

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC
 POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

MLV-515RA30
WYOMING AVENUE MAIN LINE VALVE SITE PLAN

WYOMING BOROUGH, LUZERNE COUNTY, PENNSYLVANIA

APRIL 2021
 REVISED MARCH 2022

PROJECT OWNER/APPLICANT

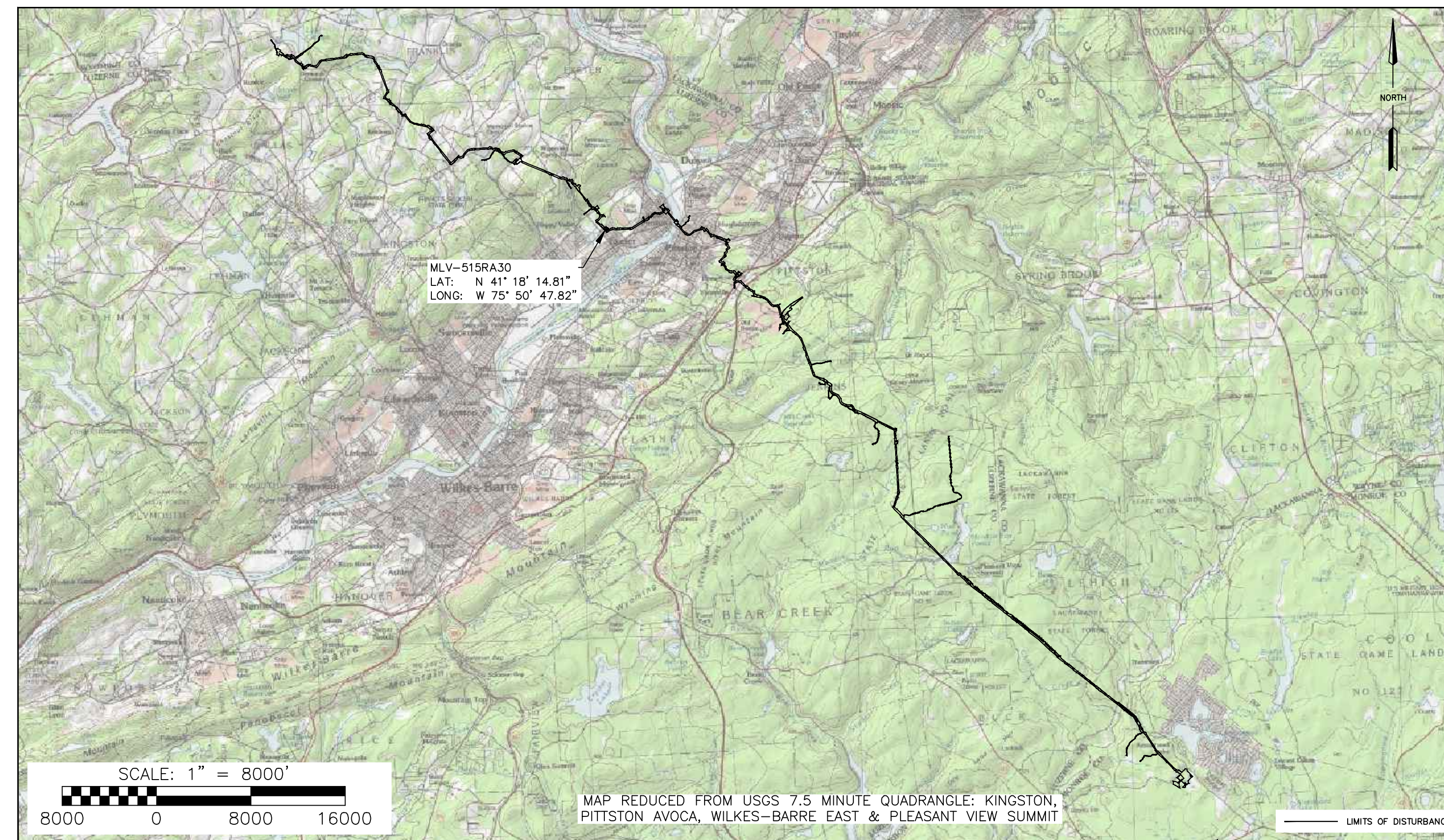
TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC
 2800 POST OAK BLVD, LEVEL 11
 HOUSTON, TX 77056
 CONTACT: JOSEPH DEAN, MANAGER PERMITTING

