMPED FILTER BAG SHOULD BE UTILIZED.
4. INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. CONTRACTOR MUST DISPOSE OF ANY TRENCH SPOILS AND SOIL EXCAVATION TO AN APPROVED LOCATION ABLE TO RECEIVE IT. BUILDING CONSTRUCTION MAY COMMENCE UPON ACCEPTANCE OF BUILDING PAD BY OWNER. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE. CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS AND SEEDING SPECIFICATIONS IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS.
5. RELOCATE CONSTRUCTION ENTRANCE 'A' TO CONSTRUCTION ENTRANCE 'B' LOCATION.
6. INITIATE STORM SEWER [AND SUBSURFACE BASIN] INSTALLATIONS FOR THE FEATURES SHOWN ON THE PLANS STARTING AT THE FURTHEST DOWNSTREAM STRUCTURE. [SEE ADDITIONAL INFILTRATION FACILITY SEQUENCING, INSTALLATION AND MAINTENANCE & INSPECTION NOTES PROVIDED ON THE POST CONSTRUCTION STORMWATER MANAGEMENT PLANS FOR CONSTRUCTION OF THE SUBSURFACE INFILTRATION BASINS. **THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE CONSTRUCTION OF SUBSURFACE INFILTRATION BASINS. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF SUBSURFACE INFILTRATION BASINS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.** INLETS DISCHARGING TO SUBSURFACE INFILTRATION BASINS MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE SUBSURFACE INFILTRATION BASIN. NO CONSTRUCTION EQUIPMENT, SUCH AS CRANES DURING BUILDING CONSTRUCTION, SHALL BE PARKED ON TOP OF THE SUBSURFACE BASINS TO AVOID DAMAGING THE SUBSURFACE BASINS OR OVER-COMPACTING THE SUBSURFACE SOILS.]
7. CONTINUE WITH THE BALANCE OF EARTHWORK INCLUDING UTILITY INSTALLATION (SANITARY, ELECTRIC, TELEPHONE, CABLE AND GAS) WHERE APPLICABLE.
8. INSTALL ALL CURBING SHOWN IN THIS PHASE AND INSTALL STONE BASE COURSE IN THE DRIVEWAY AND PARKING AREAS.
9. INITIATE FINAL GRADING AND PLACEMENT OF TOPSOIL IN ALL LANDSCAPE AREAS. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. ALL LANDSCAPE AREAS MUST BE STABILIZED AND PERMANENT SEEDING OR PLACEMENT OF SOD MUST BE APPLIED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. HOWEVER, THE AREA WILL NOT BE CONSIDERED STABILIZED UNTIL A MINIMUM UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
10. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS.
11. INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
12. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE DESIGNATED LICENSED PROFESSIONAL, REMOVE EROSION AND SEDIMENT CONTROL FACILITIES INCLUDING [FILTER SOCK AND ANY BLOCKED INLETS. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
13. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM 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. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THIS SITE.
14. DEMOBILIZE.
15. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE MONTGOMERY COUNTY CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PROJECT.

E&S PLAN DESIGNED AND IMPLEMENTED TO BE CONSISTENT WITH PCSM PLAN

§102.4(b)(5)(xiv)

REGARDING THE LOCATIONS OF EXISTING RIPARIAN BUFFERS RELATIVE TO THE LIMIT OF DISTURBANCE AND WHETHER PROPOSED INFILTRATION FACILITIES ARE OUTSIDE OF PROPOSED GRADING AREAS, NOTE THE FOLLOWING:
- THERE ARE NO EXISTING OR PROPOSED RIPARIAN BUFFERS.
- THERE ARE NO PROPOSED INFILTRATION BMPs OUTSIDE OF PROPOSED GRADING AREAS.

EXISTING/PROPOSED RIPARIAN FOREST BUFFERS

§102.4(b)(5)(xv)

REGARDING EXISTING OR PROPOSED RIPARIAN FOREST BUFFERS, NOTE THE FOLLOWING:
- THERE ARE NO EXISTING/PROPOSED RIPARIAN FOREST BUFFERS LOCATED WITHIN OR OUTSIDE THE LIMITS OF DISTURBANCE FOR THIS PROJECT.

MONTGOMERY COUNTY SOIL CONSERVATION DISTRICT STANDARD E&S NOTES

1. 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 SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. 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.
3. 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.
4. 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.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. 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.
7. 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.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(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.
9. 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.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET seq 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
11. 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.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-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.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM LOTS (SPECIFY LOT NUMBERS) ONTO (SPECIFY ROAD NAMES}
15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT 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.
16. 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.
17. 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 SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES- 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
22. 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.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
26. 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.
27. 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.
28. 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.
29. 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.
30. 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.
31. 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.
32. 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.
33. 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.
34. 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.

DEFINITION OF CLEAN FILL AND IMPORT/EXPORT MATERIAL NOTES

TO COMPLY WITH SECTION C.3 OF NOI

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE APPLICANT.

1.) 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).

2.) 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 FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".

3.) ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.

4.) ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: 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 SUBJECTED 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 DEPARTMENT'S 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 DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

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DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVL-EROS

PROJECT:

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MATTHEW JOHN KEARSE
PROFESSIONAL ENGINEER

SHEET TITLE:

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

SHEET NUMBER:

C-802

ORG. DATE - 12/19/2025

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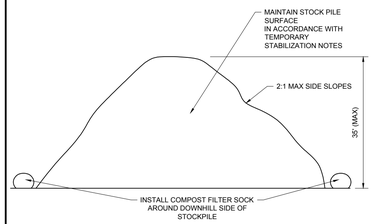

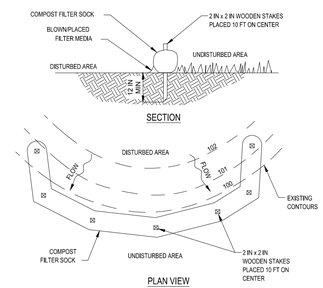

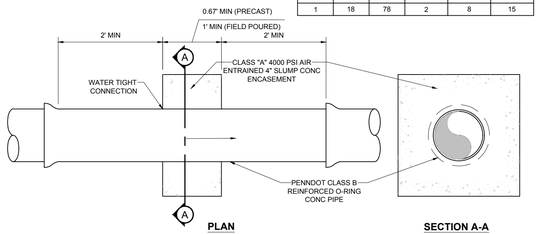

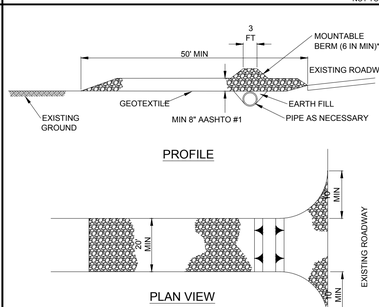

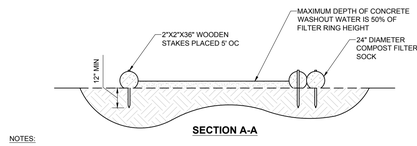

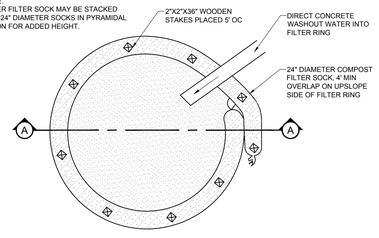

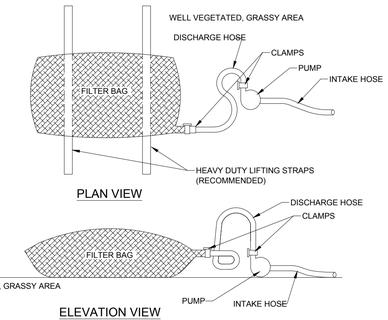

MAINTENANCE PROGRAM

§102.4(b)(5)(x)

THE FOLLOWING MAINTENANCE PROGRAM HAS BEEN DEVELOPED TO PROVIDE FOR THE INSPECTION OF BMPs ON A WEEKLY BASIS AND AFTER EACH MEASURABLE RUNOFF EVENT, AND TO INCLUDE THE REPAIR OF THE BMPs TO ENSURE THEIR EFFECTIVE AND EFFICIENT OPERATION:

UNTIL THE SITE IS STABILIZED AND DURING CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY THE CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL 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 AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

- COMPOST FILTER SOCK - INSPECTIONS SHALL BE CONDUCTED ON A WEEKLY BASIS AND/OR AFTER EACH RUNOFF EVENT. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ THE ABOVE GROUND SOCK. THE SEDIMENT SHALL BE DISPOSED OF ON SITE AND/OR IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER SIX (6) MONTHS; PHOTODEGRADABLE SOCKS AFTER ONE (1) YEAR. UPON STABILIZATION OF THE 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.
- CONSTRUCTION ENTRANCES - LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. A STABILIZED CONSTRUCTION EXIT SHALL BE CONSTRUCTED WHERE VEHICLES ENTER AND EXIT. EXITS SHALL BE MAINTAINED OR SUPPLEMENTED AS NECESSARY TO PREVENT THE RELEASE OF SEDIMENT FROM VEHICLES LEAVING THE SITE. ANY SEDIMENT DEPOSITED ON THE ROADWAY SHALL BE SWEPT AS NECESSARY THROUGHOUT THE DAY OR AT THE END OF EVERY DAY AND DISPOSED OF IN AN APPROPRIATE MANNER. SEDIMENT SHALL NOT BE WASHED INTO STORM SEWER SYSTEMS. SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEPT INTO ANY ROAD SIDE DITCH, STORM SEWER OR SURFACE WATER.
- INSPECTIONS SHALL EVALUATE DISTURBED AREAS AND AREAS USED FOR STORING MATERIALS THAT ARE EXPOSED TO RAINFALL FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM OR DISCHARGING FROM THE SITE. IF NECESSARY, THE MATERIALS MUST BE COVERED OR ORIGINAL COVERS MUST BE REPAIRED OR SUPPLEMENTED. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED WITH HYDRO-STRAW IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS. ALSO, PROTECTIVE BERMS MUST BE CONSTRUCTED, IF NEEDED, IN ORDER TO CONTAIN RUNOFF FROM MATERIAL STORAGE AREAS.
- GRASSED AREAS SHALL BE INSPECTED TO CONFIRM THAT A HEALTHY STAND OF GRASS IS MAINTAINED. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE COVERED WITH BUILDING FOUNDATION OR PAVEMENT, OR HAVE A STAND OF GRASS WITH AT LEAST 70 PERCENT DENSITY OR GREATER IN ACCORDANCE WITH PERMIT REQUIREMENTS. THE VEGETATIVE DENSITY MUST BE MAINTAINED TO BE CONSIDERED STABILIZED. AREAS MUST BE WATERED, FERTILIZED, AND RESEEDED AS NEEDED TO ACHIEVE THIS REQUIREMENT.
- ALL DISCHARGE POINTS MUST BE INSPECTED TO DETERMINE WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING DISCHARGE OF SEDIMENT FROM THE SITE OR IMPACTS TO RECEIVING WATERS.

E+S - MONITORING, INSPECTION AND REPORTING REQUIREMENTS

VISUAL INSPECTIONS

THE PERMITTEE AND CO-PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND WITHIN 24 HOURS AFTER EACH MEASURABLE RAINFALL EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECEIPT AND ACKNOWLEDGEMENT OF THE NOT BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED IN A FORMAT PROVIDED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT E&S BMPs AND PCSM BMPs ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THIS COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:

(1) A SUMMARY OF SITE CONDITIONS, E&S BMP AND PCSM BMP, IMPLEMENTATION AND MAINTENANCE AND COMPLIANCE ACTIONS; AND

(2) THE DATE, TIME, NAME AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

NONCOMPLIANCE REPORTING

WHERE E&S, PCSM OR PPC BMPs ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION, OR ANY OTHER TIME, THE PERMITTEE AND CO_PERMITTEE(S) SHALL, WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT. NONCOMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

(1) ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION;

(2) THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE;

(3) STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE; AND

(4) THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE CONDITIONS.

REDUCTION, LOSS, OR FAILURE OF THE BMPs

UPON REDUCTION, LOSS, OR FAILURE OF THE BMPs, THE PERMITTEE AND CO_PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE THE BMPs OR PROVIDE AN ALTERNATIVE METHOD OF TREATMENT. SUCH RESTORED BMPs OR ALTERNATIVE TREATMENT SHALL BE AT LEAST AS EFFECTIVE AS THE ORIGINAL BMPs.

TERMINATION OF COVERAGE

NOT: UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT ARE AUTHORIZED BY THIS PERMIT AND WHEN BMPs IDENTIFIED IN THE PCSM PLAN HAVE BEEN PROPERLY INSTALLED, THE PERMITTEE AND/OR CO_PERMITTEE OF THE FACILITY MUST SUBMIT A NOT FORM THAT IS SIGNED IN ACCORDANCE WITH PART B, SECTION 1.C, SIGNATORY REQUIREMENTS, OF THIS PERMIT. ALL LETTERS CERTIFYING DISCHARGE TERMINATION ARE TO BE SENT TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE NOT MUST CONTAIN THE FOLLOWING INFORMATION: FACILITY NAME, ADDRESS, AND LOCATION, OPERATOR NAME AND ADDRESS, PERMIT NUMBER, IDENTIFICATION AND PROOF OF ACKNOWLEDGMENT FROM THE PERSON(S) WHO WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE PCSM BMPs IN ACCORDANCE WITH THE APPROVED PCSM PLAN, AND THE REASON FOR PERMIT TERMINATION. UNTIL THE PERMITTEE HAS RECEIVED WRITTEN ACKNOWLEDGEMENT OF THE NOT, THE PERMITTEE WILL REMAIN RESPONSIBLE FOR OPERATING AND MAINTAINING ALL E&S BMPs AND PCSM BMPs ON THE PROJECT SITE AND WILL BE RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.

COMPLETION CERTIFICATE AND FINAL PLANS

WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPs IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE NOT IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS.

LIST OF CRITICAL STAGES

§102.8(f)(7)

THE CONTRACTOR SHALL NOTIFY THE PROFESSIONAL RESPONSIBLE FOR THE PROPER IMPLEMENTATION OF THE STORMWATER BMP'S AT LEAST 72 HOURS IN ADVANCE OF INSTALLATION (REFERENCE SEQUENCE OF CONSTRUCTION ON EROSION & SEDIMENT POLLUTION CONTROL PLAN AND POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS FOR PROPER CONSTRUCTION TECHNIQUES). THE PROFESSIONAL RESPONSIBLE FOR PROPER IMPLEMENTATION MUST BE ON-SITE TO OVERSEE INSTALLATION OF THE FOLLOWING BMP'S:

1. **CRITICAL STAGE:** INITIATE STORM SEWER AND SUBSURFACE BASIN INSTALLATION (BMP 001), FOR THE FEATURES SHOWN ON THE PLANS STARTING AT THE FURTHEST DOWNSTREAM STRUCTURE. INSTALL THE BASIN OUTLET STRUCTURE ALONG WITH THE PROPOSED CONVEYANCE OUTLET PIPE AND CONNECTION TO THE TOWNSHIP STORM SEWER. SEE ADDITIONAL BASIN SEQUENCING, INSTALLATION AND MAINTENANCE & INSPECTION NOTES PROVIDED ON THE POST CONSTRUCTION STORMWATER MANAGEMENT PLANS FOR CONSTRUCTION OF THE SUBSURFACE INFILTRATION BASIN. **THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE CONSTRUCTION OF SUBSURFACE DETENTION BASIN. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF SUBSURFACE BASINS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT**. IN ADDITION, INFILTRATION TESTS MUST BE COMPLETED ONCE UNDERGROUND BASIN LOCATION IS EXCAVATED. INFILTRATION TESTING RESULTS SHALL BE SENT TO THE ENGINEER FOR REVIEW. PRIOR TO THE INSTALLATION OF THE UNDERGROUND INFILTRATION BASIN, NOTIFICATION TO THE TOWNSHIP ENGINEER SHALL BE PROVIDED. INLETS DISCHARGING TO SUBSURFACE DETENTION BASIN MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE SUBSURFACE INFILTRATION BASIN. ONCE THE SITE HAS ACHIEVED FINAL STABILIZATION MAY THE UNDERGROUND BASIN START TO RECEIVE RUNOFF FROM THE CONTRIBUTORY DRAINAGE AREAS. NO CONSTRUCTION EQUIPMENT, SUCH AS CRANES DURING BUILDING CONSTRUCTION, SHALL BE PARKED DIRECTLY ON TOP OF THE SUBSURFACE BASIN TO AVOID DAMAGING THE SUBSURFACE BASIN OR OVER-COMPACTING THE SUBSURFACE SOILS.
2. **CRITICAL STAGE:** INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
3. **CRITICAL STAGE:** UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF DESIGNATED LICENSED PROFESSIONAL, REMOVE EROSION AND SEDIMENT CONTROL FACILITIES INCLUDING PERIMETER E&S CONTROLS. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.

E&S - GENERAL NOTES:

1. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL STRUCTURES. ADDITIONAL FACILITIES OR MEASURES SHALL BE INSTALLED WHERE NECESSARY OR WHERE DIRECTED BY EITHER THE TOWNSHIP OR THE COUNTY CONSERVATION DISTRICT AS CONSTRUCTION PROGRESSES.

2. THE OWNER/CONSTRUCTION MANAGER IS RESPONSIBLE FOR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROLS AND SITE STABILIZATION. THE OWNER SHALL ASSIGN ONE INDIVIDUAL TO BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL FACILITIES AND MEASURES.

3. PROTECTION TO THE EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.

4. ANY DRY FILL HAULED OFFSITE MUST BE TAKEN TO A LOCATION WITH AN EROSION AND SEDIMENTATION CONTROL PLAN WHICH HAS BEEN REVIEWED BY THE COUNTY CONSERVATION DISTRICT FOR ADEQUACY.

5. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN TRIBUTARY AREAS OF THOSE CONTROLS.

6. STOCKPILES MUST BE STABILIZED IMMEDIATELY.

7. NO CHANGES SHALL BE MADE IN THE CONTOUR OF THE LAND. NO GRADING, EXCAVATING, REMOVAL OR DESTRUCTION OF THE TOPSOIL, TREES OR OTHER VEGETATIVE COVER OF THE LAND SHALL BE COMMENCED WITHIN A PROPOSED SUBDIVISION OR LAND DEVELOPMENT TRACT UNTIL SUCH TIME THAT A PLAN FOR SEDIMENTATION CONTROL AND MINIMIZING EROSION HAS BEEN REVIEWED AND FOUND SATISFACTORY BY THE COUNTY CONSERVATION DISTRICT AND REVIEWED AND APPROVED BY THE TOWNSHIP, OR THERE HAS BEEN A DETERMINATION BY THE TOWNSHIP, UPON RECOMMENDATION BY THE COUNTY CONSERVATION DISTRICT, THAT SUCH PLANS ARE NOT NECESSARY.

8. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE COUNTY CONSERVATION DISTRICT.

9. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.

10. CONTRACTOR SHALL USE TREADED MACHINERY AND MINIMIZE SOIL COMPACTION WHEREVER POSSIBLE.

E&S PLAN PLANNING & DESIGN

§102.4(b)(4)

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE
- SEQUENCE CONSTRUCTION ACTIVITIES BY LIMITING DISTURBANCES TO A SPECIFIC TASK SUCH THAT EACH TASK IS COMPLETED BEFORE THE NEXT TASK IS INITIATED

THE FOLLOWING MEASURES ARE TAKEN TO MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE SOIL COMPACTION:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE
- USE OF TREADED MACHINERY WHERE PRACTICAL DURING EARTHMOVING OPERATIONS
- GRADE SITE TO MINIMIZE EXTENT OF CUTS/FILLS

THE FOLLOWING MEASURES ARE TAKEN TO PREVENT OR MINIMIZE GENERATION OF INCREASED STORM WATER RUNOFF:
- DIRECT RUNOFF TO AN UNDERGROUND STORMWATER BASIN TO CONTROL RUNOFF RATES

\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-EROS-PAC250142.00-0C----->LAYOUT: C-803 EROS

JB

ADS STORMTECH INSPECTION INSTRUCTIONS

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT

A. INSPECTION PORTS
  - A.A. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.B. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.C. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.D. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.E. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

B. ALL ISOLATOR PLUS ROWS
  - B.A. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.B. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE.
    - B.B.A. MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - B.B.B. FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.C. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS

A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED.
B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN.
C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM

TEMPORARY SOIL STOCKPILE

NOT TO SCALE (PA-O060101 - 09/2023)

FILTREXX
NOTES:
- SOCK MATERIAL SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.2
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST EIGHT (8) FEET UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT (PA DEP EROSION CONTROL MANUAL FIGURE 4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON PA DEP EROSION CONTROL MANUAL FIGURE 4.2. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- 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 FILTER SOCKS SHALL BE REPLACED AFTER SIX (6) MONTHS, PHOTODEGRADABLE SOCKS AFTER ONE (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.

STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

NOT TO SCALE (PADEP - MARCH 2012)

BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO FIRST COLLAR (FT)	COLLAR SPACING (FT)
1	18	78	2	8	15

NOTE:
FIELD POURED COLLARS SHALL HAVE A MINIMUM THICKNESS OF TWELVE (12) INCHES. COLLARS MAY NOT BE INSTALLED WITHIN TWO (2) FEET OF PIPE JOINTS.

ANTI-SEEP COLLAR

NOT TO SCALE (PA-O019902 - 09/2023)

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE (PADEP - MARCH 2012)

NOTES:

1.) INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2.) 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

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

CONCRETE WASHOUT NOTES:
-UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS. -WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS. -SHOULD BE A MINIMUM OF 10 FEET WIDE AND PROVIDE AT LEAST 12 INCHES OF FREEBOARD ABOVE THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS. -THE PIT SHOULD BE LINED WITH PLASTIC SHEETING OF AT LEAST 10-MIL THICKNESS (WITH NO HOLES OR TEARS) TO PREVENT LEACHING OF LIQUIDS INTO THE GROUND. -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.

TYPICAL COMPOST SOCK WASHOUT INSTALLATION

NOT TO SCALE (PA-O020201 - 09/2023)

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.

STANDARD CONSTRUCTION DETAIL #3-16 PUMPER WATER FILTER BAG

NOT TO SCALE (PADEP - MARCH 2012)

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ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG

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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-EROS

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

BOHLER TM

1515 MARKET STREET, SUITE 920
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M. J. KEARSE
PROFESSIONAL ENGINEER
MATTHEW JOHN KEARSE

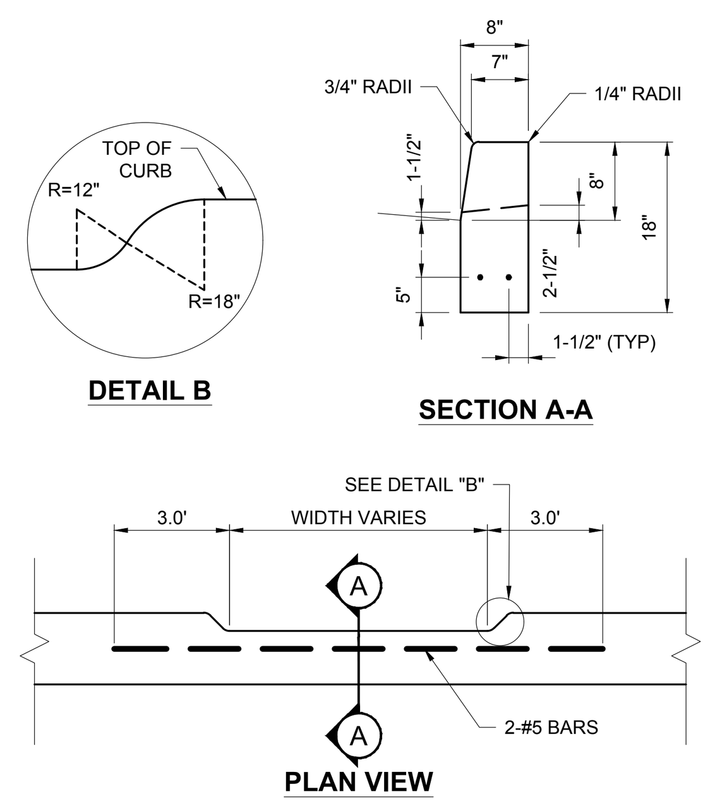
SHEET TITLE:

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

SHEET NUMBER:

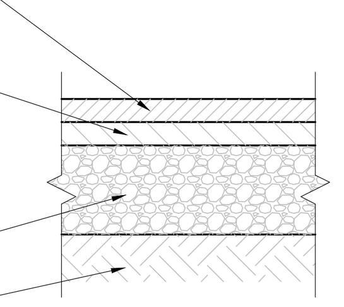
C-803

ORG. DATE - 12/19/2025



DEPRESSED CURB

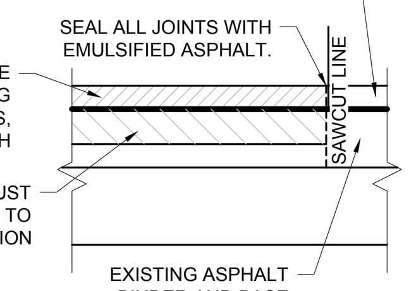
NOT TO SCALE (PA-S020204 - 09/2023)



NOTES:
1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITIONS OF PENNDOT PUBLICATION 408 AND 242 (PAVEMENT POLICY MANUAL).
2. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT PAVEMENT DESIGN RECOMMENDATIONS. IN CASE OF ANY DISCREPANCIES, THE GEOTECHNICAL REPORT RECOMMENDATIONS SHALL SUPERSEDE.

STANDARD ASPHALT PAVEMENT

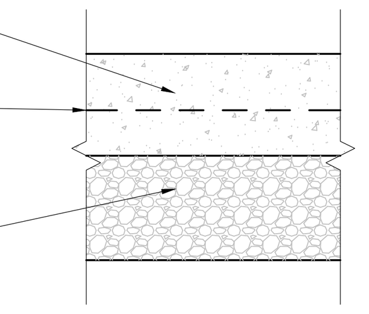
NOT TO SCALE (PA-S010101 - 06/2025)



NOTES:
1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITIONS OF PENNDOT PUBLICATION 408 AND PUBLICATION 242 (PAVEMENT POLICY MANUAL)
2. THE PROPOSED OVERLAY THICKNESS MUST BE AS INDICATED, OR MATCH THE EXISTING AS FOUND IN THE FIELD, WHICHEVER IS GREATER. A LESSER WEARING COURSE THICKNESS IS NOT PERMITTED, UNLESS OTHERWISE DEEMED ACCEPTABLE BY STATE OR LOCAL AUTHORITIES.

