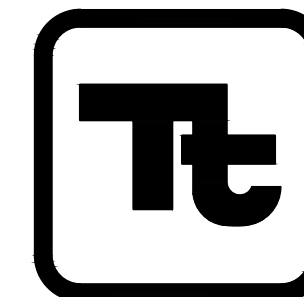


# POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

## PENNSYLVANIA PIPELINE PROJECT- BECKERSVILLE STATION

### BRECKNOCK TOWNSHIP, BERKS COUNTY

PENNSYLVANIA  
NOVEMBER 2016



PREPARED BY:  
**TETRA TECH**

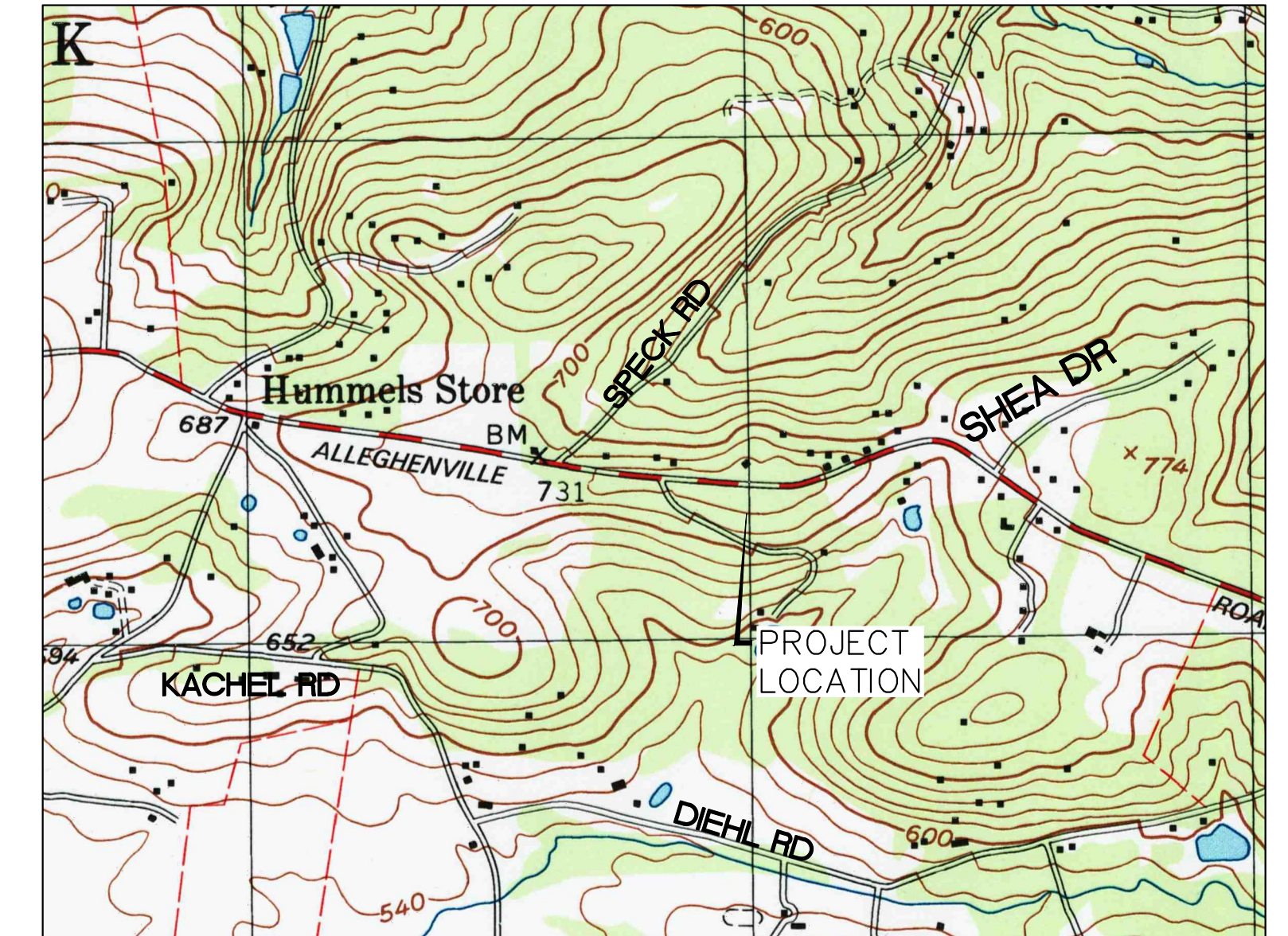
www.tetrattech.com

1134 TWIN STACKS DRIVE  
DALLAS, PA 18612  
T: (570) 674-8648 | F: (570) 674-8651  
DATE: NOVEMBER 21, 2016  
COVER SHEET 1 OF 11  
REVISION #1 - 4.22.16  
REVISION #2 - 5.13.16  
REVISION #3 - 7.01.16  
REVISION #4 - 10.18.16  
REVISION #5 - 2.6.17

