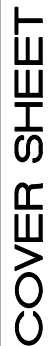
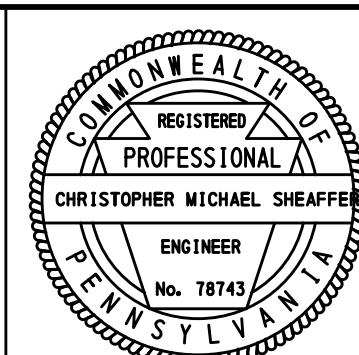


COVER SHEET									
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PROJECT NO.: 7164-006									
SHEET NO.: 1									
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4	2020.07.27	FINAL LAND DEVELOPMENT SUBMISSION II	CMS
3	2020.07.22	NPDES SUBMISSION II	ARH CMS
2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION	ARH CMS
1	2020.06.19	NPDES SUBMISSION	ARH CMS
			BY CHD



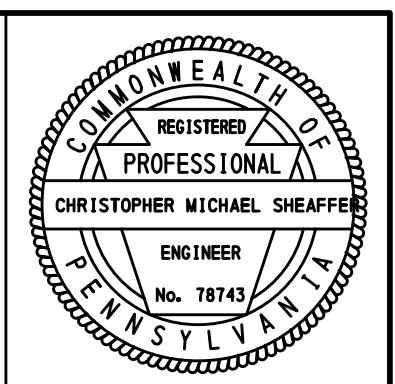
EXISTING CONDITIONS PLAN

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BOROUGH OF MILTON, NORTHUMBERLAND COUNTY, PENNSYLVANIA

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3	2020.07.22	NPDES SUBMISSION II
2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION
1	2020.06.19	NPDES SUBMISSION



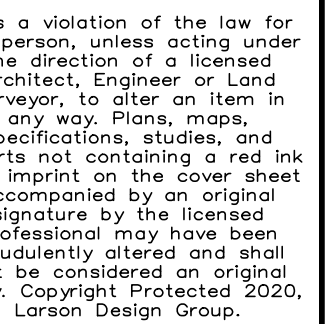
DEMOLITION PLAN

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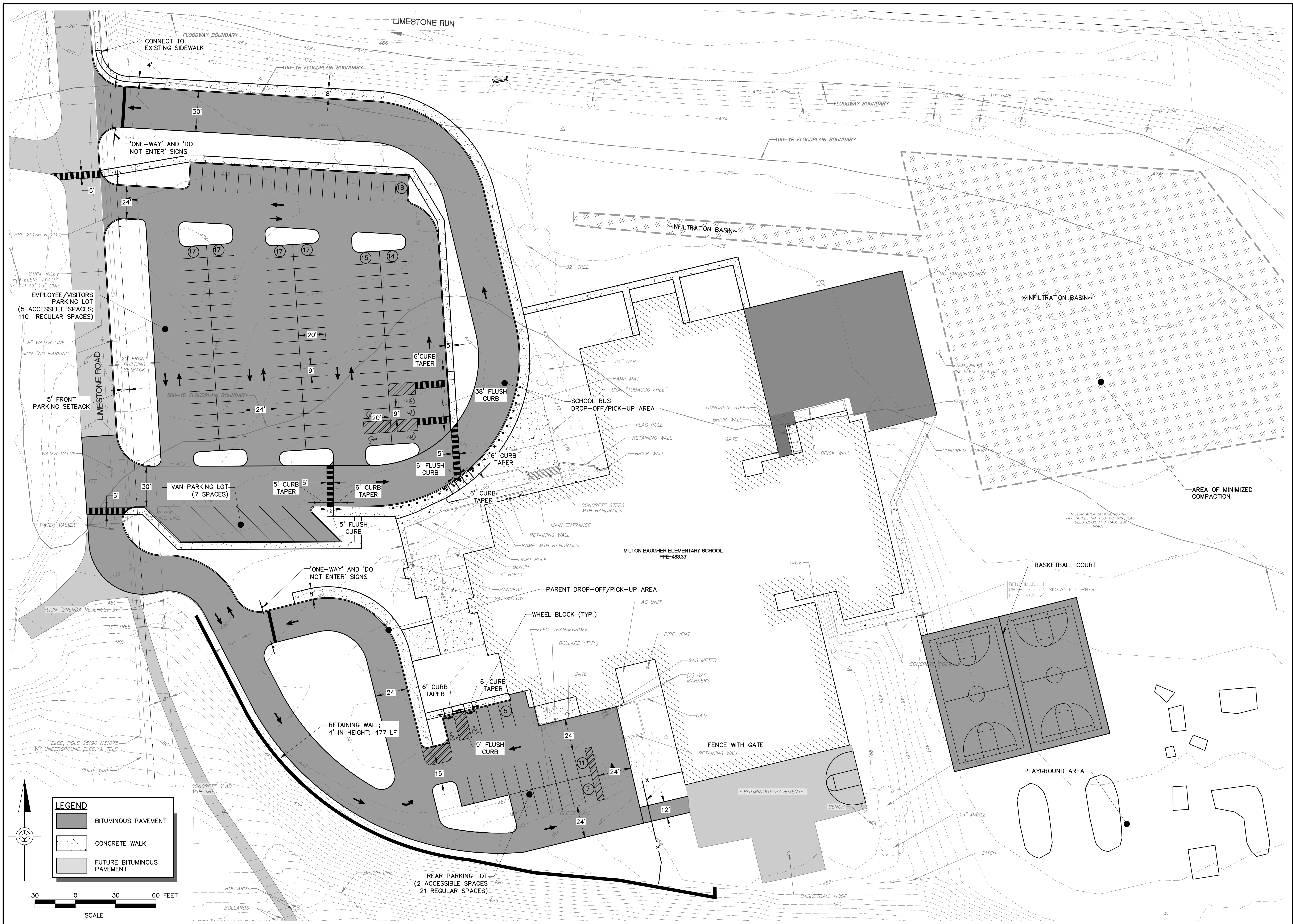
SHEET NO.: **C2.1**
PROJECT NO.: 7164-006

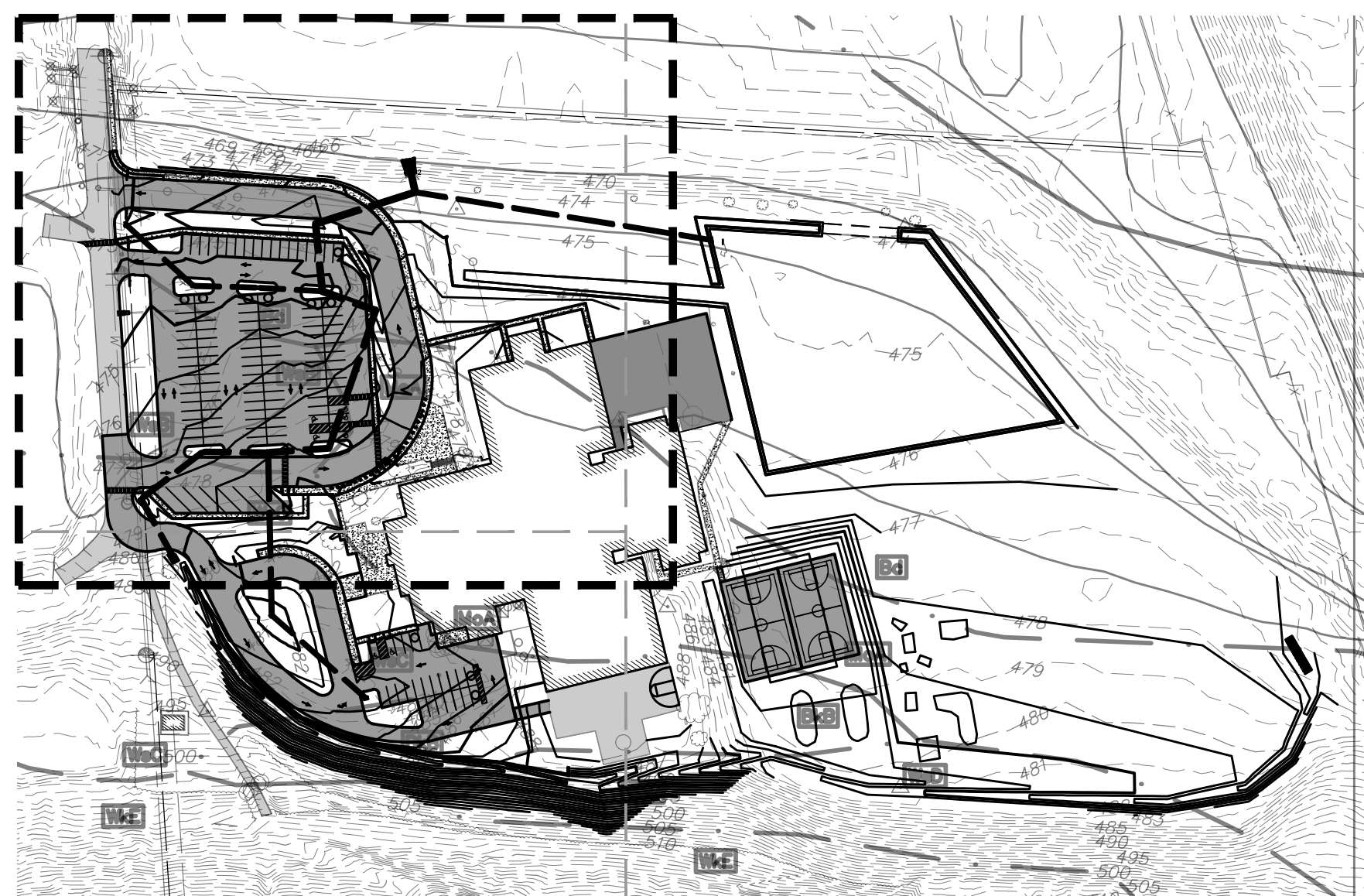
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BOROUGH OF MILTON, NORTHUM

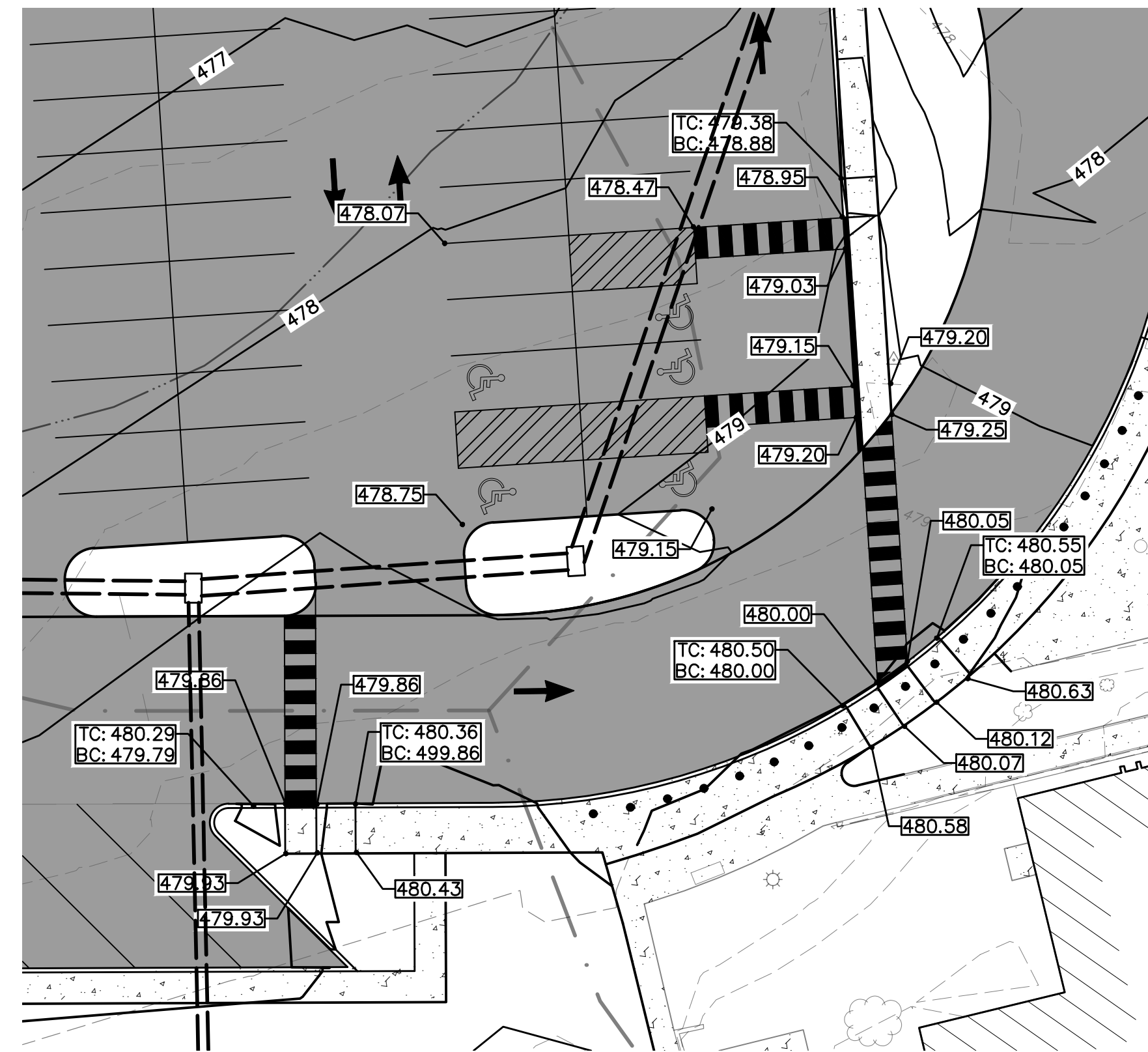
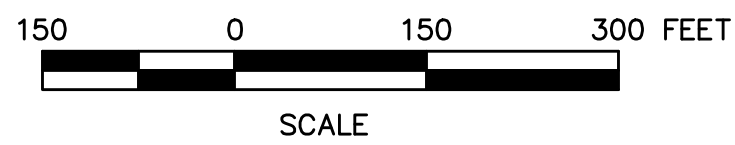
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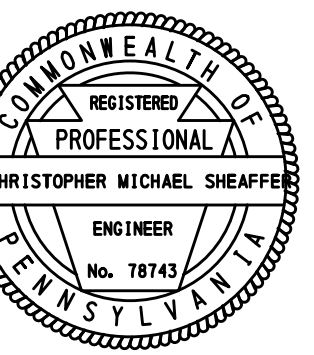
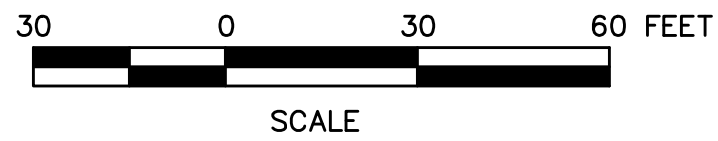
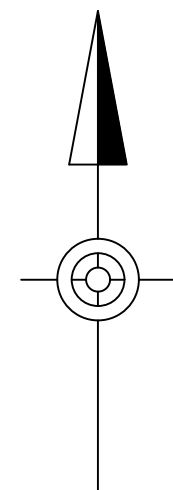
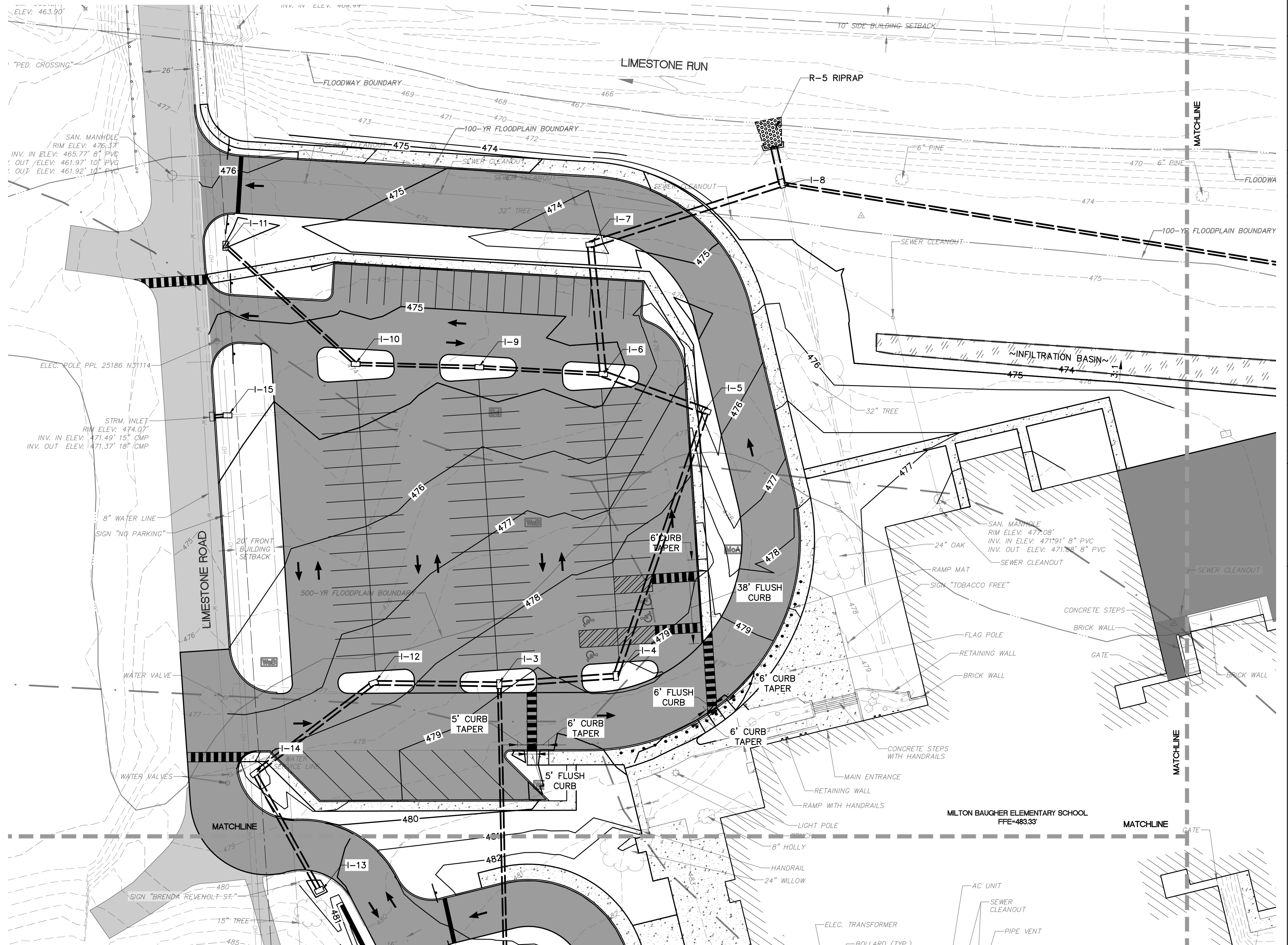
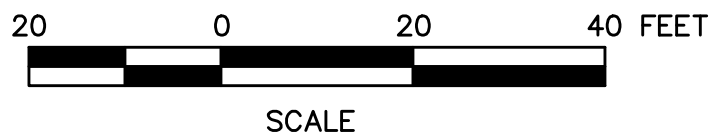




KEY MAP
SCALE: 1" = 150'



ACCESSIBLE PARKING BLOW-UP
SCALE: 1" = 20'



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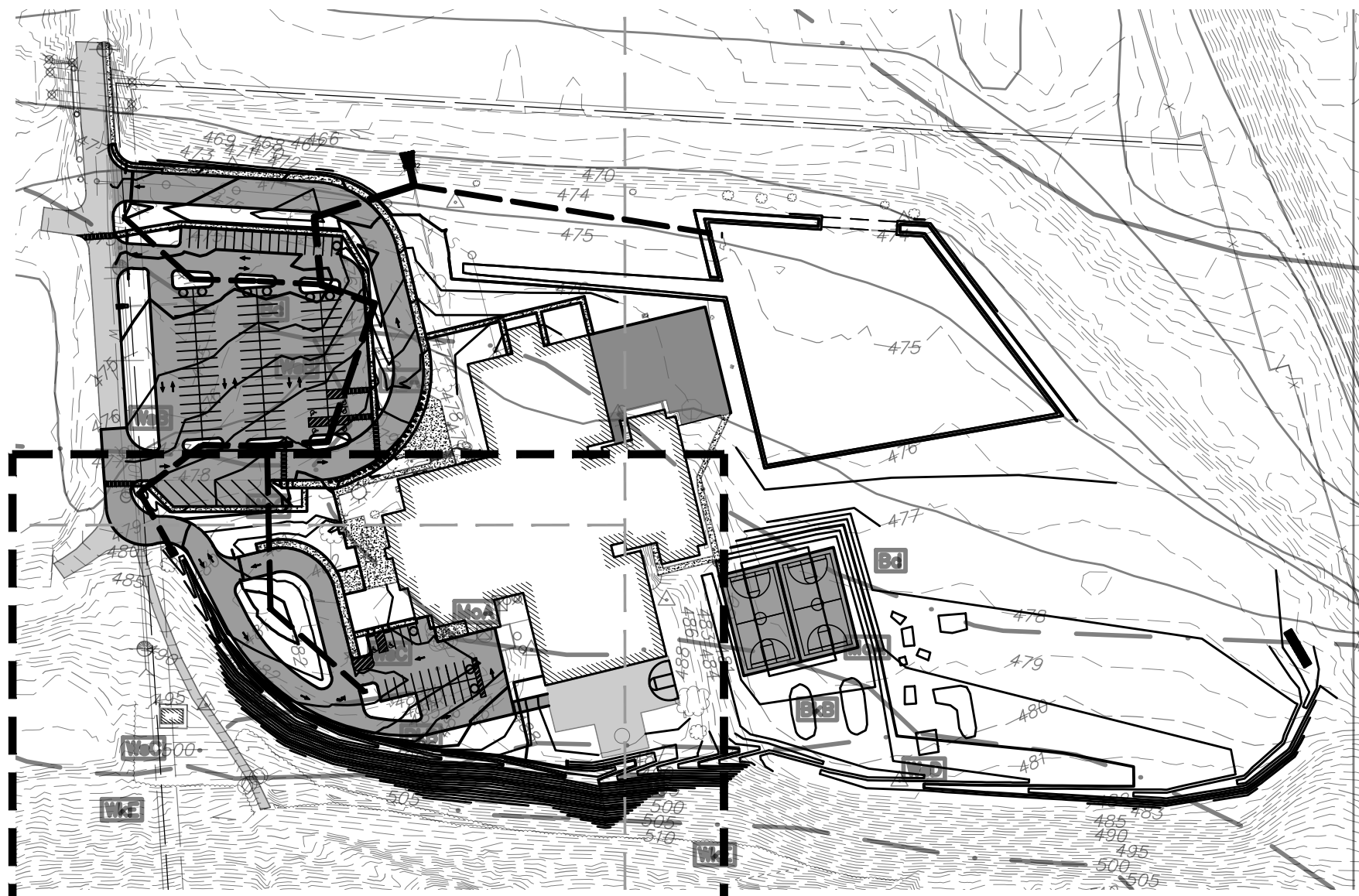
NO.	DATE	COMMENTS	ISSUE / REVISIONS
4	2020.07.27	FINAL LAND DEVELOPMENT SUBMISSION II	ARH CMS
3	2020.07.22	NPDES SUBMISSION II	ARH CMS
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1	2020.06.19	NPDES SUBMISSION	ARH CMS



GRADING AND STORMWATER PLAN - NORTH
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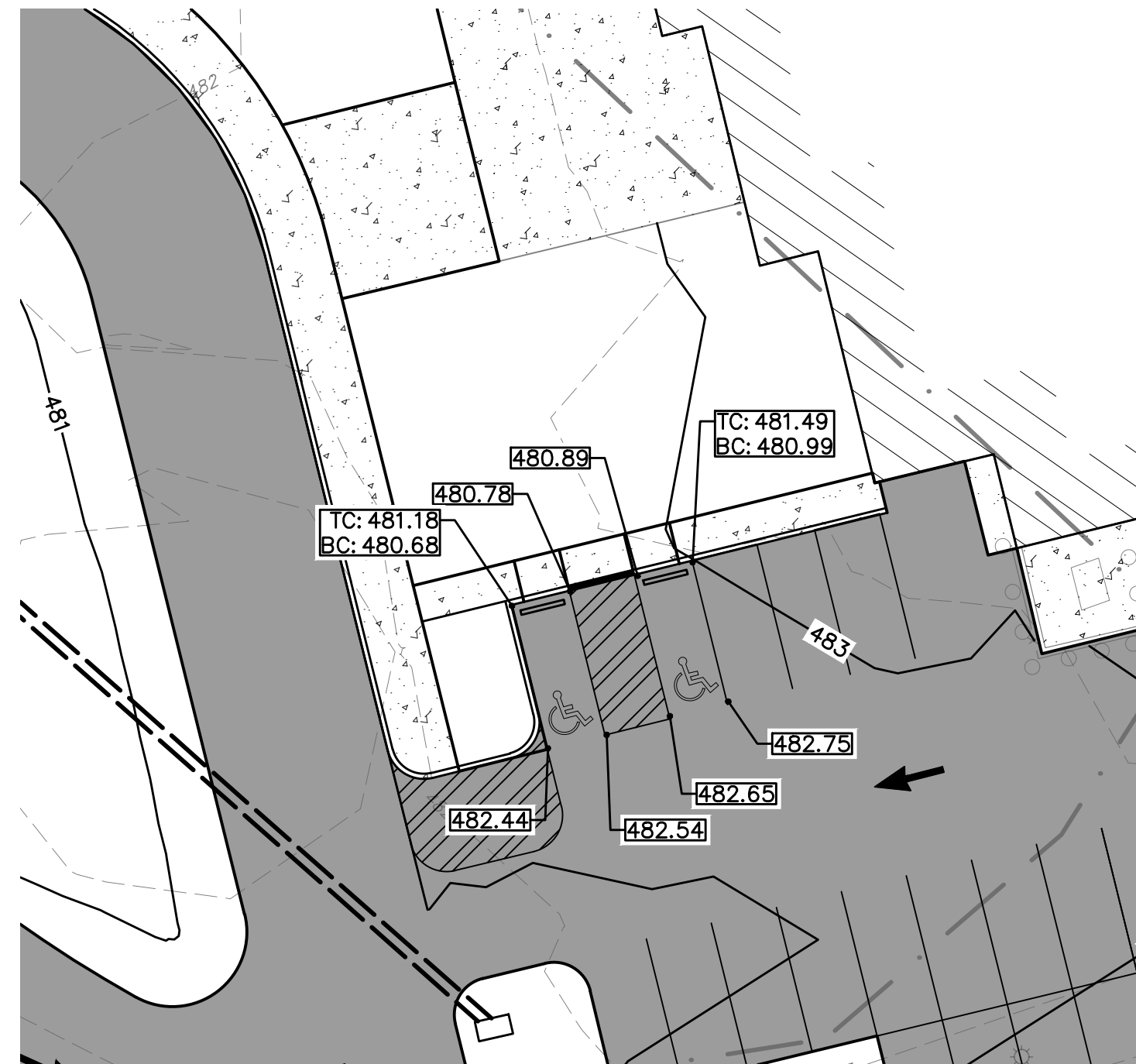
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PROJECT NO.: 7164-006



