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

EROSION & SEDIMENT CONTROL LEGEND

- TEMPORARY CONSTRUCTION ENTRANCE
- INLET PROTECTION
- 12" COMPOST SOXX
- LIMIT OF DISTURBANCE
- NPDES BOUNDARY
- SOILS BOUNDARY
- CONCRETE WASHOUT AREA
- TREE PROTECTION FENCE

GRADING-UTILITY LEGEND

EXISTING ITEMS	PROPOSED ITEMS	
		RIP-RAP
		DRAINAGE FLOW
321.34		SPOT GRADE
		STORM STRUCTURE
		HYDRANT
		VALVE
		REDUCER
C	C	U/G CABLE CONDUIT
E	E	U/G ELECTRICAL CONDUIT
E/T	E/T	U/G ELECTRICAL & TELEPHONE CONDUIT
E/T/C	E/T/C	U/G ELECTRICAL, TELEPHONE & CABLE CONDUIT
G	G	U/G GAS LINE
OH	OH	OVER HEAD WIRES
FM	FM	SANITARY SEWER FORCE MAIN
S	S	SANITARY SEWER LATERAL
S	S	SANITARY SEWER MAIN
D	D	STORM SEWER LATERAL
D	D	STORM SEWER MAIN
T	T	U/G TELEPHONE CONDUIT
W	W	WATER MAIN
	261	MINOR CONTOUR
	260	MAJOR CONTOUR
FO	FO	U/G FIBER OPTIC CONDUIT

SOILS LEGEND

CtB: CONESTOGA SILT LOAM, 3% - 8% SLOPES, HYD GROUP B

UudB: URBAN LAND-UDORTHENTS, 0%-8% PERCENT SLOPE, HYD GROUP C/D

SUPPLEMENTAL TOPOGRAPHIC INFORMATION PROVIDED FROM ASBUILT PLANS FOR ADJACENT ROYAL FARMS PARCEL PREPARED BY ROBER E. BLUE CONSULTING ENGINEERS, PC. ENTITLED "AS-BUILT SURVEY-PLANS - ROYAL FARMS STORE #225" DATED OCTOBER 11, 2017 AS LAST REVISED FEBRUARY 16, 2018.

CONTRACTOR TO FIELD VERIFY SUPPLEMENTAL TOPOGRAPHY PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY PRIOR TO ORDERING ANY MATERIALS

PCSM CREDIT AREAS

- SOIL AMENDMENT AREAS
- MINIMUM SOIL COMPACTION
- UTILITY TRENCHING AREAS (EXCLUDED FROM VOLUME CALCULATIONS)