#### DRAWING INDEX

SHEET No.	DRAWING TITLE
1	COVER SHEET AND NOTES
2	OVERALL SITE PLAN
3	PROPOSED CONDITIONS PLAN
4	PRE-POST DEVELOPED D.A. PLAN
5	CONSTRUCTION DETAILS
6	BASIN #1 CONSTRUCTION DETAILS
7	CONSTRUCTION DETAILS
8	CONSTRUCTION DETAI

PREPARED FOR:  
SUNOCO PIPELINE L.P.  
525 FRITZTOWN ROAD  
SINKING SPRING, PENNSYLVANIA 19608  
610-670-3200



LOCATION MAP  
BECKERSVILLE STATION  
MORGANTOWN QUADRANGLE  
BRECKNOCK TOWNSHIP, BERKS COUNTY,  
PENNSYLVANIA

0 1000 2000  
SCALE IN FEET  
SCALE: 1"=1000'

SUNOCO PIPELINE L.P. ACKNOWLEDGES THAT ANY REVISION TO THE APPROVED DRAINAGE PLAN MUST BE APPROVED BY THE TOWNSHIP AND THE BERKS CO. CONSERVATION DISTRICT

SUNOCO PIPELINE L.P. DATE

I, TIMOTHY J. CONNOLLY JR., P.E., CERTIFY THAT THE PROPOSED DETENTION BASIN IS NOT UNDERLAIN BY CARBONATE GEOLOGY.

*Timothy J. Connolly Jr.* 2/6/2017  
TIMOTHY J. CONNOLLY JR., P.E. DATE

I, TIMOTHY J. CONNOLLY JR., P.E., ON THIS DATE HEREBY CERTIFIES THAT THE DRAINAGE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE BRECKNOCK TOWNSHIP STORMWATER MANAGEMENT ORDINANCE

*Timothy J. Connolly Jr.* 2/6/2017  
TIMOTHY J. CONNOLLY JR., P.E. DATE

I, TIMOTHY J. CONNOLLY JR., P.E., HEREBY CERTIFY THAT THE PLAN FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS, STANDARDS AND SPECIFICATIONS OF THE COUNTY CONSERVATION DISTRICT.

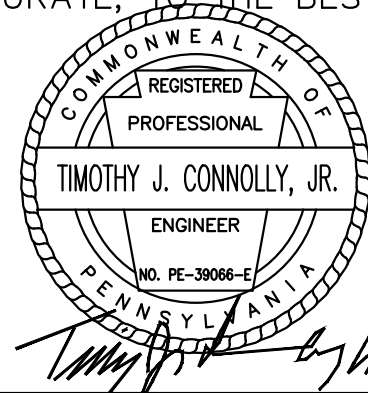
*Timothy J. Connolly Jr.* 2/6/2017  
TIMOTHY J. CONNOLLY JR., P.E. DATE