PLAN PREPARER / ENGINEER

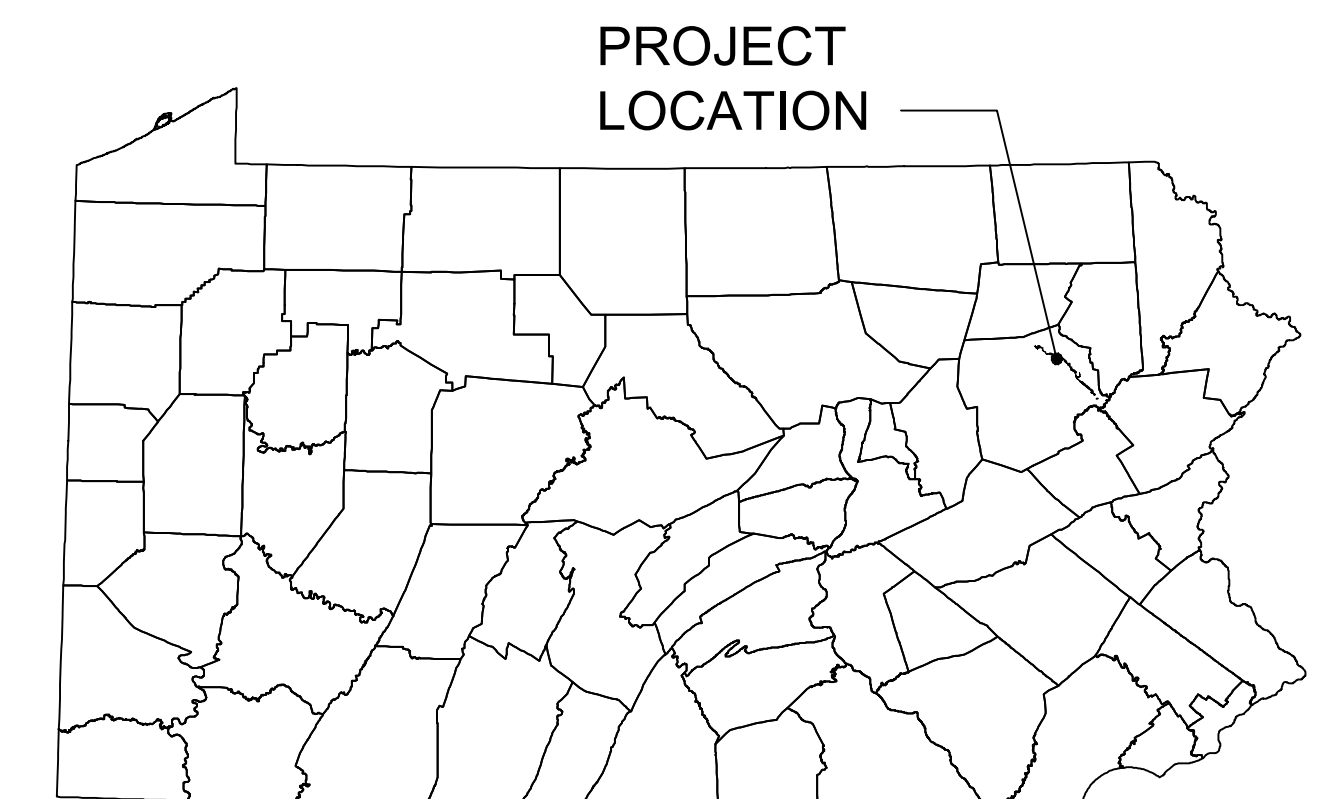
WHM CONSULTING, LLC
 366 WALKER DRIVE SUITE 300
 STATE COLLEGE, PA 16801
 PH: (814) 689-1650
 CONTACT: RYAN NELSON, PROJECT MANAGER

BAI GROUP, LLC

366 WALKER DRIVE SUITE 300
 STATE COLLEGE, PA 16801
 PH: (814) 238-2060
 CONTACT: PATRICK WOZINSKI, P.E. PROJECT ENGINEER



LOCATION MAP



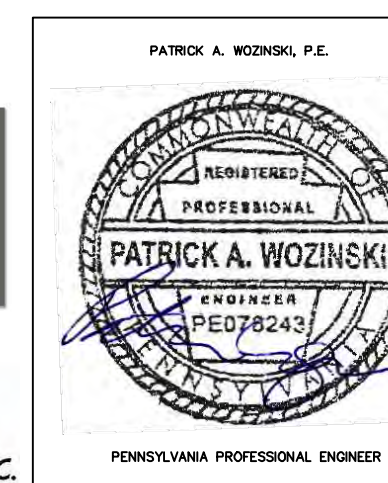
VICINITY MAP
 N.T.S.

SHEET INDEX	
SHEET NUMBER	DRAWING TITLE
1 OF 5	COVER SHEET
2 OF 5	EXISTING CONDITIONS PLAN
3 OF 5	PROPOSED CONDITIONS PLAN
4 OF 5	NOTES
5 OF 5	DETAILS

