

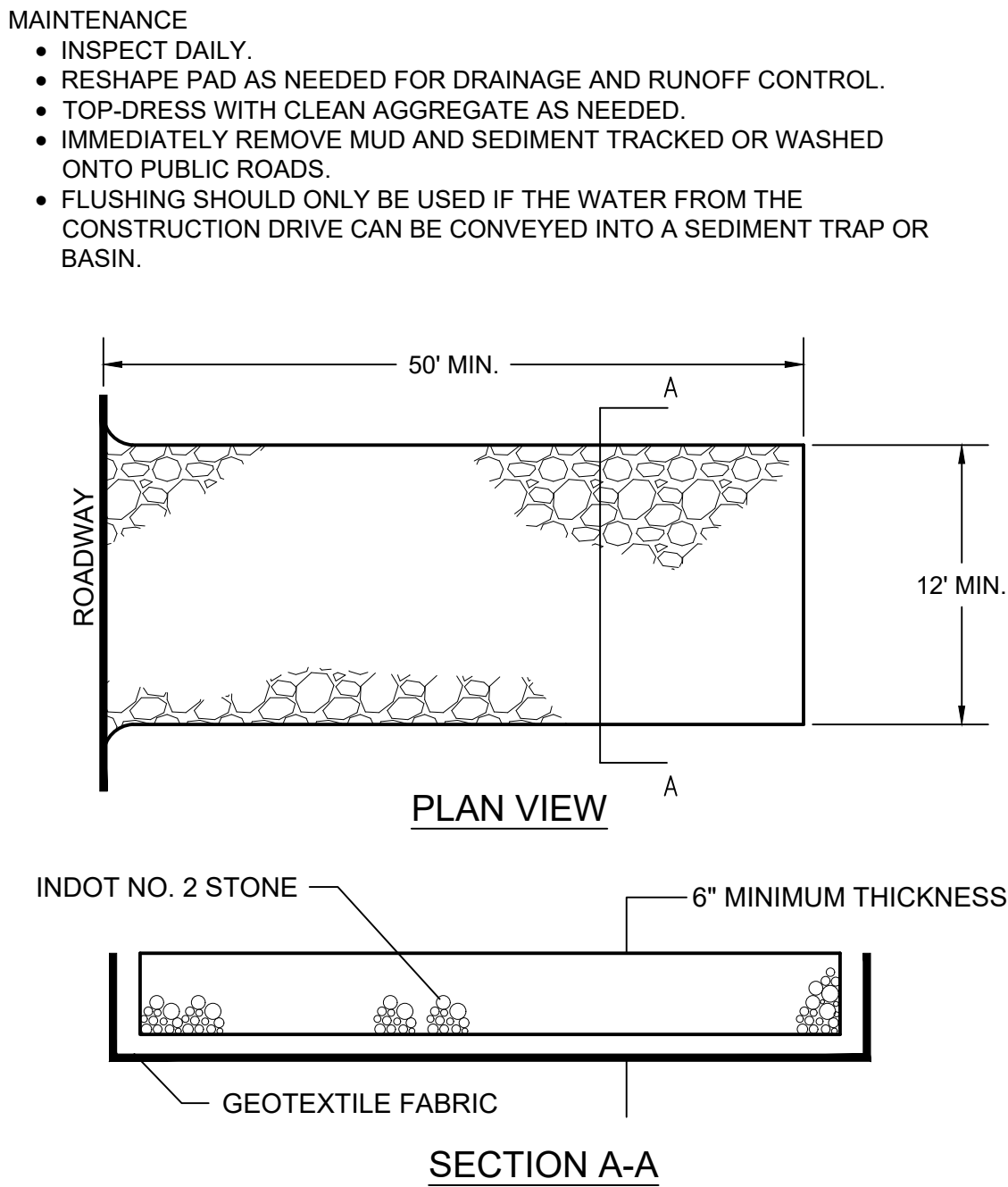
DETAIL - SEDIMENT DEWATERING BAG

NOT TO SCALE

TEMPORARY CONSTRUCTION ENTRANCE NOTES:

- PURPOSE**
- TO PROVIDE STABLE ENTRANCE/EXIT CONDITIONS FROM AN INDIVIDUAL LOT OR BUILDING SITE.
 - TO KEEP MUD AND SEDIMENT OFF OF PUBLIC ROADWAYS.
- SPECIFICATIONS**
- LOCATION - AVOID LOCATING ON STEEP SLOPES OR AT CURVES IN PUBLIC ROADS.
 - DIMENSIONS:
 - WIDTH = 12 FEET MINIMUM OR FULL WIDTH OF ENTRANCE/EXIT DRIVE, WHICHEVER IS GREATER.
 - LENGTH = 50 FEET MINIMUM OR FULL LENGTH OF DRIVE, WHICHEVER IS GREATER.
 - THICKNESS = SIX INCHES MINIMUM.
 - MATERIALS:
 - ONE TO TWO AND ONE-HALF INCH DIAMETER WASHED AGGREGATE (INDOT NO. 2).
 - ONE-HALF TO ONE AND ONE-HALF INCH WASHED AGGREGATE (INDOT NO. 53); OPTIONAL, USED PRIMARILY WHERE THE PURPOSE OF THE PAD IS TO KEEP SOIL FROM ADHERING TO VEHICLE TIRES.
 - GEOTEXTILE FABRIC UNDERLAYMENT (USED AS A SEPARATION LAYER TO PREVENT INTERMIXING OF AGGREGATE AND THE UNDERLYING SOIL MATERIAL AND TO PROVIDE GREATER BEARING STRENGTH WHEN ENCOUNTERING WET CONDITIONS OR SOILS WITH A SEASONAL HIGH WATER TABLE LIMITATION).

- INSTALLATION**
- REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.
 - GRADE THE FOUNDATION AND CROWN FOR POSITIVE DRAINAGE.
 - INSTALL A CULVERT PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
 - IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.
 - PLACE AGGREGATE (INDOT NO. 2) TO THE DIMENSIONS AND GRADE SHOWN IN THE CONSTRUCTION PLANS, LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
 - TOP-DRESS THE DRIVE WITH WASHED AGGREGATE (INDOT NO.53).
 - WHERE POSSIBLE, DIVERT ALL STORM WATER RUNOFF AND DRAINAGE FROM THE TEMPORARY CONSTRUCTION INGRESS/EGRESS PAD TO A SEDIMENT TRAP OR BASIN.



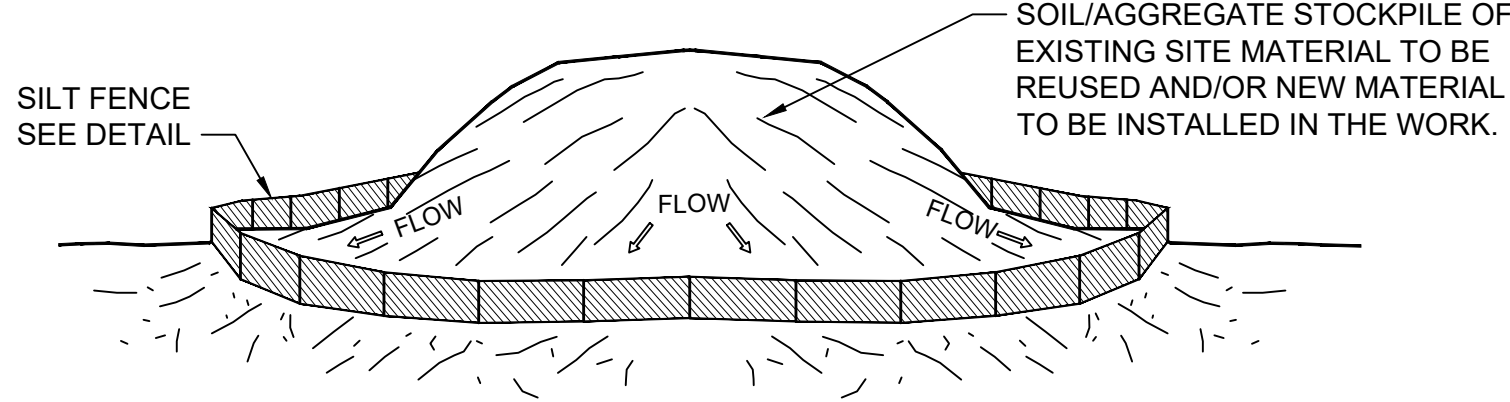
DETAIL - TEMPORARY CONSTRUCTION ENTRANCE

