

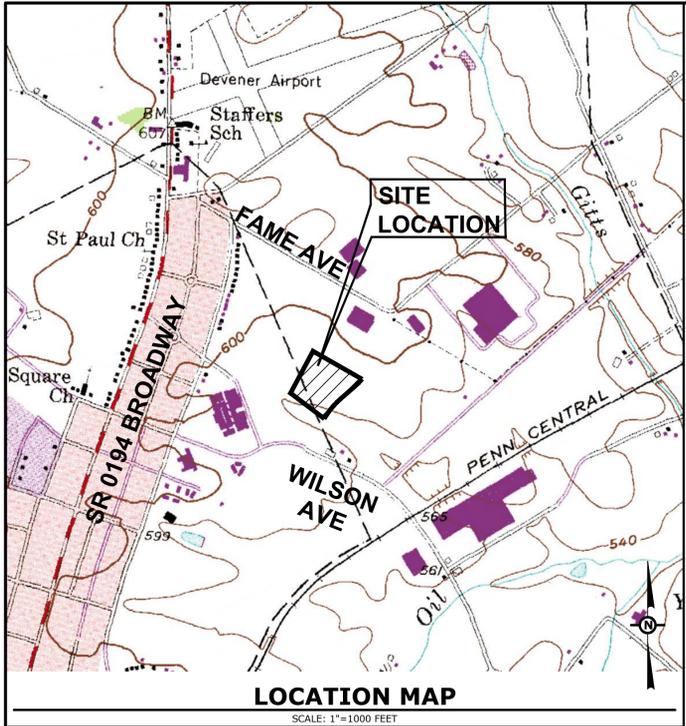
NO.	DATE	DESCRIPTION
1	7/2/2021	PER TOWNSHIP COMMENTS
2	3/23/2022	REVISED PER DEP COMMENTS DATED MARCH 11, 2022
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PLAN TYPE:  
**COVER SHEET**

# PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

# 5 INDUSTRIAL DRIVE

## FOR ELSNER ENGINEERING PENN TOWNSHIP YORK COUNTY, PENNSYLVANIA



### UTILITY INFORMATION

THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ACT 287 OF 1974 AS AMENDED BY ACT 187 OF 1996 FOR NOTIFICATION OF UTILITIES BEFORE EXCAVATION IN CONTRACT AREA. THE UNDERGROUND UTILITIES LOCATION CALL NUMBER IS 1-800-242-1776.  
PA ONE-CALL SERIAL NUMBER: 20211042416 - HANOVER BOROUGH  
20211042417 - PENN TOWNSHIP  
PA ONE-CALL SERIAL NUMBER DATE: APRIL 14, 2021

THE FOLLOWING UTILITY FACILITY OWNERS WERE NOTIFIED BY THE PA ONE-CALL SYSTEM, INC.

- |  |  |
|--|--|
| HANOVER BOROUGH<br>20211042416   | PENN TOWNSHIP<br>20211042417   |
| COLUMBIA GAS OF PA INC<br>1600 DUBLIN RD<br>COLUMBUS, OH 43215<br>CONTACT: LISA COLLINS<br>EMAIL: LDUGAN@NISOURCE.COM  | CROWN CASTLE<br>1500 CORPORATE DR<br>CANTONSBURG, PA 15317<br>CONTACT: TYLER STEIN<br>EMAIL: TYLER.STEIN@CROWNCastle.COM   |
| COLUMBIA GAS TRANSMISSION ELLWOOD<br>10750 WELSH RUN RD<br>GREENCASTLE, PA 17225-9326<br>CONTACT: STEPHEN CARROLL<br>EMAIL: STEPHEN_CARROLL@TCENERGY.COM         | COLUMBIA GAS OF PA INC<br>1600 DUBLIN RD<br>COLUMBUS, OH 43215<br>CONTACT: LISA COLLINS<br>EMAIL: LDUGAN@NISOURCE.COM  |
| HANOVER BOROUGH<br>44 FREDERICK ST<br>HANOVER, PA 17331<br>CONTACT: DALE AULT<br>EMAIL: DAULT@HANOVERBOROUGHPA.GOV   | COLUMBIA GAS TRANSMISSION ELLWOOD<br>10750 WELSH RUN RD<br>GREENCASTLE, PA 17225-9326<br>CONTACT: STEPHEN CARROLL<br>EMAIL: STEPHEN_CARROLL@TCENERGY.COM         |
| COMCAST OF SOUTHEASTERN PENNSYLVANIA<br>C/O USIC LOCATING SERVICES INC<br>13085 HAMILTON CROSSING BLVD SUITE 200<br>CARMEI, IN. 46032<br>CONTACT: USIC PERSONNEL | COLUMBIA GAS TRANSMISSION ELLWOOD<br>10750 WELSH RUN RD<br>GREENCASTLE, PA 17225-9326<br>CONTACT: STEPHEN CARROLL<br>EMAIL: STEPHEN_CARROLL@TCENERGY.COM         |
| MET ED FIRSTENERGY<br>2800 POTTSVILLE PIKE<br>READING, PA 19605<br>CONTACT: PETE HACHEM<br>EMAIL: PHACHEM@FIRSTENERGYCORP.COM                                    | HANOVER BOROUGH<br>44 FREDERICK ST<br>HANOVER, PA 17331<br>CONTACT: DALE AULT<br>EMAIL: DAULT@HANOVERBOROUGHPA.GOV   |
| CENTURYLINK<br>250 LINCOLN WAY E<br>CHAMBERSBURG, PA 17201<br>CONTACT: TRENT ROTZ<br>EMAIL: TRENT.M.ROTZ@CENTURYLINK.COM   | COMCAST OF SOUTHEASTERN PENNSYLVANIA<br>C/O USIC LOCATING SERVICES INC<br>13085 HAMILTON CROSSING BLVD SUITE 200<br>CARMEI, IN. 46032<br>CONTACT: USIC PERSONNEL |
|  | MET ED FIRSTENERGY<br>2800 POTTSVILLE PIKE<br>READING, PA 19605<br>CONTACT: PETE HACHEM<br>EMAIL: PHACHEM@FIRSTENERGYCORP.COM                                    |
|  | PENN TOWNSHIP<br>20 WAYNE AVE<br>HANOVER, PA 17331<br>CONTACT: WILLIAM MAHONE<br>EMAIL: PENNWWTP@COMCAST.NET   |
|  | CENTURYLINK<br>250 LINCOLN WAY E<br>CHAMBERSBURG, PA 17201<br>CONTACT: TRENT ROTZ<br>EMAIL: TRENT.M.ROTZ@CENTURYLINK.COM   |

### PLAN PREPARER

KUROWSKI & WILSON, LLC  
2201 N FRONT ST, SUITE 200  
HARRISBURG, PA 17110  
TELEPHONE: 717.635.2835  
CONTACT: WILLIAM C. POMPEI, II, RLA

### SITE SURVEYOR

GROUP HANOVER, INC  
213 CARLISLE STREET  
HANOVER, PA 17331  
TELEPHONE: 717.637.3800

### CERTIFICATE OF ACCURACY (PLAN)

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SUBDIVISION PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT. \_\_\_\_\_, 20\_\_\_\_



J. MARC KUROWSKI, P.E.

### CERTIFICATE OF ACCURACY (SURVEY)

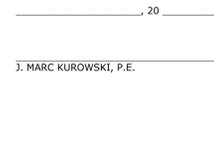
I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE BOUNDARY SURVEY SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT. \_\_\_\_\_, 20\_\_\_\_



P.L.S.

