

### TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

## SECTION 8 RIPARIAN ZONE PERMIT PLAN CITATION

### PLANS ENTITLED:

NJDEP LAND USE PERMIT PLANS
NORTHEAST SUPPLY ENHANCEMENT PROJECT
COMPRESSOR STATION 206 -TRAP ROCK ACCESS ROAD (ALTERNATE ACCESS ROAD)
(FULL PLAN SET INCLUDING FRESHWATER WETLANDS PERMIT PLANS, FLOOD HAZARD AREA PLANS & RELATED DETAILS)

### PREPARED BY:

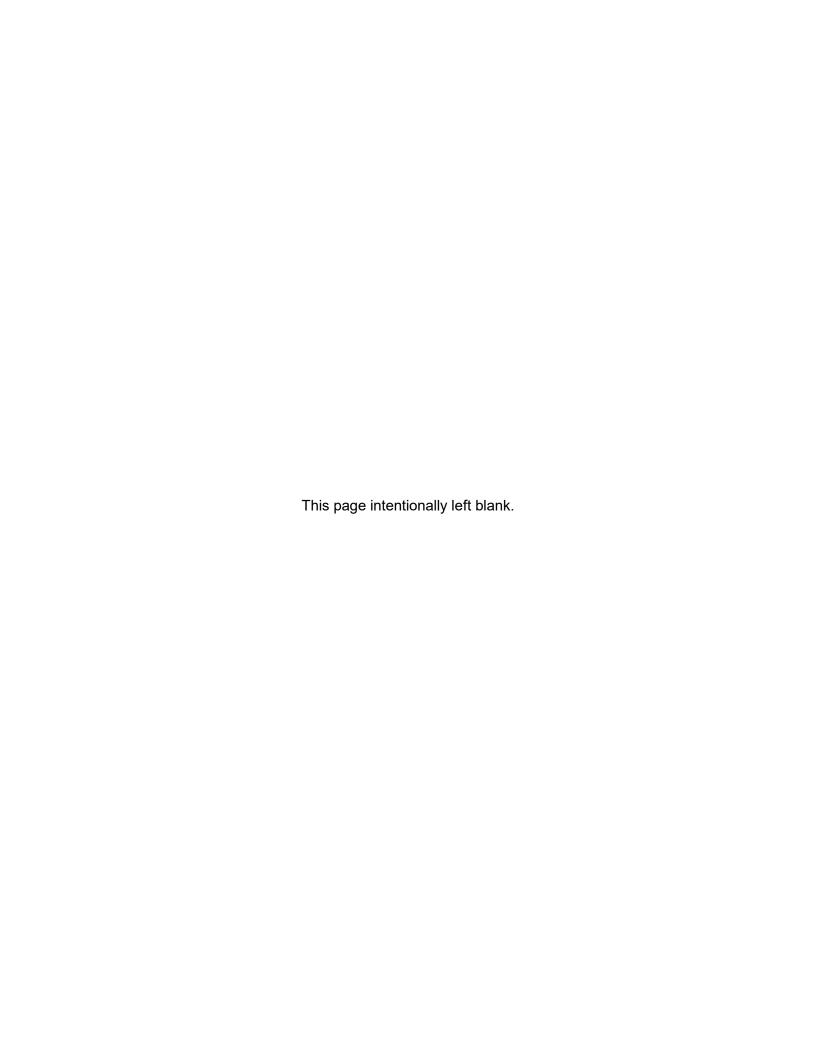
WILLIAM SALMON, PE PS&S WALL, NJ

### **PLANS DATED:**

JANUARY 15, 2020 (DATED BY SIGNATURE)