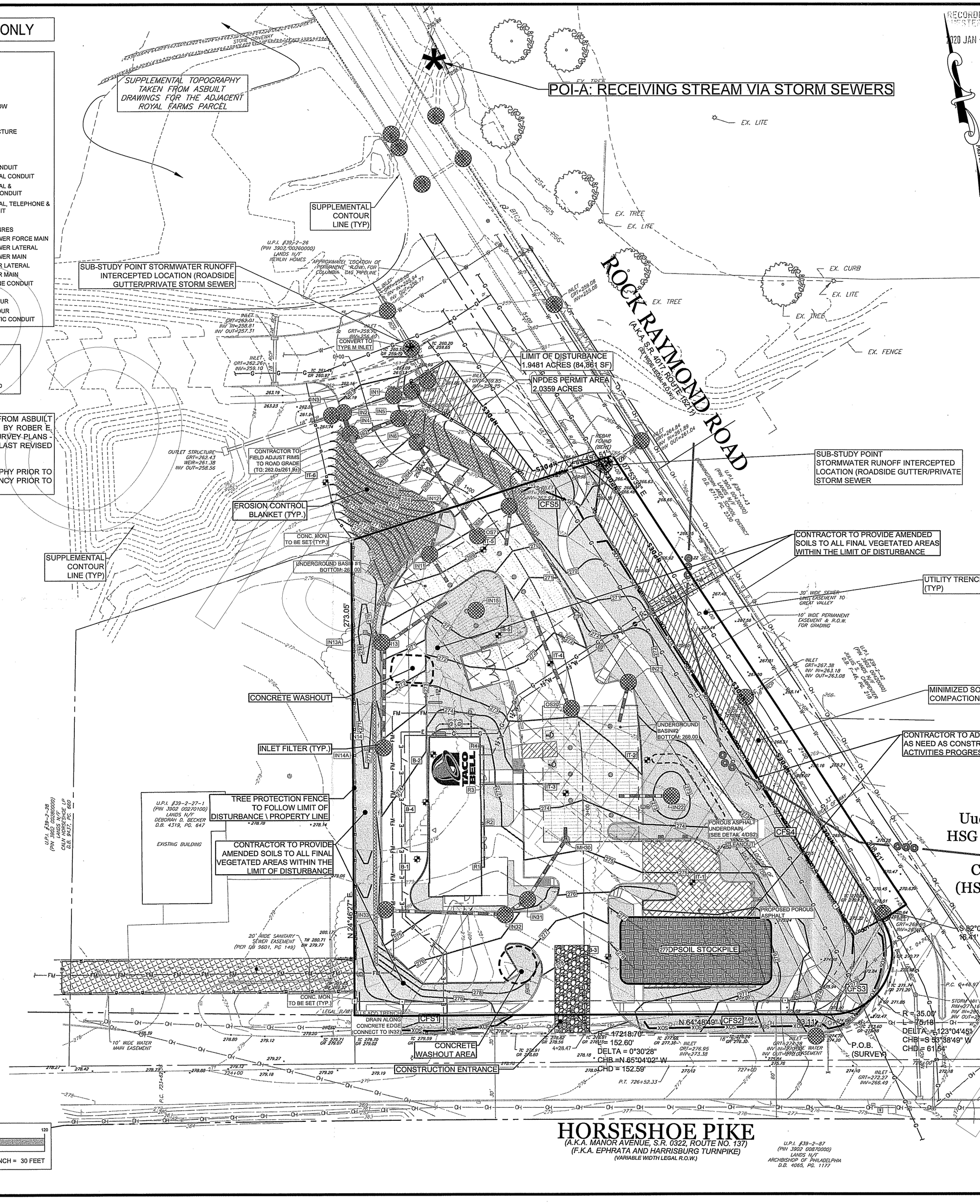
SEQUENCE OF CONSTRUCTION

SEQUENCE NOTES:

1. ALL EARTH DISTURBANCE SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE OF CONSTRUCTION. EACH STAGE/STEP SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE/STEP IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE.
2. EROSION AND SEDIMENT CONTROLS MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE WITHIN THE TRIBUTARY AREA OF THESE CONTROLS. ONLY LIMITED DISTURBANCE IS PERMITTED TO PROVIDE ACCESS TO THE EROSION AND SEDIMENT CONTROL AREAS FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS. THE OWNER/RESPONSIBLE PARTY MUST INFORM THE MUNICIPALITY THAT THE APPLICABLE E&S CONTROLS ARE INSTALLED, STABILIZED AND FUNCTIONAL BEFORE INITIATING EARTH DISTURBANCE.
3. WORK AREAS SHALL BE DELINEATED AND SURVEY CONTROL POINTS SHALL BE PROTECTED. WETLANDS ARE TO BE FENCED OR STAKED IN THE FIELD. THERE IS TO BE NO EARTH DISTURBANCE OR VEGETATIVE CLEARING IN AREAS PROTECTED BY BARRIER FENCE OR STAKES. EARTH DISTURBANCE WITHIN THESE AREAS WITHOUT REQUIRED PERMITS WILL RESULT IN POTENTIAL VIOLATIONS OF COMMONWEALTH AND FEDERAL REGULATIONS. ALL COSTS ASSOCIATED WITH DISTURBANCE OF THESE AREAS WILL BE INCURRED SOLELY AT CONTRACTOR'S EXPENSE.
4. ALL EARTH DISTURBANCES SHALL BE WITHIN THE DELINEATED LIMITS OF DISTURBANCE. NO FILL SHALL BE TAKEN OR PLACED OUTSIDE THE DESIGNATED LIMITS OF DISTURBANCE.
5. CRITICAL STAGES: IN ACCORDANCE WITH NPDES REQUIREMENTS, A PROFESSIONAL ENGINEER OR DESIGNATED REPRESENTATIVE SHALL BE ON-SITE TO OBSERVE AND CERTIFY THE INSTALLATION/ CONSTRUCTION OF CRITICAL SITE FACILITIES AND/OR CONTROLS. OBSERVATION SHALL INCLUDE BUT NOT BE LIMITED TO THE PREPARATION OF SUBGRADE OF RESPECTIVE CONTROLS, THROUGH FINAL STABILIZATION. THE ENGINEER SHALL BE NOTIFIED A MINIMUM OF 3 DAYS IN ADVANCE OF CRITICAL STAGE ACTIVITIES.
6. THE PROJECT SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING GENERALIZED SEQUENCE. THE CONTRACTOR MAY PROCEED WITH LATER STEPS PROVIDED THE REQUIRED CONTROLS ARE INSTALLED WITHIN THE TRIBUTARY AREA. THE CONTRACTOR SHALL CONSULT WITH THE CONSERVATION DISTRICT PRIOR TO PROCEEDING WITH FUTURE STEPS.
7. THE CONTRACTOR SHALL LIMIT SITE DISTURBANCE AS DEPICTED ON THE PLAN AND SHALL NOT CONDUCT DISTURBANCE OR PROJECT ACTIVITIES WITHIN 50 FEET OF ANY STREAMS, RIVERS OR TRIBUTARIES BOTH PERENNIAL OR INTERMITTENT.
8. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
9. AN ON-SITE PRE-CONSTRUCTION MEETING IS REQUIRED TO OCCUR NO LESS THAN 7-DAYS PRIOR TO ANY EARTH DISTURBANCE UNLESS NOTIFIED OTHERWISE BY SERO DEP OR THE CHESTER COUNTY CONSERVATION DISTRICT. PERMITTEES, CO-PERMITTEES, OPERATORS, ALL APPROPRIATE MUNICIPAL OFFICIALS, REPRESENTATIVES FROM THE CHESTER COUNTY CONSERVATION DISTRICT AND THE SERO DEP, AND LICENSED PROFESSIONALS OR DESIGNEES RESPONSIBLE FOR THE EARTH DISTURBANCE ACTIVITY, INCLUDING IMPLEMENTATION OF E&S AND PCSM PLANS AND CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN, SHALL ATTEND A PRE-CONSTRUCTION MEETING.
10. AS SOON AS SLOPES, CHANNELS, DITCHES, AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED.
11. THE CONTRACTOR SHALL PROVIDE TEMPORARY STABILIZATION OF THE PROJECT SITE IF THE CESSATION OF CONSTRUCTION ACTIVITIES FOR 4 OR MORE DAYS IS ANTICIPATED.
12. SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEPT INTO ANY ROAD SIDE DITCH, STORM SEWER OR SURFACE WATER
13. THE CONTRACTOR IS REQUIRED TO RELOCATE AND/OR PROVIDE ADDITIONAL EROSION CONTROL DEVICES TO THE PROJECT SITE AS CONSTRUCTION ACTIVITIES PROGRESSES TO ENSURE SEDIMENT DOES NOT LEAVE THE PROJECT AREA.