RECEIVING WATERS			
NAME	DESIGNATED USE	EXISTING USE	PFBC CLASSIFICATION
SUSQUEHANNA RIVER	WWF	N/A	N/A

Call before you dig.
 1-800-242-1776 or **811**

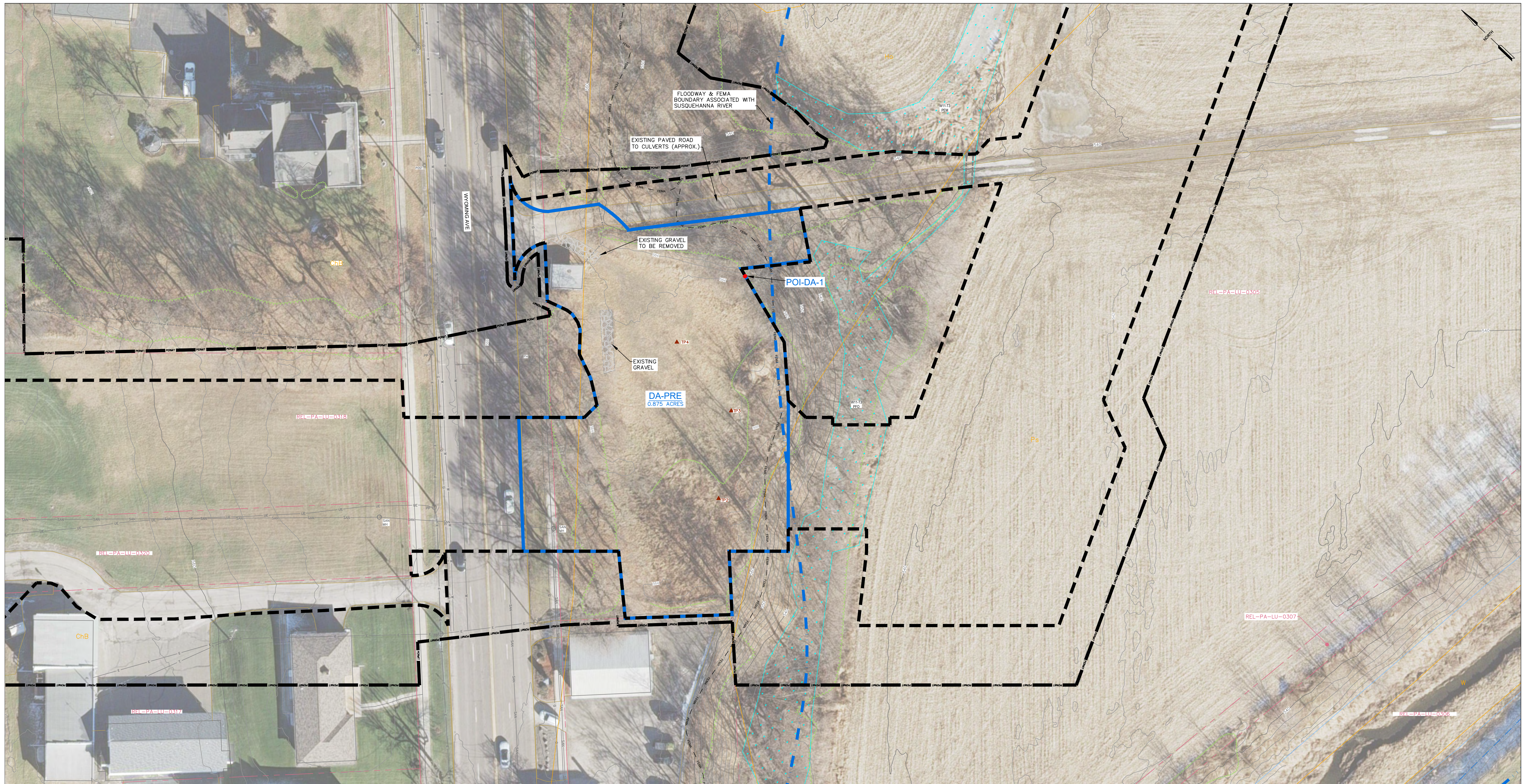
PENNSYLVANIA ACT 287 (1974) AS AMENDED BY
 PENNSYLVANIA LESS THAN THREE (3) WORKING
 DAYS AND NO MORE THAN (10) WORKING DAYS
 NOTICE TO UTILITIES BEFORE YOU EXCAVATE,
 DRILL, BLAST OR DEMOLISH.



		REVISIONS					
NO.	DATE	BY	DESCRIPTION	W.O. NO.	CHK.	APP.	
1	06/29/21	RHM	REVISED PER PADEP COMMENTS.				
2	03/01/22	RHM	RESPONSE TO PADEP TECHNICAL DEFICIENCY LETTER				

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC
 REGIONAL ENERGY ACCESS EXPANSION PROJECT
 MLV-515RA30
 POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
COVER SHEET
 WYOMING BOROUGH, LUZERNE COUNTY, PENNSYLVANIA

DRAWN BY: RHM	DATE: 03/31/21	ISSUED FOR BID:	SCALE: AS NOTED
CHECKED BY: RHM	DATE: 03/31/21	ISSUED FOR CONSTRUCTION:	REVISION:
APPROVED BY: PW	DATE: 03/31/21	DRAWING NUMBER: 26-1000-70-28-D	SHEET 1 OF 5