NORTHEAST SUPPLY ENHANCEMENT PROJECT

January 2020

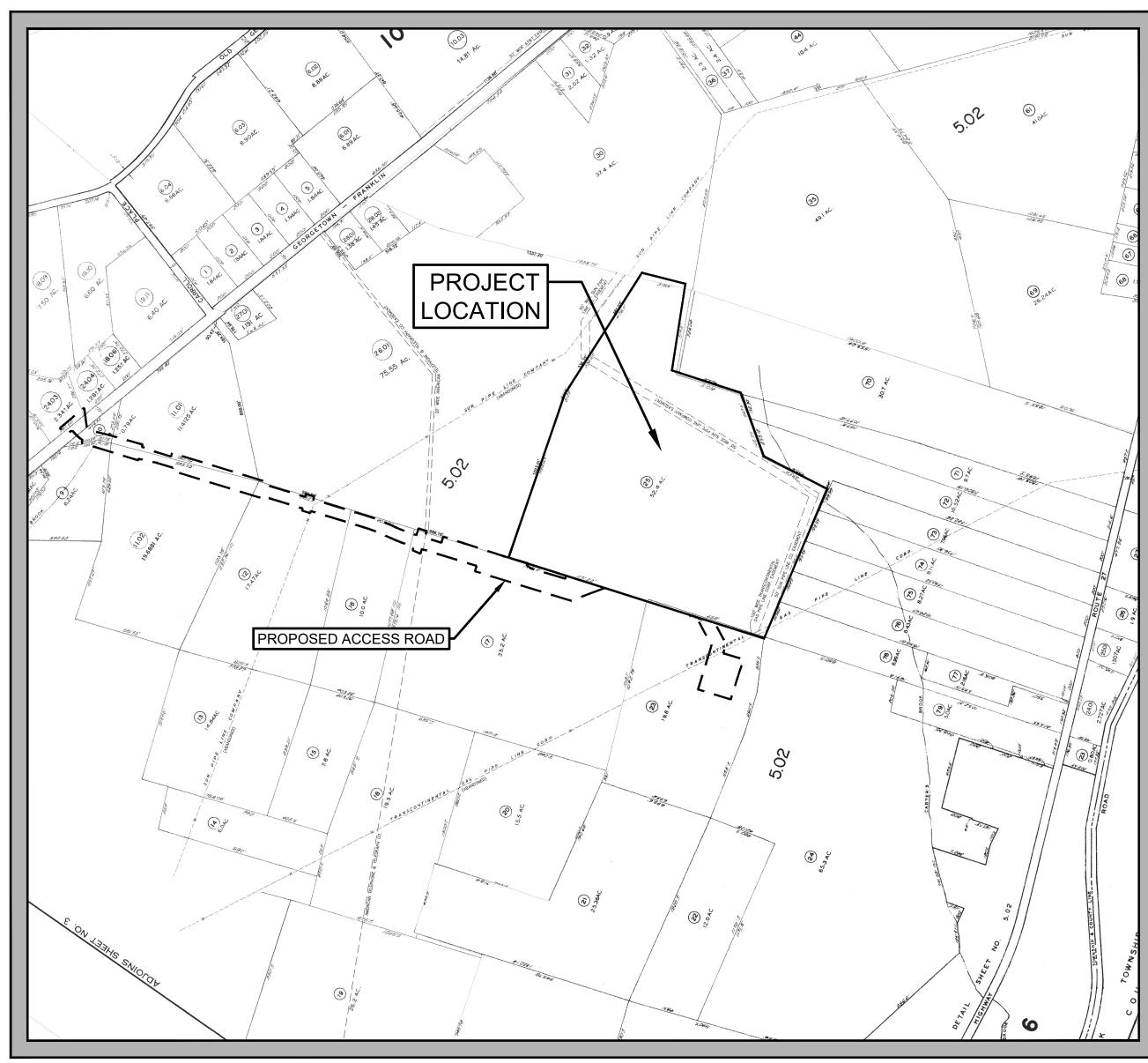


# NJDEP LAND USE PERMIT PLANS

FOR THE

# NORTHEAST SUPPLY ENHANCEMENT PROJECT COMPRESSOR STATION 206 - TRAP ROCK ACCESS ROAD (ALTERNATE ACCESS ROAD)

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC









	LIST
).	ISSUED LAST REVISED
	6/8/2018 01/15/2020
	RAL NOTES 6/8/2018 01/15/2020
	N 6/8/2018 01/15/2020
	WETLAND PERMIT PLAN 6/8/2018 01/15/2020
	WETLAND PERMIT PLAN 6/8/2018 01/15/2020
	PLAN 6/8/2018 01/15/2020
	FILE 6/8/2018 01/15/2020
	S 6/8/2018 01/15/2020
	S 6/8/2018 01/15/2020
	PLAN 6/8/2018 01/15/ FILE 6/8/2018 01/15/ S 6/8/2018 01/15/

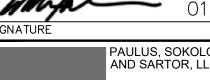
7 | 10/11/19 | REV TITLE BLOCK FOR ACCESS RD 8 01/15/20 GENERAL REVISIONS

DESCRIPTION

THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND

WILLIAM SALMON, P.E.

