Plat Num: 20-124

Cumberland County Subdivision and Land Development Review Report

Municipality:	South Newton	Surveyor/ Engineer:	Red Barn Consulting	Owner/ Developer:	Joe Ramer

Plat Title: Joe Ramer Poultry Operation

Plat Status:	Final			Plat Type:	Land Development
# of New Lots:		# of New Dwelling Units:		New Acreage Subdivided/Developed:	
Total Tract Acreage:	7.5				
Zoning District:	Ag			Proposed Land Use:	Agricultural
Date Received:	9/4/2020	County Review:	9/14/2020	Reviewed by:	SH
Checked by:					

☐ Plat appears to comply with applicable regulations.

☒ Plat appears to generally comply with applicable regulations; revisions may be required, as indicated.

☐ Plat appears to need substantial revision, as indicated.

Review comments with cited ordinance provisions are based on municipal regulations on file with the County Planning Department.

1. The proposed lot width should be provided in the Site Data Block (Zoning 3.2.E.1).
2. It appears that a variance was approved for the setback requirements related to a poultry barn, not including manure storage. The plan should indicate the location of manure storage. The applicant should address manure storage requirements and provide proof of compliance with Nutrient Management Rules and Regulations (Pennsylvania Act 38) and (Zoning 5.16).
3. The plan should include a metes and bounds description and survey monuments/markers for the entire parcel (SLDO 600.A.2 & 809).
4. The plan should include easements to all proposed stormwater management facilities (SLDO 808).
5. The parcel is also located in Penn Township. The plan should include signature blocks for approval by the Penn Township Planning Commission and the Board of Supervisors.

   If Penn Township has decided to waive their review of this plan, the written waiver letter should be provided by the Applicant to South Newton Township. Further, the plan should include a note indicating that Penn Township has waived their review of the plan.
6. The municipal border should be shown on the Location Map.
7. This property appears to be enrolled in the Cumberland County Clean and Green Program and may be subject to roll-back taxes. Contact the Cumberland County Tax Assessment Office for information.
8. When obtaining the county signature for the final plan recording process, the applicant / engineer should provide a CD that includes a .dwg AutoCAD file that shows all of the parcel boundaries, lot lines, building footprints, road rights-of-way and the edge of pavement. For more information, please visit the Cumberland County Planning Department website at: https://www.ccpa.net/3185/Plan-Submission-Recording-Procedures.

FINAL
LAND DEVELOPMENT PLAN
FOR
JOE RAMER
POULTRY OPERATION
SOUTH NEWTON TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

RECORDER OF DEEDS CERTIFICATE
RECORDED IN THE OFFICE FOR RECORDER OF DEEDS, IN AND FOR CUMBERLAND COUNTY, PENNSYLVANIA, IN SUBDIVISION PLAN BOOK _____, VOLUME _____, PAGE _____, WITNESS MY HAND AND SEAL OF OFFICE THIS _____ DAY OF _____, A.D. 2006.

_____
CUMBERLAND COUNTY RECORDER OF DEEDS

INDIVIDUAL ACKNOWLEDGEMENT
STATE OF PENNSYLVANIA
CUMBERLAND OF PROJECT
CERTIFICATE OF OWNERSHIP AND ACKNOWLEDGEMENT OF PLAN

ON THIS, THE _____ DAY OF _____, 20_____, BEFORE ME, THE UNDERSIGNED OFFICER, PERSONALLY APPEARED _____, WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSES AND SAYS THEY ARE THE OWNERS AND/OR EQUITABLE OWNERS AND/OR DEVELOPERS OF THE PROPERTY SHOWN ON THIS PLAN, THAT THEY ACKNOWLEDGE THE SAME TO BE THEIR ACT AND PLAN, AND DESIRE THE SAME TO BE RECORDED AS SUCH ACCORDING TO LAW.

_____
OWNER(S)

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES _____, 20_____

LANDOWNER STORMWATER MANAGEMENT ACKNOWLEDGMENT

I HEREBY ACKNOWLEDGE THAT, THE PROPOSED STORMWATER MANAGEMENT SYSTEM TO BE A PERMANENT FIXTURE THAT CAN ONLY BE ALTERED OR REMOVED AFTER APPROVAL OF A REVISED PLAN BY THE MUNICIPALITY.

_____, 20_____

_____
OWNER

_____
OWNER

SOUTH NEWTON TOWNSHIP PLANNING COMMISSION
AT A MEETING HELD ON _____, THE PLANNING COMMISSION OF SOUTH NEWTON TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA RECOMMENDED FOR APPROVAL THE SUBDIVISION OR LAND DEVELOPMENT PLAN OF THE PROPERTY AS SHOWN HEREON.

_____ _____ _____
_____ _____ _____

SOUTH NEWTON TOWNSHIP BOARD OF SUPERVISORS
AT A MEETING HELD ON _____, THE BOARD OF SUPERVISORS OF SOUTH NEWTON TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA, APPROVED THE SUBDIVISION OR LAND DEVELOPMENT PLAN OF THE PROPERTY OF AS SHOWN HEREON.

_____
_____

_____ _____ MUNICIPAL SEAL:

PROJECT COUNTY
PLANNING DEPARTMENT REVIEW CERTIFICATE
AT THE CUMBERLAND COUNTY PLANNING DEPARTMENT, AS REQUIRED BY THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE, ACT 247 OF 1968, AS AMENDED, REVIEWED THIS PLAN ON _____, 20_____ AND A COPY OF THE REVIEW IS ON FILE AT THE OFFICE OF THE PLANNING DEPARTMENT.

PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE ENGINEERING DETAILS SHOWN AND DESCRIBED HEREON ARE TRUE AND CORRECT AND ARE DESIGNED IN CONFORMANCE WITH THE SOUTH NEWTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AND IN ACCORDANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA.

_____, 20_____

_____
ENGINEER

CERTIFICATION OF ACCURACY

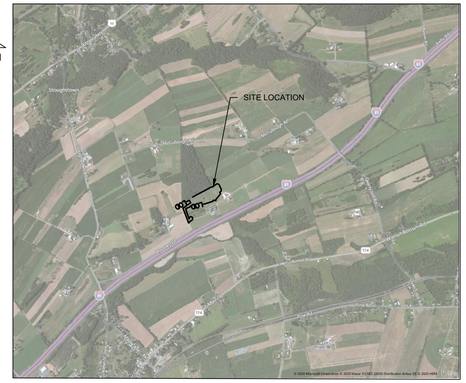
I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE TOPOGRAPHY SHOWN ON THE PLAN WAS PREPARED UNDER MY DIRECTION AND FOR WHICH I ACCEPT FULL RESPONSIBILITY.

_____, 20_____

_____
ENGINEER

UNDERLAIN GEOLOGY

_____, REPRESENTS THAT THE PROPOSED BASIN IS UNDERLAIN BY CARBONATE GEOLOGY.



LOCATION MAP
SCALE: 1" = 2000'

VARIANCE
AT MEETING HELD ON MAY 27, 2020, THE ZONING HEARING BOARD GRANTED A VARIANCE TO CONSTRUCT THE PROPOSED POULTRY BARN WITHIN 100' OF A PROPERTY LINE.

ONE - CALL SYSTEM

Pennsylvania Act 121 (2008) requires 3 working days notice from excavators who are about to Dig, Blast, Auger, Bore, Grade, Trench or Demolish anywhere in the Commonwealth. Contractor Shall Place A One-Call (1-800-242-1776) Prior to Construction.

OWNER
JOSEPH B. & MARY LOU RAMER SITE ADDRESS: 98 MOONEY ROAD SHIPPENSBURG, PA 17257 PHONE #: 717-532-2899

OPERATOR
JOE RAMER MAILING ADDRESS: 98 MOONEY ROAD SHIPPENSBURG, PA 17252 PHONE #: 717-532-2899

SOURCE OF TITLE
DEED BOOK 201304447 (MAP PIN # 41-11-0302-006A)

PLANNING INFORMATION
PLANNING PROVIDED BY: RED BARN CONSULTING, INC. 3050 YELLOW GOOSE ROAD LANCASTER, PA 17601 717-393-2176
A PROPERTY BOUNDARY SURVEY HAS NOT BEEN PERFORMED. THE PROPERTY BOUNDARY HAS BEEN SHOWN PER CUMBERLAND COUNTY GIS DATA.

TOWNSHIP ZONING / SETBACK DATA

TOWNSHIP	SOUTH NEWTON	PENN
ZONING	AGRICULTURAL DISTRICT (A)	AGRICULTURAL DISTRICT (A)
MINIMUM LOT AREA	5 ACRES - SECTION 3.2.E.1	44,000 SQ. FT. - SECTION 604.A
MINIMUM LOT WIDTH	200 FEET - SECTION 3.2.E.1	150 FEET - SECTION 604.B
FRONT YARD	50 FEET - SECTION 3.2.E.1	35 FEET - SECTION 604.C.1.a
SIDE YARD	25 FEET - SECTION 3.2.E.1	30 FEET - SECTION 604.C.1.b
REAR YARD	25 FEET - SECTION 3.2.E.1	40 FEET - SECTION 604.C.1.c
MANURE STORAGE SETBACK	200 FEET - ACT 38	200 FEET - ACT 38
MAXIMUM HEIGHT (ACCESSORY BUILDINGS)	35 FEET - SECTION 3.2.E.2	50 FEET - SECTION 604.1.E.1
MAXIMUM LOT COVERAGE	20% - SECTION 3.2.E.2	10% - SECTION 604.1.D

SITE DATA

EXISTING USE	AGRICULTURAL: ANIMAL HUSBANDRY / CROP PRODUCTION
PROPOSED USE	AGRICULTURAL: ANIMAL HUSBANDRY
ACCESSORY USE	AGRICULTURAL: CROP PRODUCTION & SINGLE FAMILY DWELLING
NUMBER OF LOTS	1
GROSS LOT AREA	70 ACRES (PER ASSESSMENT)
PROPOSED BUILDING HEIGHT	28'
PROPOSED WATER SUPPLY	PRIVATE WELL
PROPOSED SEPTIC	NONE - NO EMPLOYEES
EXISTING BUILDING COVERAGE	0.92%
EXISTING IMPERVIOUS COVERAGE	2.67%
PROPOSED BUILDING COVERAGE	2.22%
PROPOSED IMPERVIOUS COVERAGE	4.84%

E&S & NPDES SW PERMIT
AN EROSION AND SEDIMENT CONTROL PLAN AND NPDES PHASE II STORMWATER MANAGEMENT PERMIT HAS BEEN DEVELOPED FOR THIS PROJECT AND SUBMITTED TO THE COUNTY CONSERVATION DISTRICT AND DEP FOR REVIEW AND APPROVAL.

FLOODPLAIN INFORMATION
THE 100-YEAR FLOOD PLAIN IS TAKEN FROM FEMA FIRM (FLOOD INSURANCE RATE MAP), COMMUNITY-PANEL 42041C0360E (03/16/2009)

WETLANDS
A WETLANDS DETERMINATION / DELINEATION WAS PREFORMED FOR THE SITE AREA BY VORTEX ENVIRONMENTAL, INC.