LEGEND

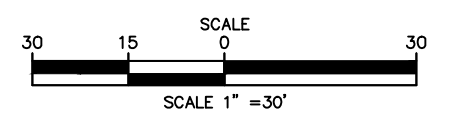
	PROPERTY LINE
	EXISTING RIGHT-OF-WAY
	ESCP PERMIT BOUNDARY
	LIMITS OF DISTURBANCE
	EXISTING FENCE
	EXISTING STONE ROW
	EXISTING STRUCTURE
	EXISTING EDGE OF ROAD
	EXISTING GRADE MAJOR CONTOURS (10' C.I.)
	EXISTING GRADE MINOR CONTOURS (2' C.I.)
	EXISTING WATERBAR AND OUTLET STRUCTURE
	APPROX. ENVIRONMENTAL STUDY LIMITS
	DELIMITED WETLAND
	DELIMITED WATERWAY / STREAM (TOP OF BANK)
	STREAM FLOW DIRECTION
	RIPARIAN BUFFER
	SC/FEMA FLOODWAY
	FEMA
	FEMA 100-YEAR FLOODPLAIN
	SOIL BOUNDARY / TYPE
	EXISTING TREELINE / TREE/SHRUB
	EXISTING LEIDY / TGPL PIPELINES

	EXISTING FOREIGN PIPELINES
	EXISTING UTILITY POLE / TOWER
	EXISTING VALVE
	EXISTING CULVERT
	EXISTING ELECTRIC LINE
	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING GAS LINE
	EXISTING WATER LINE
	EXISTING SANITARY LINE
	EXISTING STORM SEWER
	EXISTING TELEPHONE LINE
	EXISTING FIBER OPTIC LINE
	EXISTING UNDERGROUND CABLE LINE
	EXISTING STORM INLET
	EXISTING SANITARY MANHOLE
	EXISTING COMMUNICATION/ELECTRIC MANHOLE
	EXISTING FIRE HYDRANT
	EXISTING POWER POLE
	EXISTING WELL
	PRE-CONSTRUCTION DRAINAGE AREA
	TEST PIT/INFILTRATION TEST LOCATION

SOIL LEGEND
 ChB CHEMANCO GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES
 Ho HOLLY SILT LOAM
 Ps POPE SOILS
 W WATER

EXISTING CONDITION NOTES/SOURCES

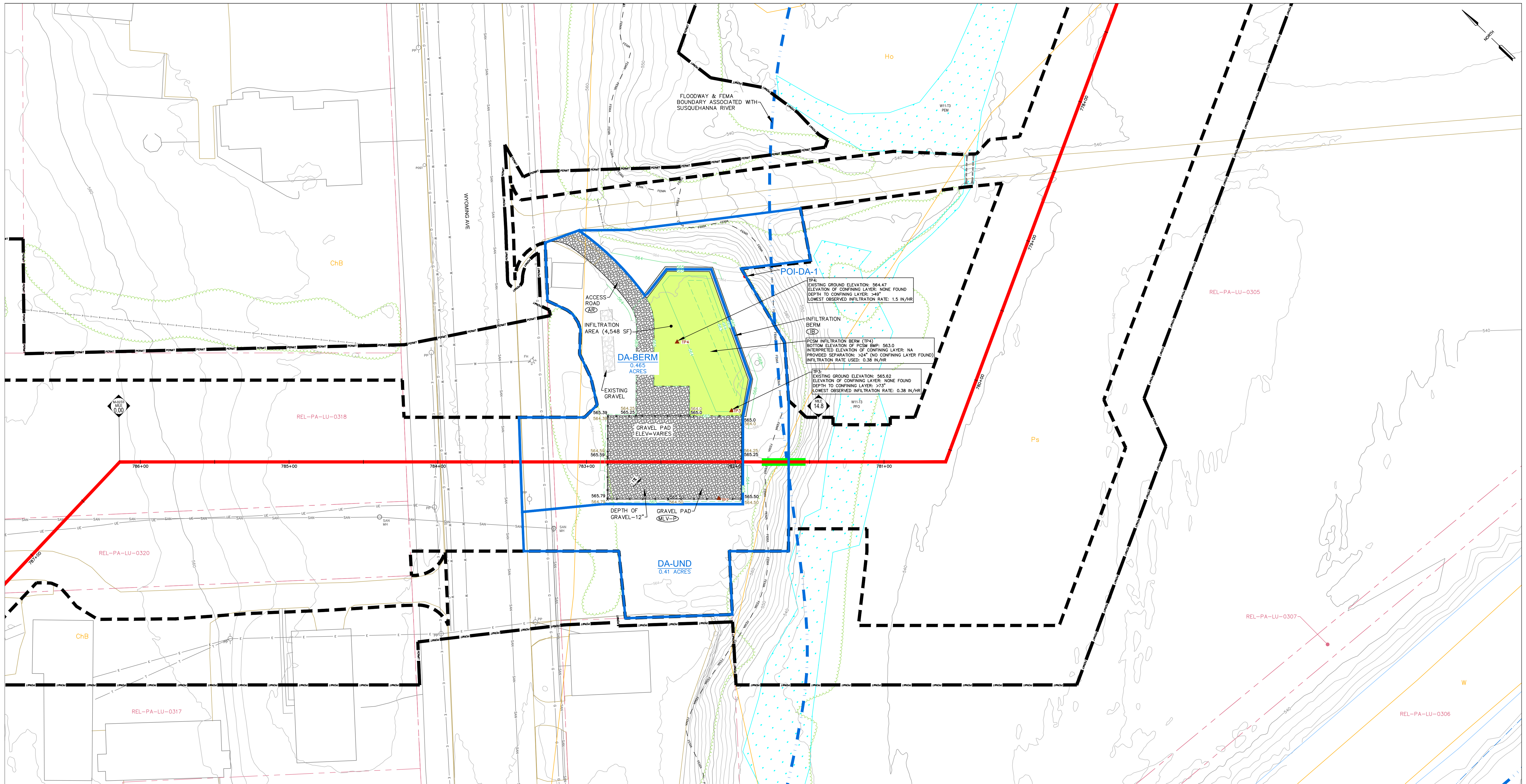
- EXISTING ROADWAYS, CONTOURS, PROPERTY LINE, TREE LINE, ETC. ARE DERIVED FROM A FIELD SURVEY PERFORMED BY TRANSCO BETWEEN 2019 AND 2020.
- PROPERTY BOUNDARIES BASED EITHER ON TAX PARCEL INFORMATION PROVIDED BY TRANSCO REFERENCE AND FIELD LOCATED EVIDENCE. PROPERTY BOUNDARY LOCATIONS BASED ON TAX PARCEL INFORMATION ARE APPROXIMATE.
- PIPELINE ALIGNMENTS AND LIMITS OF DISTURBANCE PROVIDED BY TRANSCO.
- STREAM AND WETLAND BOUNDARIES BASED ON SURVEYS CONDUCTED BY WHM CONSULTING FROM MARCH 2020 TO OCTOBER 2020.
- DATUM BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83 NORTH ZONE, NAVD86, ELEVATION MSL, DERIVED FROM GPS OBSERVATION.