MILL AND OVERLAY

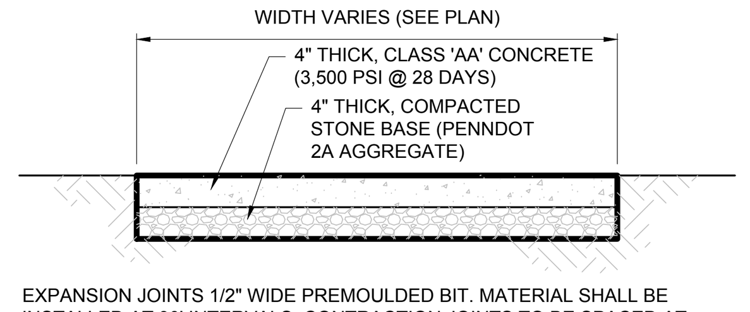
NOT TO SCALE (PA-S010401 - 09/2023)



NOTES:
1. JOINT SPACING SHALL BE 12 FT.
2. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITIONS OF PENNDOT PUBLICATION 408 AND 242 (PAVEMENT POLICY MANUAL).
3. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT PAVEMENT DESIGN RECOMMENDATIONS. IN CASE OF ANY DISCREPANCIES, THE GEOTECHNICAL REPORT RECOMMENDATIONS SHALL SUPERSEDE.

REINFORCED CONCRETE PAVEMENT

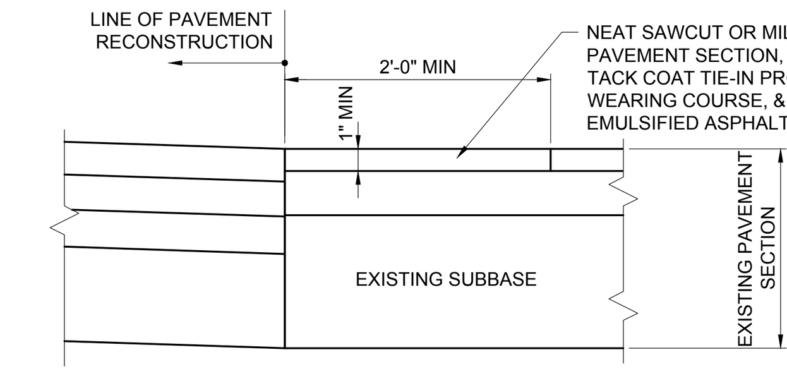
NOT TO SCALE (BE-S010203 - 03/2024)



EXPANSION JOINTS 1/2" WIDE PREMOULDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS. CONTRACTION JOINTS TO BE SPACED AT EQUAL INTERVALS, 5' MAXIMUM LENGTH.

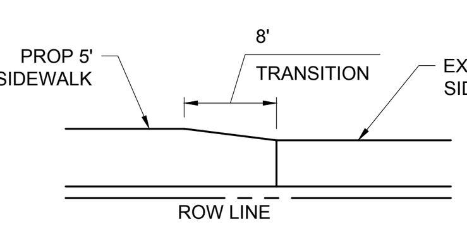
CONCRETE SIDEWALK

NOT TO SCALE (PA-S030201 - 09/2023)



PAVEMENT TIE-IN

NOT TO SCALE (PA-S019901 - 09/2023)



SIDEWALK TIE-IN

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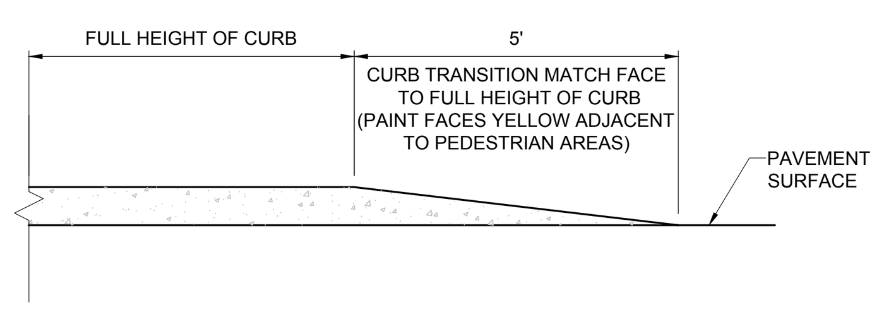
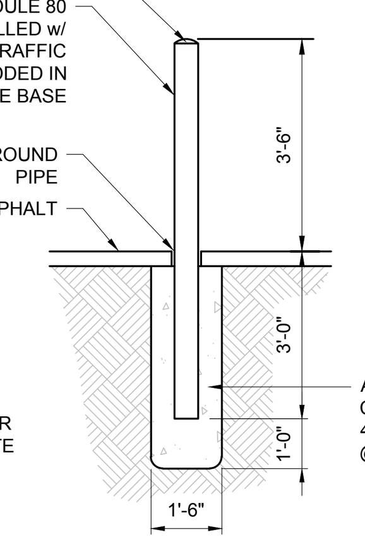


TAPERED CURB

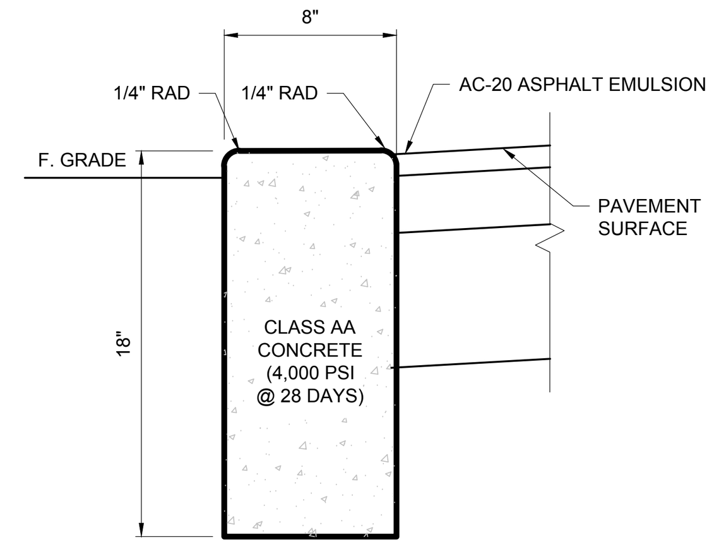
NOT TO SCALE (PA-S020203 - 09/2023)



NOTES:
1. BOLLARDS SHALL BE PAINTED TRAFFIC YELLOW AND MUST BE PERPETUALLY MAINTAINED / REPAINTED BY PROPERTY OWNER OR PARTY RESPONSIBLE FOR SITE MAINTENANCE.
2. THIS BOLLARD DETAIL IS NOT CRASH TEST RATED AND IS NOT INTENDED TO MEET THE PERFORMANCE STANDARDS OF ASTM F-3016 OF ASTM F-2656. IT IS INTENDED TO BE A VISUAL DETERRENT TO HELP PREVENT INCURSION OF VEHICLES INTO NON-VEHICULAR AREAS.

BOLLARD

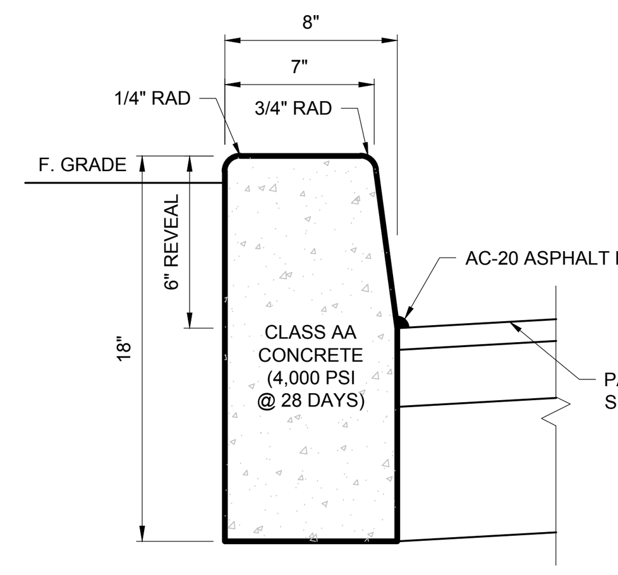
NOT TO SCALE (PA-S070101 - 06/2025)



CONTRACTION JOINTS 2" DEEP AND 3/4" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH PREMOLDED EXPANSION JOINT FILLER MATERIAL AS SPECIFIED RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.

TYPICAL FLUSH CONCRETE CURB

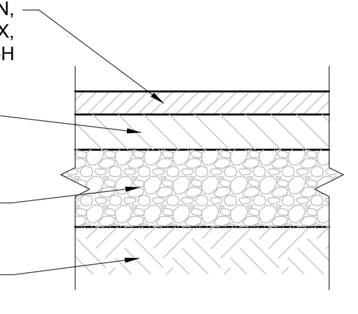
NOT TO SCALE (PA-S020202 - 03/2024)



NOTES:
1. EXPANSION JOINTS, USING 3/4" PREMOLDED EXPANSION JOINT FILLER, SHALL BE PLACED WHERE CURB IS COMPLETED AT THE END OF EACH WORKDAY OR MEETS STRUCTURES, WHICHEVER IS SHORTER.
2. CONTRACTION JOINTS SHALL BE SPACED IN UNIFORM LENGTHS AND NO MORE THAN 20' APART. CONTRACTION JOINTS SHALL BE RECESSED 2" FROM THE TOP AND FRONT OF THE CURB.

TYPICAL CONCRETE CURB

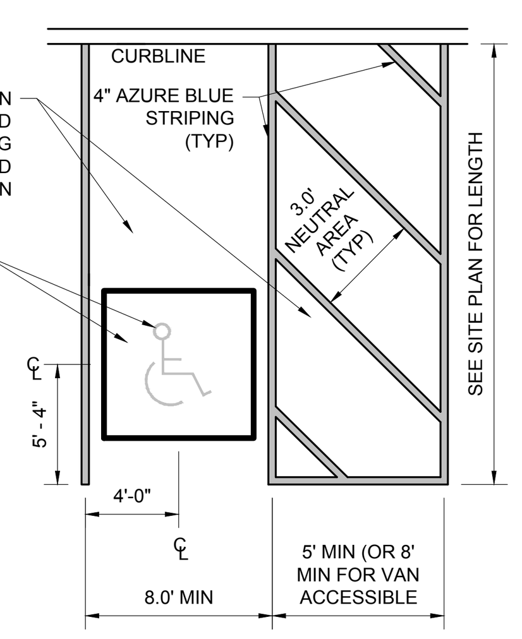
NOT TO SCALE (PA-S020201 - 10/2024)



NOTES:
1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITIONS OF PENNDOT PUBLICATION 408 AND 242 (PAVEMENT POLICY MANUAL).
2. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT PAVEMENT DESIGN RECOMMENDATIONS. IN CASE OF ANY DISCREPANCIES, THE GEOTECHNICAL REPORT RECOMMENDATIONS SHALL SUPERSEDE.

HEAVY DUTY ASPHALT PAVEMENT

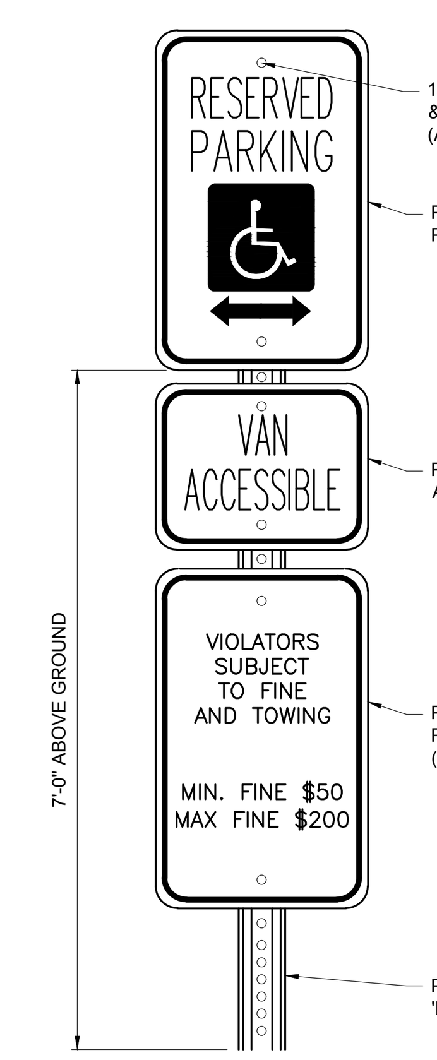
NOT TO SCALE (PA-S010102 - 06/2025)



NOTES:
1. CURB RAMPS MAY NOT EXTEND INTO ANY PORTION OF THE PARKING SPACE OR ASSOCIATED STRIPED PASSENGER LOADING ZONE.
2. CURB RAMPS, PAVEMENT MARKINGS, AND APPLICABLE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.D.A. ACCESSIBILITY GUIDELINES.

ADA ACCESSIBLE PARKING SPACE STRIPING (1 SPACE)

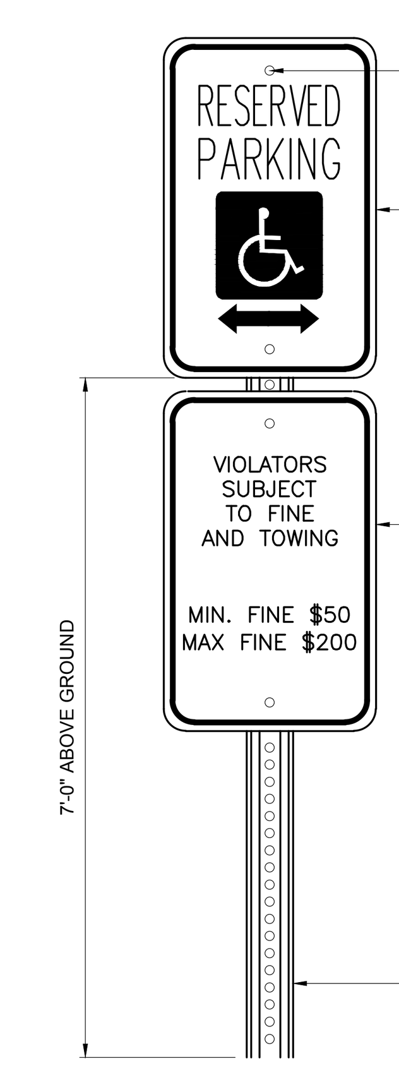
NOT TO SCALE (PA-S050102 - 09/2023)



NOTES:
1. POST MOUNTED SIGNS SHALL BE TYPE B CHANNEL BAR POSTS AND SHALL CONFORM TO PENNDOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B. APPROPRIATE POSTS SHALL BE SELECTED BASED ON THE SIZE OF THE SIGN USING THE SELECTION TABLES CONTAINED THEREIN
2. SIGN INSTALLATION SHALL BE IN ACCORDANCE WITH PENNDOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B, AS AMENDED.
3. SEE CIVIL PLANS FOR EXACT LOCATION, TYPE AND SIZE OF SIGNS. ALL REGULATORY (R SERIES), SIGNS SHALL CONFORM TO THE PENNDOT "HANDBOOK OF APPROVED SIGNS", PUBLICATION 236M, AS AMENDED, UNLESS OTHERWISE SPECIFIED.
4. SIGNS SHALL BE SETBACK 2.0' FROM CURB LINES OR OTHER OBSTRUCTIONS AS MEASURED FROM THE FACE/EDGE OF THE SIGN.
5. RESERVED PARKING SPACE SIGNS SHALL CONFORM TO DEPARTMENT OF JUSTICE "ADA STANDARDS FOR ACCESSIBLE DESIGN" AS AMENDED.
6. ALL SIGNS SHALL BE INSTALLED WITH ACORN NUT FASTENERS.

RESERVED PARKING SPACE WITH PENALTIES AND VAN ACCESSIBLE SIGNS

NOT TO SCALE (PA-S060101 - 09/2023)



RESERVED PARKING SPACE AND PENALTIES SIGNS

NOT TO SCALE (PA-S060102 - 09/2023)

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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-CNDS

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

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1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
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www.BohlerEngineering.com

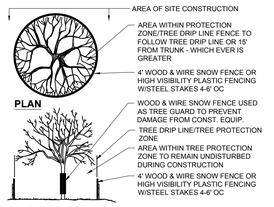
SHEET TITLE:

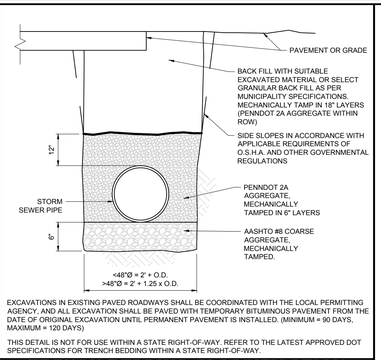
CONSTRUCTION DETAILS

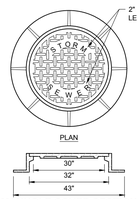
SHEET NUMBER:

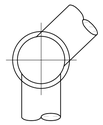
C-901

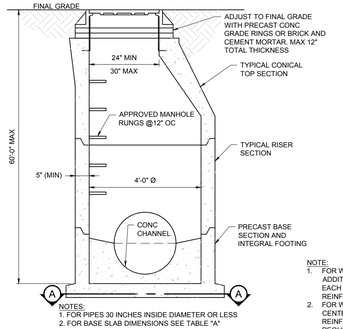
ORG. DATE - 12/19/2025

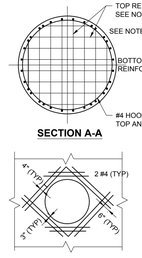


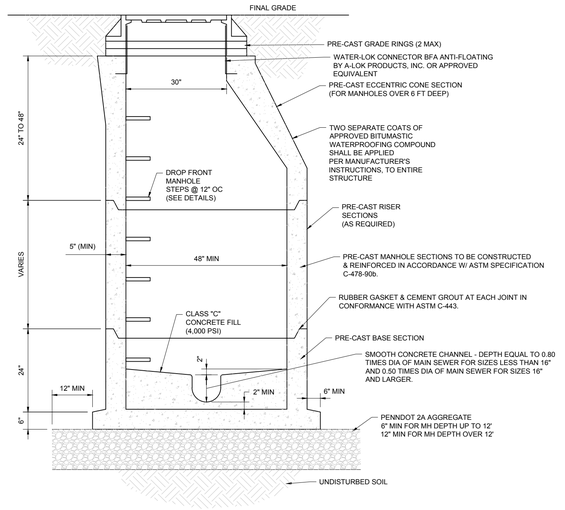


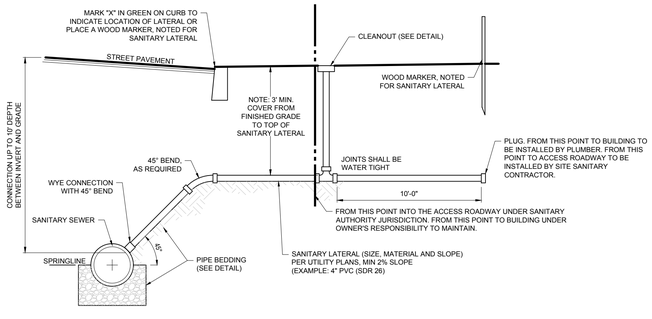


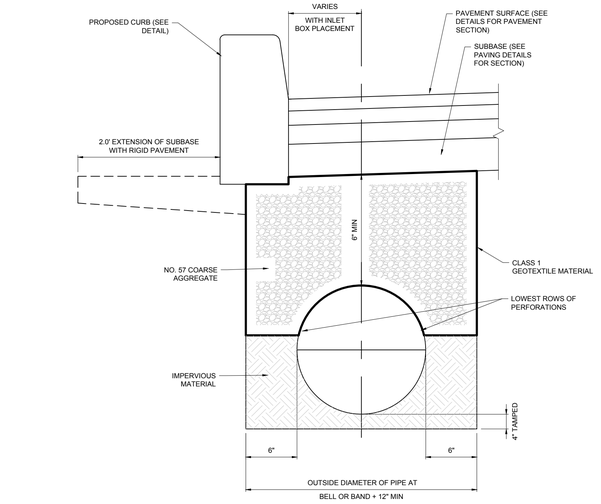


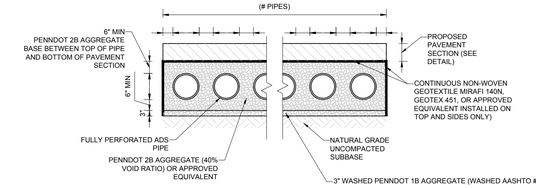


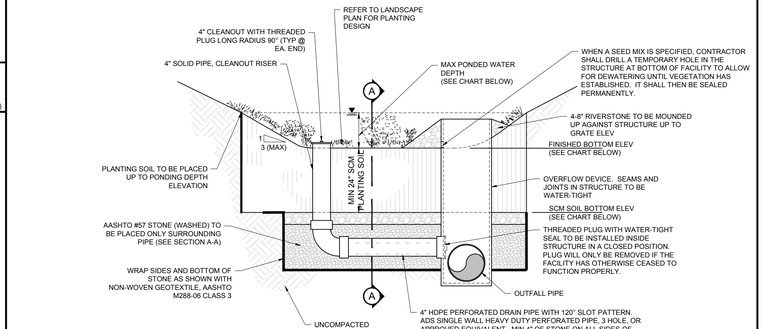


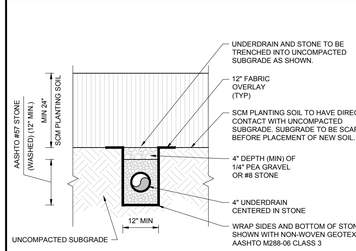












TREE PROTECTION DURING SITE CONSTRUCTION

NOT TO SCALE (PA-O030202 - 09/2023)

EXCAVATIONS IN EXISTING PAVED ROADWAYS SHALL BE COORDINATED WITH THE LOCAL PERMITTING AGENCY, AND ALL EXCAVATION SHALL BE PAVED WITH TEMPORARY BITUMINOUS PAVEMENT FROM THE DATE OF ORIGINAL EXCAVATION UNTIL PERMANENT PAVEMENT IS INSTALLED. (MINIMUM = 90 DAYS, MAXIMUM = 120 DAYS)

THIS DETAIL IS NOT FOR USE WITHIN A STATE RIGHT-OF-WAY. REFER TO THE LATEST APPROVED DOT SPECIFICATIONS FOR TRENCH BEDDING WITHIN A STATE RIGHT-OF-WAY.

TRENCH BEDDING CLASSIFICATION (STORM)

NOT TO SCALE (PA-U050203 - 09/2023)

MANHOLE COVER SECTION

NOTES:
1. STANDARD MANHOLE FRAMES & COVERS SHALL BE USED ON ALL MANHOLES NOT LOCATED WITHIN EASEMENTS UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. STANDARD MANHOLE FRAME & COVER SHALL BE BRIDGESTATE PATTERN #1012B, OR APPROVED EQUIVALENT, WITH NON-PENETRATING PICK HOLES.
3. "FLOW-SEAL" MANHOLE COVERS SHALL BE USED ON MANHOLES LOCATED WITHIN EASEMENTS, IN UNPAVED AREAS, AND OUTSIDE OF THE CENTERLINE OF PAVED ROADS.
4. ALL MANHOLE FRAME AND COVERS SHALL BE MADE IN THE USA.

PLAN VIEW

TABLE A
BASE SLAB DIMENSIONS

MAX DEPTH FROM TOP OF MANHOLE TO TOP OF FOOTING	DESIGNED (SEE NOTE 12)	
	FOOTING DIAMETER	FOOTING THICKNESS
10'-0"	6'-9"	1'-0"
20'-0"	6'-9"	1'-0"
30'-0"	6'-9"	1'-3"
40'-0"	7'-3"	1'-3"
50'-0"	8'-0"	1'-3"
60'-0"	8'-6"	1'-3"

NOTES:
1. FOR PIPES 30 INCHES INSIDE DIAMETER OR LESS
2. FOR BASE SLAB DIMENSIONS SEE TABLE "A"

SECTION

SECTION A-A

NOTE:
1. FOR WALL THICKNESS 10" THICK OR GREATER PLACE ADDITIONAL REINFORCEMENT AS SHOWN ABOVE AT EACH FACE OF THE WALL INSIDE MAIN REINFORCEMENT.
2. FOR WALLS 5" THICK KEEP MAIN REINFORCEMENT CENTERED IN WALL, PROVIDE ADDITIONAL REINFORCEMENT AS SHOWN ABOVE, MAINTAINING REQUIRED COVER.

REINFORCEMENT DETAIL AT OPENINGS

NOTES:
1. PRECAST MANHOLES, MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 714, MAY BE SUBSTITUTED FOR THE STANDARD CAST-IN-PLACE MANHOLE.
2. CONSTRUCTION NOTES:
   A. CONSTRUCT IN ACCORDANCE WITH: PENNDOT PUBLICATION 408 SPECIFICATIONS, SECTIONS 605, 606, 714 AND ASTM C-478-90, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, AS MODIFIED HERE IN:
   B. MINIMUM CONCRETE CLASS AA
   C. PROVIDE EPOXY COATED STEEL REINFORCEMENT (IN ACCORDANCE WITH ASTM A185), STEEL WELDED WIRE FABRIC (IN ACCORDANCE WITH ASTM A563 & A675), PLAIN BILLET STEEL BARS (IN ACCORDANCE WITH ASTM A615) OR DEFORMED BILLET STEEL BARS. PROVIDE MINIMUM YIELD STRENGTH OF 60,000 PSI
   D. CLEAR COVER FOR STEEL: WALLS: 2" FOOTINGS: 2" (TOP BARS), 1 1/2" (BOTTOM BARS) 1 1/2" (SIDE COVER)
3. PROVIDE 12" MINIMUM HORIZONTAL CLEARANCE BETWEEN OPENINGS LOCATED AT THE SAME DEPTH. PIPES NOT LOCATED AT THE SAME DEPTH MUST BE LOCATED VERTICALLY AT LEAST ONE TIMES MAXIMUM OPENING DIAMETER APART.
4. FOR RISERS OR BASE SECTIONS WITH OPENINGS, PROVIDE A MINIMUM HEIGHT OF SECTION EQUAL TO TWO TIMES THE LARGEST OPENING. CENTER OF OPENING TO BE LOCATED AT LEAST ONE TIMES THE OPENING FROM THE CLOSEST JOINT BETWEEN RISERS.
5. FOR PRECAST RISER OR BASE SECTIONS WITH ONE OPENING LOCATED AT DEPTHS TO 60' OR FOR SECTIONS WITH TWO OR MORE OPENINGS, LOCATED AT A DEPTH OF 15 FEET AND LESS, PROVIDE CIRCUMFERENTIAL REINFORCEMENT IN ACCORDANCE WITH REINFORCEMENT DETAIL AT OPENINGS.