PROFESSIONAL ENGINEER



NORTHEAST SUPPLY **ENHANCEMENT PROJECT** PROPOSED

**COMPRESSOR STATION 206** 

OWNSHIP OF FRANKLIN, SOMERSET COUNTY, NEW JERSE

**COVER SHEET** 

06-08-2018

CHECKED BY: WS SHEET 1 OF 9 SHEET NO.

DRAWN BY: JPS

FRESHWATER WETLANDS AND FLOOD HAZARD AREA PLANS

### NOTES ON USE OF PLANS:

- 1. UNLESS THESE PERMIT DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE," THESE DRAWINGS SHALL NOT BE USED FOR PERMITTING ASSOCIATED WITH CONSTRUCTION OR THE IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN PERMITTING DOCUMENTS. THESE PLANS ARE FOR NJDEP PERMITTING ONLY, NO CONSTRUCTION IS TO BE BASED UPON THESE PLANS.
- 2. ALL DIMENSIONS MUST BE VERIFIED IN THE FIELD DURING CONSTRUCTION BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN
- 3. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS.

THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION.

- 4. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER
- 5. THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY OTHER PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI, AND SARTOR, LLC IS EXPRESSLY PROHIBITED.
- 6. INFORMATION FOR DESIGN LAYOUT IS CONTAINED SOLELY IN THE WRITTEN DIMENSIONS, BEARINGS, AND ANGLES CONTAINED ON THE DRAWINGS.
- 7. THIS DIMENSIONAL INFORMATION IS NOT WARRANTED NOR SHOULD IT BE CONSIDERED AS COMPLETE FOR EVERY ASPECT OF THE LAYOUT. STANDARD PRACTICE REQUIRES THAT THE LAYOUT PERSON CHECK THE DIMENSIONAL DATA CONSISTENCY AND TO PERFORM SURVEY CALCULATIONS WHICH ARE CUSTOMARY FOR CONSTRUCTION LAYOUT. IN THE EVENT THAT A QUESTION OR INCONSISTENCY IS DISCOVERED, THE INSTALLER SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER, PAULUS, SOKOLOWSKI, AND SARTOR, LLC.
- 8. THE GRAPHICAL INFORMATION CONTAINED IN ELECTRONIC FILES IS INTENDED AS DRAWING DATA ONLY. IT IS NOT INTENDED TO SERVE AS SURVEY LAYOUT DATA.
- 9. ALL PROPOSED FITTING ANGLES ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY PRIOR TO CUTTING.

### **GENERAL NOTES:**

- 1. AS INDICATED IN THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES," SUFFICIENT CONSTRUCTION WARNING SIGNS ARE TO BE PROVIDED AND MAINTAINED BY CONTRACTORS PERFORMING CONSTRUCTION WORK. SAID SIGNS ARE TO BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND APPROVED BY THE APPROPRIATE MUNICIPAL INSPECTION PERSONNEL.
- 2. THE CONTRACTOR SHALL PROVIDE SUCH TEMPORARY DRAINAGE, SOIL EROSION, AND DUST CONTROL MEASURES AS MAY BE INDICATED ON THE PLANS AND/OR AS DIRECTED BY THE MUNICIPAL ENGINEER OR OTHER AGENCIES OR DEPARTMENTS TO SATISFY ENVIRONMENTAL CONCERNS.
- 3. LOCATION OF EXISTING INLETS, CATCH BASINS AND MANHOLES MUST BE FIELD VERIFIED BEFORE WORK MAY COMMENCE. ANY CONFLICTING INFORMATION FROM THAT SHOWN SHALL BE BROUGHT TO THE IMMEDIATE
- ATTENTION OF THE DESIGN ENGINEER, PAULUS, SOKOLOWSKI, AND SARTOR, LLC. 4. ALL ROADWAYS ARE TO BE PASSABLE FOR FIRE, POLICE, & EMERGENCY VEHICLES DURING CONSTRUCTION.
- 5. UNLESS SPECIFICALLY SHOWN HEREIN, THE DESIGN ENGINEER HAS NOT CONDUCTED AN INVESTIGATION OR PROVIDED DATA ON THE NATURE OF, OR STRUCTURAL SUITABILITY OF ANY SUBSURFACE MATERIALS. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IN WRITING OF ANY UNUSUAL SOIL OR ROCK CONDITIONS ENCOUNTERED