### STORM DRAINAGE PLAN CERTIFICATION

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE STORM DRAINAGE FACILITIES SHOWN AND DESCRIBED HEREON ARE DESIGNED IN CONFORMANCE WITH SECTION 609, STORMWATER MANAGEMENT ORDINANCE, PENN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE. \_\_\_\_\_, 20\_\_\_\_



J. MARC KUROWSKI, P.E.

### RECORDER OF DEEDS

RECORDED IN THE OFFICE FOR RECORDING OF DEEDS, IN AND FOR YORK COUNTY, PENNSYLVANIA, IN PLAN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_, THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. 20\_\_\_\_.

RECORDER \_\_\_\_\_  
INSTRUMENT NO. \_\_\_\_\_

### SITE DATA

PROPERTY OWNER: ELSNER ENGINEERING WORKS, INC  
PARCEL ID: 44-000-21-0005.00-0000  
DEED REFERENCE: 2656-2466  
TOTAL LOT AREA: 7.72 ACRES

### OWNER AND DEVELOPER

ADDRESS: ELSNER ENGINEERING WORKS, INC  
475 FAME AVENUE  
PO BOX 66  
HANOVER, PA 17331  
CONTACT: BERT ELSNER  
TELEPHONE: 717.637.5991

### ZONING DATA

ZONING DISTRICT: I - INDUSTRIAL ZONE (PENN TOWNSHIP)  
PROPOSED USE: INDUSTRIAL - PERMITTED

ITEM	REQUIRED	EXISTING	PROPOSED
LOT AREA	2 ACRES	7.72 ACRES	7.72 ACRES
LOT WIDTH	200 FEET	626 FEET	626 FEET
FRONT YARD SETBACK	50 FEET	N/A	140 FEET
SIDE YARD SETBACK	50 FEET	N/A	50 FEET
REAR YARD SETBACK	50 FEET	N/A	50 FEET
PARKING SETBACK	5 FEET FROM RIGHT-OF-WAY	N/A	14 FEET
TOTAL LOT COVERAGE	80%	N/A	36.2%
BUILDING HEIGHT	50 FEET	N/A	25 FEET
BUILDING COVERAGE	N/A	N/A	17.8%
PARKING	1.5 EMPLOYEE ON MAXIMUM SHIFT (MIN. 1 SP/5000 S.F.) 12	N/A	52

### YORK COUNTY PLANNING COMMISSION REVIEW STATEMENT

THE YORK COUNTY PLANNING COMMISSION, AS REQUIRED BY THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE, ACT 247 OF 1968, AS AMENDED, REVIEWED THIS PLAN ON \_\_\_\_\_, 20\_\_\_\_. THIS CERTIFICATE DOES NOT INDICATE APPROVAL OR DISAPPROVAL OF THE PLAN BY THE YORK COUNTY PLANNING COMMISSION, AND THE COMMISSION DOES NOT REPRESENT THAT THIS PLAN COMPLIES WITH THE VARIOUS ORDINANCES, RULES, REGULATIONS OR LAWS OF THE LOCAL MUNICIPALITY, THE COMMONWEALTH OR THE FEDERAL GOVERNMENT.

### PENN TOWNSHIP BOARD OF COMMISSIONERS

AT A MEETING ON \_\_\_\_\_, 20\_\_\_\_, THE PENN TOWNSHIP BOARD OF COMMISSIONERS APPROVED THIS PROJECT, INCLUDING THE COMPLETE SET OF PLANS MARKED AND INFORMATION WHICH ARE FILED WITH THE BOARD OF COMMISSIONERS IN FILE NO. \_\_\_\_\_ BASED UPON THE CONFORMITY WITH THE STANDARDS OF THE PENN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

CHAIRMAN \_\_\_\_\_  
VICE CHAIRMAN \_\_\_\_\_

### PENN TOWNSHIP ENGINEER

THIS PLAN REVIEWED BY THE PENN TOWNSHIP ENGINEER THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

TOWNSHIP ENGINEER \_\_\_\_\_

### GENERAL NOTES

- THE PURPOSE OF THIS PLAN IS THE CONSTRUCTION OF A NEW INDUSTRIAL BUILDING WITH ASSOCIATED SITE IMPROVEMENTS, GRADING, UTILITY CONNECTIONS, AND STORMWATER MANAGEMENT FACILITIES.
- THE EXISTING SITE FEATURES, TOPOGRAPHY AND PROPERTY BOUNDARY LINES SHOWN HEREON ARE OBTAINED FROM A DRAWING OF SURVEY INFORMATION OBTAINED FROM CAMPBELL AND ASSOCIATES DATED 12/20/2020. THE SURVEY WAS PERFORMED BY HANOVER GROUP, INC. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL UTILITY LINES PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. KUROWSKI AND WILSON, LLC ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND UTILITIES AS DEPICTED HEREON. ANY REQUEST FOR ADDITIONAL UTILITY INFORMATION SHOULD BE DIRECTED TO THAT RESPECTIVE UTILITY COMPANY.
- PUBLIC WATER TO BE PROVIDED BY HANOVER BOROUGH.
- PUBLIC SEWER TO BE PROVIDED BY PENN TOWNSHIP.
- THE SITE DEVELOPMENT WILL COMPLY WITH ALL APPLICABLE TOWNSHIP ORDINANCES IN EFFECT AT THE TIME OF THIS LAND DEVELOPMENT PLAN SUBMISSION.
- ALL SIGNS SHALL CONFORM TO PENNSYLVANIA DEPARTMENT OF TRANSPORTATION AND TOWNSHIP SPECIFICATIONS SECTION 301 OF THE PENN TOWNSHIP ZONING ORDINANCE AND COMPLY WITH PENNDOT T.C. STANDARDS AND SHALL BE INSTALLED BY THE DEVELOPER IN A MANNER SPECIFIED BY THE MUNICIPAL ENGINEER.
- A WETLAND INVESTIGATION OF THE SUBJECT PROPERTY WAS PERFORMED BY WRIGHT ENVIRONMENTAL LAND SERVICES ON 11/9/20. WETLANDS ARE SHOWN ON THE PLANS.
- NO PORTIONS OF THE SITE LIE WITHIN THE 100 YEAR FLOODPLAIN AS DEFINED BY F.E.M.A. MAPPING.
- ALL ADA CURB RAMPS SHALL COMPLY WITH PENNDOT PUB 72M, RC STANDARDS.
- THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP ENGINEER FORTY-EIGHT (48) HOURS IN ADVANCE OF THE BEGINNING OF CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES.