AGRICULTURAL NUISANCE DISCLAIMER
ALL LANDS WITHIN THE AGRICULTURAL DISTRICT ARE LOCATED WITHIN AN AREA WHERE LAND IS USED FOR COMMERCIAL AGRICULTURAL PRODUCTION. OWNERS, RESIDENTS, AND OTHER USERS OF ANY PORTION OF THIS PROPERTY MAY BE SUBJECTED TO INCONVENIENCE, DISCOMFORT AND THE POSSIBILITY OF INJURY TO PROPERTY AND HEALTH ARISING FROM NORMAL AND ACCEPTED AGRICULTURAL PRACTICES AND OPERATIONS INCLUDING BUT NOT LIMITED TO NOISE, ODORS, DUST, THE OPERATION OF MACHINERY OF ANY KIND INCLUDING AIRCRAFT, THE STORAGE AND DISPOSAL OF MANURE, THE APPLICATION OF FERTILIZERS, SOIL AMENDMENTS, HERBICIDES AND PESTICIDES. OWNERS, OCCUPANTS, AND USERS OF ANY PORTION OF THIS PROPERTY SHOULD BE PREPARED TO ACCEPT THESE CONDITIONS (SUCH INCONVENIENCES, DISCOMFORT, AND POSSIBILITY OF INJURY FROM NORMAL AGRICULTURAL OPERATIONS) AND ARE HEREBY PUT ON OFFICIAL NOTICE THAT SECTION 4 OF THE PENNSYLVANIA ACT 133 OF 1982 "THE RIGHT TO FARM LAW" MAY BAR THEM FROM OBTAINING A LEGAL JUDGEMENT AGAINST SUCH NORMAL AGRICULTURAL OPERATIONS.

POULTRY OPERATION INFORMATION

OPERATOR	THIS OPERATION WILL BE OPERATED BY THE OWNER.
EMPLOYEES/OPERATOR	1
OPERATIONAL TRAFFIC	DAILY AVERAGE = 1 TRUCK PER DAY
CUSTOMER TRAFFIC	0

ANIMAL NUMBERS

TYPE	NUMBER	AVG. WEIGHT (LB)	DAYS PER YEAR	ANIMAL EQUIVALENCY UNITS (AEU's)
DAIRY	80	1000	365	80.00
HEIFERS	30	675	365	20.25
CALVES	30	275	365	8.25
LAYERS	30,000	3.85	365	115.5
AVAILABLE ACRES = 62 ACRES				
AEU'S / ACRE = 3.61				

NUTRIENT MANAGEMENT PLAN
A NUTRIENT MANAGEMENT PLAN WHICH MEETS THE REQUIREMENTS OF THE NUTRIENT MANAGEMENT ACT REGULATIONS HAS BEEN DEVELOPED FOR THIS OPERATION AND SUBMITTED TO THE COUNTY CONSERVATION DISTRICT.

ODOR MANAGEMENT PLAN
AN ODOR MANAGEMENT PLAN WHICH MEETS THE REQUIREMENTS OF THE STATE CONSERVATION COMMISSION ODOR MANAGEMENT PROGRAM HAS BEEN DEVELOPED FOR THIS OPERATION AND SUBMITTED TO THE STATE CONSERVATION COMMISSION.

GENERAL NOTES

1. BENCHMARK 1: TOP OF REBAR SET . ELEVATION = 705.91' (DATUM NAVD88).
BENCHMARK 2: TOP OF REBAR SET . ELEVATION = 711.76' (DATUM NAVD88).
BENCHMARK 3: TOP OF REBAR SET . ELEVATION = 714.24' (DATUM NAVD88).
BENCHMARK 4: TOP OF WELL . ELEVATION = 712.43' (DATUM NAVD88).
BENCHMARK 5: TOP OF REBAR SET . ELEVATION = 729.04' (DATUM NAVD88).

2. THE INFORMATION CONTAINED ON SHEETS 101, 102, 201, 202, 205, AND 206 SHALL BE RECORDED.

3. THE POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT, PREPARED BY MOLLY HUGHES, P.E. OF RED BARN CONSULTING, DATED AUGUST 13, 2020, IS HEREBY DECLARED PART OF THIS LAND DEVELOPMENT PLAN.

4. ANY CHANGES TO THIS PLAN AFTER THE DATE OF PLAN PREPARATION OR LATEST REVISION SHALL NOT BE THE RESPONSIBILITY OF RED BARN CONSULTING, INC.

CONTRACTOR NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS REQUIRED FOR THE CONSTRUCTION PROPOSED ON THIS PLAN.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL, TRENCH BARRICADING, COVERING, SHEETING AND SHORING, IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

3. UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION, EXCAVATION, OR BLASTING. THE ACTUAL LOCATIONS OF THESE UTILITIES HAVE NOT BEEN FIELD VERIFIED. RED BARN CONSULTING, INC. DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE OR GUARANTEE THAT THE UNDERGROUND UTILITY INFORMATION REFLECTED ON THESE DRAWINGS IS CORRECT AND ACCURATE. RED BARN CONSULTING, INC. ASSUMES NO RESPONSIBILITY FOR ANY DAMAGE INCURRED AS A RESULT OF UNDERGROUND UTILITIES OMITTED OR INACCURATELY SHOWN.

4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE DONE DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE.

5. THE CONTRACTOR SHALL LEGALLY DISPOSE OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES, FEATURES, AND MATERIALS AS REQUIRED FOR THE CONSTRUCTION OF THE IMPROVEMENTS SHOWN ON THIS PLAN.

6. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS.

7. THE CONTRACTOR SHALL COORDINATE ANY AND ALL UTILITY SERVICE EXTENSIONS/TERMINATIONS WITH THE UTILITY OWNER.

8. THE CONTRACTOR IS RESPONSIBLE FOR ALL FIELD TESTING AND "RECORD DRAWINGS" AS REQUIRED BY THE VARIOUS AUTHORITY REQUIREMENTS.

9. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AUTHORITIES AT LEAST 10 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

10. THE CONTRACTOR SHALL CALL PA ONE-CALL PRIOR TO BEGINNING CONSTRUCTION.

11. IF SINKHOLES ARE ENCOUNTERED DURING CONSTRUCTION, THE SERVICES OF A REGISTERED GEOLOGIST SHALL BE OBTAINED TO ASSIST IN RECOMMENDING CONSTRUCTION TECHNIQUES AND PERMANENT FACILITIES NECESSARY TO AVOID FURTHER SINKHOLE CREATION AND WITH REGARD TO THE REPAIR OF ANY EXISTING SINKHOLES.

STORMWATER MANAGEMENT AND DRAINAGE EASEMENT

NO AREA IS OFFERED FOR DEDICATION TO THE PUBLIC. THE TOWNSHIP IS NOT RESPONSIBLE FOR MAINTENANCE OF ANY AREA NOT DEDICATED TO AND ACCEPTED FOR PUBLIC USE.

MUNICIPAL AND COUNTY OFFICIALS AND THEIR AGENTS OR EMPLOYEES SHALL HAVE ACCESS TO ANY AND ALL DRAINAGE EASEMENTS AND/OR DRAINAGE FACILITIES AND SHALL HAVE THE RIGHT AT THEIR DISCRETION TO MAINTAIN OR REPAIR THE FACILITIES AS NECESSARY TO RESTORE THEM TO THE DESIGN CONDITIONS.

A MINIMUM TWENTY (20) FOOT WIDE ACCESS EASEMENT SHALL BE PROVIDED AROUND ALL STORMWATER MANAGEMENT FACILITIES THAT WOULD PROVIDE INGRESS FROM AND EGRESS TO A PUBLIC RIGHT-OF-WAY.

NOTHING SHALL BE PLACED, PLANTED, SET, OR PUT WITHIN THE AREA OF AN EASEMENT THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR CONFLICT WITH THE THE EASEMENT AGREEMENT.

AS-BUILT RECORD PLANS

UPON COMPLETION AND FINAL STABILIZATION OF ALL BMP FACILITIES, AN AS-BUILT RECORD PLAN SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED FOR REVIEW AND APPROVAL

DRAWING INDEX

*SHEETS TO BE RECORDED

EXISTING FEATURES LEGEND

ADJOINER PROPERTY LINE
PROPERTY LINE
RIGHT-OF-WAY
SETBACK LINE
EASEMENT LINE
MUNICIPAL BOUNDARY
ZONING BOUNDARY
SOIL BOUNDARY
ROAD CENTERLINE
EDGE OF PAVEMENT
EDGE OF DRIVEWAY/FIELD LANE
FENCE
BUILDING
CONCRETE
CONCRETE WALL
EDGE OF WOODS
RAIL ROAD
MINOR CONTOUR
MAJOR CONTOUR
TERRACE
TERRACE TO BE REMOVED
OVERHEAD ELECTRICAL LINE
UNDERGROUND ELECTRIC LINE
SANITARY SEWER PIPE
STORMWATER PIPE / CULVERT
WATER LINE
WETLANDS BOUNDARY
WETLANDS HATCH
STREAM CENTERLINE
FLOODPLAIN BOUNDARY
FLOODPLAIN HATCH
VEGETATED WATERWAY

BENCHMARK
PROPERTY MARKER
SEPTIC STRUCTURE
STORM RISER PIPE
UTILITY POLE
WELL
SOIL TEST LOCATION
SOIL PERCOLATION TEST LOCATION

PROPOSED FEATURES LEGEND

NPDES PERMIT BOUNDARY/ LIMIT OF DISTURBANCE BOUNDARY LINE
COMPOST FILTER SOCK
CENTERLINE
MAJOR CONTOUR
MINOR CONTOUR
EASEMENT
FENCE
TERRACE
OVERHEAD ELECTRIC LINE
UNDERGROUND ELECTRIC LINE
8" SANITARY SEWER PIPE LINE
10" SANITARY SEWER PIPE LINE
STORMWATER LINE
WATER LINE
GUTTER

C.O. CLEANOUT
STORM STRUCTURE
RIP RAP APPRON
WELL
D.S. DOWNSPOUT
SEWER MANHOLE
SEPTIC MANHOLE
TREE

CONCRETE HATCH
GRAVEL HATCH
RIP-RAP LINING
TOPSOIL AMENDMENT/ AVOID SOIL COMPACTION
TEMPORARY/PERMANENT SEEDING
RE-VEGETATED CROPLAND
VEGETATED WATERWAY
TOPSOIL STOCKPILE
EROSION CONTROL BLANKET
ROCK CONSTRUCTION ENTRANCE

STANDARD PLAN ABBREVIATIONS

BC BOTTOM OF CURB ELEVATION	LP LOW POINT
BLDG BUILDING	MAX. MAXIMUM
BMP BEST MANAGEMENT PRACTICE	MIN. MINIMUM
BOMHE BOTTOM OF MANHOLE ELEVATION	MH MANHOLE
BW BOTTOM OF WALL ELEVATION	NAG NORTH AMERICAN GREEN
C.O. CLEANOUT	PERF. PERFORATED
CONC. CONCRETE	PSI POUNDS PER SQUARE INCH
CORR. CORRUGATED	PVC POLYVINYL CHLORIDE
D.S. DOWNSPOUT	SCH. SCHEDULE
ELEV. ELEVATION	SGE SUBGRADE ELEVATION
EX. EXISTING	SDR STANDARD DIAMETER RATIO
FFE FINISHED FLOOR ELEVATION	SLCPP SMOOTH-LINED CORR. PLASTIC PIPE
HDPE HIGH DENSITY POLYETHYLENE	TC TOP OF CURB ELEVATION
HP HIGH POINT	TE TOP ELEVATION
INV. IN INVERT ELEVATION	TOMHE TOP OF MANHOLE ELEVATION
INV. OUT INVERT OUT ELEVATION	TOW TOP OF WALL ELEVATION
INT. INTERSECTION	TYP. TYPICAL
LF LINEAR FEET	W/ WITH

red barn
3050 Yellow Goose Road
Lancaster, PA 17601
Phone: (717) 393-2176
Fax: (888) 850-6915
www.redbarnpa.com

