

SITE DATA

PARCEL 1
OWNER: WEST BROAD INVESTMENTS LLC
PARCEL ID: M7 2 8 0204
ADDRESS: 3412 LINDEN STREET
AREA: 22,095 S.F. (0.5072 A.C.)

PARCEL 2
OWNER: WEST BROAD INVESTMENTS LLC
PARCEL ID: M7 2 9 0204
ADDRESS: 3410 LINDEN STREET
AREA: 21,200 S.F. (0.4867 A.C.)

TOTAL AREA=43,295 SF (0.9939 AC)
LINEAL FEET OF NEW STREETS - 0 LF.

WATER SUPPLY - PUBLIC (CITY OF BETHLEHEM)
SEWER - PUBLIC (CITY OF BETHLEHEM)

ZONING DATA

ZONING DISTRICT:	RG, MEDIUM DENSITY RESIDENTIAL		
REQUIRED:	12,000 SF	EXISTING 43,295 SF	PROPOSED 43,295 SF
MINIMUM LOT SIZE:	100 FT	194 FT	194 FT
MINIMUM LOT WIDTH:			
MINIMUM YARDS:	FRONT: 20 FT	NA	20
	SIDE: 25 FT	NA	25
	REAR: 30 FT	NA	30
MAX. BUILDING COVERAGE:	70%	7%	24%
MAX. BUILDING HEIGHT:	2.5 STORIES (35FT)	NA	2 STORIES (30FT)
MINIMUM LOT AREA PER DWELLING UNIT:	4,000 SF		
PROPOSED DENSITY:	43,295 SF/10 UNITS = 4,329 SF/UNIT		
EXISTING IMPERVIOUS COVER:	10,550 SF		
PROPOSED IMPERVIOUS SURFACE:	19,319 SF		
NET INCREASE:	8,769 SF		

Legend

	PROPERTY LINE
	EXISTING RIGHT-OF-WAY
	BUILDING RESTRICTION LINE
	LOT LINE (TO BE DELETED)
	EXISTING EDGE OF PAVEMENT
	EXISTING VEGETATION
	EXISTING CENTERLINE
	EXISTING ROAD PAVEMENT
	EXISTING SIDEWALK
	EXISTING STRUCTURE
	EXISTING ADJUNCTION
	EXISTING GAS LINE
	EXISTING SANITARY LINE
	EXISTING STORM SEWER
	EXISTING WATER LINE
	EXISTING CURB
	EXISTING FENCE
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING ELECTRIC POLE
	EXISTING GAS VALVE
	EXISTING WATER VALVE
	EXISTING FIRE HYDRANT
	EXISTING IRON PIN
	EXISTING CONTROL POINT
	EXISTING TEST PIT
	EXISTING INLET

Legend

	PROP. PROPERTY LINE
	PROP. TRACT LINE
	PROP. RIGHT-OF-WAY
	PROP. EASEMENT
	PROP. BUILDING RESTRICTION LINE
	PROP. FENCE
	PROP. TREE LINE
	PROP. CENTERLINE
	PROP. SIDEWALK
	PROP. CURB
	PROP. DRIVEWAY
	PROP. CONTOUR MAJOR
	PROP. CONTOUR MINOR
	PROP. GAS LINE
	PROP. GAS LATERAL LINE
	PROP. SANITARY LINE
	PROP. SANITARY LATERAL LINE
	PROP. STORM LINE
	PROP. WATER LINE
	PROP. WATER LATERAL LINE
	PROP. DRAINAGE PATH
	PROP. MONUMENTATION
	PROP. UTILITY POLE
	PROP. SANITARY MANHOLE
	PROP. CLEANOUT
	PROP. VENT
	PROP. STORM MANHOLE
	PROP. INLET
	PROP. SIGN
	PROP. FIRE HYDRANT
	PROP. WATER VALVE
	PROP. WELL
	PROP. GAS VALVE
	PROP. TREE
	PROP. BENCHMARK
	PROP. CONCRETE WHEELSTOP
	PROP. BUILDING/STRUCTURE
	PROP. DRIVEWAY

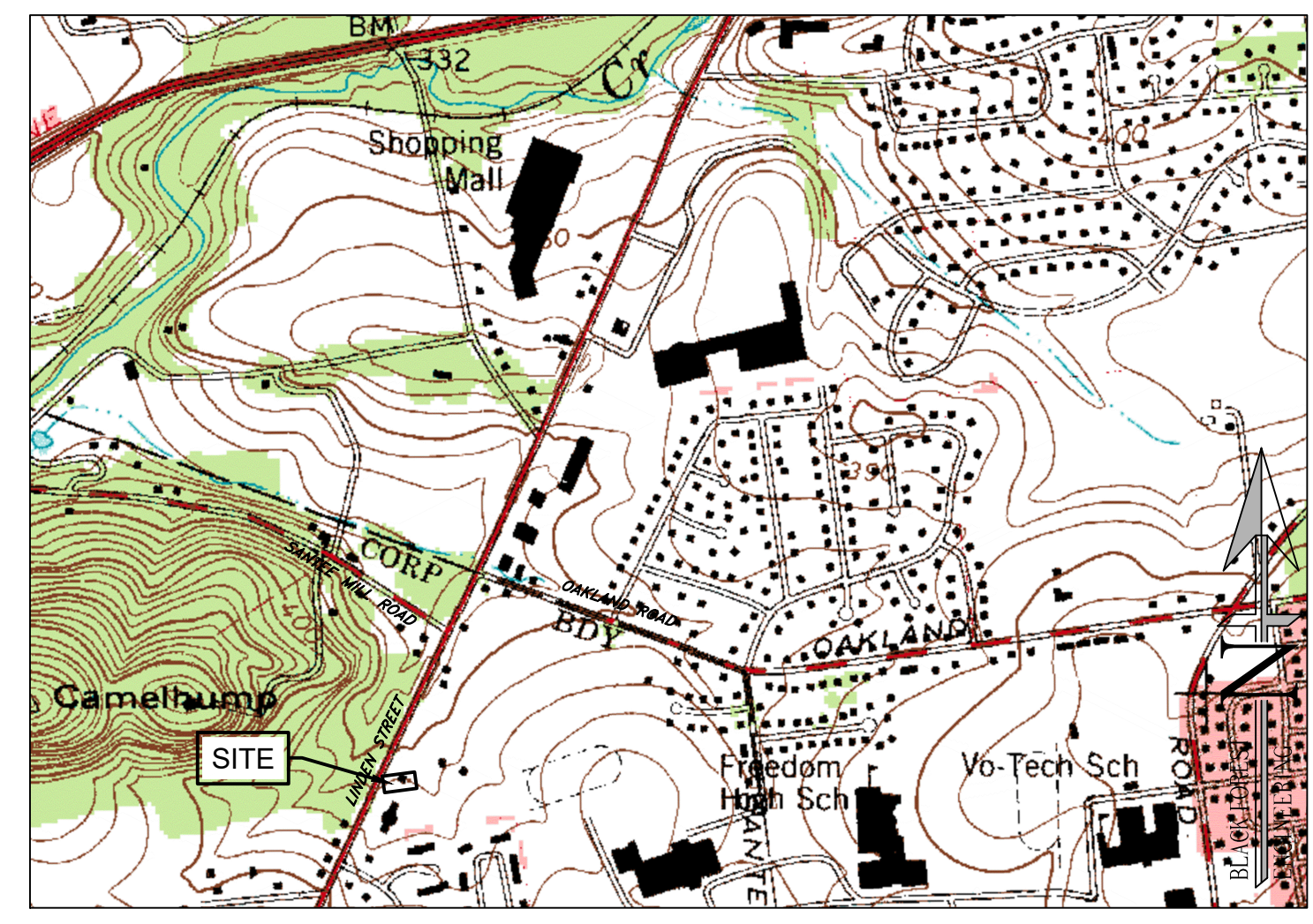
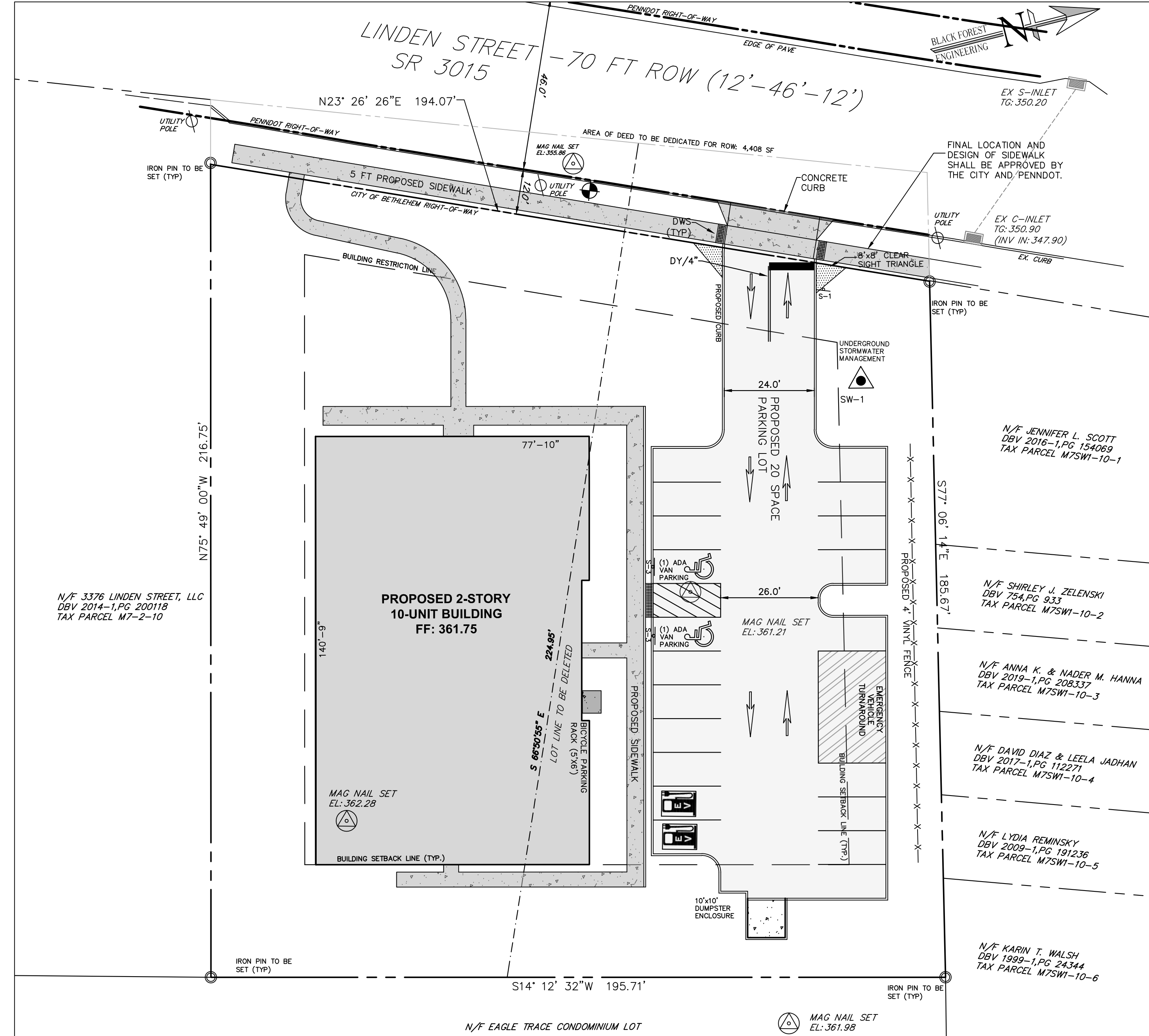
SHEET INDEX

SHEET 1	OF 11	RECORD PLAN *
SHEET 2	OF 11	EXISTING FEATURES PLAN
SHEET 3	OF 11	GRADING PLAN
SHEET 4	OF 11	UTILITY PLAN
SHEET 5	OF 11	LIGHTING & LANDSCAPE PLAN
SHEET 6	OF 11	EROSION CONTROL PLAN & DETAILS
SHEET 7	OF 11	EROSION CONTROL DETAILS
SHEET 8	OF 11	CONSTRUCTION DETAILS
SHEET 9	OF 11	CONSTRUCTION DETAILS
SHEET 10	OF 11	CONSTRUCTION DETAILS
SHEET 11	OF 11	CONSTRUCTION DETAILS

* SHEETS TO BE RECORDED

THE APARTMENTS AT 3410 LINDEN STREET
PRELIMINARY/FINAL LAND DEVELOPMENT AND LOT CONSOLIDATION
CITY OF BETHLEHEM, NORTHAMPTON COUNTY, PENNSYLVANIA
PLAN INTENT

THE APPLICANT WISHES TO CONSTRUCT AN 10 UNIT MULTI-FAMILY DWELLING WITH ASSOCIATED PARKING AND SITE IMPROVEMENTS.



LOCATION MAP
USGS NAZARETH QUADRANGLE
SCALE: 1"=1000'

SIGNATURE BLOCKS

CERTIFICATION OF OWNERSHIP

I (WE) THE OWNER(S) OF _____ BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT I (WE) AM (ARE) THE SOLE OWNER(S) OF THE ABOVE PROPERTY IN PEACEFUL POSSESSION OF THE SAME AND THAT THERE ARE NO SUITS OR LIENS PENDING AFFECTING THE TITLE THEREOF.

SIGNATURE OF OWNER _____ PRINTED NAME OF OWNER _____

NOTARIZATION

SWORN AND SUBSCRIBED BEFORE ME THIS _____ DAY OF _____ A.D. (LEGIBLE IMPRESSION OF NOTARY SEAL) NOTARY PUBLIC MY COMMISSION EXPIRES: _____

PLANNING COMMISSION APPROVAL

THE WITHIN PLOT OR PLAN OF LAND LOCATED IN BETHLEHEM, NORTHAMPTON COUNTY, PENNSYLVANIA, WAS APPROVED BY THE BETHLEHEM CITY PLANNING COMMISSION.

CHAIRMAN _____ DATE _____
PLANNING DIRECTOR _____ DATE _____

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN CORRECTLY AND ACCURATELY REPRESENTS THE LANDS OF THE OWNER AND, WHERE APPLICABLE, THE LOTS, BUILDINGS, STREETS, PARKING AREAS, WALKWAYS, AND OTHER STRUCTURES AND IMPROVEMENTS SHOWN THEREON.

JOSEPH EDWARD RENTKO
REGISTRATION NO. PE085609

PROOF OF RECORDING

PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF LEHIGH COUNTY.

PENNSYLVANIA, UNDER DOCKET ID # _____
ON THE _____ DAY OF _____ 20____

WITNESS MY HAND AND SEAL OF OFFICE THIS _____ DAY OF _____ 20____

RECORDER OF DEEDS _____

L.V.P.C. REVIEW

REVIEWED BY THE LEHIGH VALLEY PLANNING COMMISSION
PLANNING _____ DATE _____

"CALL BEFORE YOU DIG"
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE STOP CALL DESIGN STAGE STOP CALL PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776

BLACK FOREST ENGINEERING, LLC
2455 BLACK FOREST DRIVE
COPLAY, PA 18037

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JOSEPH E. RENTKO, P.E. #PE085609
2455 BLACK FOREST DRIVE
COPLAY, PA 18037
717-239-4499

REV:	DESCRIPTION:	BY:	DATE:

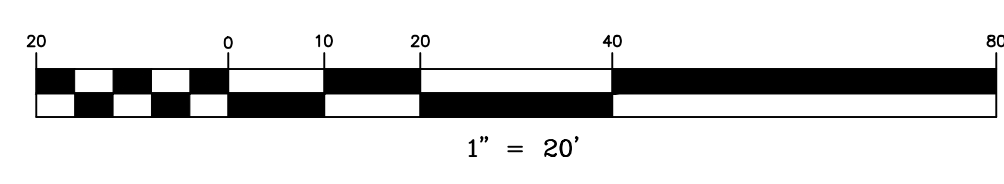
PROJECT TITLE:
3410 & 3412 LINDEN STREET

PROJECT OWNER: WEST BROAD INVESTMENTS LLC
1853 SCHADT AVE
WHITEHALL, PA 18052

PROJECT LOCATION:
**CITY OF BETHLEHEM
WARD 14 BLOCK 262
NORTHAMPTON COUNTY
PENNSYLVANIA**

RECORD

SCALE:	DATE:	DRAWN:	CHECKED:
1"=20'	3/13/23	JMK	JER
PROJECT NO.	DRAWING NO.	REVISION:	
3410	1 OF 11	00	



SIGN SCHEDULE

SYMBOL	LEGEND	QTY.	BLANK SIZE	PENNDOT #
S-1	STOP	1	24 X 24	R1-1
S-2	RESERVED PARKING WITH PARKING FINE PLAQUE	2	12 X 18 12 X 18	R7-8 R7-8B
S-3	SAME AS S-2 WITH VAN ACCESSIBLE PLAQUE AND PARKING FINE PLAQUE	2	12 X 18 12 X 6 12 X 18	R7-8 R7-8A R7-8B

BENCHMARK FOR THIS PLAN
VERTICAL CONTROL IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). BEARING SYSTEM BASED UPON THE PENNSYLVANIA NORTH AMERICAN DATUM OF 1983, SOUTH ZONE, US FOOT (PA-NAD83).

1. EXISTING TOP SANITARY SEWER MANHOLE AT SOUTHERN INTERSECTION OF DRIVEWAY AND LINDEN STREET. ELEV.=356.58

SURVEY NOTES:

- THIS PLAN IS BASED ON A FIELD SURVEY CONDUCTED ON MARCH 20, 2021 BY BLACK FOREST ENGINEERING LLC USING A TOTAL STATION AND GPS UNIT.
- THE BEARING AND COORDINATE SYSTEM IS BASED ON PA STATE PLANE SOUTH ZONE, NAD83.
- THE SHOWN ELEVATIONS ARE BASED ON USGS NORTH AMERICAN VERTICAL DATUM OF 1988.
- UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE AND HAVE BEEN BASED ON VISIBLE ABOVE-GROUND EVIDENCE. A CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATION OF ALL UTILITIES SHOWN ON THIS PLAN AND ANY ADDITIONAL EXISTING UTILITIES NOT SHOWN ON THIS PLAN.
- BOUNDARY LINES SHOWN WITH BEARINGS AND DISTANCES OR CURVE INFORMATION HAVE BEEN FIELD VERIFIED BY THIS SURVEY.