NOT TO SCALE

SEDIMENT DEWATERING BAG NOTES:

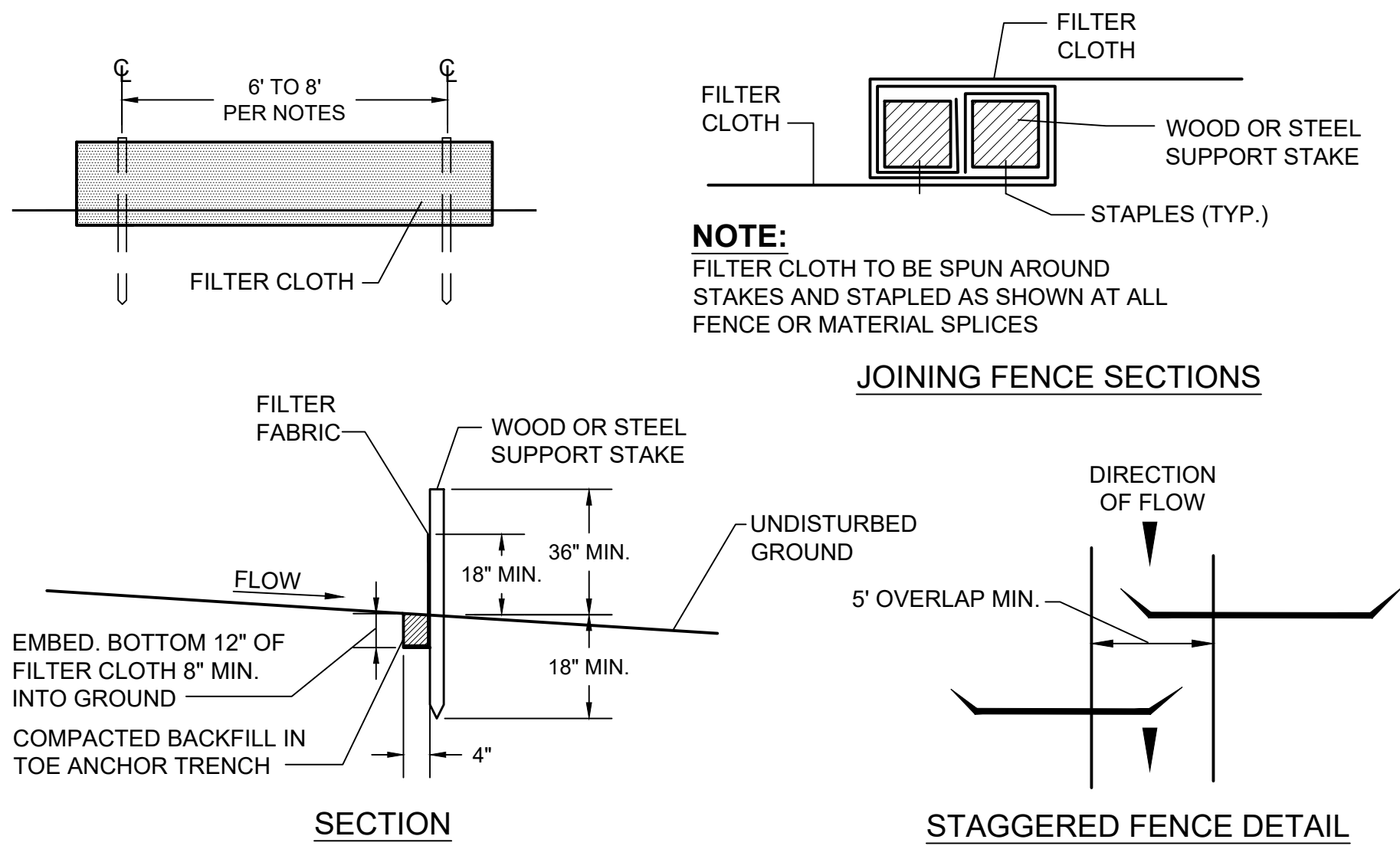
- CONTRACTOR SHALL PROVIDE SEDIMENT DEWATERING BAG(S) FOR ALL DEWATERING DISCHARGES.
- DEWATERING BAGS SHALL BE NON-WOVEN GEOTEXTILE MEETING THE MINIMUM REQUIREMENTS AS SPECIFIED BELOW, WITH HIGH STRENGTH DOUBLE STITCHED "J" TYPE SEAMS MEETING ASTM D-4884, AND SEWN IN SPOUT/NOZZLE TO ACCEPT DEWATERING DISCHARGE PIPE/HOSE, SIZED AS RECOMMENDED BY MANUFACTURER FOR FLOW CONDITIONS ENCOUNTERED. NOZZLE SHALL BE FURNISHED WITH HIGH STRENGTH MECHANICAL STRAPS FOR HOLDING THE PIPE/HOSE IN PLACE.
- MINIMUM GEOTEXTILE PROPERTIES:

PROPERTY	ASTM	8 OZ./YD ² WEIGHT	10 OZ./YD ² WEIGHT	12 OZ./YD ² WEIGHT
TENSILE STRENGTH	D-4632	200 LBS.	250 LBS.	300 LBS.
ELONGATION @ BREAK	D-4632	50%	50%	50%
MULLEN BURST	D-3786	350 PSI	350 PSI	350 PSI
TRAPEZOIDAL TEAR	D-4533	85 LBS.	100 LBS.	115 LBS.
CBR PUNCTURE	D-6241	525 LBS.	700 LBS.	850 LBS.
AOS	D-4751	80 SIEVE	100 SIEVE	100 SIEVE
PERMITTIVITY	D-4491	1.35 SEC ⁻¹	1.2 SEC ⁻¹	1.0 SEC ⁻¹
WATER FLOW RATE	D-4491	90 GPM/FT ²	85 GPM/FT ²	75 GPM/FT ²
UV RESISTANCE	D-4355	70% @ 500 HRS.	70% @ 500 HRS.	70% @ 500 HRS.



DETAIL - MATERIALS STOCKPILE

NOT TO SCALE



SILT FENCE NOTES:

- PURPOSE**
- TO TRAP SEDIMENT FROM SMALL, DISTURBED AREAS BY REDUCING THE VELOCITY OF SHEET FLOW. SILT FENCES CAPTURE SEDIMENT BY PONDING WATER TO ALLOW DEPOSITION, NOT BY FILTRATION.
 - NOTE: SILT FENCE IS NOT RECOMMENDED FOR USE AS A DIVERSION AND SHOULD NOT BE USED ACROSS A STREAM, CHANNEL, DITCH, SWALE, OR ANYWHERE THAT CONCENTRATED FLOW IS ANTICIPATED.
- SPECIFICATIONS**
- DRAINAGE AREA = LIMITED TO ONE-QUARTER ACRE PER 100 LINEAR FEET OF FENCE. FURTHER RESTRICTED BY SLOPE STEEPNESS (SEE TABLE 1).
 - EFFECTIVE LIFE = SIX MONTHS (MAXIMUM).
 - LOCATION
 - INSTALLED PARALLEL TO THE SLOPE CONTOUR.
 - MINIMUM OF 10 FEET BEYOND THE TOE OF THE SLOPE TO PROVIDE A BROAD, SHALLOW SEDIMENT POOL.
 - ACCESSIBLE FOR MAINTENANCE (REMOVAL OF SEDIMENT AND SILT FENCE REPAIR).

SPACING

Table 1. Slope Steepness Restrictions

Percent Slope		Maximum Distance
< 2%	< 50:1	100 feet
2% – 5%	50:1 to 20:1	75 feet
5% – 10% ¹	20:1 to 10:1	50 feet
10% – 20% ¹	10:1 to 5:1	25 feet
> 20% ¹	> 5:1	15 feet

¹ Consider other alternatives.

Note: Multiple rows of silt fence are not recommended on the same slope.

TRENCH

- DEPTH = EIGHT INCHES MINIMUM.
- WIDTH = FOUR INCHES MINIMUM.
- AFTER INSTALLING FENCE, BACKFILL WITH SOIL MATERIAL AND COMPACT (TO BURY AND ANCHOR THE LOWER PORTION OF THE FENCE FABRIC).

- NOTE: AN ALTERNATIVE TO TRENCHING IS TO USE MECHANICAL EQUIPMENT TO PLOW IN THE SILT FENCE.

- MATERIALS AND SILT FENCE SPECIFICATIONS**
- FABRIC WOVEN OR NON-WOVEN GEOTEXTILE FABRIC MEETING SPECIFIED MINIMUMS OUTLINED IN TABLE 2.