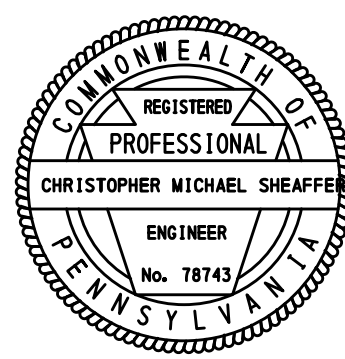
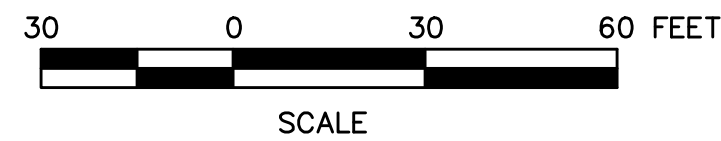
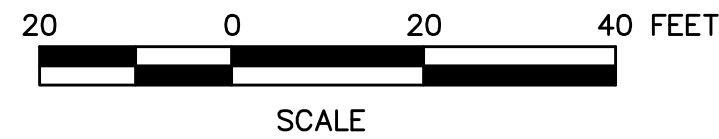
KEY MAP

SCALE: 1" = 150'



ACCESSIBLE PARKING BLOW-UP

SCALE: 1" = 20'



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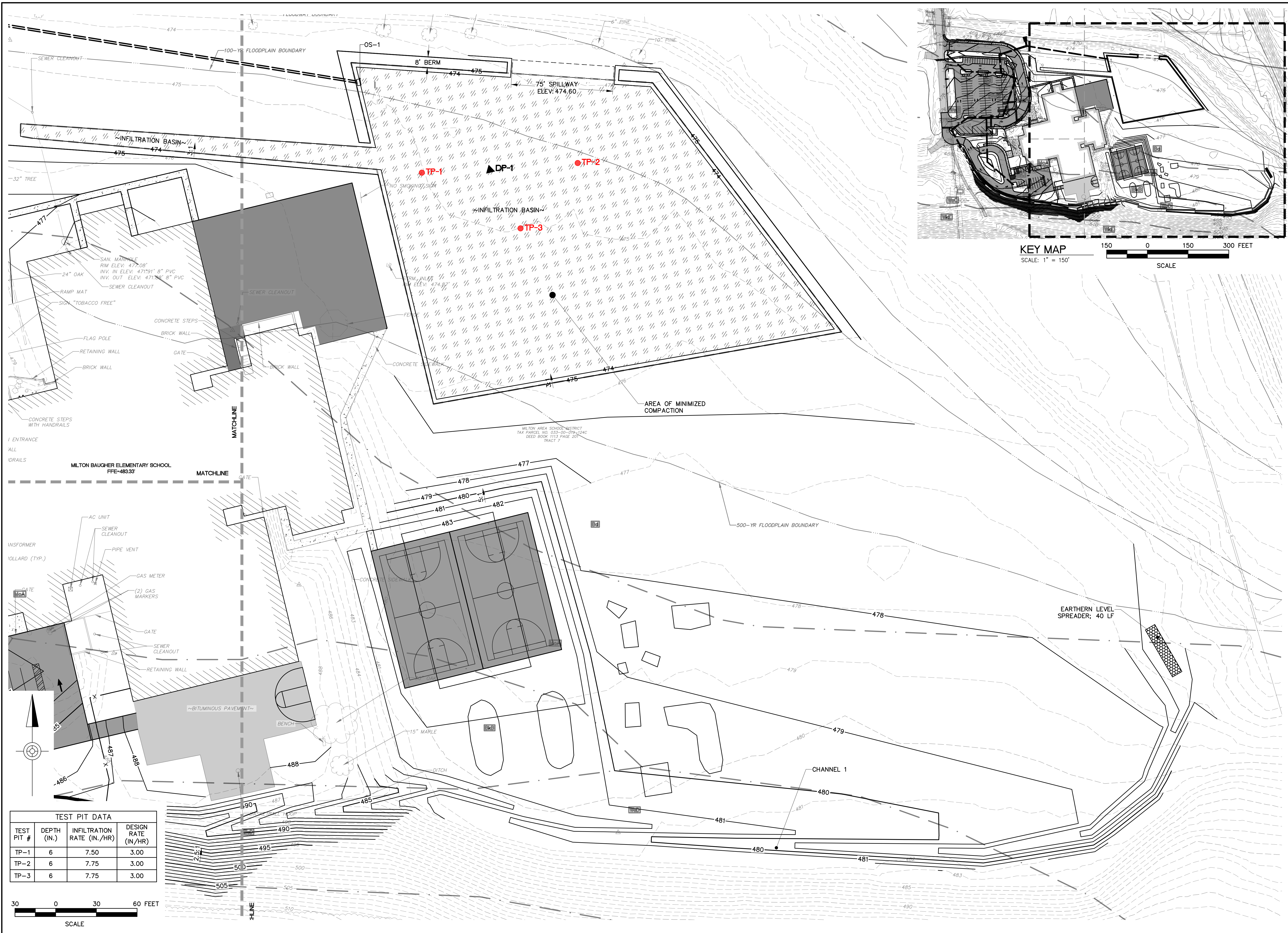
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3	2020.07.22	NPDES SUBMISSION II
2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION
1	2020.06.19	NPDES SUBMISSION



GRADING AND STORMWATER PLAN - SOUTH
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PROJECT NO.:
7164-006



KEY MAP

50 0 150 300 FEET

SCALE

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REGISTERED
PROFESSIONAL
CHRISTOPHER MICHAEL SHEAFFER
ENGINEER
No. 78743
PENNSYLVANIA

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2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION	ARH	OMS
1	2020.06.19	NPDES SUBMISSION	ARH	OMS
		COMMENTS	BT	CHD



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GRADING AND STORMWATER PLAN = EAST

MILTON BAUGHER ELEMENTARY SCHOOL

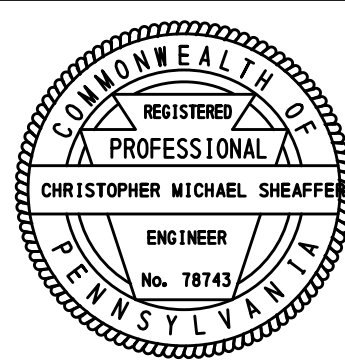
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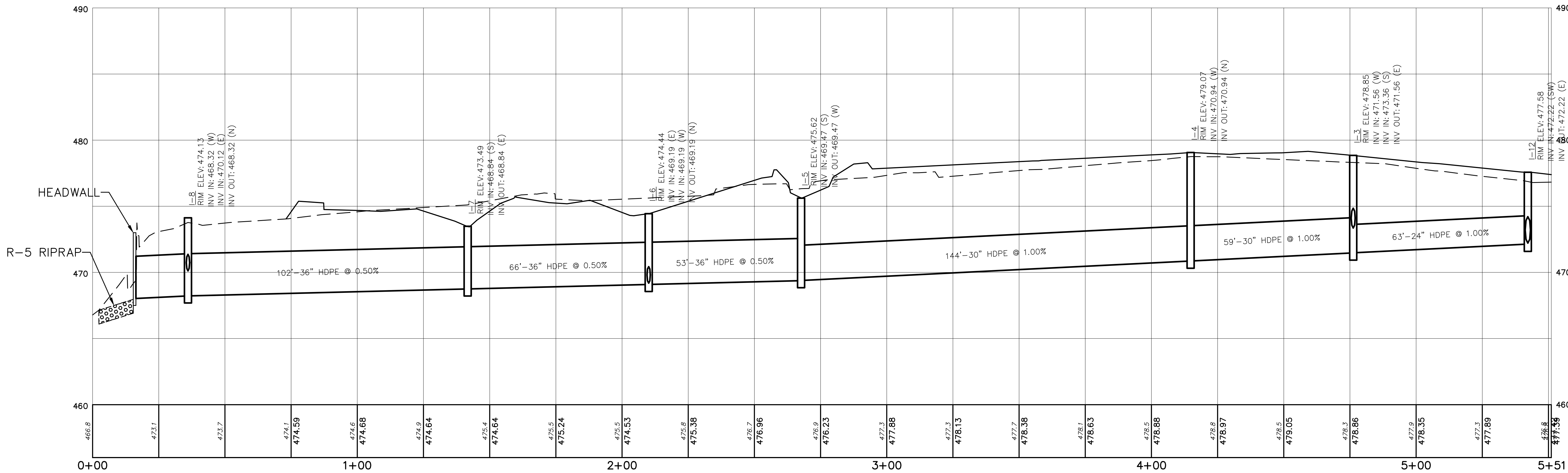
NO.	DATE	COMMENTS	ISSUE / REVISIONS
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2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION	ARH CMS
1	2020.06.19	NPDES SUBMISSION	ARH CMS
N/A			BY CHRD



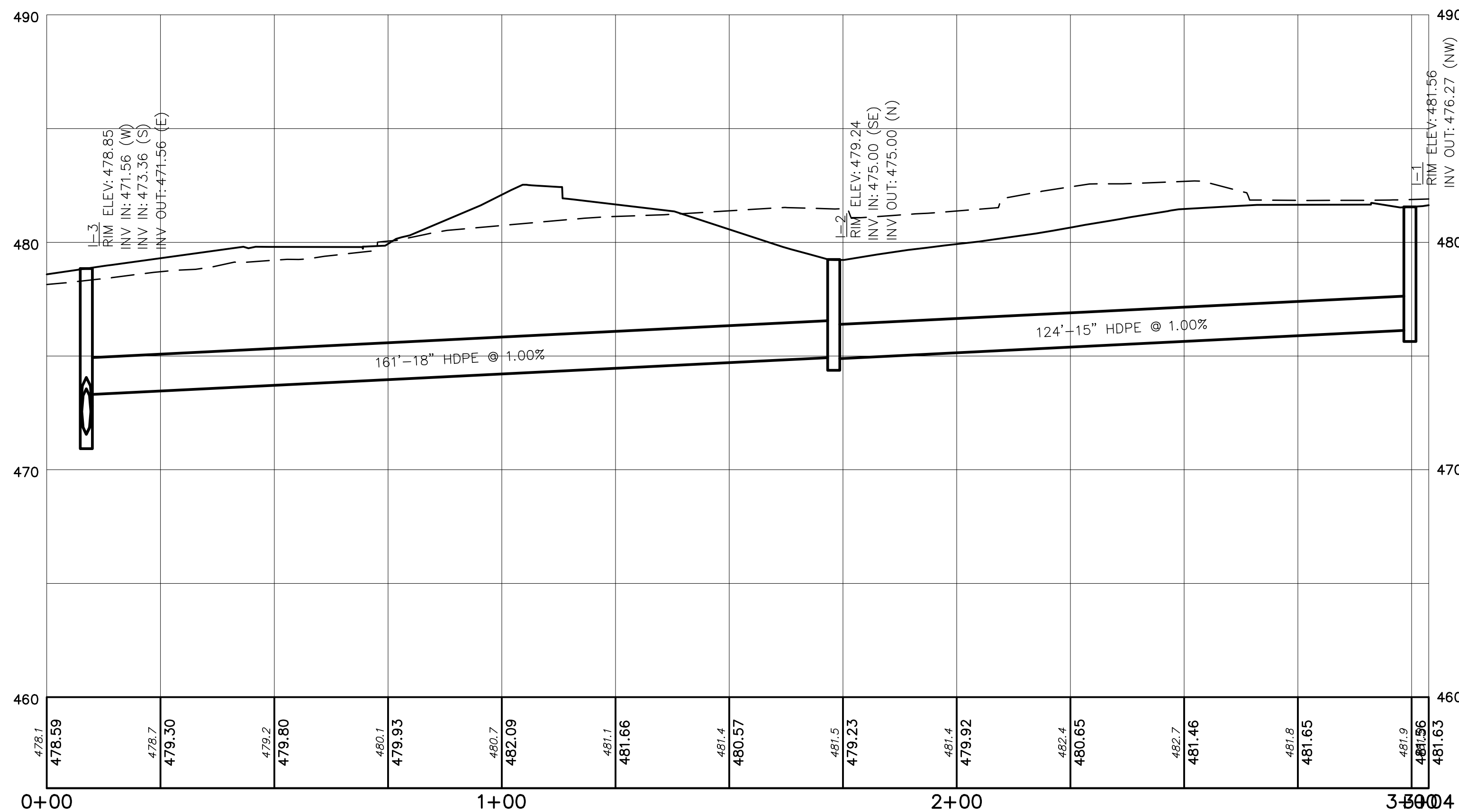
STORMWATER PIPE PROFILES
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PROJECT NO.: 7164-006

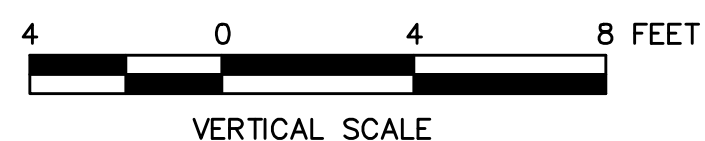
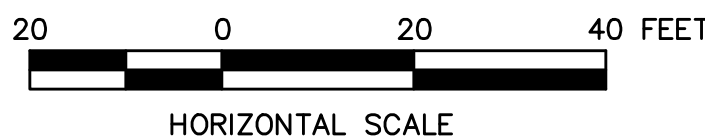


I-12 TO I-8 PROFILE



I-1 TO I-3 PROFILE

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
I	INLET
OS	OUTLET STRUCTURE



LEGEND

EXISTING GRADE

PROPOSED GRADE

HDPE

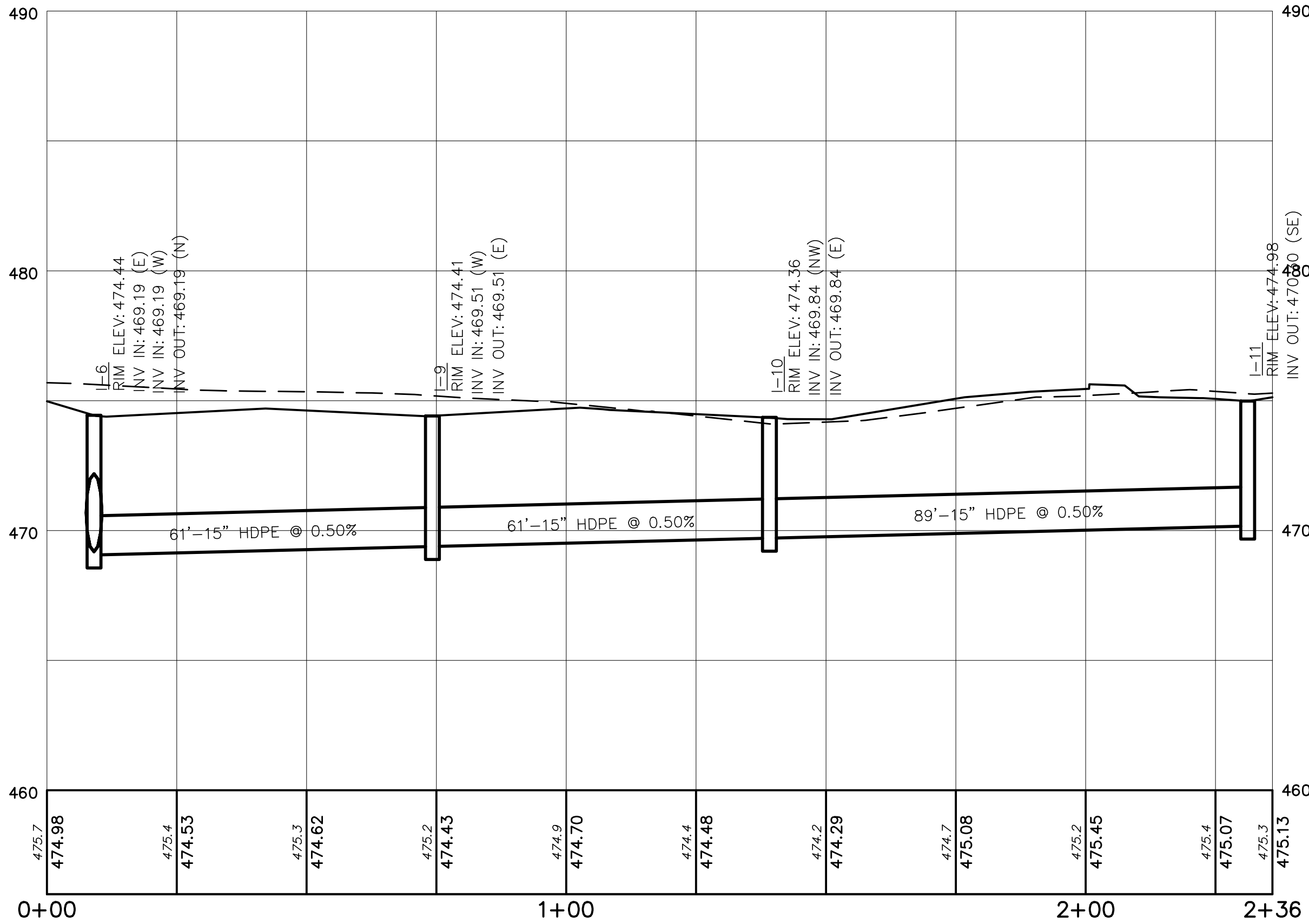
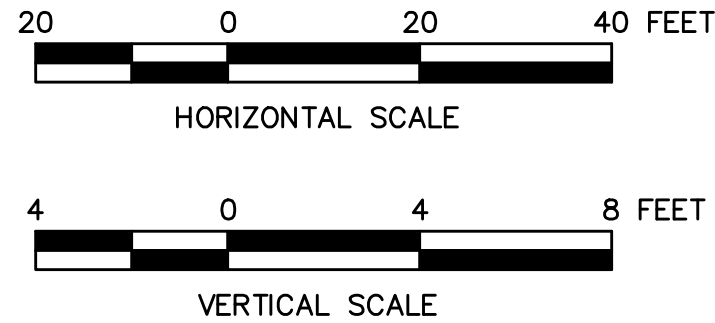
HIGH-DENSITY POLYETHYLENE PIPE