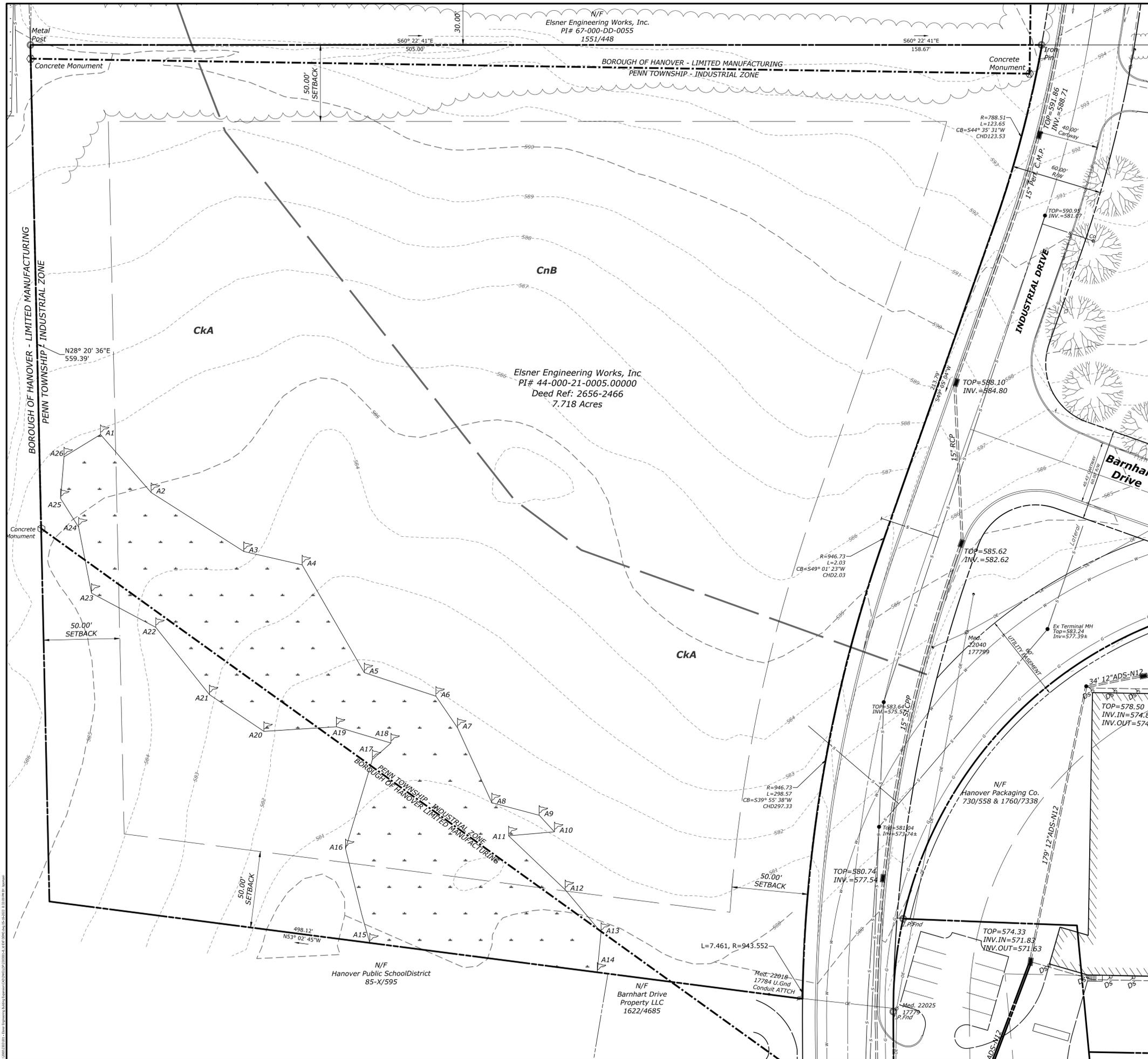
### CERTIFICATE OF OWNERSHIP, ACKNOWLEDGMENT OF PLAN AND OFFER OF DEDICATION

COMMONWEALTH OF PENNSYLVANIA  
COUNTY OF YORK

ON THIS, \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, BEFORE ME, THE UNDERSIGNED OFFICER PERSONALLY APPEARED \_\_\_\_\_ WHO, BEING DULY SWORN OR AFFIRMED

ACCORDING TO LAW, DEPOSES AND SAYS THAT HE IS THE OWNER OF THE PROPERTY SHOWN ON THE PLAN, THAT THE PLAN THEREOF WAS MADE AT HIS DIRECTION, THAT HE ACKNOWLEDGES THE SAME TO BE HIS ACT AND PLAN, THAT HE DESIRES THE SAME TO BE RECORDED AND THAT ALL STREETS AND OTHER PROPERTY IDENTIFIED AS PROPOSED PUBLIC PROPERTY (EXCEPTING THOSE AREAS LABELED NOT FOR DEDICATION) ARE HEREBY DEDICATED TO THE PUBLIC USE.