REVISION | DATE | NO BY

CLIENT
JOE RAMER
MAILING ADDRESS:
98 MOONEY ROAD
SHIPPENSBURG, PA 17257
PHONE #: 717-532-2899

PROJECT TITLE
FINAL
LAND DEVELOPMENT PLAN
FOR
JOE RAMER
POULTRY OPERATION
SOUTH NEWTON TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SHEET TITLE
COVER SHEET

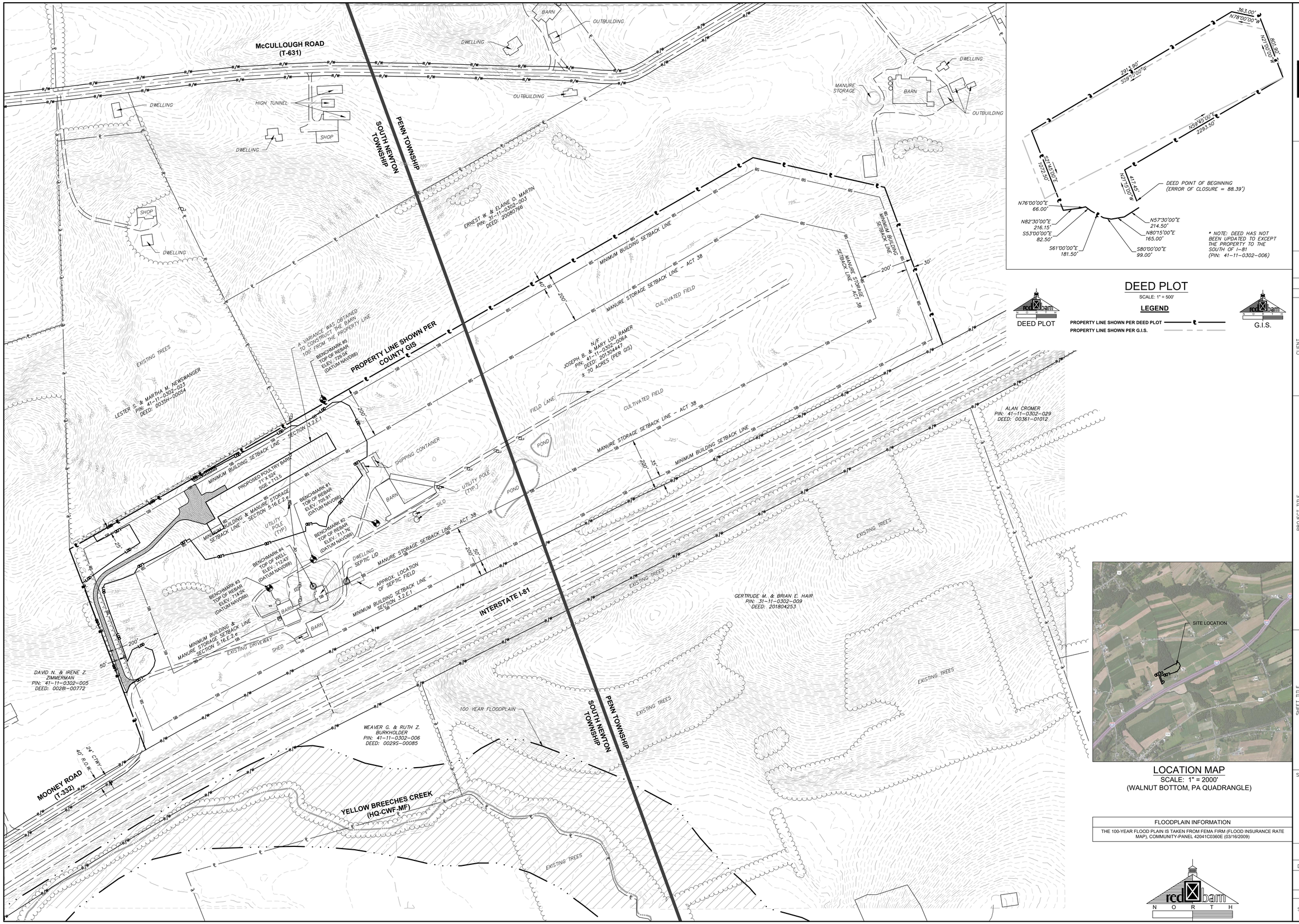
SCALE: AS NOTED

SEAL

DRAWN BY:	CHECKED BY:
BJN	MHH

DATE: 08/13/2020

SHEET NO.: 101



* NOTE: DEED HAS NOT BEEN UPDATED TO EXCEPT THE PROPERTY TO THE SOUTH OF I-81 (PIN: 41-11-0302-006)

DEED PLOT

SCALE: 1" = 500'

LEGEND

PROPERTY LINE SHOWN PER DEED PLOT

PROPERTY LINE SHOWN PER G.I.S.

DEED PLOT

G.I.S.

LOCATION MAP

SCALE: 1" = 2000'

(WALNUT BOTTOM, PA QUADRANGLE)

FLOODPLAIN INFORMATION
THE 100-YEAR FLOOD PLAIN IS TAKEN FROM FEMA FIRM (FLOOD INSURANCE RATE MAP), COMMUNITY-PANEL 42041C0360E (03/16/2009)

NORTH

redbarn
3058 Yellow Goose Road
Lancaster, PA 17601
Phone: (717) 393-2176
Fax: (888) 850-6915
www.redbarnag.com

NO	BY	DATE	REVISION

CLIENT

JOE RAMER
MAILING ADDRESS:
98 MOONEY ROAD
SHIPPENSBURG, PA 17257
PHONE #: 717-532-2899

PROJECT TITLE

FINAL LAND DEVELOPMENT PLAN FOR JOE RAMER POULTRY OPERATION

SOUTH NEWTON TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SHEET TITLE

EXISTING & PROPOSED SITE PLAN

0' 150' 300' 450'

SCALE: 1" = 150'

SEAL

DRAWN BY:	CHECKED BY:
BJN	MHH

DATE: 08/13/2020

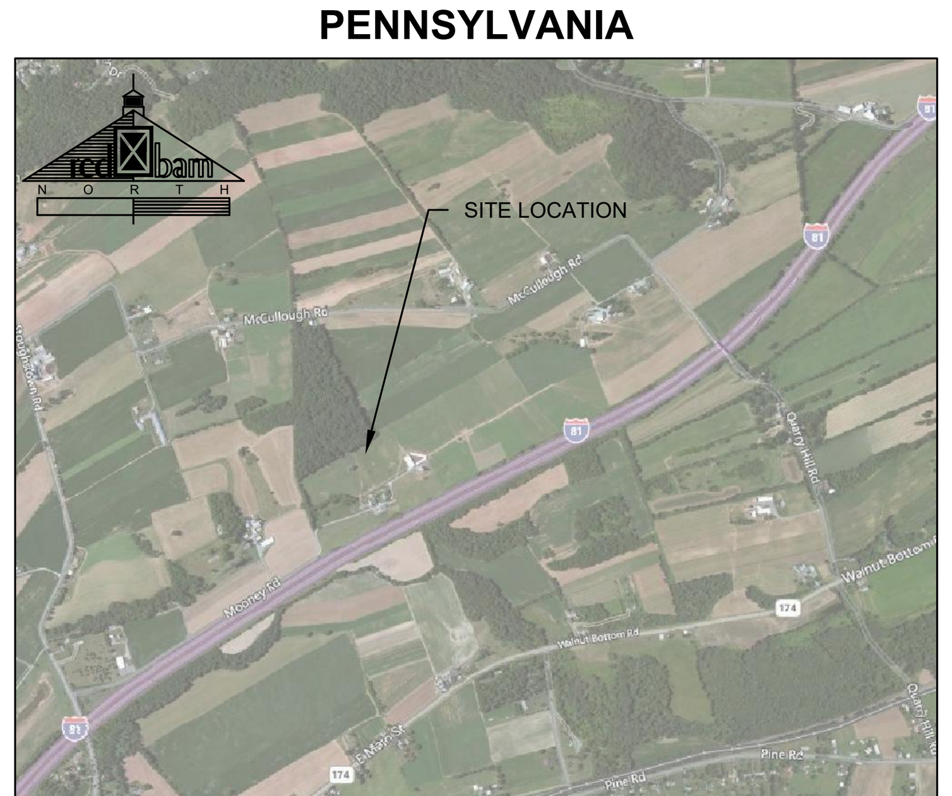
SHEET NO.: 102

PCSM PLAN

FOR

JOE RAMER
POULTRY OPERATION

SOUTH NEWTON TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA



LOCATION MAP
SCALE: 1" = 2000'
(WALNUT BOTTOM, PA QUADRANGLE)

POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) STANDARD NOTES

PCSM REQUIREMENTS:
A LICENSED PROFESSIONAL OR A DESIGNEE SHALL BE PRESENT ONSITE AND BE RESPONSIBLE DURING CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN. THE CRITICAL STAGES MAY INCLUDE THE INSTALLATION OF UNDERGROUND TREATMENT OR STORAGE BMPS, STRUCTURALLY ENGINEERED BMPS, OR OTHER BMPS AS DEEMED APPROPRIATE BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.
THE PCSM PLAN, INSPECTION REPORTS, AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.

PCSM LONG-TERM OPERATIONS AND MAINTENANCE REQUIREMENTS:
THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPS UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPS. A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS LOCATED ON THE PROPERTY.

PERMIT TERMINATION:
UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY AND INSTALLATION OF BMPS IN ACCORDANCE WITH AN APPROVED PLAN, THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.
THE NOTICE OF TERMINATION MUST INCLUDE:
(1) THE FACILITY NAME, ADDRESS AND LOCATION
(2) THE OPERATOR NAME AND ADDRESS
(3) THE NPDES PERMIT NUMBER
(4) THE REASON FOR PERMIT TERMINATION
(5) IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM
(6) COPY OF LEGAL INSTRUMENT: FOR ANY PROPERTY CONTAINING A PCSM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMPS AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT GRANTEES, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION.
(7) FINAL CERTIFICATION: THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS:
"I (NAME) DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA. C.S.A. §4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."
(1) THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN.
(2) THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS.

PROJECT WASTE AND RECYCLING NOTES

1. CUT/FILL IS ASSUMED TO BE BALANCED, EXCESS TOPSOIL WILL BE DISTRIBUTED IN SWALES, EMBANKMENTS, AND BASINS.

2. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS.

3. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260a (RELATING TO HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL), CHAPTER 271 (RELATED TO MUNICIPAL WASTE MANAGEMENT SYSTEM- GENERAL PROVISIONS) AND CHAPTER 287 (RELATING TO RESIDUAL WASTE MANAGEMENT SYSTEM - GENERAL PROVISIONS). NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. ANTICIPATED CONSTRUCTION WASTE MATERIALS WILL BE WOOD, PLASTIC, METAL, AND CONCRETE.

4. ALL WASTES AND MATERIALS DEPOSITED IN AND REMOVED FROM POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) BMP FACILITIES AND FROM IMPERVIOUS AREAS DURING OPERATION AND MAINTENANCE SHALL BE REMOVED FROM THE SITE AND RECYCLED OR PROPERLY 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 WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. ANTICIPATED MATERIALS WITH OR FROM THE PCSM BMPs INCLUDE, BUT NOT LIMITED TO, TRASH/LITTER FROM SITE, VEGETATION (GRASS CLIPPINGS), STONE (GRAVEL & RIP-RAP), SOIL, EROSION CONTROL MATERIALS, STRAW, PLASTIC, PIPES, AND CONCRETE.

5. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE(S) RECEIVING THE EXCESS HAS AN APPROVED EROSION AND SEDIMENT CONTROL PLAN THAT MEETS THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE OR FEDERAL REGULATIONS.

6. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, 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 IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.).

7. ANY PLACEMENT OF CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.

8. ENVIRONMENTAL DUE DILIGENCE MUST BE PERFORMED TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "*MANAGEMENT OF CLEAN FILL*."

CRITICAL STAGES OF IMPLEMENTATION / STORMWATER MANAGEMENT BMP CONSTRUCTION OBSERVATIONS

A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON-SITE TO INSPECT THE CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN. THE FOLLOWING CRITICAL STAGES OF IMPLEMENTATION SHALL BE INSPECTED.

1. INSTALLATION OF PCSM BIO-RETENTION BASIN A
A. INSTALLATION OF MAINTENANCE DEWATERING TRENCH
B. INSTALLATION OF TOPSOIL AMENDMENT
2. INSTALLATION OF VEGETATED SWALES A, B, & C
3. INSTALLATION OF TOPSOIL AMENDMENT
4. PERMANENT SITE STABILIZATION

CONSTRUCTION SEQUENCE

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING, GRUBBING AND TOPSOIL STRIPPING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMPS) TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

FAILURE TO CORRECTLY INSTALL SEDIMENT CONTROL FACILITIES OR FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE CORRECTIVE ACTIONS TO IMMEDIATELY RESOLVE FAILURES OF SEDIMENT CONTROL FACILITIES MAY RESULT IN ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DEFINED IN SECTION 602 OF THE CLEAN STREAMS LAW OF PENNSYLVANIA. 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.

1. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND A REPRESENTATIVE OF THE COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.

2. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

3. PERFORM CONSTRUCTION STAKEOUT AND FIELD MARK ALL E&S CONTROLS AND LIMITS OF DISTURBANCE.

4. INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCE W/ WASHRACK AND COMPOST FILTER SOCK PER PLAN SPECIFICATIONS AND DETAILS.

5. INSTALL TEMPORARY COMPOST FILTER SOCK PER PLAN SPECIFICATIONS AND DETAILS.

6. INSTALL CLEANWATER DIVERSION BERMS A, B, & C, PIPE 4 WITH ASSOCIATED INLET, FLARED END SECTION, AND RR-3 AND STABILIZE PER PLAN DETAILS AND SPECIFICATIONS. A PORTION OF PIPE 4 WILL BE NEED TO BE INSTALLED UNDER THE BERM FOR SEDIMENT TRAP A.

7. INITIATE STRIPPING AND STOCKPILING OF TOPSOIL FROM AREAS WHICH ARE TO BE RE-GRADED FOR THE CONSTRUCTION OF SEDIMENT TRAP A . STRIPPING SHALL BE LIMITED TO THOSE AREAS WHICH ARE TO BE IMMEDIATELY RE-GRADED. STOCKPILE EXCESS SOIL AND TOPSOIL IN DESIGNATED AREA.

8. INITIATE ROUGH GRADING FOR INSTALLATION OF SEDIMENT TRAP A. TO THE EXTENT POSSIBLE, DISTURBANCE SHALL BE LIMITED TO THE AREA BEING GRADED AT ANY GIVEN TIME.

9. INSTALL SEDIMENT TRAP A PER BASIN CONSTRUCTION SEQUENCE AND PLAN SPECIFICATIONS AND DETAILS. **AVOID SOIL COMPACTION IN THE BOTTOM OF THE TRAP**. ONCE PRICIPAL RISER IS INSTALLED CAP UNTIL PCSM CONVERSTION. INSTALL RIP-RAP DISSIPATER RR-A PER PLAN DETAILS AND SPECIFICATIONS.

10. INITIATE STRIPPING AND STOCKPILING OF TOPSOIL FROM AREAS WHICH ARE TO BE RE-GRADED FOR THE CONSTRUCTION OF THE BUILDING PADS, DRIVEWAYS, TURNAROUND AREAS, AND SWALES. STRIPPING SHALL BE LIMITED TO THOSE AREAS WHICH ARE TO BE IMMEDIATELY RE-GRADED. STOCKPILE EXCESS SOIL AND TOPSOIL IN DESIGNATED AREA.

11. INITIATE ROUGH GRADING FOR BUILDING PADS, DRIVEWAYS, TURNAROUND AREAS AND SWALES. TO THE EXTENT POSSIBLE, DISTURBANCE SHALL BE LIMITED TO THE AREA BEING GRADED AT ANY GIVEN TIME.

12. INSTALL SWALES A, B & C, PER PLAN SPECIFICATIONS AND DETAILS. **AVOID SOIL COMPACTION IN BOTTOM OF SWALE DURING CONSTRUCTION**. INSTALL RIPRAP APRON RR-1 & RR-2 PER PLAN DETAILS AND SPECIFICATIONS. INSTALL CONVEYANCE PIPES WITH INLETS AND FLARED END SECTIONS PER PLAN DETAILS AND SPECIFICATIONS..

13. INSTALL CONCRETE WASTE DISPOSAL AREA PER PLAN DETAILS AND SPECIFICATIONS AND INITIATE BUILDING CONSTRUCTION AND INSTALL ALL UNDERGROUND UTILITIES.

14. COMPLETE THE FINAL GRADING OF THE AREA PER THE SITE PLAN. INSTALL ROCK SPLASH PADS PER PLAN SPECIFICATIONS AND DETAILS. REMOVE ALL SEDIMENT FROM E&S CONTROLS, INCLUDING ALL SILT SOXX, SWALES, AND WORK INTO THE FINAL GRADING. E&S CONTROLS ARE TO REMAIN IN PLACE.

15. WHEN FINAL GRADE IS ACHIEVED, PERMANENT VEGETATIVE STABILIZATION SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS. ANY SLOPE EQUAL TO OR EXCEEDING 3:1 SHALL HAVE EROSION CONTROL BLANKET INSTALLED ON THE SLOPE PER PLAN SPECIFICATIONS AND DETAILS. STABILIZE ALL DRIVEWAYS AND TURNAROUND AREAS WITH GRAVEL.

16. ONCE THE SITE IS STABILIZED PER THE PERMANENT STABILIZATION SPECIFICATIONS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE COUNTY CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO THE COMMENCEMENT OF PCSM IMPROVEMENTS. PCSM IMPROVEMENTS CAN ONLY COMMENCE ONCE THE COUNTY CONSERVATION DISTRICT HAS BEEN CONTACTED AND THE SITE IS STABILIZED PER THE PERMANENT STABILIZATION SPECIFICATIONS.

17. REMOVE SEDIMENT ACCUMULATION FROM THE SEDIMENT TRAP, TREAT FOR COMPACTION, AND INSTALL TOPSOIL AMENDMENT. SPOILED SEDIMENT MAY BE PLACED IN THE AREA OF THE TOPSOIL STOCKPILE AREA. UNCAP PRINCIPAL SPILLWAY, REMOVE ROCK EMBANKMENT FILTER AND OVER EXCAVATE TO ALLOW FOR THE CLAY CORE TO BE TIED INTO WHEN INSTALLING THE EMERGENCY SPILLWAY. ONCE COMPLETED ESTABLISH PERMANENT SEEDING.

18. INSTALL TOPSOIL AMENDMENT ALONG DRIVEWAY TO PROMOTE WATER QUALITY AND PREVENT AN ACCELERATED EROSION CONDITION ALONG THE DRIVEWAY. PER PLAN DETAILS AND SPECIFICATIONS.

19. REVEGETATE CROPLAND PER PLAN NOTES AND DETAILS

20 PERMANENTLY STABILIZE ANY AREAS NOT FULLY ESTABLISHED WITH VEGETATION.

21. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE COUNTY CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO THE REMOVAL OF THE TEMPORARY BMPS.

22. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES, REMOVAL OF ALL TEMPORARY BMPS AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OPERATORS SHALL CONTACT THE COUNTY CONSERVATION DISTRICT FOR A FINAL INSPECTION.

PCSM BASIN CONSTRUCTION NOTES

BASIN CONSTRUCTION NOTES:
INFILTRATION FACILITIES RELY ON PERMEABLE SOIL CONDITIONS TO DEWATER AND FUNCTION PROPERLY. AS PART OF THE DESIGN PROCESS, SOIL, GEOLOGIC AND/OR INFILTRATION TESTING WAS CONDUCTED BY A QUALIFIED PROFESSIONAL, SOIL SCIENTIST OR LICENSED GEOLOGIST TO ASSURE THAT CONDITIONS WERE CONDUCIVE TO UTILIZE THIS TYPE OF FACILITY FOR STORMWATER MANAGEMENT CONTROL.

EVERY PRECAUTION MUST BE MAINTAINED BY THE CONTRACTOR DURING THE CONSTRUCTION OF THE INFILTRATION FACILITY TO ASSURE THAT COMPACTION DOES NOT OCCUR WHICH WOULD COMPRISE THE PERMEABILITY OF THE FLOOR OF THE INFILTRATION FACILITY. ONLY LIGHT CONSTRUCTION EQUIPMENT SHALL BE ALLOWED WITHIN THE BASIN INTERIORS. ANY EQUIPMENT THAT ENTERS THE BASINS DURING CONSTRUCTION OR DURING THE CONVERSION TO THEIR PERMANENT CONFIGURATION SHALL BE LIMITED TO A GROUND PRESSURE OF 4 POUNDS PER SQUARE INCH.

A MINIMUM DEPTH OF 24" BETWEEN THE BOTTOM OF THE BASIN AND THE SEASONAL HIGH WATER TABLE AND/OR BEDROCK (LIMITING ZONE) IS REQUIRED. THE BOTTOM OF THE BASIN SHALL BE UNDISTURBED OR UNCOMPACTED SUBGRADE. IF BEDROCK IS PRESENT WITHIN 24" OF THE BOTTOM OF THE BASIN, OVER-EXCAVATE 24" AND FILL AREA WITH UNCOMPACTED NATIVE MATERIAL TO THE BOTTOM OF THE BASIN.

HALT EXCAVATION AND NOTIFY THE ENGINEER IMMEDIATELY IF EVIDENCE OF SINKHOLE ACTIVITY OR PINNACLES OF CARBONATE ROCK ARE ENCOUNTERED IN THE AREA OF THE BASIN.