SEQUENCE:

1. INSTALL PERIMETER CONTROLS (TREE PROTECTION, COMPOST FILTER SOCKS, ETC) AND ROCK CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.
   - 1.1. INSTALL INLET PROTECTION IN ALL EXISTING INLETS DOWNSTREAM OF CONSTRUCTION ACTIVITIES AS INDICATED ON THE PLANS.
   - 1.2. (CRITICAL STAGE) INSTALL TREE PROTECTION FENCING PROTECTING AREAS OF MINIMAL GRADING BY FIELD MARKING THE LIMIT OF DISTURBANCE.
   - 1.3. NOTE: ONLY LIMITED DISTURBANCE IS PERMITTED FOR INSTALLATION OF CONTROLS. CLEARING AND GRUBBING CAN NOT COMMENCE UNTIL PERIMETER CONTROLS ARE INSTALLED AND FUNCTIONAL.
   - 1.4. CONTRACTOR SHOULD ADJUST PERIMETER COMPOST FILTER SOCKS, AS NEEDED, AS CONSTRUCTION PROGRESSES AND GRADING ADJUSTS. ADJUSTMENTS MUST BE COMPLETE AT THE END OF EACH DAY.
2. STRIP TOPSOIL FROM WITHIN DISTURBANCE AREA AND STOCKPILE AS INDICATED.
3. BEGIN CONSTRUCTION OF DRIVEWAY CONNECTION TO ROYAL FARMS DRIVEWAY ACCESS.
   - 3.1. INSTALL STORM INLETS #1-#4. INSTALL INLET PROTECTION UPON COMPLETION OF STRUCTURES.
   - 3.2. CONSTRUCT ROADWAY TO BASE COURSE.
4. (CRITICAL STAGE) CONSTRUCT UNDERGROUND BASINS #1 AND #2.
   - 4.1. INSTALL STORM SEWER CONNECTIONS AND OUTFALL STORM SEWER NETWORK (IN4-OS7), INSTALL INLET PROTECTION AS INDICATED.
   - 4.2. EXCAVATE BASIN #1 AREA TO SUBGRADE AND BEGIN BASIN CONSTRUCTION. DO NOT INSTALL SAND WITHIN FILTER CHAMBER UNTIL LATER STEP.
     - 4.2.1. (CRITICAL STAGE) INSTALL FILTER FABRIC ON THE INTERIOR WALLS AND FLOOR OF THE BASIN CHAMBERS AS A TEMPORARY EROSION CONTROL MEASURE.
   - 4.3. CONCURRENTLY, BEGIN CONSTRUCTION OF STORM SEWERS TRIBUTARY TO BASIN #1 (IN10, IN 12, IN13, IN13A, IN14, IN14A, IN15) INSTALL INLET PROTECTION AS INDICATED.
   - 4.4. EXCAVATE BASIN #2 AREA TO SUBGRADE; INSTALL OS20 TO BASIN #1 AND BEGIN BASIN #2 CONSTRUCTION.
   - 4.5. CONCURRENTLY, BEGIN CONSTRUCTION OF STORM SEWERS TRIBUTARY TO BASIN #2 (IN21, IN22, MH30 TO IN33) INSTALL INLET PROTECTION AS INDICATED
   - 4.6. CONSTRUCT ROOF LEADER PIPING TO WITHIN 5 FT OF BUILDING FOUNDATION, FLAG FOR FUTURE CONNECTION.
   - 4.7. BACKFILL OF BASIN AREAS AND STORM SEWERS AS WORK PROGRESSES.
5. INSTALL 15'Ø CONCRETE WASHOUT AND BEGIN BUILDING FOUNDATION CONSTRUCTION. CONCURRENTLY, INSTALL UTILITIES AND STUB TO WITHIN 5FT OF BUILDING FOUNDATIONS.
6. BEGIN SANITARY SEWER INSTALLATION. INSTALL GREASE TRAP AND PUMP STATION. BEGIN FORCEMAIN INSTALLATION.
7. ROUGH GRADE AND INSTALL REMAINING DRIVEWAY/PARKING AREAS TO BASE COURSE. ROUGH GRADE ALL REMAINING AREAS.
8. (CRITICAL STAGE) INSTALL POROUS PAVEMENT
9. COMPLETE BUILDING CONSTRUCTION AND FINISH GRADE AREA. FINISH GRADING SHALL INCLUDE BUT NOT BE LIMITED TO, (CRITICAL STAGE) THE PLACEMENT/CONSTRUCTION OF AMENDED SOILS, APPLICATION OF SOIL AMENDMENTS; SEEDING AND MULCHING; AND FINAL STABILIZATION MEASURES. INSTALL SITE DECORATIVE LANDSCAPE FEATURES AND STRUCTURES (WALKS, WALLS, PATIOS, AND LANDSCAPING).
10. (CRITICAL STAGE) INSTALL LANDSCAPING. CONTRACTOR TO USE LOW GROUND PRESSURE EQUIPMENT WITHIN THESE AREAS.
9. FINISH PAVE PARKING AREAS AND INSTALL PARKING STRIPING. INSTALL SIDEWALKS ALONG FRONTAGES.
10. REMOVE INLET PROTECTION AND FLUSH ALL STORM SEWERS. UPON DEWATERING OF BASINS, REMOVE TEMPORARY FILTER FABRIC FROM BASIN CHAMBERS AND DISPOSE OF. INSTALL SAND IN BASIN FILTERS.
11. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED (70% UNIFORM STABILIZATION OF DISTURBED SOIL ON SITE WILL BE COVERED WITH VEGETATION), TEMPORARY EROSION CONTROLS, INCLUDING SILT FENCE MUST BE REMOVED. SHOULD ANY AREAS BECOME DISTURBED DURING REMOVAL OF THE CONTROLS, THEY MUST BE IMMEDIATELY STABILIZED IMMEDIATELY.
12. AT THE COMPLETION OF CONSTRUCTION AND UPON FINAL SITE STABILIZATION, THE OWNER/RESPONSIBLE PARTY SHALL SUBMIT THE NOTICE OF TERMINATION (N.O.T.) TO THE COUNTY CONSERVATION DISTRICT.