   FOR RISERS OR BASE SECTIONS WITH 2 OR MORE OPENINGS, LOCATED AT A DEPTH GREATER THAN 15 FEET, BUT LESS THAN OR EQUAL TO 30 FEET, PROVIDE CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.44 SQ/IN VERTICAL FOOT FOR THE DEPTH OF THE RISER OR BASE SECTION

   FOR RISERS OR BASE SECTIONS WITH 2 OR MORE OPENINGS, LOCATED AT DEPTHS GREATER THAN 30 FEET, USE A 10 INCH THICK WALL RISER OR BASE SECTION WITH CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ/IN VERTICAL FOOT EACH FACE

   RISERS OR BASE SECTIONS WITH HOLES TO BE CLEARLY MARKED WITH MAXIMUM ALLOWABLE DEPTH.
6. PROVIDE ADDITIONAL REINFORCEMENT BARS AROUND OPENINGS AS SHOWN ON REINFORCEMENT DETAILS AT OPENINGS
7. PROVIDE MANHOLE STEPS MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 605.2(C). ALTERNATE CONFIGURATIONS AND DIMENSIONS, AS APPROVED BY THE ENGINEER, MAY BE USED.
8. PROVIDE MINIMUM 1" SECTION DIMENSION FOR METAL STEPS. PROVIDE MAXIMUM 3/4" SECTION DIMENSION FOR NON-DETERIORATING MATERIAL STEPS.
9. MECHANICAL ANCHOR REQUIRED FOR INSTALLATION OF STEPS WITHOUT HOOKS.
10. FOR FOOTING TOP REINFORCEMENT, BOTH DIRECTIONS, USE NO. 19 (6) BARS AT 12" FOR DEPTHS TO 60' OR 0.30 IN²/FT WWF FOR DEPTHS TO 30' AND 0.32 IN²/FT WWF FOR DEPTHS GREATER THAN 30'. 6" MAXIMUM SPACING FOR WWF.
11. FOR FOOTING BOTTOM REINFORCEMENT, BOTH DIRECTIONS, USE NO. 13 (4) BARS AT 18" FOR DEPTHS TO 60' OR 0.15 IN²/FT WWF FOR DEPTHS TO 30' AND 0.16 IN²/FT WWF FOR DEPTHS GREATER THAN 30'. 6" MAXIMUM SPACING FOR WWF.
12. A SAFE BEARING CAPACITY OF (1.5 TONS PER SF) UNDER THE ENTIRE SLAB IS ASSUMED TO DETERMINE THE BASE SIZE. WHEN THE SUBSOIL IS EXTREMELY POOR, PROCEED WITH CONSTRUCTION ONLY AFTER THE ENGINEER SPECIFIES ADEQUATE BASE DESIGN.

PRECAST STORM MANHOLE

NOT TO SCALE (PA-U010101 - 09/2023)

NOTES:
1. PLACE NO. 57 COARSE AGGREGATE, TAMPED IN LAYERS 6" THICK, STARTING AT THE LOWEST ROWS OF PERFORATIONS OR THE START OF THE OPEN JOINT. PLACE GROUPS OF PERFORATIONS OR THE OPEN JOINT (1/3 PIPE CIRCUMFERENCE) SYMMETRICALLY ABOUT THE VERTICAL CENTER LINE.
2. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 610 FOR PAVEMENT BASE DRAIN AND SECTION 604 FOR COMBINATION STORM SEWER AND UNDERDRAIN
3. PROVIDE BITUMINOUS PAPER WHEN GEOTEXTILE MATERIAL IS NOT INDICATED.
4. PREFABRICATED PAVEMENT BASE DRAIN IS NOT RECOMMENDED UNDER CURBED SECTIONS AND ADJACENT TO WIDENED PAVEMENT.
5. FOR ADDITIONAL DETAIL SPECIFICATIONS SEE PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION SERIES RC-30M

COMBINATION STORM SEWER AND UNDERDRAIN

NOT TO SCALE (PA-U010601 - 09/2023)

PRECAST SANITARY MANHOLE

NOT TO SCALE (PA-U020101 - 09/2023)

TYPICAL SANITARY SEWER LATERAL

NOT TO SCALE (PA-U020403 - 01/2025)

SECTION A-A

SEQUENCE OF CONSTRUCTION FOR BIO-RETENTION / BIO-INFILTRATION
1. PRIOR TO AND DURING CONSTRUCTION, THE FACILITY AREA SHALL BE PROTECTED WITH A COMPLETE RING OF FILTER SOCK TO PREVENT SILT AND EROSION UNTIL THE FACILITY AND THE CONTRIBUTING DRAINAGE AREA IS FULLY STABILIZED.
2. THE BIO-RETENTION / BIO-INFILTRATION FACILITY SHALL BE EXCAVATED TO THE DEPTH AND SIZE REQUIRED. THE CONTRACTOR MUST TAKE CARE NOT TO COMPACT THE IN-SITU SOILS.
3. FOR BIO-INFILTRATION FACILITY, ONCE THE AREA IS EXCAVATED TO SUBGRADE ELEVATIONS, COMPLETE INFILTRATION TESTING OF SUBGRADE IN ACCORDANCE WITH PADEP SCM CERTIFICATION REQUIREMENTS.
4. SUBSOILS IN THE ENTIRE GARDEN AREA MUST BE THOROUGHLY AND DEEPLY SCARIFIED BEFORE THE CONTRACTOR PLACES THE PLANTING SOIL MATERIAL. SCARIFYING MUST BE DONE WITH A TOOTHED BACKHOE.
5. THE FACILITY SHALL HAVE AN OVERFLOW DRAIN THESE SHALL BE INSTALLED BEFORE PROCEEDING.
6. THE UNDERDRAIN IS TO BE INSTALLED IN AN AGGREGATE LAYER AT THE DEPTH SHOWN IN THE CHART BELOW.
7. INSTALL PLANTING SOIL TO THE DEPTH REQUIRED. THE PLANTING SOIL SHALL MEET THE SPECIFICATIONS OUTLINED IN THE 'PLANTING SOIL SPECIFICATIONS FOR B.M.P. FACILITIES'.
8. PRE-SOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION IN ORDER TO AID IN SETTLEMENT.
9. COMPLETE FINAL GRADING TO ACHIEVE DESIGN GRADE. LEAVE SPACE FOR UPPER LAYER OF COMPOST OR MULCH, IF REQUIRED, AS SPECIFIED ON THE PLANS.
10. PLANT RAIN GARDEN FACILITY WORKING FROM THE BOTTOM OF THE FACILITY UP THE SIDES, PER THE LANDSCAPE PLAN.
11. UNLESS THE FACILITY IS SPECIFIED TO BE SEEDED WITH A MEADOW MIX, THE CONTRACTOR SHALL COVER THE PLANTING SOIL WITH A MAXIMUM OF 2 INCHES OF SHREDDED HARDWOOD BARK MULCH.
12. ALL PROTECTION MEASURES INSTALLED AT THE BEGINNING OF CONSTRUCTION (SEE STEP 1 ABOVE) SHALL BE MAINTAINED AND REMAIN IN PLACE UNTIL THE FACILITY AND ADJACENT AREAS ARE FULLY STABILIZED.

FACILITY NUMBER	FINISHED BOTTOM ELEVATION	SCM SOIL BOTTOM ELEVATION	OVERFLOW GRATE ELEVATION	MAXIMUM PONDING DEPTH	OVERFLOW DEVICE	OVERFLOW INVERT	TESTPIT NUMBER	LIMITING ZONE		DESIGN INFILTRATION RATE (IN/HR)
								ELEV	DESC	
AGB #1	220.00	219.50	223.00	223.42	TYPE 'M' INLET	220.00				0.1

TYPICAL BIO-RETENTION / BIO-INFILTRATION

NOT TO SCALE (PA-U019808 - 01/2025)

BASIN NUMBER	FINISHED BOTTOM ELEVATION	MAXIMUM PONDING DEPTH	TEST PIT NUMBER	LIMITING ZONE		DESIGN INFILTRATION RATE (IN/HR)
				ELEV	DESC	
UGB #1	221.00	224.76				0.1

STORMWATER DETENTION BASIN SPECIFICATIONS:
1. UTILIZE A UNIFORMLY GRADED CRUSHED STONE (PENNDOT 2B AGGREGATE), PROVIDED THAT THE STONE IS PROPERLY CLEANED AND THAT A MINIMUM VOID RATIO OF 40% IS PROVIDED. HIGHER VOID THE RATIOS MAY BE SELECTED BY THE DESIGN ENGINEER, AND IF SO, THE DESIGN VOID RATIO SHALL GOVERN. IN ORDER TO INSURE THAT THE STONE USED IS PROPERLY CLEANED, IN ADDITION TO AASHTO DESIGNATION: M43-88 GRADATION, THE PERCENT PASSING THE NO. 200 SIEVE SHALL NOT EXCEED 0.2%
2. A CERTIFICATION FROM THE MANUFACTURER DOCUMENTING THE FULL GRADATION AND VOID RATIO SHALL BE OBTAINED.
3. WHEN IN THE OPINION OF THE TOWNSHIP INSPECTOR OR THE GEOTECHNICAL ENGINEER THE STONE IS NOT CONSISTENT WITH THE APPROVED SAMPLE, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE THE STONE RETESTED AND CERTIFIED BEFORE ANY ADDITIONAL STONE IS INSTALLED OR DELIVERED.
4. ALL STONE SAMPLES AND CERTIFICATIONS SHALL BE SUBMITTED TO THE TOWNSHIP 14 DAYS PRIOR TO THE START OF STORMWATER DETENTION BASIN CONSTRUCTION.
5. EXCAVATION OF THE INFILTRATION FACILITIES SHALL BE PERFORMED WITH EQUIPMENT THAT WILL NOT COMPACT THE BOTTOM OF THE BED.
6. THE BOTTOM OF THE EXCAVATION SHALL BE SCARIFIED PRIOR TO THE PLACEMENT OF AGGREGATE.
7. ONLY CLEAN AGGREGATE, FREE OF DEBRIS, SHALL BE ALLOWED.
8. THE TOP AND SIDES OF THE BEDS SHALL BE COVERED WITH CONTINUOUS NON-WOVEN GEOTEXTILE, MIRAFI 140N, AMOCO 4547, GEOTEX 451, OR APPROVED EQUIVALENT.
9. CONSTRUCTION OF THE FACILITY SHALL PREVENT SILT FROM CLOGGING THE AGGREGATE BACKFILL.
10. CONTRACTOR TO REVIEW AND IMPLEMENT PIPE BEDDING AND BACKFILL REQUIREMENTS RECOMMENDED BY THE SPECIFIC PIPE MANUFACTURER.
11. THE BEDS SHALL BE BACKFILLED WITH CLEAN WASHED AGGREGATE AND SHALL BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF INSPECTION INDICATES THAT SOIL/SEDIMENT HAS CONTAMINATED THESE ITEMS, THE MATERIALS SHALL BE REPLACED AND/OR CLEANED AS NECESSARY.

INFILTRATION BASIN CONSTRUCTION SEQUENCE
1. PRIOR TO AND DURING CONVERSION OF A SEDIMENT FACILITY TO AN INFILTRATION BASIN, THE FACILITY AREA SHALL BE SURROUNDED BY FILTER SOCK TO PREVENT SILT AND EROSION UNTIL THE FACILITY AND THE CONTRIBUTING DRAINAGE AREA ARE FULLY STABILIZED.
2. INITIATE CONVERTING THE SEDIMENT FACILITY TO AN INFILTRATION BASIN REMOVE ALL TEMPORARY E&S CONTROLS WITHIN THE BASIN EXCEPT FOR TEMPORARY E&S CONTROLS ON THE OUTLET STRUCTURE.
3. THE FACILITY SHALL BE EXCAVATED TO THE DEPTH AND SIZE REQUIRED. ALL SEDIMENT-LADEN SOILS SHALL BE REMOVED FROM THE FACILITY. THE CONTRACTOR MUST TAKE CARE NOT TO COMPACT THE IN-SITU SOILS.
4. ONCE THE AREA IS EXCAVATED TO SUBGRADE ELEVATIONS, A QUALIFIED SOIL ENGINEER/SCIENTIST SHALL CONDUCT INFILTRATION TESTING TO DETERMINE IF THE DESIGN INFILTRATION RATES AS SPECIFIED CAN BE ACHIEVED. THE INFILTRATION RATES SHALL BE PROVIDED TO THE ENGINEER PROVIDING OVERSIGHT.
5. SUBSOILS IN THE ENTIRE BASIN AREA MUST BE THOROUGHLY AND DEEPLY SCARIFIED. SCARIFYING MUST BE DONE WITH A TOOTHED BACKHOE.
6. COMPLETE FINAL GRADING TO ACHIEVE DESIGN GRADE.
7. REMOVE TEMPORARY E&S CONTROLS ON THE OUTLET STRUCTURE.
8. PLANT BASIN FACILITY WORKING FROM THE BOTTOM OF THE FACILITY UP THE SIDES, PER THE LANDSCAPE PLAN.
9. ALL PROTECTION MEASURES INSTALLED AT THE BEGINNING OF CONSTRUCTION (SEE STEP 1 ABOVE) SHALL BE MAINTAINED AND REMAIN IN PLACE UNTIL THE FACILITY AND ADJACENT AREAS ARE FULLY STABILIZED.

CROSS SECTION OF SUBSURFACE INFILTRATION BED

NOT TO SCALE (PA-U019803 - 06/2025)

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ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: PAC250142.00-0C
DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVL-CNDS

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

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M. J. KEARSE
PROFESSIONAL ENGINEER
MATTHEW JOHN KEARSE

Matthew John Kearse

SHEET TITLE:

CONSTRUCTION DETAILS

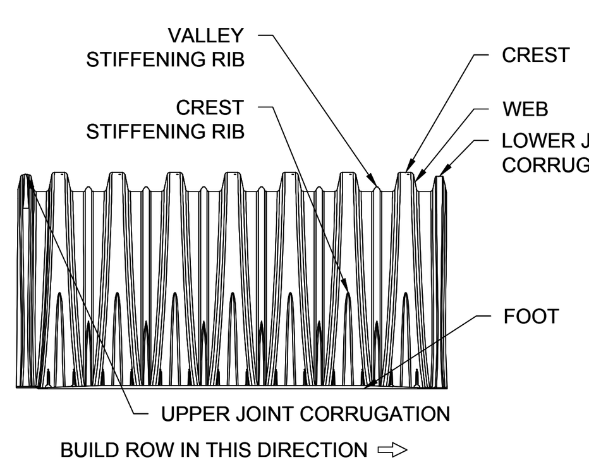
SHEET NUMBER:

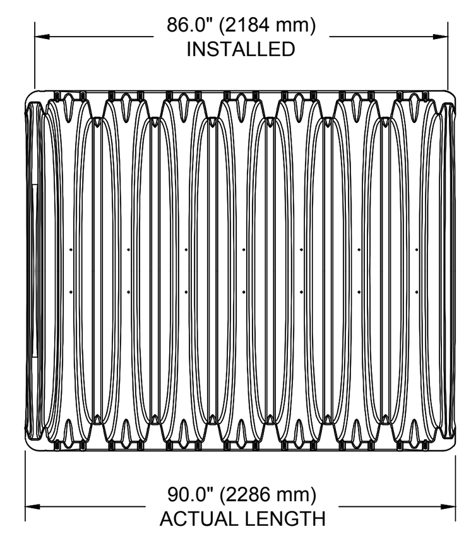
C-902

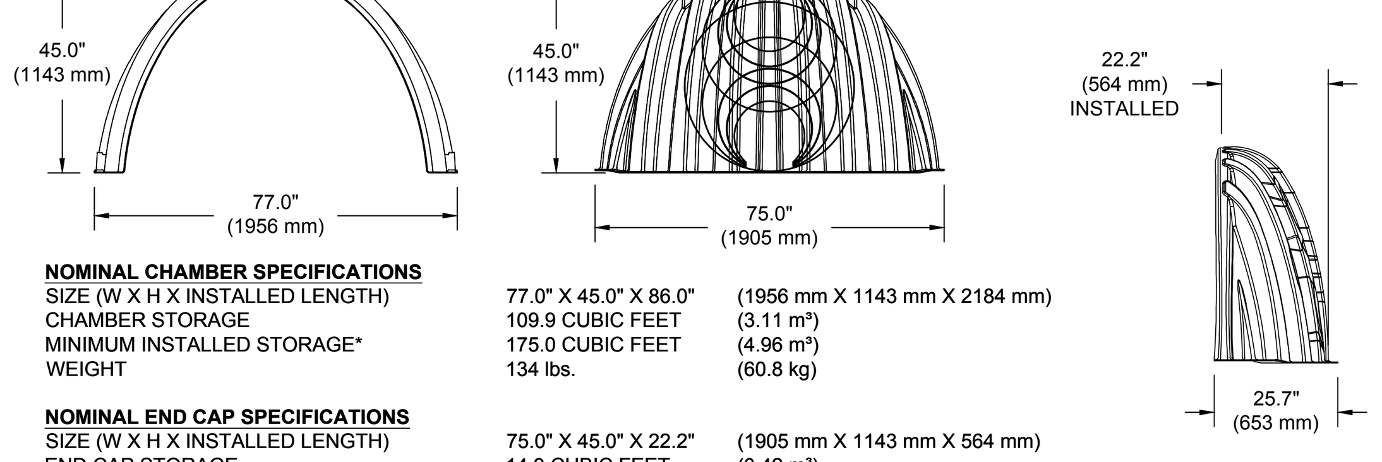
ORG. DATE - 12/19/2025

MC-3500 TECHNICAL SPECIFICATION

NTS







NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

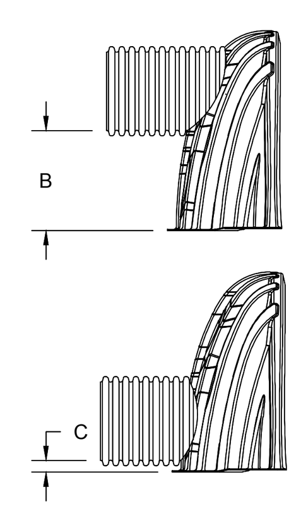
SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

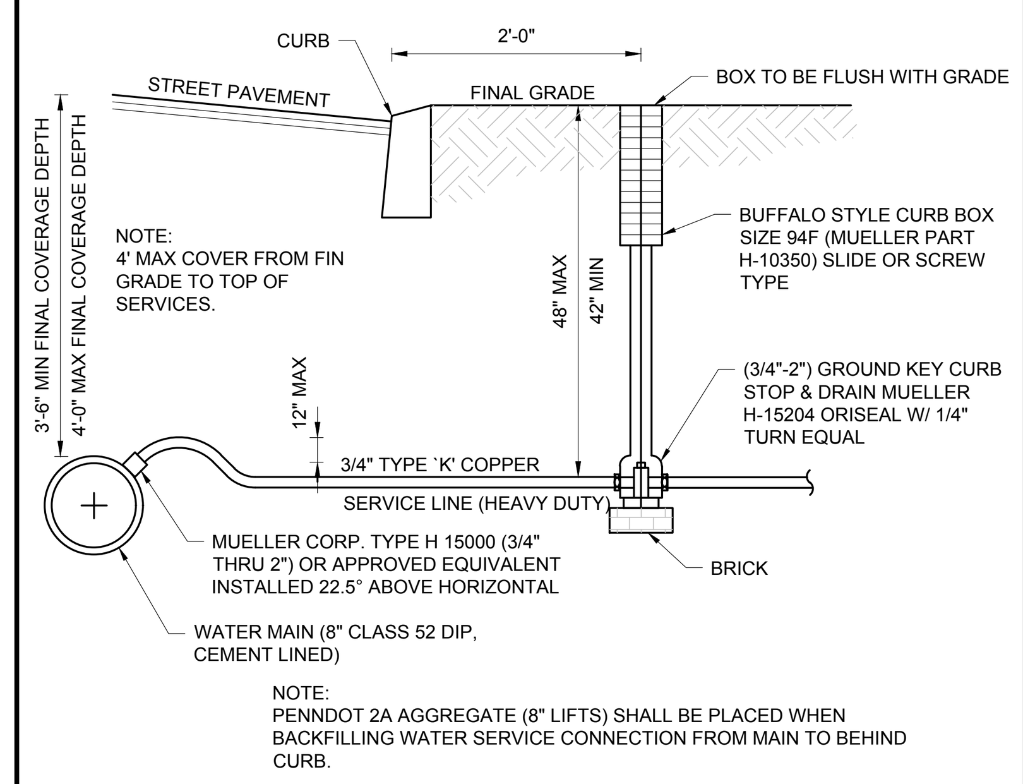
STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL



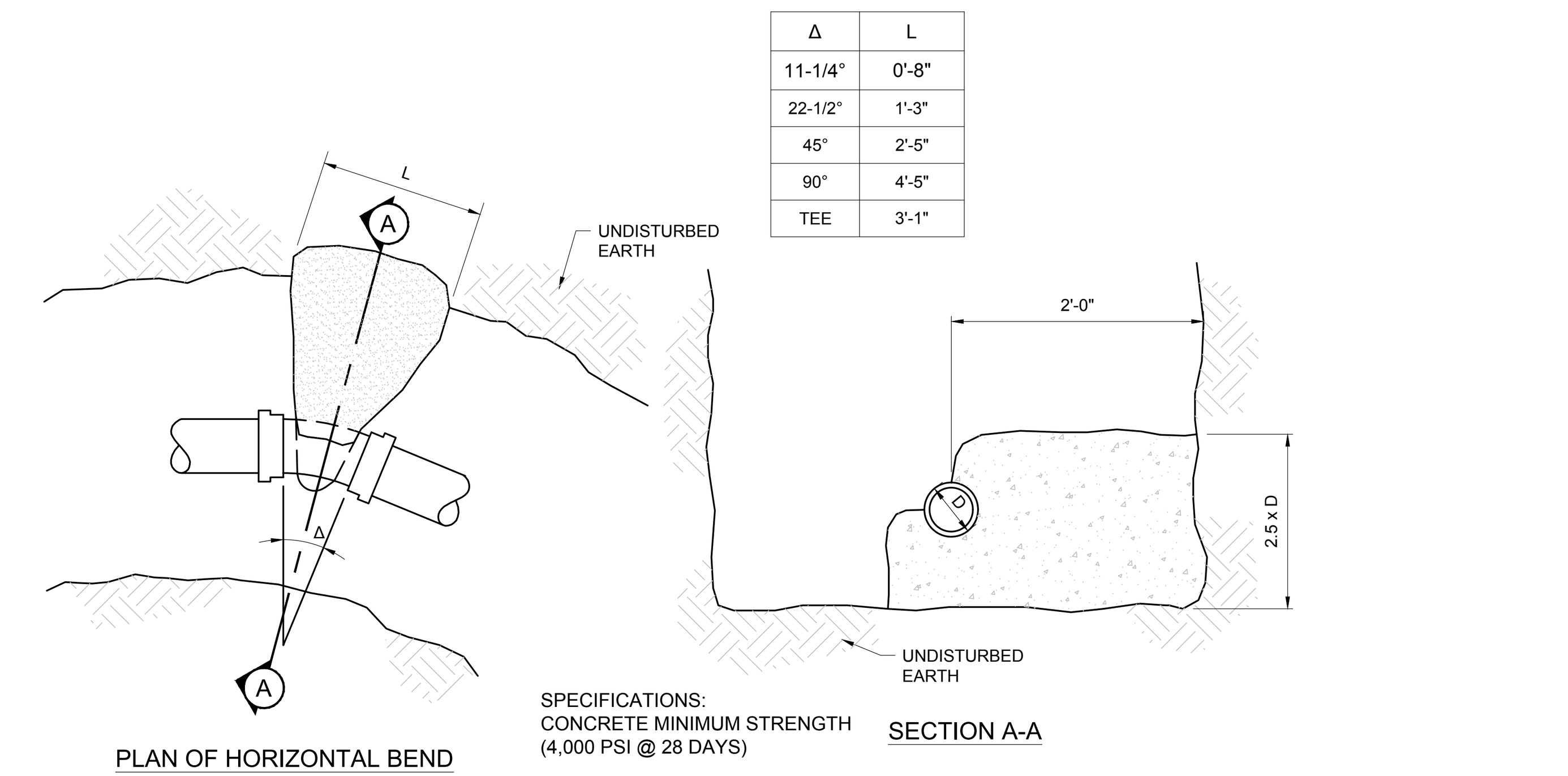
CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.



TYPICAL WATER SERVICES CONNECTION

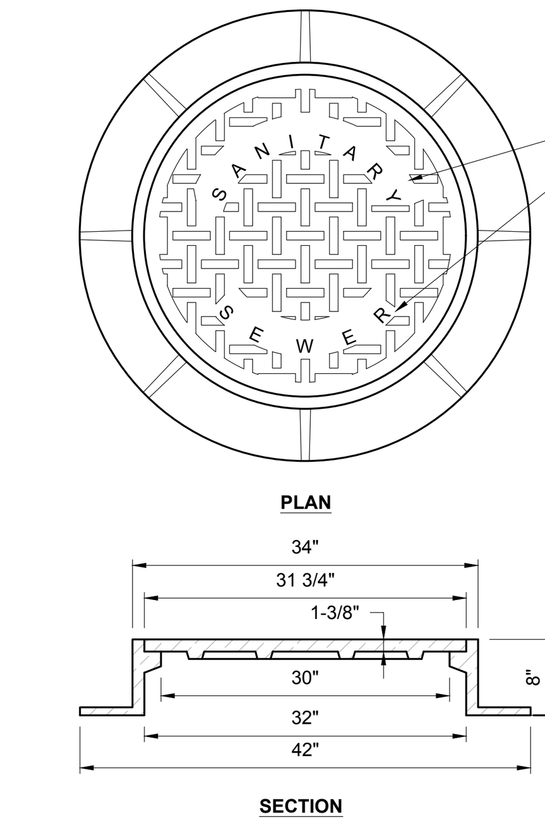
NOT TO SCALE (PA-U030401 - 07/2025)

Δ	L
11-1/4°	0'-8"
22-1/2°	1'-3"
45°	2'-5"
90°	4'-5"
TEE	3'-1"



THRUST BLOCK

NOT TO SCALE (PA-U030501 - 09/2023)

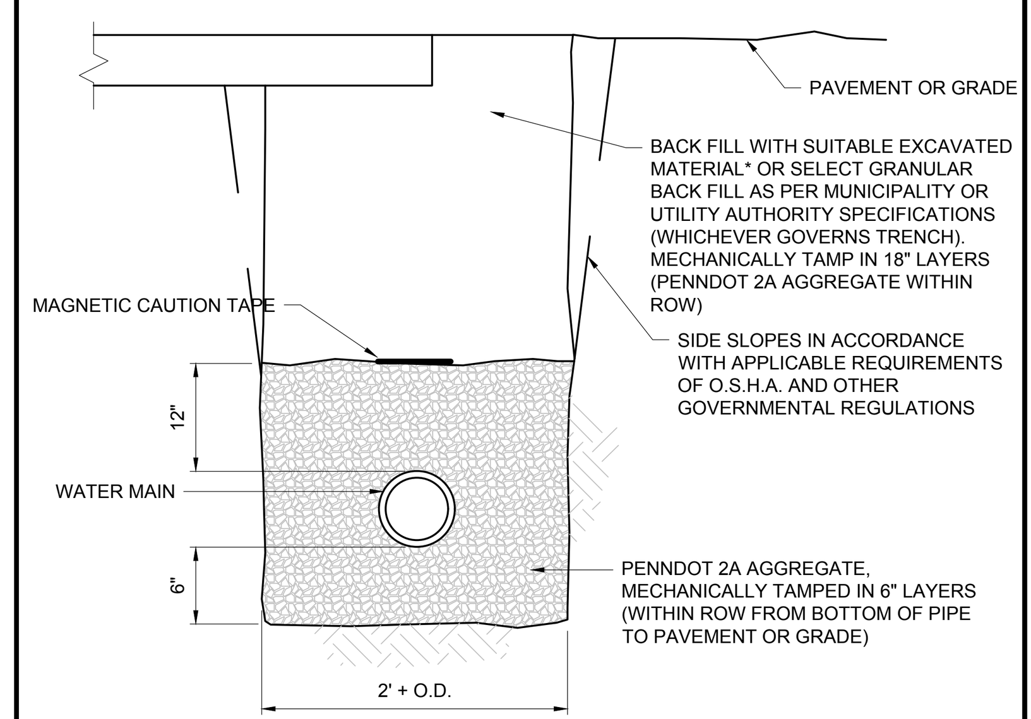


NOTES:

1. STANDARD MANHOLE FRAMES & COVERS SHALL BE USED ON ALL MANHOLES NOT LOCATED WITHIN EASEMENTS UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. STANDARD MANHOLE FRAME & COVER SHALL BE BRIDGESTATE PATTERN #1012B, OR APPROVED EQUIVALENT, WITH NON-PENETRATING PICK HOLES.
3. "FLOW-SEAL" MANHOLE COVERS SHALL BE USED ON MANHOLES LOCATED WITHIN EASEMENTS, IN UNPAVED AREAS, AND OUTSIDE OF THE CENTERLINE OF PAVED ROADS.
4. ALL MANHOLE FRAME AND COVERS SHALL BE MADE IN THE USA.