PARKING REQUIREMENT
2 SPACES PER MULTI FAMILY UNIT
10 UNITS x 2 = 20 SPACES REQ'D (20 PROVIDED)

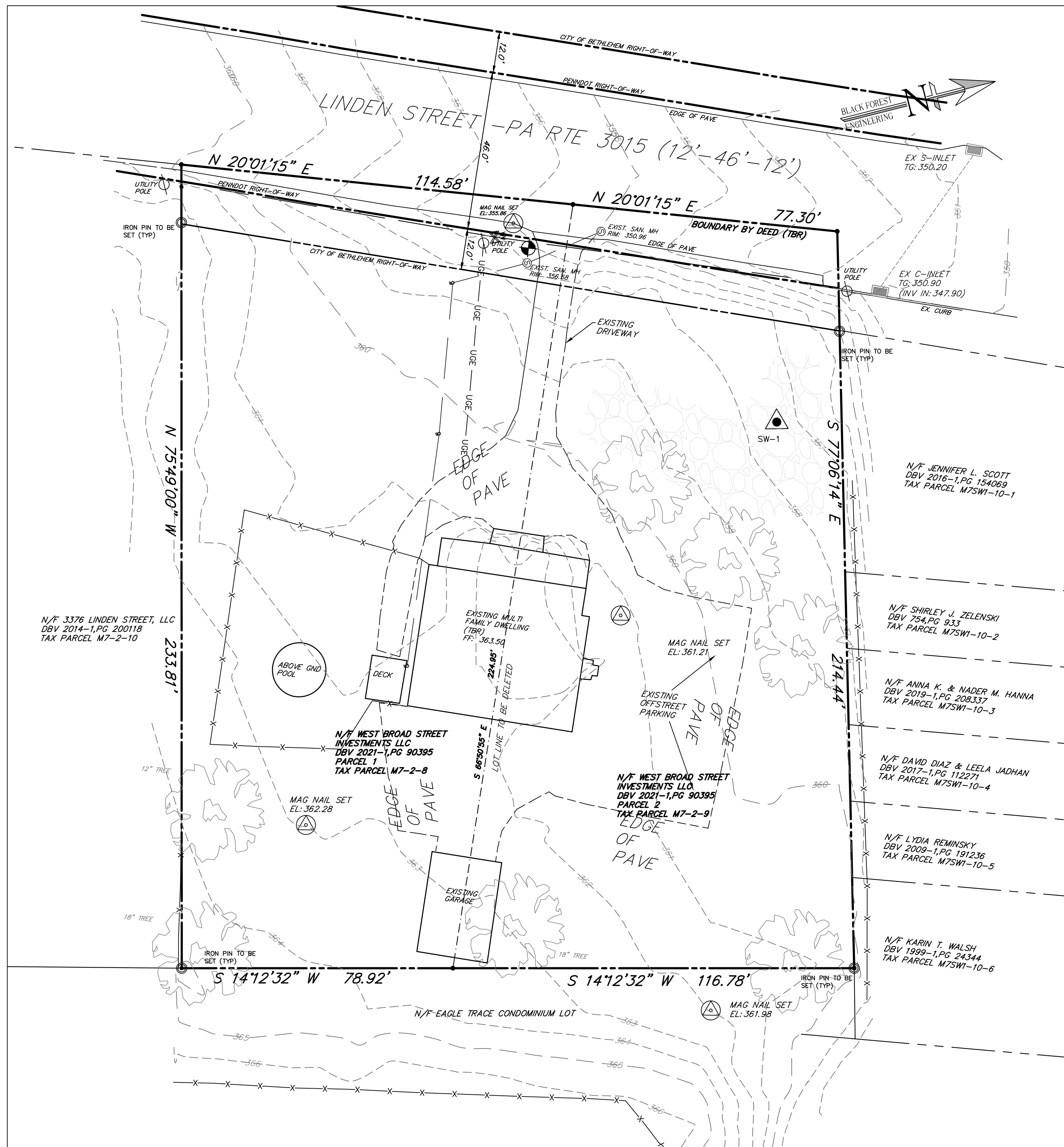
RECORD NOTES

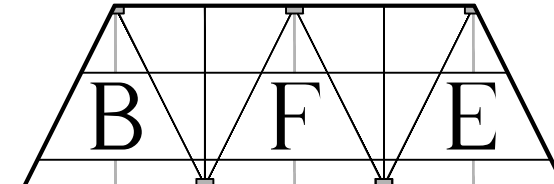
- EACH LOT SHOWN IS SUBJECT TO ALL EASEMENTS VISIBLE, OR ON RECORD, OR AS REQUIRED BY A UTILITY TO SERVE SAID LOT AT SUCH TIME AS THE UTILITY IS INSTALLED.
- ALL IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH THE CITY OF BETHLEHEM STANDARDS AND SPECIFICATIONS AND THE APPROPRIATE PUBLIC UTILITY AUTHORITIES.
- THE SITE WAS EVALUATED FOR WETLANDS AND WATERCOURSES AND IT WAS DETERMINED THAT WETLANDS AND WATERCOURSES DO NOT EXIST ON THE SITE.
- THERE ARE NO FEMA DELINEATED 100-YR FLOODPLAINS OR WATERCOURSES ON OR NEAR THIS PROPERTY.
- ALL LOTS SHALL HAVE A FIVE (5) FOOT DRAINAGE, GRADING AND UTILITY EASEMENT ALONG OUTER LOT LINES UNLESS NOTED OTHERWISE.
- ACTUAL UTILITY CONNECTION POINTS SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
- ALL LOTS SHALL BE LAID OUT AND GRADED TO PREVENT CROSS LOT DRAINAGE AND TO PROVIDE POSITIVE DRAINAGE AWAY FROM PROPOSED BUILDING AREAS.
- ALL CITY PERMITS MUST BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- RUNOFF FROM ALL ON-SITE IMPERVIOUS AREAS SHALL NOT BE DIRECTED INTO THE PUBLIC SANITARY SEWER, ACROSS THE SIDEWALK AREA WITHIN THE PUBLIC RIGHT-OF-WAY, OR ONTO ADJOINING PROPERTIES, SECTION 1753.08 B.4 OF THE CITY PROPERTY REHABILITATION & MAINTENANCE CODE.
- ALL LATERAL SANITARY SEWER PIPING IS TO BE SCH 40 OR SDR-26 PVC PIPING UNLESS OTHERWISE NOTED..
- WORK TO BE PERFORMED ONSITE, SHALL BE DONE IN ACCORDANCE WITH THE IBC.
- ANY RETAINING WALL 4 FEET OR GREATER IN HEIGHT SHALL HAVE A DESIGN PREPARED, SIGNED, AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF PENNSYLVANIA AND SHALL BE SUBMITTED AT THE TIME OF BUILDING PERMIT APPLICATION TO BE REVIEWED AND APPROVED BY AN APPROVED THIRD PARTY REVIEWER. THE WALL SHALL BE DESIGNED TO BE CONTAINED COMPLETELY WITHIN THE APPLICANT'S PROPERTY OR AN EASEMENT SHALL BE ACQUIRED AND INDICATED ON THE RECORD PLAN TO ALLOW FOR THE CONSTRUCTION OF ANY PORTION OF THE WALL AND/OR WALL THE BACKS TO BE CONSTRUCTED ON THE ADJOINING PROPERTY.
- ALL PAVEMENT MARKINGS MUST BE THERMOPLASTIC PAVEMENT MARKINGS.
- BUILDING PERMITS SHALL NOT BE ISSUED UNTIL COMPLETION OF THE PLANNING MODULE.
- A TOTAL LOT (BLANKET) STORMWATER MANAGEMENT EASEMENT IS HEREBY PROVIDED ACROSS THE LOT IN ORDER FOR INSPECTION AND MAINTENANCE OF THE PROPOSED STORMWATER MANAGEMENT CONTROLS.
- BY SUBMISSION OF THESE PLANS THE ENGINEER ON RECORD CERTIFIES THAT THESE PLANS ARE IN COMPLETE CONFORMANCE WITH THE CITY OF BETHLEHEM STORM WATER MANAGEMENT ORDINANCE.
- IN ORDER TO MAINTAIN CONTINUITY BETWEEN PLAN REVISIONS, ANY CHANGES TO A PREVIOUS PLAN SUBMISSION SHALL BE FLAGGED WITH A TRIANGLE. ANY CHANGES NOT FLAGGED MAY BE CONSIDERED NOT APPROVED. FLAGGED CHANGES SHALL BE REFERENCED TO THE APPROPRIATE REVISION DATE IN THE REVISION BLOCK.
- ACCURATE AS-BUILT PLANS SHALL BE KEPT UP TO DATE DURING THE CONSTRUCTION PROCESS. AT THE COMPLETION OF THE PROJECT RECORD DRAWINGS SHALL BE DEVELOPED FROM THE AS-BUILT PLANS AND SUBMITTED TO THE CITY ENGINEER'S OFFICE. ALL FINAL DRAWINGS SHALL SHOW NORTH AMERICAN DATUM (NAD) 1983 STATE PLANE COORDINATES IN FEET (PENNSYLVANIA SOUTH), TIPS ZONE 3702) AND THE DIGITAL FILE SHALL BE IN STATE PLANE FEET COORDINATES AS APPLICABLE. THE HARD COPY OF THE RECORD DRAWINGS SHALL BE IN THE FORM OF A MYLAR COPY. THE ENGINEER OF RECORD SHALL CERTIFY (I.E. P.E. STAMPED AND SIGNED) THAT THE RECORD DRAWINGS COMPLY SUBSTANTIALLY WITH THE APPROVED PLAN AND THAT THEY CONFORM TO INDUSTRY STANDARDS. ALL DIGITAL FILES SHALL RESIDE ON PC COMPATIBLE CD ROM CONTAINING THE DIGITAL REPRESENTATION OF THE FINAL PLAN AS PRESENTED ON THE TWENTY-FOUR (24) INCH BY THIRTY-SIX (36) INCH SHEETS. THE DIGITAL MAP SHALL BE AUTOCAD COMPATIBLE. ALL LAYERS INCLUDED IN THE DIGITAL MAPS SHALL BE THE STANDARDIZED LAYERS PREPARED AND UTILIZED BY THE CITY OF BETHLEHEM TO ENSURE COMPATIBILITY WITH THE CITY'S EXISTING CAD STANDARDS AND AS DESCRIBED IN APPENDIX A OF THE CITY'S SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.
- PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY, PERMITS MUST BE OBTAINED FROM CITY ENGINEERING OFFICE.
- THE CITY OF BETHLEHEM FIRE DEPARTMENT SHALL APPROVE THE FINAL LOCATION OF THE FOLLOWING REQUIRED ITEMS: KNOX BOX, FIRE DEPARTMENT CONNECTION (FDC), POST INDICATING VALVE (PIV) AND 'NO PARKING FIRE LANE' SIGNAGE.