#### GENERAL NOTES

- DEVELOPER/ OWNER: SUNOCO PIPELINE, LP  
525 FRITZTOWN ROAD  
SINKING SPRING, PA. 19608  
610-670-3200
- CURRENT TAX IDENTIFICATION #: 34-5302-02-56-2952  
INSTRUMENT #2014027505, RECORDED 8-25-2014  
TOTAL PARCEL SIZE = 17.45 AC
- PUBLIC SEWER AND WATER WILL NOT BE PROVIDED. THE FACILITY IS UNMANNED.
- EXISTING CONTOURS AND FEATURES COMPILED FROM WWW.PASDA.PSU.EDU.  
EXISTING CONTOURS ARE BASED ON NAVD 88 DATUM.
- NO PORTION OF THE SITE LIES WITHIN ANY 100 YEAR FLOOD ZONES,  
AS PER F.E.M.A. MAPPING, FIRM PANEL 629 OF 700,  
MAP #42011C0629G, EFFECTIVE DATE IS 06/03/2012.
- THERE ARE NO WETLANDS WITHIN THE DISTURBED AREA OF THE SITE.
- THE ASSOCIATED STORM WATER MANAGEMENT REPORT FOR THIS PROJECT IS TITLED:  
EROSION AND SEDIMENTATION CONTROL PLAN  
PENNSYLVANIA PIPELINE PROJECT  
BECKERSVILLE STATION EXPANSION ACTIVITIES  
BRECKNOCK TOWNSHIP  
BERKS COUNTY, PA  
MARCH, 2016
- THE SITE LIES WITHIN A 50% RELEASE RATE DISTRICT OF THE CONESTOGA RIVER  
ACT 167 STORMWATER MANAGEMENT PLAN.
- UN-NAMED TRIBUTARY TO MUDDY CREEK IS LISTED AS "HQ-TSF" UNDER CHAPTER 93.
- THE PADOT DRIVEWAY HOP NO. 05048641 WAS ISSUED ON 7/17/2014.
- SUNOCO LOGISTICS PARTNERS, LP WILL BE RESPONSIBLE FOR PERMANENT INSPECTION  
AND MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES.
- BRECKNOCK TOWNSHIP AND ITS AUTHORIZED AGENTS HAVE THE RIGHT, BUT NOT THE  
DUTY TO ENTER THE PROPERTY TO PERFORM INSPECTIONS OF STORMWATER FACILITIES.  
ACCESS AND INSPECTIONS WITHIN THE SECURED AREA CAN ONLY BE COMPLETED WITH  
AUTHORIZED REPRESENTATIVES OF THE PROPERTY OWNER.
- THE EXISTING WELL AND SEPTIC SYSTEM ON THE PARCEL WILL BE ABANDONED IN  
ACCORDANCE WITH DEP AND TOWNSHIP REGULATIONS, IF THE BUILDING IS DEMOLISHED.
- SITE LIGHTING WILL BE ACCOMPLISHED WITH POLE MOUNTED FIXTURES.  
LIGHTS WILL REMAIN IN THE "OFF" POSITION UNLESS NIGHTTIME WORK IS ANTICIPATED.
- THERE ARE NO ADVERTISING SIGNS PROPOSED FOR THIS SITE.
- IT IS REQUIRED BY BRECKNOCK TOWNSHIP THAT ALL SITE LIGHTING SHALL REMAIN IN  
THE OFF MODE DURING ALL NIGHT TIME HOURS. THE SITE LIGHTING SHALL BE DESIGNED  
TO BE MANUALLY OPERATED BY SUNOCO PERSONNEL ONLY WHEN NECESSARY DURING  
NIGHT TIME HOURS OF OPERATION WHEN SUNOCO PERSONNEL ARE ON-SITE.
- LADDER RUNGS SHALL BE PROVIDED FOR ALL STORM SEWER INLETS AND MANHOLES  
WITH A DEPTH OF 4 FEET OR GREATER.
- ALL STORM MANHOLES SHALL HAVE THE WORD "STORM" CAST ON THE TOP MANHOLE COVER.

#### ENGINEER CERTIFICATION

I, TIMOTHY J. CONNOLLY JR., P.E., A LICENSED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA, DOES HEREBY CERTIFY THAT THE ACCOMPANYING APPLICATION, PLANS AND SUPPORTING DOCUMENTATION ARE TRUE AND ACCURATE, TO THE BEST OF MY KNOWLEDGE.



*Timothy J. Connolly Jr.* 2/6/2017  
TIMOTHY J. CONNOLLY JR., P.E. DATE  
PE-39066-E  
1134 TWIN STACKS DRIVE, DALLAS, PA. 18612

CALL BEFORE YOU DIG!  
PENNSYLVANIA LAW REQUIRES  
3 WORKING DAYS NOTICE FOR  
CONSTRUCTION PHASE AND 10 WORKING  
DAYS IN DESIGN STAGE - STOP CALL  
Pennsylvania One Call System, Inc.  
 1-800-242-1776