IF AFTER INSTALLATION, ANY INFILTRATION FACILITY DOES NOT FUNCTION AS DESIGNED, AND THE CAUSE IS DETERMINED BY A QUALIFIED PROFESSIONAL TO BE INCORRECT CONSTRUCTION OF COMPACTION DURING CONSTRUCTION, THE CONTRACTOR WILL RESPONSIBLE TO PERFORM REMEDIATION, OUTLINED BY THE SOIL AMENDMENT AND RESTORATION NOTES TO RESTORE BASIN PERMEABILITY.

CONSTRUCTION SEQUENCE:
1. INSTALL PRINCIPAL SPILLWAY AND EMERGENCY SPILLWAY IF NOT ALREADY INSTALLED DURING THE E&S PHASE.
2. INSTALL MAINTENANCE DEWATERING UNDERDRAIN IF SPECIFIED.
3. REMOVE ALL SEDIMENT FROM BASIN IF BASIN WAS USED AS E&S CONTROL DURING CONSTRUCTION.
4. TREAT COMPACTION AND INSTALL 12" MINIMUM TOPSOIL AMENDMENT PER SOIL AMENDMENT AND RESTORATION NOTES
5. COMPLETE FINAL GRADING TO ACHIEVE PROPOSED DESIGN ELEVATIONS.
6. IMMEDIATELY AFTER FINAL GRADE IS ACHIEVED FOR PCSM BASIN, PERMANENT VEGETATIVE STABILIZATION SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS PER PLAN SPECIFICATIONS AND DETAILS. ANY SLOPE 3:1 OR STEEPER SHALL HAVE EROSION CONTROL MATTING INSTALLED ON THE SLOPE PER PLAN SPECIFICATIONS AND DETAILS.

PCSM VEGETATED SWALE CONSTRUCTION NOTES

VEGETATED SWALE & BERM NOTES:
NOTE: IF A VEGETATED SWALE IS USED FOR RUNOFF CONVEYANCE DURING CONSTRUCTION, IT SHOULD BE GRADED AND STABILIZED IMMEDIATELY. ANY DAMAGED AREAS SHOULD BE FULLY RESTORED TO ENSURE FUTURE FUNCTIONALITY OF THE SWALE.

CONSTRUCTION SEQUENCE:
1. ROUGH GRADE THE VEGETATED SWALE. EQUIPMENT SHALL AVOID EXCESSIVE COMPACTION AND/OR LAND DISTURBANCE.
2. REPLACE TOPSOIL AMENDMENT BACK IN VEGETATED SWALE PER PLAN DETAILS AND SPECIFICATIONS. SEE SOIL AMENDMENT AND RESTORATION NOTES.
3. CONSTRUCT CHECK DAMS, IF REQUIRED.
4. FINE GRADE THE VEGETATED SWALE.
5. INSTALL PERMANENT SEEDING AND PROTECTIVE LINING AS PER APPROVED PLANS AND ACCORDING TO FINAL PLANTING LIST.

SOIL AMENDMENT & RESTORATION CONSTRUCTION NOTES

SOIL AMENDMENT NOTES:

SOIL AMENDMENT AND RESTORATION IS THE PROCESS OF RESTORING DISTURBED SOILS BY RESTORING SOIL POROSITY BY PHYSICAL TREATMENT AND/OR ADDING A SOIL AMENDMENT, SUCH AS TOPSOIL, COMPOST OR COMPOSTED MANURE SOLIDS.
THE SOIL RESTORATION PROCESS MAY NEED TO BE REPEATED OVER TIME, DUE TO COMPACTION BY USE AND/OR SETTLING.

1. BIORETENTION BASIN CONSTRUCTION SEQUENCE:
a. TREAT COMPACTED AREAS BY RIPPING / SUBSOILING / TILLING / SCARIFYING AS OUTLINED BELOW, PRIOR TO REPLACEMENT OF TOPSOIL AMENDMENT IN THE BMP.
b. DISTRIBUTE TOPSOIL AMENDMENT OVER INFILTRATION BMP. ON-SITE TOPSOIL WITH AN ORGANIC CONTENT OF AT LEAST 5 PERCENT CAN BE PROPERLY STOCKPILED AND USED. COMPOSTED MANURE SOLIDS MAY BE USED TO AMEND SOIL AT A RATE OF 5%-15%. GREEN MANURE MAY NOT BE USED.
c. STABILIZED BMP PER PLAN SPECIFICATIONS AND DETAILS.
2. VEGETATED SWALE, CONSTRUCTION SEQUENCE:
a. TREAT COMPACTED AREAS BY RIPPING / SUBSOILING / TILLING / SCARIFYING AS OUTLINED BELOW, PRIOR TO REPLACEMENT OF TOPSOIL AMENDMENT IN THE BMP.
b. DISTRIBUTE TOPSOIL WITH A HIGH ORGANIC CONTENT BACK WITHIN VEGETATED SWALES. ON-SITE TOPSOIL WITH A CONTENT OF AT LEAST 5 PERCENT CAN BE PROPERLY STOCKPILED AND USE. STABILIZED BMP PER PLAN SPECIFICATIONS AND DETAILS.
c. STABILIZE BMP PER PLAN SPECIFICATION AND DETAILS
3. TREATING COMPACTION BY RIPPING / SUBSOILING / TILLING / SCARIFICATION CONSTRUCTION SEQUENCE:
a. SUBSOILING IS ONLY EFFECTIVE WHEN PERFORMED ON DRY SOILS.
b. RIPPING, SUBSOILING, OR SCARIFICATION OF THE SUBSOIL SHOULD BE PERFORMED WHERE SUBSOIL HAS BECOME COMPACTED BY EQUIPMENT OPERATION, DRIED OUT AND CRUSTED, OR WHERE NECESSARY TO OBLITERATE EROSION RILLS.
c. RIPPING (SUBSOILING) SHOULD BE PERFORMED USING A SOLID-SHANK RIPPER AND TO A DEPTH OF 20 INCHES, (8 INCHES FOR MINOR COMPACTION).
d. SHOULD BE PERFORMED BEFORE TOPSOIL AMENDMENT IS PLACED AND AFTER ANY EXCAVATION OF COMPLETED.
e. SUBSOILING SHOULD NOT BE PERFORMED WITH COMMON TILLAGE TOOLS SUCH AS A DISK OR CHISEL PLOW BECAUSE THEY ARE TOO SHALLOW AND CAN COMPACT THE SOIL JUST BENEATH THE TILLAGE DEPTH.

TABLE 4.2: COMPOST STANDARDS
(FROM PA DEP E&S CONTROL MANUAL)

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

PERMANENT STABILIZATION CONSTRUCTION NOTES

1. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

2. ALL TOPSOIL SHALL BE REPLACED AT A DEPTH OF AT LEAST 6" IN ORDER TO PROMOTE STORMWATER INFILTRATION AND PERMANENT VEGETATIVE STABILIZATION ON ALL DISTURBED AREAS TO BE PERMANENTLY REVEGETATED.

3. ALL TOPSOIL SHALL BE LOOSENED TO A DEPTH OF AT LEAST 4". ALL OBJECTIONABLE MATERIAL LARGER THAN 2" SHALL BE REMOVED.

4. CONTRACTOR SHALL PROVIDE SOIL TESTING PH BEFORE IMPLEMENTING PERMANENT SEEDING. LIMESTONE AND FERTILIZER SHALL BE APPLIED UNIFORMLY TO AREAS TO BE SEEDED, AND WORKED INTO THE SOIL TO A DEPTH OF 2". IN THE ABSENCE OF SOILS TESTING, APPLY LIMESTONE AND FERTILIZER PER THE APPLICATION RATE SPECIFIED BELOW.
A. LIMESTONE - PULV. AG., AT 6 TONS/ACRE
B. FERTILIZER - 100 LBS/AC N, 200 LBS/AC P205, 200 LBS/AC K20
* BASED ON EROSION CONTROL & CONSERVATION PLANTING ON NONCROPLAND.

5. MULCH OF LONG STEM STRAW SHALL BE APPLIED AT AN EVEN APPLICATION OF 3 TONS/ACRE WITH A SURFACE COVERING OF 100%, MULCH SHALL BE EITHER MECHANICALLY STABILIZED OR STABILIZED BY USE OF A TACKIFIER.

6. HYDROSEED IS NOT CONSIDERED STABILIZATION UNTIL IT GERMINATES.

SEEDING MIX: LOW MAINTENANCE BASIN	SEEDING MIX: EMBANKMENTS	SEEDING MIX: SWALES/LOWLANDS/VFS
CONSERVATION FORMULATIONS: BASIN MIX: CONSERVE - LOW MAINTENANCE BASIN 50% TALL FESCUE 18% HARD FESCUE 10% PERENNIAL RYEGRASS 10% CREEPING RED FESCUE 6% WHITE CLOVER 6% REDTOP	CONSERVATION FORMULATIONS: EMBANKMENTS: CONSERVE - HIGH & DRY 55% TALL FESCUE 19% HARD FESCUE 10% SWITCHGRASS 10% PERENNIAL RYEGRASS 6% WHITE CLOVER	CONSERVATION FORMULATIONS: SWALES & LOWLANDS: CONSERVE - LOWLAND 54% TALL FESCUE 24% POA TRIVIALIS 10% PERENNIAL RYEGRASS 6% REDTOP 6% REED CANARYGRASS
SEEDING RATE: 200 LBS PER ACRE	SEEDING RATE: 150 LBS PER ACRE	SEEDING RATE: 200 LBS PER ACRE

SUPPLIED BY: F.M. BROWN'S SONS, INC. SINKING SPRING, PA,
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POST-CONSTRUCTION STORMWATER MANAGEMENT OPERATION AND MAINTENANCE

OWNER / OPERATOR

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ACKNOWLEDGEMENT OF RESPONSIBILTY

I HEREBY ACKNOWLEDGE THAT, I AM RESPONSIBLE FOR THE POST-CONSTRUCTION OPERATION AND MAINTENANCE OF ALL STORMWATER MANAGEMENT CONVEYANCES AND BEST MANAGEMENT PRACTICES AS STATED BELOW. INSPECTIONS WILL BE LOGGED ONTO DEP FORM 3150-FM-BWEW0083 AND KEPT ON SITE AT ALL TIMES.

OWNER / OPERATOR ____________ DATE ____________

OPERATION AND MAINTENANCE NOTES

1. ALL STORMWATER MANAGEMENT CONVEYANCES AND BEST MANAGEMENT PRACTICES SHOWN ON THIS PLAN SHALL BE CONSTRUCTED BY THE CONTRACTOR IN ACCORDANCE WITH THE DESIGN, CONDITIONS AND SPECIFICATIONS IDENTIFIED ON THIS PLAN. OWNERSHIP, OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES SHALL BE THE RESPONSIBILITY OF THE LANDOWNER, HIS SUCCESSORS AND ASSIGNS IN PERPETUITY, UNLESS SPECIFICALLY IDENTIFIED OTHERWISE HEREIN.

2. STORMWATER MANAGEMENT CONVEYANCES AND BEST MANAGEMENT PRACTICES SHALL BE OPERATED AND MAINTAINED IN GOOD WORKING CONDITION TO ENSURE THAT THEY PERFORM THEIR DESIGN FUNCTION, IN A MANNER ACCEPTABLE TO THE TOWNSHIP AND COUNTY.