SANITARY MANHOLE FRAME

NOT TO SCALE (PA-U020104 - 09/2023)

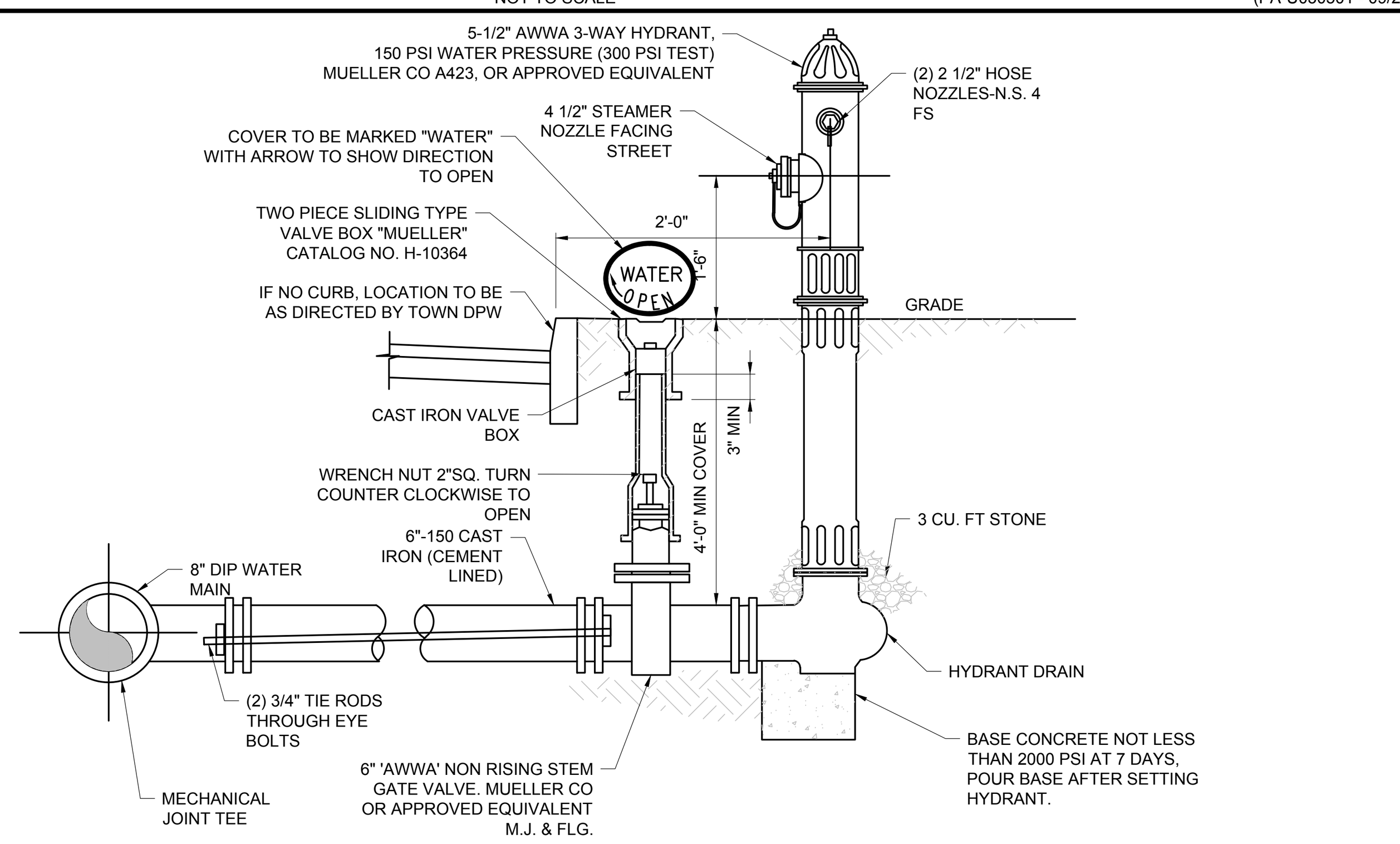


EXCAVATIONS IN EXISTING PAVED ROADWAYS SHALL BE COORDINATED WITH THE LOCAL PERMITTING AGENCY, AND ALL EXCAVATION SHALL BE PAVED WITH TEMPORARY BITUMINOUS PAVEMENT FROM THE DATE OF ORIGINAL EXCAVATION UNTIL PERMANENT PAVEMENT IS INSTALLED. (MINIMUM = 90 DAYS, MAXIMUM = 120 DAYS)

THIS DETAIL IS NOT FOR USE WITHIN A STATE RIGHT-OF-WAY. REFER TO THE LATEST APPROVED DOT SPECIFICATIONS FOR TRENCH BEDDING WITHIN A STATE RIGHT-OF-WAY.

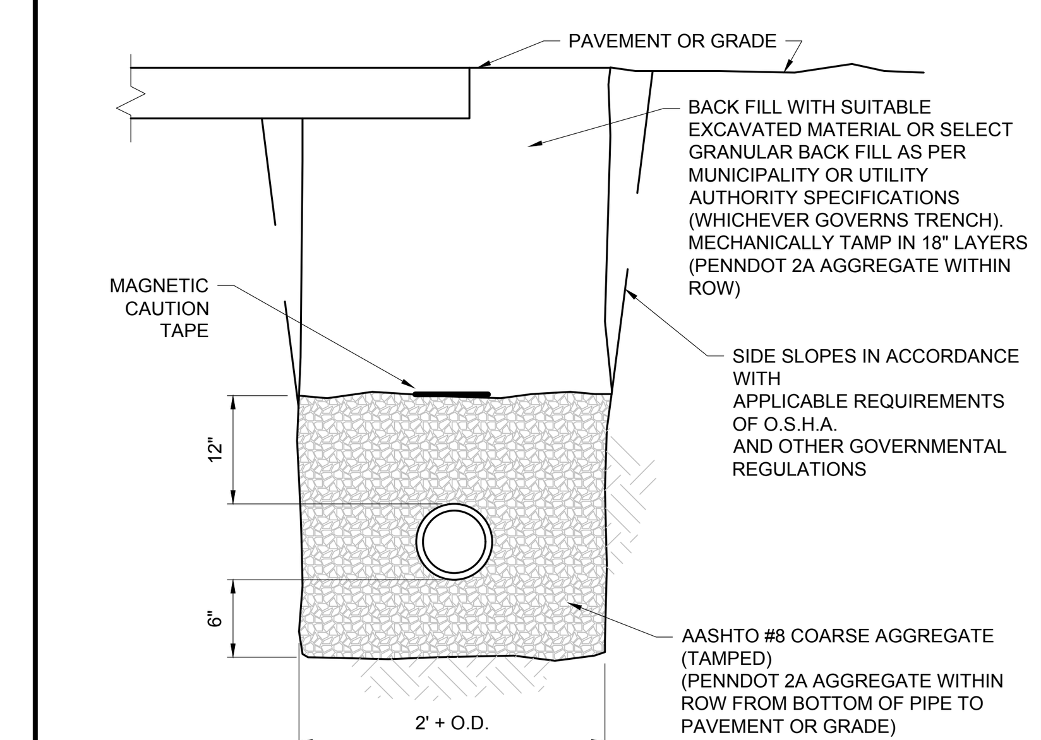
TRENCH BEDDING CLASSIFICATION (WATER MAIN)

NOT TO SCALE (PA-U050201 - 09/2023)



TYPICAL HYDRANT AND VALVE INSTALLATION

NOT TO SCALE (PA-U030101 - 09/2023)



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TRENCH BEDDING CLASSIFICATION (SANITARY MAIN)

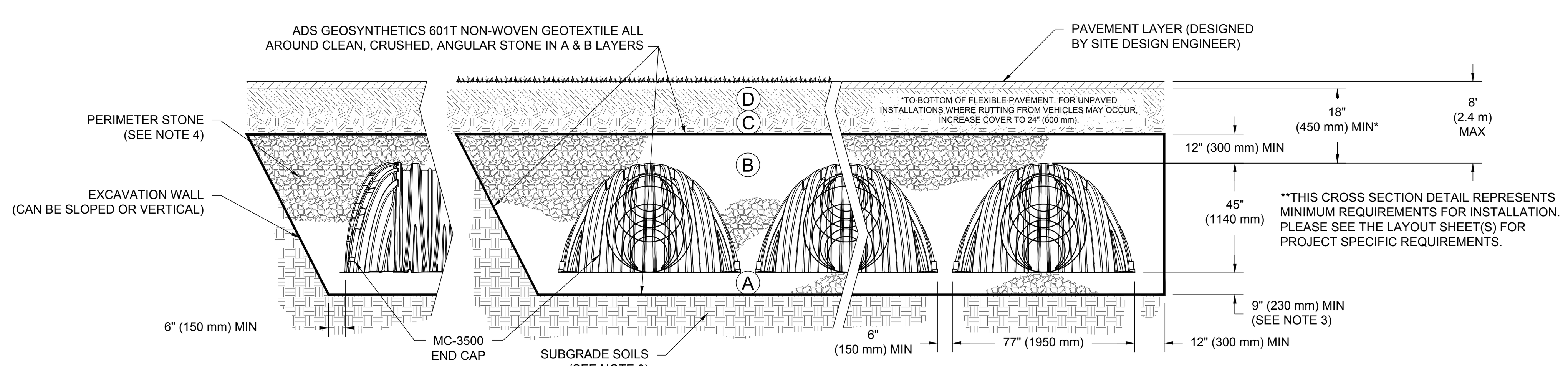
NOT TO SCALE (PA-U050202 - 09/2023)

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

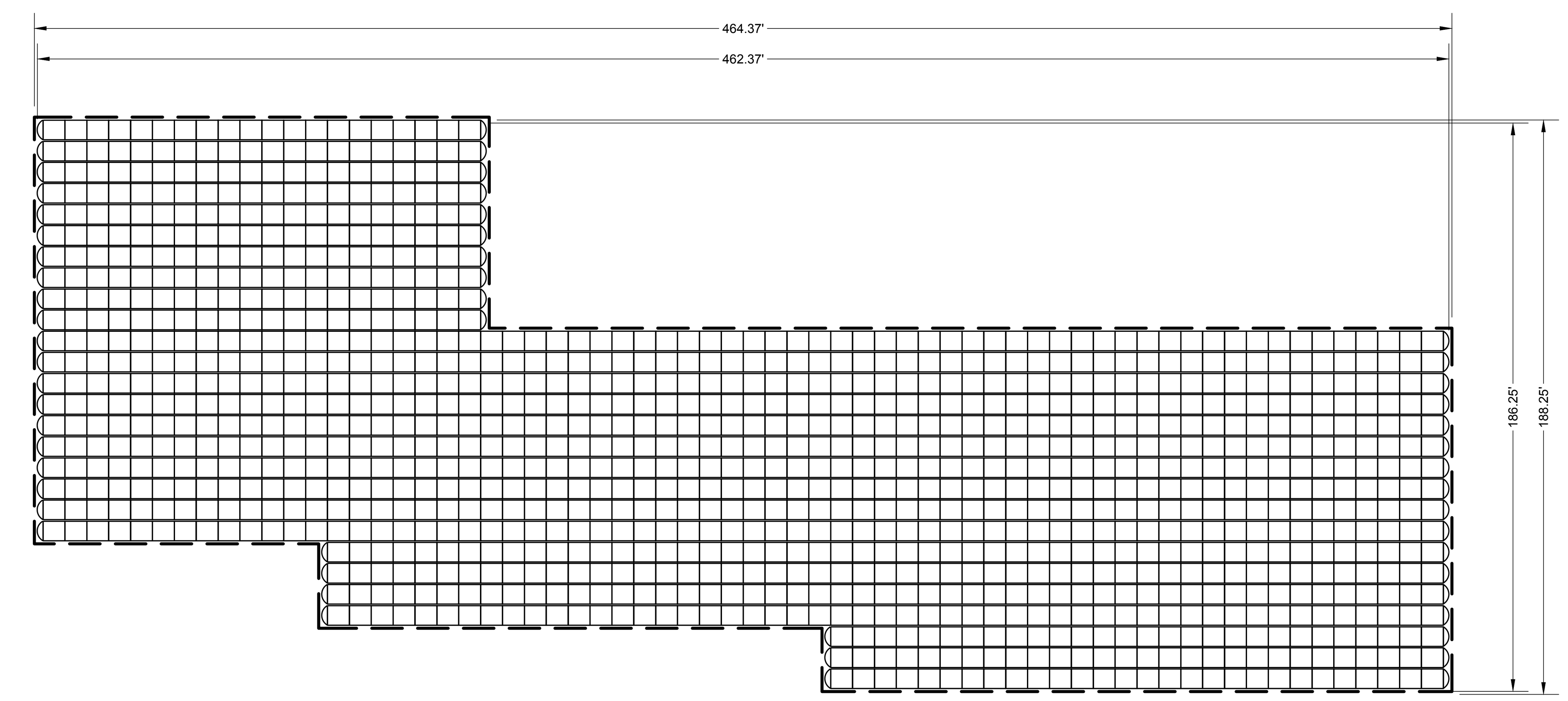
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

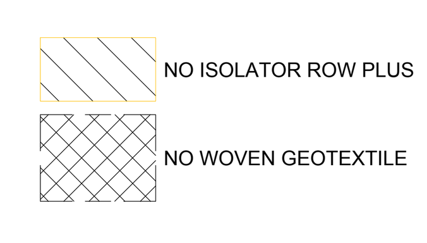
PROPOSED LAYOUT	
1128	STORMTECH MC-3500 CHAMBERS
54	STORMTECH MC-3500 END CAPS
12	STONE ABOVE (in)
9	STONE BELOW (in)
40	STONE VOID
201783	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)
57675	SYSTEM AREA (SF)
1305.2	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS	
MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	233.50
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	227.50
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	227.00
MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	227.00
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	227.00
TOP OF STONE:	226.50
TOP OF MC-3500 CHAMBER:	225.50
BOTTOM OF MC-3500 CHAMBER:	221.75
BOTTOM OF STONE:	221.00

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW





NOTES

- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-CNDS

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA
M. KEARSE
PROFESSIONAL ENGINEER
MATTHEW JOHN KEARSE

SHEET TITLE:

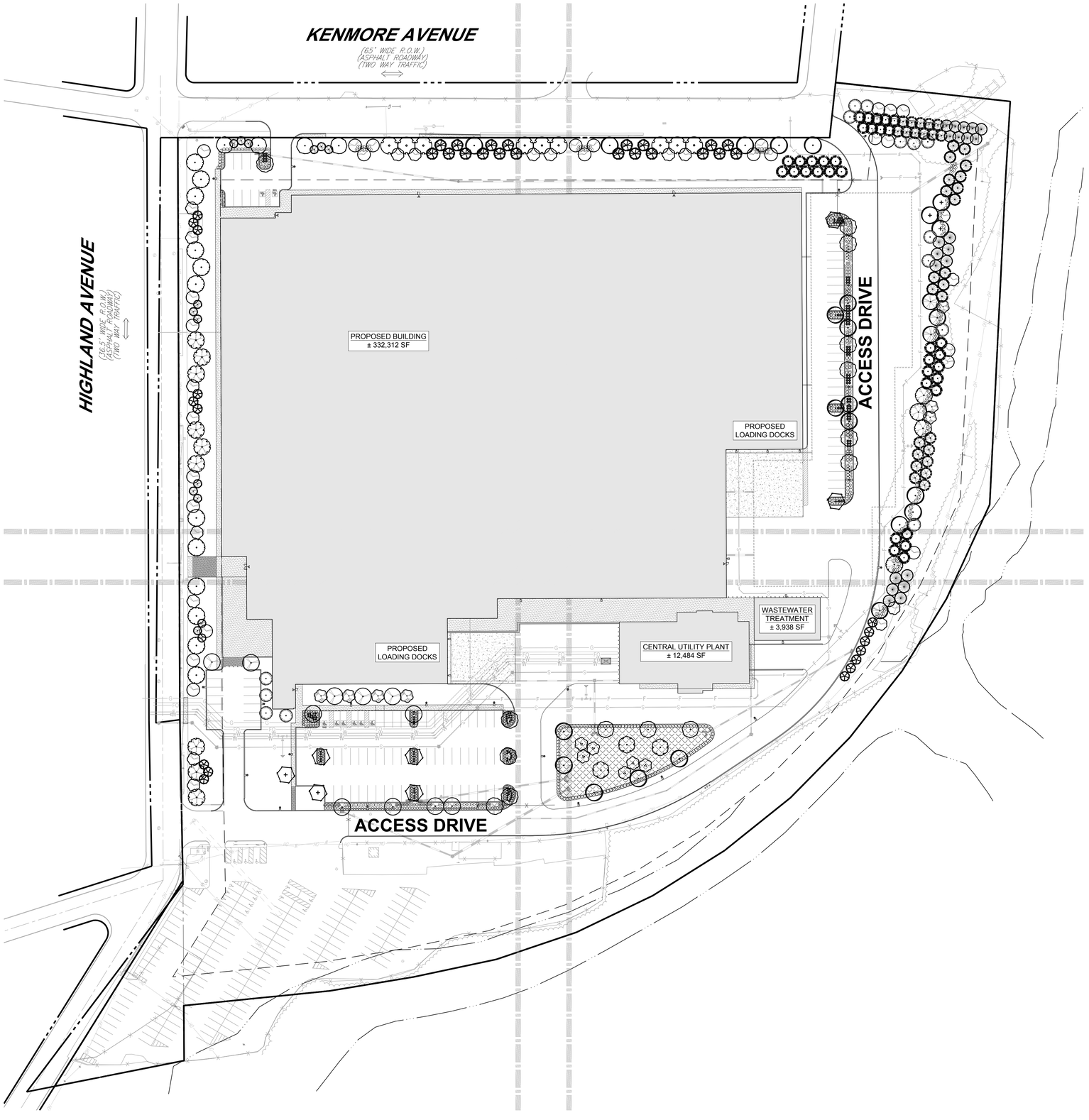
CONSTRUCTION DETAILS

SHEET NUMBER:

C-903

ORG. DATE - 12/19/2025

\\BOHLERENG.NET\SHARES\PA-PROJECTS\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAC250142.00-0C----->LAYOUT: C-903 DETL
JB



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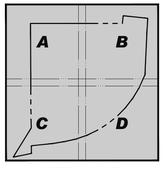

KEY MAP
SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

60 30 15 0 60
SCALE: 1" = 60'

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www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

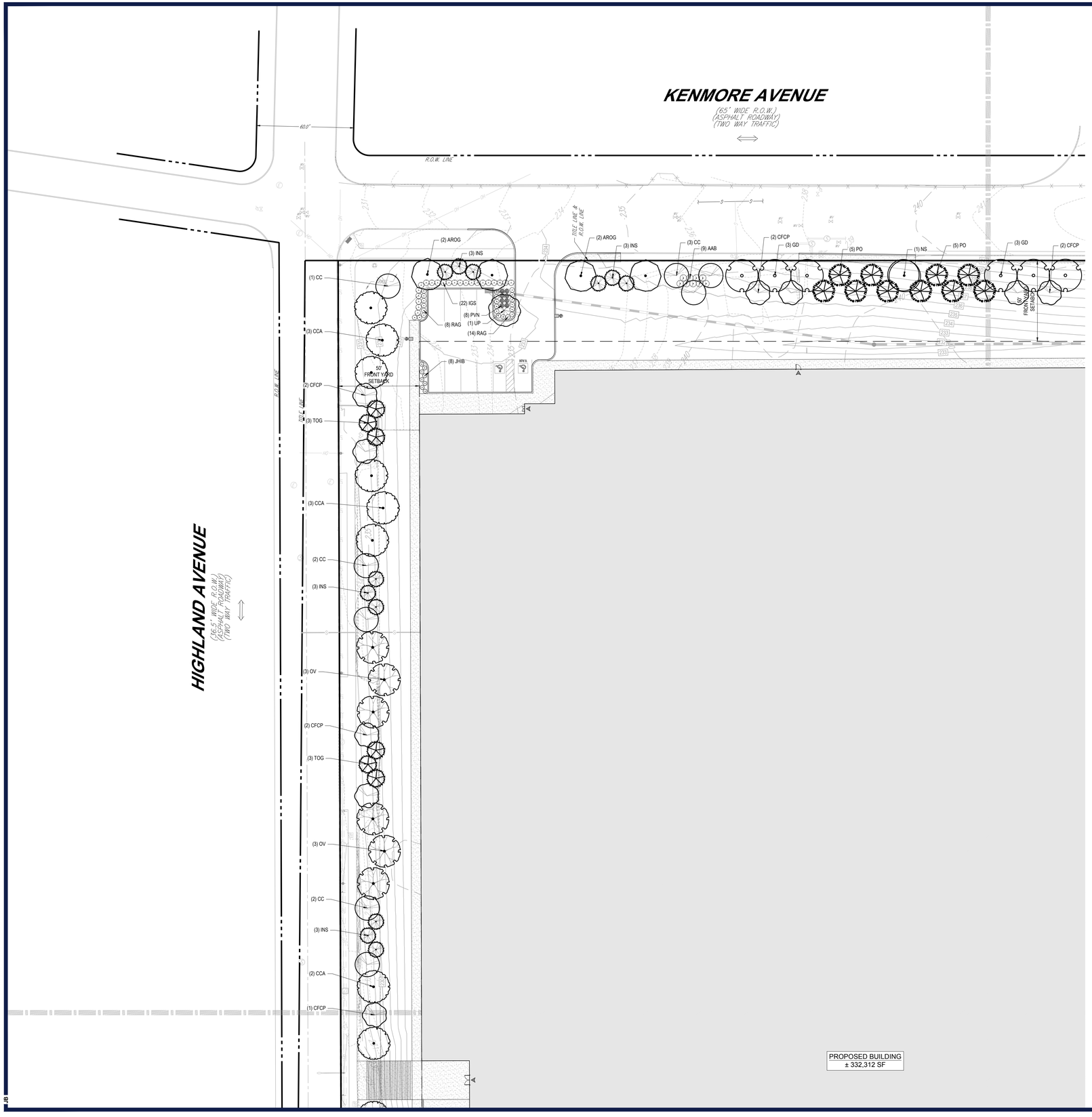
OVERALL LANDSCAPE PLAN

SHEET NUMBER:

L-100

ORG. DATE - 12/19/2025

R:\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-LLGT-PAC250142.00-0C-----LAYOUT L-100 OA LSCP
JB