- EXISTING Legend**
- PROPERTY LINE
 - - - - - EXISTING RIGHT-OF-WAY
 - ==== BUILDING RESTRICTION LINE
 - ==== LOT LINE (TO BE DELETED)
 - ===== EXISTING EDGE OF PAVE
 - ~~~~~ EXISTING VEGETATION
 - EXISTING CENTERLINE
 - ===== EXISTING ROAD PAVEMENT
 - EXISTING SIDEWALK
 - ===== EXISTING STRUCTURE
 - EXISTING ADJOINER
 - EXISTING GAS LINE
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 - EXISTING STORM SEWER
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 - EXISTING MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - EXISTING ELECTRIC POLE
 - EXISTING GAS VALVE
 - EXISTING WATER VALVE
 - EXISTING FIRE HYDRANT
 - EXISTING IRON PIN
 - EXISTING CONTROL POINT
 - EXISTING TEST PIT
 - EXISTING INLET

SOIL TYPES UmB

UoD Urban Land Duffield - 8 to 25 percent slopes

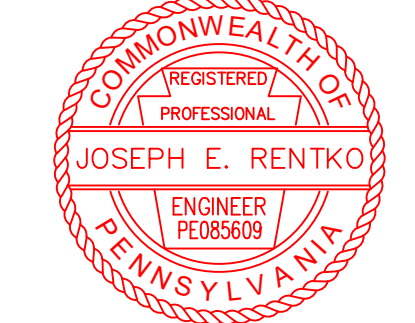




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COPLAY, PA 18037

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SEAL:



JOSEPH E. RENTKO, P.E. #0085609
2455 BLACK FOREST DRIVE
COPLAY, PA 18037
370-239-4499

REV.	DESCRIPTION:	BY	DATE

PROJECT TITLE:
3410 & 3412 LINDEN STREET

PROJECT OWNER: WEST BROAD INVESTMENTS LLC
1853 SCHADT AVE
WHITEHALL, PA 18052

PROJECT LOCATION:
CITY OF BETHLEHEM
WARD 14 BLOCK 262
NORTHAMPTON COUNTY
PENNSYLVANIA

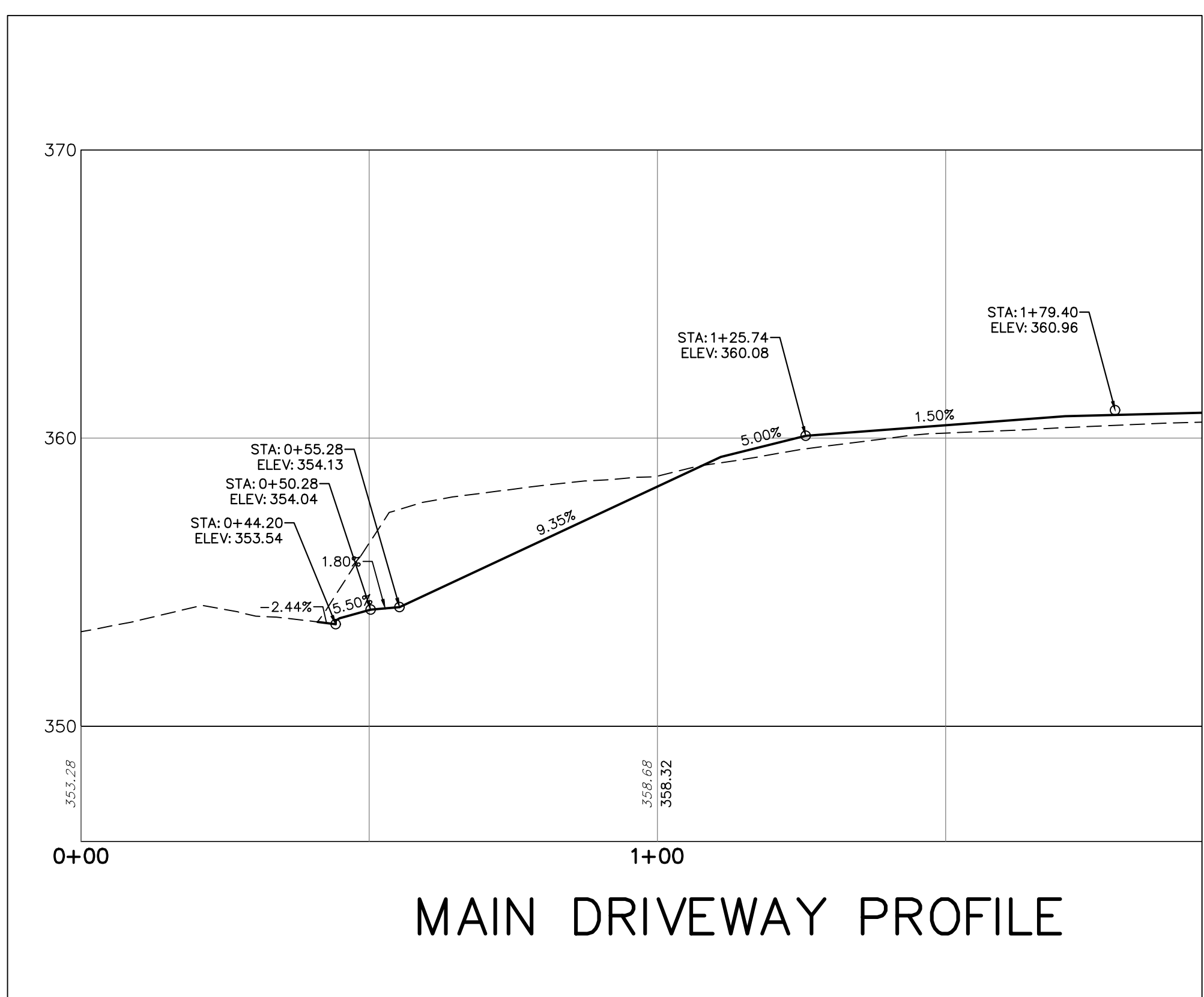
PLAN TITLE:
EXISTING SITE

SCALE:	DATE:	DRAWN:	CHECKED:
1"=20'	3/13/23	JMK	JER

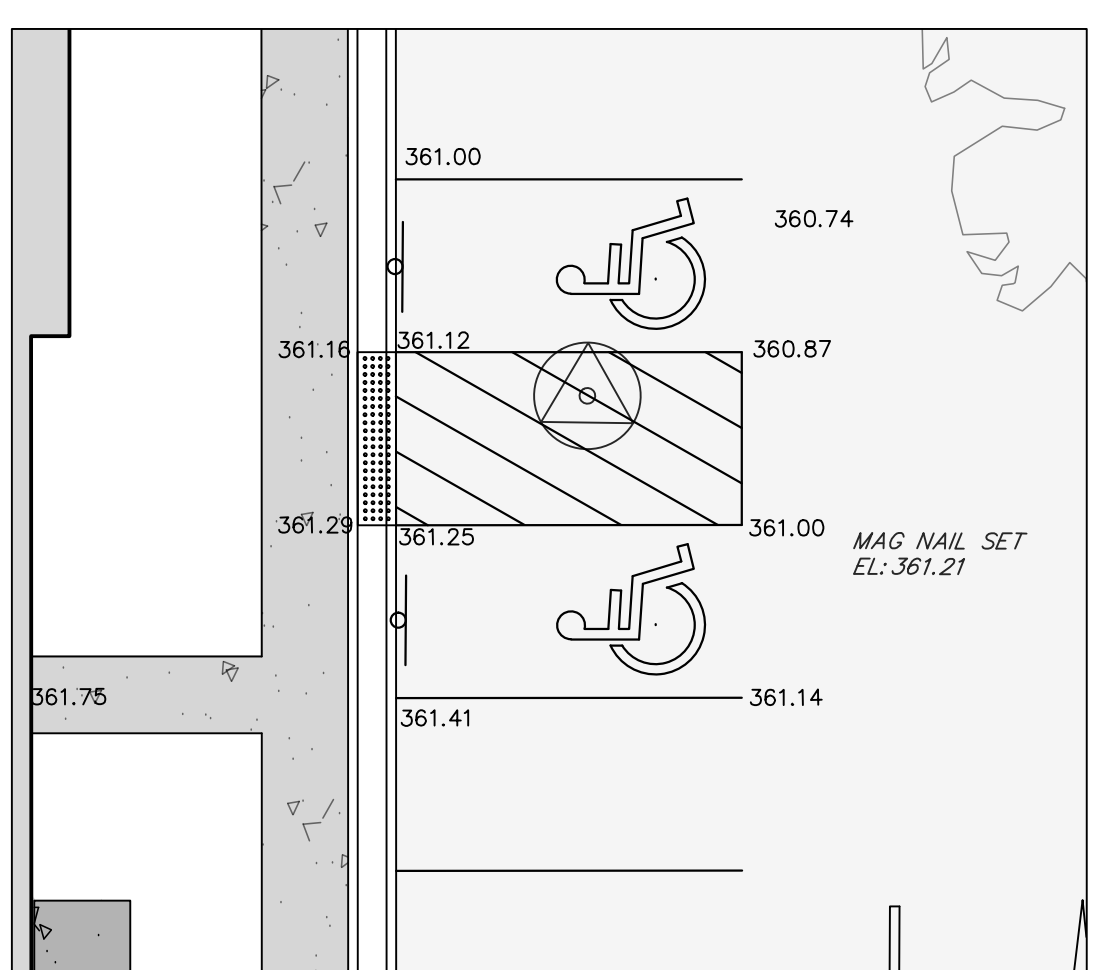
PROJECT NO.	DRAWING NO.	REVISION:
3410	2 OF 11	00

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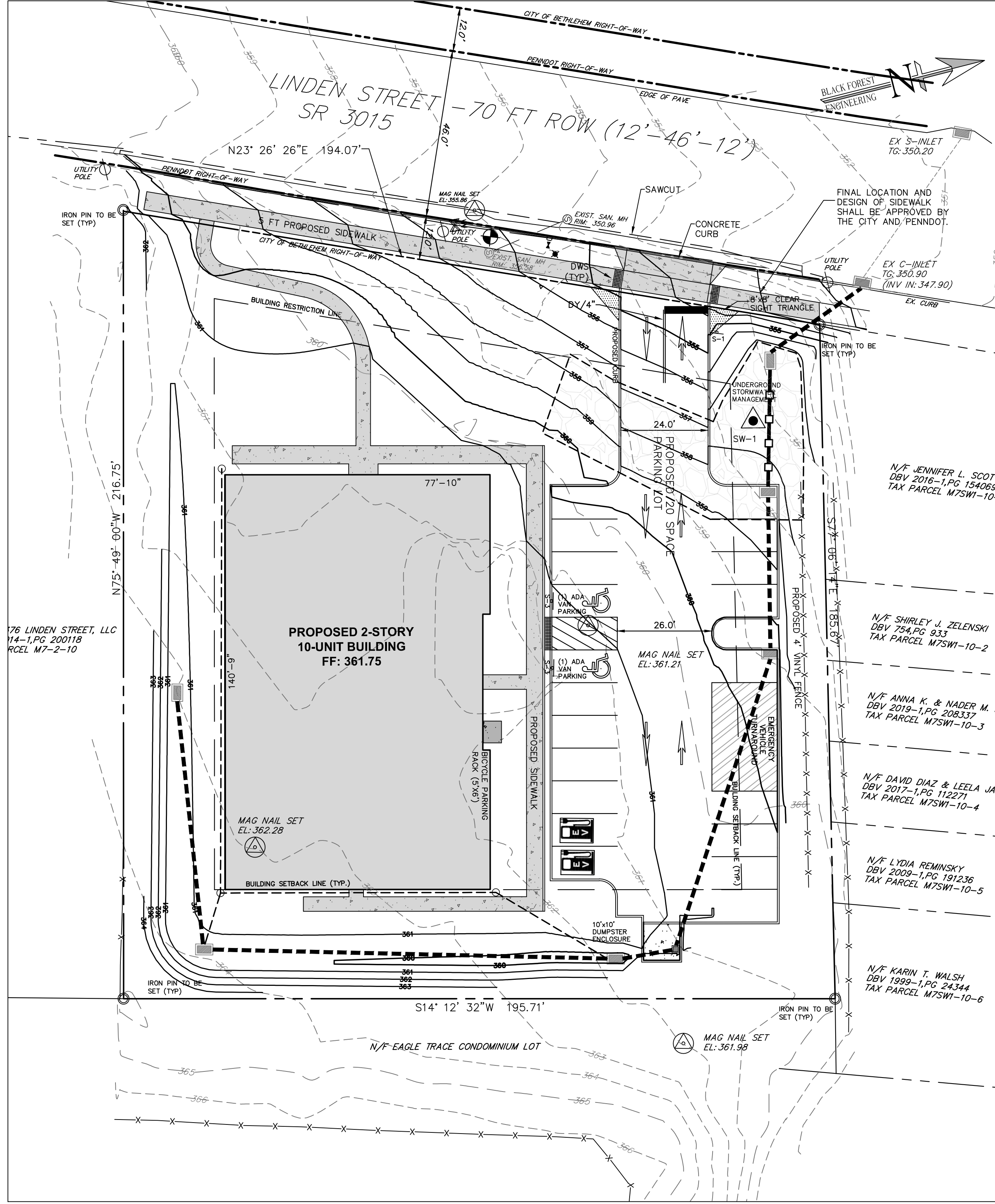
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 - PROP. BENCHMARK
 - PROP. CONCRETE WHEELSTOP
 - PROP. BUILDING/STRUCTURE
 - PROP. DRIVEWAY



MAIN DRIVEWAY PROFILE
SCALE: 1"=4' VERT.
1"=20' HORIZ.



ADA PARKING BLOW-UP
SCALE: 1"=10'



Pure Basin & Curb Inlet Filters

Pure basin and curb inlet filters are the preferred choice for permanent inlet protection and stormwater runoff control. Constructed of versatile stainless steel, Pure Inlet Filters will fit any drainage structure and are available with site-specific filter bags providing various levels of filtration.

Applications

- Commercial
- Industrial
- Residential
- Gas stations
- Parking lots
- Book stores
- Maintenance

Features

- Custom stainless steel frames are configured to fit into any drainage structure
- Flow and bypass inlet meet specific site requirements
- Filter bags target site specific removal of trash, leaves, small particles, oil and grease
- Works below grade with bypass to drain area if bag is full
- Installs quickly and maintained with removal tool
- Stainless steel frame provides extended service life
- Flow and bypass inlet meet specific site requirements
- Filter bags target site specific removal of trash, leaves, small particles, oil and grease
- Works below grade with bypass to drain area if bag is full
- Installs quickly and maintained with removal tool

Pure Inlet Filters Specification

Identification
The specifier shall inspect the plans and/or work site to determine the quantity of each drainage structure casting type. The quantity casting number, exact grate size and clear opening size or other information will be necessary to finalize the part number and dimensions.

Material and performance
The filter is comprised of a stainless steel frame and a replaceable geotextile filter bag attached to the frame with a stainless steel locking band. The filter bag hangs suspended below the grate that shall allow full bypass flow into the drainage structure if the bag is completely filled with sediment. The standard woven polypropylene filter bags are rated for 200 gpm/ft² with a removal efficiency of 80% when filtering a 1000-1500 mesh sediment load. The non-proprietary PC filter bags are rated for 133 gpm/ft² and have been third party tested at 95% TSS removal to 100 micron and 97% TSS removal of used motor oil hydrocarbon risk.

Installation
Remove the grate and clean the ledge of the frame to ensure it is free of stone and dirt. Hang the inlet filter's suspension hangers firmly on the casting's inside ledge. Replace the grate and confirm it is elevated no more than 1/2 inch. For wall mount units, follow instructions for attaching the stainless steel mounting brackets using the provided concrete fasteners.

Inspection Frequency
Construction site inspection should occur following each 10" (25 mm) or more rain event. Post construction inspections should occur three times per year in areas with mid year round rainfall and four times per year in areas with summer rains. Industrial application site inspections should occur on a regular scheduled basis no less than three times per year.

Maintenance guidelines
Empty the filter bag if more than half filled with sediment and debris or as directed by the engineer. Remove the grate, engage the lifting bar or handles with the removal tool and lift from the structure. Dispose of the sediment or debris as directed by the engineer or maintenance contract in accordance with EPA guidelines.

As an alternative, an industrial vacuum may be used to collect the accumulated sediment. Remove any called out oil from the sediment bag and transfer the bag with medium spray for optimal filtration. Replace the bag if torn or punctured to 1/2 inch diameter or greater on the lower half of the bag. Post construction PC/PC bags should be maintained prior to 30% saturation. The average 10' x 10' filter bag will retain approximately 160 lbs of 100 mesh sediment. The bag should be replaced when the bag is full. The bag should be replaced when the bag is full. The bag should be replaced when the bag is full.

Filter bag replacement