		REVISIONS			
NO.	DATE	BY	DESCRIPTION	W.O. NO.	CHK. APP.
1	06/29/21	RHM	REVISED PER PADEP COMMENTS.		
2	03/01/22	RHM	RESPONSE TO PADEP TECHNICAL DEFICIENCY LETTER		

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC
 REGIONAL ENERGY ACCESS EXPANSION PROJECT
 MLV-515RA30
EXISTING CONDITIONS PLAN
 WYOMING BOROUGH, LUZERNE COUNTY, PENNSYLVANIA

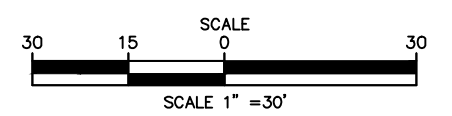
DRAWN BY: RHM	DATE: 03/31/21	ISSUED FOR BID:	SCALE: AS NOTED
CHECKED BY: RJN	DATE: 03/31/21	ISSUED FOR CONSTRUCTION:	REVISION:
APPROVED BY: PW	DATE: 03/31/21	DRAWING NUMBER: 26-1000-70-28-D	SHEET 2 OF 5
WO: 1222636	RID: 209		



LEGEND	
	PROPERTY LINE
	EXISTING RIGHT-OF-WAY
	ESCP PERMIT BOUNDARY
	LIMITS OF DISTURBANCE
	EXISTING FENCE
	EXISTING STONE ROW
	EXISTING STRUCTURE
	EXISTING EDGE OF ROAD
	EXISTING GRADE MAJOR CONTOURS (10' C.L.)
	EXISTING GRADE MINOR CONTOURS (2' C.L.)
	EXISTING WATERBAR AND OUTLET STRUCTURE
	APPROX. ENVIRONMENTAL STUDY LIMITS
	DELINEATED WETLAND
	DELINEATED WATERWAY / STREAM (TOP OF BANK)
	STREAM FLOW DIRECTION
	RIPIARIAN BUFFER
	50' FEMA FLOODWAY
	FEMA 100-YEAR FLOODPLAIN
	SOIL BOUNDARY / TYPE
	EXISTING TREE LINE / TREE/SHRUB
	EXISTING LEDY / TGPL PIPELINES
	EXISTING FOREIGN PIPELINES
	EXISTING UTILITY POLE / TOWER
	EXISTING VALVE
	EXISTING CULVERT
	EXISTING ELECTRIC LINE
	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING GAS LINE
	EXISTING WATER LINE
	EXISTING SANITARY LINE
	EXISTING STORM SEWER
	EXISTING TELEPHONE LINE
	EXISTING FIBER OPTIC LINE
	EXISTING UNDERGROUND CABLE LINE
	EXISTING STORM INLET
	EXISTING SANITARY MANHOLE
	EXISTING COMMUNICATION/ELECTRIC MANHOLE
	EXISTING FIRE HYDRANT
	EXISTING POWER POLE
	EXISTING WELL
	PROPOSED CONSTRUCTION FENCE
	PROPOSED PIPELINE
	PROPOSED PIPELINE GROUNDBED
	GEHAZARD ALONG PIPELINE
	PROPOSED WATERBAR AND OUTLET STRUCTURE
	PROPOSED CHANNEL AND DIVERSION CHANNEL
	PROPOSED CULVERT
	PROPOSED FENCE
	PROPOSED GRAVEL
	PROPOSED GRADE MAJOR CONTOURS (10' C.L.)
	PROPOSED GRADE MINOR CONTOURS (2' C.L.)
	POST-CONSTRUCTION DRAINAGE AREA
	PROPOSED INFILTRATION AREA
	TEST PIT/INFILTRATION TEST LOCATION
	PAD SPOT ELEVATION
	SUBGRADE SPOT ELEVATION