MY COMMISSION EXPIRES \_\_\_\_\_



- ### LEGEND
- EXISTING AND DEMOLITION FEATURES
- ADJOINING PROPERTY BOUNDARY LINE
  - - - EASEMENT LINE
  - LEGAL RIGHT OF WAY LINE
  - MINIMUM BUILDING SETBACK LINE
  - MUNICIPAL BOUNDARY LINE
  - ZONING DISTRICT BOUNDARY LINE
  - EDGE OF EXISTING SURFACE
  - WATERCOURSE
  - INDEX CONTOUR LINE
  - 420 --- INTERMEDIATE CONTOUR LINE
  - x 500.00 SPOT ELEVATION
  - ⊕ BENCHMARK LABEL
  - OVERHEAD ELECTRIC LINES
  - UNDERGROUND ELECTRIC LINES
  - MANHOLE
  - ⊕ UTILITY POLE
  - GUY WIRE
  - DRAINAGE PIPE
  - DRAINAGE INLET
  - RIP-RAP
  - UNDERGROUND NATURAL GAS LINE
  - TREELINE
  - SANITARY SEWER GRAVITY LINE
  - SANITARY SEWER CLEANOUT
  - WATER LINE
  - WATER VALVE
  - WETLAND
  - STORM SEWER PIPE
  - MAILBOX
  - SIGN
  - SOIL TYPE BOUNDARY LINE

### SOILS INFORMATION

**CkA** CLARKSBURG SILT LOAM  
0 TO 3 PERCENT SLOPES  
(HYDROLOGIC GROUP C)

**CnB** CONESTOGA SILT LOAM,  
3 TO 8 PERCENT SLOPES  
(HYDROLOGIC GROUP B)



2201 North Front Street, Suite 200  
Harrisburg, PA 17110  
P: 717.635.2835  
www.kandwengineers.com

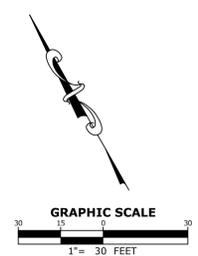
## PRELIMINARY/FINAL LAND DEVELOPMENT PLAN 5 INDUSTRIAL DRIVE FOR ELSNER ENGINEERING



PROFESSIONAL SEAL  
SCALE: AS SHOWN  
DATE: APRIL 22, 2021  
K&W PROJECT: 2303.001  
DRAWN BY: PKB

NO.	DATE	DESCRIPTION
1	7/2/2021	PER TOWNSHIP COMMENTS
2	3/23/2022	REVISED PER DEF COMMENTS DATED MARCH 11, 2022
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PLAN TYPE:  
**EXISTING FEATURES PLAN**









PROFESSIONAL SEAL  
SCALE: AS SHOWN  
DATE: APRIL 22, 2021  
K&W PROJECT: 2303.001  
DRAWN BY: PKB

NO.	DATE	DESCRIPTION
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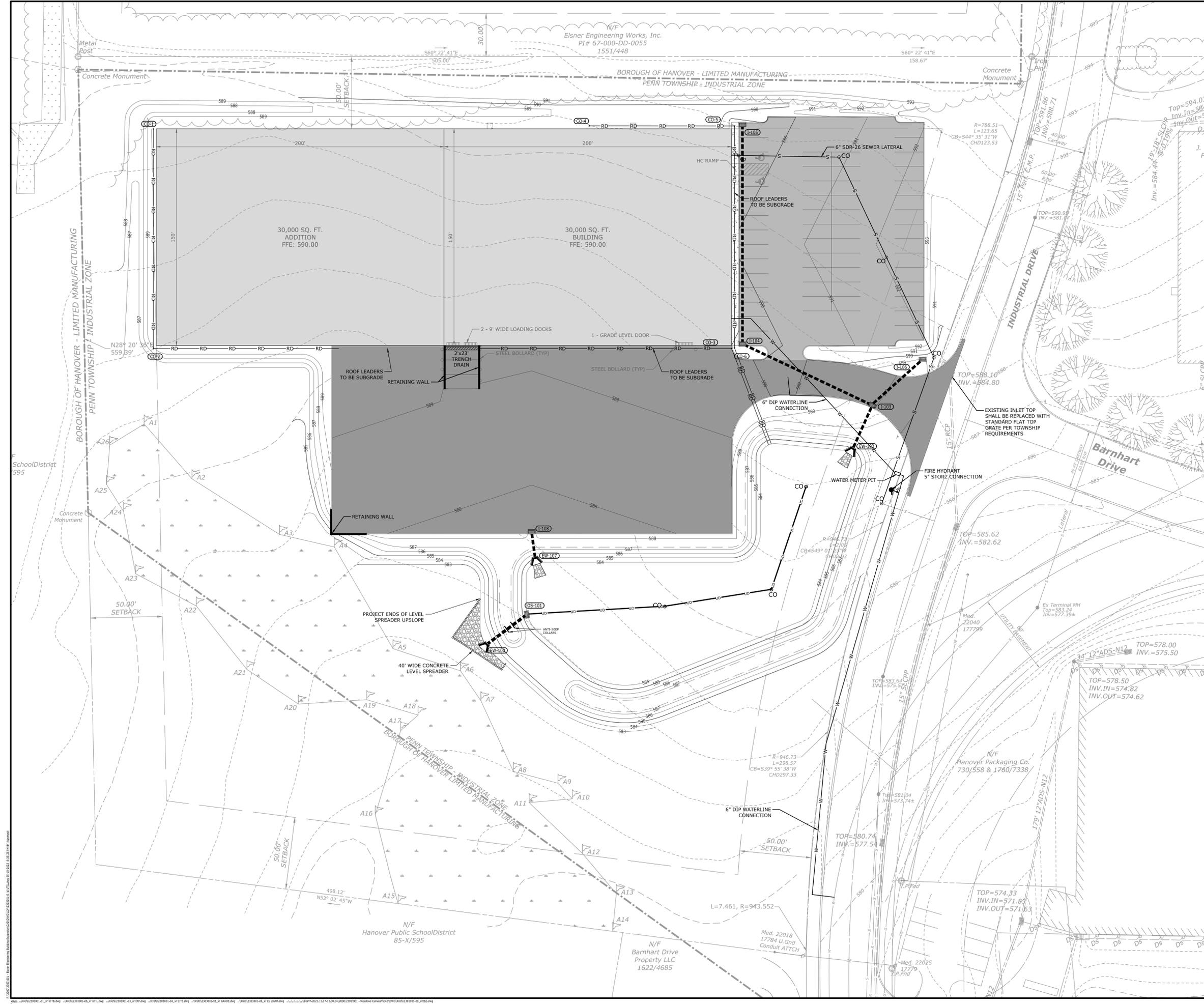
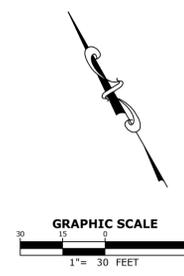
PLAN TYPE:  
**UTILITY PLAN**