Remove the bag by loosening or cutting off the clamping band. Take the new filter bag, which is equipped with a stainless steel woven steel clamping band and use a screwdriver to tighten the bag around the frame channel. Ensure the bag is secure and there is not slack around the perimeter of the band.

ADS INLET FILTER
NOT TO SCALE

ADS logo and contact information: 800-821-6710

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2455 BLACK FOREST DRIVE
COPLAY, PA 18037

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SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
JOSEPH E. RENTKO
ENGINEER (PROFESSION)

JOSEPH E. RENTKO, P.E. #0085609
2455 BLACK FOREST DRIVE
COPLAY, PA 18037
717-239-4499

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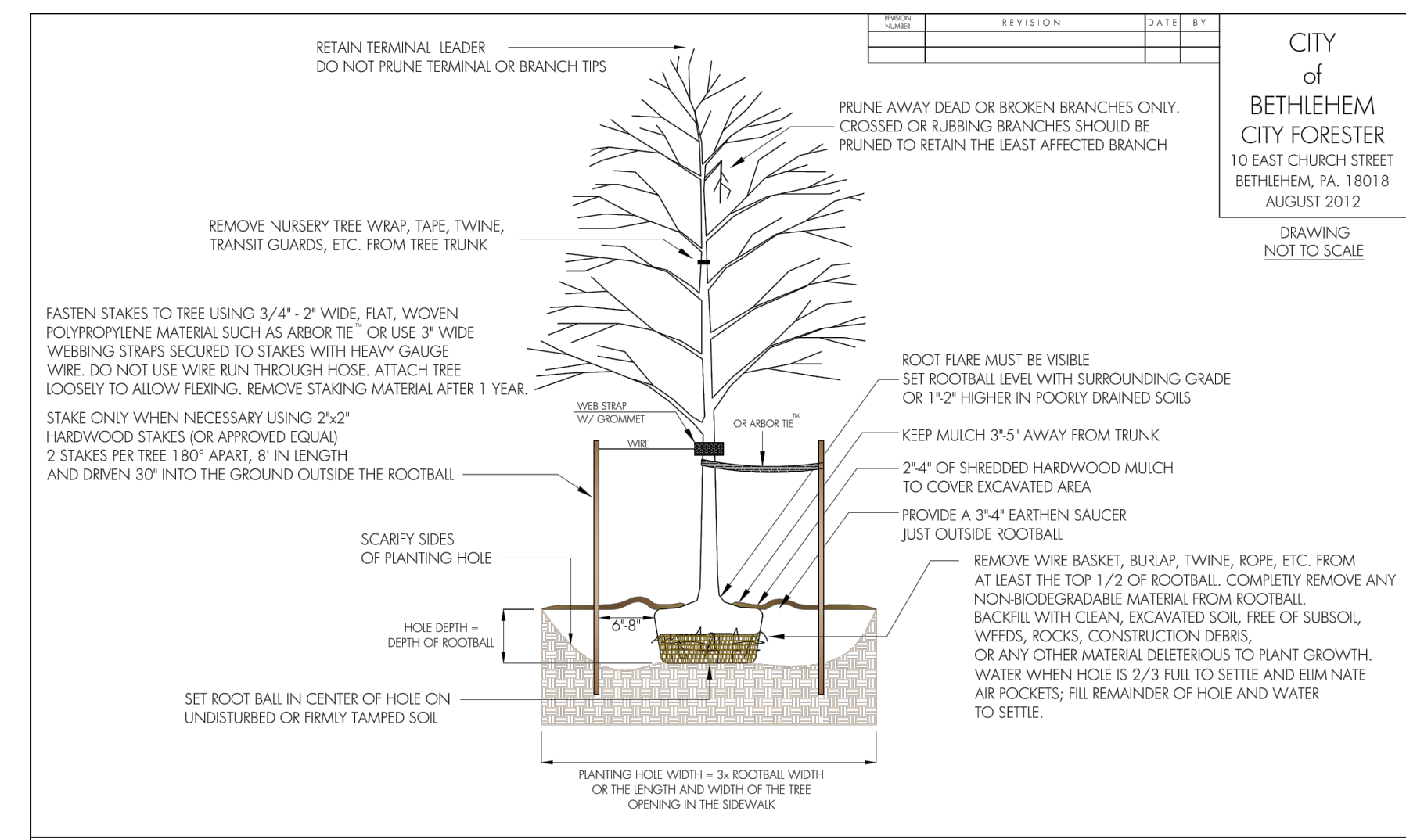
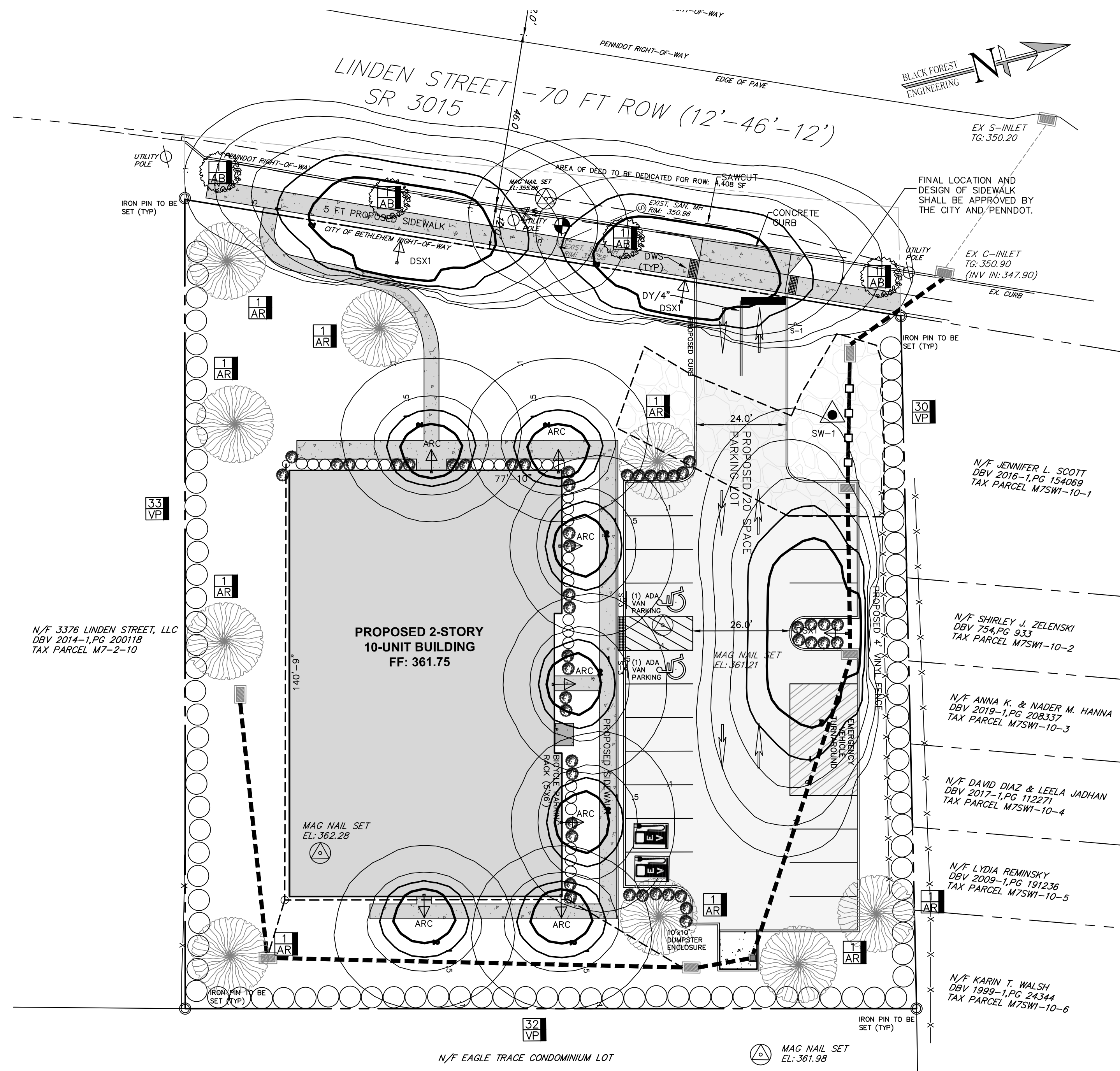
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PENNSYLVANIA**

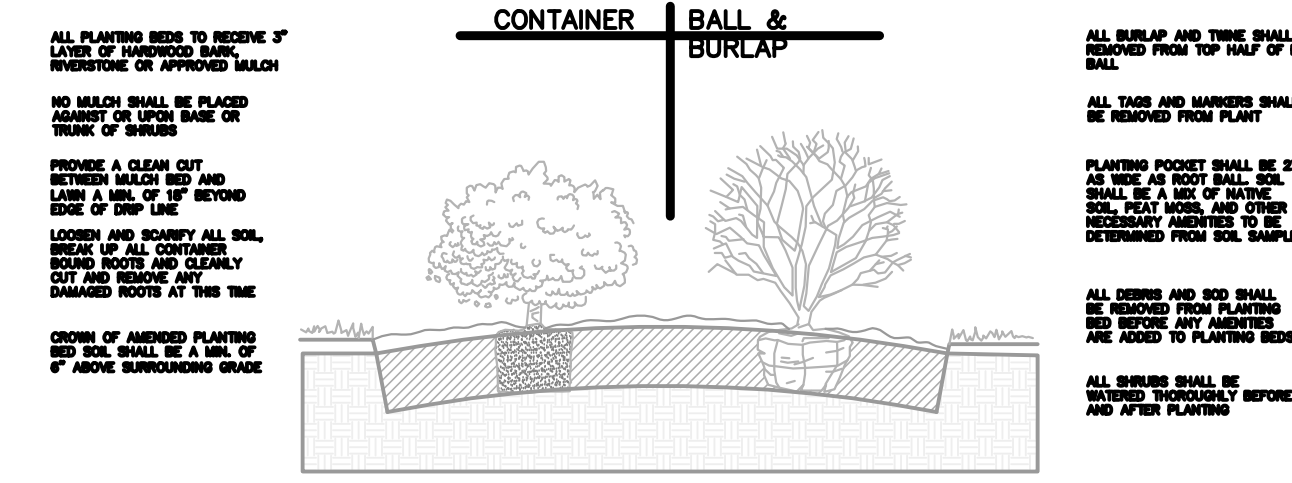
PLAN TITLE:
GRADING PLAN

SCALE:	DATE:	DRAWN:	CHECKED:
1"=20'	3/13/23	JMK	JER

PROJECT NO.	DRAWING NO.	REVISION:
3410	3 OF 11	00



PLAN PREPARER
 BLACK FOREST ENGINEERING, LLC
 2455 BLACK FOREST DRIVE
 COPLAY, PA 18037
 (570)-239-4499



SHRUB PLANTING

- NOTES** NOT TO SCALE
- REFER TO SITE PLAN FOR LANDSCAPED AREAS.

SITE LIGHTING PLAN

LIGHTING SCHEDULE				
KEY	COMPANY	PRODUCT NAME	QTY	HT
ARC	LITHONIA	ARC 1 LED P1 30K	7	10
DSX	LITHONIA	DSX1 LED P1 40K BLC MVOLT	3	15

PROPOSED BUILDING LIGHTS MODEL: ARC 1
 LED P1 30K (OR EQUAL) 10FT HT
 PROPOSED PARKING/STREET LIGHTS MODEL: DSX1 LED
 P1 40K BLC MVOLT (OR EQUAL) 15FT POLE
 *NOTE: ALL LIGHT SOURCES TO BE SHIELDED.

VINYL PRIVACY FENCE DETAIL

REQUIRED LANDSCAPING:

- STREET TREES:**
 LINDEN STREET = 200 LF FRONTAGE (1 TREE REQ'D PER 50 LF); 4 TREES REQ'D
- LANDSCAPE AREAS EQUAL TO 10 PERCENT OF THE OFFSTREET PARKING AREA SHALL BE PROVIDED. APPROX PARKING AREA=6,897 SF REQ'D LANDSCAPE AREA=690 SF
 - LANDSCAPE AREAS EQUAL TO 10 PERCENT OF THE MULTIFAMILY BUILDING AREA SHALL BE PROVIDED. APPROX BUILDING AREA=6,897 SF REQ'D LANDSCAPE AREA=1,095 SF
 - TOTAL REQ'D LANDSCAPE AREA=1,995 SF PROVIDED LANDSCAPE AREA=9,000 SF
 - ONE (1) TREE PER 15 PARKING SPACES; 1.33 TREES REQUIRED; 2 PROVIDED
 - ONE (1) TREE PER 8" CALIPER TREE REMOVED FROM SITE; 7 TREES REMOVED; 7 ADDITIONAL TREES PROVIDED

PLANT LIST: STREET & PARKING LOT/REPLACEMENT TREES

KEY	BOTANIC / COMMON NAME	SIZE	ROOT CONDITION	QUANTITY
AB	ACER BUERGERIANUM / TRIDENT MAPLE	2"-2.5" CAL.	B&B	4
AR	ACER RUBRUM / OCTOBER GLORY	2"-2.5" CAL.	B&B	9

PLANT LIST: BUFFER PLANTS

KEY	BOTANIC / COMMON NAME	SIZE	ROOT CONDITION	QUANTITY
VP	VIURNUM X PRAGENSE / PRAGENSE VIURNUM	7 LB	B&B	95

PLANT LIST: FOUNDATION PLANTS

KEY	BOTANIC / COMMON NAME	SIZE	ROOT CONDITION	QUANTITY
IG	ILEX GLABRA / SHAMROCK	5 LB	CONT.	48
IV	ITEA VIRGINICA / LITTLE HENRY	5 LB	CONT.	30

ALL TREES AND SHRUBS SHALL BE MATCHES, IN FORM, IN THEIR VARIETY.

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SEAL:

JOSEPH E. RENTKO, P.E. #PE085609
 2455 BLACK FOREST DRIVE
 COPLAY, PA 18037
 (570)-239-4499

REV.	DESCRIPTION:	BY	DATE

PROJECT TITLE:
3410 & 3412 LINDEN STREET

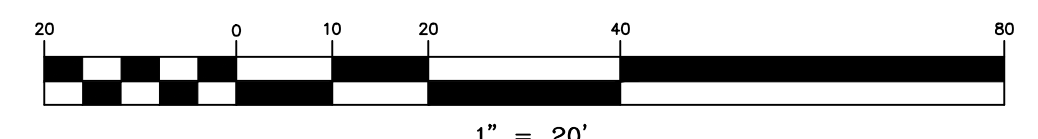
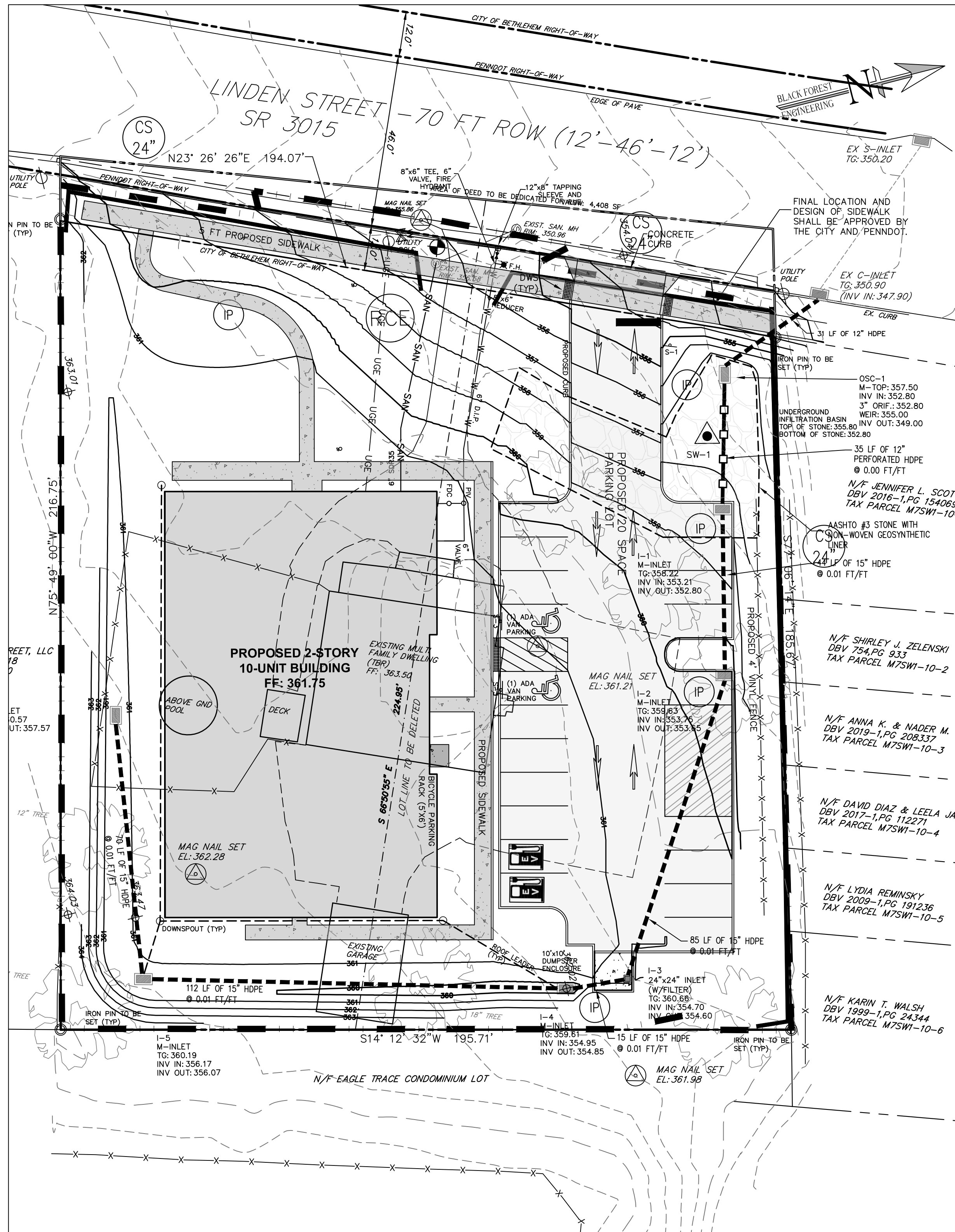
PROJECT OWNER:
 WEST BROAD INVESTMENTS LLC
 1853 SCHADT AVE
 WHITEHALL, PA 18052

PROJECT LOCATION:
 CITY OF BETHLEHEM
 WARD 14 BLOCK 262
 NORTHAMPTON COUNTY
 PENNSYLVANIA

PLAN TITLE:
LIGHTING AND LANDSCAPE

SCALE:	DATE:	DRAWN:	CHECKED:
1"=10'	3/13/23	JMK	JER

PROJECT NO.	DRAWING NO.	REVISION:
3410	5 of 11	00



ACCELERATED EROSION CONTROL
 DURING THE CONSTRUCTION PHASE, MEASURES TO CONTROL ACCELERATED EROSION INCLUDE BUT ARE NOT LIMITED TO THE USE OF TEMPORARY STOCKPILES, PUMPED WATER FILTERS, AND PERMANENT STABILIZATION OF FINAL GRADES. ALL EFFORTS TO MINIMIZE THE EXTENT AND DURATION OF THE EARTH DISTURBANCE ACTIVITIES, MINIMIZE SOIL COMPACTION (WHERE PRUDENT), MAXIMIZE THE PRESERVATION OF EXISTING DRAINAGE FEATURES AND VEGETATION, AND TO EMPLOY OTHER MEASURES OR CONTROLS TO PREVENT THE INCREASE OF STORMWATER RUNOFF.

RESPONSIBILITY FOR E & S CONTROL FACILITIES
 NOTE: CONTRACTOR SHALL COMPLETE INSPECTION REPORT FORM 3150-FM-BWEV-0083 INSURING MAINTENANCE OF E&S FACILITIES. DURING IMPROVEMENTS CONSTRUCTION, THE SITE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION, STABILIZATION & MAINTENANCE OF ALL SITE EROSION & SEDIMENTATION CONTROL FACILITIES. AFTER CONTRACTOR INVOLVEMENT CEASES, RESPONSIBILITY SHALL REVERT TO THE OWNER OF THE PROPERTY.

ASSURANCE OF DESIGN PERFORMANCE

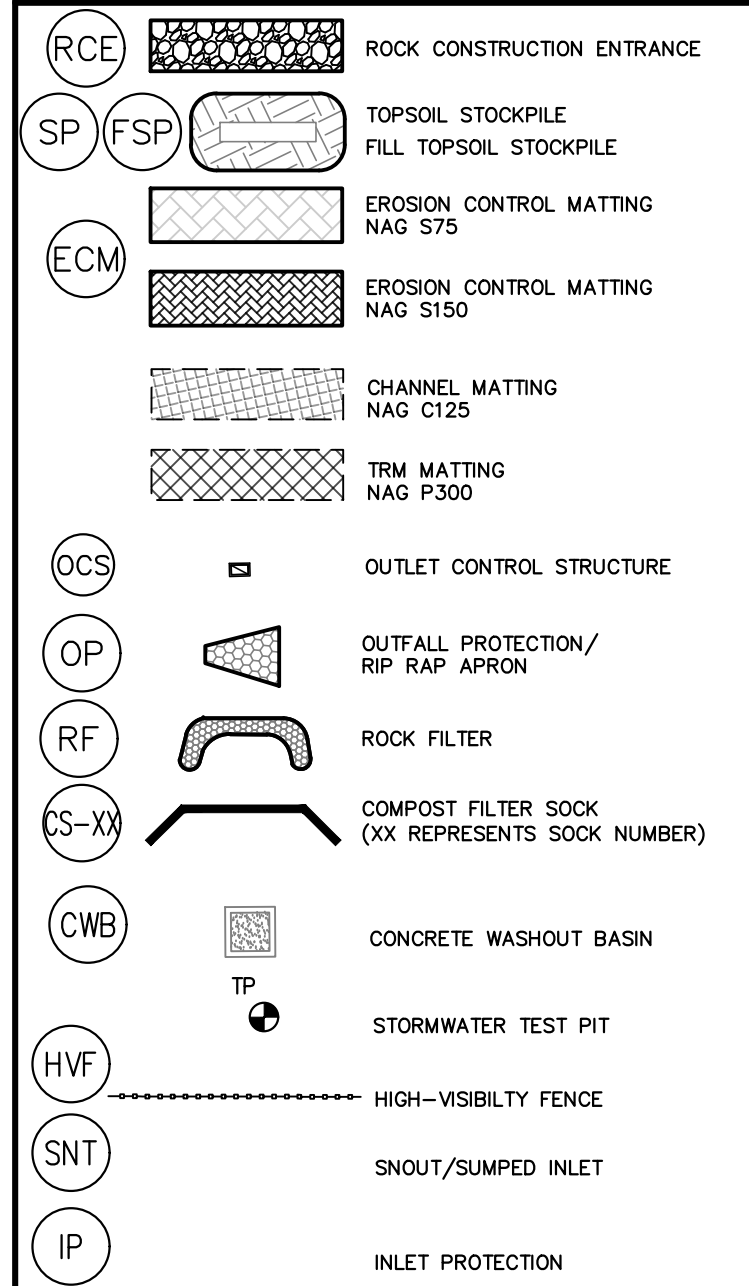
THE SPECIFICATIONS AND REQUIREMENTS OF THE PROJECT PLANS, NARRATIVE AND SPECIFICATION ARE THE MINIMUM ACCEPTABLE CONSTRUCTION CRITERIA FOR THIS PROJECT.

DURING SITE DEVELOPMENT CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENT CONTROL FACILITIES MUST BE CHECKED BY THE SITE CONTRACTOR AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ANY DAMAGE TO THE FACILITIES MUST BE REPAIRED IMMEDIATELY. ANY LOST SOIL MATERIAL SHALL BE RECOVERED, IF POSSIBLE. WASHED OUT LAWN OR SLOPE AREAS MUST HAVE TOPSOIL REPLACED AND THEN MUST BE RE-SEED AND MULCHED.

IF, FOR ANY REASON, THE DESIGNED FACILITIES OR MEASURES DO NOT PROVIDE THE NECESSARY PROTECTION, THE CONTRACTOR SHALL ADJUST THE EROSION CONTROL MEASURES AND SEDIMENT CONTROL MEASURES TO ACHIEVE A COMPLETE NON-ERODED STABILIZED SITE CONDITION.

AFTER THE MUNICIPALITY'S FINAL ACCEPTANCE OF SITE WORK CONSTRUCTION AND STABILIZATION BY THE CONTRACTOR, THE GROUND SURFACE AND ALL DRAINAGE FACILITIES LOCATED ON PUBLIC PROPERTY WILL BE MAINTAINED BY THE MUNICIPALITY.

EROSION AND SEDIMENT POLLUTION CONTROL LEGEND



LIMIT OF DISTURBANCE:
 41,045SF (0.94 AC)

PLAN PREPARER
 BLACK FOREST ENGINEERING, LLC