3. THE OWNER SHALL INSPECT EACH STORMWATER MANAGEMENT CONVEYANCE AND BEST MANAGEMENT PRACTICE AFTER EACH SIGNIFICANT RAINFALL EVENT. APPROPRIATE ACTION SHALL BE TAKEN TO ENSURE ALL MAINTENANCE. ALL MAINTENANCE COSTS WILL BE BORNE BY THE OWNER.

4. MUNICIPAL AND COUNTY OFFICIALS AND THEIR AGENTS OR EMPLOYEES SHALL HAVE THE RIGHT OF ACCESS FOR INSPECTION AND, IN CASES OF CONSTRUCTION DEFAULT, CONSTRUCTION OF THE STORMWATER MANAGEMENT CONVEYANCES AND BEST MANAGEMENT PRACTICES.

5. ALL STORMWATER FROM THE DEVELOPED SITE IS DESIGNED TO BE DIRECTED TO THE STORMWATER BMP'S AS SHOWN ON THE PLANS. SEE THE BMP SPECIFIC OPERATION AND MAINTENANCE NOTES.

BIO-RETENTION BASIN O&M NOTES

BASIN NOTES:
THE INFILTRATION OF STORMWATER ENSURES THAT THE PEAK FLOW RATE AND VOLUME LEAVING THE SITE WILL NOT INCREASE. SUCH INCREASES MAY CAUSE FLOODING AND CHANNEL EROSIONS DOWNSTREAM OF THE SITE. THE BASINS SHALL BE MAINTAINED AND STABILIZED WITH PERMANENT VEGETATIVE COVER.

THE BASIN HAS A PRINCIPAL SPILLWAY OUTLET STRUCTURE WHICH IS CONNECTED TO AN OUTLET PIPE.

THE BASIN HAS A MAINTENANCE DEWATERING UNDERDRAIN. THE MAINTENANCE DEWATERING UNDERDRAIN HAS A SHUT-OFF VALVE LOCATED INSIDE THE RISER PIPE OF THE PRINCIPAL SPILLWAY. THE SHUT-OFF VALVE SHALL BE CLOSED FOR NORMAL OPERATION OF THE BASIN. THE SHUT-OFF VALVE SHALL BE OPENED ONLY IF THE BASIN BECOMES SEDIMENT-CLOGGED, DOES NOT DEWATER WITHIN 72 HOURS AFTER A STORM EVENT AND REQUIRES MAINTENANCE.

THE BASIN HAS AN EMERGENCY SPILLWAY. THE EMERGENCY SPILLWAY IS A VEGETATED, BROAD-CRESTED WEIR. THE CREST AND EXIT SLOPE OF THE EMERGENCY SPILLWAY SHALL BE MAINTAINED AND STABILIZED WITH PERMANENT VEGETATIVE COVER AND PERMANENT EROSION CONTROL MATTING.

PRIOR TO THE INSTALLATION OF THE EMERGENCY SPILLWAY MATTING, THE PROPERTY OWNER AND/OR INSTALLER SHOULD CONTACT THE LOCAL MANUFACTURER'S REPRESENTATIVE FOR INSTALLATION ADVICE.

SHOULD VEGETATION FAIL TO ADEQUATELY ESTABLISH THROUGH THE TRM AFTER ONE GROWING SEASON, THE PROPERTY OWNER AND/OR INSTALLER SHOULD CONTACT THE LOCAL MANUFACTURER'S REPRESENTATIVE FOR ADDITIONAL GUIDANCE

INSPECTION:
- INSPECT THE BASIN AND ITS PRINCIPAL SPILLWAY AND EMERGENCY SPILLWAY FOR DEBRIS AND/OR EROSION.
- INSPECT THE STRUCTURAL INTEGRITY OF THE PRINCIPAL SPILLWAY AND ITS APPURTENANCES.
- INSPECT THAT SHUT-OFF VALVE FOR THE MAINTENANCE DEWATERING UNDERDRAIN IS CLOSED.
- INSPECT THE PRINCIPAL SPILLWAY OUTLET FOR EROSION.
- INSPECT THE PERMANENT EROSION CONTROL MATTING ON THE CREST AND EXIT SLOPE OF THE EMERGENCY SPILLWAY FOR DAMAGE.
- INSPECT THE PERMANENT VEGETATIVE COVER ON THE SOIL SURFACE OF THE BASIN AND ITS EMERGENCY SPILLWAY FOR A UNIFORM 70% VEGETATIVE COVER.

MAINTENANCE ISSUES:
PROPERLY DESIGNED AND INSTALLED BASINS REQUIRE SOME REGULAR MAINTENANCE.
- IF THE BASIN FAILS TO DEWATER WITHIN THE REQUIRED TIME FRAME. THE OPERATOR SHALL REMEDIATE THE BOTTOM OF THE BASIN PER SITE PLAN SPECIFICATIONS AND RESTORE THE BMP TO THE ORIGINAL CROSS-SECTION AND INFILTRATION RATE. INFILTRATION TESTING WILL BE REQUIRED DETERMINE THE REMEDAITION WAS SUFFICIENT.
- REMOVE DEBRIS AND/OR SEDIMENT FROM THE BASIN AND ITS PRINCIPAL SPILLWAY AND EMERGENCY SPILLWAY.
- REPAIR OR REPLACE DAMAGED PORTIONS OF THE PRINCIPAL SPILLWAY AND ITS APPURTENANCES.
- ENSURE THE SHUT-OFF VALVE FOR THE MAINTENANCE DEWATERING UNDERDRAIN IS CLOSED FOR NORMAL OPERATION OF THE BASIN.
- OPEN THE SHUT-OFF VALVE FOR THE MAINTENANCE DEWATERING UNDERDRAIN ONLY IF THE BASIN BECOMES SEDIMENT-CLOGGED, DOES NOT DEWATER WITH 72 HOURS AFTER A STORM EVENT AND REQUIRES MAINTENANCE.
- REPLACE DAMAGED PERMANENT EROSION CONTROL MATTING ON THE CREST AND/OR EXIT SLOPE OF THE EMERGENCY SPILLWAY.
- IF PERMANENT VEGETATIVE COVER FALLS BELOW 70% OF THE SOIL SURFACE OF THE BASIN AND/OR ITS EMERGENCY SPILLWAY, RE-SEED OR OVER-SEED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
- APPLY LIME AND FERTILIZER IN ACCORDANCE WITH RECOMMENDATIONS BASED ON SOIL TESTING.
- MOW ALL GRASSES AT LEAST TWICE EACH YEAR.

VEGETATED AREA O&M NOTES

VEGETATED AREA NOTES:
VEGETATED AREAS ARE INSTALLED TO PROMOTE STORMWATER INFILTRATION AND PROVIDE RUNOFF RATE CONTROL. VEGETATED AREAS SHALL BE MAINTAINED AND STABILIZED WITH PERMANENT VEGETATIVE COVER. VEGETATED AREAS SHALL BE MAINTAINED IN A MEADOW CONDITION.

INSPECTION:
- INSPECT THE AMOUNT OF PERMANENT VEGETATIVE COVER ON THE SOIL SURFACE.
- INSPECT THE AMOUNT OF PERMANENT VEGETATIVE COVER ON THE SOIL SURFACE OF THE VEGETATED LEVEL SPREADER.
- BIWEEKLY INSPECTIONS ARE RECOMMENDED FOR AT LEAST THE FIRST GROWING SEASON, OR UNTIL THE VEGETATION IS PERMANENTLY ESTABLISHED.
- ONCE THE VEGETATION IS ESTABLISHED, INSPECTIONS OF HEALTH, DIVERSITY, AND DENSITY SHOULD BE PERFORMED AT LEAST TWICE PER YEAR, DURING BOTH THE GROWING AND NON-GROWING SEASON.

MAINTENANCE:
- IF PERMANENT VEGETATIVE COVER FALLS BELOW 70% OF THE SOIL SURFACE, RE-SEED OR OVER-SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.
- APPLY LIME AND FERTILIZER IN ACCORDANCE WITH RECOMMENDATIONS BASED ON SOIL TESTING.
- MOW ALL GRASSES AT LEAST TWICE EACH YEAR. MOWING SHOULD BE DONE ONLY WHEN THE SOIL IS DRY, IN ORDER TO PREVENT TRACKING DAMAGE TO VEGETATION, SOIL COMPACTION, AND FLOW CONCENTRATIONS. DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY.

VEGETATED SWALE & BERM O&M NOTES

VEGETATED SWALE & BERM NOTES:
VEGETATED SWALES ARE INSTALLED TO PROMOTE WATER QUALITY AND STORMWATER INFILTRATION. VEGETATED SWALES SHALL BE MAINTAINED AND STABILIZED WITH PERMANENT VEGETATIVE COVER. VEGETATED SWALES SHALL BE MAINTAINED IN A MEADOW CONDITION. ANY DAMAGED AREAS SHOULD BE FULLY RESTORED TO ENSURE FUTURE FUNCTIONALITY OF THE SWALE.

INSPECTION AND MAINTENANCE ISSUES:
THE FOLLOWING SCHEDULE OF INSPECTION AND MAINTENANCE ACTIVITIES IS RECOMMENDED:
MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY AND WITHIN 48 HOURS AFTER EVERY MAJOR STORM EVENT (> 1 INCH RAINFALL DEPTH):
- INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN > 3 INCHES AT ANY SPOT OR COVERING VEGETATION)
- INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED
- INSPECT FOR POOLS OF STANDING WATER; DEWATER AND DISCHARGE TO AN APPROVED LOCATION AND RESTORE TO DESIGN GRADE
- MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN SWALE IS DRY TO AVOID RUTTING
- INSPECT FOR LITTER; REMOVE PRIOR TO MOWING
- INSPECT FOR UNIFORMITY IN CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED
- INSPECT SWALE INLET (CURB CUTS, PIPES, ETC.) AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED

MAINTENANCE ACTIVITIES TO BE DONE AS NEEDED:
- PLANT ALTERNATIVE GRASS SPECIES IN THE EVENT OF UNSUCCESSFUL ESTABLISHMENT.
- RESEED BARE AREAS; INSTALL APPROPRIATE EROSION CONTROL MEASURES WHEN NATIVE SOIL IS EXPOSED OR EROSION CHANNELS ARE FORMING
- ROTOTILL AND REPLANT SWALE IF STANDING WATER EXISTS FOR MORE THAN 48 HOURS
- INSPECT AND CORRECT CHECK DAMS WHEN SIGNS OF ALTERED WATER FLOW (CHANNELIZATION, OBSTRUCTIONS, EROSION, ETC.) ARE IDENTIFIED
- WATER DURING DRY PERIODS, FERTILIZE, AND APPLY PESTICIDE **ONLY WHEN ABSOLUTELY NECESSARY**
- REMOVE DEBRIS AND/OR SEDIMENT FROM SWALES AND DIVERSION BERMS.
- IF PERMANENT VEGETATIVE COVER FALLS BELOW 70% OF THE SOIL SURFACE OF THE SWALES AND DIVERSION BERMS, RE-SEED OR OVER-SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.
- MOW ALL GRASSES AT LEAST TWICE EACH YEAR.