I

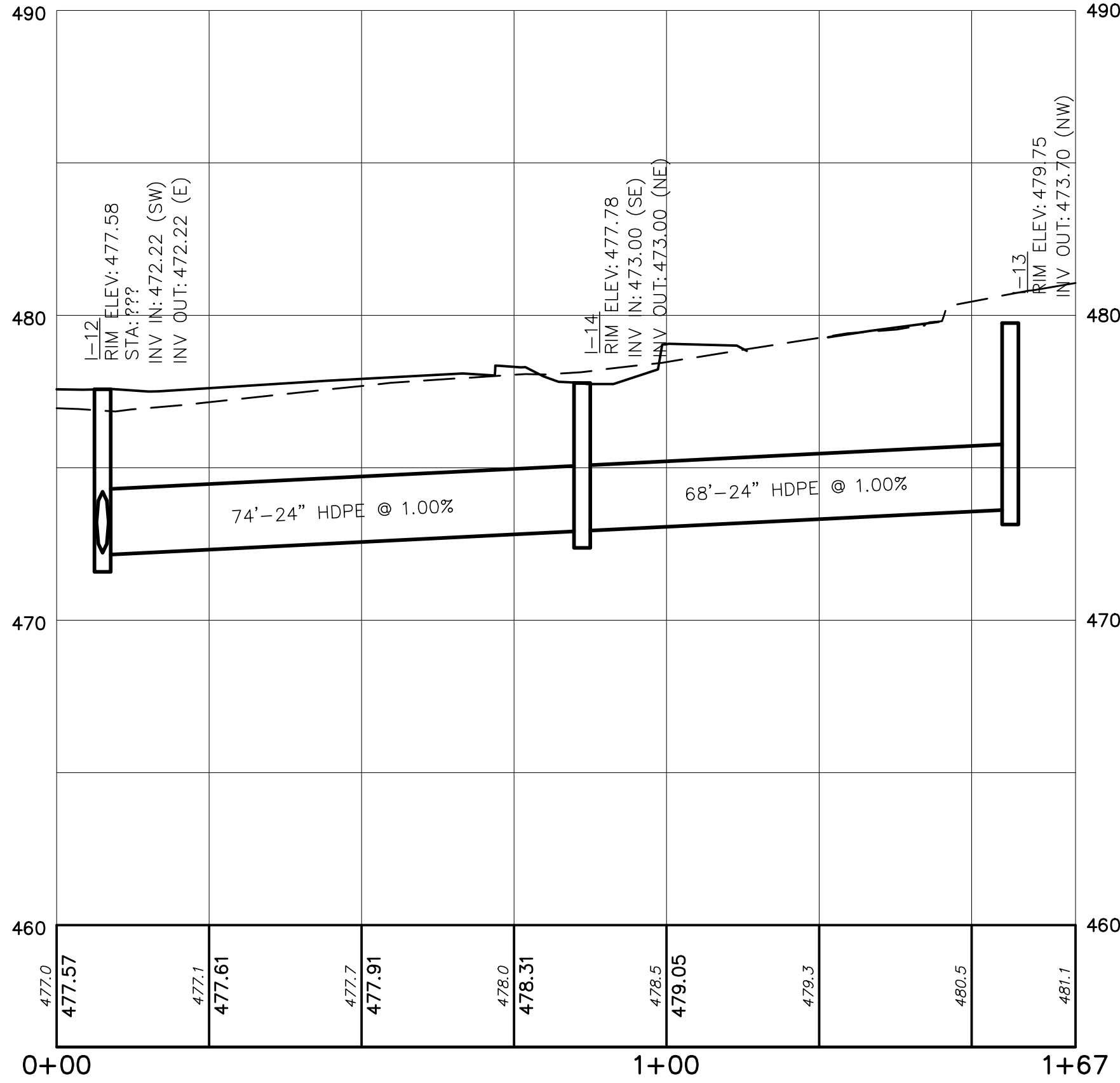
INLET

OS

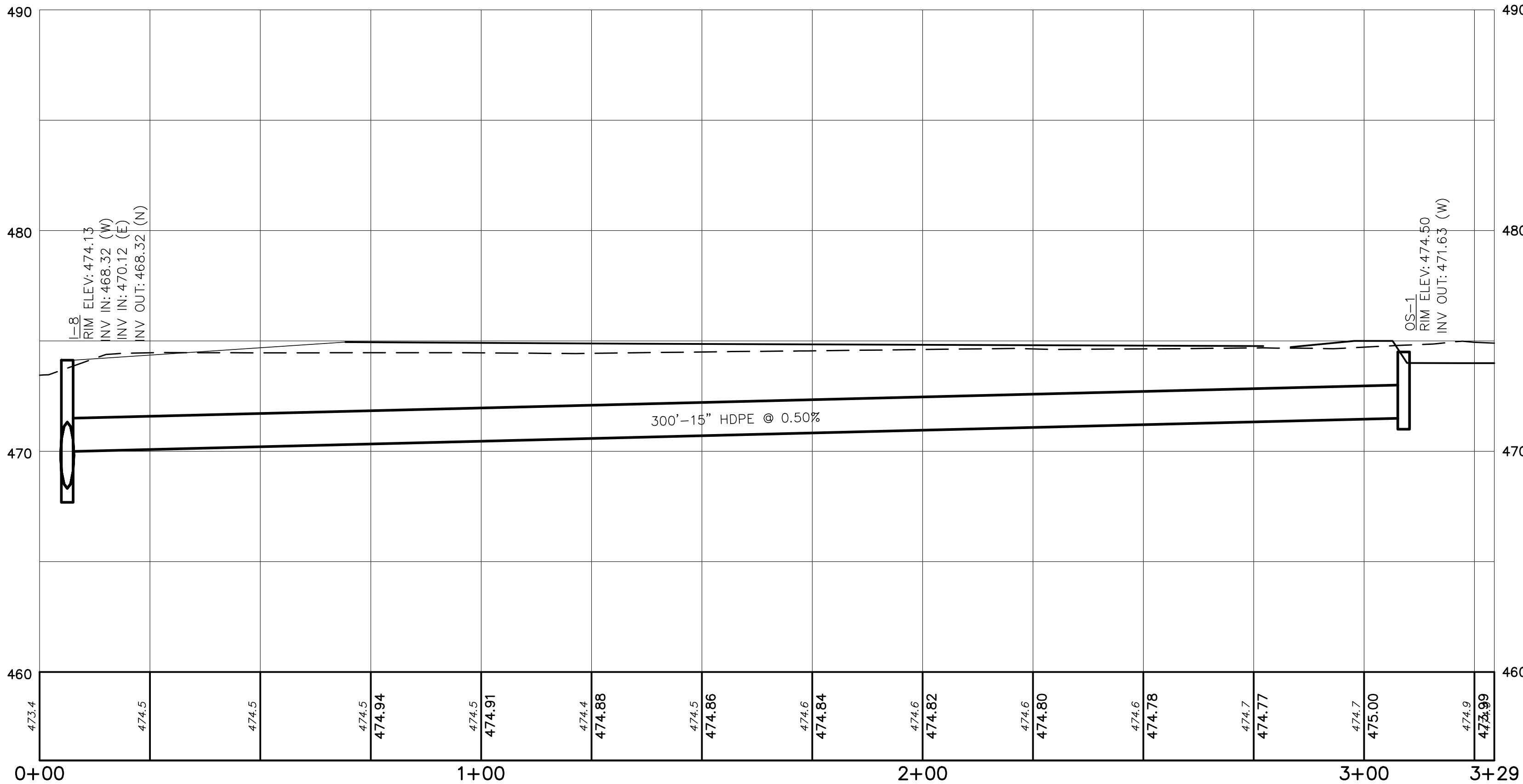
OUTLET STRUCTURE



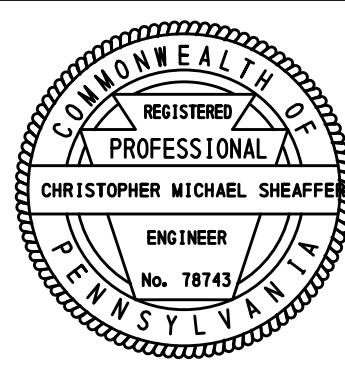
I-11 TO I-6 PROFILE



I-13 TO I-12 PROFILE



OS-1 TO I-10 PROFILE



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NOL			BY	CHRD

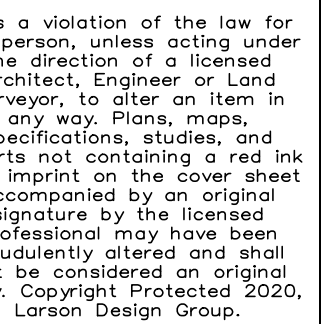


STORMWATER PIPE PROFILES

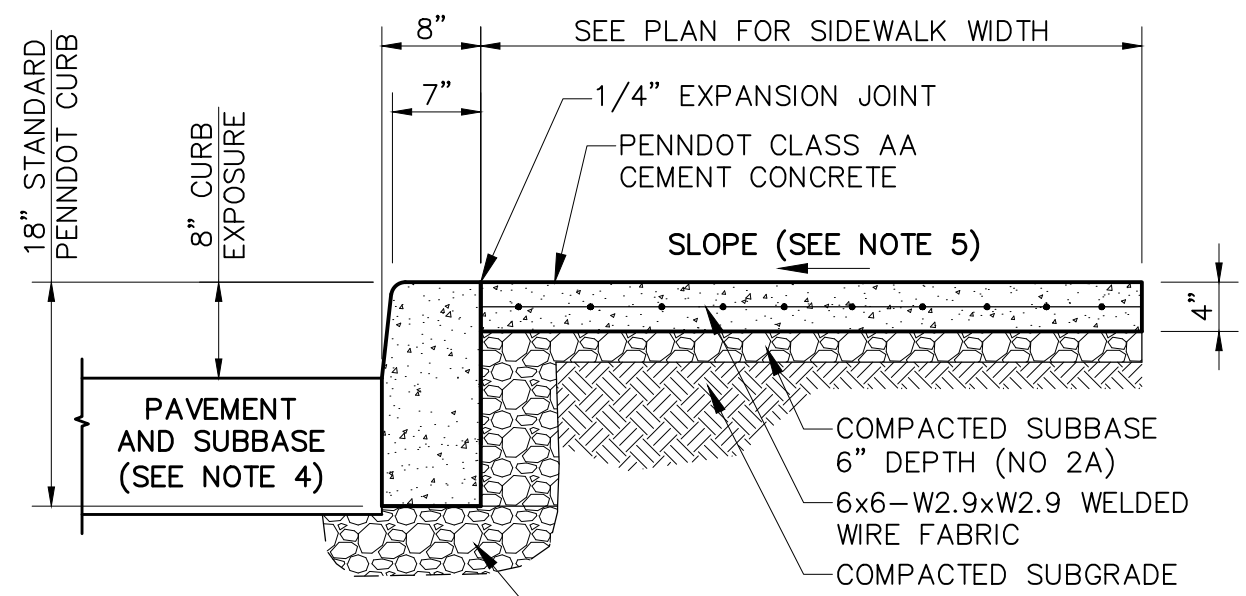
MILTON BAUGHER ELEMENTARY SCHOOL
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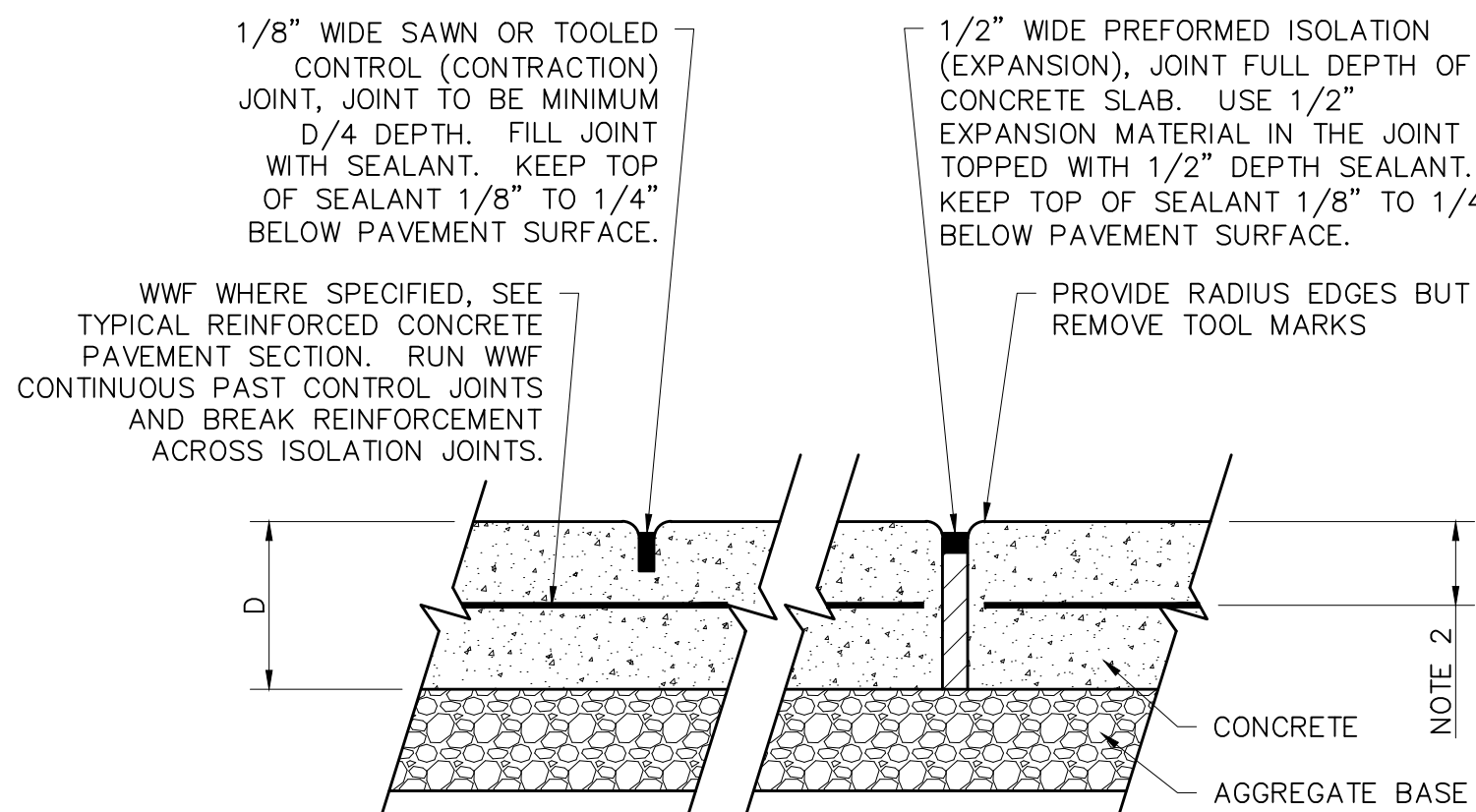


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ECT NO.:	7164-006



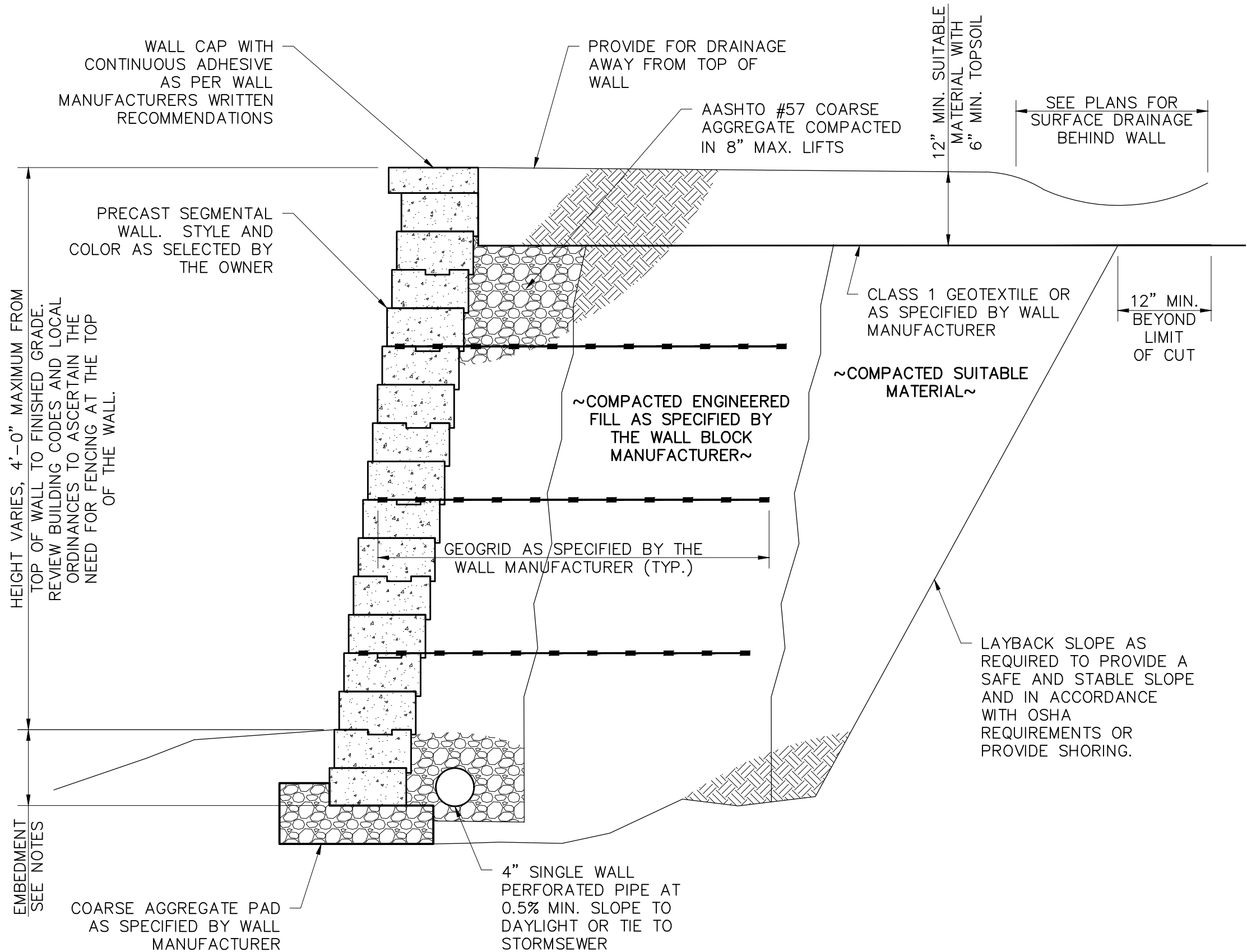
- NOTES**
1. FORM 2" SMOOTH TOOLED BORDER AT ALL JOINTS AND EDGES WITH A 1/4" RADIUS EDGING TOOL.
2. PROVIDE SCORED JOINTS EVERY 5' AND EXPANSION JOINTS AT MAXIMUM 25' INTERVALS.
3. WHERE SIDEWALK OR CURB ABUTS RIGID OBJECTS, INSTALL 1/4" PREMOLDED EXPANSION MATERIAL.
4. CURB ADJACENT TO EXISTING PAVEMENT
- SAW CUT EXISTING PAVEMENT A MINIMUM OF 24" FROM FACE OF PROPOSED CURB OR AS NECESSARY TO SET CURB FORMS AND ACHIEVE PROPER COMPACTION. COMPACT SUBBASE AND ASPHALT BASE COURSE WITH A SMALL VIBRATORY ROLLER AND/OR VIBRATORY-PLATE COMPACTOR. DO NOT USE JUMPING JACK TYPE COMPACTORS IN THESE AREAS. SEE PAVEMENT DETAIL FOR LAYER DEPTHS. SEAL ALL JOINTS BETWEEN EXISTING AND NEW PAVEMENT AND CURB.
- CURB ADJACENT TO PROPOSED PAVEMENT
- SEE PAVEMENT DETAIL FOR LAYER DEPTHS AND SEAL JOINT BETWEEN PAVEMENT AND CURB.
5. CROSS SLOPE OF WALK SHALL BE 1.8% MAXIMUM.
6. LONGITUDINAL GRADE OF SIDEWALK SHALL BE 5.0% MAXIMUM OR MATCH ADJACENT ROAD GRADE IF OVER 5%.
7. CONSTRUCT CURB ON COMPACTED SUBGRADE OR OVER-EXCAVATE AND PLACE 6" LAYER OF SUBBASE, NO. 2A, TO PROVIDE FIRM FOUNDATION. ADDITIONAL EXCAVATION AND SUBBASE ARE INCIDENTAL TO CURB.

SCALE:NOT TO SCALE



- NOTES:**
1. SEE DRAWINGS AND SPECIFICATIONS FOR PLACEMENT OF ISOLATION AND CONTROL JOINTS FOR SIDEWALK OR CONCRETE SLABS ON GRADE.
 2. D/2 FOR SIDEWALKS. 2 1/2" MIN. TO D/2 MINUS 1/2" MAX. FOR VEHICULAR PAVEMENTS.

SCALE:NOT TO SCALE



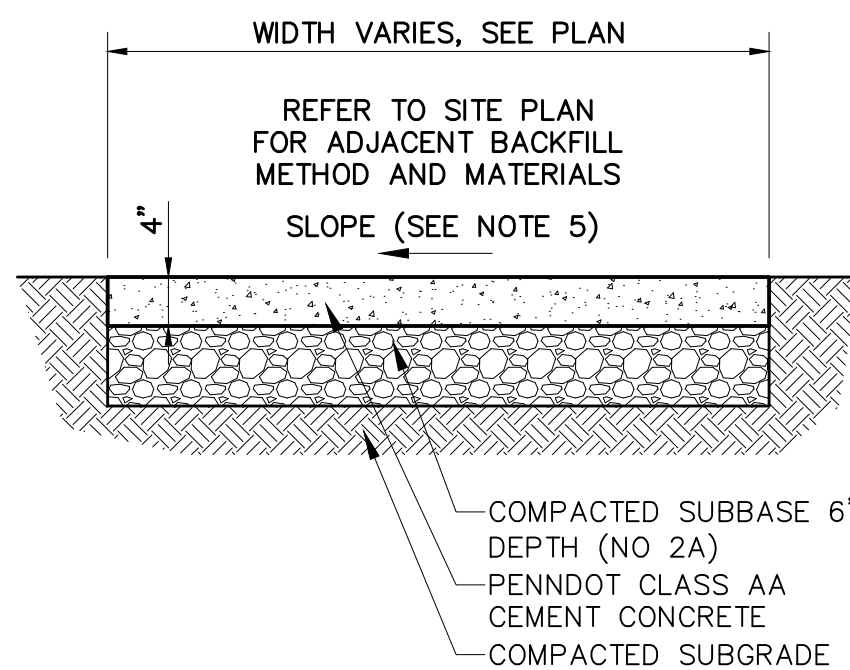
- NOTES:**
1. THE CONTRACTOR SHALL CONSTRUCT THE RETAINING WALL TO A MINIMUM HEIGHT SUPPORTING THE PROPOSED SPOT AND CONTOUR ELEVATIONS AS SHOWN ON THE GRADING PLAN. STEPPING OF THE TOP AND BOTTOM ELEVATIONS OF THE WALL SHALL BE PLANNED AND CONSTRUCTED ACCORDINGLY AND IN CONFORMANCE WITH THE WALL MANUFACTURER'S FINAL DESIGN, SPECIFICATIONS AND GUIDANCE.
 2. WALL FOOTING OR BASE PAD, REINFORCEMENT, AND GEOGRID SHALL BE CONSTRUCTED AS DESIGNED AND REQUIRED BY THE WALL MANUFACTURER'S FINAL DESIGN, SPECIFICATIONS AND GUIDANCE.
 3. THE WALL IS BID AS A DETACHED DESIGN BY THE CONTRACTOR. THIS DRAWING IS FURNISHED FOR PRELIMINARY DESIGN PURPOSES ONLY AND SHOULD NOT BE CONSIDERED TO BE THE FINAL DESIGN. THE FINAL COMPONENT ARRANGEMENT AND LAYOUT SHALL BE AS DESIGNED AND SPECIFIED BY WALL MANUFACTURER'S FINAL DESIGN, SPECIFICATIONS AND GUIDANCE.
 4. MINIMUM EMBEDMENT AT THE BASE OF THE WALL SHALL BE 6". EMBEDMENT INCREASES WITH INCREASED WALL HEIGHTS, SLOPING FILLS IN FRONT AND BEHIND WALL OR POOR FOUNDATION SOILS; FOLLOW THE WALL MANUFACTURER'S FINAL DESIGN, SPECIFICATIONS AND GUIDANCE.

SCALE: NOT TO SCALE

SCALE:NOT TO SCALE



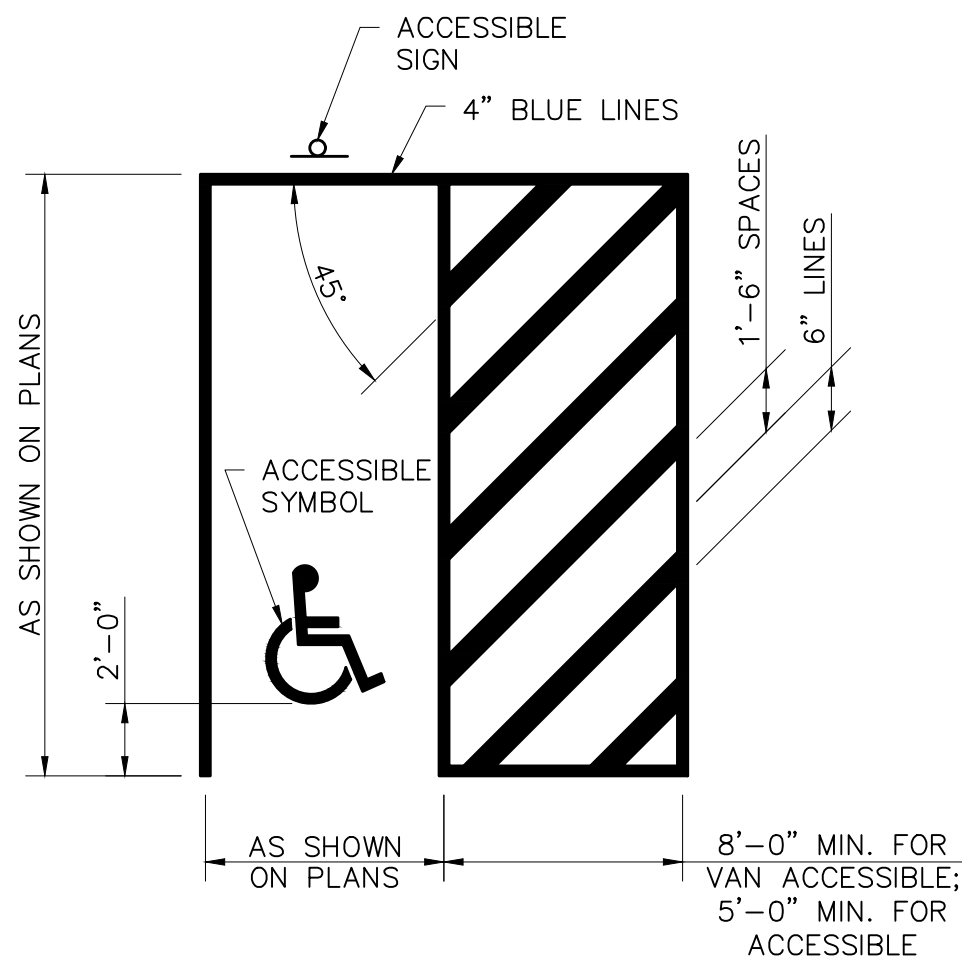
SCALE:NOT TO SCALE



- NOTES:**
1. FORM A RADIUS EDGE AT ALL EDGES AND JOINTS WITH A 1/4" RADIUS EDGING TOOL. REMOVE ALL TOOL MARKS.
 2. PROVIDE SCORED JOINTS EVERY 5' AND EXPANSION JOINTS AT MAXIMUM 25' INTERVALS.
 3. WHERE CONCRETE ABUTS RIGID OBJECTS, INSTALL 1/4" PREMOLDED EXPANSION MATERIAL.
 4. PROVIDE LIGHT BROOM FINISH PERPENDICULAR TO FOOT TRAFFIC.
- CROSS SLOPE OF WALK TO BE .8% MAXIMUM AND LONGITUDINAL SLOPE OF 5.0% MAXIMUM UNLESS INDICATED OTHERWISE ON GRADING PLAN OR OTHER DETAILS.

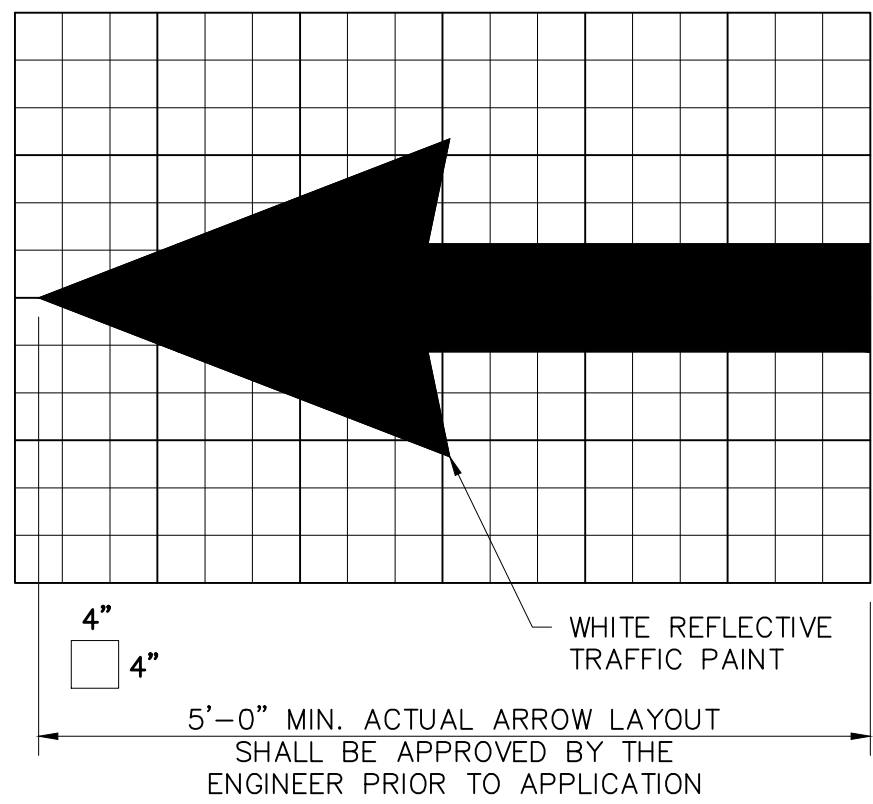
SCALE:NOT TO SCALE

SCALE:NOT TO SCALE

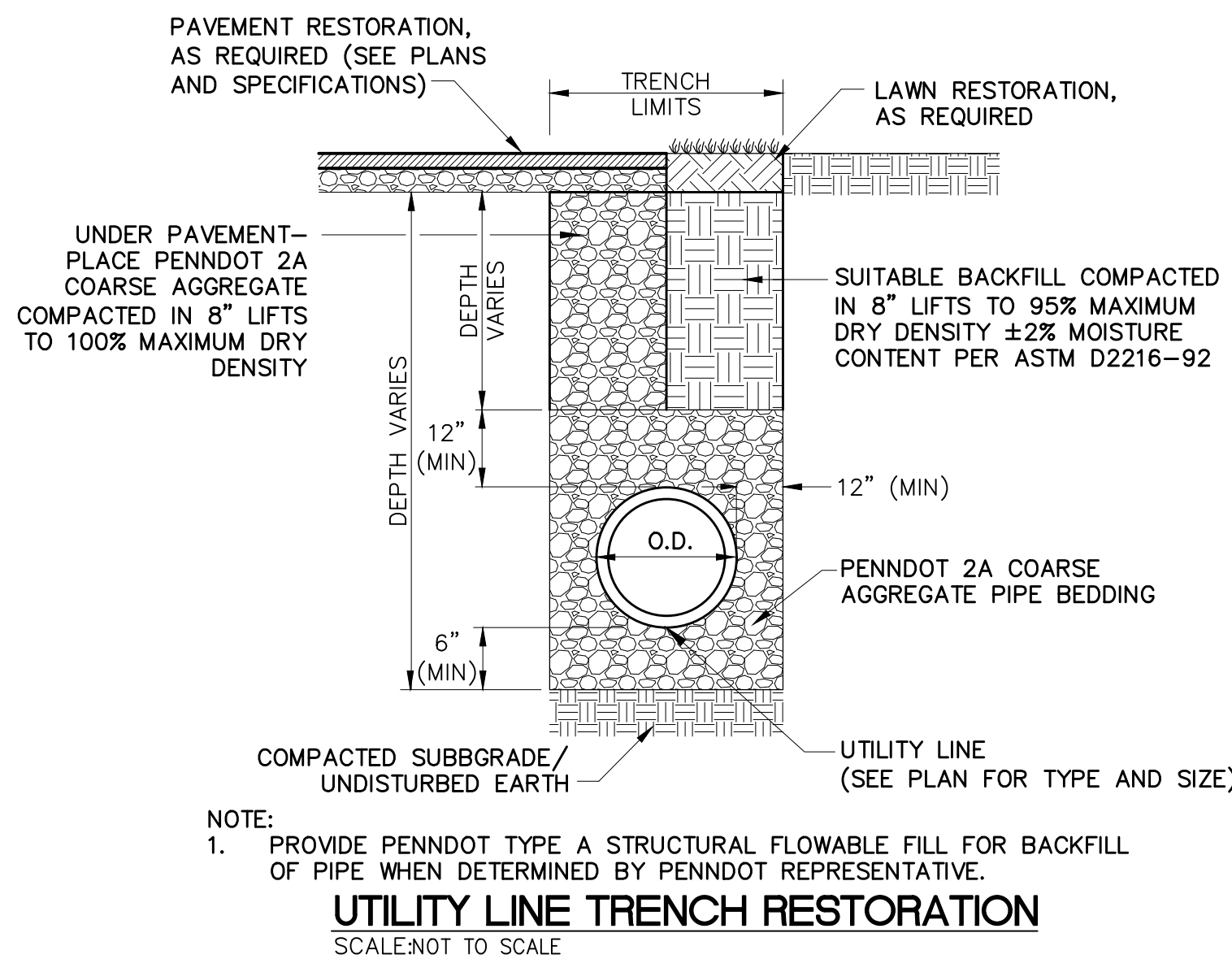


NOTE:
1. THE MAXIMUM SLOPE IN ANY DIRECTION CANNOT EXCEED 2.0%.