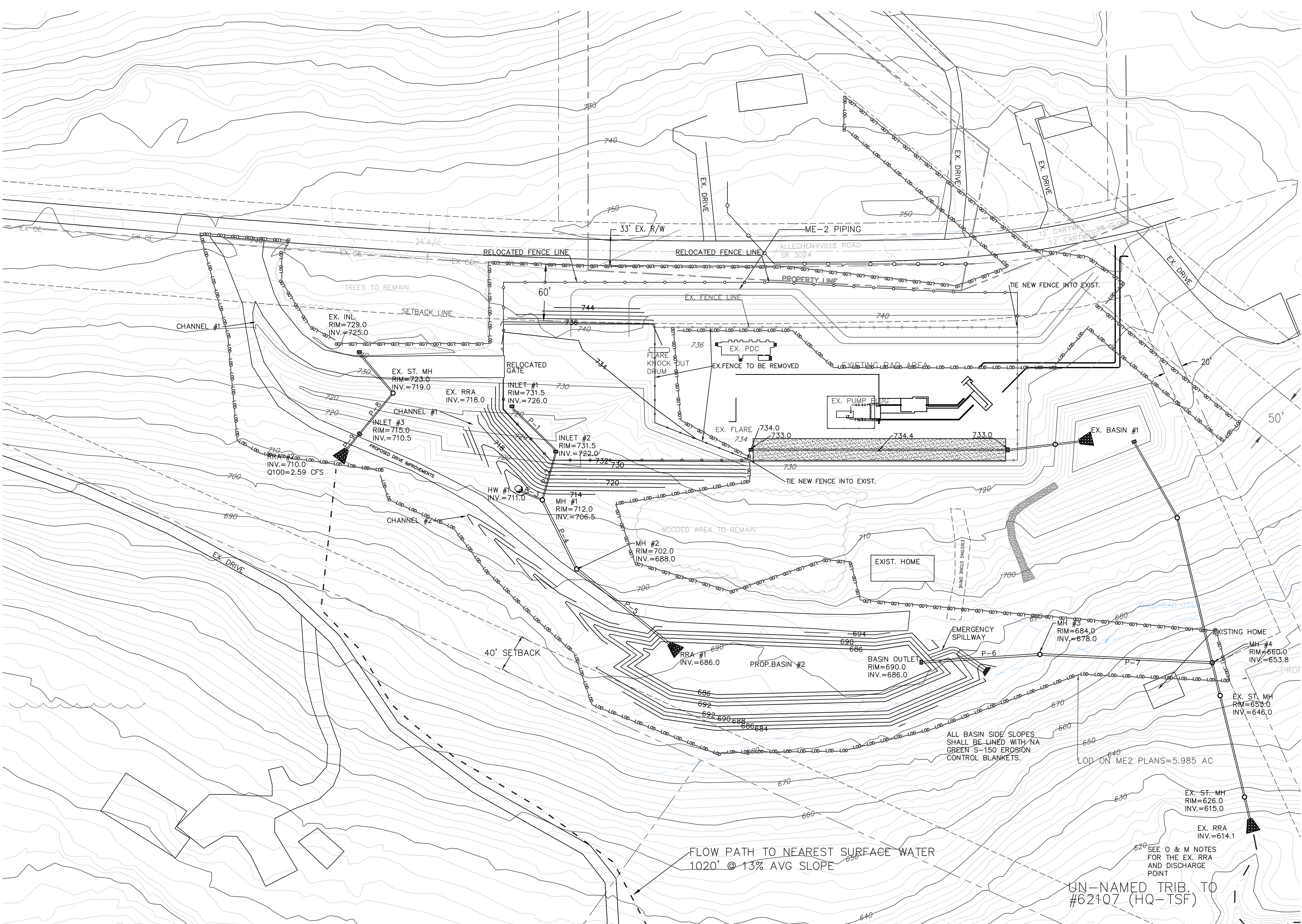
- #### LEGEND
- EXISTING R/W
  - PROPERTY LINE
  - SOIL BOUNDARY
  - SETBACK LINE
  - 730 ----- EXISTING CONTOURS
  - 735 ----- PROPOSED CONTOURS
  - Tc FLOW PATH
  - PRE-DEV DA BOUNDARY
  - POST-DEV DA BOUNDARY
  - LOD-LOD-LOD-LOD LOD/ESCGP-2 BOUNDARY = 5.985 AC
  - ▣ PADOT TYPE M PRECAST INLET
  - RR#2 4' DIA. PADOT PRECAST STORM MH
  - STORM PIPE W/ FES
  - RIPRAP APRON
  - 8' HEIGHT "SIMTEK" FENCE
  - ☼ EXISTING LIGHT POLE, LITHONIA STSH 30 6-4B  
SQUARE TAPERED STEEL HINGED LIGHT POLE  
(6.41"x 3.08" RECT. x 30' TALL) FROM ME-1  
PHASE. NO LIGHTS PROPOSED IN PPP PHASE.