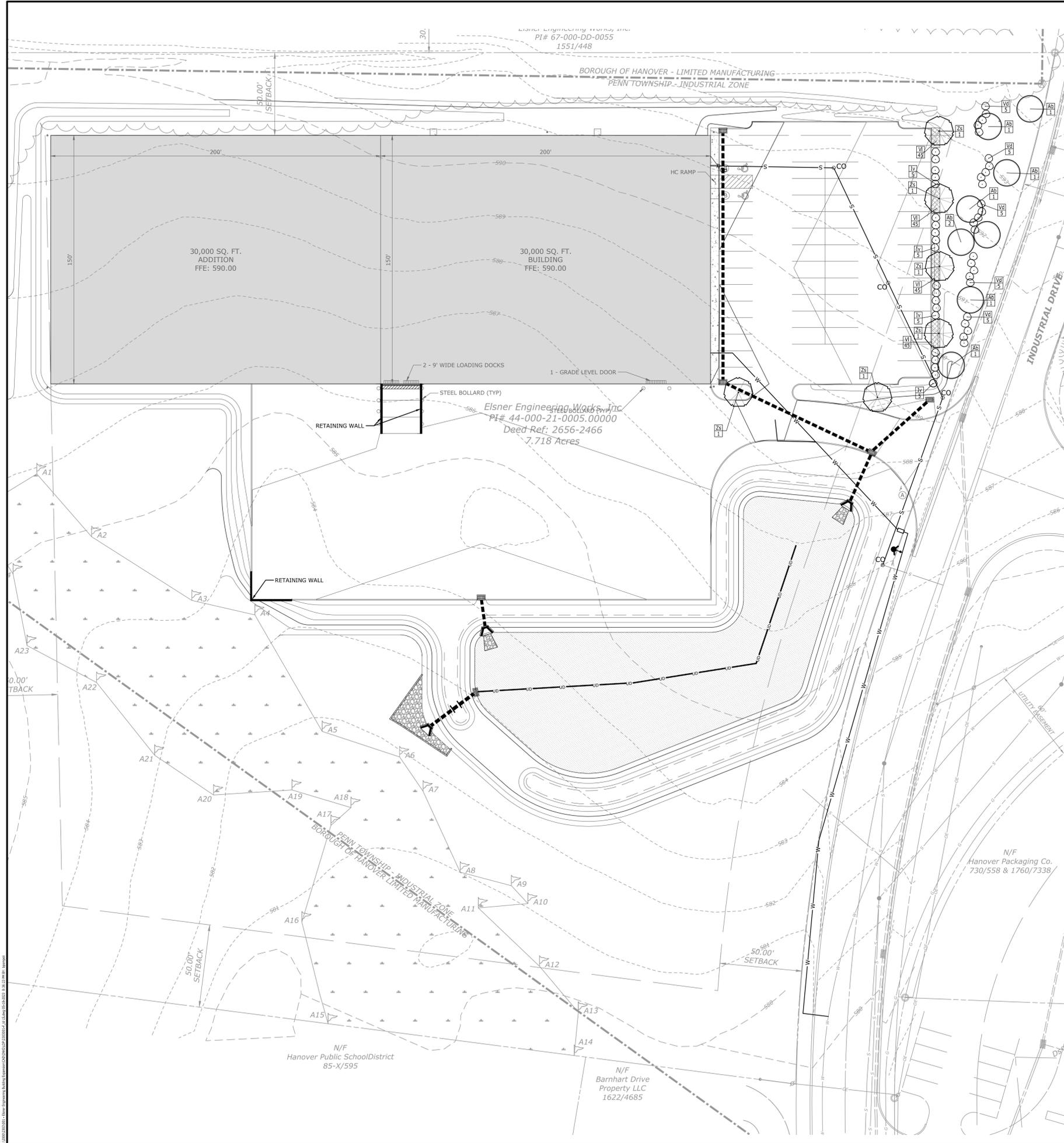
SHEET:  
**5 OF 8**

**LEGEND**

- SANITARY SEWER MANHOLE
- SANITARY SEWER STRUCTURE LABEL
- SANITARY SEWER MAIN
- SANITARY SEWER SERVICE LATERAL
- DRAINAGE MANHOLE
- DRAINAGE INLET
- ENDWALL
- DRAINAGE CULVERT OR PIPE
- DRAINAGE STRUCTURE LABEL
- ROOF DRAIN PIPE
- RIPRAP
- UNDERDRAIN
- UNDERDRAIN CLEANOUT
- WATER VALVE
- WATER LINE
- FIRE WATER LINE
- FIRE HYDRANT

- UTILITY NOTES**
- ALL ROOF DRAIN PIPING SHALL BE INSTALLED AT A MINIMUM SLOPE OF 0.5% AND SHALL CONNECT TO STUBS LEFT BY P.C. AT FIVE (5) FEET OUTSIDE THE BUILDING.
  - REFER TO M.E.P. DRAWINGS FOR SITE LIGHTING, TRANSFORMER, AND BUILDING ELECTRICAL LAYOUT AND CONNECTION TO EXISTING UTILITY POLE.
  - ALL SANITARY SEWER CONSTRUCTION MATERIALS, METHOD AND APPURTENANCES SHALL BE IN ACCORDANCE WITH PADEP'S DOMESTIC WASTEWATER FACILITIES MANUAL AND FAIRVIEW TOWNSHIP STANDARD SPECIFICATIONS AND DETAILS AT THE TIME OF CONSTRUCTION.
  - THE PENETRATION INTO THE EX. SANITARY SEWER MANHOLE SHALL BE 0.10' ABOVE THE EX. CHANNEL INVERT AND A PSX II BOOT AND TWO (2) STAINLESS STEEL CLAMPS SHALL BE USED. A NEW CHANNEL MUST BE CUT OUT AND FORMED TO PENN TOWNSHIP AUTHORITY SPECIFICATIONS.
  - ALL SANITARY SEWER LATERAL SECTIONS SHALL BE INSTALLED WITH A MINIMUM SLOPE OF 1%.
  - CURB BOXES ARE REQUIRED OVER ALL SANITARY SEWER CLEANOUTS AND WATER LINE VALVES. ALL CURB BOXES SHALL BE BROUGHT TO FINISHED GRADE.
  - REFER TO ARCHITECTURAL DRAWINGS FOR INSTALLATION OF CABLE TELEVISION AND TELEPHONE PEDESTALS.
  - REFER TO ARCHITECTURAL DRAWINGS FOR INSTALLATION OF NATURAL GAS EMERGENCY GENERATOR AND RELATED GAS SERVICE LINE AND ELECTRICAL CONNECTIONS.
  - EXACT NATURAL GAS CONNECTION POINT TO EXISTING DISTRIBUTION SYSTEM TO BE DETERMINED BY UGI UTILITIES, INC. CONTRACTOR IS RESPONSIBLE FOR EXCAVATING THE ENTIRE SERVICE TRENCH. SEE UGI GAS TRENCH DETAIL ON SHEET ## FOR LIMIT OF WORK BY CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE GAS LINE INSTALLATION WITH UGI UTILITIES, INC.
  - ALL DRAINAGE STRUCTURES (INCLUDING INLETS, MANHOLES, ENDWALLS, ETC.) PROPOSED FOR DEDICATION OR LOCATED WITHIN A STREET SECTION SHALL BE CAPABLE OF HANDLING AN HS-25 LOADING.
  - ALL STORMWATER PIPES, CULVERTS, MANHOLES, INLETS, ENDWALLS AND END SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS SET FORTH IN PENNDOT PUBLICATION 408, AS AMENDED, AND SHALL CONFORM TO THE REQUIREMENTS OF THE PENNDOT, BUREAU OF DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION (RC), PUBLICATION NO. 72, IN EFFECT AT THE TIME THE DESIGN IS SUBMITTED.
  - ALL WATER MAINS ARE TO BE CEMENT LINED DUCTILE IRON PIPE, CLASS 52.
  - ALL PADEP WATER SUPPLY REGULATIONS SHALL APPLY.
  - WATER LINES SHALL BE KEPT SEPARATED A MINIMUM OF FIVE (5) FEET HORIZONTALLY FROM ANY OTHER UTILITY, EXCEPT SANITARY SEWER LINES. THE SEPARATION FOR WHICH SHALL BE IN ACCORDANCE WITH PADEP REGULATIONS.
  - ALL WATER MAINS ARE TO BE PRESSURE TESTED WITH A REPRESENTATIVE OF THE WATER DEPARTMENT PRESENT DURING THE TESTING.