NOTICE SHALL BE GIVEN TO AGENCIES 72 HOURS IN ADVANCE IF WORK MAY IMPACT EMERGENCY RESPONSE.

- 6. ALL SOIL EROSION AND SEDIMENT CONTROL STRUCTURES AND MEASURES SHALL BE IN PLACE PRIOR TO ANY SITE DISTURBANCE.
- 7. CONTRACTOR TO RESTORE GROUND SURFACE OF GAS PIPELINE TRENCH, CONSTRUCTION STAGING AREAS, AND ALL OTHER DISTURBED AREAS TO THEIR ORIGINAL CONDITION OR BETTER, OR AS SPECIFIED IN THESE PLANS.
- 8. NO CONSTRUCTION SHALL BE PERFORMED ON WEEKENDS OR DURING NIGHTS IN RESIDENTIAL AREAS WITHOUT PRIOR APPROVAL OF WILLIAMS.
- 9. ALL TREES REMOVED DURING CLEARING SHALL BE TRIMMED AND PLACED AT EDGE OF EASEMENT FOR LANDOWNER UNLESS OTHERWISE NOTED ON PLANS.

### OWNER / APPLICANT

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC 2800 POST OAK BLVD HOUSTON, TEXAS 77056

### FLOOD HAZARD AREA AND FRESHWATER

### WETLANDS NOTES:

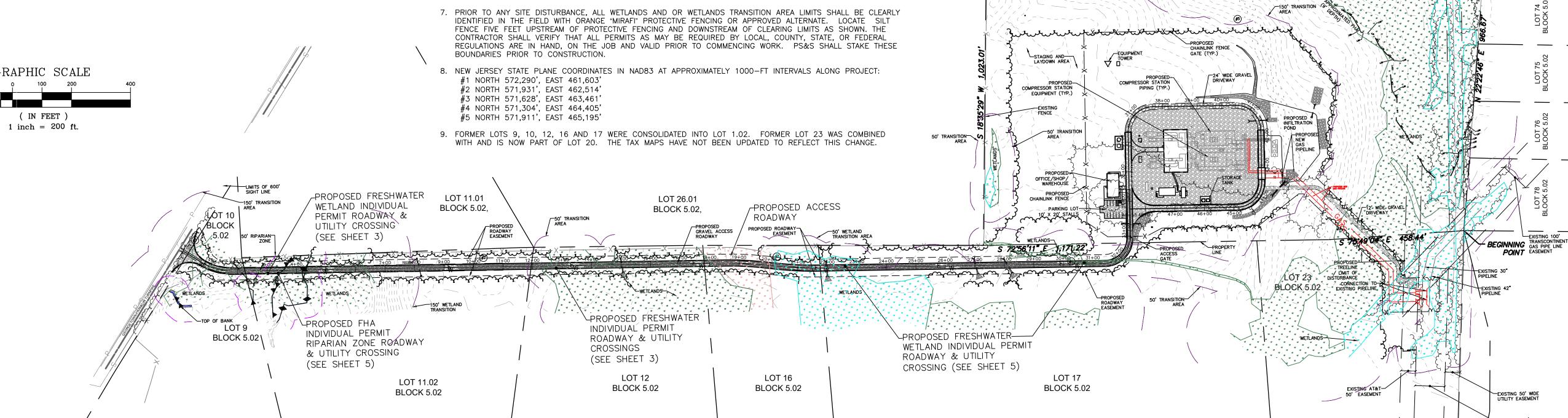
- 1. THE PURPOSE OF THESE PLANS IS TO SECURE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION FRESHWATER WETLANDS, FLOOD HAZARD AREA FLOODPLAIN VERIFICATION AND FLOOD HAZARD AREA INDIVIDUAL PERMITS FOR THE PROPOSED CONSTRUCTION OF A COMPRESSION STATION 206 AND ASSOCIATED IMPROVEMENTS IN FRANKLIN TOWNSHIP, SOMERSET COUNTY AS PART OF THE NORTHEAST SUPPLY ENHANCEMENT PROJECT.
- A. FRESHWATER WETLAND INDIVIDUAL PERMIT N.J.A.C. 7:7A-7.2
- B. FLOOD HAZARD AREA INDIVIDUAL PERMIT REGULATED ACTIVITIES
- N.J.A.C. 7:13-11.1 REGULATED ACTIVITY IN CHANNEL N.J.A.C. 7:13-11.2 REGULATED ACTIVITY IN RIPARIAN ZONE N.J.A.C. 7:13-11.6 REGULATED ACTIVITY IN OR AFFECTING A PRESENT OR DOCUMENTED HABITAT FOR
- THREATENED OR ENDANGERED SPECIES
- N.J.A.C. 7:13-12.1 REGULATED ACTIVITY ALL REQUIREMENTS
- N.J.A.C. 7:13-12.2 REGULATED ACTIVITY FOR STORMWATER MANAGEMENT N.J.A.C. 7:13-12.3 REGULATED ACTIVITY FOR EXCAVATION, FILL AND GRADING ACTIVITIES