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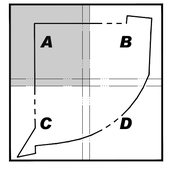
PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CANOPY TREES					
AROG	7	ACER RUBRUM `OCTOBER GLORY`	OCTOBER GLORY RED MAPLE	2.5" CAL.	B&B
ASGM	4	ACER SACCHARUM `GREEN MOUNTAIN`	GREEN MOUNTAIN SUGAR MAPLE	2.5" CAL.	B&B
CCA	12	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2.5" CAL.	B&B
GBP	11	GINKGO BILOBA `PRINCETON SENTRY`	PRINCETON SENTRY MAIDENHAIR TREE	2.5" CAL.	B&B
GD	9	GYMNOCLADUS DIOICUS `ESPRESSO-JFS`	ESPRESSO KENTUCKY COFFEETREE	2.5" CAL.	B&B
GTIK	7	GLEDITSIA TRIACANTHOS INERMIS `SKYCOLE`	SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B
NS	13	NYSSA SYLVATICA	SOUR GUM	2.5" CAL.	B&B
OV	9	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM	2.5" CAL.	B&B
QBC	3	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	B&B
QPH	10	QUERCUS PHELLOS	WILLOW OAK	2.5" CAL.	B&B
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	2.5" CAL.	B&B
UP	11	ULMUS AMERICANA `PRINCETON`	AMERICAN ELM	2.5" CAL.	B&B
EVERGREEN TREES					
INS	15	ILEX X `NELLIE R. STEVENS`	NELLIE R. STEVENS HOLLY	8` HT.	B&B
PGL	21	PICEA GLAUCA	WHITE SPRUCE	8` HT.	B&B
PIAB	34	PICEA ABIES	NORWAY SPRUCE	8` HT.	B&B
PM	20	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	8` HT.	B&B
PO	20	PICEA OMORIKA	SERBIAN SPRUCE	8` HT.	B&B
PS	14	PINUS STROBUS	WHITE PINE	8` HT.	B&B
TOG	16	THUJA OCCIDENTALIS `GREEN GIANT`	GREEN GIANT ARBORVITAE	8` HT.	B&B
ORNAMENTAL TREES					
AGB	14	AMELANCHIER X GRANDIFLORA `AUTUMN BRILLIANCE`	AUTUMN BRILLIANCE SERVICEBERRY	2-2 1/2" CAL.	B&B
CC	26	CERCIS CANADENSIS	EASTERN REDBUD	2-2 1/2" CAL.	B&B
CFC	7	CORNUS FLORIDA `CHEROKEE CHIEF`	CHEROKEE CHIEF DOGWOOD	2-2 1/2" CAL.	B&B
CFCP	17	CORNUS FLORIDA `CHEROKEE PRINCESS`	CHEROKEE PRINCESS DOGWOOD	2-2 1/2" CAL.	B&B
MV	6	MAGNOLIA VIRGINIANA	SWEET BAY	8-10`	B&B
SHRUBS					
AAB	61	ARONIA ARBUTIFOLIA `BRILLIANTISSIMA`	BRILLIANT RED CHOKEBERRY	3-4`	B&B
CAH	39	CLETHRA ALNIFOLIA `HUMMINGBIRD`	HUMMINGBIRD SUMMERSWEET (DWARF)	24-30"	CONTAINER
CSF	62	CORNUS SERICEA `FARROW`	ARCTIC FIRE RED TWIG DOGWOOD	24-30"	CONTAINER
IGS	63	ILEX GLABRA `SHAMROCK`	SHAMROCK INKBERRY	24-30"	CONTAINER
IMBB	3	ILEX X MESERVEAE `BLUE BOY`	BLUE BOY HOLLY	24-30"	CONTAINER
IMBG	20	ILEX X MESERVEAE `BLUE GIRL`	BLUE GIRL HOLLY	24-30"	CONTAINER
IV	46	ITEA VIRGINICA `HENRY'S GARNET`	HENRY'S GARNET SWEETSPIRE	24-30"	CONTAINER
IVJD	4	ILEX VERTICILLATA `JIM DANDY`	JIM DANDY WINTERBERRY	30-36"	CONTAINER
IVRS	38	ILEX VERTICILLATA `RED SPRITE`	RED SPRITE WINTERBERRY	18-24"	CONTAINER
JHIB	124	JUNIPERUS HORIZONTALIS `MONBER`	ICEE BLUE JUNIPER	15-18" SPRD	CONTAINER
JO	40	JUNIPERUS VIRGINIANA `GREY OWL`	GREY OWL JUNIPER	15-18" SPRD	CONTAINER
LB	22	LINDERA BENZOIN	SPICEBUSH	30-36"	CONTAINER
RAG	149	RHUS AROMATICA `GRO-LOW`	GRO-LOW FRAGRANT SUMAC	15-18"	CONTAINER
VR	36	VIBURNUM RHYTIDOPHYLLUM	LEATHERLEAF VIBURNUM	3-4`	B&B
GRASSES					
PVN	87	PANICUM VIRGATUM `NORTH WIND`	NORTHWIND SWITCH GRASS	1 GAL.	CONTAINER
SSO	68	SCHIZACHYRIUM SCOPARIUM `STANDING OVATION`	STANDING OVATION LITTLE BLUESTEM GRASS	1 GAL.	CONTAINER



KEY MAP
SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY

30 15 7.5 0 30
SCALE: 1" = 30'

BOHLER™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
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WWW.PA1CALL.ORG

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PROJECT No.: PAC250142.00-0C
DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVIL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

BOHLER™
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3409
Fax: (267) 402-3401
www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

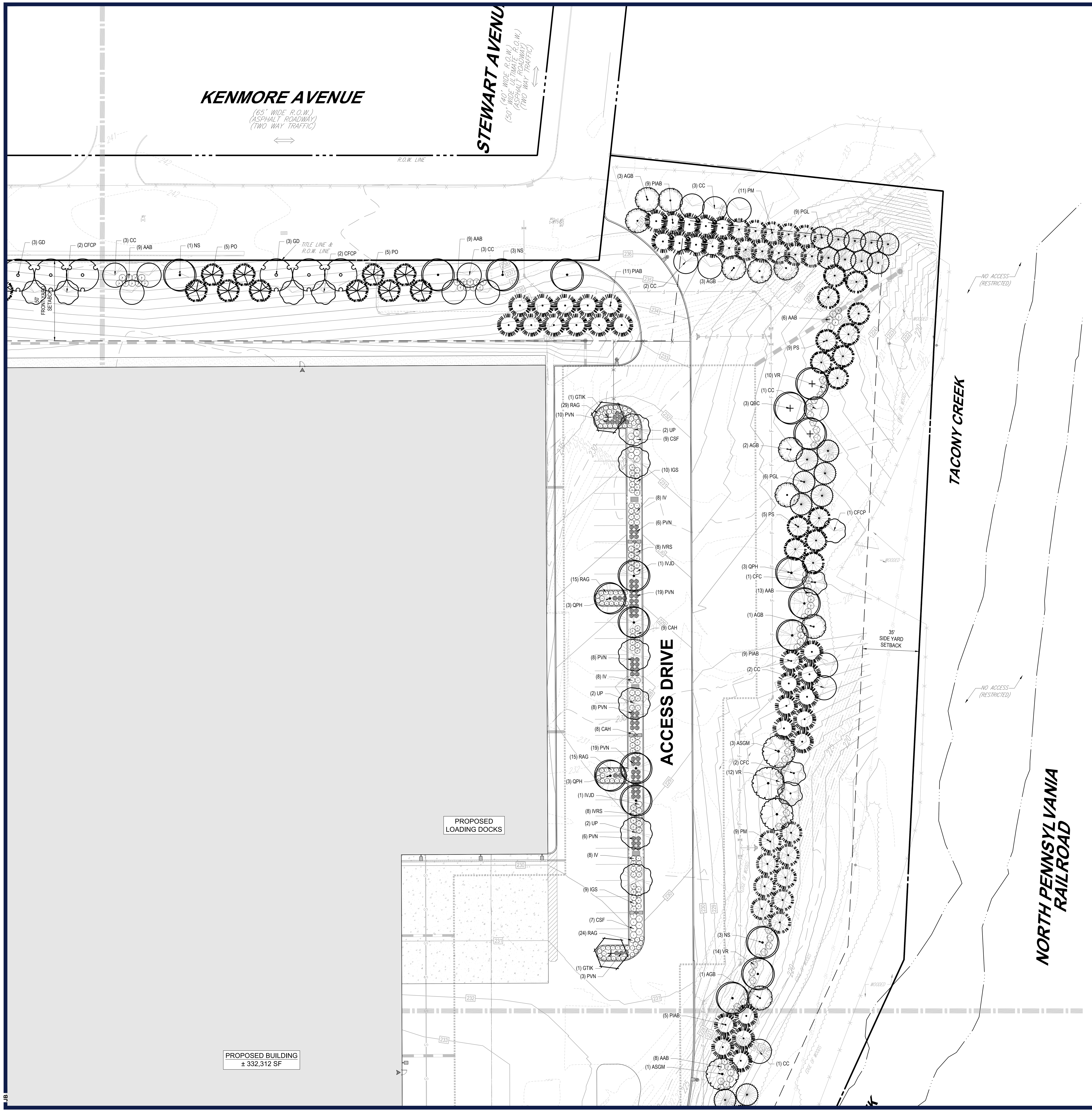
LANDSCAPE PLAN 'A'

SHEET NUMBER:

L-101

ORG. DATE - 12/19/2025

R:\2025\PAC\250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LLGT-PAC250142.00-0C-----LAYOUT: L-101 LSCP 'A'
JB



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PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CANOPY TREES					
AROG	7	ACER RUBRUM `OCTOBER GLORY`	OCTOBER GLORY RED MAPLE	2.5" CAL.	B&B
ASGM	4	ACER SACCHARUM `GREEN MOUNTAIN`	GREEN MOUNTAIN SUGAR MAPLE	2.5" CAL.	B&B
CCA	12	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2.5" CAL.	B&B
GBP	11	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY MAIDENHAIR TREE	2.5" CAL.	B&B
GD	9	GYMNOCLADUS DIOICUS 'ESPRESSO-JFS'	ESPRESSO KENTUCKY COFFEETREE	2.5" CAL.	B&B
GTIK	7	GLEDITSIA TRIACANTHOS INERMIS `SKYCOLE`	SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B
NS	13	NYSSA SYLVATICA	SOUR GUM	2.5" CAL.	B&B
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QBC	3	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	B&B
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TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	2.5" CAL.	B&B
UP	11	ULMUS AMERICANA `PRINCETON`	AMERICAN ELM	2.5" CAL.	B&B
EVERGREEN TREES					
INS	15	ILEX X `NELLIE R. STEVENS`	NELLIE R. STEVENS HOLLY	8` HT.	B&B
PGL	21	PICEA GLAUCA	WHITE SPRUCE	8` HT.	B&B
PIAB	34	PICEA ABIES	NORWAY SPRUCE	8` HT.	B&B
PM	20	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	8` HT.	B&B
PO	20	PICEA OMORIKA	SERBIAN SPRUCE	8` HT.	B&B
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TOG	16	THUJA OCCIDENTALIS `GREEN GIANT`	GREEN GIANT ARBORVITAE	8` HT.	B&B
ORNAMENTAL TREES					
AGB	14	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	2-2 1/2" CAL.	B&B
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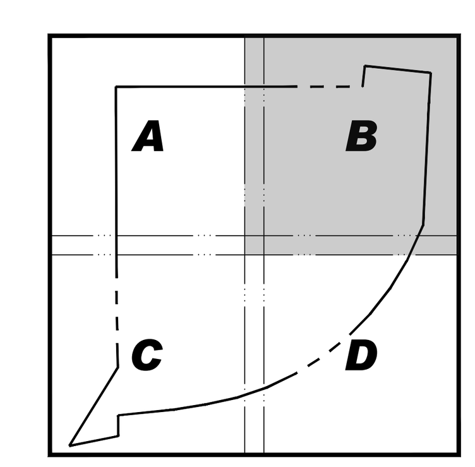

KEY MAP
SCALE 1" = 600'

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30 15 7.5 0 30
SCALE: 1" = 30'

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
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PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

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1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

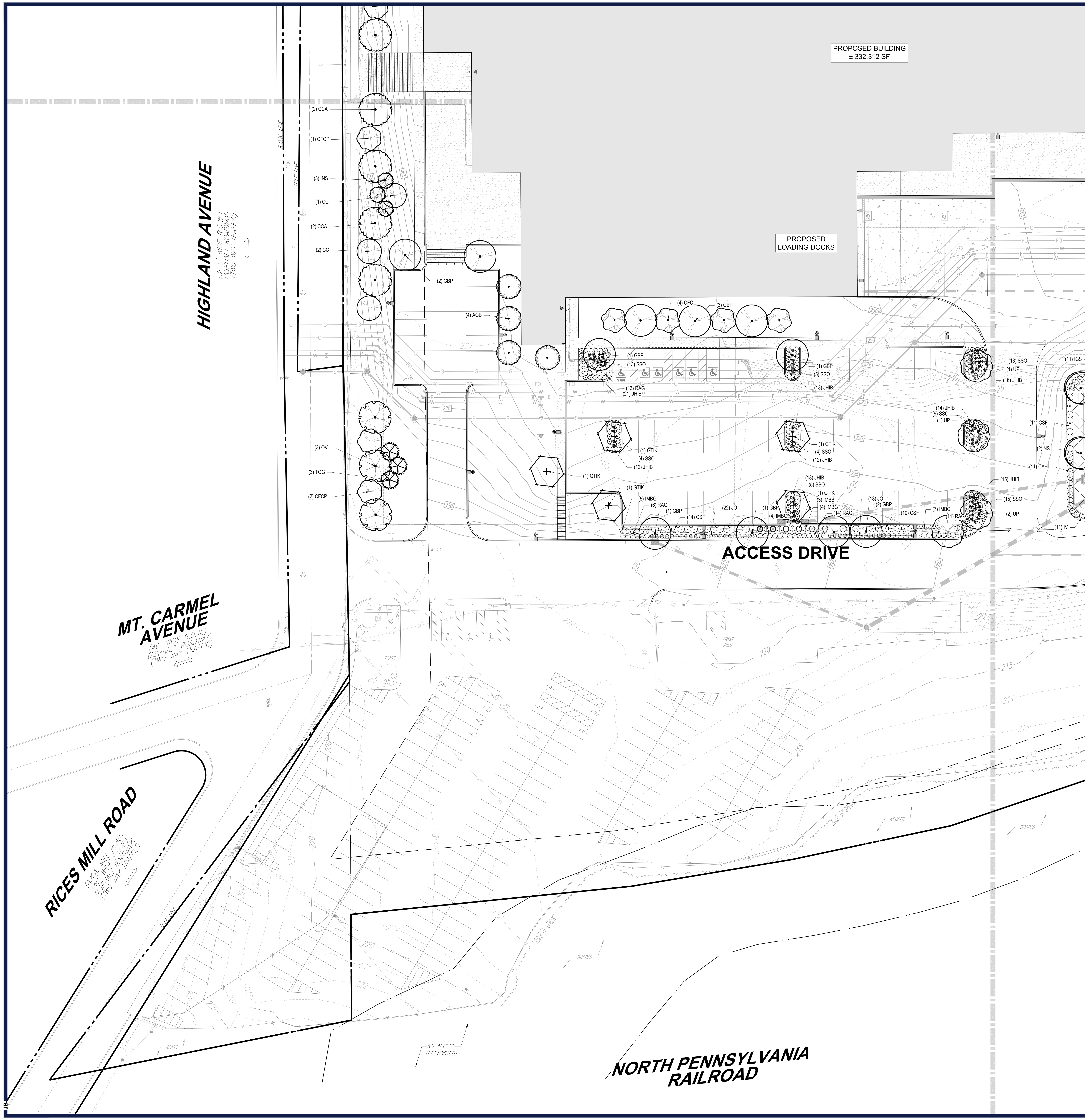
J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LANDSCAPE PLAN 'B'

SHEET NUMBER:
L-102

ORG. DATE - 12/19/2025



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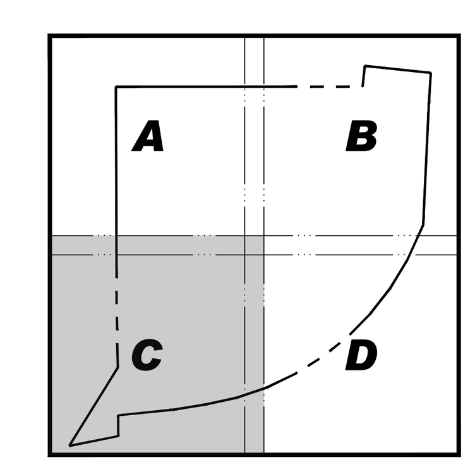

KEY MAP
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BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
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REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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PROJECT No.: PAC250142.00-0C
DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

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APN 30-00-35584-00-8

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www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT

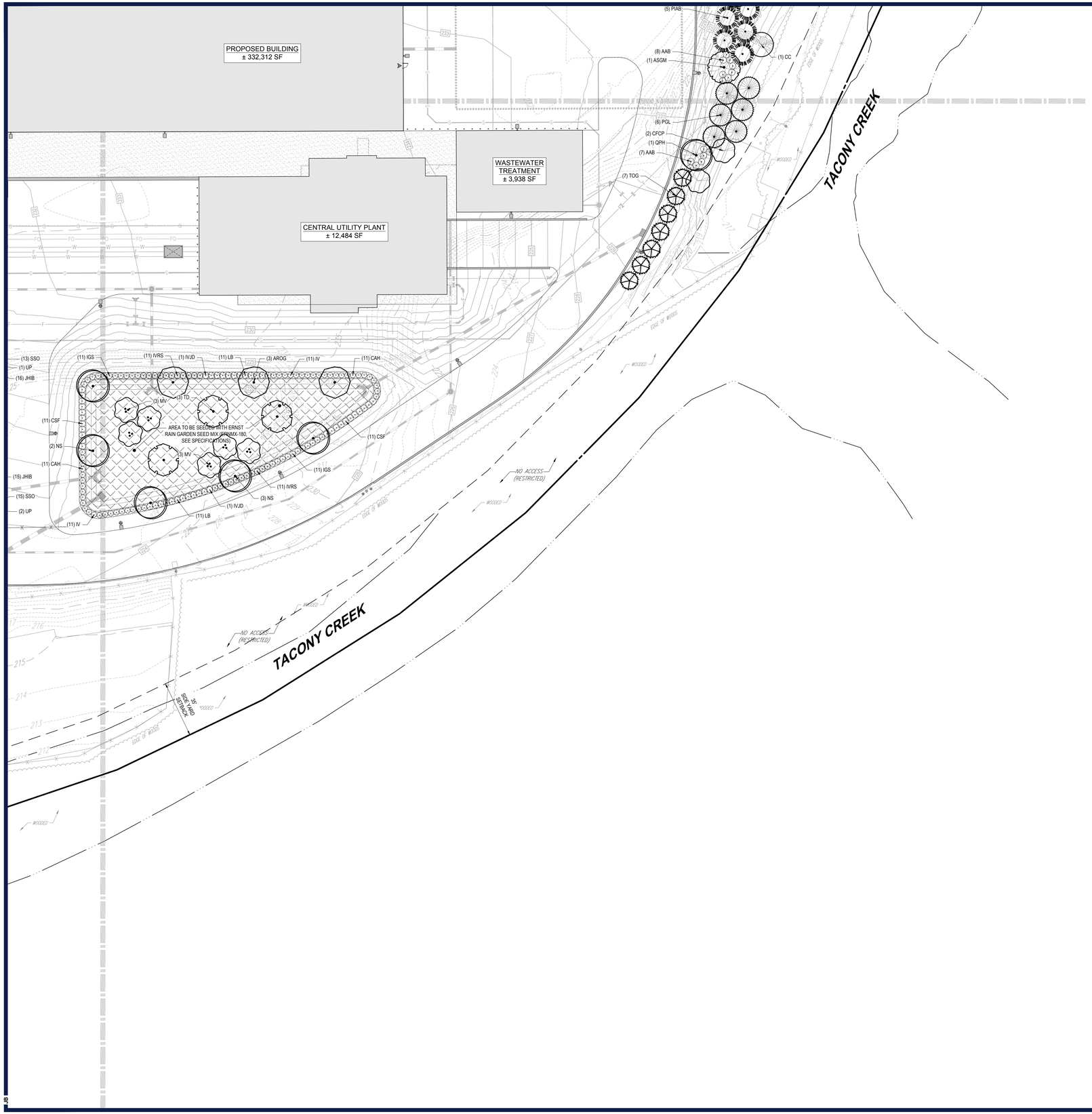
SHEET TITLE:

LANDSCAPE PLAN 'C'

SHEET NUMBER:

L-103

ORG. DATE - 12/19/2025

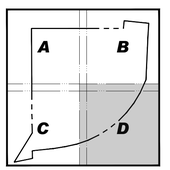


GENERAL LANDSCAPE NOTES:

1. THESE LANDSCAPE PLANS ARE TO BE READ IN CONJUNCTION WITH THE LANDSCAPE SPECIFICATIONS, AND ASSOCIATED DETAILS FOUND ON THE LANDSCAPE DETAILS SHEET. THE GENERAL NOTES, FOUND ON THE NOTES PAGE OF THIS PLAN SET, ARE CONSIDERED PART OF LANDSCAPE PLANS. THE CONTRACTOR MUST REFER TO, AND FULLY COMPLY WITH, ALL NOTES, SPECIFICATIONS AND DETAILS DESCRIBED HEREIN, ON THE LANDSCAPE PLANS AND IN THE LANDSCAPE DETAILS SHEET.
2. ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH "MATERIALS" SECTION OF THE LANDSCAPE SPECIFICATIONS, UNLESS OTHERWISE SPECIFICALLY STATED ON THIS PLAN.
3. SHRUBS PLANTED ALONG HEAD-IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
4. PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER AND THE MUNICIPALITY'S ENGINEERING AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
5. WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY STORMWATER FACILITY, INCLUDING RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.
6. IF IRRIGATION IS REQUIRED BY THE OWNER OR APPROVING MUNICIPALITY, THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCT'S MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF AN IRRIGATION SYSTEM.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPING UNTIL PROJECT MAINTENANCE IS TURNED OVER TO THE PROPERTY OWNER OR OTHER RESPONSIBLE PARTY. SUCH RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO, THE CARE, WATERING, AND MAINTENANCE OF ALL PLANT MATERIAL; LAWN MOWING; AND SEASONAL MAINTENANCE.

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CANOPY TREES					
AROG	7	ACER RUBRUM `OCTOBER GLORY`	OCTOBER GLORY RED MAPLE	2.5" CAL.	B&B
ASGM	4	ACER SACCHARUM `GREEN MOUNTAIN`	GREEN MOUNTAIN SUGAR MAPLE	2.5" CAL.	B&B
CCA	12	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2.5" CAL.	B&B
CBP	11	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY MAIDENHAIR TREE	2.5" CAL.	B&B
GD	9	GYMNOCLADUS DIOICUS 'ESPRESSO-JFS'	ESPRESSO KENTUCKY COFFEETREE	2.5" CAL.	B&B
GTIK	7	GLEDITSIA TRIACANTHOS INERMIS `SKYCOLE`	SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B
NS	13	NYSSA SYLVATICA	SOUR GUM	2.5" CAL.	B&B
OV	9	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM	2.5" CAL.	B&B
QBC	3	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	B&B
QPH	10	QUERCUS PHELLOS	WILLOW OAK	2.5" CAL.	B&B
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	2.5" CAL.	B&B
UP	11	ULMUS AMERICANA `PRINCETON`	AMERICAN ELM	2.5" CAL.	B&B
EVERGREEN TREES					
INS	15	ILEX X `NELLIE R. STEVENS`	NELLIE R. STEVENS HOLLY	8` HT.	B&B
PGL	21	PICEA GLAUCA	WHITE SPRUCE	8` HT.	B&B
PIAB	34	PICEA ABIES	NORWAY SPRUCE	8` HT.	B&B
PM	20	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	8` HT.	B&B
PO	20	PICEA OMORIKA	SERBIAN SPRUCE	8` HT.	B&B
PS	14	PINUS STROBUS	WHITE PINE	8` HT.	B&B
TOG	16	THUJA OCCIDENTALIS `GREEN GIANT`	GREEN GIANT ARBORVITAE	8` HT.	B&B
ORNAMENTAL TREES					
AGB	14	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	2-2 1/2" CAL.	B&B
CC	26	CERCIS CANADENSIS	EASTERN REDBUD	2-2 1/2" CAL.	B&B
CFC	7	CORNUS FLORIDA 'CHEROKEE CHIEF'	CHEROKEE CHIEF DOGWOOD	2-2 1/2" CAL.	B&B
CFCP	17	CORNUS FLORIDA 'CHEROKEE PRINCESS'	CHEROKEE PRINCESS DOGWOOD	2-2 1/2" CAL.	B&B
MV	6	MAGNOLIA VIRGINIANA	SWEET BAY	8-10`	B&B
SHRUBS					
AAB	61	ARONIA ARBUTIFOLIA `BRILLIANTISSIMA`	BRILLIANT RED CHOKEBERRY	3-4`	B&B
CAH	39	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET (DWARF)	24-30"	CONTAINER
CSF	62	CORNUS SERICEA 'FARROW'	ARCTIC FIRE RED TWIG DOGWOOD	24-30"	CONTAINER
IGS	63	ILEX GLABRA `SHAMROCK`	SHAMROCK INKBERRY	24-30"	CONTAINER
IMBB	3	ILEX X MESERVEAE `BLUE BOY`	BLUE BOY HOLLY	24-30"	CONTAINER
IMBG	20	ILEX X MESERVEAE `BLUE GIRL`	BLUE GIRL HOLLY	24-30"	CONTAINER
IV	46	ITEA VIRGINICA `HENRY`S GARNET`	HENRY`S GARNET SWEETSPIRE	24-30"	CONTAINER
IVJD	4	ILEX VERTICILLATA `JIM DANDY`	JIM DANDY WINTERBERRY	30-36"	CONTAINER
IVRS	38	ILEX VERTICILLATA `RED SPRITE`	RED SPRITE WINTERBERRY	18-24"	CONTAINER
JHIB	124	JUNIPERUS HORIZONTALIS `MONBER`	ICEE BLUE JUNIPER	15-18" SPRD	CONTAINER
JO	40	JUNIPERUS VIRGINIANA `GREY OWL`	GREY OWL JUNIPER	15-18" SPRD	CONTAINER
LB	22	LINDERA BENZOIN	SPICEBUSH	30-36"	CONTAINER
RAG	149	RHUS AROMATICA `GRO-LOW`	GRO-LOW FRAGRANT SUMAC	15-18"	CONTAINER
VR	36	VIBURNUM RHYTIDOPHYLLUM	LEATHERLEAF VIBURNUM	3-4`	B&B
GRASSES					
PVN	87	PANICUM VIRGATUM `NORTH WIND`	NORTHWIND SWITCH GRASS	1 GAL.	CONTAINER
SSO	68	SCHIZACHYRIUM SCOPARIUM `STANDING OVATION`	STANDING OVATION LITTLE BLUESTEM GRASS	1 GAL.	CONTAINER



KEY MAP
SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY

30 15 7.5 0 30
SCALE: 1" = 30'

BOHLER™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. WWW.PA1CALL.ORG

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVIL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

BOHLER™
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LANDSCAPE PLAN 'D'

SHEET NUMBER:

L-104

ORG. DATE - 12/19/2025

R:\2025\PAC\250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LLGT-PAC250142.00-0C-----LAYOUT(L-104 LSCP 'D'
JB