ACCESSIBLE PARKING STALL
SCALE: NOT TO SCALE

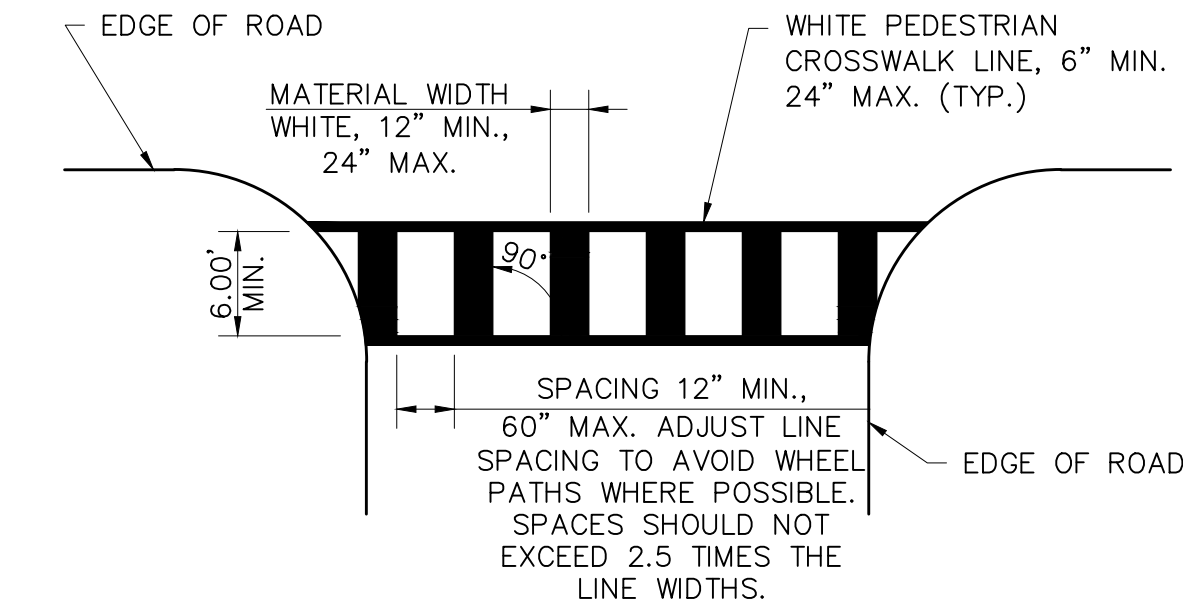


PAINTED TRAFFIC ARROW FOR PARKING LOTS
SCALE: NOT TO SCALE

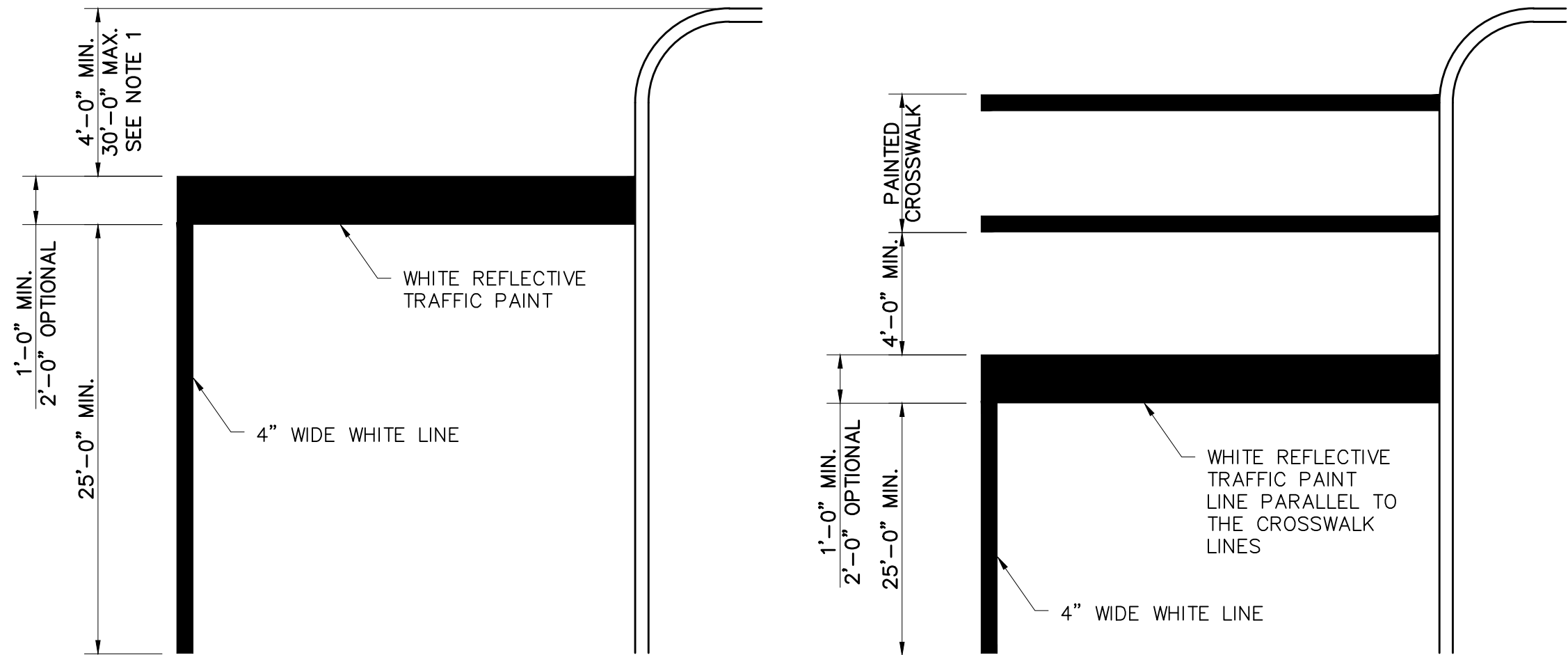


NOTE:
1. PROVIDE PENNDOT TYPE A STRUCTURAL FLOWABLE FILL FOR BACKFILL OF PIPE WHEN DETERMINED BY PENNDOT REPRESENTATIVE.

UTILITY LINE TRENCH RESTORATION
SCALE: NOT TO SCALE

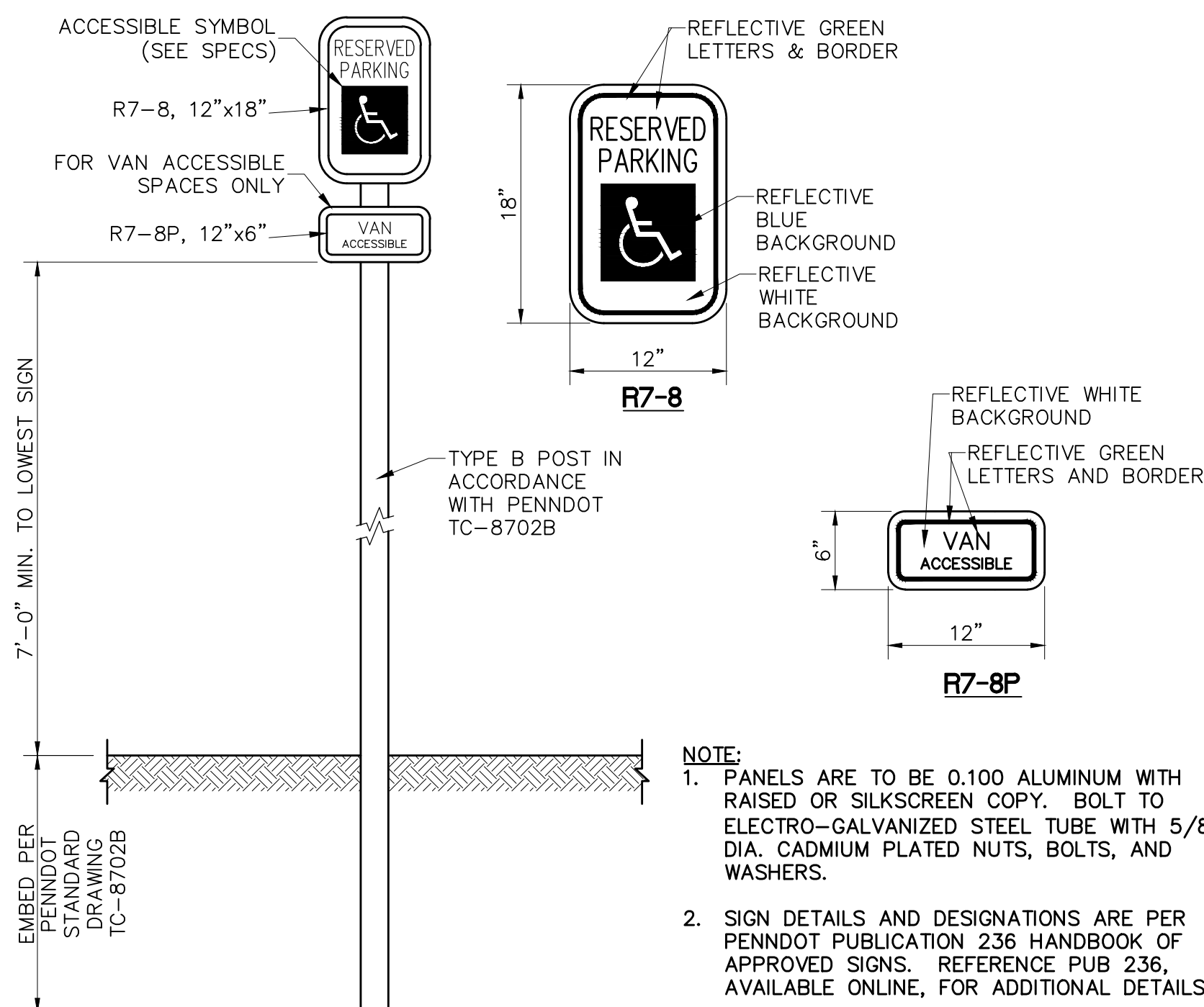


TYPE C - PERPENDICULAR CROSSWALK MARKINGS
SCALE: NOT TO SCALE



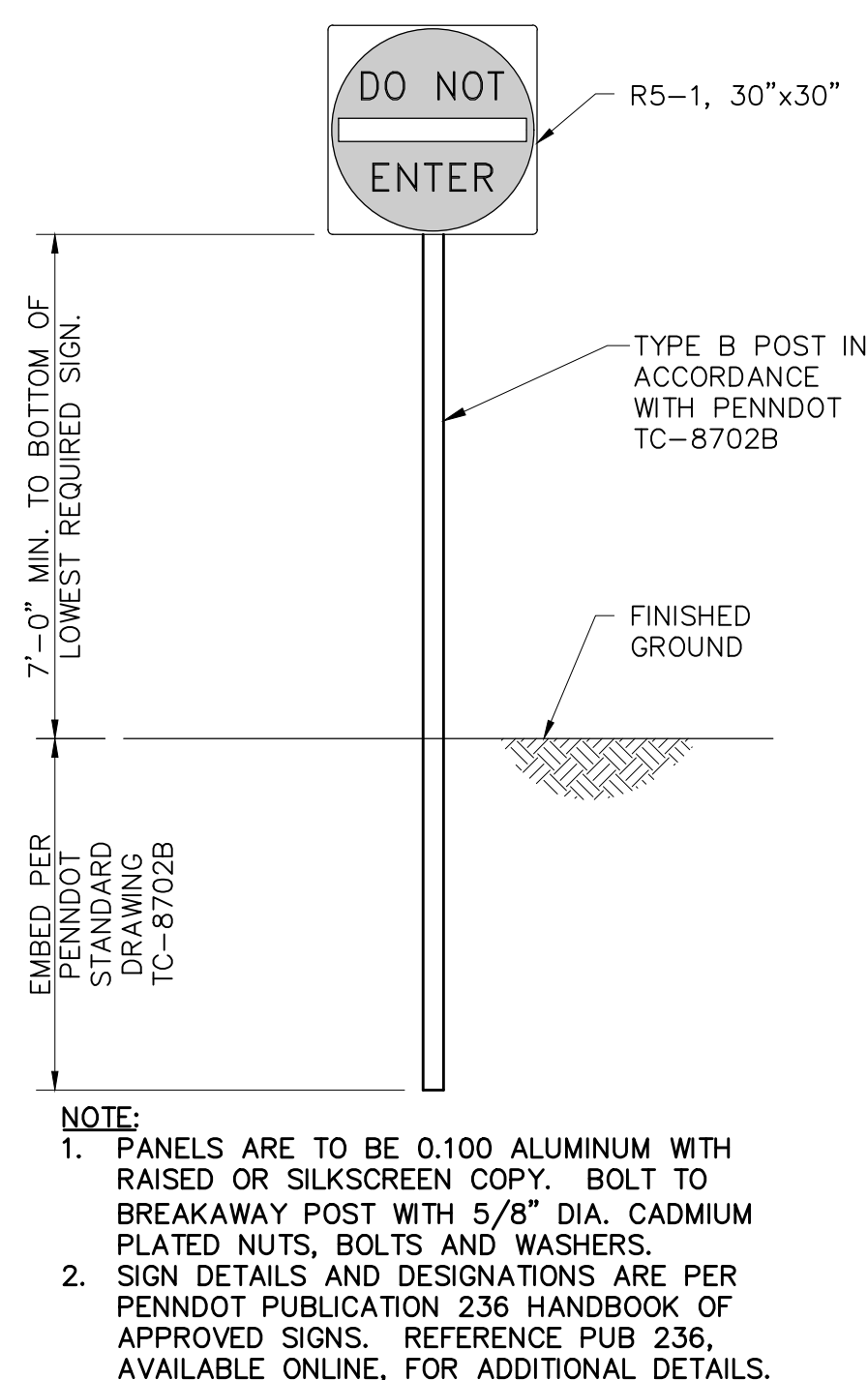
NOTES:
1. STOP LINES SHALL BE SOLID WHITE LINES THAT COMPLETELY TRAVERSE EACH TRAFFIC LANE. AT INTERSECTIONS WITH A STOP SIGN THE STOP LINE SHALL BE PLACED 4'-0" MINIMUM OR 30' MAXIMUM FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY TO ENSURE MAXIMUM SIGHT DISTANCE TO VEHICLES ON THE CROSSING ROUTE. WHEN USED ON MULTILANE APPROACHES TO A SIGNALIZED INTERSECTION THE STOP LINE MAY BE STAGGERED FOR EACH LANE TO ASSIST TURNING VEHICLES AND TO IMPROVE SIGHT DISTANCE FOR A MOTORIST DESIRING TO MAKE A RIGHT TURN ON RED.
2. LOCATE STOP LINES A MINIMUM OF 4'-0" IN ADVANCE OF AND PARALLEL TO THE CROSSWALK LINES.

PAINTED STOP BAR
SCALE: NOT TO SCALE



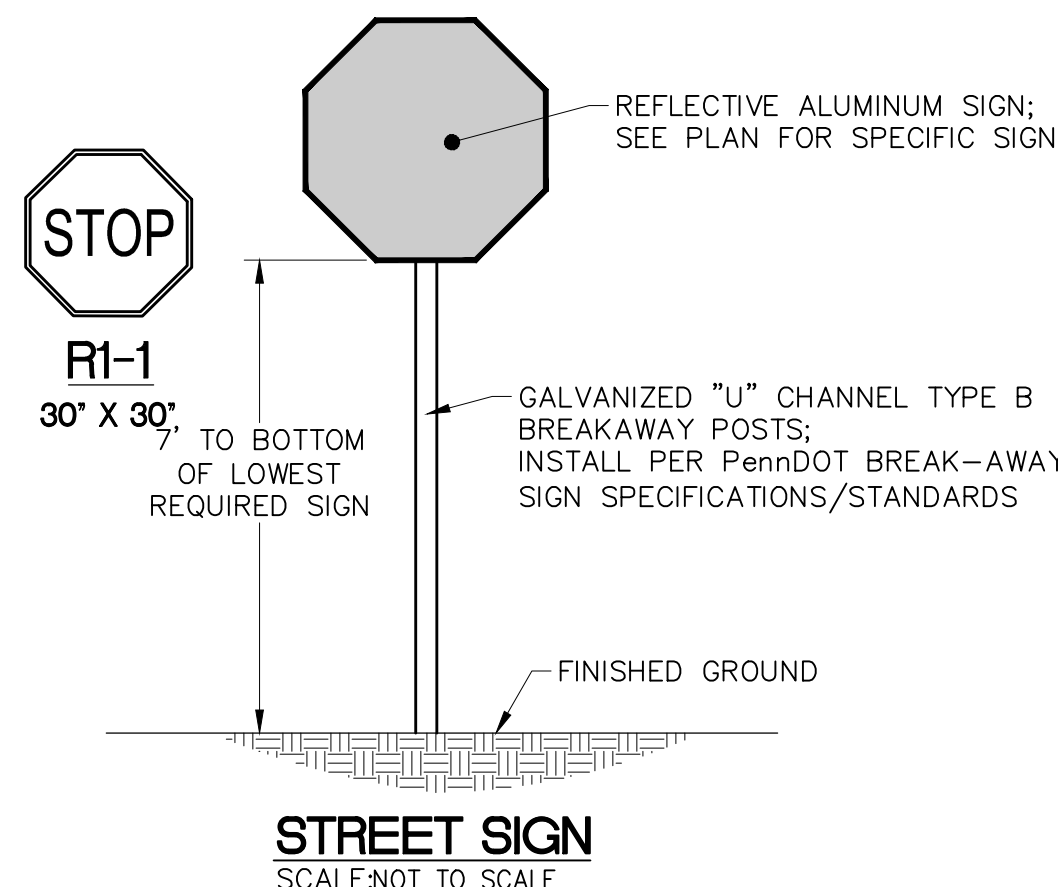
NOTE:
1. PANELS ARE TO BE 0.100 ALUMINUM WITH RAISED OR SILKSCREEN COPY. BOLT TO ELECTRO-GALVANIZED STEEL TUBE WITH 5/8" DIA. CADMIUM PLATED NUTS, BOLTS, AND WASHERS.
2. SIGN DETAILS AND DESIGNATIONS ARE PER PENNDOT PUBLICATION 236 HANDBOOK OF APPROVED SIGNS. REFERENCE PUB 236, AVAILABLE ONLINE, FOR ADDITIONAL DETAILS.

ACCESSIBLE SIGN ON TYPE B POST
SCALE: NOT TO SCALE

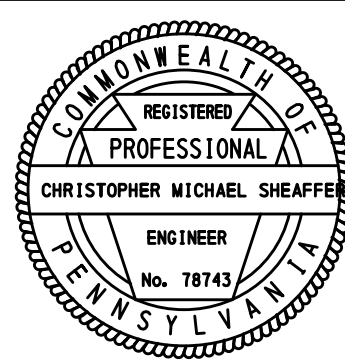


NOTE:
1. PANELS ARE TO BE 0.100 ALUMINUM WITH RAISED OR SILKSCREEN COPY. BOLT TO BREAKAWAY POST WITH 5/8" DIA. CADMIUM PLATED NUTS, BOLTS AND WASHERS.
2. SIGN DETAILS AND DESIGNATIONS ARE PER PENNDOT PUBLICATION 236 HANDBOOK OF APPROVED SIGNS. REFERENCE PUB 236, AVAILABLE ONLINE, FOR ADDITIONAL DETAILS.

"DO NOT ENTER" SIGN
SCALE: NOT TO SCALE



STREET SIGN
SCALE: NOT TO SCALE



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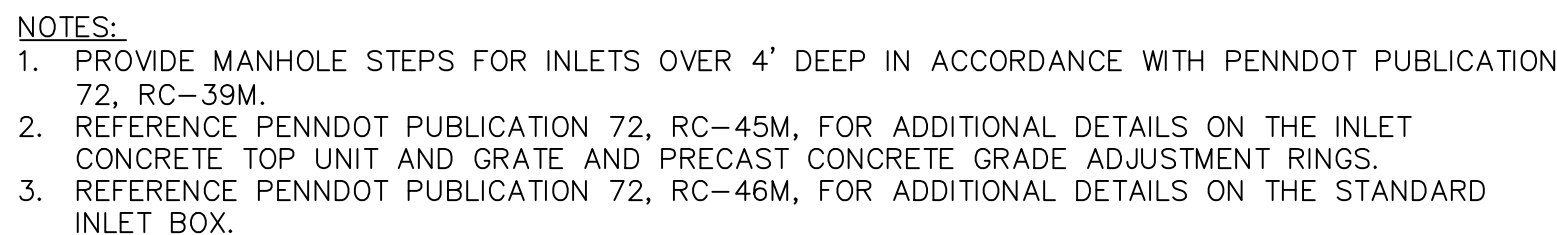
NO.	DATE	BY	CHD	COMMENTS	ISSUE / REVISIONS
4	2020.07.27	ARH	CMS	FINAL LAND DEVELOPMENT SUBMISSION II	
3	2020.07.22	ARH	CMS	NPDES SUBMISSION II	
2	2020.06.24	ARH	CMS	FINAL LAND DEVELOPMENT SUBMISSION	
1	2020.06.19	ARH	CMS	NPDES SUBMISSION	
1	2020.06.19	ARH	CMS	NPDES SUBMISSION	



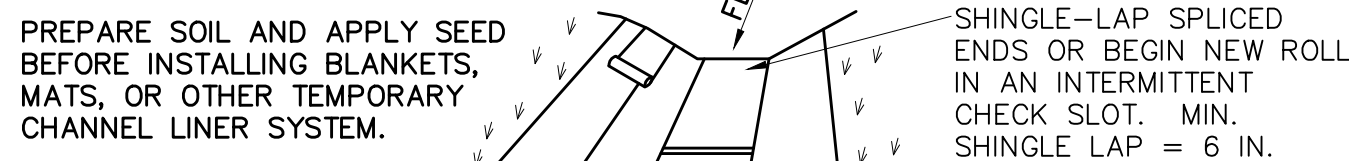
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SHEET NO.:
D11
PROJECT NO.: 7164-006



SCALE: NOT TO SCALE



(LOOKING DOWNSTREAM)

CHANNEL CROSS-SECTION

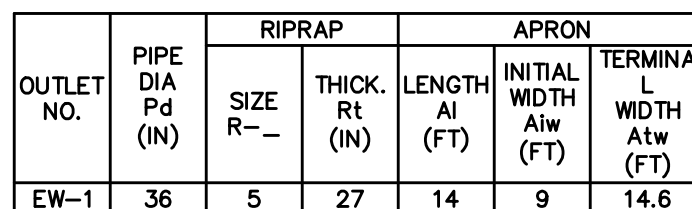
* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)	LINING *
1	—	4	2	15	3	2.5	S1508N STAPLE PATTERN D OR EQUAL
2	—	2	2	13	2.5	3	S1508N STAPLE PATTERN D OR EQUAL

NOTES:-

1. ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
2. CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.
3. DISCOVERY OF OBSTRUCTIONS, SUCH AS ROCKS, LOGS, LIMBS 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.
4. NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOVING 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.

SCALE:NOT TO SCALE



- NOTES:

- NOTES:
1. ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
 2. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIP-RAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

SCALE:NOT TO SCALE

PRE-MANUFACTURED TRASH RACK

ELEV.: 474.50

STANDARD PennDOT INLET BOX

BASIN BOTTOM: 474.00

15" ϕ SLCPP

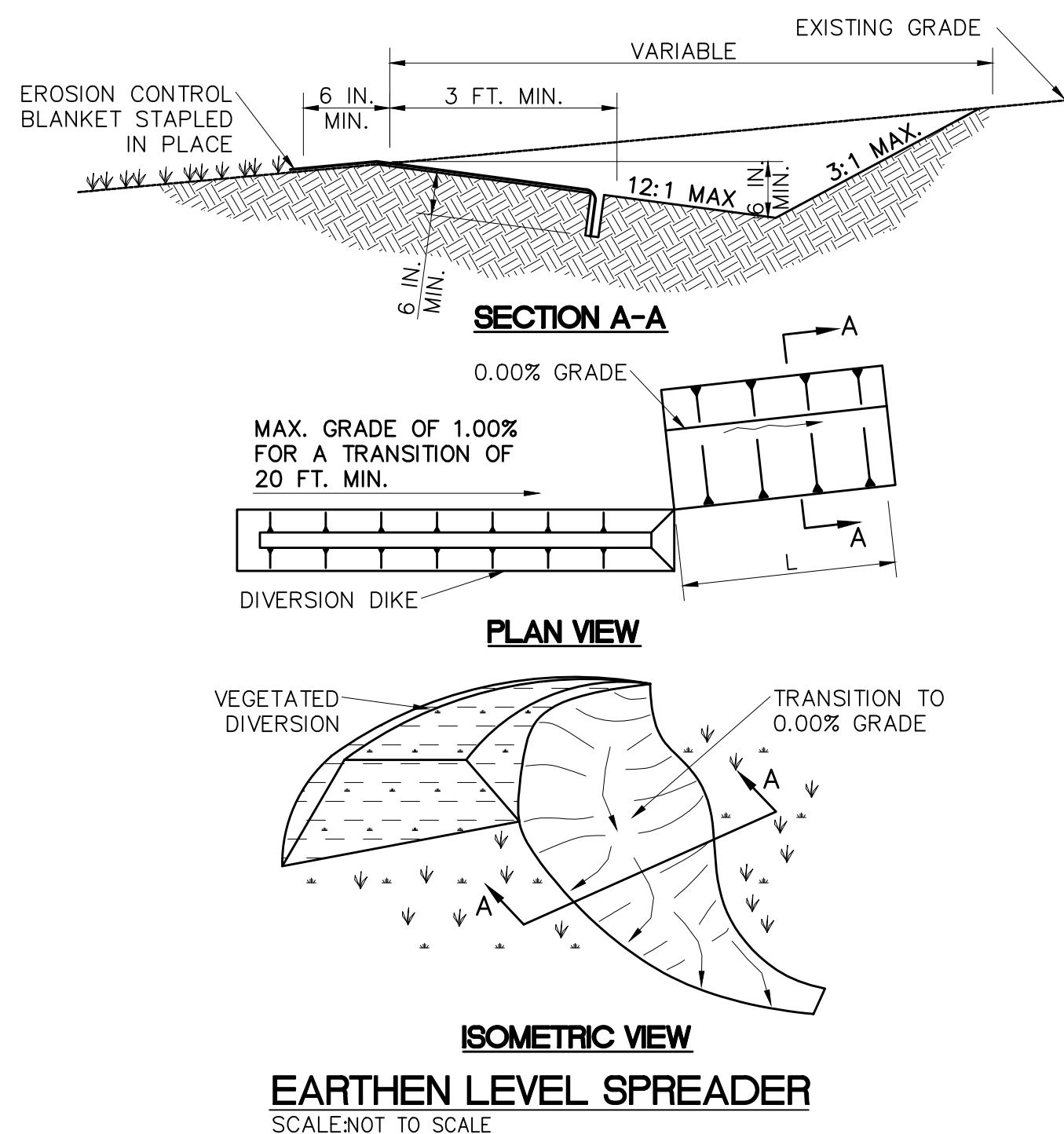
4" ϕ PVC

INV.: 471.63

FRONT VIEW
LOOKING DOWNSTREAM

OUTLET STRUCTURE (OS-1)