 2455 BLACK FOREST DRIVE
 COPLAY, PA 18037
 (570)-239-4499

SOIL TYPES — UmB —

UoD Urban Land Duffield — 8 to 25 percent slopes

ALL BMP'S SHALL BE INSPECTED AFTER EVERY RUNOFF EVENT AND ON A WEEKLY BASIS. ANY NECESSARY REPAIRS MUST BE MADE IMMEDIATELY.

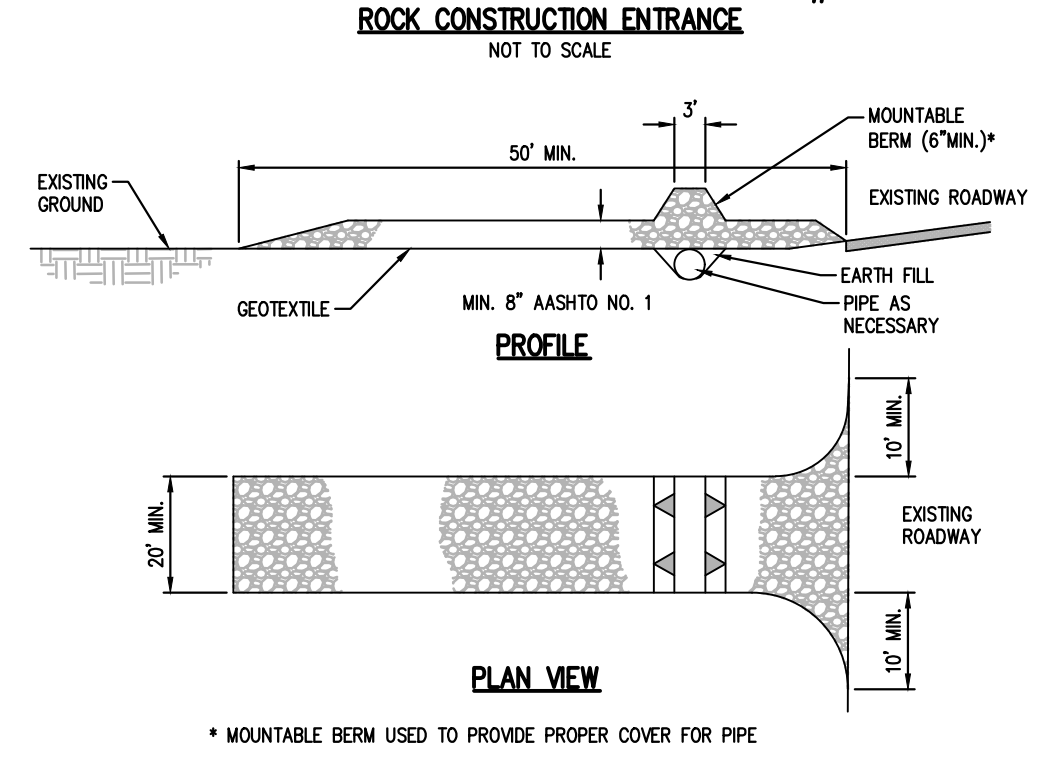
CONSTRUCTION NOTES:

- All grading shall be done in accordance with the City of Bethlehem.
- No earthmoving or grading activities may take place until a grading permit is granted by the City of Bethlehem.
- The City Engineer and/or staff may enter the property to inspect all grading and construction activities on the site.
- At least 7 days prior to any earth disturbance activities, the operator shall notify the City and invite all contractors involved in those activities, and the landowner to an on-site meeting.
- At least 7 days prior to any earth disturbance activities, the operator shall provide notice in writing to the City of Bethlehem that earth disturbance activities will be commencing.
- Temporary and permanent seeding shall be in accordance with requirements on the details. Compost Filter Socks shall be installed downslope of all topsoil stockpiles as indicated in the Topsoil Stockpile detail.
 - Topsoil pile locations may be adjusted to fit the contractor schedule as long as the silt sock is placed downslope of the pile locations.
 - Prior to any seeding and lime and fertilizer application, a soil test shall be performed to determine the pH factor. Additional lime and fertilizer may be required.
- All disturbed areas shall be immediately stabilized if earth disturbance/construction has ceased. Disturbed slopes of 3:1 or greater shall be stabilized with erosion control matting.
- Soil compaction and vehicle traffic shall be kept to a minimum at areas designated for sanitary absorption or stormwater infiltration BMPs.
- Topsoil should be stripped and stockpiled prior to all earthwork. Only strip the amount of topsoil necessary to perform earthwork. All disturbed areas shall be stabilized immediately if disturbance has ceased.
- On a daily basis, the Contractor shall inspect and clean any sediment that is tracked onto existing roads.
- All erosion control facilities shall be inspected after every runoff event and on a weekly basis, any necessary repairs must be made immediately.
- An area shall be considered to have achieved final stabilization when it has a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding or other movements.
- NAGS75 matting to be applied to all proposed 3:1 slopes.

SEQUENCE OF CONSTRUCTION

- At least 7 days before starting any earth disturbance activities, the operator provide written notification to the City of Bethlehem and shall invite all contractors involved in those activities, appropriate municipal officials, the ESDP plan preparer and the landowner to an on-site meeting.
- At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System, Inc. shall be notified at 1-800-242-1776 for the location of existing underground utilities.
- Flag and mark the Limits of Disturbance. No grading or earthmoving may take place beyond the Limits of Disturbance.
- Install Rock Construction Entrance (RCE) off of Linden Street where indicated on the Plan. This shall be the only ingress and egress from the site. Any sediment tracked onto the public roadway shall be collected and returned to the site by the end of each workday. Any sediment tracked onto the public roadway during RCE construction shall be cleaned immediately.
- Install perimeter compost filter socks at locations indicated on plan and per details.
- Remove existing buildings, structures and asphalt from the site. Immediately stabilize any disturbed areas outside of construction area. Any remaining topsoil shall be stockpiled in stockpile locations indicated on the plan.
- Begin bulk earthwork for the building pad and parking lot. Rough grade the driveway and sidewalk. Fill should be compacted in layers so as to minimize sliding, slumping and erosion of soil. Erosion control matting shall be installed on any graded slopes of 3:1 or greater. The underground infiltration basin shall be installed at this time. Careful attention shall be paid to not over compact the subbase. Immediately install and connect the proposed outlet control structure. Begin storm sewer installation beginning at basin riser and working up slope.
- Rough grade building pad area. Fill should be compacted in layers so as to minimize sliding, slumping and erosion of soil. All newly graded shall be stabilized immediately. Erosion control matting shall be installed on any graded slopes of 3:1 or greater. Install curbing and paving base course.
- Begin building construction and utility connection installation. Complete final paving.
- Upon completion of proposed improvements, any temporary staging area shall be restored to existing condition. Proposed landscaping shall be installed upon completion of building.
- After the site is stabilized, remove E&S BMPs. Immediately stabilize any areas disturbed by the removal of the erosion and sediment pollution controls. An area shall be considered to have achieved final stabilization when it has a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding or other movements.

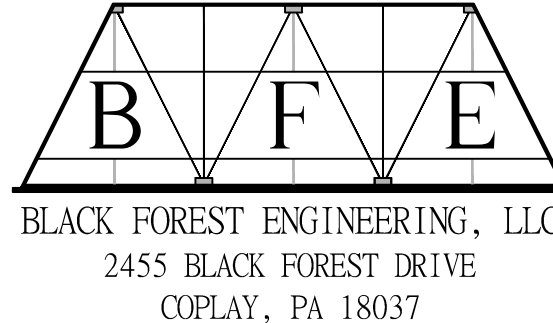
Standard Construction Detail # 3-1



General Notes:

- REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
 - ROCK SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
 - MOUNTABLE BEAM 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.

"CALL BEFORE YOU DIG"
 PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN ADVANCE FOR UTILITY LOCATIONS. IF YOU ARE NOT SURE IF YOU NEED TO STOP CALL PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776