Table 2. Geotextile Fabric Specifications for Silt Fence (minimum)

Physical Property	Woven Geotextile Fabric	Non-Woven Geotextile Fabric
Filtering efficiency	85%	85%
Textile strength at 20% elongation	30 lbs. per linear inch	50 lbs. per linear inch
Standard strength	50 lbs. per linear inch	70 lbs. per linear inch
Extra strength	50 lbs. per linear inch	70 lbs. per linear inch
Slurry flow rate	0.3 gal./min./square feet	4.5 gal./min./square feet
Water flow rate	15 gal./min./square feet	220 gal./min./square feet
UV resistance	70%	85%
Post spacing	7 feet	5 feet

Note: Silt fences can be purchased commercially.

- HEIGHT - A MINIMUM OF 18 INCHES ABOVE GROUND LEVEL (30 INCHES MAXIMUM).
- REINFORCEMENT - FABRIC SECURELY FASTENED TO POSTS WITH WOOD LATHE.
- SUPPORT POSTS
 - 2 X 2 INCH HARDWOOD POSTS. STEEL FENCE POSTS MAY BE SUBSTITUTED FOR HARDWOOD POSTS (STEEL POSTS SHOULD HAVE PROJECTIONS FOR FASTENING FABRIC).
 - SPACING EIGHT FEET MAXIMUM IF FENCE IS SUPPORTED BY WIRE MESH FENCING. SIX FEET MAXIMUM FOR EXTRA-STRENGTH FABRIC WITHOUT WIRE BACKING.

INSTALLATION

- LAY OUT THE LOCATION OF THE FENCE SO THAT IT IS PARALLEL TO THE CONTOUR OF THE SLOPE AND AT LEAST 10 FEET BEYOND THE TOE OF THE SLOPE TO PROVIDE A SEDIMENT STORAGE AREA. TURN THE ENDS OF THE FENCE UP SLOPE SUCH THAT THE POINT OF CONTACT BETWEEN THE GROUND AND THE BOTTOM OF THE FENCE END TERMINATES AT A HIGHER ELEVATION THAN THE TOP OF THE FENCE AT ITS LOWEST POINT.

DETAIL - SILT FENCE

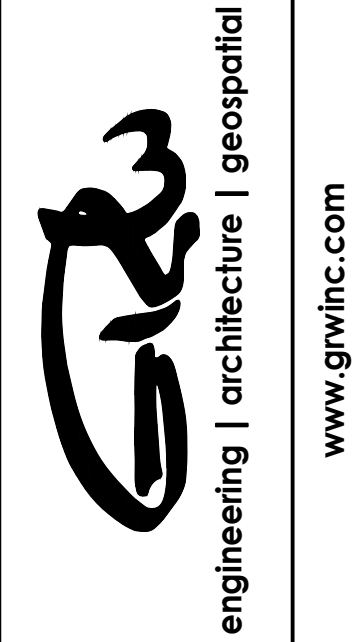
NOT TO SCALE

MATERIALS STOCKPILE NOTES:

- ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED.
- RESTORE STOCKPILE SITES TO PRE-EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.
- STOCKPILE HEIGHTS MUST NOT EXCEED 10 FT. UNLESS OTHERWISE DIRECTED BY OWNER. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

This document, originally issued, sealed, and signed by Joseph P Tierney, Indiana Professional Engineer, No.19300407, on July 2022, shall not be used in lieu of a certified document.

GRW PROJECT NO. 4923	CLIENT PROJECT NO. --
ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT OR ANY PART OF THE INFORMATION CONTAINED HEREIN SHALL BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF GRW ENGINEERS, INC. AND SHALL NOT BE USED FOR ANY OTHER PROJECT OTHER THAN THIS SPECIFIC PROJECT WITHOUT WRITTEN PERMISSION.	



EROSION CONTROL DETAILS II

NEW LIFT STATION AND FORCEMAIN
TOWN OF PENDLETON, INDIANA

REVISIONS	NO.	DESCRIPTION	DATE	BY	DESIGNED	DRAWN	REVIEWED	APPROVED
					JPT	AMR	JPT	JPT

DATE: JULY 2022
SCALE: N.T.S.
SHEET NO.

C-16