LANDSCAPE COMPLIANCE CHART

SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
ZONING: 2401 PRESERVATION AND PROTECTION OF EXISTING VEGETATION	A.2.d.(1)(a) EXISTING LOTS. TREE REPLACEMENT SHALL OCCUR WHEN NEW IMPERVIOUS COVERAGE EXCEEDS 500 S.F. AND A TREE WITH A MINIMUM CALIPER OF SIX INCHES (6") IS REMOVED. IN SUCH CASES, TWO NEW TREES, EACH A MINIMUM OF 3-TO-3.5" CALIPER, MEASURED 6" ABOVE GRADE, SHALL BE PLANTED FOR EACH TREE WITH A MINIMUM CALIPER OF 6" OR GREATER THAT IS REMOVED.	NET DECREASE IN IMPERVIOUS COVERAGE. NOT APPLICABLE.	NOT APPLICABLE
2402 PARKING LOT LANDSCAPING AND STREET TREES	A.2.a.(2) THERE SHALL BE NO MORE THAN 15 CONTIGUOUS PARKING STALLS IN A ROW WITHOUT A PLANTING ISLAND. AS AN ALTERNATIVE, AN APPLICANT MAY PROVIDE ONE CANOPY TREE FOR EVERY TEN PARKING STALLS IN PLANTING ISLAND AREAS AND/OR PERIMETER PARKING PLANTING AREAS, AT THE DISCRETION OF THE BOARD OF COMMISSIONERS. HOWEVER, REGARDLESS OF WHICH OPTION IS USED, IS USED, THE ENDS OF ALL PARKING ROWS SHALL BE DIVIDED FROM DRIVES BY PLANTING ISLANDS.	TOTAL PROPOSED PARKING SPACES = 114 REQUIRED: 114 / 10 = 11.4 OR 12 CANOPY TREES PROVIDED: 2 GBP, 6 GTIK, 2 QPH, 4 UP (14 SHADE TREES, ALSO COUNTING TOWARD SECTION 2402.A.2.a.(4) BELOW)	COMPLIES
	A.2.a.(4) EACH PLANTING ISLAND SHALL CONTAIN ONE SHADE TREE PLUS SHRUBS AND/OR GROUNDCOVER TO COVER THE ENTIRE AREA AT MATURITY. PARKING LOT TREES SHALL BE A MINIMUM OF THREE INCHES IN CALIPER, BRANCHING AT 6 FEET TO 8 FEET IN HEIGHT AND OF THE RECOMMENDED SPECIES AS LISTED IN THE 'RECOMMENDED PLANT MATERIALS' LIST IN THE SALDO. PARKING LOT ISLANDS SHALL BE PLANTED IN LAWN OR GROUND COVER ONLY.	TOTAL PROPOSED PLANTING ISLANDS = 14 REQUIRED: 14 SHADE TREES PROVIDED: 2 GBP, 6 GTIK, 2 QPH, 4 UP (14 SHADE TREE, ALSO COUNTING TOWARD SECTION 2402.A.2.a.(2) ABOVE) PLUS SHRUBS AND GROUNDCOVER	COMPLIES
	A.2.a.(5) SHADE TREES LOCATED WITHIN ANY PARKING ISLAND WHICH IS LESS THAN 300 SQUARE FEET MEASURED FROM OUTSIDE CURB TO OUTSIDE CURB WILL REQUIRE PERMANENTLY INSTALLED IRRIGATION.	IRRIGATION WILL BE PROVIDED IN ANY PARKING ISLANDS LESS THAN 300 SQUARE FEET IN AREA.	COMPLIES
	A.2.b.(3) ALL PLANTING STRIPS SHALL BE A MINIMUM OF EIGHT FEET WIDE. STRIPS SHALL RUN THE LENGTH OF THE PARKING ROW, UNDERLAIN BY SOIL, MOUNDED AT NO MORE THAN A 4:1 SLOPE, NOR LESS THAN A 12:1 SLOPE, AND SHALL BE PROTECTED BY CURBS, WHEEL STOPS, OR BOLLARDS. PLANTING STRIPS SHALL CONTAIN PLANTINGS OF TREES SUITABLE FOR PARKING LOTS (PLEASE REFER TO THE 'RECOMMENDED PLANT MATERIALS' LIST IN THE SALDO) AT INTERVALS OF 30 TO 40 FEET, PLUS SHRUBS AND/OR GROUNDCOVER TO COVER THE ENTIRE AREA AT MATURITY.	TOTAL LENGTH OF PROPOSED PLANTING STRIPS = 566± LF REQUIRED: 566 / 40 = 14.2 OR 15 CANOPY TREES PROVIDED: 4 GBP, 4 QPH, 7 UP (15 CANOPY TREES PLUS SHRUBS AND GROUNDCOVER)	COMPLIES
	A.5.PARKING LOT PERIMETER BUFFER. ALL PARKING LOTS OR AREAS WITH MORE THAN 15 PARKING SPACES SHALL BE BUFFERED ACCORDING TO THE FOLLOWING WHEN ANY PART OF THE PARKING LIES WITHIN 150' OF A PROPERTY LINE, PUBLIC STREET, OR RESIDENTIAL DISTRICT (EXCEPTION: THOSE PARKING LOTS TO WHICH THE STREET WALL REQUIREMENT IN ARTICLE XXV: STREETSCAPE APPLIES). a. PARKING LOTS SHALL BE PLANTED WITH A MEDIUM-INTENSITY BUFFER [SEE §2403.B. BUFFER REQUIREMENTS], A MINIMUM OF 10 FEET IN WIDTH, EXCEPT WHERE BUILDINGS, ACCESS DRIVES, AND/OR WALKWAYS ARE LOCATED. (2) MEDIUM INTENSITY BUFFER. A MEDIUM-INTENSITY BUFFER IS INTENDED TO PARTIALLY OBSCURE THE VIEW OF A LAND DEVELOPMENT OR PROVIDE A DEGREE OF PRIVACY. IT MAY CONSIST OF ANY OF THE FOLLOWING OPTIONS: (a) OPTION A: 2 CANOPY TREES (2-2½" MINIMUM CALIPER), 2 UNDERSTORY TREES (1½" MINIMUM CALIPER), 5 EVERGREEN TREES (8' MINIMUM HEIGHT), AND 5 SHRUBS (24" MINIMUM HEIGHT) PER EACH 100 LINEAR FEET. (b) OPTION B: A DECORATIVE, OPAQUE WALL OR FENCE. A FENCE OR WALL, 6 FEET IN HEIGHT. WHERE THE FENCE OR WALL FACES A PUBLIC STREET OR DISTRICT PERMITTING RESIDENTIAL USES, SHRUBS SHALL LINE THE OUTSIDE OF THE FENCE OR WALL AT A RATIO OF 10 SHRUBS PER 100 LINEAR FEET. NO MORE THAN 50% OF THE SHRUBS SHALL CONSIST OF ANY ONE SPECIES; THEY MAY BE GROUPED INFORMALLY OR SPACED EVENLY.	PARKING LOT PERIMETER LENGTH ALONG HIGHLAND AVE = 232± LF REQUIRED: MEDIUM INTENSITY BUFFER (OPTION A) 232 / 100 = 2.32 2.32 x 2 = 4.64 OR 5 CANOPY TREES 2.32 x 2 = 4.64 OR 5 UNDERSTORY TREES 2.32 x 5 = 11.6 OR 12 EVERGREEN TREES 2.32 x 5 = 11.6 OR 12 SHRUBS PROVIDED: BUFFER PLANTINGS PER 2403.B.4.a. BELOW TO MEET THE INTENT OF THIS REQUIREMENT.	COMPLIES
		PARKING LOT PERIMETER LENGTH ALONG KENMORE AVE = 54± LF REQUIRED: MEDIUM INTENSITY BUFFER (OPTION A) 54 / 100 = 0.54 0.54 x 2 = 1.08 OR 2 CANOPY TREES 0.54 x 2 = 1.08 OR 2 UNDERSTORY TREES 0.54 x 5 = 2.7 OR 3 EVERGREEN TREES 0.54 x 5 = 2.7 OR 3 SHRUBS PROVIDED: BUFFER PLANTINGS PER 2403.B.4.a. BELOW TO MEET THE INTENT OF THIS REQUIREMENT.	COMPLIES
	A.6. MINIMUM GREEN AREA. IN ADDITION TO THE VEGETATION REQUIRED FOR BUFFERS AND SCREENS, A MINIMUM OF 10% OF ANY PARKING AREA OVER 15,000 SQUARE FEET IN GROSS AREA, OUTSIDE CURB TO OUTSIDE CURB, SHALL BE DEVOTED TO LANDSCAPING. THIS MAY BE COUNTED TOWARDS MEETING ANY MINIMUM GREEN AREA REQUIREMENT OF THE RESPECTIVE ZONING DISTRICT IN WHICH THE PARKING IS LOCATED.	TOTAL OPEN AIR PARKING AREA = 58,416± SF REQUIRED (10%): 5,841.6 SF PROVIDED: 6,825± SF (11.7%)	COMPLIES
	B.2.c. TREES SHALL BE PLANTED AT A RATIO OF AT LEAST ONE TREE PER 40 L.F. OF FRONTAGE OR FRACTION THEREOF. TREES SHALL BE DISTRIBUTED ALONG THE ENTIRE FRONTAGE OF THE PROPERTY, ALTHOUGH THEY NEED NOT BE EVENLY SPACED. WHEN FEASIBLE, TREES PLANTED ON DIFFERENT SIDES OF THE SAME STREET SHOULD HAVE ALTERNATING ARRANGEMENT TO MINIMIZE GAPS IN TREE CANOPY COVER.	TOTAL LENGTH OF IMPROVED FRONTAGE ALONG HIGHLAND AVE = 784± LF (EXCLUDING DRIVEWAY WIDTH) REQUIRED: 784 / 40 = 19.6 OR 20 TREES PROVIDED: 12 CCA, 9 OV (21 TREES; ALSO COUNTING TOWARDS 2403.B.4.a. BELOW)	COMPLIES
		TOTAL LENGTH ALONG KENMORE AVE = 717± LF (EXCLUDING DRIVEWAY WIDTHS) REQUIRED: 717 / 40 = 17.9 OR 18 TREES PROVIDED: 3 AROG, 10 GD, 5 NS (8 TREES; ALSO COUNTING TOWARDS 2403.B.4.a. BELOW)	COMPLIES
2403 BUFFERS AND SCREENS	FIGURE 24.5 BUFFER REQUIRED BY LAND USE TYPE PROPOSED LAND USE / ADJOINING LAND USE CLASSIFICATION / BUFFER TYPE REQUIRED IV (INDUSTRIAL) / I RESID / VH, H* II COMMUNITY SERVICE / M* III RETAIL / M IV INDUSTRIAL / L *APPLIES TO RESIDENTIAL DISTRICT WHEN LOCATED ACROSS LOCAL STREET OR RAILROAD TRACKS B.4.a.(1) LOW INTENSITY BUFFER. A LOW-INTENSITY BUFFER IS INTENDED TO SOFTEN THE IMPACT OF A LAND DEVELOPMENT WITHOUT SIGNIFICANTLY BLOCKING THE VIEW. IT INCLUDES THE FOLLOWING ELEMENTS PER 100 L.F.: 1 CANOPY TREE (2-2½" MINIMUM CALIPER), 2 UNDERSTORY TREES (1½" MINIMUM CALIPER), AND 2 EVERGREEN TREES (8' MINIMUM HEIGHT). (2) MEDIUM INTENSITY BUFFER. A MEDIUM-INTENSITY BUFFER IS INTENDED TO PARTIALLY OBSCURE THE VIEW OF A LAND DEVELOPMENT OR PROVIDE A DEGREE OF PRIVACY. IT MAY CONSIST OF ANY OF THE FOLLOWING OPTIONS: (a) OPTION A: 2 CANOPY TREES (2-2½" MINIMUM CALIPER), 2 UNDERSTORY TREES (1½" MINIMUM CALIPER), 5 EVERGREEN TREES (8' MINIMUM HEIGHT), AND 5 SHRUBS (24" MINIMUM HEIGHT) PER EACH 100 LINEAR FEET. (b) OPTION B: A DECORATIVE, OPAQUE WALL OR FENCE. A FENCE OR WALL, 6 FEET IN HEIGHT. WHERE THE FENCE OR WALL FACES A PUBLIC STREET OR DISTRICT PERMITTING RESIDENTIAL USES, SHRUBS SHALL LINE THE OUTSIDE OF THE FENCE OR WALL AT A RATIO OF 10 SHRUBS PER 100 LINEAR FEET. NO MORE THAN 50% OF THE SHRUBS SHALL CONSIST OF ANY ONE SPECIES; THEY MAY BE GROUPED INFORMALLY OR SPACED EVENLY. (3) HIGH INTENSITY BUFFER. A HIGH-INTENSITY BUFFER IS INTEDED TO FORM A BARRIER TO THE VIEW OF A LAND DEVELOPMENT OR PROVIDE MORE PRIVACY THAN LESS-INTENSE BUFFERS. IT INCLUDES THE FOLLOWING ELEMENTS PER 100 LINEAR FEET: (a) OPTION A: 8 EVERGREEN TREES (8' MINIMUM HEIGHT AT TIME OF PLANTING), 2 CANOPY TREES (2-2 ½" MINIMUM CALIPER), 2 UNDERSTORY TREES (1 ½" MINIMUM CALIPER), AND 10 SHRUBS (24" MINIMUM HEIGHT AT TIME OF PLANTING). (b) OPTION B: A DOUBLE ROW OF EVERGREEN TREES (8' MINIMUM HEIGHT AT TIME OF PLANTING), PLANTED 10 FEET ON CENTER, AND STAGGERED SO AS TO FORM A CONTINUOUS SCREEN. (c) OPTION C: 15 EVERGREEN SHRUBS (4' MINIMUM HEIGHT AT TIME OF PLANTING), 3 CANOPY TREES (2-2½" MINIMUM CALIPER), AND 4 ORNAMENTAL TREES (1½" MINIMUM CALIPER). (d) OPTION D: AN OPAQUE FENCE OR WALL, 6 FEET IN HEIGHT; ON THE OUTSIDE OF THE FENCE OR WALL, THERE SHALL BE 3 CANOPY TREES (2-2½" MINIMUM CALIPER) AND 4 ORNAMENTAL TREES (1½" MINIMUM CALIPER). (4) VERY HIGH INTENSITY BUFFER. A VERY HIGH INTENSITY BUFFER IS INTENDED TO FORM AN EXTENSIVE BARRIER TO THE VIEW OF, AND PHYSICALLY SEPARATE, A LAND DEVELOPMENT FROM AN ADJACENT PROPERTY; OR PROVIDE SUBSTANTIAL PRIVACY. IT CONSISTS OF THE FOLLOWING: (a) A DOUBLE ROW OF EVERGREENS, PLANTED 10 FEET ON CENTER, WITH A MINIMUM HEIGHT AT PLANTING OF 6 FEET AND A MINIMUM HEIGHT AT MATURITY OF 15 FEET, WITH THE TWO ROWS OFFSET TO FORM A CONTINUOUS SCREEN AT MATURITY; AND (b) A 4- TO 6-FOOT HIGH CONTINUOUS CURVILINEAR BERM, ALONG WITH FLOWERING TREES, AT THE RATE OF ONE TREE FOR EVERY 20 FEET, SPACED EVENLY OR ARRANGED INFORMALLY. THE BERM AND FLOWERING TREES SHALL BE LOCATED ON THE FAR SIDE OF THE ROW OF EVERGREENS FROM THE ABUTTING PROPERTY. THE MAXIMUM SLOPE OF THE BERM SHALL BE THREE TO ONE (3:1). (5) LIMITED AREA BUFFERS. SO	TOTAL LENGTH OF IMPROVED FRONTAGE ALONG HIGHLAND AVE = 784± LF (OPPOSITE LOCAL STREET FROM PARKING LOT; EXCLUDING DRIVEWAY WIDTH) REQUIRED: LOW INTENSITY BUFFER 784 / 100 = 7.84 7.84 x 1 = 7.84 OR 8 CANOPY TREES 7.84 x 2 = 15.68 OR 16 UNDERSTORY TREES 7.84 x 2 = 15.68 OR 16 EVERGREEN TREES PROVIDED: 12 CCA, 9 OV (21 CANOPY TREES); 8 CC, 8 CFCP (16 UNDERSTORY TREES); 9 INS, 9 TOG (18 EVERGREEN TREES);	COMPLIES
		TOTAL LENGTH ALONG KENMORE AVE = 717± LF (OPPOSITE LOCAL STREET FROM RETAIL USE; EXCLUDING DRIVEWAY WIDTHS) REQUIRED: MEDIUM INTENSITY BUFFER (OPTION A) 717 / 100 = 7.17 7.17 x 2 = 14.34 OR 15 CANOPY TREES 7.17 x 2 = 14.34 OR 15 UNDERSTORY TREES 7.17 x 5 = 35.85 OR 36 EVERGREEN TREES 7.17 x 5 = 35.85 OR 36 SHRUBS PROVIDED: 4 AROG, 9 GD, 5 NS (18 CANOPY TREES); 9 CC, 6 CFCP (15 UNDERSTORY TREES); 6 INS, 11 PIAB, 20 PO (37 EVERGREEN TREES); 27 AAB, 17 IGS (44 SHRUBS)	COMPLIES
		TOTAL LENGTH ALONG NORTHEAST PROPERTY LINE = 207± LF (ADJACENT TO RESIDENTIAL USE) REQUIRED: VERY HIGH INTENSITY BUFFER DOUBLE ROW OF EVERGREENS ON 10 FOOT CENTER 207 / 20 = 10.35 OR 11 FLOWERING TREES PROVIDED: DOUBLE ROW OF EVERGREENS ON 10 FOOT CENTER WITH 6 AGB, 5 CC (11 FLOWERING TREES)	COMPLIES
		TOTAL LENGTH ALONG IMPROVED SOUTHEAST PROPERTY LINE = 695± LF (OPPOSITE RAILROAD TRACKS FROM RESIDENTIAL USE; EXCLUDING LENGTH OF EXISTING VEGETATION TO REMAIN) REQUIRED: HIGH INTENSITY BUFFER (OPTION A) 695 / 100 = 6.95 6.95 x 8 = 55.6 OR 56 EVERGREEN TREES 6.95 x 2 = 13.9 OR 14 CANOPY TREES 6.95 x 2 = 13.9 OR 14 UNDERSTORY TREES 6.95 x 10 = 69.5 OR 70 SHRUBS PROVIDED: 12 PGL, 14 PIAB, 9 PM, 14 PS, 7 TOG (56 EVERGREEN TREES); 4 ASGM, 3 NS, 3 QBC, 4 QPH (14 CANOPY TREES); 4 AGB, 4 CC, 3 CFC, 3 CFCP (14 UNDERSTORY TREES); 34 AAB, 36 VR (70 SHRUBS)	COMPLIES
	C.1. SITE ELEMENT SCREENS SHALL BE REQUIRED IN ALL PROPOSED SUBDIVISION AND LAND DEVELOPMENTS FOR SITE ELEMENTS THAT ARE LOCATED PARTIALLY OR FULLY WITHIN 100 FEET OF THE PROPERTY LINE OR EXISTING ROAD RIGHT-OF-WAY. FIGURE 24.7 SITE ELEMENT SCREEN REQUIREMENTS SITE ELEMENT / TYPE OF SCREEN REQUIRED ACCESSORY BUILDING / LOW INTENSITY ELECTRICAL, HVAC, OR UTILITY EQUIPMENT BOX / LOW INTENSITY DUMPSTER OR TRASH CONTAINMENT AREA / MEDIUM INTENSITY LOADING DOCK / MEDIUM INTENSITY DISTRIBUTION CENTER / HIGH INTENSITY C.6.a. LOW INTENSITY SITE ELEMENT SCREEN: (1) SCREEN TYPE #1: EVERGREEN OR DECIDUOUS SHRUBS. THIS SHALL CONSIST OF EVERGREEN OR DECIDUOUS SHRUBS SPACED NO FURTHER THAN THREE FEET ON CENTER, IN A MINIMUM FIVE-FOOT-WIDE BED SURROUNDING THE SITE ELEMENT, AND ARRANGED TO PROVIDE A CONTINUOUS HEDGE-LIKE SCREEN WITH A MINIMUM HEIGHT OF 4 FEET AT MATURITY. SHRUBS MAY BE CLIPPED TO FORM A HEDGE OR LEFT IN THEIR NATURAL HABIT. (2) SCREEN TYPE #2: BERM WITH ORNAMENTAL TREES AND SHRUBS. A 2- TO 3-FOOT HIGH CONTINUOUS, CURVILINEAR BERM WITH ORNAMENTAL TREES AT THE RATE OF ONE ORNAMENTAL TREE AND TWO SHRUBS FOR EVERY 20 LINEAR FEET, CLUSTERED OR ARRANGED INFORMALLY. THE MAXIMUM SLOPE OF THE BERM SHALL BE THREE TO ONE (3:1). C.6.b. MEDIUM INTENSITY SITE ELEMENT SCREEN: (1) SCREEN TYPE #4: OPAQUE FENCE OR MASONRY WALL WITH SHRUBS. THIS SHALL CONSIST OF AN OPAQUE FENCE OR MASONRY WALL WITH A MINIMUM HEIGHT OF AT LEAST 6 GEET. A FENCE MAY NOT CONSIST OF CHAIN LINK OR WIRE; A WALL SHALL BE CONSTRUCTED OF MASONRY (BUT NOT UNFINISHED CONCRETE MASONRY UNITS). THE FINISHED SIDE OF THE FENCE OR WALL SHALL FACE OUT. THE OUTSIDE OF THE FENCE OR WALL SHALL BE SURROUNDED BY A PLANTING AREA EXTENDING AT LEAST 3 FEET OUTWARDS, PLANTED WITH DECIDUOUS OR EVERGREEN SHRUBS 93' MINIMUM HEIGHT AT TIME OF PLANTING, WITH A HEIGHT OF AT LEAST 6' AT MATURITY) SPACED NO FURTHER THAN 3 FEET ON CENTER. SCREENS FOR DUMPSTERS OR TRASH CONTAINMENT AREAS SHALL COMPLETELY ENCLOSE THE SITE ELEMENT, AND SHALL INCLUDE A SELF-CLOSING GATE. (2) SCREEN TYPE #5: EVERGREEN HEDGE. THIS SHALL CONSIST OF AN EVERGREEN HEDGE WITH A MINIMUM OF 6 FEET AT TIME OF PLANTING, SPACED NO FURTHER APART THAN 3 FEET ON CENTER. C.6.c. HIGH-INTENSITY SITE ELEMENT SCREEN: (1) SCREEN TYPE #6: DOUBLE ROW OF EVERGREEN TREES. THIS SHALL CONSIST OF A DOUBLEROW OF EVERGREEN TREES WITH A MINIMUM HEIGHT OF 6 FEET AT PLANTING TIME, SPACED NO FURTHER APART THAN 10 FEET ON CENTER AND OFFSET 10 FEET TO PROVIDE A CONTINUOUS SCREEN AT A MINIMUM HEIGHT OF 12' AT MATURITY. (2) SCREEN TYPE #7: OPAQUE FENCE WITH ORNAMENTAL TREES AND SHRUBS. THIS SHALL CONSIST OF A 6-FOOT TALL OPAQUE FENCE SURROUNDING THE SITE ELEMENT ON AT LEAST THREE SIDES WITH ADDITIONAL PLANTINGS AT A MINIMUM RATE OF THREE SHRUBS (24" MINIMUM HEIGHT AT TIME OF PLANTING) AND TWO ORNAMENTAL TREES OR LARGE SHRUBS FOR EACH 10 LINEAR FEET OF PROPOSED FENCE, ARRANGED FORMALLY OR INFORMALLY NEXT TO THE FENCE. (3) SCREEN TYPE #8: ARCHITECTURAL EXTENSION OF THE BUILDING. THIS SHALL CONSIST OF AN 8-FOOT MINIMUM HEIGHT EXTENSION OF THE BUILDING (SUCH AS A WING WALL) AND SHALL ENCLOSE SERVICE OR LOADING DOCKS. THE PREDOMINANT BUILDING MATERIAL OF THE EXTENSION SHALL BE THE SAME AS THAT USED AS THE PREDOMINANT MATERIAL ON THE MAIN BUILDING. IT IS RECOMMENDED THAT THE SAME STYLE OF ARCHITECTURE ON THE MAIN BUILDING BE USED ON THE EXTENSION.	PERIMETER BUFFERS REQUIRED BY 2403.B.4.a. ABOVE TO MEET THE INTENT OF SITE ELEMENT SCREENING.	COMPLIES
2403 BUFFERS AND SCREENS (CONT'D)	D.2. A MINIMUM OF 25% OF THE LINEAR AREA (PARALLEL TO THE BUILDING WALL) BETWEEN THE BUILDING FOUNDATION AND SIDEWALKS, ACCESS DRIVES, OR PARKING AREAS SHALL BE LANDSCAPED WITH ORNAMENTAL OR EVERGREEN TREES AND SHRUBS (PLEASE REFER TO THE 'RECOMMENDED PLANT MATERIALS' LIST IN THE SALDO)	TREES AND SHRUBS HAVE BEEN PROVIDED BETWEEN THE BUILDING FOUNDATION AND THE SIDEWALKS	COMPLIES
SALDO: 146-39 LANDSCAPING	A.(1) PLACEMENT. SHADE TREES SHALL BE PROVIDED BY THE SUBDIVIDER/LAND DEVELOPER AND PLANTED APPROXIMATELY FIVE FEET INSIDE THE LOT LINES PARALLELING THE RIGHT-OF-WAY LINE. THE TREES SHALL BE PLACED TO PROVIDE AN APPROXIMATE AVERAGE SPACING OF ONE TREE PER 50 FEET OR PLANTED IN AN ALTERNATE ARRANGEMENT CONSISTENT WITH TOWNSHIP POLICY ENCOURAGING THE USE OF SHADE TREES IN SUBDIVISION/LAND DEVELOPMENT. THE TREES SHALL BE LOCATED SO AS NOT TO INTERFERE WITH THE INSTALLATION AND MAINTENANCE OF SIDEWALKS AND UTILITIES OR THE OPERATION OF STREETLIGHTS, NOR SHALL THEY BE PLACED WITHIN THE CLEAR SIGHT TRIANGLE AT STREET INTERSECTIONS.	SEE ZONING SECTION 2402.B.2.c. ABOVE FOR MORE STRICT REQUIREMENT.	SEE ABOVE
	B.(2)(c) MINIMUM TREE/SHRUB PLANTINGS FOR THE GREEN AREA SHALL INCLUDE A MINIMUM OF ONE DECIDUOUS OR EVERGREEN TREE OF TWO-AND-ONE-HALF-INCH CALIPER, MEASURED AT A HEIGHT OF THREE FEET ABOVE GRADE, FOR EACH 1,000 SQUARE FEET OF GREEN AREA. THREE EVERGREEN SHRUBS OF 2 1/2 FEET IN HEIGHT MAY BE SUBSTITUTED FOR ONE TREE FOR A MAXIMUM OF 50% OF THE TREE REQUIREMENT. THE TREE/SHRUB REQUIREMENT MAY BE MET BY PRESERVING EXISTING TREES AS PROVIDED IN SUBSECTION B(4).	TOTAL GREEN AREA PROVIDED ON SITE = 197,503± SF (PERVIOUS AREA WITHIN LOD) REQUIRED: 197,503 / 1000 = 197.5 OR 198 TREES PROVIDED: 7 AROG, 4 ASGM, 12 CCA, 11 GBP, 9 GD, 7 GTIK, 13 NS, 9 OV, 3 QBC, 10 QPH, 3 TD, 11 UP, 15 INS, 21 PGL, 34 PIAB, 20 PM, 20 PO, 14 PS, 16 TOG, 14 AGB, 25 CC, 7 CFC, 17 CFCP, 6 MV (308 TREES ALSO COUNTING TOWARDS OTHER REQUIREMENTS, SEE ZONING SECTIONS ABOVE.)	COMPLIES
	B.(3)(a)[1] AT LEAST 5% OF THE TOTAL AREA DEVOTED TO PARKING AREA, NOT INCLUDING BUFFERS OR YARDS ON THE PERIMETER, SHALL NOT BE PAVED BUT SHALL BE USED FOR INTERIOR LANDSCAPING WITHIN A PARKING AREA.	SEE ZONING SECTION 2402.A.6. ABOVE FOR MORE STRICT REQUIREMENT.	SEE ABOVE
	B.(3)(a)[2] FOR ANY LAND USE WHERE THE TOTAL NUMBER OF PARKING SPACES EXCEEDS 10 STALLS, AT LEAST ONE TWO-AND-ONE-HALF-INCH CALIPER DECIDUOUS OR EVERGREEN TREE SHALL BE PLANTED WITHIN THE PARKING AREA. AN ADDITIONAL TREE OF THE SAME SIZE SHALL BE PLANTED FOR EACH ADDITIONAL 15 SPACES OR PORTION THEREOF. (b) THE TREE REQUIREMENT MAY BE MET BY PRESERVING EXISTING TREES AS PROVIDED IN SUBSECTION B(4).	SEE ZONING 2402.A.2.a.(2) ABOVE FOR MORE STRICT REQUIREMENT.	SEE ABOVE
	B.(4)(a) EXISTING TREE PRESERVATION CREDIT. THE NUMBER OF TREES REQUIRED BY THIS SECTION MAY BE REDUCED BY GIVING CREDIT TO THE APPROVED PRESERVATION OF EXISTING TREES AS COMPUTED BELOW: TRUNK DIAMETER OF APPROVED PRESERVED TREE (INCHES)* / NUMBER OF TREES CREDITED 30 OR GREATER / 6 30 TO 35 / 5 26 TO 29 / 4 20 TO 25 / 3 13 TO 19 / 2 3.5 TO 12 / 1 * NOTE: MEASURED AT A HEIGHT OF 3 1/2 FEET ABOVE THE NATURAL GRADE.	SEE ZONING 2402.A.2.a.(2) ABOVE FOR MORE STRICT REQUIREMENT.	SEE ABOVE