AUXILIARY SPILLWAYNOTES

AUXILIARY SPILLWAY NOTES:
AUXILIARY SPILLWAYS: THE AUXILIARY SPILLWAYS SHALL ENSURE POSITIVE DRAINAGE AWAY FROM THE BUILDINGS SHOULD THE STORMWATER PIPES DRAINING THE SWALES BETWEEN THE BUILDINGS BECOME CLOGGED. THE GRADING TO CONVEY ANY STORMWATER DISCHARGED FROM THE AUXILIARY SPILLWAYS OVER GRAVEL AREAS TO THE BASINS SHALL BE MAINTAINED AND SHALL REMAIN FREE OF ANY OBSTRUCTIONS THAT WOULD IMPEDE THE CONVEYANCE OF STORMWATER. GRAVEL DEPTH IN THE AREAS GRADED TO CONVEY STORMWATER FROM THE AUXILIARY SPILLWAYS TO THE BASINS SHALL BE MAINTAINED AS NECESSARY TO RESIST THE LOADS AND RUTTING IMPOSED BY THE ANTICIPATED TRAFFIC.

INSPECTION:
- INSPECT THAT STORMWATER WOULD BE CONVEYED FROM THE AUXILIARY SPILLWAYS TO THE BASINS.
- INSPECT FOR RUTS IN THE GRAVEL AREAS FROM THE AUXILIARY SPILLWAYS.
- INSPECT FOR AREAS WHERE GRAVEL DEPTH IS THINNING IN THE AUXILIARY

MAINTENANCE:
- RE-GRADE GRAVEL AREAS TO ENSURE THE CONVEYANCE OF STORMWATER.
- REMOVE ANY OBSTRUCTIONS THAT WOULD IMPEDE THE CONVEYANCE OF STORMWATER.
- FILL RUTS WITH GRAVEL.
- REPLACE GRAVEL IN AREAS WHERE GRAVEL DEPTH IS THINNING.

ROCK SPLASH PAD NOTES

ROCK SPLASH PAD NOTES:
ROCK SPLASH PADS SHALL BE MAINTAINED TO THE ORIGINAL DESIGN SPECIFICATIONS AND TO PREVENT EROSION FROM ROOF RUNOFF.

INSPECTION:
- INSPECT FOR EROSION BEYOND THE WIDTH OF THE ROCK SPLASH PADS.
- INSPECT FOR LOSS OF STONE.

MAINTENANCE:
· IF THE WIDTH OF THE ROCK SPLASH PADS IS NOT ADEQUATE TO PREVENT EROSION FROM ROOF RUNOFF, INCREASE THE WIDTH OF THE ROCK SPLASH PADS.
· REPLACE STONE TO MAINTAIN THE ORIGINAL DESIGN SPECIFICATIONS.

GRAVEL DRIVEWAY NOTES

GRAVEL AREA NOTES:
GRAVEL AREAS: GRAVEL DEPTH SHALL BE MAINTAINED AS NECESSARY TO RESIST THE LOADS AND RUTTING IMPOSED BY THE ANTICIPATED TRAFFIC.

INSPECTION:
- INSPECT FOR RUTS.
- INSPECT FOR AREAS WHERE GRAVEL DEPTH IS THINNING.

MAINTENANCE:
- FILL RUTS WITH GRAVEL.
- REPLACE GRAVEL IN AREAS WHERE GRAVEL DEPTH IS THINNING.

STORMWATER PIPES & APPURTENANCES

STORMWATER PIPE & APPURTENANCES NOTES:
STORMWATER PIPES AND APPURTENANCES SHALL BE MAINTAINED TO ENSURE STRUCTURAL INTEGRITY, DESIGN FLOW CAPACITY AND THE UNIMPEDED CONVEYANCE OF STORMWATER. APPURTENANCES INCLUDE FLARED END SECTIONS.

INSPECTION:
- INSPECT STORMWATER PIPES AND APPURTENANCES FOR DEBRIS AND/OR SEDIMENT.
- INSPECT THE STRUCTURAL INTEGRITY OF STORMWATER PIPES AND APPURTENANCES.

MAINTENANCE:
- REMOVE AND/OR FLUSH DEBRIS AND/OR SEDIMENT FROM STORMWATER PIPES AND APPURTENANCES.
- REPAIR OR REPLACE DAMAGED STORMWATER PIPES AND APPURTENANCES.

RIPRAP OUTLET/DISSIPATER PROTECTION

RIPRAP NOTES:
RIPRAP OUTLET/DISSIPATER PROTECTION SHALL BE MAINTAINED TO THE ORIGINAL DESIGN SPECIFICATIONS AND TO PREVENT EROSION.

INSPECTION:
- INSPECT FOR EROSION AT OUTLETS.
- INSPECT FOR LOSS OF RIPRAP.

MAINTENANCE:
- IF THE SPECIFIED RIPRAP SIZE IS NOT ADEQUATE TO PREVENT EROSION, INSTALL RIPRAP OF A LARGER SIZE.
- REPLACE RIPRAP TO MAINTAIN THE ORIGINAL DESIGN SPECIFICATIONS.

RE-VEGETATED CROPLAND NOTES

RE-VEGETATED CROPLAND NOTES:

THE AREA DELINEATED AS RE-VEGETATED CROPLAND SHALL BE RESTORED TO THE EXISTING PRE-DEVELOPMENT CONDITION. THESE AREAS ARE LIMITED TO TRAVEL PATHS FOR CONSTRUCTION EQUIPMENT, AREAS BETWEEN THE REGRADED AREAS AND FILTERSOCK, AND THE TOPSOIL STOCKPILE AREAS.

RESTORATION SEQUENCE:
1. THE RE-VEGETATED CROPLAND AREAS SHALL BE TREATED FOR COMPACTION IN ACCORDANCE WITH THE NOTES BELOW.
A. TREATING COMPACTION BY RIPPING / SUBSOILING / TILLING / SCARIFICATION CONSTRUCTION SEQUENCE:
a. SUBSOILING IS ONLY EFFECTIVE WHEN PERFORMED ON DRY SOILS.
b RIPPING, SUBSOILING, OR SCARIFICATION OF THE SUBSOIL SHOULD BE PERFORMED WHERE SUBSOIL HAS BECOME COMPACTED BY EQUIPMENT OPERATION, DRIED OUT AND CRUSTED, OR WHERE NECESSARY TO OBLITERATE EROSION RILLS.
c. RIPPING (SUBSOILING) SHOULD BE PERFORMED USING A SOLID-SHANK RIPPER AND TO A DEPTH OF 20 INCHES, (8 INCHES FOR MINOR COMPACTION).
d. SHOULD BE PERFORMED BEFORE TOPSOIL AMENDMENT IS PLACED AND AFTER ANY EXCAVATION OF COMPLETED.
e. SUBSOILING SHOULD NOT BE PERFORMED WITH COMMON TILLAGE TOOLS SUCH AS A DISK OR CHISEL PLOW BECAUSE THEY ARE TOO SHALLOW AND CAN COMPACT THE SOIL JUST BENEATH THE TILLAGE DEPTH.
SOIL AMENDMENT AND RESTORATION IS THE PROCESS OF RESTORING DISTURBED SOILS BY RESTORING SOIL POROSITY BY PHYSICAL TREATMENT AND/OR ADDING A SOIL AMENDMENT, SUCH AS TOPSOIL, COMPOST OR COMPOSTED MANURE SOLIDS.
THE SOIL RESTORATION PROCESS MAY NEED TO BE REPEATED OVER TIME, DUE TO COMPACTION BY USE AND/OR SETTLING.
2. ONCE COMPACTION HAS BEEN REMEDIATED THE AREA SHALL BE RESTORED TO THE PRE-DEVELOPMENT CONDITION. CULTIVATED AREAS SHALL THEN BE STABILIZED IN ACCORDANCE WITH THE FARM CONSERVATION PLAN/MANURE MANAGEMENT PLAN. THE OPERATOR SHALL FOLLOW THOSE GUIDELINES TO DETERMINE THE APPROPRIATE MANURE SPREADER CALIBRATION AND CROP ROTATION SCHEDULE. THESE AREAS ARE CONSIDERED STABILIZED IF A 70% UNIFORM VEGETATED COVER IS ACHIEVED OR IF THE AREA IS REPRESENTATIVE OF TYPICAL GROUND COVER CONDITIONS ASSOCIATED WITH STANDARD FARMING OPERATIONS.

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NO	BY	DATE	REVISION

CLIENT
JOE RAMER
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PHONE #: 717-532-2899

PROJECT TITLE
FINAL LAND DEVELOPMENT PLAN
FOR
JOE RAMER POULTRY OPERATION
SOUTH NEWTON TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

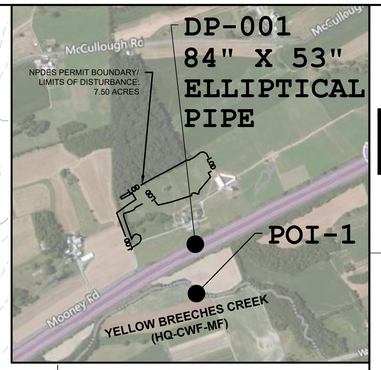
SHEET TITLE
PCSM PLAN:
NOTES

0'
SCALE: AS NOTED

SEAL

DRAWN BY: BJN
CHECKED BY: MHH
DATE: 08/13/2020

SHEET NO.: 201



PERMIT BOUNDARY MAP

SCALE: 1" = 800'

LIGHTING SCHEDULE		
TYPE	QUANTITY	DESCRIPTION
	1	SPAULDING, LMC-175P-PC, WALLPACK LAREDO FULL CUTOFF WALLPACK, LAMPS: (1) MVR175/VBU/MEDPA, LUMENS: 17500 BLST: STD LLF = 0.72 @ 19.5

HATCH LEGEND

- WETLANDS
- VEGETATED WATERWAY
- CONCRETE
- GRAVEL
- RIP-RAP
- TOPSOIL AMENDMENT/ AVOID SOIL COMPACTION
- TEMPORARY/PERMANENT SEEDING
- RE-VEGETATED CROPLAND
- TOPSOIL STOCKPILE
- SWALE/BERM MATTING - EROSION CONTROL BLANKET
- SLOPE MATTING - EROSION CONTROL BLANKET
- ROCK CONSTRUCTION ENTRANCE

FLOODPLAIN INFORMATION
THE 100-YEAR FLOOD PLAIN IS TAKEN FROM FEMA FIRM (FLOOD INSURANCE RATE MAP), COMMUNITY-PANEL 42041C0360E (03/16/2009)

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PROJECT TITLE
FINAL
LAND DEVELOPMENT PLAN
FOR
JOE RAMER
POULTRY OPERATION
SOUTH NEWTON TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SHEET TITLE
PCSM PLAN:
CONTROL GRADING PLAN