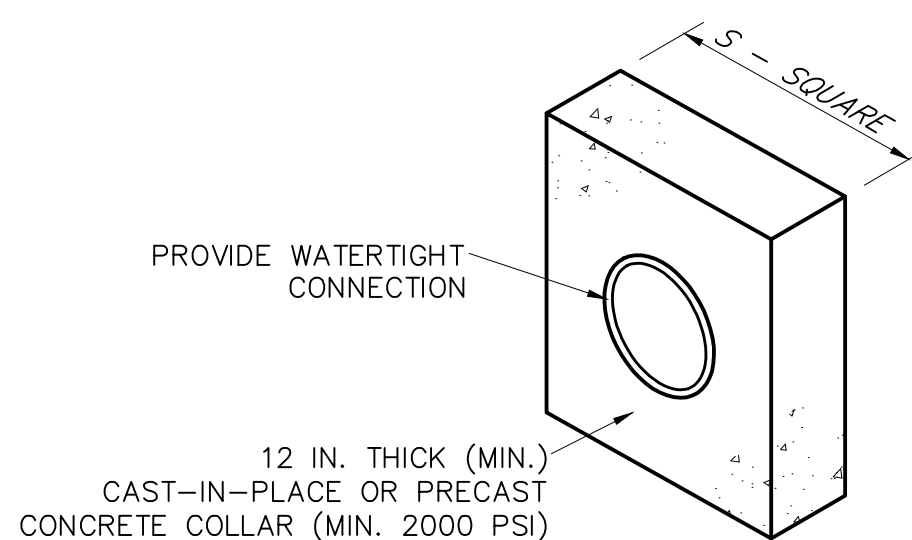
SCALE: NOT TO SCALE



- NOTES:

- NOTES:
1. ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.
 2. COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE

SCALE-NOT TO SCALE



BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO FIRST COLLAR (FT)	COLLAR SPACING (FT)
1	15	36	2	30	245

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NO	DATE	COMMENTS	ARH	OAS	CHD
4	2020.07.27	FINAL LAND DEVELOPMENT SUBMISSION II	ARH	OAS	
3	2020.07.22	NPDES SUBMISSION II	ARH	OAS	
2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION	ARH	OAS	
1	2020.06.19	NPDES SUBMISSION	ARH	OAS	
			BT	CHD	



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SITE DETAILS

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BOUGH OF MILTON, NORTHUMBERLAND COUNTY, PENNSYLVANIA

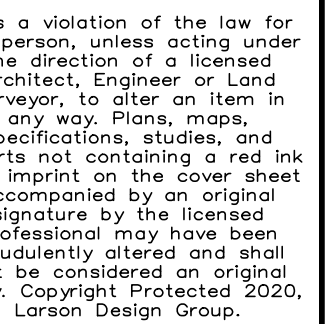
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D1.2

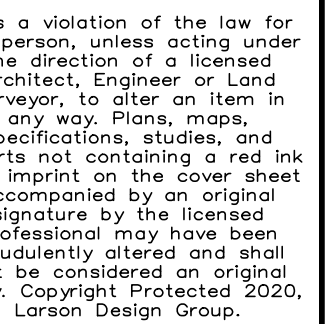
PROJECT NO.: 7164-006



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T NO.:	ES1.0
ECT NO.:	7164-006

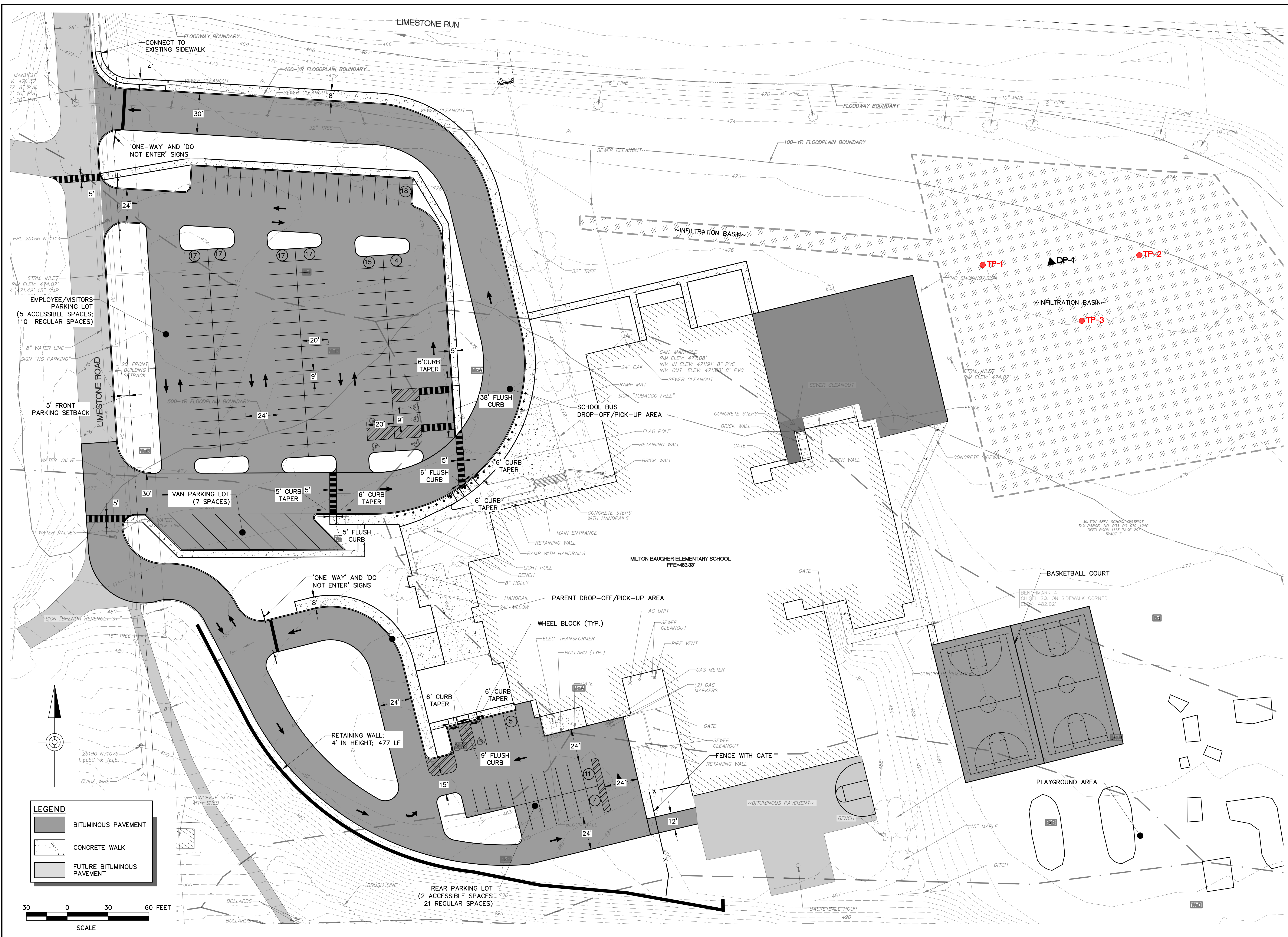


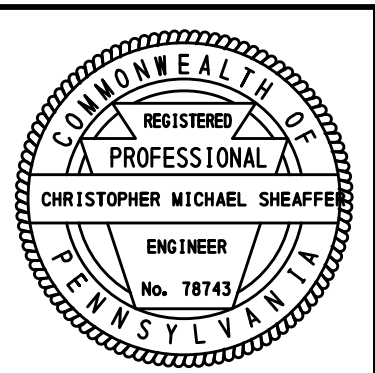
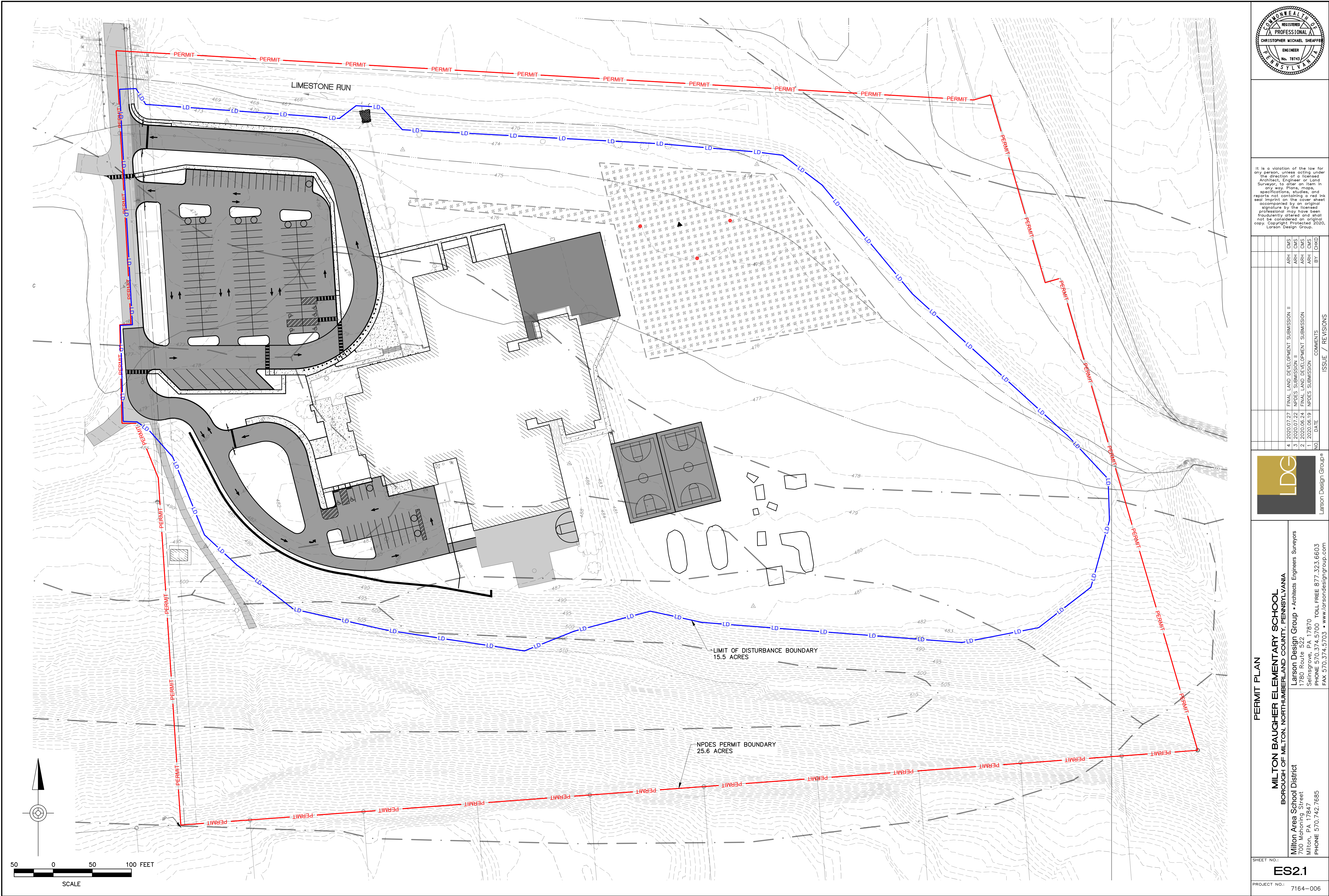
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4	2020.07.27	FINAL LAND DEVELOPMENT SUBMISSION II	ARRH	CMS			
3	2020.07.22	NPDES SUBMISSION II	ARRH	CMS			
2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION	ARRH	CMS			
1	2020.06.19	NPDES SUBMISSION	ARRH	CMS			



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ES2.0





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1	2020.06.19	NPDES SUBMISSION	ARH

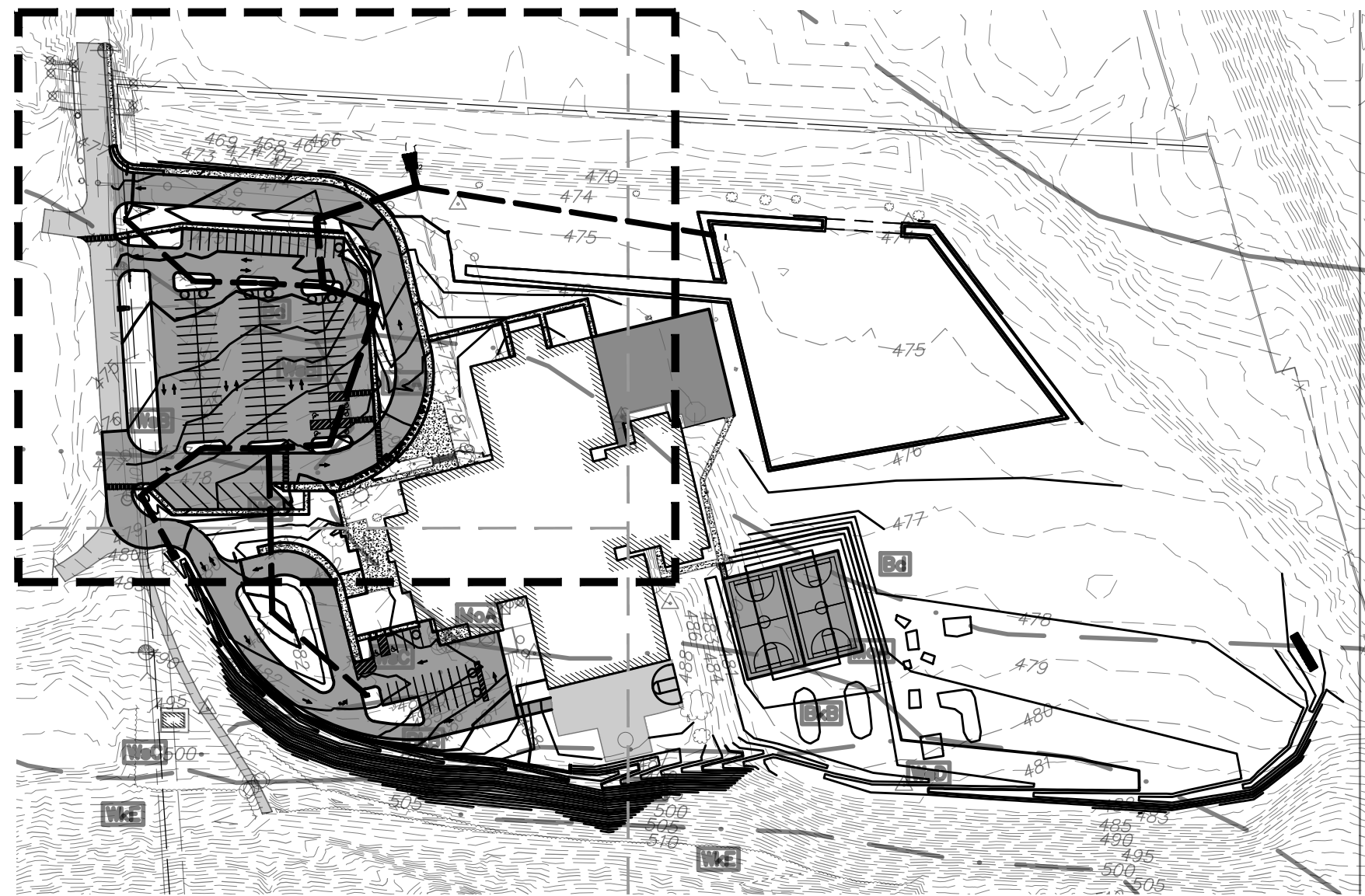


PERMIT PLAN
MILTON BAUGHER ELEMENTARY SCHOOL
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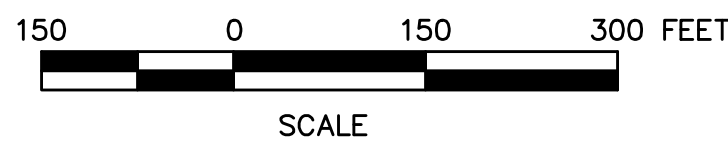
PERMIT PLAN

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SHEET NO.:
E52.1
PROJECT NO.: 7164-006

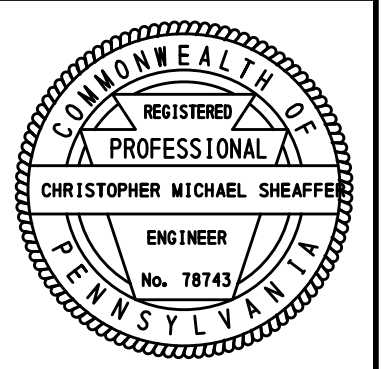
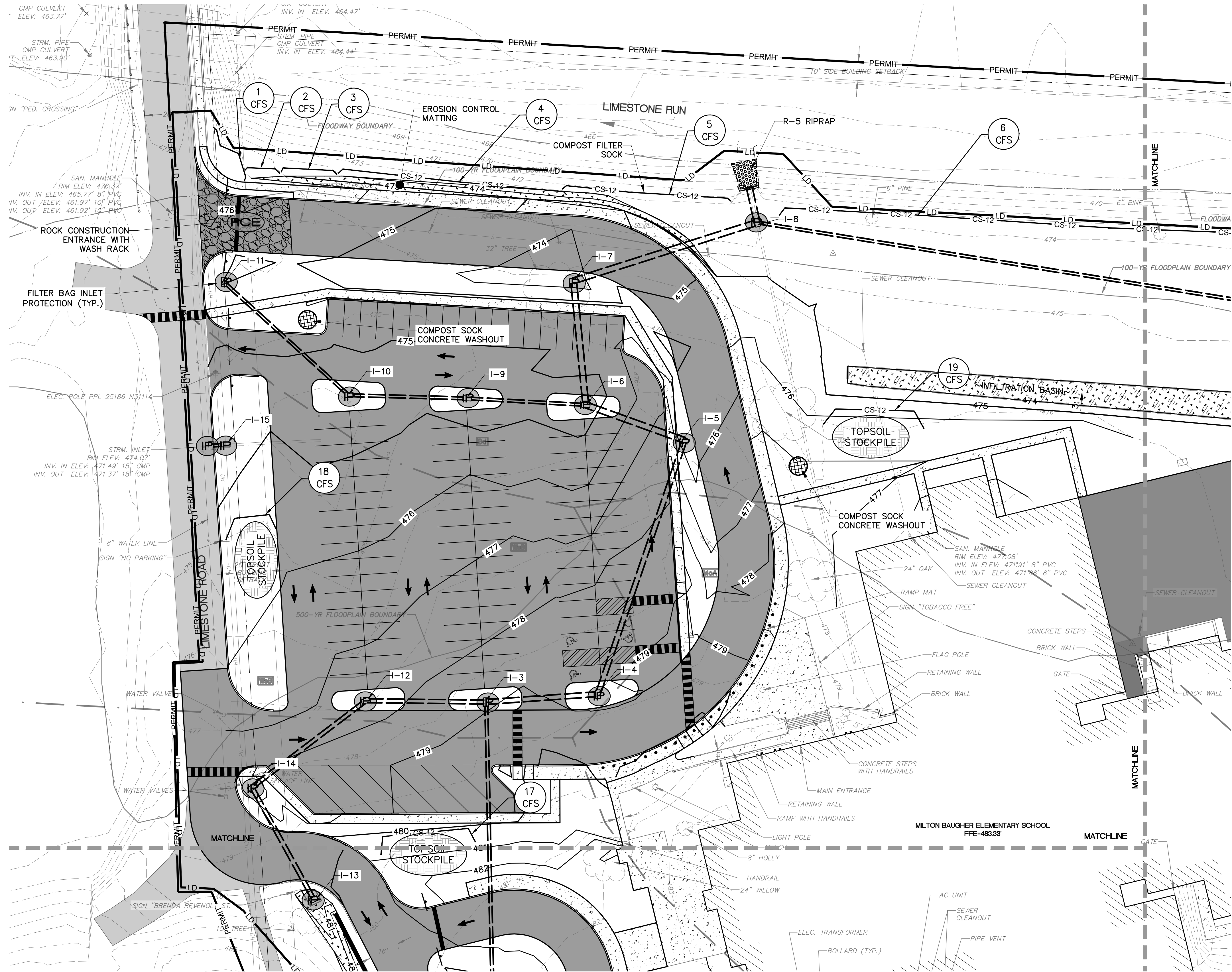
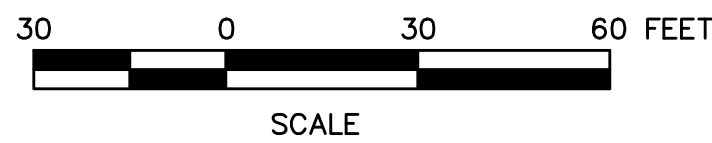


KEY MAP
SCALE: 1" = 150'



LEGEND

- EROSION CONTROL MATTING
- AREA OF MINIMUM COMPACTION



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2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION
1	2020.06.19	NPDES SUBMISSION



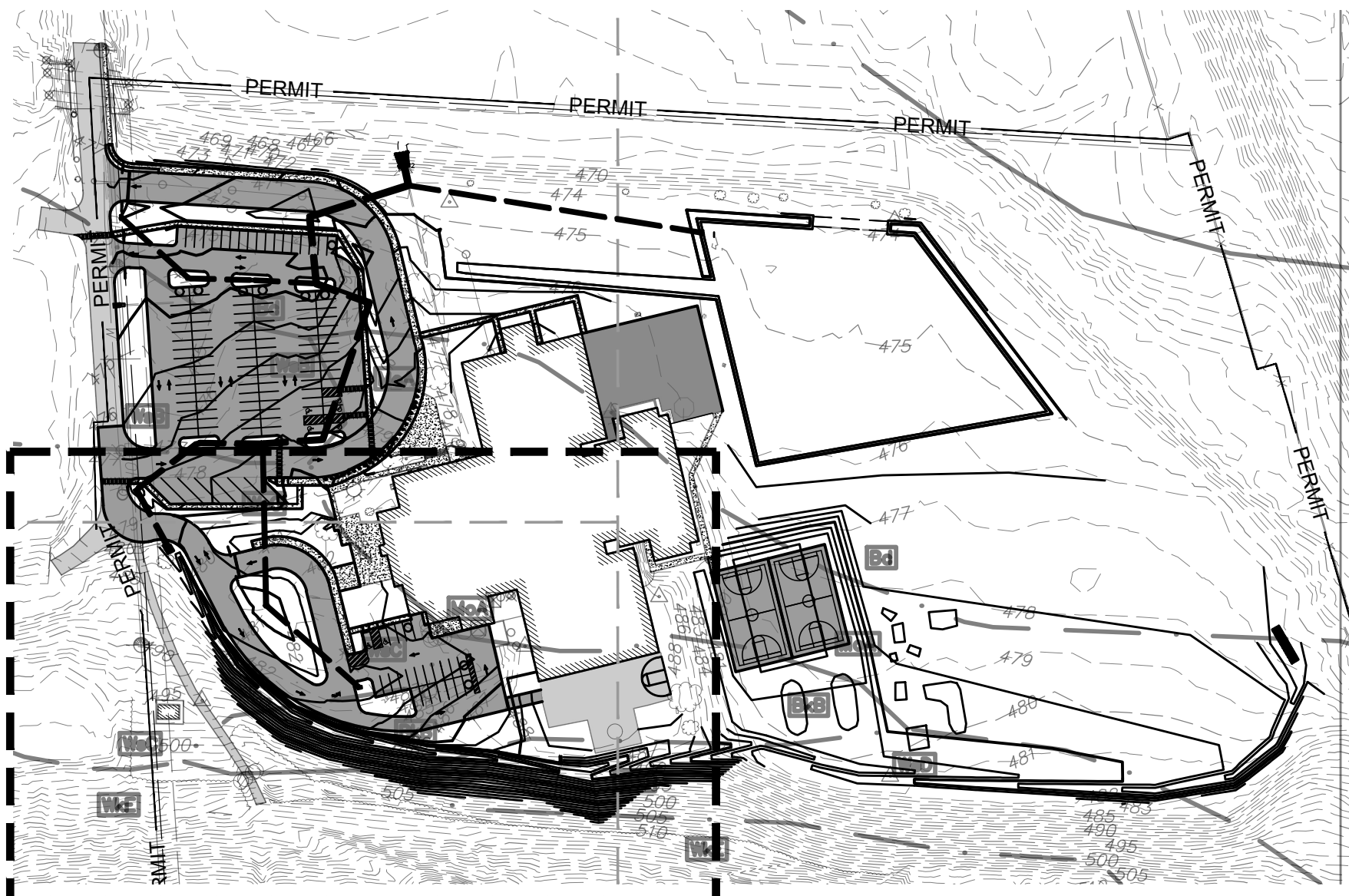
EROSION AND SEDIMENT CONTROL PLAN - NORTH

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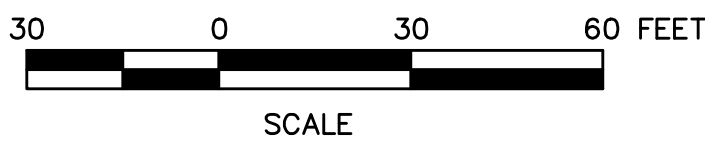
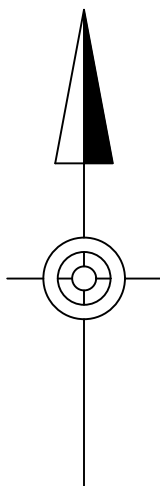
KEY MAP
SCALE: 1" = 150'



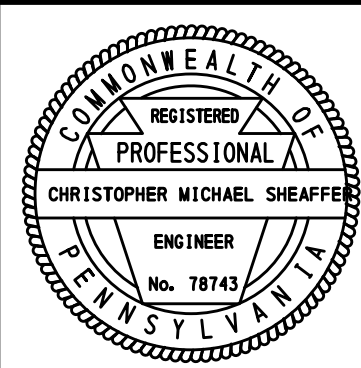
SCALE

LEGEND

	EROSION CONTROL MATTING
	AREA OF MINIMUM COMPACTION



SCALE



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1	2020.06.19	NPDES SUBMISSION
1	2020.06.19	BY CHD