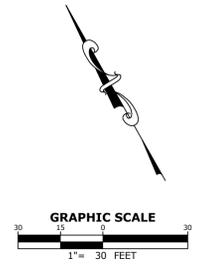


**LEGEND** PROPOSED LANDSCAPE PLAN FEATURES

- DECIDUOUS TREES
- SHRUBS
- GROUND COVER
- STORMWATER BASIN - ERNST SEED MIX TYPE 126
- PLANTING LABEL

**LANDSCAPE NOTES**

- SITE PREPARATION**
- PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES, AND LAWNS AND EXISTING EXTERIOR PLANTS FROM DAMAGE CAUSED BY PLANTING OPERATIONS, CONTACT PA-1-CALL 1-800-242-1776 AT A MINIMUM OF THREE WORKING DAYS PRIOR TO COMMENCEMENT OF WORK.
  - PROVIDE EROSION CONTROL MEASURE TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUN-OFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.
- PLANT BED ESTABLISHMENT**
- CONTRACTOR TO CONFIRM EXISTING TOPSOIL DEPTH AND SHALL FURNISH SOIL ANALYSIS BY QUALIFIED LAB STATING PERCENTAGES OF ORGANIC MATTER, GRADUATION OF SAND, SILT AND CLAY CONTENT, DELETERIOUS MATERIAL, PH AND MINERAL AND PLANT-NUTRIENT content of topsoil. Contractor to provide data at a minimum of 5 different planting areas. Contractor TO SUBMIT EXISTING TOPSOIL DEPTH AND RECOMMENDED QUANTITIES OF NITROGEN, PHOSPHORUS AND POTASH INGREDIENTS TO BE ADDED TO PRODUCE A SATISFACTORY TOPSOIL TO LANDSCAPE ARCHITECT FOR APPROVAL.
  - TOPSOIL SHALL HAVE ACIDITY RANGE OF PH 5.0 TO PH 7.0 AND AN ORGANIC CONTENT OF AT LEAST 3-4%. MINIMUM TOPSOIL DEPTH IN PLANTING BEDS SHALL BE 12" BUT 18" IS RECOMMENDED. ADDITIONAL TOPSOIL SHALL BE ADDED WHEN POSSIBLE.
  - APPLY APPROVED SOIL AMENDMENTS AND FERTILIZER ON SURFACE AND THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BACKFILL.
  - LAY OUT INDIVIDUAL TREE AND SHRUB LOCATIONS AND AREAS FOR MULTIPLE EXTERIOR PLANTINGS. STAKE LOCATIONS, OUTLINE AREAS, ADJUST LOCATIONS WHEN REQUESTED, AND OBTAIN LANDSCAPE ARCHITECTS ACCEPTANCE OF LAYOUT BEFORE PLANTING. MAKE MINOR ADJUSTMENTS AS REQUIRED.
- SOD ESTABLISHMENT**
- REMOVE STONES, ROOTS OR OTHER UNDESIRABLE FOREIGN MATERIAL FROM GRADE AND DISC, DRAG, HARROW OR HAND RAKE TO SUFFICIENT DEPTH TO LOOSEN SOIL. THE SURFACE ON WHICH SOD IS LAID SHOULD BE SMOOTH, FIRM AND FREE OF DEPRESSIONS.
  - ALL SOD IS TO BE LAID ON TOPSOILED AREAS. THE JOINTS SHALL BE CLOSELY LAID. TOPSOIL SHALL BE FINELY GRADED TO A TRUE AND EVEN SURFACE AT THE REQUIRED FINISHED GRADE. SOD SHALL BE CUT AND LAID ON THE SITE THE SAME DAY.
- SOD**
- SOD SHALL CONTAIN AT LEAST 85 PERCENT PERMANENT GRASS SUITABLE TO THE CLIMATE IN WHICH IT IS TO BE PLACED; NOT MORE THAN 25 PERCENT NURSING GRASS; NOT MORE THAN 10 PERCENT WEED AND UNDESIRABLE GRASSES, AND SHALL BE OF GOOD TEXTURE, FREE FROM OBNOXIOUS ROOTS, STONES AND FOREIGN MATERIALS. THE SOD SHALL BE UNIFORMLY CUT, ONE AND ONE HALF INCHES THICK WITH CLEAN-CUT EDGES. CONTRACTOR TO SUBMIT SOURCE AND SEED CONTENT TO LANDSCAPE ARCHITECT FOR APPROVAL.
- PLANT MATERIAL**
- FURNISH NURSERY-GROWN TREES AND SHRUBS COMPLYING WITH ANS 260.1, WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING, PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK-FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALE, INJURIES, ABRASIONS, AND DISFIGUREMENT.
  - PROVIDE TREES AND SHRUBS OR SIZES AND GRADES COMPLYING WITH ANS 260.1 FOR THE TYPE OF TREES AND SHRUBS REQUIRED. TREES AND SHRUBS OF A LARGER SIZE MAY BE USED IF ACCEPTABLE TO ARCHITECT, WITH A PROPORTIONATE INCREASE IN SIZE OF ROOTS OR BALLS.
  - IF NORMAL ARRANGEMENTS OR CONSECUTIVE ORDER OF TREES OR SHRUBS IS SHOWN, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD, AND NUMBER LABEL TO ASSURE SYMMETRY IN PLANTING.
- CLEANUP AND PROTECTION**
- DURING EXTERIOR PLANTING, KEEP ADJACENT PAVINGS AND CONSTRUCTION CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
  - PROTECT EXTERIOR PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS, OPERATIONS BY OTHER CONTRACTORS AND TRADES, AND OTHERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED EXTERIOR PLANTING.
- DISPOSAL**
- REMOVE SURPLUS SOIL AND WASTE MATERIAL, INCLUDING EXCESS SUBSOIL, UNSUITABLE SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
- WARRANTY**
- WARRANT THE FOLLOWING EXTERIOR PLANTS FOR THE WARRANTY PERIOD INDICATED IN THE SPECIFICATIONS, AGAINST DEFECTS INCLUDING DEATH OR UNSATISFACTORY GROWTH. WARRANTY PERIODS FOR ALL PLANT MATERIAL AND SOD: ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
  - REMOVE DEAD EXTERIOR PLANTS IMMEDIATELY. REPLACE IMMEDIATELY UNLESS REQUIRED TO PLANT IN THE SUCCEEDING PLANTING SEASON.
  - REPLACE EXTERIOR PLANTS THAT ARE MORE THAN 25 PERCENT DEAD OR IN AN UNHEALTHY CONDITION AT END OF WARRANTY PERIOD.
  - A LIMIT OF ONE REPLACEMENT OF EACH EXTERIOR PLANT WILL BE REQUIRED, EXCEPT FOR LOSSES OR REPLACEMENTS DUE TO FAILURE TO COMPLY WITH REQUIREMENTS.
- MISC. PLANTING NOTES**
- ALL PLANTING MATERIAL TO BE INSTALLED AS PER SIZE INDICATED ON PLANT SCHEDULE.
  - ANY SUBSTITUTIONS THAT MAY BE REQUIRED SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ORDERING MATERIAL.
  - ALL PLANTINGS AND PLANTING PROCEDURES SHALL CONFORM TO GOOD NURSERY AND LANDSCAPE PRACTICE AND THE STANDARDS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSESRYMAN.
  - PRIOR TO COMMENCEMENT OF WORK ALL UTILITIES BOTH ABOVE AND BELOW GROUND SHALL BE LOCATED THROUGH THE PA 1CALL SYSTEM AND/OR THE GENERAL CONTRACTOR ON SITE. IF ANY CONFLICTS DO OCCUR THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY FOR RELOCATION.
  - CONTRACTOR TO VERIFY ALL PLANT COUNTS AND LOCATIONS PRIOR TO ORDERING MATERIAL. K&W AND THE OWNER ACCEPT NO RESPONSIBILITY FOR TYPOGRAPHICAL ERRORS AND MISCOUNTS.
  - ALL PLANTINGS SHALL HAVE WATER RETAINING CRYSTALS SUCH AS TERRASORB, OR APPROVED EQUAL, INCORPORATED INTO PLANTING SOIL AS RECOMMENDED BY MANUFACTURER.
  - ANY PLANT NOT INCLUDED IN A PLANTING BED SHALL HAVE A MULCHED CIRCLE. THE SIZE OF THE MULCHED CIRCLE SHALL BE DETERMINED ACCORDING TO THE OVERALL PLANT SIZE OR CALIPER. CONSULT THE LANDSCAPE ARCHITECT FOR CLARIFICATION IF REQUIRED.
  - EACH PLANT SHALL BE PLANTED SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT, AT ANY TIME, COVER THE ROOTBALL WITH TOPSOIL BACKFILL.
  - THE TOPSOIL BACKFILL SHALL BE FIRMLY TAMPED, COMPAREABLE TO FOOT PRESSURE, IN 3" LIFTS TO STABILIZE THE ROOT BALL AND TO PREVENT AIR POCKETS.
  - WATER ALL PLANTINGS INDIVIDUALLY WITH AN OPEN ENDED GARDEN HOSE SUBSEQUENT TO INSTALLATION. DO NOT USE MECHANICAL SPRINKLERS TO WATER PLANTINGS.