RECORDER OF DEEDS CHESTER COUNTY, PA
2020 JAN -8 PM 1:30

KNOW WHAT'S BELOW. CALL BEFORE YOU DIG

STATE OF PENNSYLVANIA ONE CALL
DIAL 811 or 1-800-242-1776
WWW.PA1CALL.ORG
TICKET #20181203367

REV.	DATE	COMMENT	BY
10	2019-12-05	REV. PER TWP REVIEW LETTER AND TO ISSUE FOR FINAL RECORDING	MJT
9	2019-08-08	REV. PER PYLON LOCATION & FINAL PLAN RESOLUTION COMPLIANCE	MJT
8	2019-03-15	REV PER D.A.W.A. ENGINEER COMMENTS	MPG

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER RYAN T. WHITMORE No. PE070543

RYAN T. WHITMORE
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. 076556

RECEIVED
DEC 11 2019
CODES DEPARTMENT
CALN TOWNSHIP

PROJECT No: 170027
DRAWN BY: M. TOTH
CHECKED BY: R. WHITMORE
CAD I.D. #: 02_ES_170027

LANDCORE Engineering Consultants, P.C.
PO BOX 37635 #6287
PHILADELPHIA, PENNSYLVANIA 19101-0635
PHONE 215-635-2010 | FAX 215-352-4248
LANDCORECONSULTING.COM

PROJECT: DOWNINGTOWN INVESTORS, LLC
PROPOSED TACO BELL with DRIVE-THRU SERVICE
50 ROCK RAYMOND ROAD
CALN TOWNSHIP
CHESTER COUNTY, PENNSYLVANIA

TITLE: EROSION AND SEDIMENT CONTROL PLAN

SCALE: (H) AS NOTED (V) -
DATE: 2018-04-27
SHEET: 2 of 25
REV. No: 10

ES