EROSION AND SEDIMENT CONTROL PLAN - SOUTH

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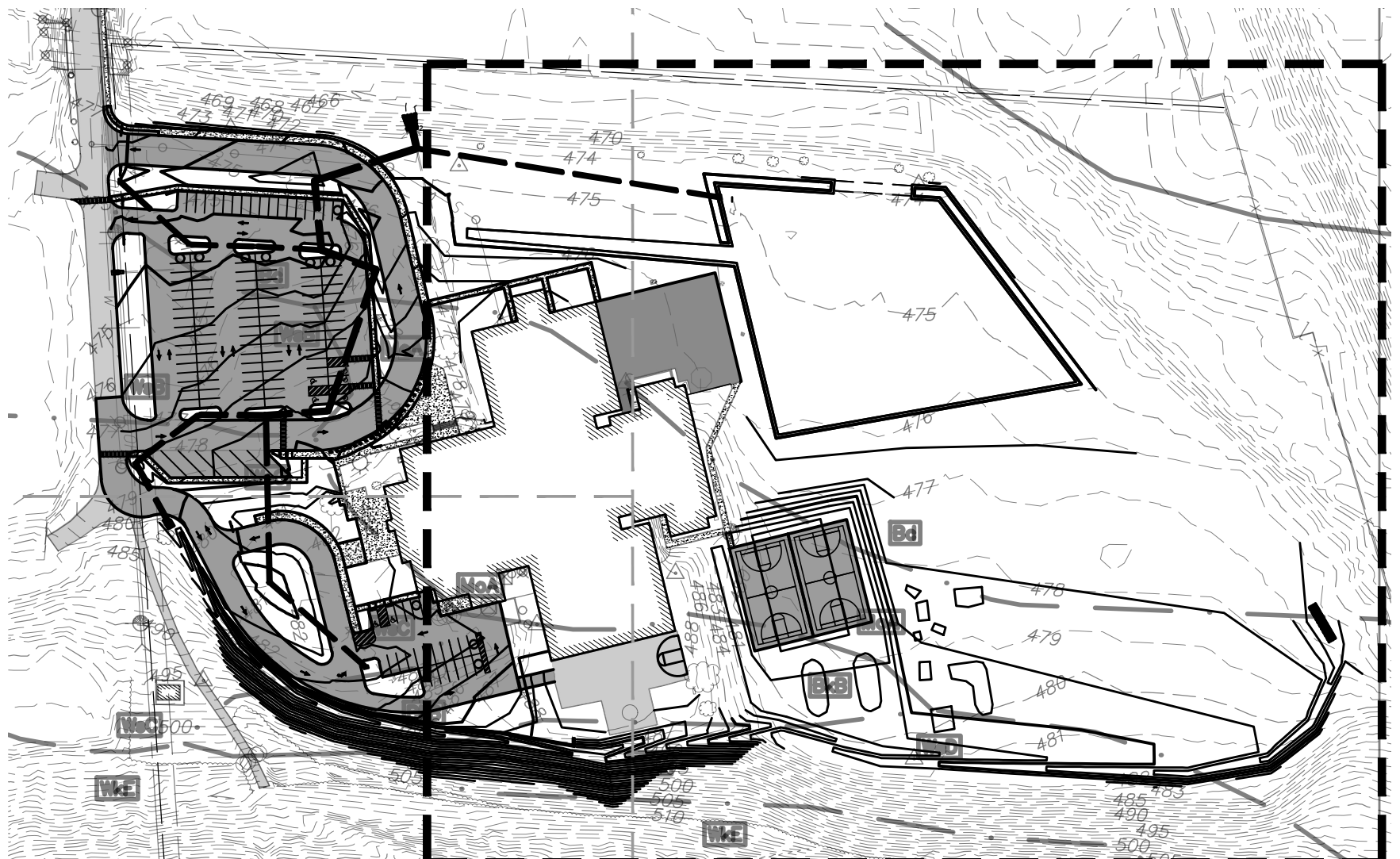
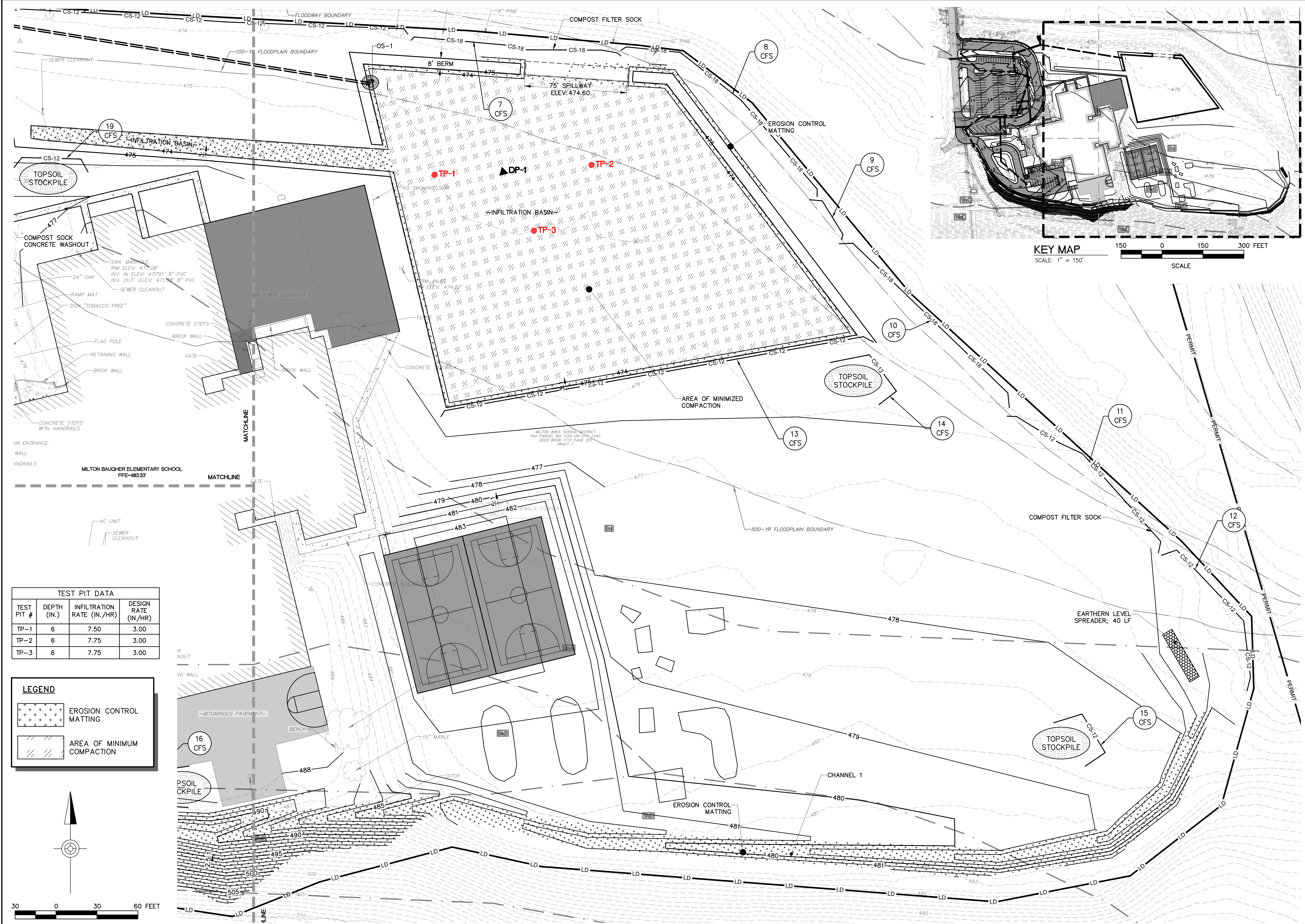
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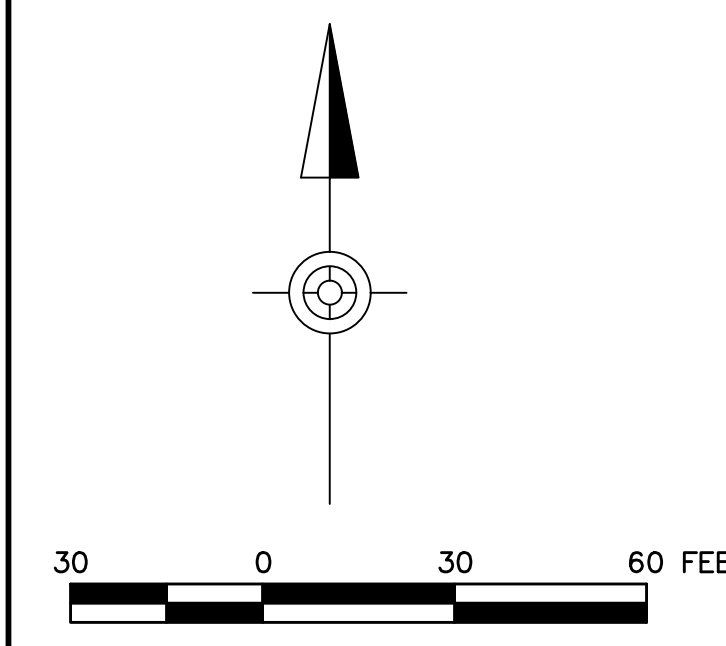
PROJECT NO.: 7164-006



TEST PIT DATA			
TEST PIT #	DEPTH (IN.)	INFILTRATION RATE (IN./HR)	DESIGN RATE (IN./HR)
TP-1	6	7.50	3.00
TP-2	6	7.75	3.00
TP-3	6	7.75	3.00

LEGEND

EROSION CONTROL MATTING

AREA OF MINIMUM COMPACTION

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER MICHAEL SHEAFFER
No. 78743

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3	2020.07.22	NPDES SUBMISSION II	ARH
2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION	CMS
1	2020.06.19	NPDES SUBMISSION	ARH

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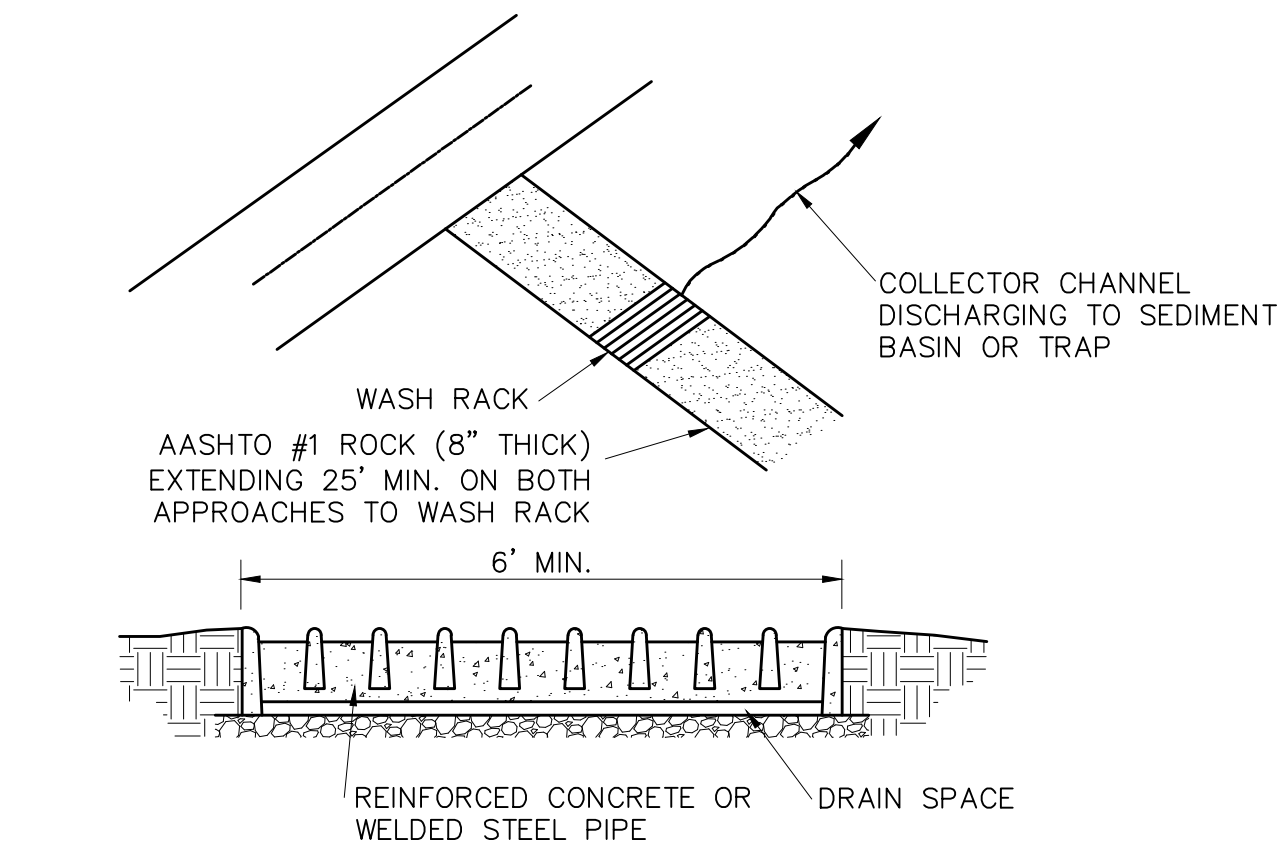
EROSION AND SEDIMENT CONTROL PLAN - EAST

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SHEET NO.: ES3.2

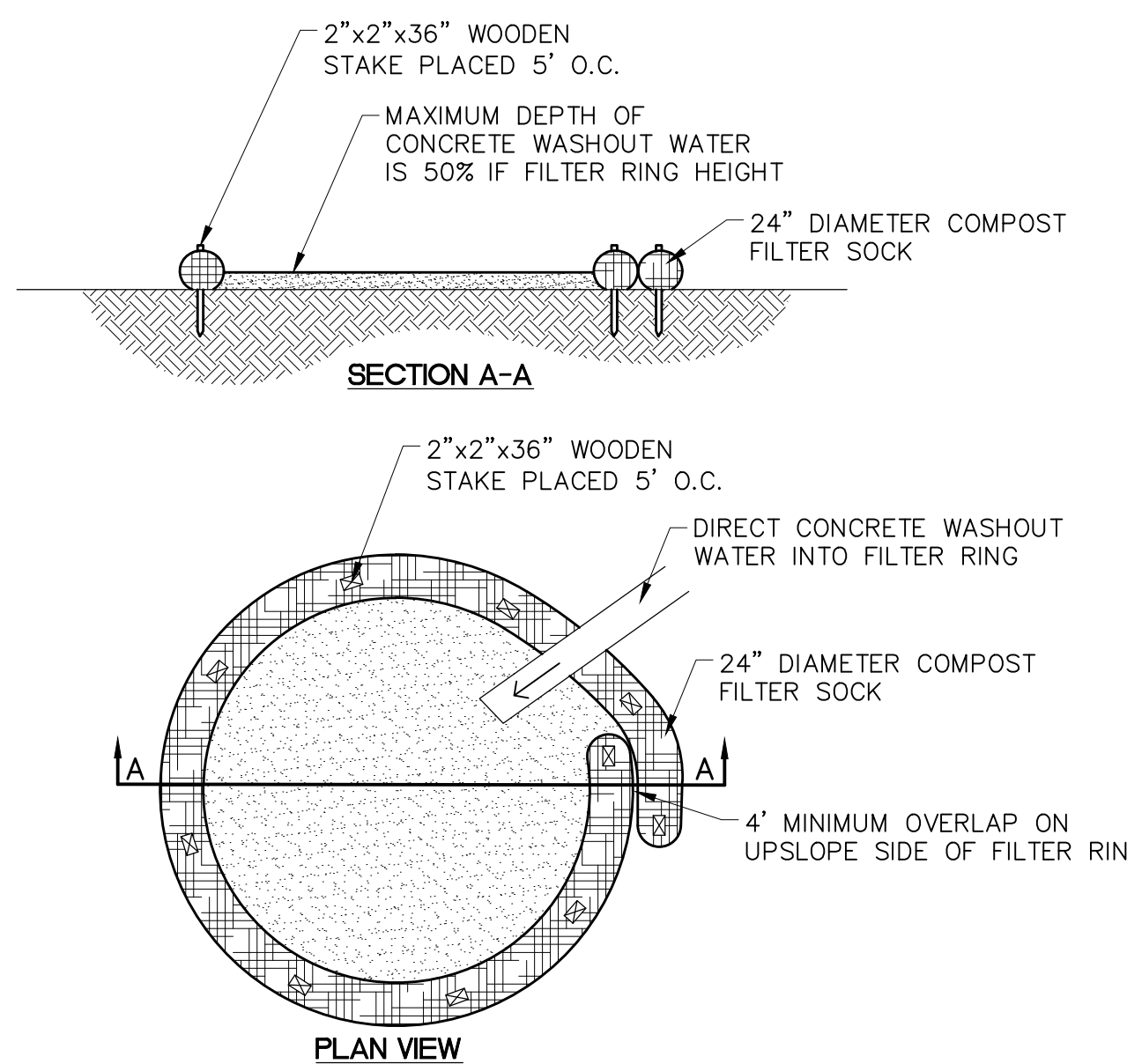
PROJECT NO.: 7164-006



- NOTES:**
1. WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
 2. WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.
 3. A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.
 4. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ACCESS WITH WASH RACK

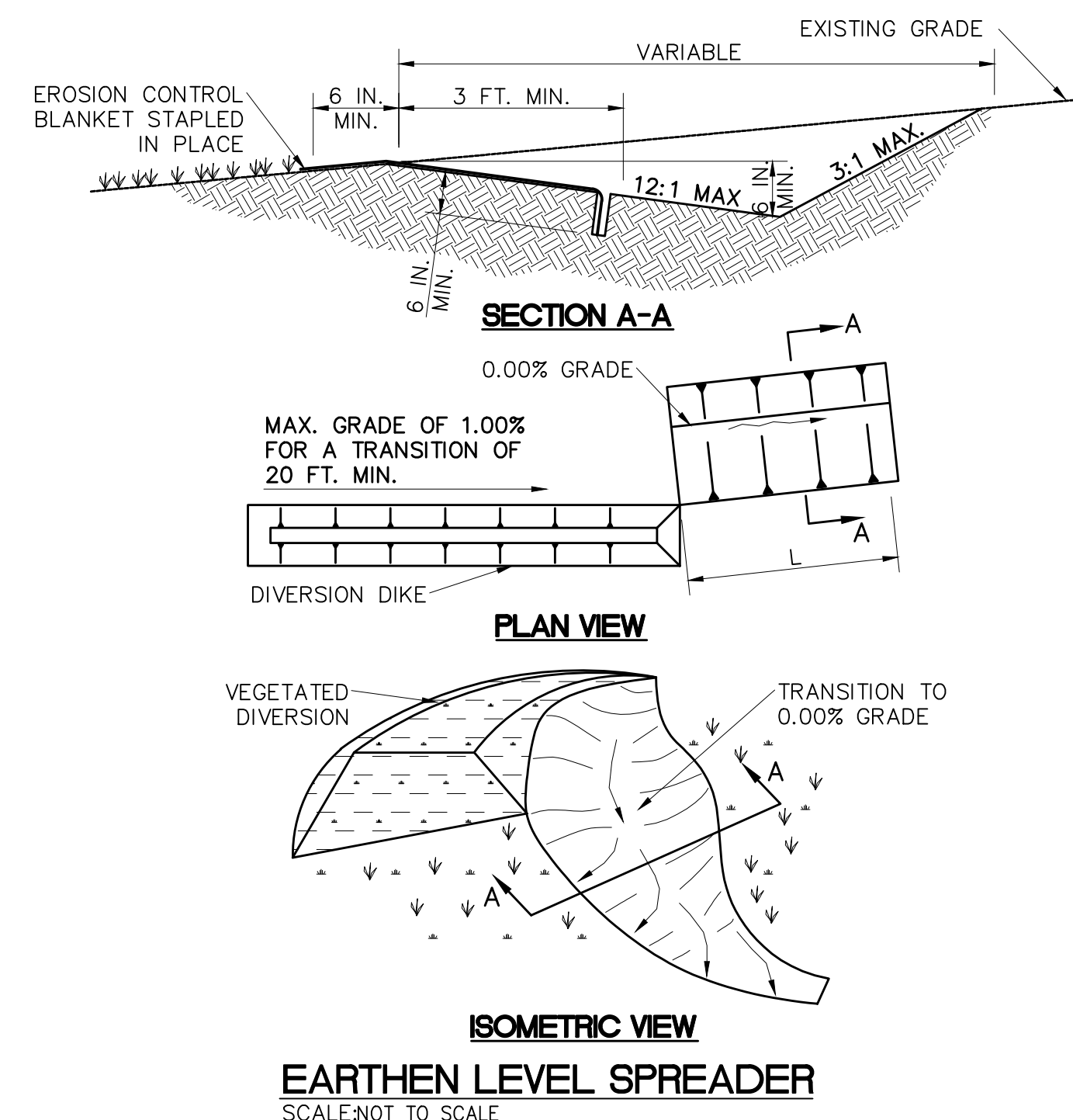
SCALE: NOT TO SCALE



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

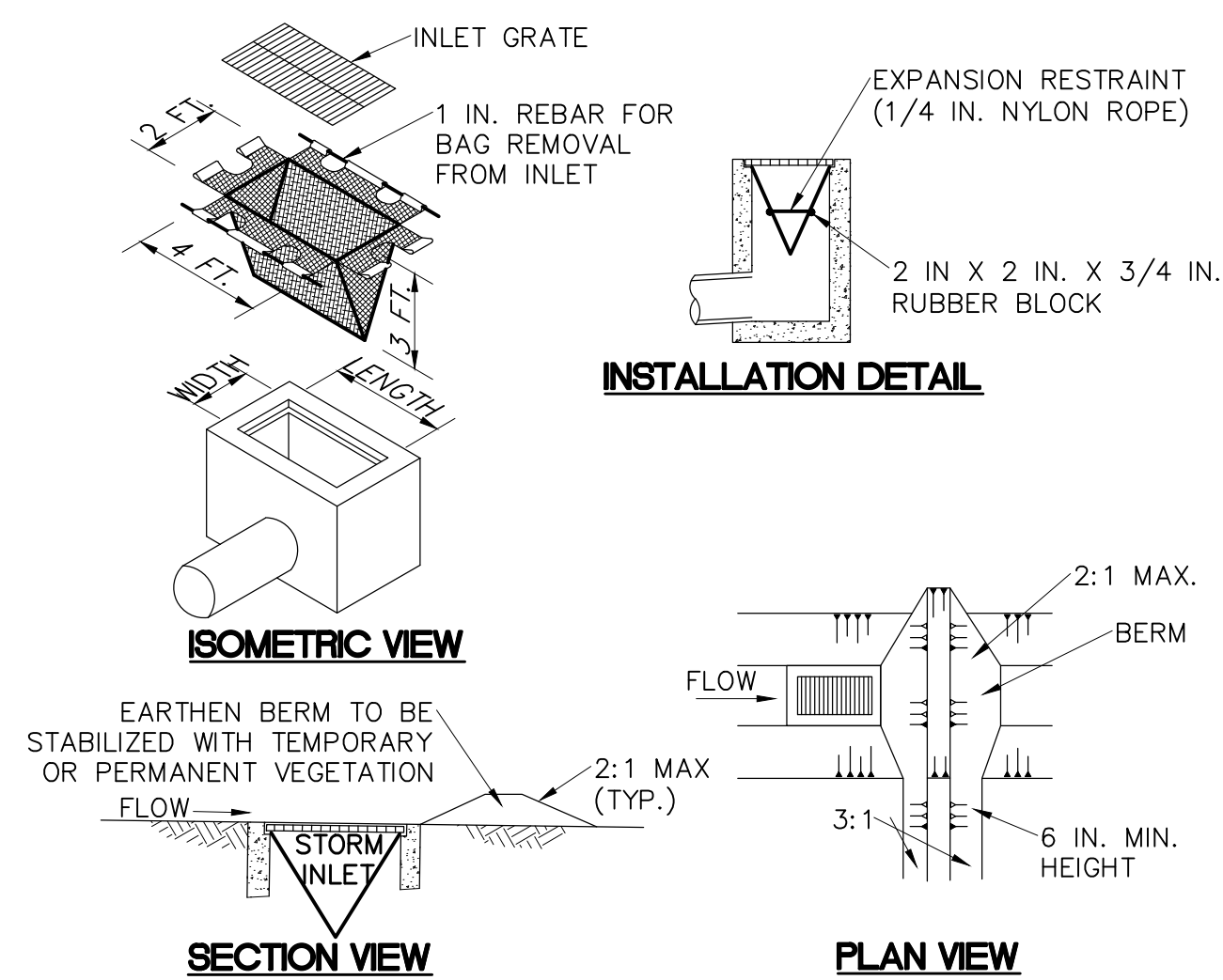
COMPOST SOCK CONCRETE WASHOUT

SCALE: NOT TO SCALE



EARTHEN LEVEL SPREADER

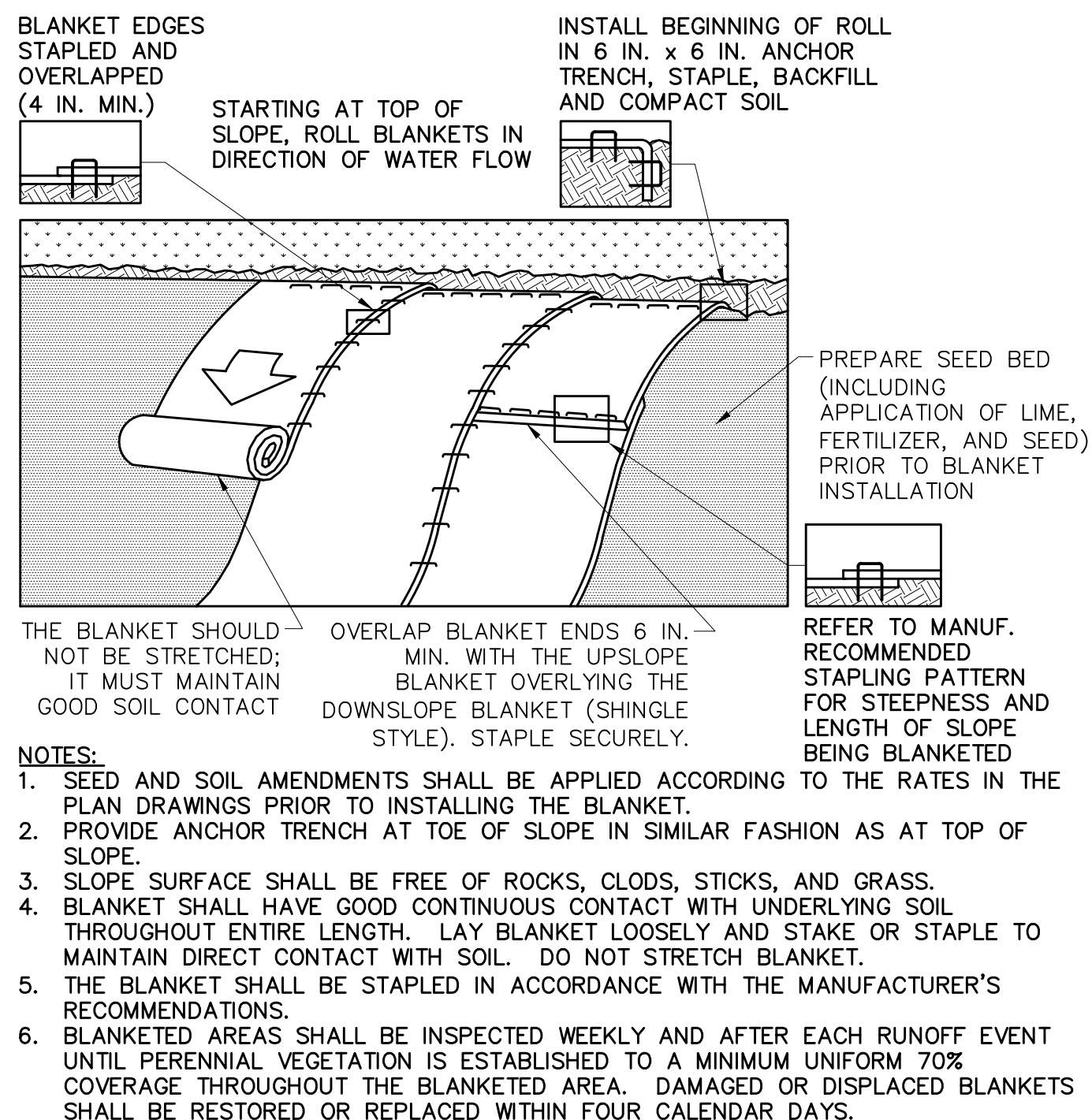
SCALE: NOT TO SCALE



- NOTES:**
1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
 2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
 3. ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
 4. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
 5. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF 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 OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
 6. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