N.J.A.C. 7:13-12.8 REGULATED ACTIVITY FOR UTILITY LINE

- N.J.A.C. 7:13-12.6 REGULATED ACTIVITY FOR ROADWAY N.J.A.C. 7:13-12.7 REGULATED ACTIVITY FOR CULVERT
- 2. THE APPLICANT/OWNER SHALL SECURE ALL PROPOSED PERMANENT AND TEMPORARY EASEMENTS AND RIGHTS OF ACCESS SHOWN ON THE PLANS PRIOR TO CONSTRUCTION. THE OWNER/CONTRACTOR SHALL ALSO SECURE NECESSARY EASEMENTS OR RIGHTS OF ACCESS BEYOND THE LIMITS SHOWN, AS DEEMED NECESSARY.
- 3. THE CONTRACTOR IS ADVISED THAT STAGING, STORING AND STOCKPILING OF MATERIALS AND EQUIPMENT SHALL BE ACCOMPLISHED OUTSIDE NJDEP REGULATED FRESHWATER WETLANDS, WETLANDS BUFFERS OR FLOOD HAZARD AREA RIPARIAN ZONES TO THE MAXIMUM EXTENT PRACTICABLE AND IN ACCORDANCE WITH NJDEP LINEAR CONSTRUCTION
- 4. THE CONTRACTOR SHALL EXCAVATE, STORE AND REPLACE TOPSOIL WITHIN TRENCH LIMITS. PROPOSED FINISHED GRADE SHALL MATCH EXISTING GRADE. ALL EXCESS MATERIAL SHALL BE DISPOSED OF LAWFULLY.
- 5. ANY PROPOSED TRENCH IN A STREAM CHANNEL, OPEN WATER OR RIPARIAN ZONE IS TO BE A MAXIMUM OF 20 FEET WIDE, UNLESS CONSTRUCTION STANDARDS DICTATE ADDITIONAL WIDTH.
- 6. A MINIMUM COVER OF FOUR (4) FEET SHALL BE PROVIDED FROM THE CHANNEL INVERT. THE ELEVATION OF THE TRANSMISSION GAS MAIN SHALL REMAIN HORIZONTAL UNTIL TEN (10) FEET BEYOND THE TOP OF BANK, OR TWICE THE HEIGHT OF THE STREAM BANK, WHICHEVER IS GREATER. THE INCLINED OF THE MAIN SHALL BE NO GREATER THAT 1:2 ENTERING AND EXITING THE CHANNEL BANK AREA.
- 7. ALL OR A PORTION OF THE SITE LIES WITHIN A FLOOD HAZARD AREA. CERTAIN ACTIVITIES IN FLOOD HAZARD AREAS ARE REGULATED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SOME ACTIVITIES MAY BE PROHIBITED ON THIS SITE OR MAY FIRST REQUIRE A PERMIT. CONTACT THE DIVISION OF LAND USE REGULATIONS AT (609) 292-0060 FOR MORE INFORMATION PRIOR TO ANY CONSTRUCTION ON SITE.