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CANOPY TREES					
AROG	7	ACER RUBRUM `OCTOBER GLORY`	OCTOBER GLORY RED MAPLE	2.5" CAL.	B&B
ASGM	4	ACER SACCHARUM `GREEN MOUNTAIN`	GREEN MOUNTAIN SUGAR MAPLE	2.5" CAL.	B&B
CCA	12	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2.5" CAL.	B&B
GBP	11	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY MAIDENHAIR TREE	2.5" CAL.	B&B
GD	9	GYMNOCLADUS DIOICUS 'ESPRESSO-JFS'	ESPRESSO KENTUCKY COFFEETREE	2.5" CAL.	B&B
GTIK	7	GLEDITSIA TRIACANTHOS INERMIS `SKYCOLE`	SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B
NS	13	NYSSA SYLVATICA	SOUR GUM	2.5" CAL.	B&B
OV	9	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM	2.5" CAL.	B&B
QBC	3	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	B&B
QPH	10	QUERCUS PHELLOS	WILLOW OAK	2.5" CAL.	B&B
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	2.5" CAL.	B&B
UP	11	ULMUS AMERICANA `PRINCETON`	AMERICAN ELM	2.5" CAL.	B&B
EVERGREEN TREES					
INS	15	ILEX X `NELLIE R. STEVENS`	NELLIE R. STEVENS HOLLY	8` HT.	B&B
PGL	21	PICEA GLAUCA	WHITE SPRUCE	8` HT.	B&B
PIAB	34	PICEA ABIES	NORWAY SPRUCE	8` HT.	B&B
PM	20	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	8` HT.	B&B
PO	20	PICEA OMORIKA	SERBIAN SPRUCE	8` HT.	B&B
PS	14	PINUS STROBUS	WHITE PINE	8` HT.	B&B
TOG	16	THUJA OCCIDENTALIS `GREEN GIANT`	GREEN GIANT ARBORVITAE	8` HT.	B&B
ORNAMENTAL TREES					
AGB	14	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	2-2 1/2" CAL.	B&B
CC	26	CERCIS CANADENSIS	EASTERN REDBUD	2-2 1/2" CAL.	B&B
CFC	7	CORNUS FLORIDA 'CHEROKEE CHIEF'	CHEROKEE CHIEF DOGWOOD	2-2 1/2" CAL.	B&B
CFCP	17	CORNUS FLORIDA 'CHEROKEE PRINCESS'	CHEROKEE PRINCESS DOGWOOD	2-2 1/2" CAL.	B&B
MV	6	MAGNOLIA VIRGINIANA	SWEET BAY	8-10`	B&B
SHRUBS					
AAB	61	ARONIA ARBUTIFOLIA `BRILLIANTISSIMA`	BRILLIANT RED CHOKEBERRY	3-4`	B&B
CAH	39	CLETHRA ALNIFOLIA `HUMMINGBIRD`	HUMMINGBIRD SUMMERSWEET (DWARF)	24-30"	CONTAINER
CSF	62	CORNUS SERICEA 'FARROW'	ARCTIC FIRE RED TWIG DOGWOOD	24-30"	CONTAINER
IGS	63	ILEX GLABRA `SHAMROCK`	SHAMROCK INKBERRY	24-30"	CONTAINER
IMBB	3	ILEX X MESERVEAE `BLUE BOY`	BLUE BOY HOLLY	24-30"	CONTAINER
IMBG	20	ILEX X MESERVEAE `BLUE GIRL`	BLUE GIRL HOLLY	24-30"	CONTAINER
IV	46	ITEA VIRGINICA `HENRY`S GARNET`	HENRY`S GARNET SWEETSPIRE	24-30"	CONTAINER
IVJD	4	ILEX VERTICILLATA `JIM DANDY`	JIM DANDY WINTERBERRY	30-36"	CONTAINER
IVRS	38	ILEX VERTICILLATA `RED SPRITE`	RED SPRITE WINTERBERRY	18-24"	CONTAINER
JHIB	124	JUNIPERUS HORIZONTALIS `MONBER`	ICEE BLUE JUNIPER	15-18" SPRD	CONTAINER
JO	40	JUNIPERUS VIRGINIANA `GREY OWL`	GREY OWL JUNIPER	15-18" SPRD	CONTAINER
LB	22	LINDERA BENZOIN	SPICEBUSH	30-36"	CONTAINER
RAG	149	RHUS AROMATICA `GRO-LOW`	GRO-LOW FRAGRANT SUMAC	15-18"	CONTAINER
VR	36	VIBURNUM RHYTIDOPHYLLUM	LEATHERLEAF VIBURNUM	3-4`	B&B
GRASSES					
PVN	87	PANICUM VIRGATUM `NORTH WIND`	NORTHWIND SWITCH GRASS	1 GAL.	CONTAINER
SSO	68	SCHIZACHYRIUM SCOPARIUM `STANDING OVATION`	STANDING OVATION LITTLE BLUESTEM GRASS	1 GAL.	CONTAINER

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ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

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JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
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J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LANDSCAPE DETAILS

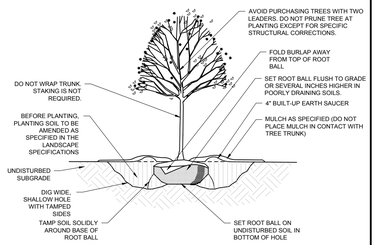
SHEET NUMBER:

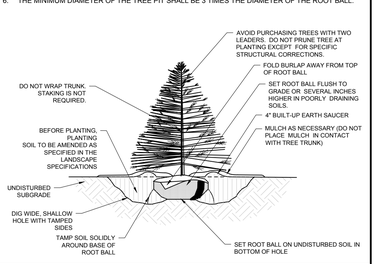
L-105

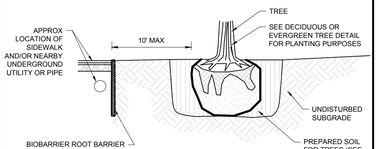
ORG. DATE - 12/19/2025

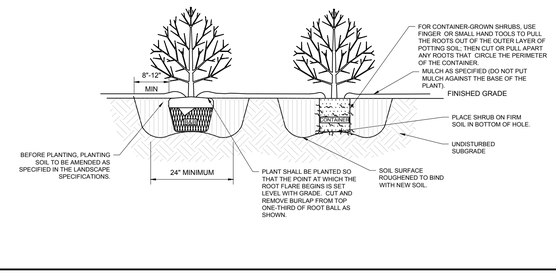
R:\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-LLGT-PAC250142.00-0C----->LAYOUT: L-105 LSCP DTLS

JB









NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD OR CUT BURLAP BACK FROM TOP 1/3 OF ROOT BALL.
3. PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5. THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE SCARIFIED TO AVOID MATTING OF SOIL.
6. THE MINIMUM DIAMETER OF THE TREE PIT SHALL BE 3 TIMES THE DIAMETER OF THE ROOT BALL.

DECIDUOUS TREE PLANTING

NOT TO SCALE

(PA-L040101 - 11/2023)

NOTES:
1. ANY TREE INSTALLED WITHIN 10 FT OF NEW CONCRETE SIDEWALKS AND/OR NEARBY UNDERGROUND UTILITY OR PIPE SHOULD BE INSTALLED WITH BIOBARRIER ROOT BARRIER FABRIC AS SHOWN.
2. TREES SHALL BE INSTALLED ACCORDING TO THE APPROPRIATE PLANTING DETAIL.

BIOBARRIER ROOT BARRIER

NOT TO SCALE

(PA-L049903 - 11/2023)

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 1/3 FROM ROOT BALL.
3. PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5. THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE SCARIFIED TO AVOID MATTING OF SOIL.
6. THE MINIMUM DIAMETER OF THE TREE PIT SHALL BE 3 TIMES THE DIAMETER OF THE ROOT BALL.

EVERGREEN TREE PLANTING

NOT TO SCALE

(PA-L040102 - 11/2023)

SHRUB PLANTING

NOT TO SCALE

(PA-L040108 - 11/2023)

LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:

THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS

A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 5.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - LAWN AREAS SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. FOR SOIL BED PREPARATIONS, REFER TO ITEM 8 BELOW.
- LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
- SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

E. FERTILIZER
- FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
- FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

F. PLANT MATERIAL
- ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.2), LATEST EDITION, AS PUBLISHED BY AMERICAN HORT (FORMERLY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION).
- IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
- PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
- TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1¼", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
- ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
- CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
- SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
- TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES

A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS

A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION

A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS

A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
- TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
- TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
- MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING

A. UNLESS OTHERWISE CONTRACTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING

A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AND LAWN AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.A.]):
- 20 POUNDS 'GRO-POWER' OR APPROVED EQUAL SOIL CONDITIONER/FERTILIZER
- 20 POUNDS 'NITRO-FORM' (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING

A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. 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. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
- PLANTS: MARCH 15TH TO DECEMBER 15TH
- LAWN AND MEADOW SEED MIXES: MARCH 1ST TO MAY 15TH OR BETWEEN AUGUST 15TH AND OCTOBER 15TH

PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM
BETULA VARIETIES
CARPINUS VARIETIES
CRATAEGUS VARIETIES
KOELREUTERIA
LIQUIDAMBAR STYRACIFLUA
LIRIODENDRON TULIPIFERA
PLATANUS X ACERIFOLIA
POPULUS VARIETIES
PRUNUS VARIETIES
PYRUS VARIETIES
QUERCUS VARIETIES
TILIA TOMENTOSA
ZELKOVA VARIETIES

H. PLANTING PITS SHALL BE DUG WITH LEVEL OR CONVEX BOTTOMS, WITH THE WIDTH THREE TIMES THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
- 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME
- 3 PARTS TOPSOIL BY VOLUME
- 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
  - 2 TABLETS PER 1 GALLON PLANT
  - 3 TABLETS PER 5 GALLON PLANT
  - 4 TABLETS PER 15 GALLON PLANT
  - LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK

I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE. NO PRUNING SHALL BE CONDUCTED WITHIN THE FIRST YEAR OF PLANTING.

L. GROUND COVER AREAS SHALL RECEIVE A ¼" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)

A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. (SEE SPECIFICATION 2.F. ABOVE)

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10TH AND JUNE 30TH.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING

A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE

A. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED "DEAD OR DYING" IF MORE THAN 30% OF ITS BRANCHES ARE DEAD.

C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

D. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP

A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

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PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP-CALL BEFORE YOU DIG!

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
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THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

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J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

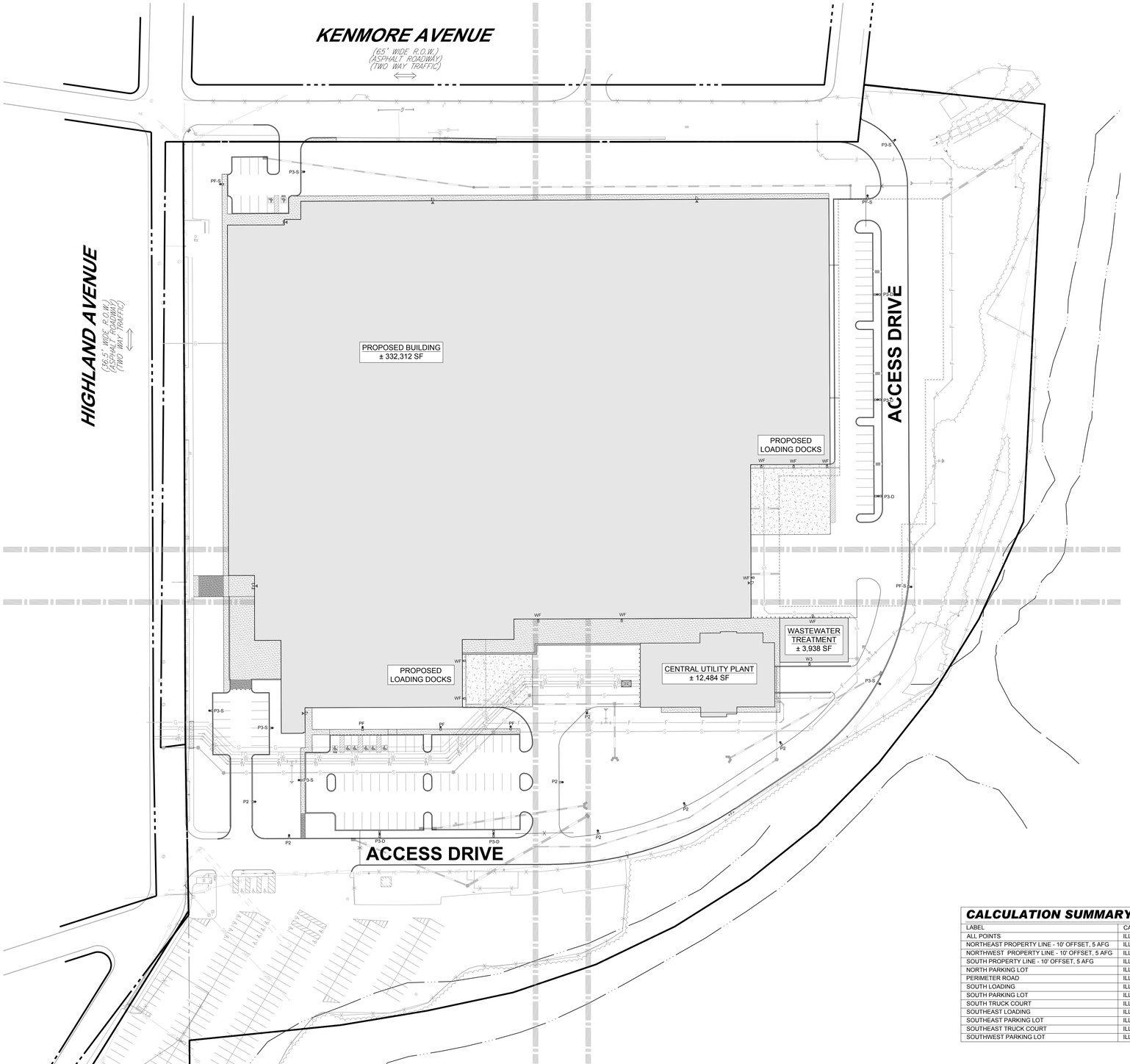
SHEET TITLE:

LANDSCAPE DETAILS

SHEET NUMBER:

L-106

ORG. DATE - 12/19/2025



GENERAL LIGHTING NOTES:

1. THE GENERAL NOTES, FOUND ON THE NOTES PAGE OF THIS PLAN SET, MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE ELECTRICAL CONTRACTOR MUST BECOME FAMILIAR WITH, REFER TO AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY.
2. THE ELECTRICAL CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THIS LIGHTING PLAN, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL APPLICABLE AGENCY AND GOVERNMENTAL REGULATIONS. THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY DIFFER FROM THE VALUES DEPICTED ON THIS PLAN DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, MAINTENANCE, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES, EXISTING AMBIENT LIGHT SOURCE ON AND OFF SITE, AND OTHER RELATED VARIABLE FIELD CONDITIONS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN FOOTCANDLES (FC).
4. THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES. POWER SYSTEM, CONDUITS, WIRING, CONTROLS, AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, ELECTRICAL ENGINEER'S AND/OR ELECTRICAL CONTRACTOR'S RESPONSIBILITY, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) AND ALL APPLICABLE BUILDING AND LOCAL ELECTRICAL CODES.
5. THE ELECTRICAL CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURE(S) TO THE PROFESSIONAL OF RECORD'S ATTENTION, PRIOR TO THE START OF CONSTRUCTION.
6. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL LIGHTING IS INSTALLED PER THIS LIGHTING PLAN, INCLUDING THE LOCATION, ORIENTATION, SHIELDING, AND/OR ROTATED OPTICS IN ORDER TO ACHIEVE THE LIGHTING LEVELS DEPICTED ON THIS PLAN. EXISTING POLES AND FOUNDATIONS ARE NOT TO BE REUSED.
7. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND OTHER MAINTENANCE SPECIFIED BY THE MANUFACTURER. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN.
8. THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON DATA PROVIDED BY THE MANUFACTURER FOLLOWING IES LM-80-21 TESTING (OR MOST RECENT EDITION). THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF LISTED IN THE LUMINAIRE SCHEDULE.
9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO BOHLER FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE LUMINAIRE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC STUDY WILL BE REJECTED.
10. LIGHT POLE FOUNDATIONS ARE SHOWN ON THE PLAN IN THE INTENDED LOCATION BASED ON THE LIGHTING CALCULATIONS, UNLESS OTHERWISE NOTED. LIGHT SYMBOLS ARE SHOWN LARGER THAN ACTUAL SIZE, HOWEVER FOUNDATION SIZE IS SHOWN AT ACTUAL SIZE.

LIGHTING COMPLIANCE CHART

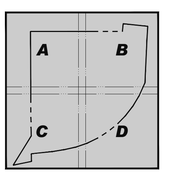
SECTION	REQUIREMENT	COMPLIANCE
ZONING: 2601.H. LIGHTING STANDARDS	2. MINIMUM PARKING LIGHTING. ALL ON-LOT PUBLIC PARKING AREAS, AISLES, AND ACCESS WAYS FOR ANY NONRESIDENTIAL USE SHALL BE PROVIDED WITH A MINIMUM OF ONE HALF (.5) FOOT CANDLES OF LIGHT AT ANY POINT ON THE GROUND.	COMPLIES
	3. MAXIMUM LIGHTING SPILLOVER. LIGHTING SPILLOVER ONTO NONRESIDENTIAL PROPERTIES OR STREET RIGHTS-OF-WAY SHALL NOT EXCEED 1 FOOT CANDLE OF LIGHT AT A DISTANCE MEASURED TEN FEET (10') FROM THE PROPERTY LINE, MEASURED AT A HEIGHT FIVE FEET (5') ABOVE GRADE. LIGHTING SPILLOVER ONTO RESIDENTIAL PROPERTIES SHALL NOT EXCEED .5 FOOT CANDLES, AT A DISTANCE MEASURED TEN FEET (10') FROM THE PROPERTY LINE, MEASURED AT A HEIGHT FIVE FEET (5') ABOVE GRADE. NO LIGHT SHALL SHINE DIRECTLY FROM A LIGHT SOURCE ONTO THE GROUND, INTO THE WINDOWS, OR ONTO IMPROVEMENTS OF AN ABUTTING RESIDENTIAL PROPERTY.	COMPLIES
	4. LIGHTING STANDARDS IN PARKING AREAS SHALL NOT BE LOCATED FARTHER THAN 200' APART, AND MAY NOT BE TALLER THAN 18' IN HEIGHT. NO PEDESTRIAN LIGHTING STANDARD MAY EXCEED 14' IN HEIGHT.	COMPLIES
	5. IN EVERY DISTRICT, ALL LIGHTING SHALL BE ARRANGED SO THAT THE LIGHT SOURCE IS NOT VISIBLE FROM STREETS OR HIGHWAYS AND THE LIGHT SOURCE DOES NOT PRODUCE HAZARDOUS INTERFERENCE OF ANY KIND.	COMPLIES
	6. ALL LIGHTING SHALL USE A FULL-CUTOFF DESIGN, SO THAT THE POINT SOURCE OF LIGHTS SHALL NOT BE VISIBLE FROM ANY LOCATION OFF-PREMISES.	COMPLIES
	7. LIGHTS AND REFLECTORS PERMITTED IN CONJUNCTION WITH EXTERIOR SIGNS SHALL BE EQUIPPED WITH RESTRAINING HOODS OR SHIELDS TO CONCENTRATE THE ILLUMINATION UPON THE AREA OF THE SIGN, AND TO PREVENT THE LIGHT SOURCE FROM BEING VISIBLE FROM STREETS OR ABUTTING PROPERTIES.	COMPLIES
	8. LIGHTING DESIGN. IT IS RECOMMENDED THAT LIGHTING BE DESIGNED TO BE COMPATIBLE WITH THE REST OF THE DEVELOPMENT'S ARCHITECTURE AND MATERIALS.	COMPLIES
	9. SETBACKS. LIGHTING SHALL BE SET BACK 20' FROM ADJACENT RESIDENTIAL DISTRICTS OR USES.	COMPLIES
	10. LIGHTING LOCATED WITHIN A SETBACK AREA THAT LIES ADJACENT TO A RESIDENTIAL DISTRICT OR USE SHALL BE NO HIGHER THAN TEN FEET (10').	COMPLIES

CALCULATION SUMMARY

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
ALL POINTS	ILLUMINANCE	Fc	0.32	4.9	0.0	N.A.	N.A.
NORTHEAST PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.01	0.5	0.0	N.A.	N.A.
NORTHWEST PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.01	0.1	0.0	N.A.	N.A.
SOUTH PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.00	0.1	0.0	N.A.	N.A.
NORTH PARKING LOT	ILLUMINANCE	Fc	1.59	2.9	0.8	1.99	3.63
PERIMETER ROAD	ILLUMINANCE	Fc	1.58	4.2	0.5	3.16	8.40
SOUTH LOADING	ILLUMINANCE	Fc	3.21	3.7	2.5	1.28	1.48
SOUTH PARKING LOT	ILLUMINANCE	Fc	1.40	4.1	0.5	2.80	8.20
SOUTH TRUCK COURT	ILLUMINANCE	Fc	1.33	3.2	0.6	2.22	5.33
SOUTHEAST LOADING	ILLUMINANCE	Fc	3.28	4.6	2.0	1.64	2.30
SOUTHEAST PARKING LOT	ILLUMINANCE	Fc	1.62	4.5	0.5	3.24	9.00
SOUTHEAST TRUCK COURT	ILLUMINANCE	Fc	1.31	3.3	0.5	2.62	6.60
SOUTHWEST PARKING LOT	ILLUMINANCE	Fc	2.09	3.0	0.7	2.99	4.29

LUMINAIRE SCHEDULE

LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LUMINAIRE LUMENS	LUMINAIRE LUMENS	LLF	BUG RATING	DESCRIPTION	POLE
P2	7	18'-0" AFG	SINGLE	9650	9650	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 2, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T2M-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
P3-D	5	18'-0" AFG	BACK-BACK	9762	9762	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM28AS)
P3-S	6	18'-0" AFG	SINGLE	8462	8462	0.900	B1-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3 WITH HOUSESIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA-HS)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
PF	3	18'-0" AFG	SINGLE	9976	9976	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
PF-S	3	18'-0" AFG	SINGLE	8367	8367	0.900	B1-U0-G2	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM WITH HOUSESIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-RPA-HS)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
W3	1	18'-0" AFF	SINGLE	9762	9762	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-WBA)	----------
WF	9	18'-0" AFF	SINGLE	9976	9976	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-WBA)	----------



KEY MAP
SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

60 30 15 0 60
SCALE: 1" = 60'

BOHLER™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
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SUSTAINABILITY SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS. LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. WWW.PA1CALL.ORG

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: PAC250142.00-0C
DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVIL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

BOHLER™
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

OVERALL LIGHTING PLAN

SHEET NUMBER:

L-200

ORG. DATE - 12/19/2025

R:\2025\PAC250142.00\CAD\SHEAVING\SPLAN SETS\CIVIL SITE PLANS\P-CIVIL-LLGT\PAC250142.00-0C-----LAYOUT L-200 OA LGHT
JB

LUMINAIRE SCHEDULE

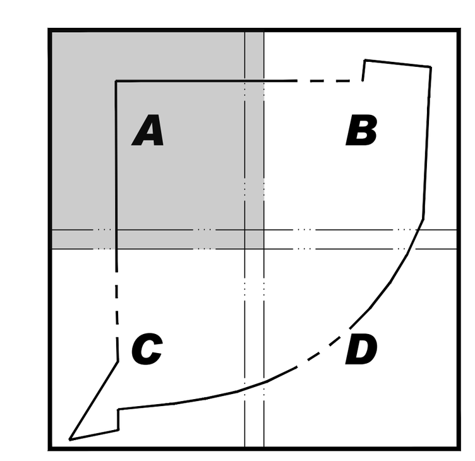
LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LUMINAIRE LUMENS	LUMINAIRE LUMENS	LLF	BUG RATING	DESCRIPTION	POLE
P2	7	18'-0" AFG	SINGLE	9650	9650	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 2, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T2M-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
P3-D	5	18'-0" AFG	BACK-BACK	9762	9762	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM28AS)
P3-S	6	18'-0" AFG	SINGLE	8462	8462	0.900	B1-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3 WITH HOUSESIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA-HS)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
PF	3	18'-0" AFG	SINGLE	9976	9976	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
PF-S	3	18'-0" AFG	SINGLE	8367	8367	0.900	B1-U0-G2	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM WITH HOUSESIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-RPA-HS)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
W3	1	18'-0" AFF	SINGLE	9762	9762	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-WBA)	----------
WF	9	18'-0" AFF	SINGLE	9976	9976	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-WBA)	----------

GENERAL LIGHTING NOTES:

1. THE GENERAL NOTES, FOUND ON THE NOTES PAGE OF THIS PLAN SET, MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE ELECTRICAL CONTRACTOR MUST BECOME FAMILIAR WITH, REFER TO AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY.
2. THE ELECTRICAL CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THIS LIGHTING PLAN, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL APPLICABLE AGENCY AND GOVERNMENTAL REGULATIONS. THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY DIFFER FROM THE VALUES DEPICTED ON THIS PLAN DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, MAINTENANCE, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES, EXISTING AMBIENT LIGHT SOURCE ON AND OFF SITE, AND OTHER RELATED VARIABLE FIELD CONDITIONS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN FOOTCANDLES (FC).
4. THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES. POWER SYSTEM, CONDUITS, WIRING, CONTROLS, AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, ELECTRICAL ENGINEER'S AND/OR ELECTRICAL CONTRACTOR'S RESPONSIBILITY, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) AND ALL APPLICABLE BUILDING AND LOCAL ELECTRICAL CODES.
5. THE ELECTRICAL CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURE(S) TO THE PROFESSIONAL OF RECORD'S ATTENTION, PRIOR TO THE START OF CONSTRUCTION.
6. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL LIGHTING IS INSTALLED PER THIS LIGHTING PLAN, INCLUDING THE LOCATION, ORIENTATION, SHIELDING, AND/OR ROTATED OPTICS IN ORDER TO ACHIEVE THE LIGHTING LEVELS DEPICTED ON THIS PLAN. EXISTING POLES AND FOUNDATIONS ARE NOT TO BE REUSED.
7. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND OTHER MAINTENANCE SPECIFIED BY THE MANUFACTURER. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN.
8. THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON DATA PROVIDED BY THE MANUFACTURER FOLLOWING IES LM-80-21 TESTING (OR MOST RECENT EDITION). THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF LISTED IN THE LUMINAIRE SCHEDULE.
9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO BOHLER FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE LUMINAIRE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC STUDY WILL BE REJECTED.
10. LIGHT POLE FOUNDATIONS ARE SHOWN ON THE PLAN IN THE INTENDED LOCATION BASED ON THE LIGHTING CALCULATIONS, UNLESS OTHERWISE NOTED. LIGHT SYMBOLS ARE SHOWN LARGER THAN ACTUAL SIZE, HOWEVER FOUNDATION SIZE IS SHOWN AT ACTUAL SIZE.