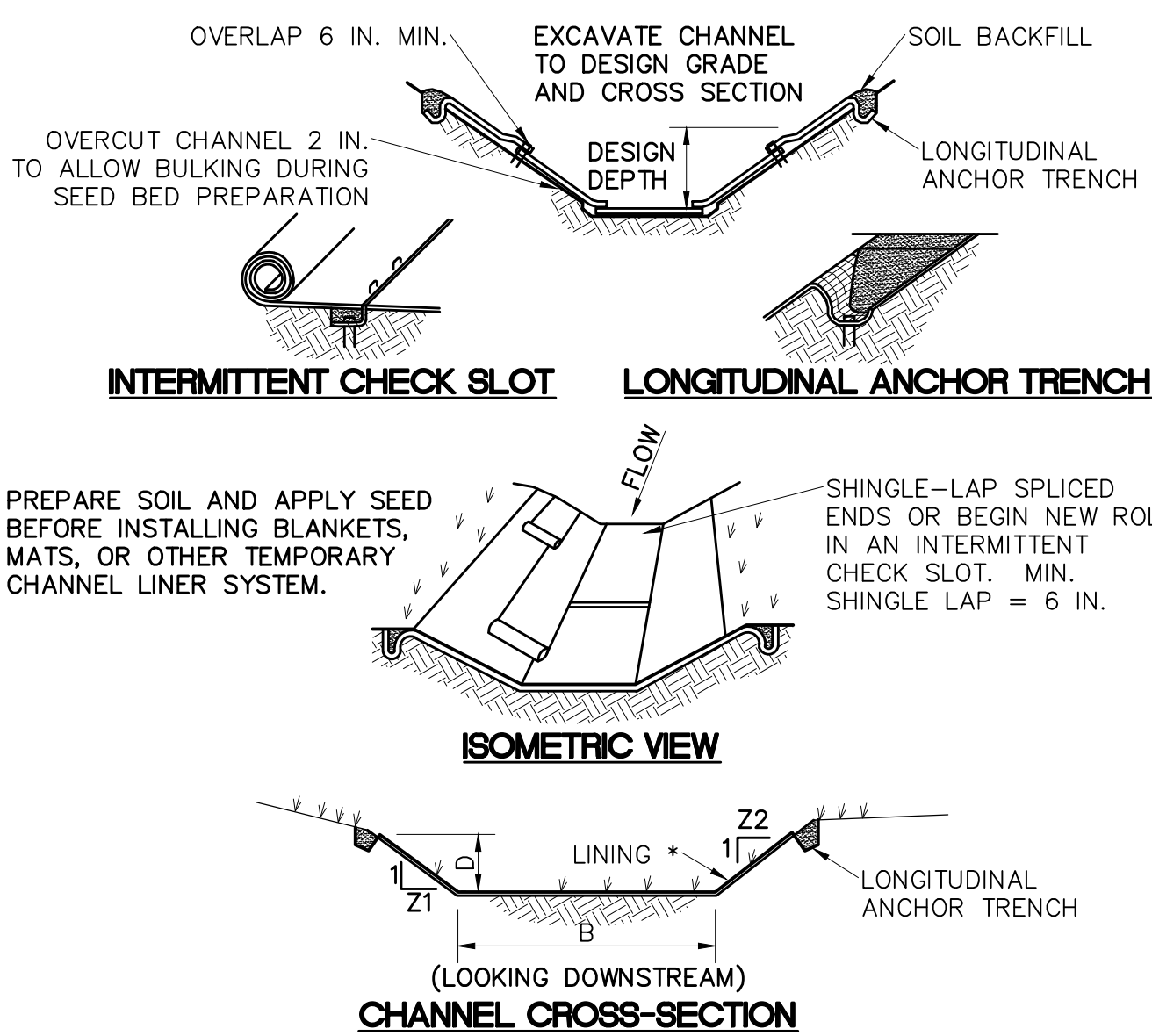
FILTER BAG INLET PROTECTION - TYPE M INLET

SCALE: NOT TO SCALE



EROSION CONTROL BLANKET INSTALLATION

SCALE: NOT TO SCALE



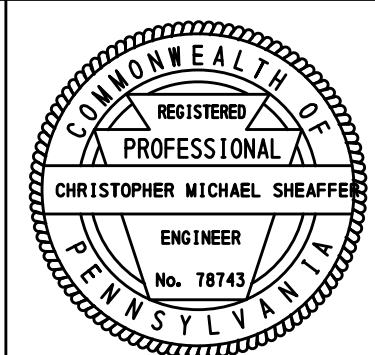
* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)	LINING *
1	—	4	2	15	3	2.5	S150BN STAPLE PATTERN D OR EQUAL
2	—	2	2	13	2.5	3	S150BN STAPLE PATTERN D OR EQUAL

- NOTES:**
1. ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
 2. CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.
 3. 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.
 4. 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.

VEGETATED CHANNEL

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2	2020.06.24	ARH	CMS	FINAL LAND DEVELOPMENT SUBMISSION	
1	2020.06.19	ARH	CMS	NPDES SUBMISSION	

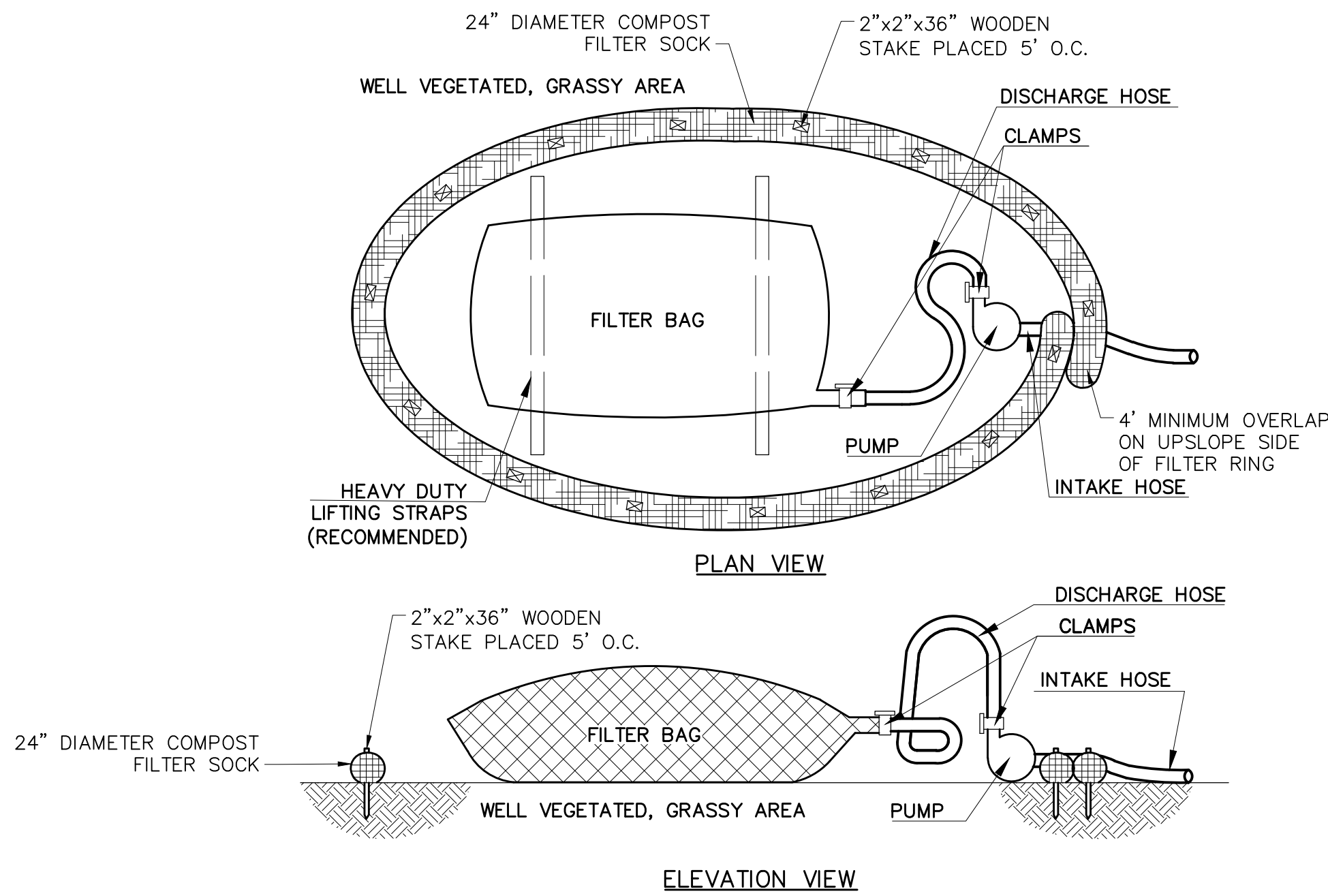


EROSION AND SEDIMENT CONTROL DETAILS

MILTON BAUGHER ELEMENTARY SCHOOL
BOROUGH OF MILTON, NORTHUMBERLAND COUNTY, PENNSYLVANIA

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INSTALLATION

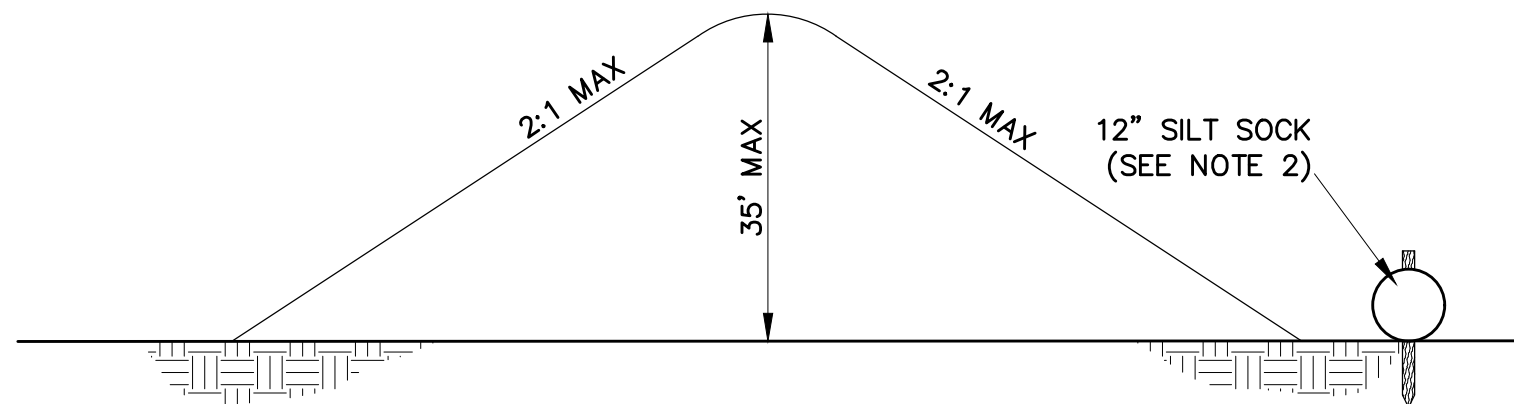
1. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
2. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED.
3. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY.
4. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTIN MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
5. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHOULD BE INSTALLED BELOW BAGS LOCATED WITH 50 FEET OF RECEIVING STREAM OR WHERE GRASSY AREA IS NOT AVAILABLE. A COMPOST BERM OR COMPOST FILTER SOCK SHALL BE PLACED BELOW ANY BAG DISCHARGING TO A SPECIAL PROTECTION SURFACE WATER.
6. 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.
7. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATED AND SCREENED.

MAINTENANCE

1. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED.
2. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
3. IT IS RECOMMENDED THAT BAG BE PLACED ON STRAPS TO FACILITATE REMOVAL.
4. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

PUMPED WATER FILTER BAG

SCALE:NOT TO SCALE

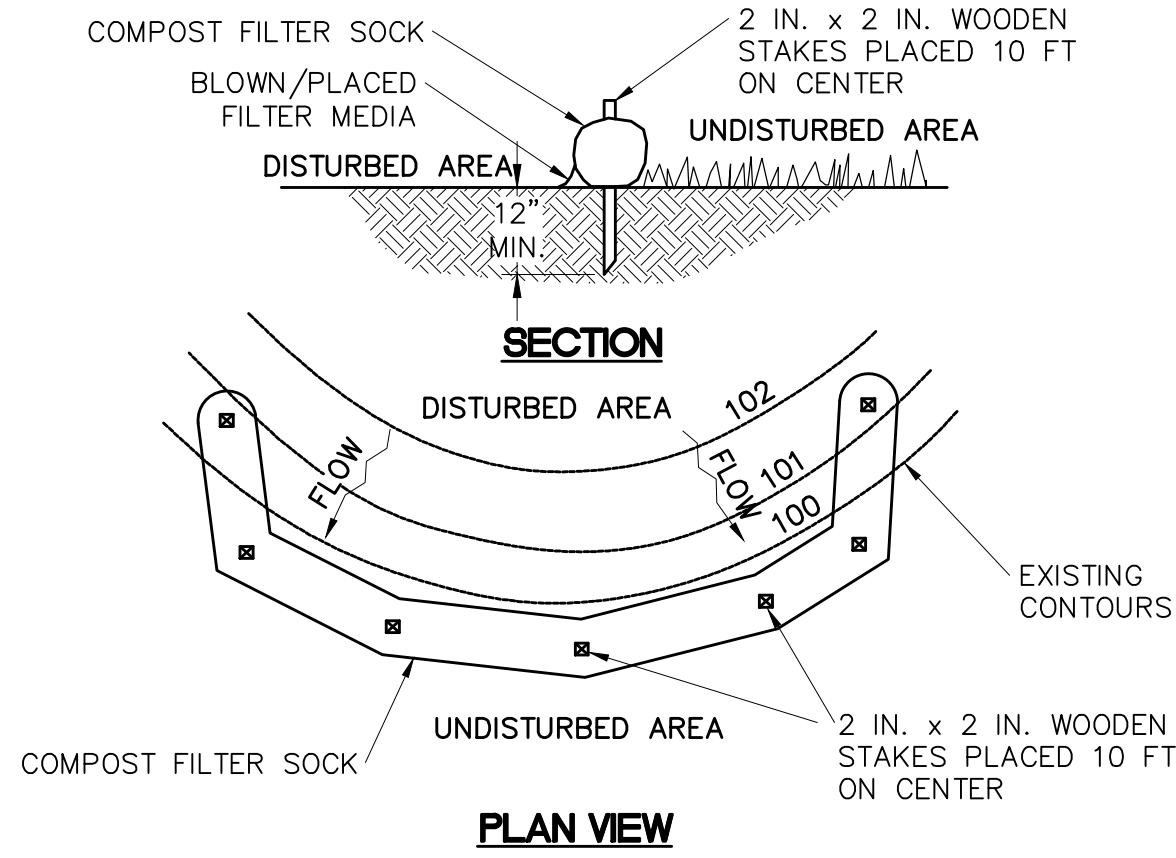


NOTES:

1. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
2. SILT SOCK SHALL BE INSTALLED AT THE DOWNSLOPE SIDE OF THE MATERIAL STOCKPILE.
3. MATERIAL STOCKPILES SHALL BE TEMPORARILY STABILIZED WITH SEED AND MULCH.
4. MATERIAL STOCKPILE LOCATIONS SHALL BE PROVIDED WHERE INDICATED ON THE PLAN, OR ALTERNATE LOCATION APPROVED BY OWNER.

TOPSOIL STOCKPILE

SCALE:NOT TO SCALE



NOTES:

1. SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
5. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
6. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
7. 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.

TABLE 4.1
COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

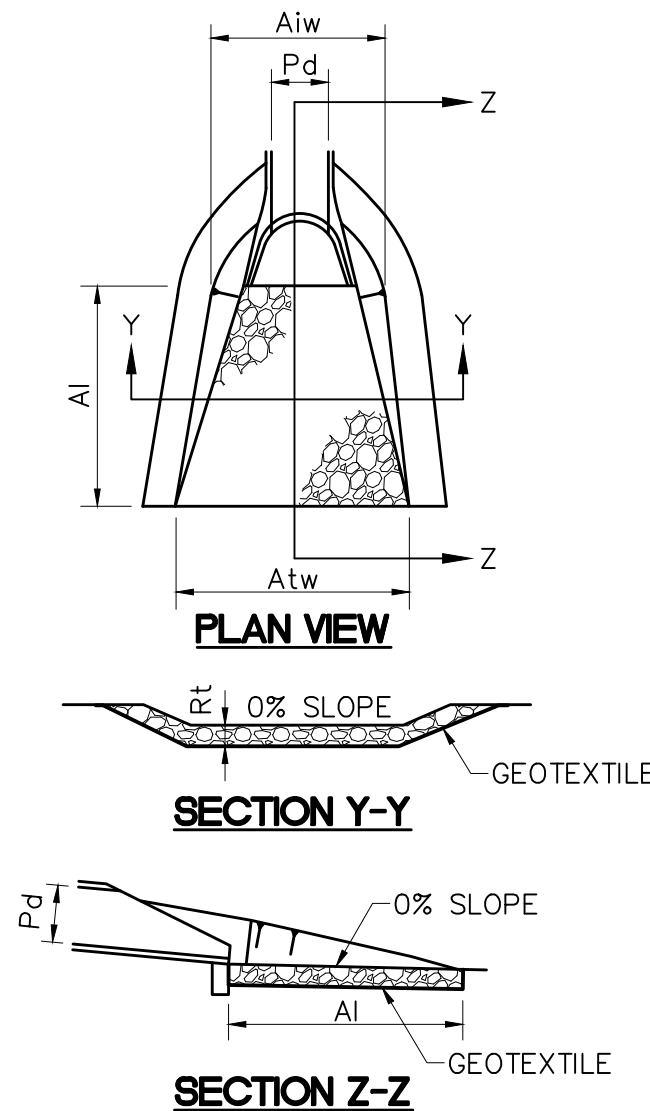
MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOCK DIAMETERS	12"	12"	12"	12"	12"
	18"	18"	18"	18"	18"
		24"	24"	24"	24"
		32"	32"	32"	32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAINMENT NETTING	HDPE BIAXIAL NET				
	CONTINUOUSLY WOUND				
	FUSION-WELDED JUNCTURES				
OUTER FILTRATION MESH	3/4"x3/4" MAX. APERTURE SIZE				
	COMPOSITE POLYPROPYLENE FABRIC				
	(WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)				
	3/16" MAX. APERTURE SIZE				
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.					

TABLE 4.2
COMPOST STANDARDS

ORGANIC MATTER CONTENT	25-100% (DRY WEIGHT BASE)
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

COMPOST FILTER SOCK

SCALE:NOT TO SCALE



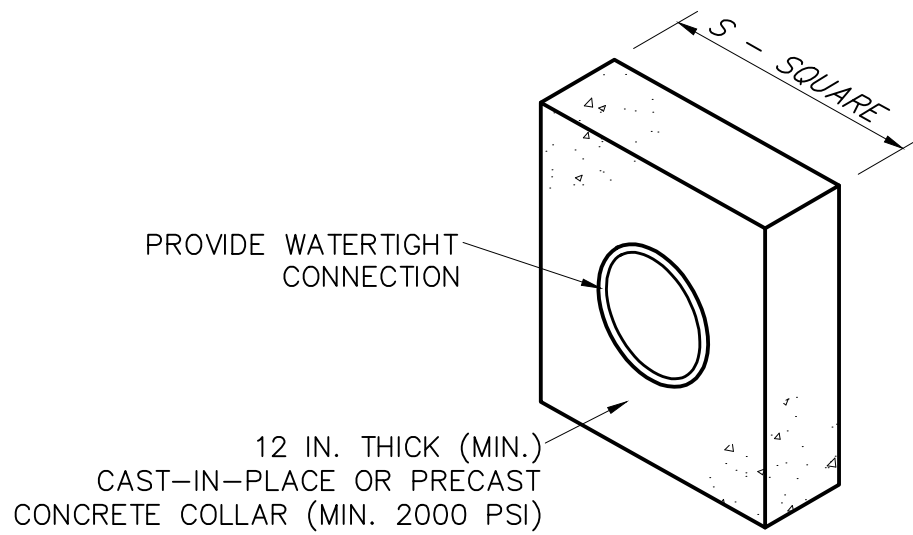
OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP		APRON		TERMINAL WIDTH Atw (FT)
		SIZE R-	THICK. Rt (IN)	LENGTH Al (FT)	INITIAL WIDTH Aiw (FT)	
EW-1	36	5	27	14	9	14.6

NOTES:

1. ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
2. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIP-RAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL

SCALE:NOT TO SCALE



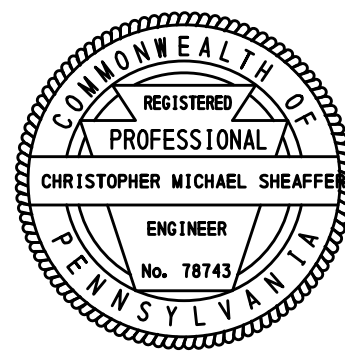
BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISE TO FIRST COLLAR (FT)	COLLAR SPACING (FT)
1	15	36	2	30	245

NOTES:

1. ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.
2. COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

CONCRETE ANTI-SEEP COLLAR

SCALE:NOT TO SCALE



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DATE	BY	ISSUE / REVISIONS
4/2020.07.27	ARH	FINAL LAND DEVELOPMENT SUBMISSION II
3/2020.07.22	ARH	NPDES SUBMISSION II
2/2020.06.24	ARH	FINAL LAND DEVELOPMENT SUBMISSION
1/2020.06.19	ARH	NPDES SUBMISSION
NOI	DATE	COMMENTS



EROSION AND SEDIMENT CONTROL DETAILS
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STANDARD EROSION AND SEDIMENTATION CONTROL PLAN NOTES

A circular professional engineer seal for the Commonwealth of Pennsylvania. The outer ring contains the text "COMMONWEALTH OF" at the top and "PENNSYLVANIA" at the bottom. Inside the ring, the word "REGISTERED" is at the top, "PROFESSIONAL" is in the center, and "ENGINEER" is at the bottom. A horizontal bar across the middle contains the name "CHRISTOPHER MICHAEL SHEAFFER". Below the name, the number "No. 78743" is printed.

				ARH	CMS
				ARH	CMS
				ARH	CMS
				ARH	CMS
				BY	CHKD

FINAL LAND DEVELOPMENT SUBMISSION	NPDES SUBMISSION II	FINAL LAND DEVELOPMENT SUBMISSION	NPDES SUBMISSION	COMMENTS	ISSUE / DEVISIONS
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ES5.0

PROJECT NO.: 7164-006

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE 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 MAP(S) IN THE AMOUNT NEEDED 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 TO THE PROJECT SITE ON LIMESTONE ROAD. VEHICLES AND EQUIPMENT MAY ONLY ENTER AND EXIT THE CONSTRUCTION SITE VIA A STABILIZED ROCK CONSTRUCTION ENTRANCE.
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, REGRADE, 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 SWEEPED 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. SEEDS 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.
35. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
36. UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.
37. CHANNELS HAVING RIPRAP, RENO MATTESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.
38. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.
39. SEDIMENT BASINS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.
40. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.
41. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
42. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
43. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM EIGHT (8) LAYERED LIFTS AT NINETY FIVE PERCENT (95%) MODIFIED PROCTOR DENSITY.
44. ACCORDING TO THE SOILS SURVEY OF NORTHUMBERLAND COUNTY, PA. THE SOIL ON SITE IS COMPOSED OF THE FOLLOWING SOILS:
 - ◊ Bd – BASHER SOILS, FREQUENTLY FLOODED
 - ◊ BkB – BERKS CHANNERY SILT LOAM – 3 TO 8 PERCENT SLOPES
 - ◊ MoA – MONONGAHELOA SILT LOAM – 0 TO 3 PERCENT SLOPES
 - ◊ WeD – WEIKERT CHANNERY SILT LOAM – 15 TO 25 PERCENT SLOPES
 - ◊ WkE – WEIKERT AND KLINESVILLE SILT LOAM – STEEP
 - ◊ WsB – WHEELINGS SOILS – 3 TO 8 PERCENT SLOPES
 - ◊ WsC – WHEELING SOILS – 8 TO 15 PERCENT SLOPES
45. THE PROJECT SITE DRAINS INTO LIMESTONE RUN (WWF) AS CLASSIFIED BY CHAPTER 93.
46. STREAM CLASSIFICATION RESTRICTIONS:
 - A. FOR STOCKED TROUT STREAMS: NO IN-STREAM ACTIVITY WITHIN 50 FEET OF THE STREAM OTHER THAN BORING SHALL OCCUR BETWEEN MARCH 1 AND JUNE 15.
 - B. FOR WILD TROUT STREAMS: NO IN-STREAM ACTIVITY WITHIN 50 FEET OF THE STREAM OTHER THAN BORING SHALL OCCUR BETWEEN OCTOBER 1 AND DECEMBER 31.
47. THE OPERATOR/PERMITTEE SHALL ENSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
48. APPROVAL OF THE USE OF SKIMMER(S) DOES NOT APPROVE USE OF ANY SKIMMER(S) IN VIOLATION OF ANY PATENT, PATENT RIGHTS, AND/OR PATENT LAWS.

PROCEDURES WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE WILL BE UNDERTAKEN IN ACCORDANCE WITH THIS TITLE

THE RECYCLING AND DISPOSAL OF MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. COMPLY WITH AIR QUALITY, WATER QUALITY, SOLID WASTE MANAGEMENT POLICIES, ETC.

CONSTRUCTION WASTES MAY INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

- EXCESS SOIL MATERIALS(1) OR SEDIMENT AS A RESULT OF EROSION RUNOFF
- TREES, SHRUBS AND BRUSH REMOVED DURING CLEARING AND GRUBBING(2)
- SANITARY WASTES(3)
- CONCRETE WASH WATER(3)
- PACKAGING MATERIALS (WOOD, PAPER, PLASTIC, STYROFOAM, ETC.)(3)
- SCRAP OR SURPLUS BUILDING MATERIALS (METALS, RUBBER, PLASTIC, GLASS, MASONRY PRODUCTS, AND OTHER SOLID WASTE MATERIALS)(3)
- PETROLEUM PRODUCTS, PAINT AND THINNERS, CLEANING SOLVENTS, CURING COMPOUNDS AND SIMILAR MATERIALS(3)
- DEMOLITION DEBRIS(3)

1. UNLESS OTHERWISE DIRECTED, EXCESS SOIL AND EXCAVATED MATERIAL MAY BE USED FOR FILL MATERIAL ON SITE OR OFF SITE. COORDINATE WITH OWNER AND AGENCIES HAVING JURISDICTION.
2. TREES, SHRUBS AND BRUSH SHALL BE CHIPPED WHEN POSSIBLE AND REUSED AS MULCH. DO NOT BURN WITHOUT PERMISSION.
3. WHERE POSSIBLE WASTES SHALL BE RECYCLED. WHERE NOT PRACTICAL, WASTES SHALL BE PROPERLY DISPOSED OF AT A PERMITTED LANDFILL FACILITY. THE CONTRACTOR IS ENCOURAGED TO CONSULT THE RECYCLING HOTLINE OR LOCAL SOIL WASTE MANAGEMENT AGENCY.