**LEGEND** LANDSCAPE PLAN FEATURES

**TREES**

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT
Ab	ACER BUERGERANUM TRIDENT MAPLE	8	2" CAL.	B8B
Zs	ZELKOVA SERRATA/ JAPANESE ZELKOVA	6	2" CAL.	B8B

**SHRUBS**

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT
Iv	ITEA VIRGINICA 'LITTLE HENRY' LITTLE HENRY SWEETSPIRE	20	15-18"	CONT.
Vd	VIBURNUM DENTATUM ARROWWOOD	25	2" CAL.	B8B

**GROUND COVER**

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT
Vi	LIRIOPE MUSCARI 'VARIEGATA' VARIEGATED LIRIOPE	180	4" POT @ 24" O.C. STAGGERED	---

2201 North Front Street, Suite 200  
Harrisburg, PA 17110  
P: 717.635.2835  
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**PRELIMINARY/FINAL LAND DEVELOPMENT PLAN**

**5 INDUSTRIAL DRIVE**

**FOR**

**ELSNER ENGINEERING**

PENN TOWNSHIP

PROFESSIONAL SEAL

SCALE: AS SHOWN  
DATE: APRIL 22, 2021  
K&W PROJECT: 2303.001  
DRAWN BY: PKB  
CAD DRAWING: 2303001-1.dwg

NO.	DATE	DESCRIPTION
1	7/2/2021	PER TOWNSHIP COMMENTS
2	3/23/2022	REVISED PER DEF COMMENTS DATED MARCH 11, 2022
3		
4		
5		
6		
7		