PROPOSED STORM PIPE TABLE

INLET	TG	INV	PIPE	LENGTH	SIZE	SLOPE
INL 1	731.50	726.00				
INL 2	731.50	722.00	P-1	65	15"	6.15%
MH. 1	712.00	706.50	P-2	49	15"	31.63%
HW 1	-----	711.00	-----	-----	-----	-----
MH. 1	712.00	706.50	P-3	22	15"	20.45%
MH. 2	702.00	688.00	P-4	78	15"	23.72%
RRA 1	-----	686.00	P-5	125	15"	1.60%
BASIN OUTLET	690.00	686.00	-----	-----	-----	-----
MH. 3	684.00	678.00	P-6	125	15"	6.40%
MH. 4	660.00	653.80	P-7	181	15"	13.37%
EX. ST. MH.	653.00	646.00	EX.	35	15"	22.29%
EX. ST. MH.	626.00	615.00	EX.	106	15"	29.25%
EX. RRA	-----	614.10	EX.	24	15"	3.75%
EX. INL.	729.00	725.00	-----	-----	-----	-----
EX. ST. MH.	723.00	719.00	EX. PIPE	52	15"	11.54%
INL 3	715.00	710.50	P-8	52	15"	16.35%
RRA 2	-----	710.00	P-9	22	15"	2.27%

ALL INLETS ARE PADOT TYPE M PRECAST CONCRETE.  
 ALL MANHOLES ARE 4' DIAMETER PRECAST CONCRETE.  
 ALL STORM INLETS AND MANHOLES MUST HAVE LADDER RUNGS  
 ALL MANHOLES SHALL HAVE THE WORD "STORM" ON COVER.  
 ALL STORM PIPE IS SLCPP, ADS-N12 OR APPROVED EQUAL.  
 ALL INLETS SHALL CONTAIN A PAINTED MARKER THAT STATES, "NO DUMPING, DISCHARGES TO STREAMS".  
 FOR PIPE P-6, USE RCCP.

LONG TERM OPERATION AND MAINTENANCE NOTES FOR THE RIPRAP APRON NEAR THE UNNAMED TRIBUTARY PIPE DISCHARGE:  
 1. PROVIDE TEMPORARY CONSTRUCTION FENCING AROUND THE EXISTING RRA.  
 2. ANY DISTURBED AREAS NEAR THE EXISTING RRA SHOULD BE RE-SEEDDED WITH NATIVE VEGETATION.  
 3. PROVIDE MONTHLY INSPECTIONS OF THE DISCHARGE POINT AND AFTER ALL RAINFALLS OVER 1" IN DEPTH.  
 4. INSPECTOR SHOULD LOOK FOR ANY EROSION OF THE STREAMBED, STREAM BANK STABILITY, ANY SIGNS OF SEDIMENT/DEBRIS ACCUMULATION AND THE PRESENCE OF NATIVE VEGETATION AND ANY INVASIVE SPECIES.  
 5. CORRECT ALL MAINTENANCE ISSUES IN A TIMELY MANNER.



**LEGEND**

- EXISTING R/W
- PROPERTY LINE
- (---) SOIL BOUNDARY
- SETBACK LINE
- 730 EXISTING CONTOURS
- 735 PROPOSED CONTOURS
- Tc FLOW PATH
- PRE-DEV DA BOUNDARY
- POST-DEV DA BOUNDARY
- LOD-LOD-LOD-LOD LOD/ESCGP-2 BOUNDARY = 5.985 AC
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- 8' HEIGHT "SIMTEK" FENCE

0 50 100  
 SCALE: 1"=50'

3  
 OF  
 8

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MARK	DATE	DESCRIPTION	BY
1	4/22/16	REVISED PER EXISTING SURVEY	GZ
2	5/13/16	REVISED PER LTL LETTER (4/20/16)	GZ
3	7/01/16	REVISED PER LTL LETTER (6/7/16)	GZ
4	10/18/16	REVISED PER PA DEP REVIEW	GZ

PPP - BECKERSVILLE PUMP STATION  
 BRECKNOCK TOWNSHIP, BERKS COUNTY  
 PCSM PLAN - PROPOSED CONDITIONS

DATE: 03/11/16  
 PROJECT NO.: 212IC-PB-00136  
 DRAWN BY: GZ  
 CHECKED BY: TC  
 SCALE: 1"=50'  
 FILE: BASEPLAN  
 NAME: PROP 3  
 COPYRIGHT TETRA TECH INC.