CONTRACTOR SHALL PRACTICE GOOD HOUSEKEEPING, INCLUDING BUT ARE NOT LIMITED TO THE FOLLOWING:

- NEAT, ORDERLY AND CENTRALIZED STORAGE OF MATERIALS AND WASTES
- CONTROL OF LITTER PROVIDING CONTAINERS WITH LIDS IF NEEDED
- REGULAR DISPOSAL
- PROMPT CLEANUP OF ANY SPILLS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS OR IN ACCORDANCE WITH REGULATORY REQUIREMENTS. UTILIZE A SPECIALTY FIRM IF REQUIRED
- PROMPT CLEANUP OF SEDIMENTS WITHIN THE SITE AND ONTO ADJACENT ROADWAYS
- ALL SEDIMENTS REMOVED FROM EKS BAYS SHALL BE DISTRIBUTED TO A TOPSOIL STOCKPILE OR SPREAD ON ANOTHER PROJECT SITE
- MUDS
- KEEP DUST WITHIN TOLERABLE LIMITS BY USING WATER OR OTHER APPROVED DUST SUPPRESSERS

CLEAN FILL IS UNCONTAMINATED, NONWATER-SOLUBLE, NONDECOMPOSABLE 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 RECOGNIZABLE AS SUCH. (25 P.A. CODE 271.101 AND 287.101) THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED.

TO DETERMINE WHETHER A FILL IS CLEAN OR REGULATED, A PERSON MUST PERFORM ENVIRONMENTAL DUE DILIGENCE. ANALYTICAL ASSESSMENT, TESTING OR SAMPLING IS ONLY REQUIRED IF VISUAL INSPECTION OR REVIEWS OF HISTORIC PROPERTY USE INDICATES EVIDENCE OF THE RELEASE OF A REGULATED SUBSTANCE.

THE USE OF CLEAN FILL IS REGULATED UNDER ENVIRONMENTAL LAWS AND REGULATIONS. THE USE OF MATERIALS AS CLEAN FILL UNDER DEP'S CLEAN FILL POLICY, MUST COMPLY WITH ALL APPLICABLE REQUIREMENTS GOVERNING PLACEMENT, SUCH AS CHAPTER 102 (EROSION AND SEDIMENT CONTROL) AND CHAPTER 105 (DAM SAFETY AND WATERWAY MANAGEMENT).

ANY PERSON PLACING CLEAN FILL WHICH HAS BEEN AFFECTED BY A RELEASE OF A REGULATED SUBSTANCE ON A PROPERTY MUST CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL ON FORM FP-001. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.

BEST MANAGEMENT PRACTICES (BMP) MUST BE FOLLOWED PRIOR TO DEMOLITION ACTIVITIES TO REMOVE MATERIALS LIKE LEAD BASED PAINT SURFACE, FRIABLE ASBESTOS AND HAZARDOUS MATERIALS SUCH AS MERCURY SWITCHES, PCB BALLASTS AND FLORESCENT LIGHT BULBS FROM A BUILDING IF THE BRICK, BLOCK OR CONCRETE IS USED AS CLEAN FILL.

CLEAN FILL MAY NOT CONTAIN ANY FREE LIQUIDS BASED ON VISUAL INSPECTION, AND SHALL NOT CREATE NUISANCES (FOR EXAMPLE OBJECTIONABLE ODORS) TO USERS OF RECEIVING PROPERTY OR ADJACENT PROPERTY OWNERS.

SEQUENCE OF BMP INSTALLATION AND REMOVAL IN RELATION TO THE SCHEDULING OF EARTH DISTURBANCE ACTIVITIES, PRIOR TO, DURING AND AFTER EARTH DISTURBANCE ACTIVITIES THAT ENSURE THE PROPER FUNCTIONING OF ALL BMP'S [§102.4(b)(5)(vii)]

- A. AT LEAST SEVEN (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, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- B. UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPs AND AT LEAST THREE (3) DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.
- C. AT LEAST THREE (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.
- D. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWING. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED.

E. SITE SPECIFIC CONSTRUCTION SEQUENCE:

NOTE: LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION, AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. REFERENCE UTILITY LINE TRENCH EXCAVATION NOTES ON ESO FOR ADDITIONAL INFORMATION.

1. FIELD MARKINGS FOR LIMITS OF DISTURBANCE SHOULD BE INSTALLED.
2. INSTALL ORANGE CONSTRUCTION FENCE FOR BASIN AREA ON SHOWN ON THE PLANS TO MINIMIZE COMPACTION OF BASIN AREA.
3. INSTALL ALL ROCK CONSTRUCTION ENTRANCES AND COMPOST FILTER SOCK AS INDICATED ON PLANS.
4. PERFORM DEMOLITION OF EXISTING FEATURES AS SHOWN ON PLANS.
5. STRIP TOPSOIL AND STOCKPILE AT LOCATIONS SHOWN ON PLANS. INSTALL COMPOST FILTER SOCKS AROUND STOCKPILES.
6. PERFORM EARTH WORK AND GRADING TO ACHIEVE REQUIRED SUBGRADES IN A MANNER TO MINIMIZE DUST IN AREAS. MAINTAIN SHEET FLOW AND PREVENT CONCENTRATED FLOWS FORM LEAVING THE SITE.
7. CONSTRUCT BASIN AS SHOWN ON PLANS. REFER TO PCSM PLANS FOR CONSTRUCTION SPECIFICATIONS AND DETAILS.
 - a. STAKEOUT BASIN BOTTOM TO AVOID EXCESSIVE COMPACTION BY HEAVY EQUIPMENT.
 - b. INSTALL OS-1 TO DW-1, WORKING DOWNSTREAM TO UPSTREAM.
 - c. CONSTRUCT BASIN AS SHOWN ON PLANS.
 - d. SEED AND MULCH BASIN AREA.
7. INSTALL STORMWATER CONVEYANCE SYSTEM 1-8 TO 1-1 WORKING DOWNSTREAM TO UPSTREAM. INSTALL FILTER BAG INLET PROTECTION ONCE AN INLET IS SET.
8. INSTALL STORMWATER CONVEYANCE SYSTEM 1-3 TO 1-13 WORKING DOWNSTREAM TO UPSTREAM. INSTALL FILTER BAG INLET PROTECTION ONCE AN INLET IS SET.
9. INSTALL STORMWATER CONVEYANCE SYSTEM 1-6 TO 1-11 WORKING DOWNSTREAM TO UPSTREAM. INSTALL FILTER BAG INLET PROTECTION ONCE AN INLET IS SET.
10. INSTALL STORMWATER CONVEYANCE SYSTEM FROM EXISTING INLET TO 1-15 WORKING DOWNSTREAM TO UPSTREAM. INSTALL FILTER BAG INLET PROTECTION ONCE AN INLET IS SET.
11. CONSTRUCT CHANNEL 1 WORKING DOWNSTREAM TO UPSTREAM. INSTALL EROSION CONTROL MATTING.
12. CONSTRUCT CHANNEL 2 WORKING DOWNSTREAM TO UPSTREAM, INSTALL EROSION CONTROL MATTING.
13. CONSTRUCT RETAINING WALL.
14. CONSTRUCT SIDEWALK, PAVEMENT, AND OTHER SITE AMENITIES. PROPOSED DRIVEWAYS TO BE PERFORMED WHEN THE ROCK CONSTRUCTION ENTRANCE CAN BE REMOVED FOLLOWING FINAL PAVING OF PROPOSED BITUMINOUS AREAS.
15. COMPLETE FINAL GRADING AND SEEDING AS SHOWN ON PLANS.
16. IMMEDIATELY STABILIZE DISTURBED AREAS UPON TEMPORARY CESSATION OF WORK, FOUR (4) DAYS OR MORE, AS SOON AS ANY GRADED AREAS REACH FINAL GRADE. IT IS NOT ACCEPTABLE TO WAIT FOR AN ENTIRE PHASE TO BE FINAL GRADED BEFORE SEEDING AND MULCHING TAKES PLACE.
17. THE COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED FOR A SITE REVIEW WHEN 70% PERENNIAL VEGETATION COVER IS ACHIEVED.
18. UPON NOTIFICATION FROM THE COUNTY CONSERVATION DISTRICT THAT THE PROJECT IS CONSIDERED STABILIZED, INFILTRATION TESTING SHOULD BE PERFORMED TO ENSURE THAT POST-CONSTRUCTION STORMWATER MANAGEMENT BASIN WILL PERFORM ADEQUATELY. RESULTS SHOULD BE SUBMITTED TO THE CONSERVATION DISTRICT UPON COMPLETION.
19. UPON ACHIEVING FINAL GRADES, ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED IN ACCORDANCE WITH THE FINAL CONDITIONS.
20. REMOVE ANY INLET PROTECTION AND COMPOST FILTER SOCKS STILL REMAINING ON THE PROJECT SITE. CLEAN ANY ACCUMULATED SEDIMENT FROM CHANNELS, CATCH BASIN, AND CULVERTS. ALL EROSION CONTROL MATTING SHOULD REMAIN IN PLACE.
21. CONTRACTOR/ APPLICANT SHOULD COMPLETE THE NOTICE OF TERMINATION (NOT) TO PROVIDE TO THE DESIGN PROFESSIONAL FOR SUBMISSION TO THE CONSERVATION DISTRICT TO START THE FINAL INSPECTION PROCESS. AN AS-BUILT DRAWING OF THE SITE SHALL BE INCLUDED WITH THE NOT SUBMISSION.

SHEET NO.:

UTILITY LINE TRENCH EXCAVATION

THE MOST IMPORTANT EROSION AND SEDIMENTATION CONTROL CONSIDERATION FOR TRENCH CONSTRUCTION IS THE LIMITING AND SCHEDULING OF WORK ACTIVITIES, AS FOLLOWS:

3. MINIMIZE AREA OF EXPOSURE. DISTURB ONLY THE AREA REQUIRED FOR CONSTRUCTION. AT THE PRESENT TIME, NATURAL VEGETATION COVERS THE AREA AND THERE IS LITTLE EROSION. DO NOT DISTURB ANY EXISTING VEGETATION BELOW THE CONSTRUCTION AREA. THIS AREA WILL ACT AS A NATURAL FILTER.
2. MINIMIZE THE TIME OF EXPOSURE. ALL DISTURBED AREAS WILL BE RE-SEEDED AND MULCHED WITHIN FOUR (4) DAYS, OR SOONER IF WORK IS COMPLETED.
3. FOR INSTALLATION IN LAWN AREAS, TOPSOIL SHALL BE STRIPPED FROM AREAS TO BE DISTURBED AND STOCKPILED ADJACENT TO TRENCH FOR REDISTRIBUTION AT FINAL GRADING. EXCAVATED MATERIAL SUITABLE FOR BACKFILLING TRENCH SHALL LIKEWISE BE STOCKPILED ADJACENT TO TRENCH, PREFERABLY UPGRADE OF TRENCH. IF RAIN IS FORECAST PRIOR TO BACKFILLING TRENCH, INSTALL SILT BARRIER FENCE BELOW STOCKPILED MATERIAL AND PROTECT TRENCH FROM ENTRY OF SURFACE WATER.
4. FOR INSTALLATION IN PAVEMENT AND SHOULDER AREAS, EXCAVATED MATERIAL SHALL BE LOADED INTO TRUCKS, HAULED OFF SITE AND PROPERLY DISPOSED OF. BACKFILL WITH SELECT MATERIAL. WHERE EXCAVATED MATERIAL IS PERMITTED AS BACKFILL, DO NOT PLACE EXCAVATED MATERIAL IN OR ADJACENT TO CURBS, GUTTERS, OR DITCHES WHERE IT MAY COME IN CONTACT WITH STORM WATER. WHERE EXCAVATED MATERIAL MUST BE SO PLACED, PROTECT MATERIAL BY SECURELY ANCHORED SHEETING, PLASTIC, ETC.
5. INSTALL CONTROL MEASURES BEFORE DISTURBING THE LAND THAT DRAINS INTO THEM. ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE WORKING CONDITION DURING CONSTRUCTION UNTIL ALL DISTURBED AREAS ARE STABILIZED. CLEAN OR CHANGE AS NEEDED.
6. INSTALL SILT BARRIER FENCE AS SHOWN AND AS REQUIRED IN ACCORDANCE WITH THE DETAIL.
7. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE REMOVED BY PUMPING. NO DISCHARGE OF SILT, MUD OR OTHER POLLUTANTS DIRECTLY INTO ANY WATERCOURSE WHEN USING PUMPS DURING CONSTRUCTION WILL BE PERMITTED. CONSTRUCT SEDIMENTATION BASINS IF NECESSARY. TRENCH DE-WATERING DISCHARGES MAY BE DIRECTED THROUGH A PUMPED WATER FILTER BAG AND ONTO EXISTING VEGETATION IF ACCEPTABLE.
8. THESE MEASURES REPRESENT THE MINIMUM PRECAUTIONS REQUIRED. CONTRACTOR SHALL EVALUATE THE EFFECTIVENESS OF THE MEASURES CITED AND IMPLEMENT THEM ALONG WITH ADDITIONAL MEASURES AS NEEDED.
9. SCHEDULE OF ACTIVITIES:
 - A. INSTALL SILT BARRIER FENCE, AT LIMIT OF GRADING LINE, AND ELSEWHERE AS NEEDED.
 - B. CLEAR AND GRUB AREA OF CONSTRUCTION. TREES AND OTHER NATURAL VEGETATION ARE NOT TO BE DISTURBED OUTSIDE THE CONSTRUCTION AREA. LIMIT CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO (2) TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
 - C. EXCAVATE. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED AND TESTED THE SAME DAY.
 - D. INSTALL PIPE IN ACCORDANCE WITH RESTORATION DETAILS.
 - E. BACKFILL IN ACCORDANCE WITH RESTORATION DETAILS.
 - F. 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 AT THE END OF EACH WEEK.
 - G. CONTRACTOR SHALL MAINTAIN ALL CONTROL MEASURES UNTIL PERMANENT STABILIZATION HAS OCCURRED. CHECK CONTROL MEASURES WEEKLY OR AFTER EVERY RAINFALL EVENT. CLEAN OR REPLACE AS NEEDED.
10. EXCEPTIONS: IN CERTAIN CASES TRENCHES CANNOT BE BACKFILLED UNTIL THE PIPE IS HYDROSTATICALLY TESTED, OR ANCHORS AND OTHER PERMANENT FEATURES ARE INSTALLED. IN THESE CASES, THE FOLLOWING EXCEPTIONS APPLY:
 - A. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX (6) DAYS. ALL PRESSURE TESTING AND THE COMPLETE BACKFILLING OF THE OPEN TRENCH MUST BE COMPLETED BY THE SEVENTH WORKING DAY.
 - B. IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS, APPROPRIATE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES/FACILITIES WILL BE INSTALLED, AND THE AREAS SEEDED AND MULCHED WITHIN THE NEXT TWO (2) CALENDAR DAYS.

SEEDING

TEMPORARY SEEDING:

1. IF PERMANENT VEGETATION IS NOT PLACED ON DISTURBED AREA FOR FOUR (4) OR MORE DAYS, THE DISTURBED AREA SHALL BE SEEDED AS FOLLOWS:
 - A. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY AGRICULTURAL GRADE LIME AT A RATE OF 1 TONS/ACRE, OR 45 LBS/1,000 SF AND FERTILIZER 10-10-10 AT A RATE OF 1000 LBS/ACRE OR 23 LB/1,000 SF;
 - B. BROADCAST TEMPORARY SEED MIXTURE OF ANNUAL RYEGRASS AT A RATE OF 44 LBS/ACRE, OR 1 LB/1,000 SF; AND
 - C. SPREAD MULCH (STRAW OR HAY) AT A RATE OF 3 TONS/ACRE, OR 133 LBS/1,000 SF.

PERMANENT SEEDING:

1. PLACE TOPSOIL TO A MINIMUM DEPTH OF 6 INCHES WHERE THE TEXTURE OF THE EXPOSED SOIL IS NOT SUITABLE FOR VEGETATIVE GROWTH, OR WHERE THE TOPSOIL DEPTH IS INSUFFICIENT FOR THE SUPPORTING ROOT ZONE.
2. LIME AND FERTILIZE ACCORDING TO SOIL TESTS OR AT THE RATES INDICATED BELOW.
3. LOOSEN SURFACE SOIL TO A DEPTH OF 4 TO 6 INCHES WITH SUITABLE EQUIPMENT. APPLY SEEDS UNIFORMLY BY BROADCASTING OR HYDROSEEDING.
4. MULCH ALL AREAS, IF NECESSARY, MULCH SHALL BE ANCHORED WITH WOOD CELLULOSE FIBER (APPLIED AT A RATE OF 750 LBS/ACRES) OR OTHER SUITABLE MULCH ANCHORING MATERIAL.
5. SEED AND SOIL AMENDMENT APPLICATION RATES – SLOPES < 3:1:
 - A. APPLY AGRICULTURAL GRADE LIME AT A RATE OF 2 TONS/ACRE, OR 90 LBS/1,000 SF;
 - B. APPLY FERTILIZER 10–20–10 AT A RATE OF 696 LBS/ACRE OR 16 LB/1,000 SF;
 - C. BROADCAST A PERMANENT SEED MIXTURE OF 50% TALL FESCUE (2 VARIETIES), 40% PERENNIAL RYEGRASS (2 VARIETIES), AND 10% BLUEGRASS (2 VARIETIES) AT A RATE OF 100 LBS/ACRE, OR 2.3 LB/1,000 SF (SEE SPECIFICATIONS FOR FURTHER DETAIL); AND
 - D. SPREAD MULCH (STRAW) AT A RATE OF 3 TONS/ACRE, OR 133 LBS/1,000 SF.
6. SEED AND TOPSOIL AMENDMENT APPLICATION RATES – SLOPE > 3:1:
 - A. APPLY AGRICULTURAL GRADE LIME AT A RATE OF 2 TONS/ACRE, OR 90 LBS/1,000 SF;
 - B. APPLY FERTILIZER 10–20–10 AT A RATE OF 696 LBS/ACRE OR 16 LB/1,000 SF;
 - C. BROADCAST A PERMANENT SEED MIXTURE OF 100% TALL FESCUE 31 AT A RATE OF 100 LBS/ACRE, OR 2.3 LBS/1,000 SF; AND
 - D. SPREAD MULCH (STRAW) AT A RATE OF 3 TONS/ACRE, OR 133 LBS/1,000 SF.
7. IF A UNIFORM 70% COVER IS NOT ESTABLISHED ON ALL LAWN AREAS BY OCTOBER 15, THE CONTRACTOR SHALL LOOSEN THE SOIL SURFACE AND APPLY ADDITIONAL TOPSOIL, AND APPLY SOIL AMENDMENTS, SEED, AND MULCH TO THE EXTENT REQUIRED TO ESTABLISH ADEQUATE COVER.
8. IF A UNIFORM 90% COVER IS NOT ESTABLISHED ON ALL SLOPES BY OCTOBER 15, ALL BARREN AREAS SHALL BE REPLANTED IN ACCORDANCE WITH THE DIRECTIONS IN ITEMS 5 AND 6.
9. ALL VEGETATION SHALL BE GUARANTEED TO ACHIEVE 100% COVERAGE WITHIN ONE YEAR, OR PLANTING SHALL CONTINUE UNTIL 100% COVERAGE IS ACHIEVED.

MAINTENANCE PROGRAM	
1. Name of the maintenance program:	
2. Date of the maintenance program:	
3. Name of the person responsible for the maintenance program:	
4. Name of the person who conducted the maintenance program:	
5. Name of the person who reviewed the maintenance program:	
6. Name of the person who approved the maintenance program:	
7. Name of the person who implemented the maintenance program:	
8. Name of the person who monitored the maintenance program:	
9. Name of the person who reported the maintenance program:	
10. Name of the person who closed the maintenance program:	

MAINTENANCE PROGRAM WHICH PROVIDES FOR INSPECTION OF BMPS ON A WEEKLY BASIS AND AFTER EACH MEASURABLE RAINFALL EVENT, INCLUDING THE REPAIR OF THE BMPS TO ENSURE EFFECTIVE AND EFFICIENT OPERATION [§102.4(b)(5)(x)]

IT SHALL BE THE RESPONSIBILITY OF THE OWNER'S CONTRACTOR TO MAINTAIN THE TEMPORARY CONTROL DEVICES. THE DEVICES SHALL BE REGULARLY INSPECTED ON A WEEKLY BASIS AND AFTER EVERY STORM EVENT. SEE DETAIL SPECIFIC ITEMS FOR PROPER MAINTENANCE OF THOSE ITEMS.

IN ADDITION, THE PA DEP DOCUMENT FORM #3150-FM-BWEW0083 SHOULD BE COMPLETED AS A "VISUAL SITE INSPECTION REPORT" FOR RECORD KEEPING PURPOSES.

THE FOLLOWING BMP'S ARE USED ON THE PROJECT SITE:

- ROCK CONSTRUCTION ENTRANCE WITH WASH RACK
- COMPOST FILTER SOCK
- FILTER BAG INLET PROTECTION
- PUMPER WATER FILTER BAG
- CONCRETE WASHOUT
- VEGETATED CHANNEL
- RIP—RAP APRON
- TOPSOIL STOCKPILE
- EARTHEN LEVEL SPREADER

GENERAL MAINTENANCE

- REPAIR, RESEED, AND RE-MULCH ANY AREAS THAT ERODE PRIOR TO FINAL STABILIZATION. FINAL STABILIZATION WILL BE ACHIEVED WHEN THERE IS A UNIFORM VEGETATIVE COVER OR DENSITY OF 70% ACROSS THE DISTURBED AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE MEASURES TO INSURE THAT SEDIMENT IS NOT DEPOSITED ON PUBLIC WALKS OR ROADWAYS. IF ANY SEDIMENT IS DEPOSITED ON PUBLIC WALKS OR ROADWAYS, IT SHALL BE REMOVED AND RETURNED TO THE SITE DAILY. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER OR SURFACE WATER.

RIPARIAN BUFFERS

NO RIPARIAN BUFFERS ARE LOCATED WITHIN THE PROPOSED PROJECT AREA.

THERMAL IMPACTS

THERMAL IMPACTS ARE REDUCED BY MAINTAINING THE 2-YR RUNOFF VOLUME DIFFERENCE ON THE PROJECT SITE AND DIRECTING IMPERVIOUS RUNOFF TO STORMWATER FACILITIES. RUNOFF IS CAPTURED AND DIRECTED TO AN INFILTRATION BASIN WHICH WILL REDUCE ANY HEAT ISLAND EFFECT FROM IMPERVIOUS SURFACE RUNOFF.

POTENTIAL POLLUTION FROM GEOLOGIC/SOIL CONDITIONS

THERE ARE NO GEOLOGIC FORMATION CONCERNS; HOWEVER, THE SOILS POSE AN EROSION HAZARD. MINIMIZE THE SUBGRADE EXPOSURE WHEN PERFORMING EARTHWORK OPERATIONS.

RECEIVING SURFACE WATER CLASSIFICATION

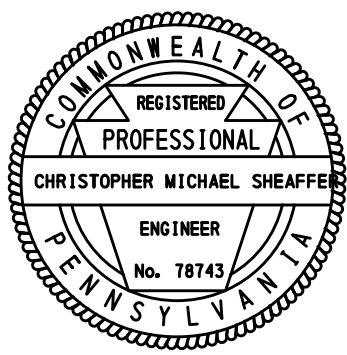
THE PROJECT SITE DRAINS TO THE LIMESTONE RUN WHICH IS CLASSIFIED AS A WARM WATER FISHES (WWF) IN PENNSYLVANIA TITLE 25, CHAPTER 93.

EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN

THE EROSION AND SEDIMENT CONTROL PLAN HAS BEEN DEVELOPED AND INTENDED TO MINIMIZE THE EXTENT AND DURATION OF THE EARTH DISTURBANCE OCCURRING AT THE PROJECT SITE. IN ORDER TO MINIMIZE THE DISTURBANCE, THE SITE-SPECIFIC CONSTRUCTION SEQUENCE SHOULD BE FOLLOWED AS APPROVED BY THE NORTHERMBERLAND COUNTY CONSERVATION DISTRICT. THE EXTENT OF DISTURBANCE IS MINIMIZED BY REDUCING THE LENGTH OF THE EARTH DISTURBANCE SLOPES TO MINIMIZE THE CONTRAST OF THE EARTH DISTURBANCE. EROSION CONTROL MATTING HAS BEEN ADDED TO STEEP SLOPES AND SPREADING OF SEED AND MULCHING WILL BE PROVIDED IN ALL OTHER AREAS. THE PORTIONS OF THE PROJECT SITE TO BE MATTED CAN BE SEEN ON THE PLAN. THE PLAN HAS BEEN DEVELOPED WITH THE BEST INTENTIONS TO UTILIZE EXISTING DOWNSTREAM DRAINAGE PATHS AND FEATURES.

ALL RUNOFF FROM THE PROJECT SITE WILL BE FILTERED WITH COMPOST FILTER SOCK.

THE USE OF HEAVY EQUIPMENT SHOULD BE AVOIDED ON AREAS THAT WILL BE UTILIZED FOR INFILTRATION. THE EQUIPMENT OPERATOR SHOULD UTILIZE THE BUCKET TEETH FOR EXCAVATION OF THE FINAL SIX (6) INCHES TO AVOID COMPACTION AND SEALING OF THE SUBGRADE. SMEARING OF THE SOILS MAY LEAD TO CLOGGING OF THE SOIL VOIDS AND REDUCE OR ELIMINATE INFILTRATION. IN ADDITION, EXCESSIVE COMPACTION DURING THE PLACEMENT OF TOPSOIL, SEEDING AND MULCHING OPERATIONS SHOULD BE MINIMIZED TO ASSIST IN TOP LEVEL INFILTRATION THROUGHOUT THE PROJECT SITE.



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		ISSUE / COMMENTS			
NO	DATE	COMMENTS	BY	CHKD	
4	2020.07.27	FINAL LAND DEVELOPMENT SUBMISSION II	ARH	QMS	
3	2020.07.22	NPDES SUBMISSION II	ARH	QMS	
2	2020.06.24	FINAL LAND DEVELOPMENT SUBMISSION	ARH	QMS	
1	2020.06.19	NPDES SUBMISSION	ARH	QMS	



EROSION AND SEDIMENT CONTROL NOTES

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SHEET NO.:

ES5.1

PROJECT NO.: 7164-006