PLAN TYPE: **LANDSCAPE PLAN**

SHEET: **6 OF 8**



PROFESSIONAL SEAL

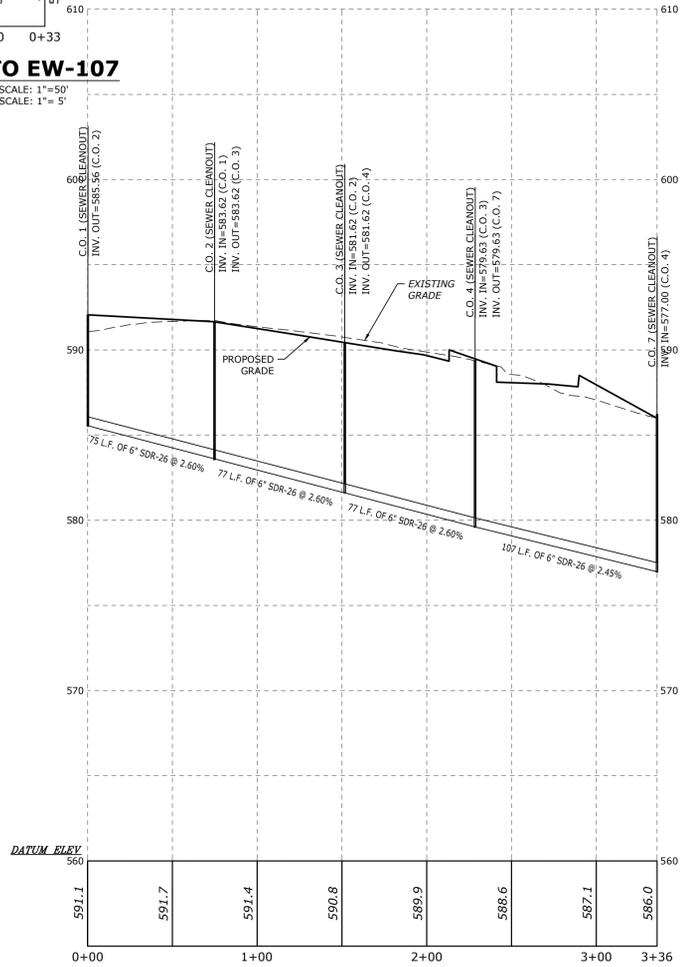
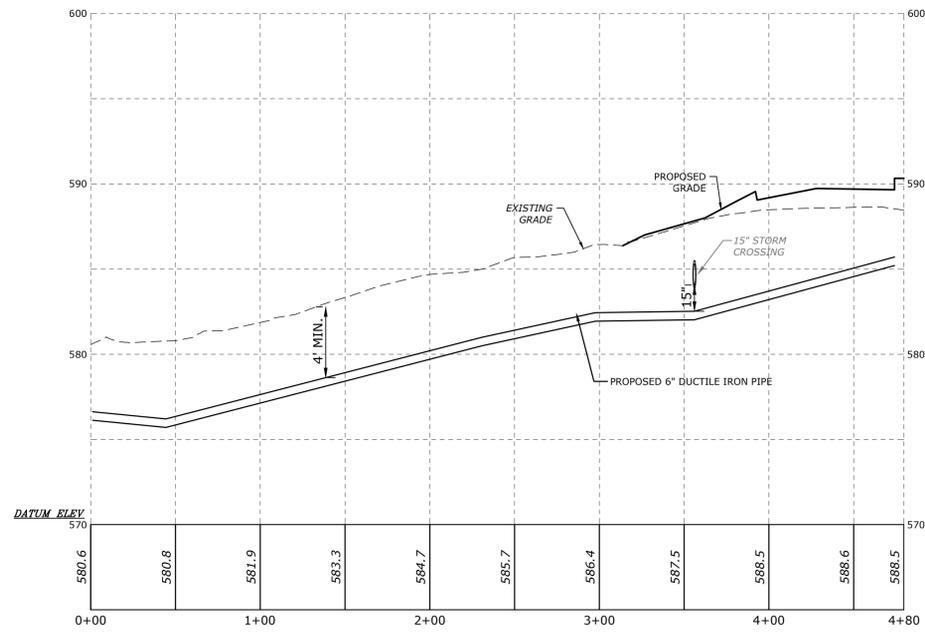
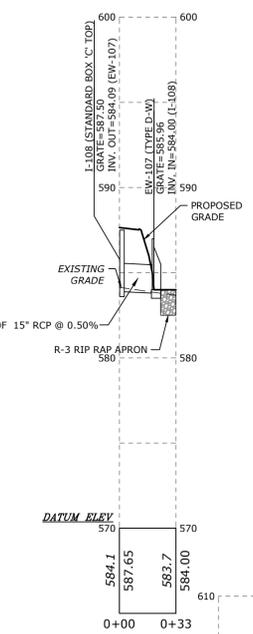
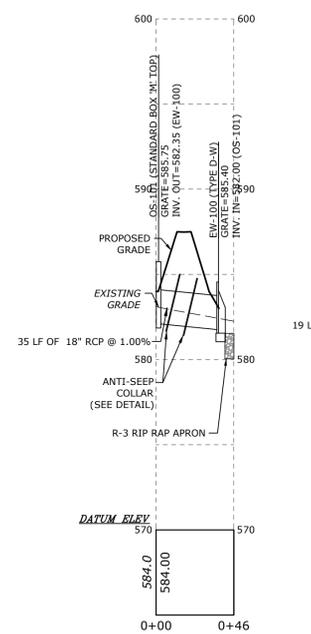
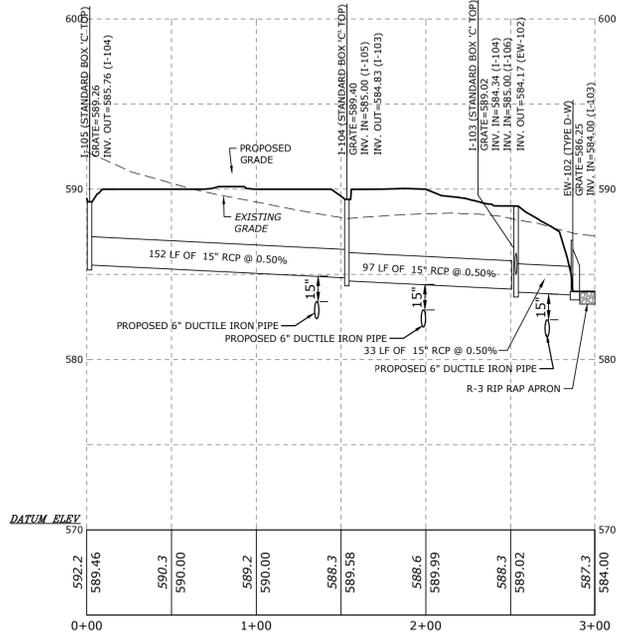
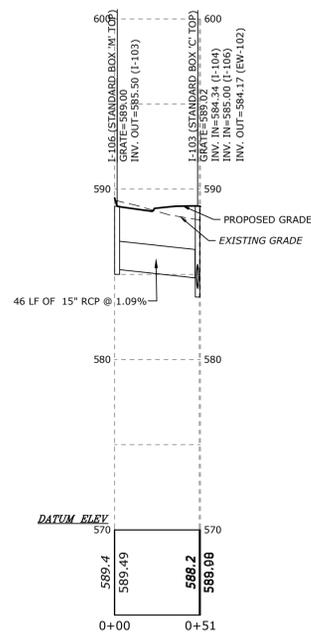
SCALE: AS SHOWN  
DATE: APRIL 22, 2021  
K&W PROJECT: 2303.001  
DRAWN BY: PKB

CAD DRAWING: 2303001-G\_M PROF.dwg

NO.	DATE	DESCRIPTION
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7		

PLAN TYPE: **PROFILES**

SHEET:



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REVISIONS		DESCRIPTION	
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