CALCULATION SUMMARY

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
ALL POINTS	ILLUMINANCE	Fc	0.32	4.9	0.0	N.A.	N.A.
NORTHEAST PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.01	0.5	0.0	N.A.	N.A.
NORTHWEST PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.01	0.1	0.0	N.A.	N.A.
SOUTH PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.00	0.1	0.0	N.A.	N.A.
NORTH PARKING LOT	ILLUMINANCE	Fc	1.59	2.9	0.8	1.99	3.63
PERIMETER ROAD	ILLUMINANCE	Fc	1.58	4.2	0.5	3.16	8.40
SOUTH LOADING	ILLUMINANCE	Fc	3.21	3.7	2.5	1.28	1.48
SOUTH PARKING LOT	ILLUMINANCE	Fc	1.40	4.1	0.5	2.80	8.20
SOUTH TRUCK COURT	ILLUMINANCE	Fc	1.33	3.2	0.6	2.22	5.33
SOUTHEAST LOADING	ILLUMINANCE	Fc	3.28	4.6	2.0	1.64	2.30
SOUTHEAST PARKING LOT	ILLUMINANCE	Fc	1.62	4.5	0.5	3.24	9.00
SOUTHEAST TRUCK COURT	ILLUMINANCE	Fc	1.31	3.3	0.5	2.62	6.60
SOUTHWEST PARKING LOT	ILLUMINANCE	Fc	2.09	3.0	0.7	2.99	4.29



KEY MAP

SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

30 15 7.5 0 30

SCALE: 1" = 30'

BOHLER//

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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WWW.PA1CALL.ORG

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PROJECT No.: PAC250142.00-0C
DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

BOHLER//
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LIGHTING PLAN 'A'

SHEET NUMBER:

L-201

ORG. DATE - 12/19/2025

LUMINAIRE SCHEDULE

LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LUMINAIRE LUMENS	LUMINAIRE LUMENS	LLF	BUG RATING	DESCRIPTION	POLE
P2	7	18'-0" AFG	SINGLE	9650	9650	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 2, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T2M-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
P3-D	5	18'-0" AFG	BACK-BACK	9762	9762	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM28AS)
P3-S	6	18'-0" AFG	SINGLE	8462	8462	0.900	B1-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3 WITH HOUSESIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA-HS)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
PF	3	18'-0" AFG	SINGLE	9976	9976	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
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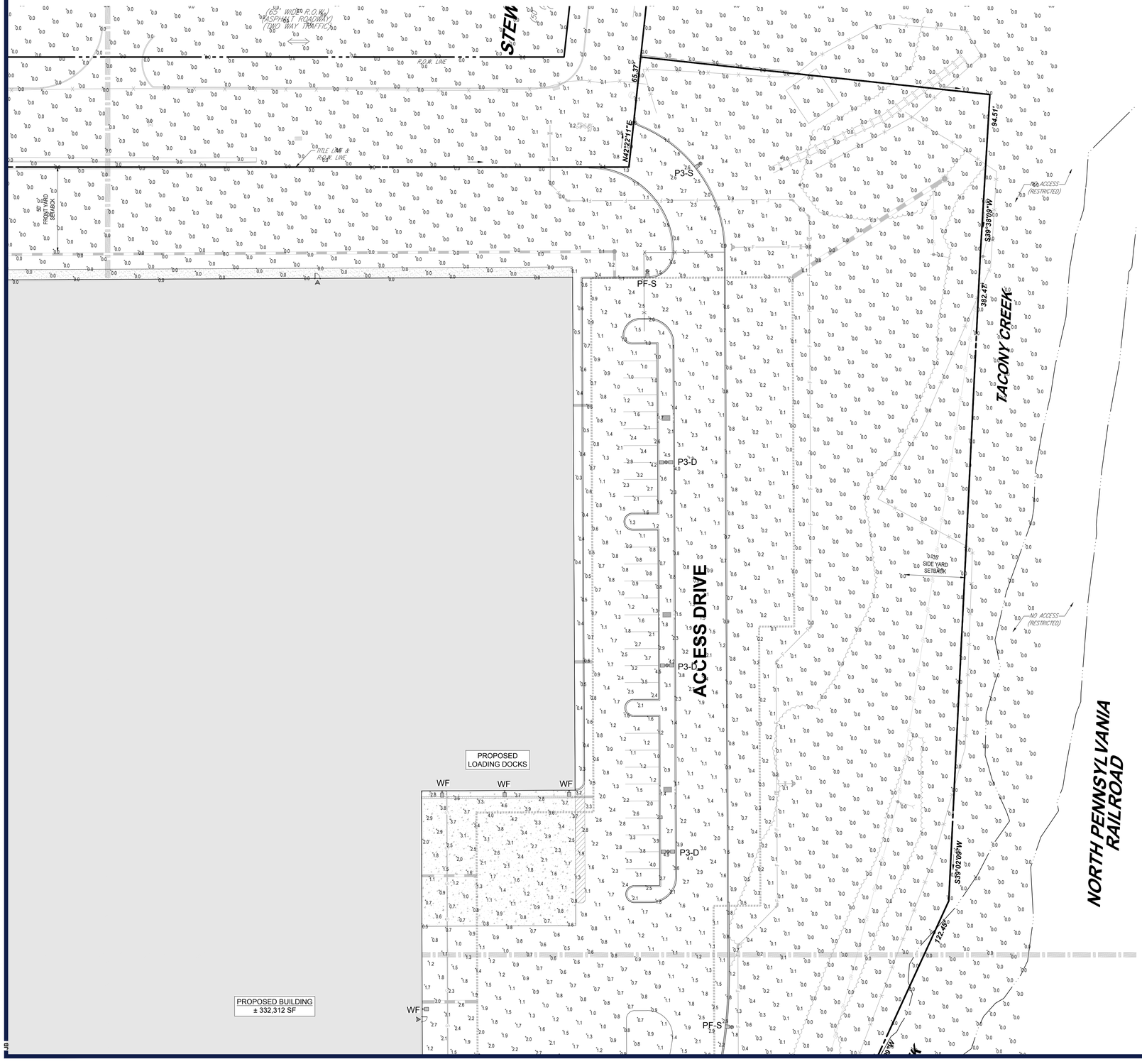

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CALCULATION SUMMARY

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NORTHWEST PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.01	0.1	0.0	N.A.	N.A.
SOUTH PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.00	0.1	0.0	N.A.	N.A.
NORTH PARKING LOT	ILLUMINANCE	Fc	1.59	2.9	0.8	1.99	3.63
PERIMETER ROAD	ILLUMINANCE	Fc	1.58	4.2	0.5	3.16	8.40
SOUTH LOADING	ILLUMINANCE	Fc	3.21	3.7	2.5	1.28	1.48
SOUTH PARKING LOT	ILLUMINANCE	Fc	1.40	4.1	0.5	2.80	8.20
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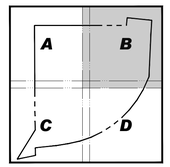
SOUTHEAST PARKING LOT	ILLUMINANCE	Fc	1.62	4.5	0.5	3.24	9.00
SOUTHEAST TRUCK COURT	ILLUMINANCE	Fc	1.31	3.3	0.5	2.62	6.60
SOUTHWEST PARKING LOT	ILLUMINANCE	Fc	2.09	3.0	0.7	2.99	4.29



KEY MAP
SCALE 1" = 600'

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

30 15 7.5 0 30
SCALE: 1" = 30'

BOHLER™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABILITY SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. WWW.PA1CALL.ORG

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

BOHLER™
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

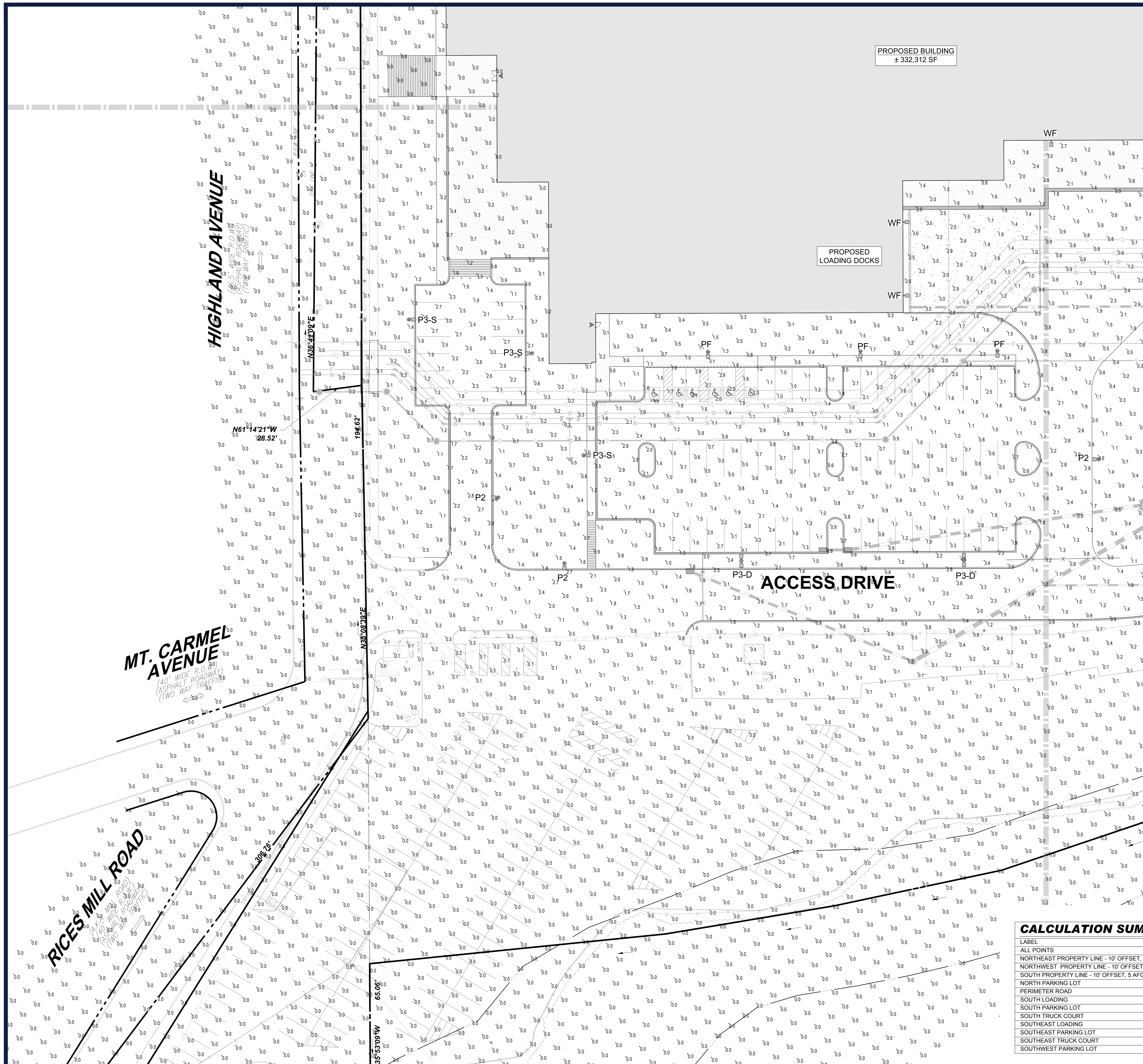
LIGHTING PLAN 'B'

SHEET NUMBER:

L-202

ORG. DATE - 12/19/2025

R:\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-LLGT-PAC250142.00-0C-----LAYOUT L-202 LGHT 'B'
JB



GENERAL LIGHTING NOTES:

1. THE GENERAL NOTES, FOUND ON THE NOTES PAGE OF THIS PLAN SET, MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE ELECTRICAL CONTRACTOR MUST BECOME FAMILIAR WITH, REFER TO AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY.
2. THE ELECTRICAL CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THIS LIGHTING PLAN, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL APPLICABLE AGENCY AND GOVERNMENTAL REGULATIONS. THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY DIFFER FROM THE VALUES DEPICTED ON THIS PLAN DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, MAINTENANCE, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES, EXISTING AMBIENT LIGHT SOURCE ON AND OFF SITE, AND OTHER RELATED VARIABLE FIELD CONDITIONS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN FOOTCANDLES (FC).
4. THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES. POWER SYSTEM, CONDUITS, WIRING, CONTROLS, AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, ELECTRICAL ENGINEER'S AND/OR ELECTRICAL CONTRACTOR'S RESPONSIBILITY, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) AND ALL APPLICABLE BUILDING AND LOCAL ELECTRICAL CODES.
5. THE ELECTRICAL CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURE(S) TO THE PROFESSIONAL OF RECORD'S ATTENTION, PRIOR TO THE START OF CONSTRUCTION.
6. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL LIGHTING IS INSTALLED PER THIS LIGHTING PLAN, INCLUDING THE LOCATION, ORIENTATION, SHIELDING, AND/OR ROTATED OPTICS IN ORDER TO ACHIEVE THE LIGHTING LEVELS DEPICTED ON THIS PLAN. EXISTING POLES AND FOUNDATIONS ARE NOT TO BE REUSED.
7. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND OTHER MAINTENANCE SPECIFIED BY THE MANUFACTURER. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN.
8. THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON DATA PROVIDED BY THE MANUFACTURER FOLLOWING IES LM-80-21 TESTING (OR MOST RECENT EDITION). THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF LISTED IN THE LUMINAIRE SCHEDULE.
9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO BOHLER FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE LUMINAIRE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC STUDY WILL BE REJECTED.
10. LIGHT POLE FOUNDATIONS ARE SHOWN ON THE PLAN IN THE INTENDED LOCATION BASED ON THE LIGHTING CALCULATIONS, UNLESS OTHERWISE NOTED. LIGHT SYMBOLS ARE SHOWN LARGER THAN ACTUAL SIZE, HOWEVER FOUNDATION SIZE IS SHOWN AT ACTUAL SIZE.

CALCULATION SUMMARY

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
ALL POINTS	ILLUMINANCE	Fc	0.32	4.9	0.0	N.A.	N.A.
NORTHEAST PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.01	0.5	0.0	N.A.	N.A.
NORTHWEST PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.01	0.1	0.0	N.A.	N.A.
SOUTH PROPERTY LINE - 10' OFFSET, 5 AFG	ILLUMINANCE	Fc	0.00	0.1	0.0	N.A.	N.A.
NORTH PARKING LOT	ILLUMINANCE	Fc	1.59	2.9	0.8	1.99	3.63
PERIMETER ROAD	ILLUMINANCE	Fc	1.58	4.2	0.5	3.16	8.40
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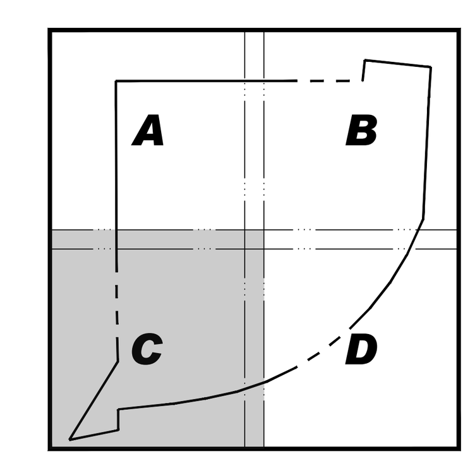
LUMINAIRE SCHEDULE

LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LUMINAIRE LUMENS	LUMINAIRE LUMENS	LLF	BUG RATING	DESCRIPTION	POLE
P2	7	18'-0" AFG	SINGLE	9650	9650	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 2, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T2M-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
P3-D	5	18'-0" AFG	BACK-BACK	9762	9762	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM28AS)
P3-S	6	18'-0" AFG	SINGLE	8462	8462	0.900	B1-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3 WITH HOUSESIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA-HS)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
PF	3	18'-0" AFG	SINGLE	9976	9976	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
PF-S	3	18'-0" AFG	SINGLE	8367	8367	0.900	B1-U0-G2	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM WITH HOUSESIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-RPA-HS)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
W3	1	18'-0" AFF	SINGLE	9762	9762	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-WBA)	----------
WF	9	18'-0" AFF	SINGLE	9976	9976	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-WBA)	----------



KEY MAP
SCALE 1" = 600'

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30 15 7.5 0 30
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BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
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WWW.PA1CALL.ORG

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PROJECT No.: PAC250142.00-0C
DRAWN BY: JB
CHECKED BY: AS
DATE: 12/19/2025
CAD I.D.: P-CIVL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS ENGINEERING, INC.

PROPOSED INDUSTRIAL REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

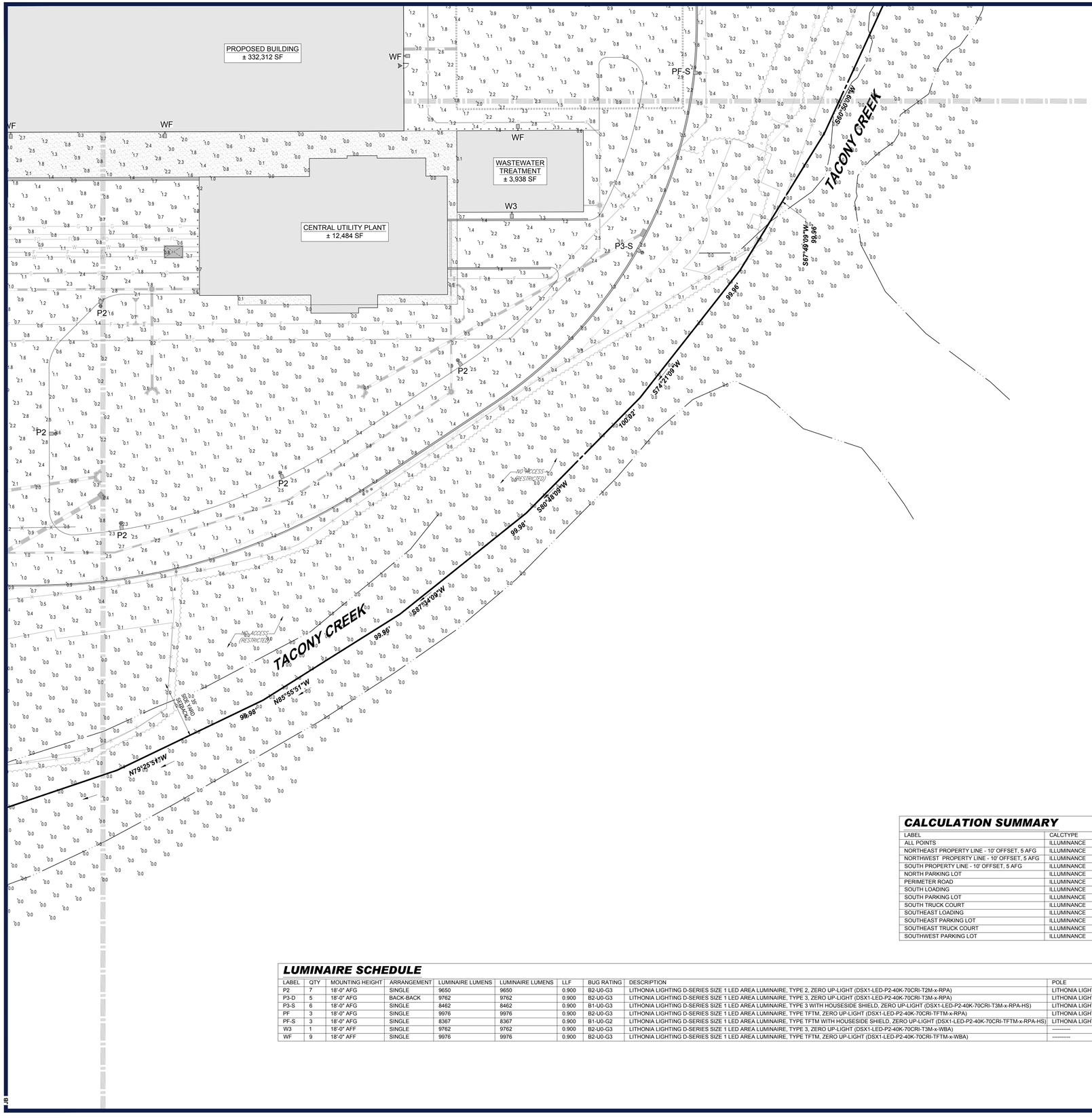
SHEET TITLE:

LIGHTING PLAN 'C'

SHEET NUMBER:

L-203

ORG. DATE - 12/19/2025



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SOUTH PARKING LOT	ILLUMINANCE	Fc	1.40	4.1	0.5	2.80	8.20
SOUTH TRUCK COURT	ILLUMINANCE	Fc	1.33	3.2	0.6	2.22	5.33
SOUTHEAST LOADING	ILLUMINANCE	Fc	3.28	4.6	2.0	1.64	2.30
SOUTHEAST PARKING LOT	ILLUMINANCE	Fc	1.62	4.5	0.5	3.24	9.00
SOUTHEAST TRUCK COURT	ILLUMINANCE	Fc	1.31	3.3	0.5	2.62	6.60
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LUMINAIRE SCHEDULE

LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LUMINAIRE LUMENS	LUMINAIRE LUMENS	LLF	BUG RATING	DESCRIPTION	POLE
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P3-D	5	18'-0" AFG	BACK-BACK	9762	9762	0.900	B2-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM28AS)
P3-S	6	18'-0" AFG	SINGLE	8462	8462	0.900	B1-U0-G3	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3 WITH HOUSESIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-T3M-x-RPA-HS)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
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PF-S	3	18'-0" AFG	SINGLE	8367	8367	0.900	B1-U0-G2	LITHONIA LIGHTING D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE TFTM WITH HOUSESIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P2-40K-70CRI-TFTM-x-RPA-HS)	LITHONIA LIGHTING ROUND STRAIGHT STEEL POLE, 15'-6" LENGTH (RSS-15-6-4B-DM19AS)
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KEY MAP
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REVISIONS

REV	DATE	COMMENT	DRAWN BY CHECKED BY

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
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PROJECT No.:	PAC250142.00-0C
DRAWN BY:	JB
CHECKED BY:	AS
DATE:	12/19/2025
CAD I.D.:	P-CIVL-LLGT

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

FOR

PRECIS
ENGINEERING, INC.

PROPOSED INDUSTRIAL
REDEVELOPMENT

1900 KENMORE AVENUE
JENKINTOWN, PA 19046
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
APN 30-00-35584-00-8

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

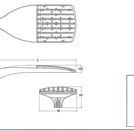
SHEET TITLE:

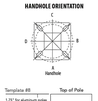
LIGHTING PLAN 'D'

SHEET NUMBER:
L-204

ORG. DATE - 12/19/2025

R:\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-LLGT-PAC250142.00-0C----->LAYOUT: L-204 LGHT 'D'
JB





D-Series Size 1
LED Area Luminaire

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	0.69 ft² (0.06 m²)
Length:	32.71" (83.1 cm)
Width:	14.26" (36.2 cm)
Height H1:	7.88" (20.0 cm)
Height H2:	2.73" (6.9 cm)
Weight:	34 lbs (15.4 kg)

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Design Select options indicated by this color background.

Ordering Information
EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

Ordering Information
Accessories

Shield Accessories
External Glare Shield (EGSR)
House Side Shield (HS)

Drilling
HANDHOLE ORIENTATION

Tenon Mounting Slipfitter

DSX1 Area Luminaire - EPA

Photometric Diagrams

Performance Data
Lumen Ambient Temperature (LAT) Multipliers
Electrical Load
Projected LED Lumen Maintenance
FAO Dimming Settings
LED Color Temperature / Color Rendering Multipliers
Motion Sensor Default Settings
Controls Options

Performance Data
Lumen Output

Dimensions

nLight Control - Sensor Coverage and Settings
nLight Sensor Coverage Pattern
NLTAIR2 PIRHN

FEATURES & SPECIFICATIONS

NOTE:
THIS DETAIL SERVES AS A GUIDELINE ONLY. CONTRACTOR SHALL ENSURE DESIGN IS PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS, AND SITE-SPECIFIC SOIL PARAMETERS. SOME SITE LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING ASIDE FROM THE LIGHT FIXTURE INCLUDING (BUT NOT LIMITED TO) CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

CONCRETE LIGHT POLE BASE

NOT TO SCALE
(BE-L020101 - 01/2025)

BOHLER//™

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

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J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LIGHTING DETAILS

SHEET NUMBER:

L-205

ORG. DATE - 12/19/2025

R:\2025\PAC250142.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-LLGT-PAC250142.00-0C----->LAYOUT: L-205 LGHT DTLS
JB