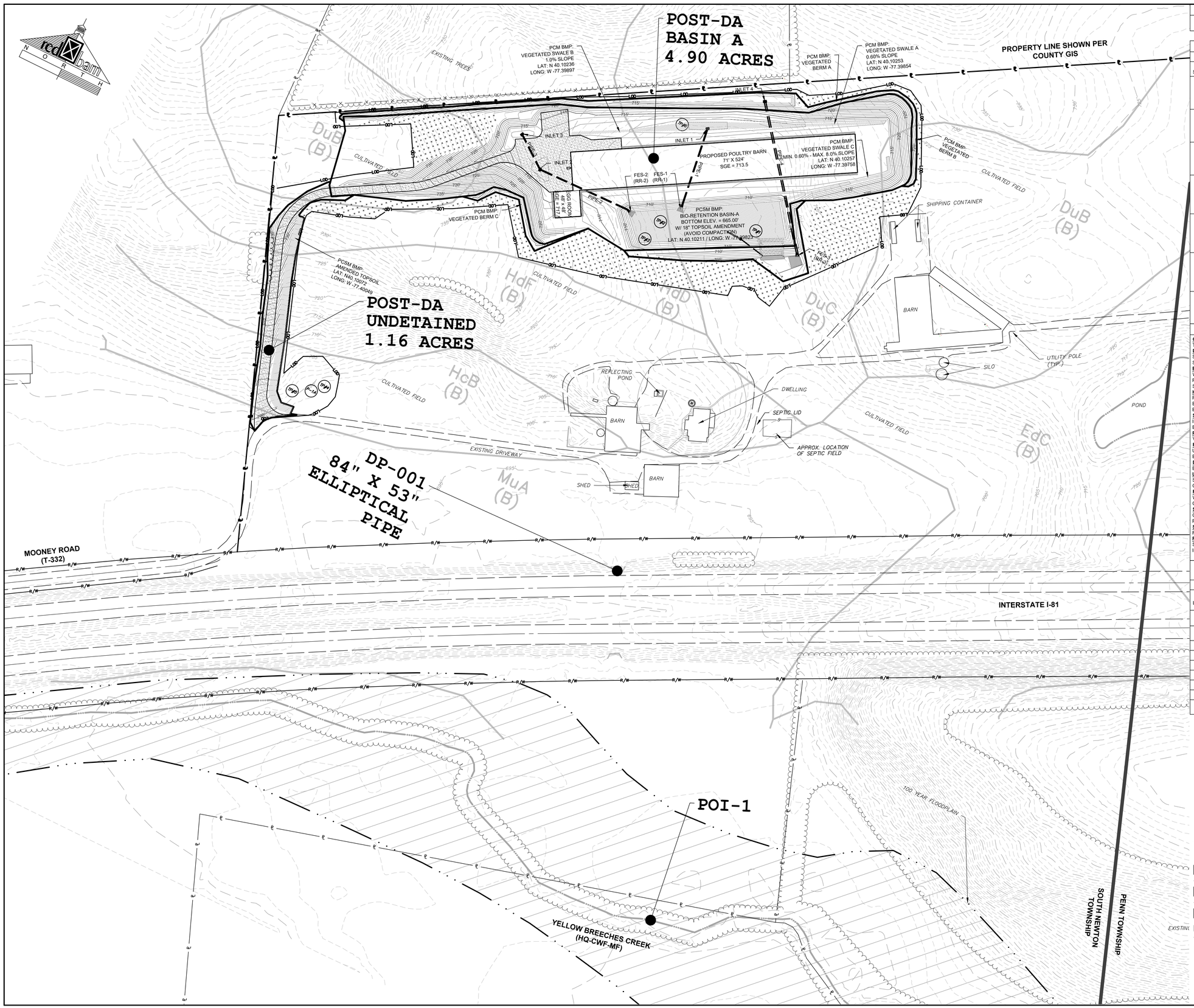
SCALE: 1" = 50'

SEAL

DRAWN BY:	CHECKED BY:
BJN	MHH

DATE: 08/13/2020

SHEET NO.: 202



FLOODPLAIN INFORMATION

THE 100-YEAR FLOOD PLAIN IS TAKEN FROM FEMA FIRM (FLOOD INSURANCE RATE MAP), COMMUNITY-PANEL 42041C0360E (03/16/2009)

SOILS INFORMATION

(PER SOILS SURVEY OF CUMBERLAND COUNTY, PENNSYLVANIA)

MAP SYMBOL	SOIL NAME	HYDROLOGIC SOIL GROUP
DuA	DUFFIELD SILT LOAM, 0-3% SLOPES LIMITATIONS: CUTBANKS CAVE, EASILY ERODIBLE, HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, SHRINK-SWELL, POTENTIAL SINKHOLE, WETNESS.	B
DuB	DUFFIELD SILT LOAM, 3-8% SLOPES LIMITATIONS: CUTBANKS CAVE, EASILY ERODIBLE, HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, SHRINK-SWELL, POTENTIAL SINKHOLE, WETNESS.	B
DuC	DUFFIELD SILT LOAM, 3-8% SLOPES LIMITATIONS: CUTBANKS CAVE, EASILY ERODIBLE, HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, SHRINK-SWELL, POTENTIAL SINKHOLE, WETNESS.	B
HcB	HAGERSTOWN SILT LOAM, 3-8% SLOPES LIMITATIONS: CUTBANKS CAVE, EASILY ERODIBLE, DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATERTABLE, HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, SHRINK-SWELL, POTENTIAL SINKHOLE.	B
HdD	HAGERSTOWN-ROCK OUTCROP COMPLEX, 8-25% SLOPES LIMITATIONS: CUTBANKS CAVE, EASILY ERODIBLE, DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATERTABLE, HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, SHRINK-SWELL, POTENTIAL SINKHOLE.	B
HdF	HAGERSTOWN-ROCK OUTCROP COMPLEX, 25-60% SLOPES LIMITATIONS: CUTBANKS CAVE, EASILY ERODIBLE, DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATERTABLE, HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, SHRINK-SWELL, POTENTIAL SINKHOLE.	B
MuA	MURRILL CHANNERY LOAM, 0-3% SLOPES LIMITATIONS: CUTBANKS CAVE, HYDRIC INCLUSIONS, LOW STRENGTH / LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, POTENTIAL SINKHOLE.	B

SOILS LIMITATIONS AND RESOLUTIONS

CUTBACK CAVE: SOIL CUT SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1. ALL TRENCHING SHALL BE DONE PER OSHA GUIDELINES.
DROUGHTY: PERMANENT STABLIZATION SHALL BE COMPLETED DURING THE GROWING SEASON. CARE SHALL BE TAKEN TO ENSURE ADEQUATE MOISTURE IS AVAILABLE FOR SEED GERMINATION.
EASILY ERODIBLE: EROSION WILL BE MINIMIZED BY ESTABLISHMENT OF VEGETATION WITH A MINIMUM 6" OF TOPSOIL. PROPER COMPACTION OF SUBSOILS WHERE REQUIRED, AND THE INSTALLATION OF MATTING PER PLAN DETAILS AND SPECIFICATIONS. SOIL SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1.
HYDRIC INCLUSIONS: THE SITE HAS BEEN INVESTIGATED AND NO DISTURBANCE WITH PROPOSED WITHIN ANY WETLANDS AREA. THE SITE IS LOCATED IN AN AREA THAT HAS BEEN CULTIVATED FOR THE LAST FIVE YEARS. SITE SPECIFIC TESTING WAS DONE ENSURE BMP'S WERE PROPERLY PLACED.
SLOW PERCOLATION: PERC TESTING WAS COMPLETED WITH A DOUBLE RING INFILTROMETER TO ENSURE ADEQUATE PERCOLATION WITHIN THE INFILTRATION BMP'S.
PIPING: PIPING WILL BE AVOIDED WITH PROPER COMPACTION AND ESTABLISHMENT OF VEGETATION.
POOR TOPSOIL: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER UTILIZATION OF PERMANENT STABLIZATION. THE TOPSOIL WILL BE AMENDED IN THE BMP AREAS.
DEPTH TO SATURATION: SITE SPECIFIC TESTING WAS DONE TO ENSURE INFILTRATION BMP'S MAINTAINED THE RECOMMEND SEPARATION DISTANCE.
LOW STRENGTH / LANDSLIDE PRONE: PROPER SITE COMPACTION AND PERMANENT SITE STABLIZATION PER PLAN DETAILS AND SPECIFICATIONS WILL MITIGATE THIS CONFLICT. SOIL SLOPES SHALL BE GRADED AT A MINIMUM OF 3:1.
FROST ACTION: COMMENCING/COMPLETING THE SITE WORK PRIOR TO INCLIMATE WEATHER MITIGATES THIS CONCERN. PROPER FOOTING DEPTH, DRAINAGE, AND COVER WILL AID IN THE REDUCTION OF THIS POTENTIAL.
SHRINK-SWELL: ESTABLISHMENT OF PERMANENT VEGETATION AND PROPER COMPACTION ALONG WITH PROPER INSTALLATION OF THE CONVEYANCE SYSTEM PER PLAN DETAILS AND SPECIFICATIONS WILL REDUCE THE POTENTIAL.
SINKHOLES: THE SITE WAS INVESTIGATED FOR SINKHOLE POTENTIAL. THE RECOMMENDED DEP LOADING RATIOS ARE MAINTAINED TO MITIGATE THIS POTENTIAL.
FLOODING / PONDING / WETNESS: THE SITE IS GRADED FOR PROPER DRAINAGE. SITE SPECIFIC TESTING WAS DONE IN THE AREAS OF THE BMP'S TO AVOID NEGATIVE IMPACTS.

SOIL TESTING RESULTS

BASIN-A

TEST LOCATION	EXIST. GRADE ELEV. (FEET)	TESTING ELEV. (FEET)	INFILTRATION DEPTH ELEV. (FEET)	INFILTRATION DEPTH CUT (INCHES)	PROBE DEPTH ELEV. (FEET)	PROBE DEPTH CUT (INCHES)	RATE
TP#1	705.00	705.00	705.00	0	703.00	24	1.25 IN/HR
TP#2	707.00	705.00	705.00	24	703.00	48	4.5 IN/HR
TP#3	710.00	705.00	705.00	60	703.00	84	1.5 IN/HR
RAIN GARDEN							
TP#4	699.00	698.00	698.00	12	696.00	36	1.0 IN/HR
TP#5	701.00	698.00	698.00	36	696.00	60	3.0 IN/HR
SWALE							
TP#6	709.00	709.00	709.00	0	707.00	24	1.13 IN/HR

DRAINAGE AREA LEGEND

- FLOW PATH
- TERRACE
- PRE-DEVELOPMENT DRAINAGE AREA
- PRE-DEVELOPMENT TIME OF CONCENTRATION LINE
- POST-DEVELOPMENT DRAINAGE AREA
- POST-DEVELOPMENT TIME OF CONCENTRATION LINE
- CONVEYANCE DRAINAGE AREA
- SEDIMENT BASIN/TRAP DRAINAGE AREA
- SOIL TYPE BOUNDARY LINE
- HaB (C) SOIL TYPE MAP SYMBOL (HYDROLOGIC SOIL GROUP)
- TP#1 SOIL TEST PIT LOCATION
- P-1A SOIL PERCOLATION TEST LOCATION

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FOR
JOE RAMER POULTRY OPERATION
SOUTH NEWTON TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SHEET TITLE
PCSM PLAN:
POST-DEVELOPMENT DRAINAGE AREA PLAN

SCALE: 1" = 80'
0' 80' 160' 240'

SEAL

DRAWN BY:	CHECKED BY:
BJN	MHH

DATE: 08/13/2020

SHEET NO.: 204