SOIL LEGEND
 ChB CHEMANCO GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES
 Ho HOLLY SILT LOAM
 Ps POPE SOILS
 W WATER

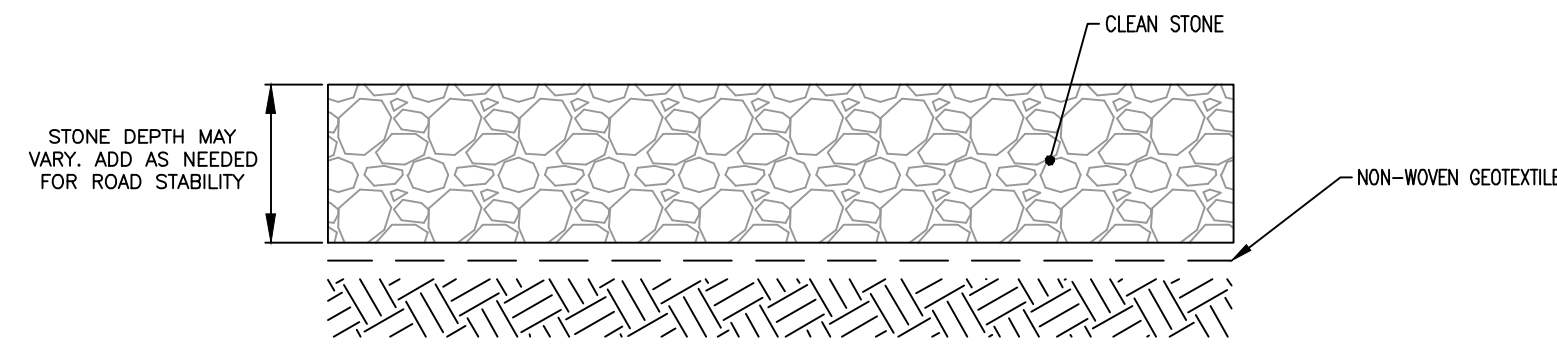
- EXISTING CONDITION NOTES/SOURCES**
- EXISTING ROADWAYS, CONTOURS, PROPERTY LINE, TREE LINE, ETC. ARE DERIVED FROM A FIELD SURVEY PERFORMED BY TRANSCO BETWEEN 2019 AND 2020.
 - PROPERTY BOUNDARIES BASED EITHER ON TAX PARCEL INFORMATION PROVIDED BY TRANSCO REFERENCE AND FIELD LOCATED EVIDENCE. PROPERTY BOUNDARY LOCATIONS BASED ON TAX PARCEL INFORMATION ARE APPROXIMATE.
 - PIPELINE ALIGNMENTS AND LIMITS OF DISTURBANCE PROVIDED BY TRANSCO.
 - STREAM AND WETLAND BOUNDARIES BASED ON SURVEYS CONDUCTED BY WHM CONSULTING FROM MARCH 2020 TO OCTOBER 2020.
 - DATUM BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83 NORTH ZONE, NAVD86, ELEVATION MSL, DERIVED FROM GPS OBSERVATION.



NO.		DATE	BY	DESCRIPTION	W.O. NO.	CHK.	APP.
1	06/29/21	RHM	RHM	REVISED PER PADEP COMMENTS.			
2	03/01/22	RHM	RHM	RESPONSE TO PADEP TECHNICAL DEFICIENCY LETTER			

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC
 REGIONAL ENERGY ACCESS EXPANSION PROJECT
 MLV-515RA30
PROPOSED CONDITIONS PLAN
 WYOMING BOROUGH, LUZERNE COUNTY, PENNSYLVANIA

DRAWN BY: RHM	DATE: 03/31/21	ISSUED FOR BID:	SCALE: AS NOTED
CHECKED BY: RJN	DATE: 03/31/21	ISSUED FOR CONSTRUCTION:	REVISION:
APPROVED BY: PW	DATE: 03/31/21	DRAWING NUMBER: 26-1000-70-28-D	SHEET 3 OF 5