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REV:	DESCRIPTION:	BY:	DATE:

PROJECT TITLE:
3410 & 3412 LINDEN STREET

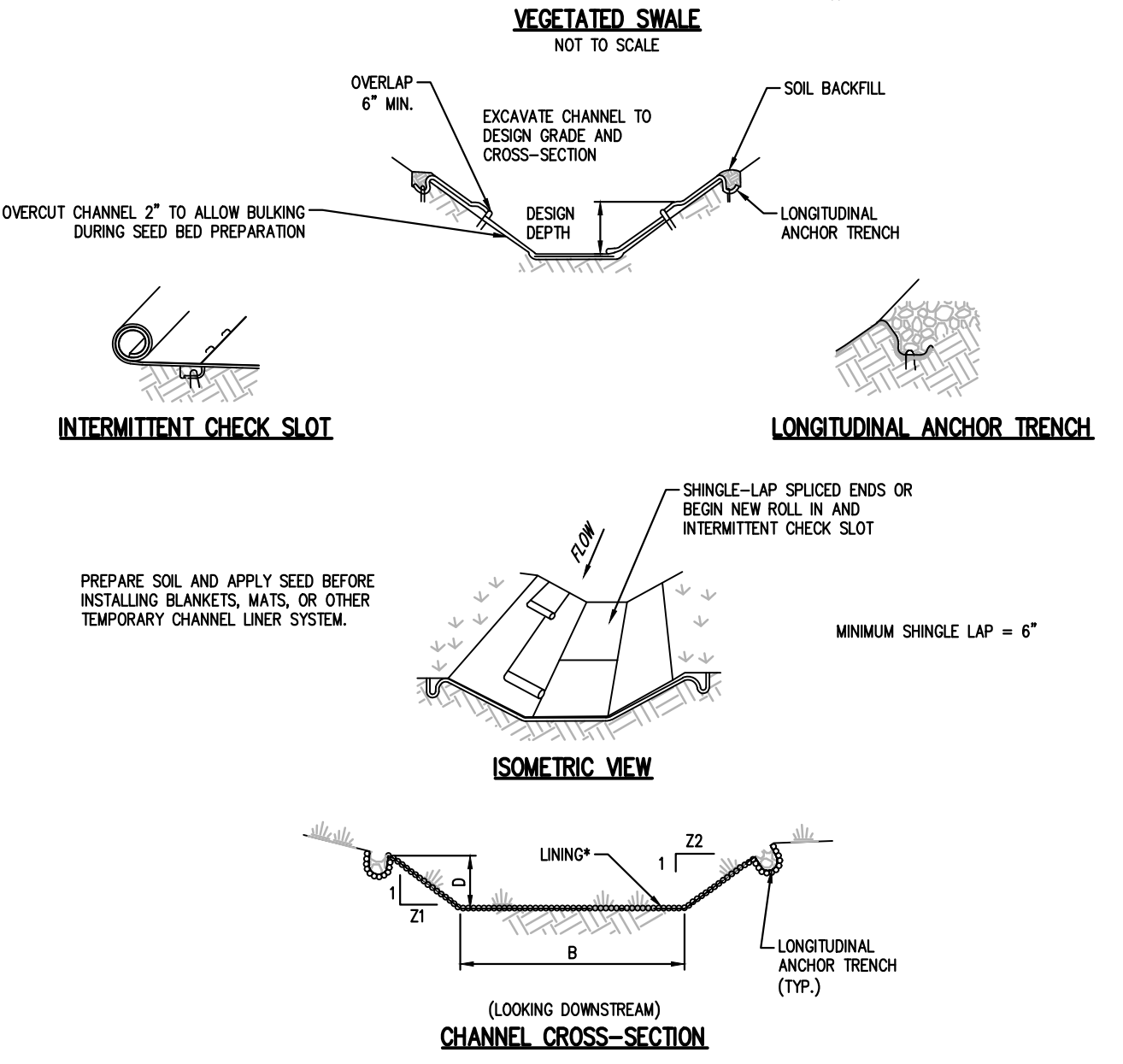
PROJECT OWNER:
 WEST BROAD INVESTMENTS LLC
 1853 SHADT AVE
 WHITEHALL, PA 18052

PROJECT LOCATION:
 CITY OF BETHLEHEM
 WARD 14 BLOCK 262
 NORTHAMPTON COUNTY
 PENNSYLVANIA

PLAN TITLE:
EROSION CONTROL

SCALE: 1"=20'	DATE: 3/13/23	DRAWN: JMK	CHECKED: JER
PROJECT NO. 3410	DRAWING NO. 6	OF 11	REVISION: 00

Standard Construction Detail # 6-1



*SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS AND VEGETATIVE STABILIZATION SPECIFICATIONS FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION.

ADAPTED FROM SAUX APPLIED EARTH CARE - EROSION DRAW 5.0

General Notes:

- ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
- CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.
- NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	Z1 (FT)	Z2 (FT)	LINING*
REAR YARD	ALL	0	1	3	3	NAG S75

MULCHING—Mulch absorbs rainfall impact, increases the rate of infiltration, reduces soil moisture loss due to evaporation, moderates soil temperatures, provides a suitable environment for germination, and protects the seedling from intense sunlight. All seeded areas should be mulched or blanketed to minimize the potential for failure to establish an adequate vegetative cover. Mulching may also be used as a temporary stabilization of disturbed areas in non-germinating seasons.

Apply mulches at the rates shown in table 11.6

Straw and hay mulch should be anchored immediately after application to prevent being blown away. A tractor-drawn implement may be used to crimp the straw or hay into the soil (about 3 inches). This method should be limited to slopes no steeper than 3H:1V. The machinery should be operated on the contour. (Note: Crimping of hay or straw by turning over it with tracked machinery is not recommended.)

Mulch Type	Application Rate (Min.)			Notes
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yds.	
Straw	3 tons	140 lb.	1,240 lb.	Either wheel or oat straw, free of weeds, not chipped or finely broken.
Hay	3 tons	140 lb.	1,240 lb.	Timothy, mixed clover and timothy or other native forage grasses
Wood Chips	4-6 tons	185-275 lb.	1,650-2,500 lb.	May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lb.	415	See limitations above

STANDARD EROSION AND SEDIMENT CONTROL PLAN NOTES

ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED EAS 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 AT ITS DISCRETION.

AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL NOTIFY ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE EAS PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.

AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.

AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE EAS BMPs SPECIFIED BY THE SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS EAS PLAN.

AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.

TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS. IT SHALL BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.

IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 2601 ET SEQ., 2711, AND 2871.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, BURIED, DUMPED, OR DISCHARGED AT THIS SITE.

ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN EAS PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-1001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.

ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN. OVER UNDISTURBED VEGETATED AREAS. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.

VEHICLES AND EQUIPMENT MAY NEVER ENTER DIRECTLY NOR EXIT DIRECTLY FROM LOTS (SPECIFY LOT NUMBERS), ONTO (SPECIFY ROAD NAMES). VEHICLES AND EQUIPMENT MAY ONLY ENTER AND EXIT THE CONSTRUCTION SITE VIA A STABILIZED ROCK CONSTRUCTION ENTRANCE.

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 RAINFALL EVENT AND ON A WEEKLY BASIS. THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO LEHIGH COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REVEGETATING AND REPAIRING MUST BE PERFORMED IMMEDIATELY. IF THE EAS BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.

A LOG SHOWING DATES THAT EAS BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.

SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEP INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.

ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.

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 OUTCROPS SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.

ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOIL, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.

FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.

FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SURFACE DRAIN OR OTHER APPROVED METHOD.

ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE PERMANENTLY SEEDED WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS. SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.

IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL UNDISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR OTHER PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.

PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UPROOF, 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.

EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs. EAS BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE EAS BMPs.

AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT BEST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.

UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.