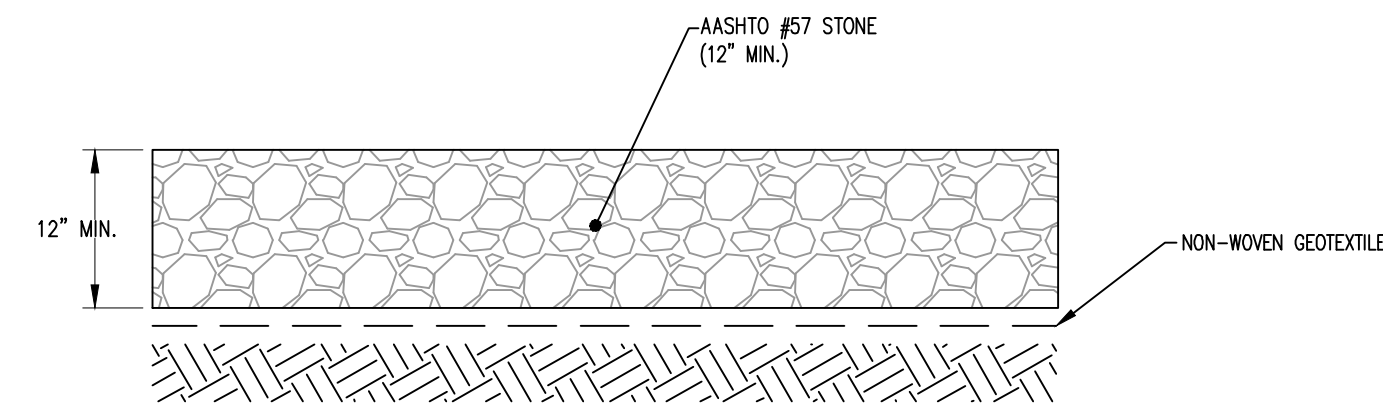


- NOTES:
- CROSS SECTION TO BE APPLIED TO DRY AREAS WITHOUT DRAINAGE CONCERNS.
 - EXISTING MATERIAL TO BE REMOVED AND STOCKPILED IN AN APPROVED LOCATION ONLY.
 - EXISTING DRAINAGE PATTERNS SHALL BE MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION & SEDIMENT POLLUTION CONTROL PLAN FOR THE PROJECT.
 - GRADING AND CROSS SLOPES VARY BY EXISTING CONDITIONS; SEE SPECIFIC DESIGN AND PROFILE FOR MORE DETAIL.
 - WITHIN EXTENTS OF GRADING FOR PERMANENT ACCESS ROADS AND VALVE SITES, COMPACT ALL SOIL FILL/BACKFILL AND COARSE AGGREGATE WITH FINES TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557. CONTRACTOR SHALL UTILIZE ADEQUATELY SIZED AND CONFIGURED EQUIPMENT TO ACHIEVE SPECIFIED COMPACTION.
 - AS DIRECTED BY ENGINEER AND APPROVED BY OWNER, EXCAVATE AND STABILIZE SOFT SPOTS, UNSATISFACTORY SOILS AND AREAS OF EXCESSIVE PUMPING OR RUTTING.
 - PROOF-ROLLING OF SUBGRADE MAY BE REQUIRED TO DETERMINE PROPER COMPACTION BY OWNER.
 - TEMPORARILY WIDENED ROAD SHOULD FOLLOW THE SAME SPECIFICATION FOR WIDENED ROADS. THE EXISTING ROAD SHALL BE MAINTAINED.
 - ROADS FOR TEMPORARY CONSTRUCTION USE WILL BE MAINTAINED AND RESTORED TO THEIR PREVIOUS CONDITIONS IN ACCORDANCE WITH CHAPTER 102 ROAD MAINTENANCE ACTIVITIES. PLAN VIEW ACCESS ROAD CALLOUTS IDENTIFY THE PROPOSED ROAD MAINTENANCE ACTIVITY FOR THE PROJECT (I.E. MAINTENANCE ONLY, TEMPORARY WIDENING, ETC.).

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.