FAILURE TO CORRECTLY INSTALL EAS BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF EAS BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES BEING IMPOSED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE 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.

IN THE EVENT OF SINKHOLE DISCOVERY A PROFESSIONAL GEOLOGIST OR ENGINEER WILL BE CONTACTED CONCERNING MITIGATION. ADDITIONALLY, THE LEHIGH COUNTY CONSERVATION DISTRICT WILL BE MADE AWARE OF THE SINKHOLE DISCOVERY IMMEDIATELY.

THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.

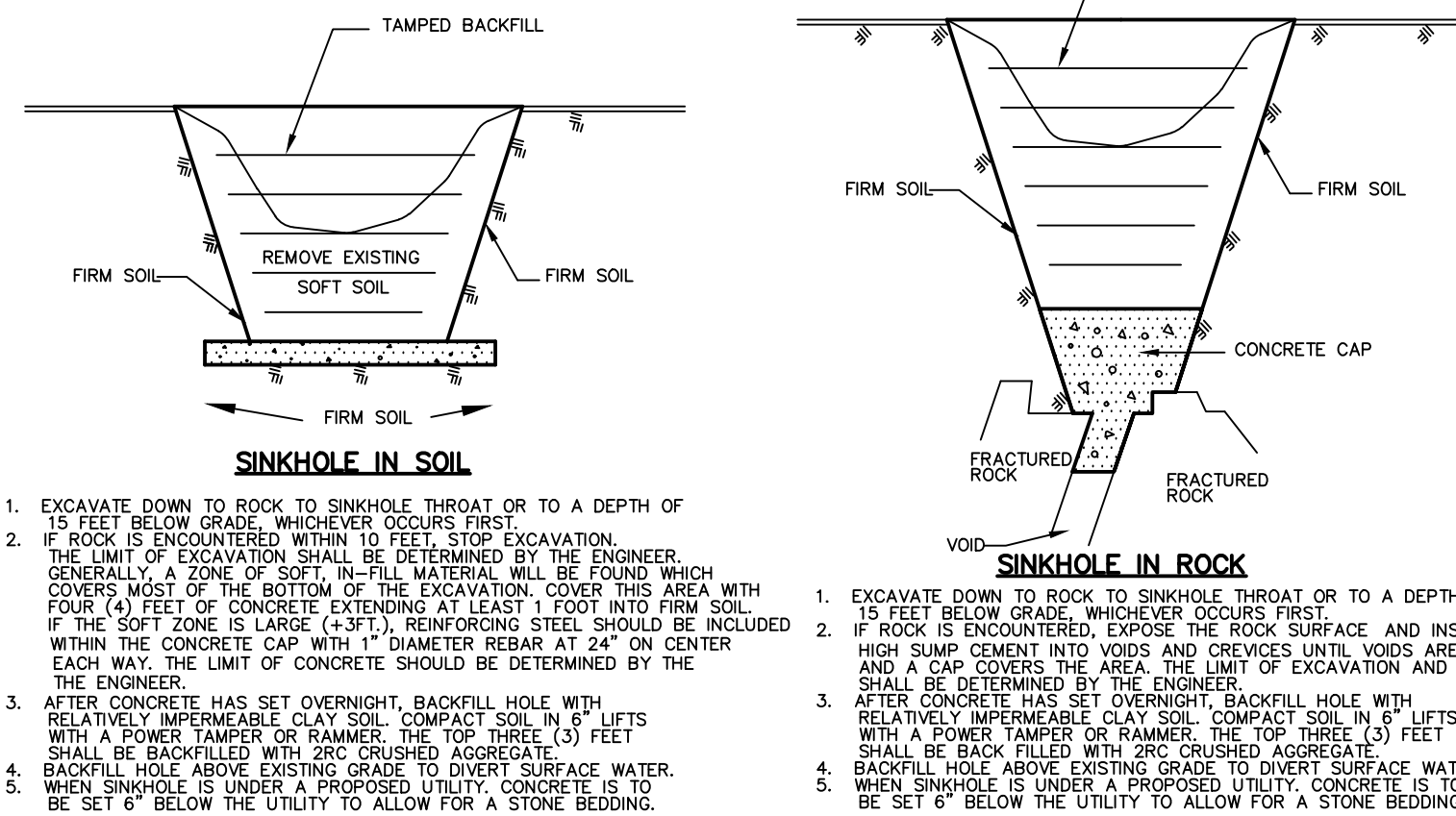
THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART 1.000, INCLUDING OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.

THE EAS CONTROL PLAN MAPS MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL, INCLUDING THE SITE IDENTIFICATION NUMBER. (THIS IS A NUMBERED SYMBOL, NOT A NOTE.)

AT STREAM CROSSINGS, 50' BUFFER AREAS SHOULD BE MAINTAINED. ON BUFFERS, CLEARING, SOIL DISTURBANCES, DITCHING, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RAINWATER FROM TRENCHES, WELDING PIPE SECTIONS, REVEGETATING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS.

ALL WETLANDS MUST BE DELINEATED AND PROTECTED WITH ORANGE SAFETY FENCE PRIOR TO ANY EARTHMOVING ACTIVITY.

STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN



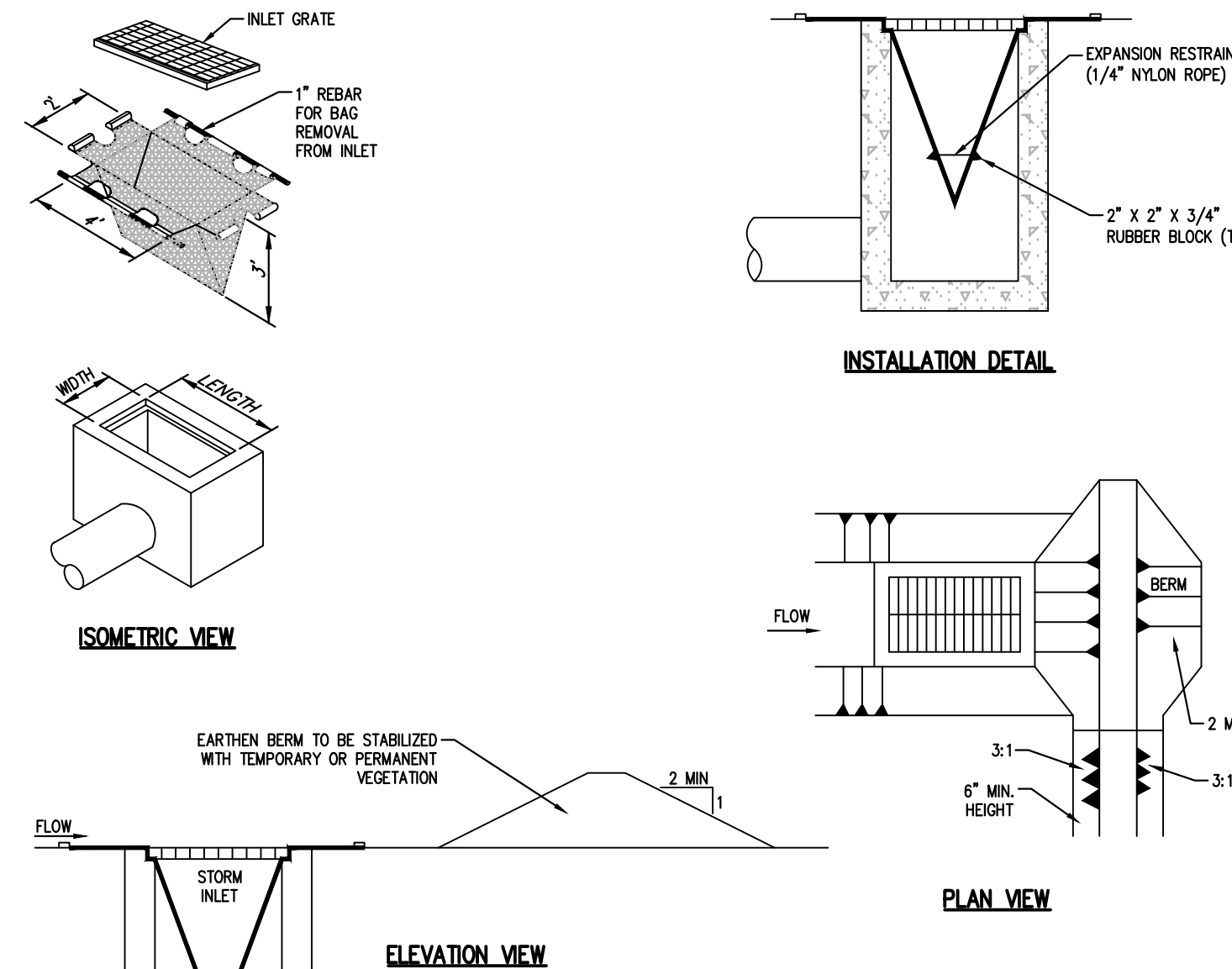
- EXCAVATE DOWN TO ROCK TO SINKHOLE THROAT OR TO A DEPTH OF 15 FEET BELOW GRADE, WHICHEVER OCCURS FIRST.
- IF ROCK IS ENCOUNTERED WITHIN 10 FEET STOP EXCAVATION. THE LIMIT OF EXCAVATION SHALL BE DETERMINED BY THE ENGINEER. GENERALLY A ZONE OF SOFT, IN-FILL MATERIAL WILL BE FOUND WHICH COVERS MOST OF THE BOTTOM OF THE EXCAVATION. COVER THIS AREA WITH FOUR (4) FEET OF CONCRETE EXTENDING AT LEAST 1 FOOT INTO FIRM SOIL. IF THE SOFT ZONE IS LARGE (4-8 FT), REINFORCING STEEL SHOULD BE INCLUDED WITHIN THE CONCRETE CAP WITH 1" DIAMETER REBAR AT 24" ON CENTER EACH WAY. THE LIMIT OF CONCRETE SHOULD BE DETERMINED BY THE ENGINEER.
- AFTER CONCRETE HAS SET OVERNIGHT, BACKFILL HOLE WITH RELATIVELY IMPERMEABLE CLAY SOIL. COMPACT SOIL IN 6" LIFTS WITH A POWER TAMPER OR RAMMER. THE TOP THREE (3) FEET SHALL BE BACKFILLED WITH 20% CRUSHED AGGREGATE.
- BACKFILL HOLE ABOVE EXISTING GRADE TO DIVERT SURFACE WATER.
- WHEN SINKHOLE IS UNDER A PROPOSED UTILITY, CONCRETE IS TO BE SET 6" BELOW THE UTILITY TO ALLOW FOR A STONE BEDDING.

SINKHOLE REPAIR DETAILS
N.T.S.

STANDARD CONSTRUCTION DETAIL # 4-16

FILTER BAG INLET PROTECTION - TYPE M INLET

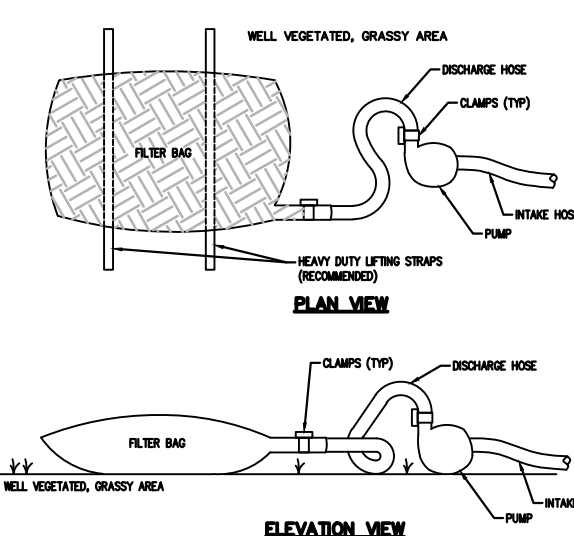
NOT TO SCALE



STANDARD CONSTRUCTION DETAIL # 3-16

FILTER BAG WATER FILTER BAG

NOT TO SCALE



PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. MFC WITH STRENGTH	ASTM D-588	60 LBS
SOIL STRENGTH	ASTM D-588	2
PUNCTURE	ASTM D-588	10 LBS
WEAR RESIST	ASTM D-588	100
UV RESISTANCE	ASTM D-588	70%
AS REQUIRED	ASTM D-588	AS REQ.

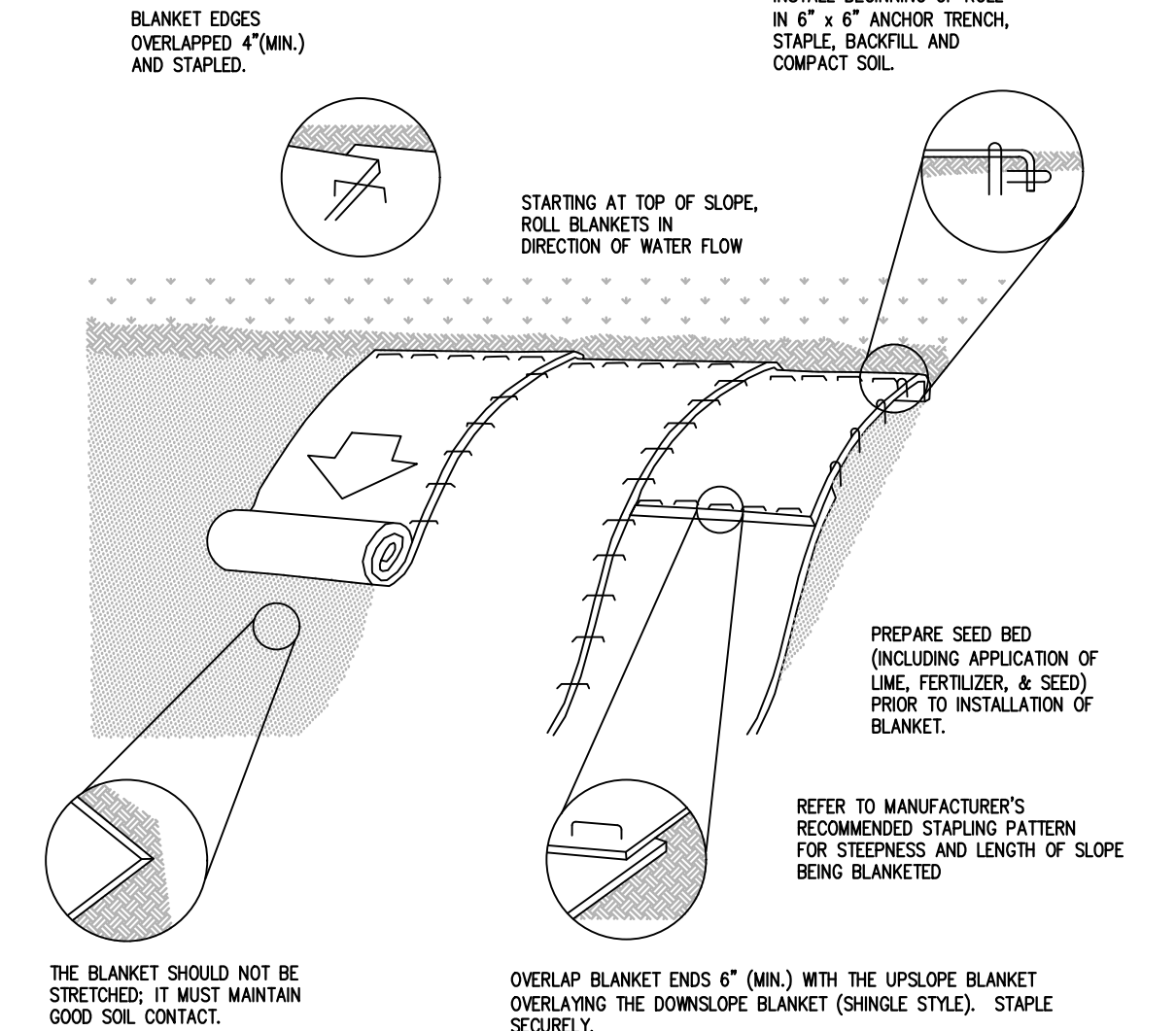
GENERAL NOTES:

- A FILTER BAG IS A BAG OF POLYPROPYLENE OR POLYESTER MATERIAL. BAGS SHALL BE PROVIDED WITH A STITCHED SEAM AT THE END OF EACH BAG. BAGS SHALL BE KEPT IN TRAYS TO PREVENT DAMAGE TO THE BAGS. BAGS SHALL BE KEPT IN TRAYS TO PREVENT DAMAGE TO THE BAGS. BAGS SHALL BE KEPT IN TRAYS TO PREVENT DAMAGE TO THE BAGS.
- INSTALL BAGS AT THE TOP OF SLOPE. BAGS SHALL BE STRETCHED TO MAINTAIN GOOD SOIL CONTACT.
- OVERLAP BAG ENDS 6" (MIN.) WITH THE UPSLOPE BLANKET. OVERLAP THE DOWNSLOPE BLANKET (SINGLE STYLE). STAPLE SECURELY.
- SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
- BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
- THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN A 4-WEEK PERIOD.

Standard Construction Detail # 11-1

EROSION CONTROL BLANKET INSTALLATION

NOT TO SCALE



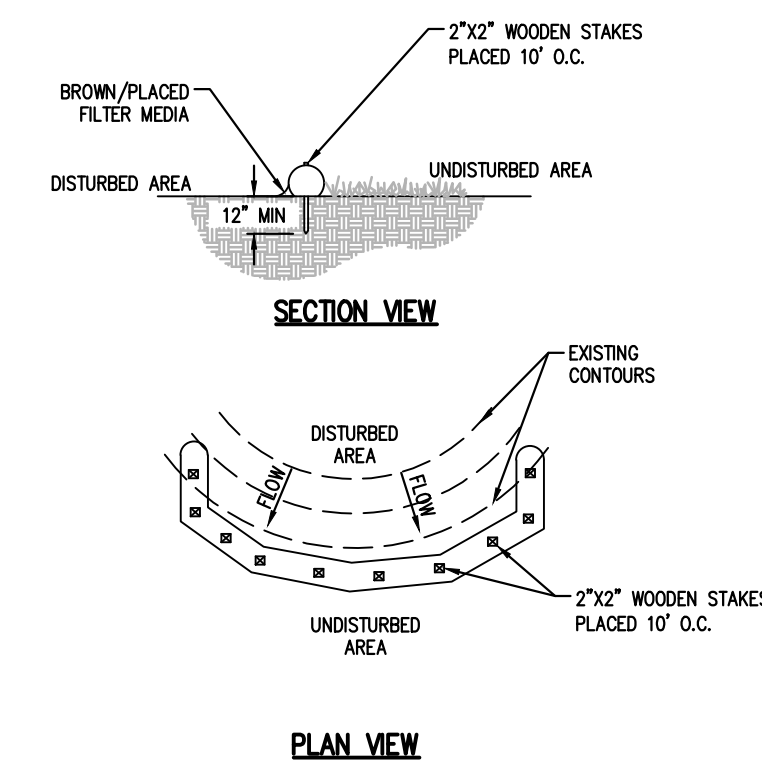
General Notes:

- SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
- BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
- THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN A 4-WEEK PERIOD.

Standard Construction Detail # 4-1

COMPOST FILTER SOCK

NOT TO SCALE



GENERAL NOTES:

- MAXIMUM DRAINAGE AREA = 1/2 ACRE.
- INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
- AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PS, AND A MINIMUM TENSILE TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
- INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
- DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

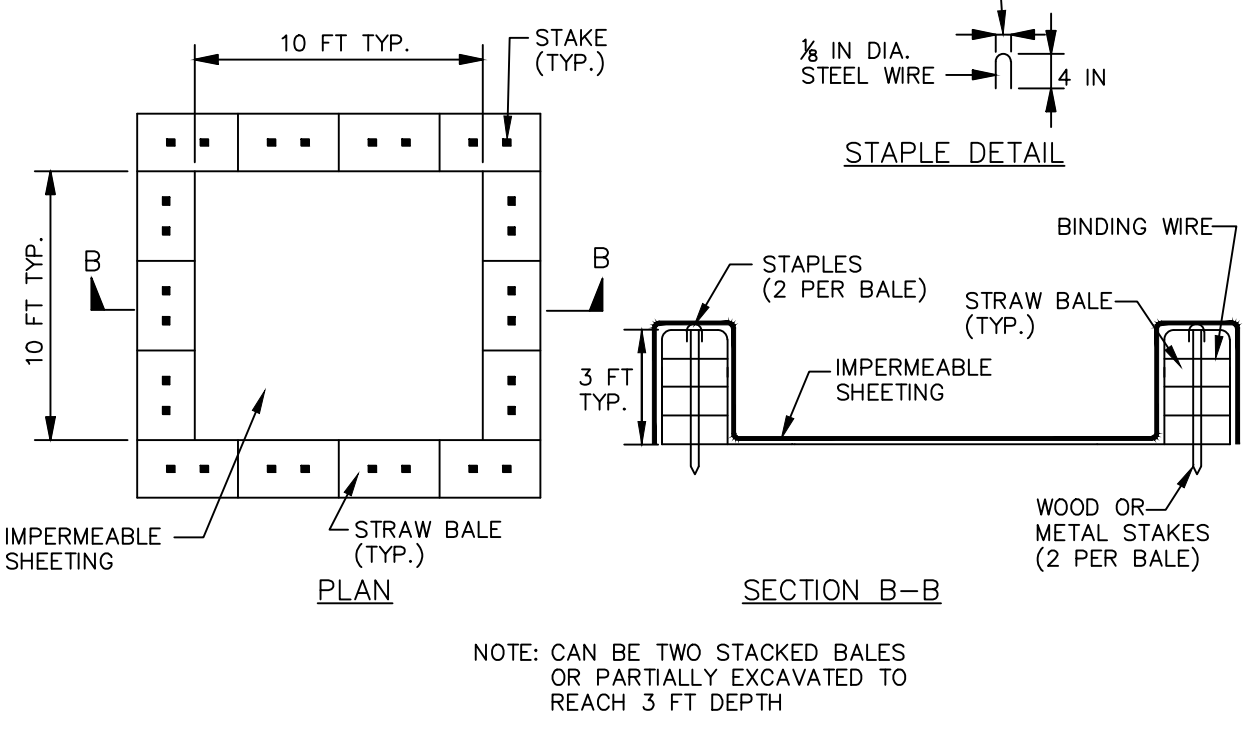
General Notes:

- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (SEE FIGURE 4.1 OF THE PA DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL, MAR. 2012). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN OF FIGURE 4.2 OF THE PA DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MAR. 2012). STAKES MAY BE INSTALLED IMMEDIATELY UP THE SLOPE 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 ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS. PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

Site Specific Detail

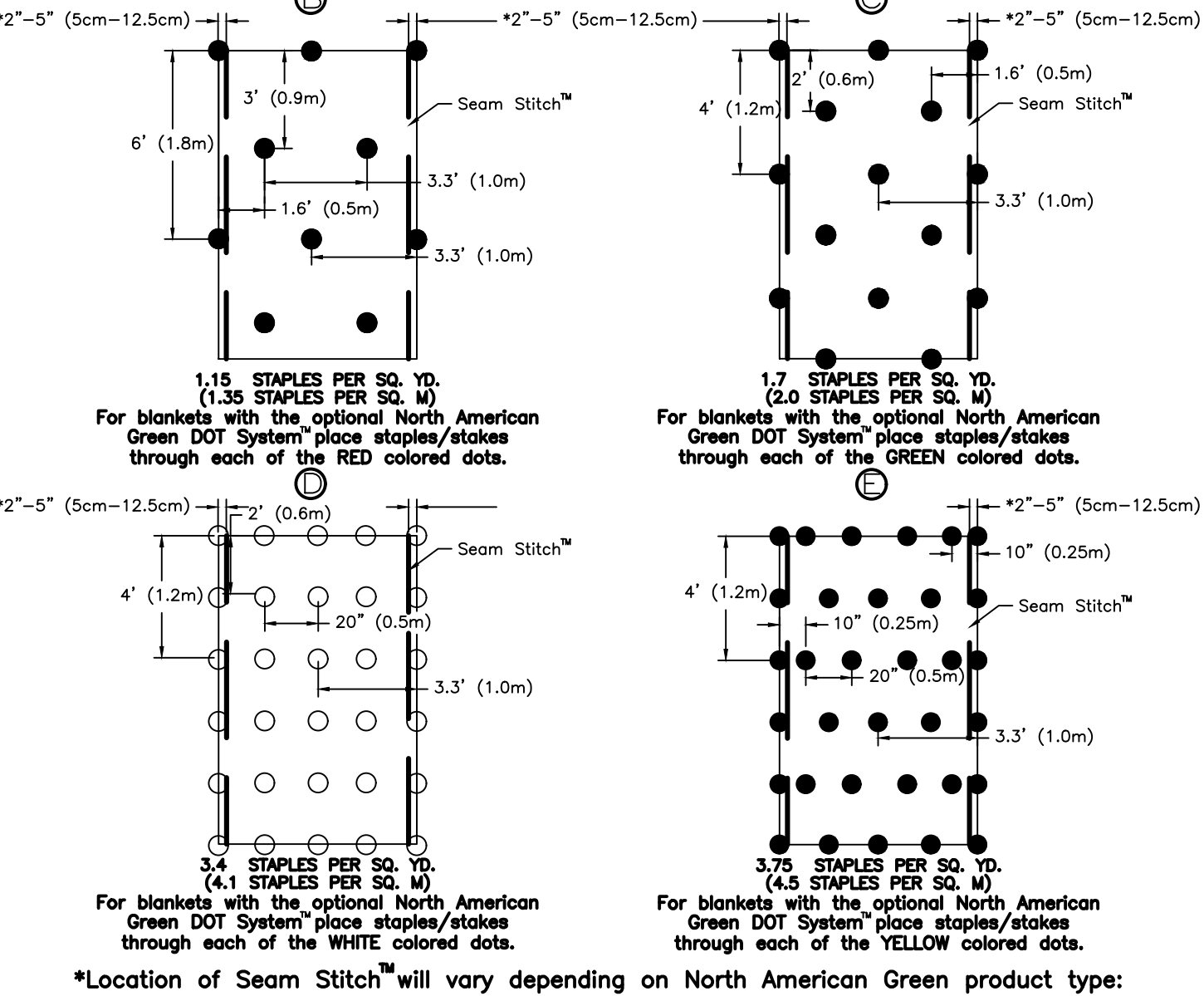
CONCRETE WASHOUT STRUCTURE

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

- LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
- SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
- PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
- PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
- KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTYP OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. MET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.



MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HMPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		28 psi	28 psi	44 psi	202 psi
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.	100% AT 1000 HR.	100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS

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

ALL BMP'S SHALL BE INSPECTED AFTER EVERY RUNOFF EVENT AND ON A WEEKLY BASIS. ANY NECESSARY REPAIRS MUST BE MADE IMMEDIATELY.

NORTH AMERICAN GREEN

14649 HIGHWAY 41 NORTH
EVANSVILLE, IN 47725
USA 1-800-772-2040
CANADA 1-800-448-2040
www.nagreen.com

BLACK FOREST ENGINEERING, LLC
2455 BLACK FOREST DRIVE
COPLAY, PA 18037

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SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
JOSEPH E. RENTKO
ENGINEER (1985/2010)

JOSEPH E. RENTKO, P.E. #E085609
1855 BLACK FOREST DRIVE
COPLAY, PA 18037
370-239-4489

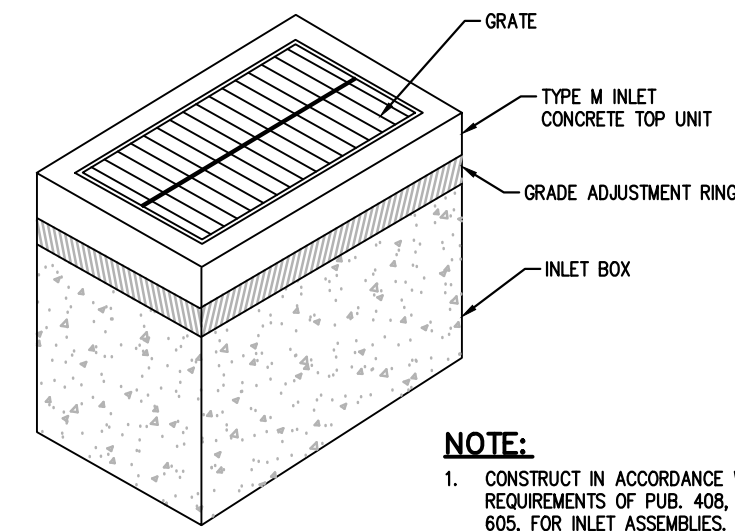
PROJECT TITLE:
3410 & 3412 LINDEN STREET

PROJECT OWNER:
WEST BROAD INVESTMENTS LLC
1853 SCHADT AVE
WHITEHALL, PA 18052

PROJECT LOCATION:
**CITY OF BETHLEHEM
WARD 14 BLOCK 262
NORTHAMPTON COUNTY
PENNSYLVANIA**

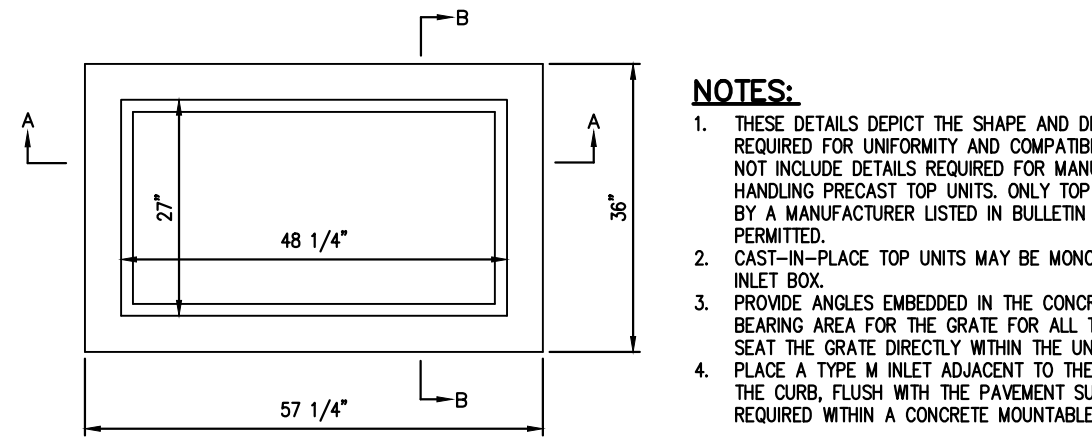
PLAN TITLE:
EROSION CONTROL DETAILS

SCALE:	DATE:	DRAWN:	CHECKED:
AS NOTED	3/13/23	JMK	JER
PROJECT NO.	DRAWING NO.	REVISION:	
3410	7 of 11	00	

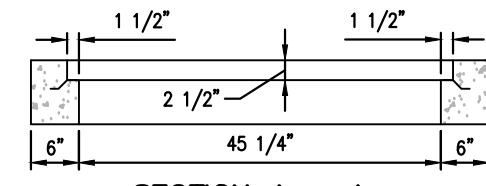


NOTE:
 1. CONSTRUCT IN ACCORDANCE WITH REQUIREMENTS OF PUB. 408, SECTION 605, FOR INLET ASSEMBLIES.
 2. GRADE ADJUSTMENT RINGS SHALL BE MASONRY OR PRECAST CONCRETE CONSTRUCTION.

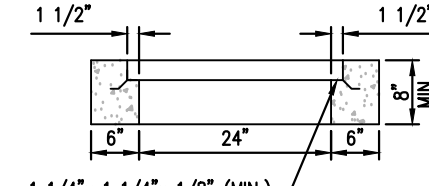
TYPE M INLET
 NOT TO SCALE



PLAN VIEW



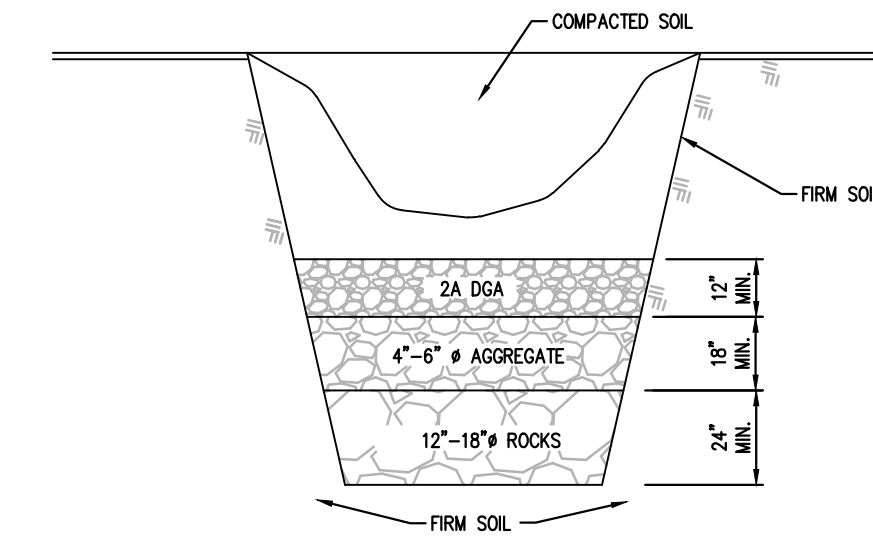
SECTION A - A



SECTION B - B

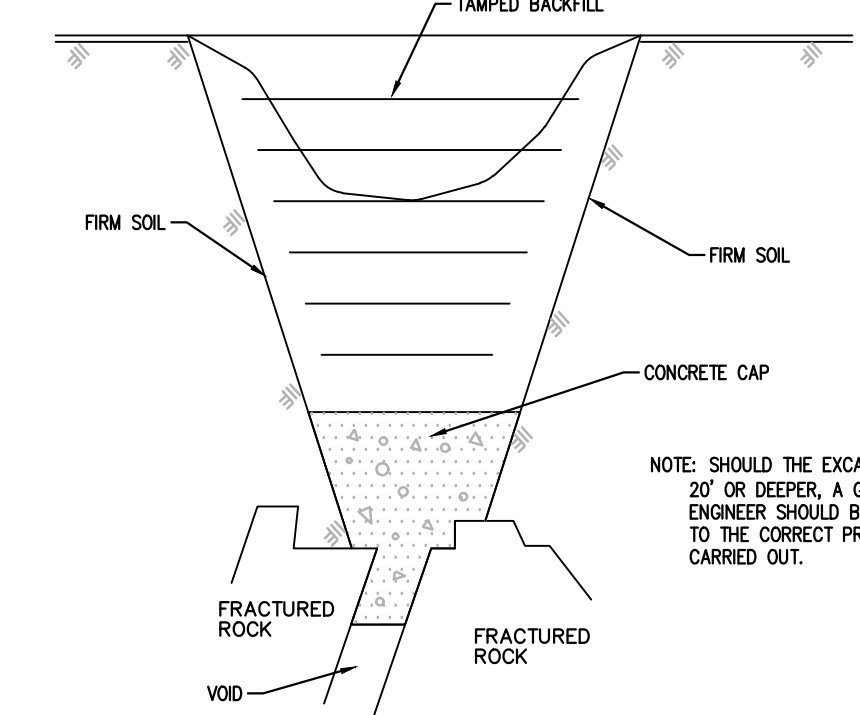
TYPE M INLET CONCRETE TOP UNITS
 NOT TO SCALE

NOTES:
 1. THESE DETAILS DEPICT THE SHAPE AND DIMENSIONS REQUIRED FOR UNIFORMITY AND COMPATIBILITY. THEY DO NOT INCLUDE DETAILS REQUIRED FOR MANUFACTURING AND HANDLING PRECAST TOP UNITS. ONLY TOP UNITS SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15 SHALL BE PERMITTED.
 2. CAST-IN-PLACE TOP UNITS MAY BE MONOLITHIC WITH THE INLET BOX.
 3. PROVIDE ANGLES EMBEDDED IN THE CONCRETE AS A BEARING AREA FOR THE GRATE FOR ALL TOP UNITS WHICH SEAT THE GRATE DIRECTLY WITHIN THE UNIT.
 4. PLACE A TYPE M INLET ADJACENT TO THE BACK EDGE OF THE CURB, FLUSH WITH THE PAVEMENT SURFACE, WHEN REQUIRED WITHIN A CONCRETE MOUNTABLE CURB SECTION.



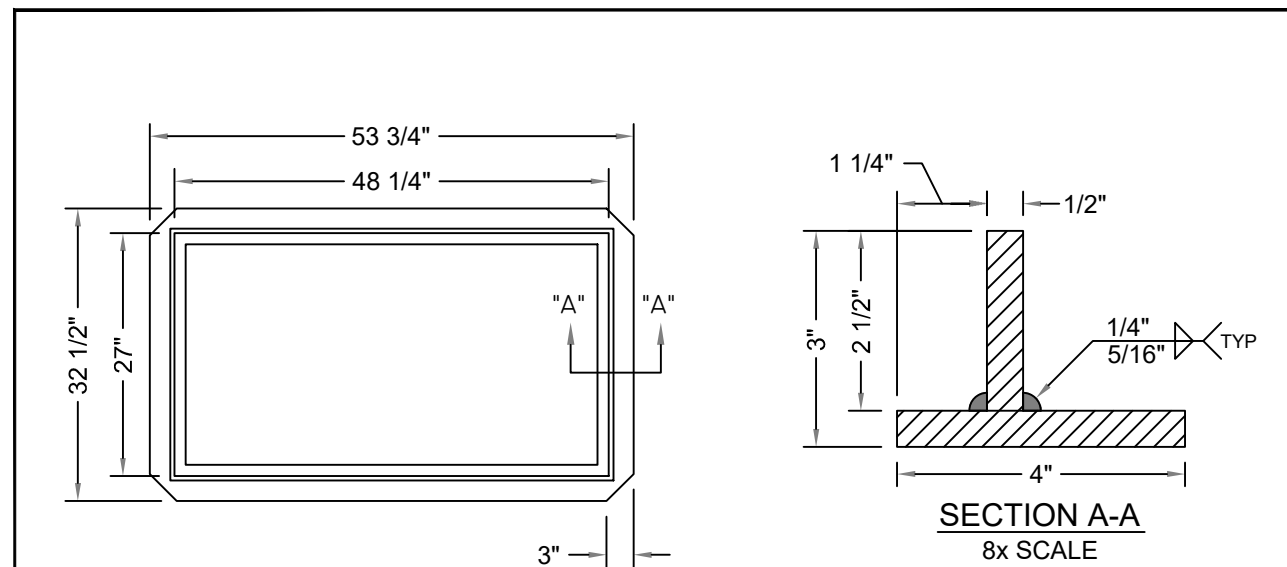
Sinkhole In Soil
 NOT TO SCALE

- THE REPAIR TECHNIQUES AS DESCRIBED BELOW ARE SUITABLE ONLY IF THE SINKHOLE IS LOCATED IN AN OPEN AREA. IF THE SINKHOLE IS LOCATED UNDER OR NEAR A STRUCTURE OR A BUILDING, COMPACTION GROUTING MAY BE NECESSARY FOR REMEDIATION, AS DETERMINED BY A GEOTECHNICAL ENGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA.
- EXCAVATE DOWN TO ROCK TO SINKHOLE THROAT OR TO A DEPTH OF 15 FEET BELOW GRADE, WHICHEVER OCCURS FIRST.
- IF ROCK IS ENCOUNTERED WITHIN 10 FEET, STOP EXCAVATION. THE LIMIT OF EXCAVATION SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER. GENERALLY, A ZONE OF SOFT, IN-FILL MATERIAL WILL BE FOUND WHICH COVERS MOST OF THE BOTTOM OF THE EXCAVATION. COVER THIS AREA WITH A GRADED ROCK FILTER AS SHOWN ABOVE.
- BACKFILL HOLE WITH RELATIVELY IMPERMEABLE CLAY SOIL. COMPACT SOIL IN 6" LIFTS WITH A POWER TAMPER OR RAMMER TO AT LEAST 95% OF THE STANDARD PROCTOR.
- BACKFILL HOLE ABOVE EXISTING GRADE TO DIVERT SURFACE WATER.



Sinkhole In Rock
 NOT TO SCALE

- THE REPAIR TECHNIQUES AS DESCRIBED BELOW ARE SUITABLE ONLY IF THE SINKHOLE IS LOCATED IN AN OPEN AREA. IF THE SINKHOLE IS LOCATED UNDER OR NEAR A STRUCTURE OR A BUILDING, COMPACTION GROUTING MAY BE NECESSARY FOR REMEDIATION, AS DETERMINED BY A GEOTECHNICAL ENGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA.
- EXCAVATE DOWN TO BEDROCK OR TO THE SINKHOLE THROAT.
- EXPOSE THE ROCK SURFACE BY WASHING THE AREA WITH A SMALL HOSE WATER SPRAY AND INSTALL HIGHSLUMP CEMENT INTO VOIDS AND CRACKS UNTIL VOIDS ARE FILLED AND A CAP COVERS THE AREA. THE LIMIT OF EXCAVATION AND CONCRETE SHALL BE DETERMINED BY THE ENGINEER.
- AFTER CONCRETE HAS SET OVERNIGHT, BACKFILL HOLE WITH RELATIVELY IMPERMEABLE CLAY SOIL. COMPACT SOIL IN 6" LIFTS WITH A POWER TAMPER OR RAMMER TO AT LEAST 95% OF THE STANDARD PROCTOR. THE TOP THREE(3) FEET SHALL BE BACKFILLED WITH 2R# CRUSHED AGGREGATE.
- BACKFILL HOLE ABOVE EXISTING GRADE TO DIVERT SURFACE WATER.
- WHEN SINKHOLE IS UNDER A PROPOSED UTILITY, CONCRETE IS TO BE SET 6" BELOW THE UTILITY TO ALLOW FOR A STONE BEDDING.



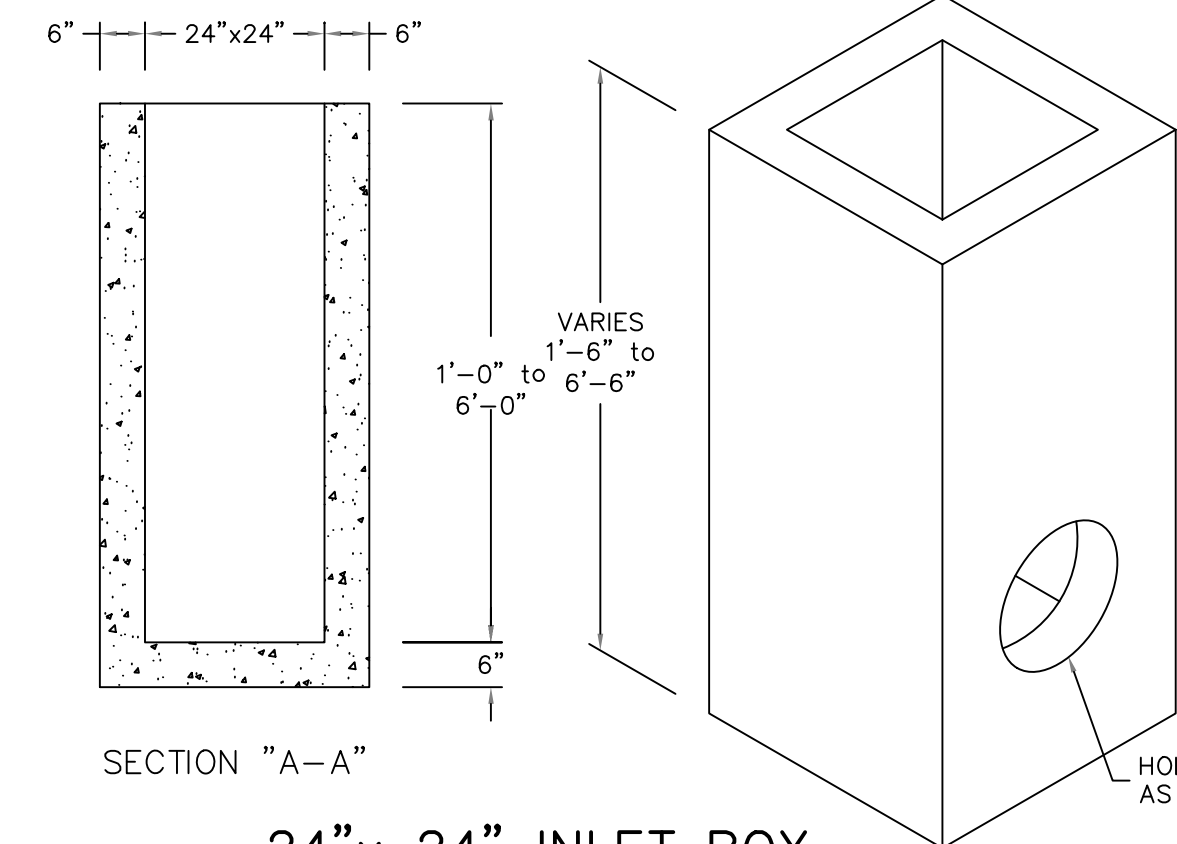
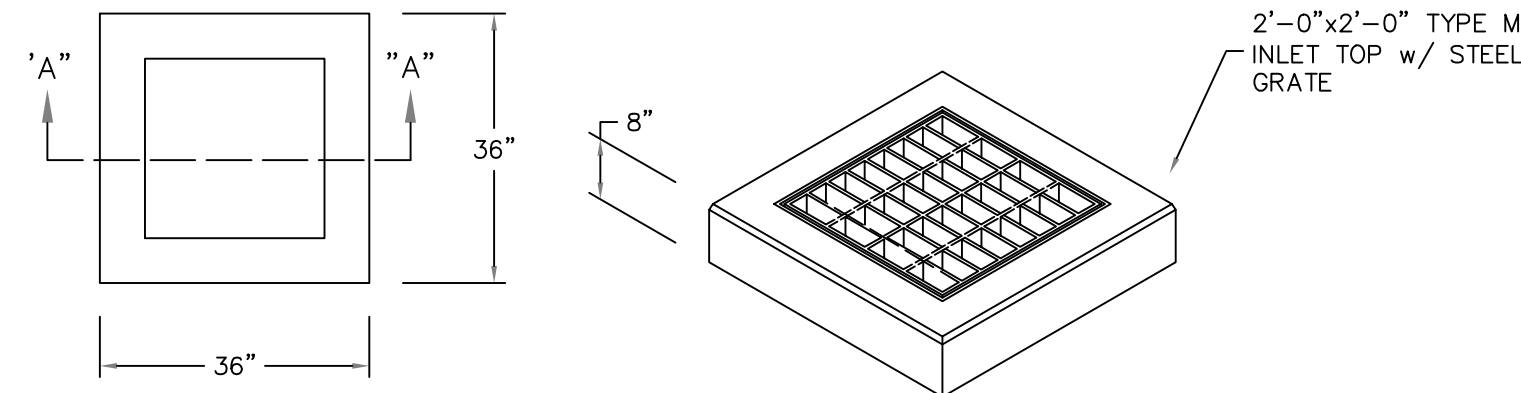
FRONT VIEW

SIDE VIEW

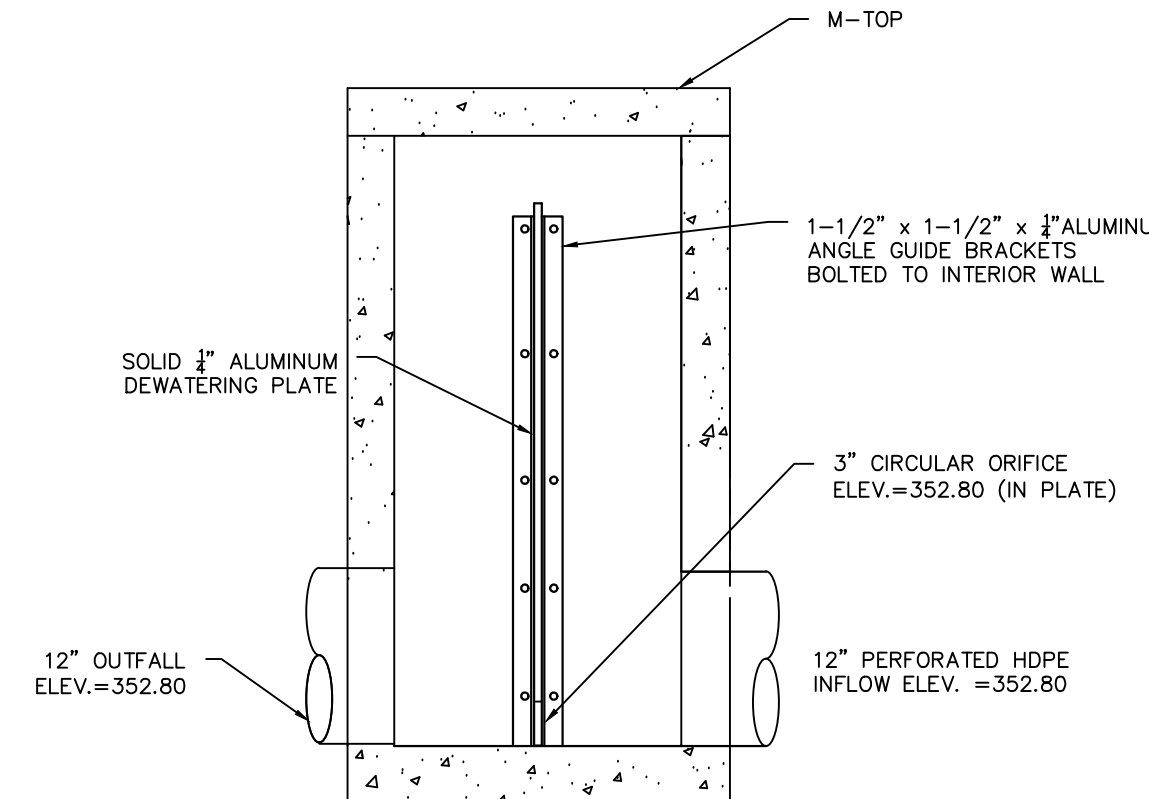
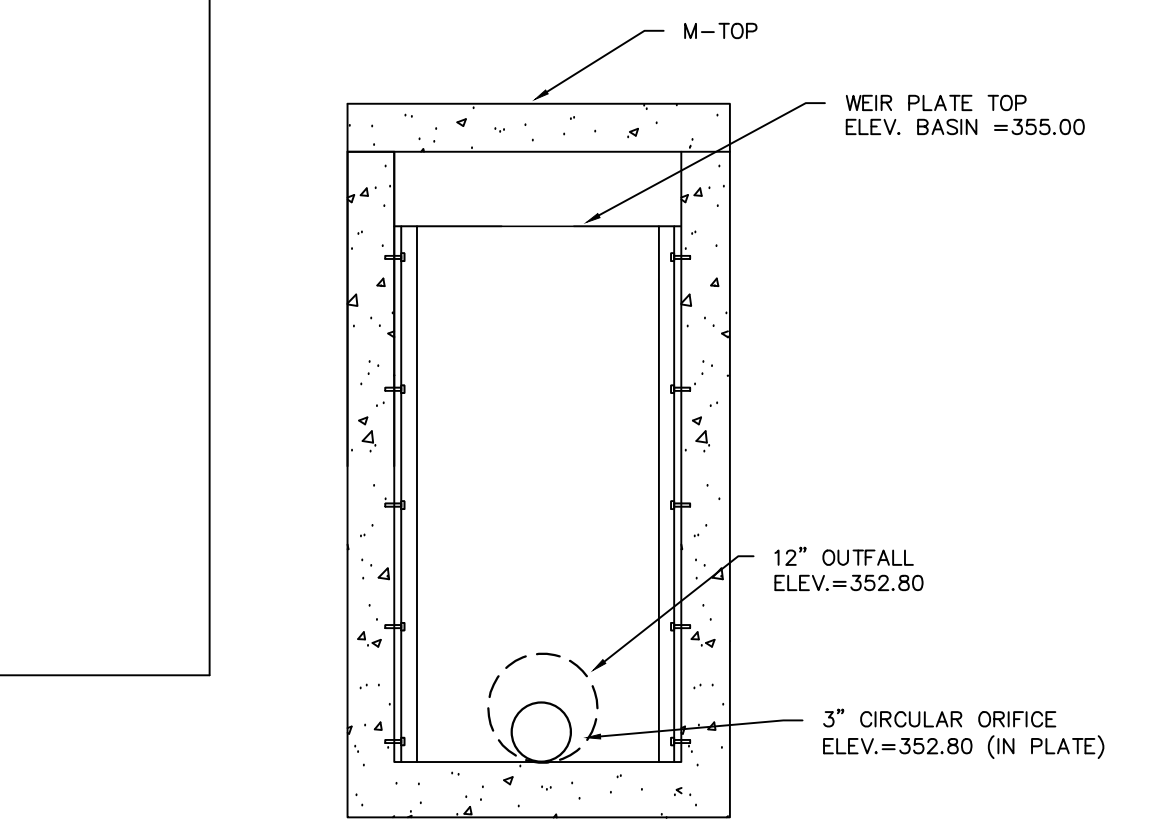
NOTES:
 - STRUCTURAL STEEL COATED WITH (1) COAT OF BITUMINOUS PAINT.
 - STRUCTURAL STEEL TO MEET OR EXCEED REQUIREMENTS OF AASHTO M270 OR ASTM-A709 GRADE 36
 - ALL WELDING IS DONE BY CERTIFIED WELDERS AS PER PENNDOT PUBL. 408, SECTION 1105.03.

MONARCH PRECAST CONCRETE CORP.
 425 NORTH DAUPHIN STREET ALLENTOWN, PA. 18109
 WWW.MONARCHPRECAST.COM PHONE (610) 437-6746 FAX (610) 437-7133

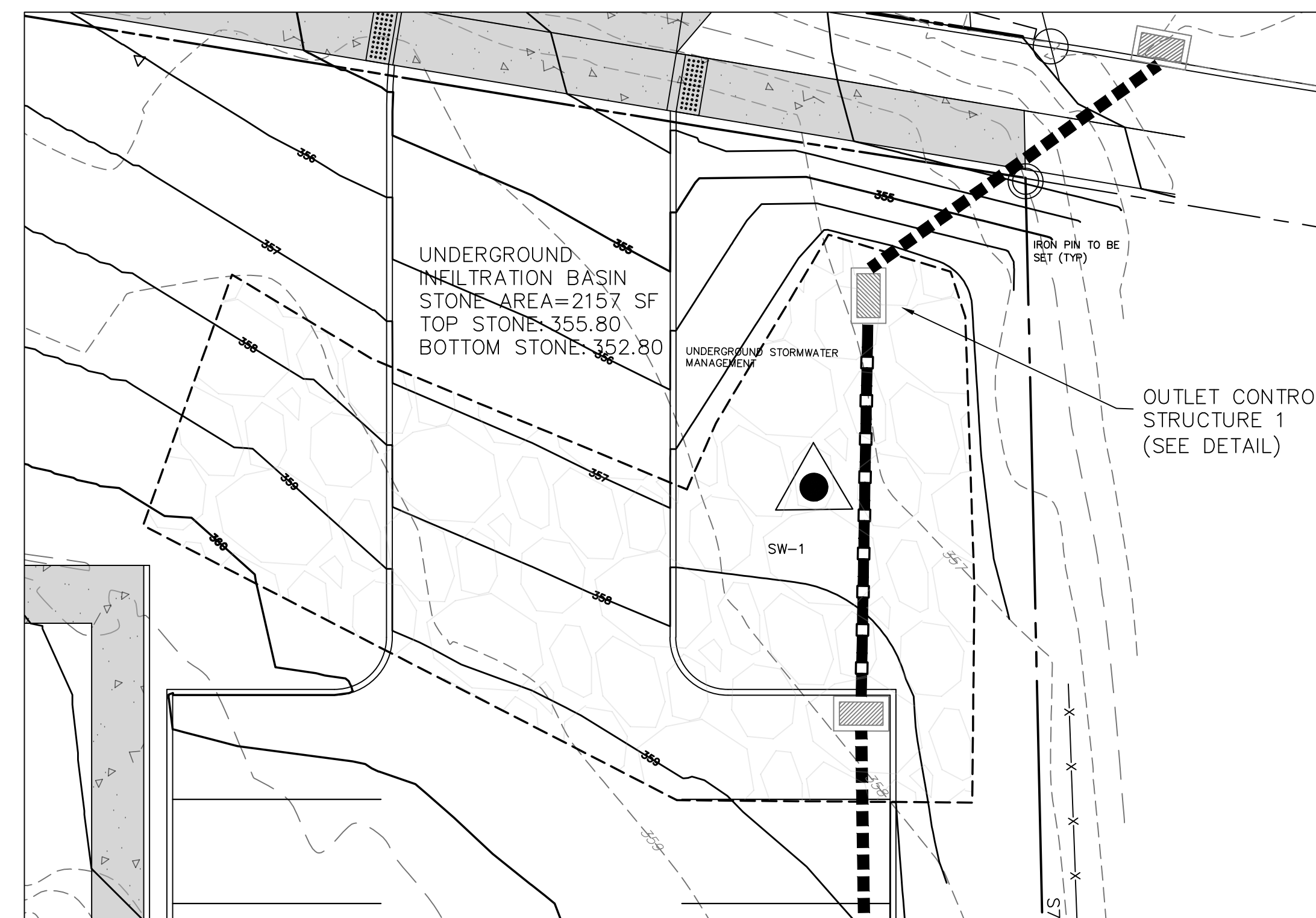
3' M ALTERNATE STEEL FRAME



24" x 24" INLET BOX W/TYPE M INLET TOP



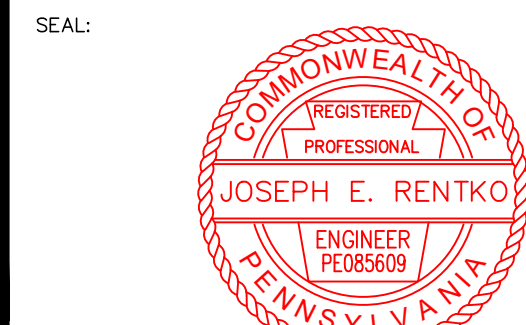
BASIN OUTLET STRUCTURE (OCS-1)
 N.T.S.



BASIN DETAIL

BLACK FOREST ENGINEERING, LLC
 2455 BLACK FOREST DRIVE
 COPLAY, PA 18037

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JOSEPH E. RENTKO, P.E. #20085609
 2455 BLACK FOREST DRIVE
 COPLAY, PA 18037
 717-239-4499

REV.	DESCRIPTION:	BY	DATE

PROJECT TITLE:
 3410 & 3412 LINDEN STREET

PROJECT OWNER:
 WEST BROAD INVESTMENTS LLC
 1853 SCHADT AVE
 WHITEHALL, PA 18052

PROJECT LOCATION:
 CITY OF BETHLEHEM
 WARD 14 BLOCK 262
 NORTHAMPTON COUNTY
 PENNSYLVANIA

PLAN TITLE:
 CONSTRUCTION DETAILS

SCALE:	DATE:	DRAWN:	CHECKED:
AS NOTED	3/13/23	JMK	JER

PROJECT NO.	DRAWING NO.	REVISION:
3410	11 OF 11	00