TRANSCONTINENTAL GAS PIPE LINE CORPORATION
STANDARD ENVIRONMENTAL DETAIL
AR PERMANENT/TEMPORARY
STONE ACCESS ROAD

PENNSYLVANIA

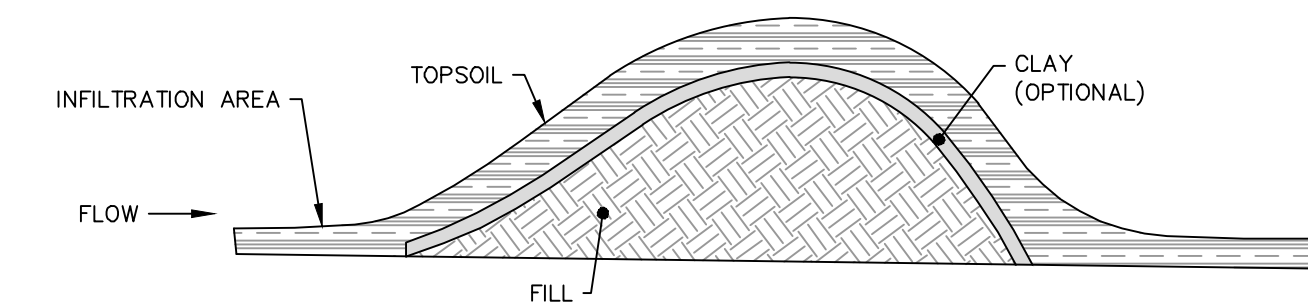


- NOTES:
- CROSS SECTION TO BE APPLIED TO DRY AREAS WITHOUT DRAINAGE CONCERNS.
 - EXISTING MATERIAL TO BE REMOVED AND STOCKPILED IN AN APPROVED LOCATION ONLY.
 - EXISTING DRAINAGE PATTERNS SHALL BE MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION & SEDIMENT POLLUTION CONTROL PLAN FOR THE PROJECT.
 - GRADING AND CROSS SLOPES VARY BY EXISTING CONDITIONS; SEE SPECIFIC DESIGN AND PROFILE FOR MORE DETAIL.
 - WITHIN EXTENTS OF GRADING FOR PERMANENT ACCESS ROADS AND VALVE SITES, COMPACT ALL SOIL FILL/BACKFILL AND COARSE AGGREGATE WITH FINES TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557. CONTRACTOR SHALL UTILIZE ADEQUATELY SIZED AND CONFIGURED EQUIPMENT TO ACHIEVE SPECIFIED COMPACTION.
 - AS DIRECTED BY ENGINEER AND APPROVED BY OWNER, EXCAVATE AND STABILIZE SOFT SPOTS, UNSATISFACTORY SOILS AND AREAS OF EXCESSIVE PUMPING OR RUTTING.
 - PROOF-ROLLING OF SUBGRADE MAY BE REQUIRED TO DETERMINE PROPER COMPACTION BY OWNER.

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.

TRANSCONTINENTAL GAS PIPE LINE CORPORATION
STANDARD ENVIRONMENTAL DETAIL
MLV-P MAIN LINE VALVE PAD

PENNSYLVANIA



IDEAL SUBSTRATE LAYERS FOR A BERM

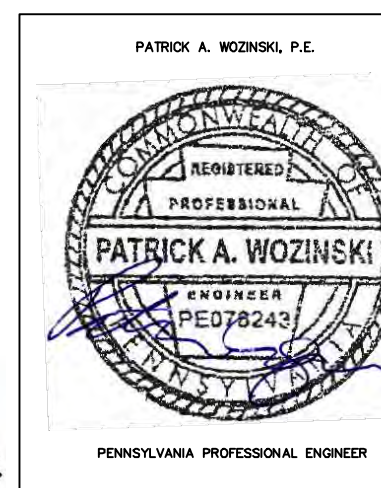
INFILTRATION BERM NO.	BOT. ELEV. (ft)	TOP ELEV. (ft)	HEIGHT (ft)	TOP WIDTH (ft)	OVERALL LENGTH (ft)	SHWT (in BELOW GROUND)	BEDROCK (in BELOW GROUND)
1	563	565	2.0	2	154	> 49"	> 49"

- NOTES:
- AN INFILTRATION BERM IS A MOUND OF COMPACTED EARTH WITH SLOPING SIDES THAT IS USUALLY LOCATED ALONG A CONTOUR ON RELATIVELY GENTLY SLOPING SITES.
- MAINTAIN A MINIMUM 2-FOOT SEPARATION TO BEDROCK AND SEASONALLY HIGH WATER TABLE. PROVIDE DISTRIBUTED INFILTRATION AREA (5:1 IMPERVIOUS AREA TO INFILTRATION AREA - MAXIMUM), SITE ON NATURAL, UNCOMPACTED SOILS WITH ACCEPTABLE INFILTRATION CAPACITY.
- BERMS SHOULD BE RELATIVELY LOW, PREFERABLY NO MORE THAN 24 INCHES IN HEIGHT.
- THE BACK OF THE BERM SHALL BE LINED WITH SC150BN LINING WITH A STAPLE D PATTERN AND SHALL EXTEND AT LEAST 10 FT BEYOND THE TOE OF THE BERM.
- BERMS SHALL HAVE SIDE SLOPES OF 2:1 AND ARE NOT TO BE MOWED.
- THE CREST OF THE BERM SHOULD BE LOCATED NEAR ON EDGE OF THE BERM, RATHER THAN IN THE MIDDLE, TO ALLOW FOR A MORE NATURAL, ASYMMETRICAL SHAPE.
- BERMS SHOULD BE VEGETATED USING SEED MIXTURE 1 PLUS 3 FROM TABLE 11.5.

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.

TRANSCONTINENTAL GAS PIPE LINE CORPORATION
STANDARD ENVIRONMENTAL DETAIL
IB INFILTRATION BERM

PENNSYLVANIA



REVISIONS						
NO.	DATE	BY	DESCRIPTION	W.O. NO.	CHK.	APP.
1	06/29/21	RHM	REVISED PER PADEP COMMENTS.			
2	03/01/22	RHM	RESPONSE TO PADEP TECHNICAL DEFICIENCY LETTER			

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC
REGIONAL ENERGY ACCESS EXPANSION PROJECT
MLV-515RA30
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
DETAILS
WYOMING BOROUGH, LUZERNE COUNTY, PENNSYLVANIA

DRAWN BY: RHM	DATE: 03/31/21	ISSUED FOR BID:	SCALE: AS NOTED
CHECKED BY: RJN	DATE: 03/31/21	ISSUED FOR CONSTRUCTION:	REVISION:
APPROVED BY: PW	DATE: 03/31/21	DRAWING NUMBER: 26-1000-70-28-D	SHEET 5 OF 5
W.O. 1222636	RID: 209		