- 8. NEW JERSEY STATE OPEN WATERS AND WETLANDS AND WATERS OF THE U.S. DELINEATION DATA WERE COLLECTED BY ECOLSCIENCES, ECOLOGY & ENVIRONMENTAL, INC., AND AMY S. GREENE ENVIRONMENTAL CONSULTANTS, INC. IN 2016-2018 AND BY TRANSCONTINENTAL GAS PIPELINE COMPANY, LLC AND ECOLOGY & ENVIRONMENT, INC. IN 2019. A MAPPING GRADE TRIMBLE GPS WAS USED TO COLLECT FRESHWATER WETLANDS IN THE FIELD. IN NEW JERSEY MAPPING GRADE LOCATIONS AND DATA WERE RECORDED BY CIVIL SURVEY OF WILLIAMS STRATEGIC SOURCING COMPANY, LLC TO MEET PLS CERTIFICATION REQUIREMENTS REQUIRED BY NJDEP LETTER OF INTERPRETATION (LOI).
- 9. WITHIN THE SURVEY CORRIDOR ECOLOGY AND ENVIRONMENT, INC. AND AMY GREENE ENVIRONMENTAL ESTABLISHED THE RIPARIAN ZONES UTILIZING WATERS OF THE UNITED STATES FIELD DATA. OUTSIDE SURVEY CORRIDOR FEATURES ECOLOGY AND ENVIRONMENT, INC. USED REMOTE SENSING FOR FEATURES WHO'S TRADITIONAL AREAS ENCROACH INTO THE SURVEY CORRIDOR FROM OUTSIDE.
- 10. PROPOSED PROJECT IS SUBJECT TO SOMERSET-UNION SOIL CONSERVATION DISTRICT PLAN CERTIFICATION APPROVAL.
- 11. PRIOR TO ANY SITE DISTURBANCE, ALL WETLANDS AND OR WETLANDS TRANSITION AREA LIMITS SHALL BE CLEARLY IDENTIFIED IN THE FIELD WITH ORANGE "MIRAFI" PROTECTIVE FENCING OR APPROVED ALTERNATE. LOCATE SILT FENCE FIVE FEET UPSTREAM OF PROTECTIVE FENCING AND DOWNSTREAM OF CLEARING LIMITS AS SHOWN. THE CONTRACTOR SHALL VERIFY THAT ALL PERMITS AS MAY BE REQUIRED BY LOCAL, COUNTY, STATE, OR FEDERAL REGULATIONS ARE IN HAND, ON THE JOB AND VALID PRIOR TO COMMENCING WORK. PS&S SHALL STAKE THESE BOUNDARIES PRIOR TO CONSTRUCTION.
- 12. NON-PAVED AREAS IN FRESHWATER WETLANDS AND/OR RIPARIAN ZONES TO RECEIVE 18 INCHES OF TOPSOIL/INSITU MATERIAL.
- 13. CONTRACTOR SHALL DISPOSE OF ANY HAZARDOUS SUBSTANCES (IF ENCOUNTERED) OFF-SITE. NO PLACEMENT, STORAGE OR PROCESSING OF HAZARDOUS SUBSTANCES IN REGULATED AREAS PERMÍTTED.
- 14. THE NEW JERSEY FLOOD HAZARD AREA DESIGN FLOOD ASSOCIATED WITH CARTER'S BROOK WERE DETERMINED USING NJDEP METHOD 5 (FLOOD HAZARD AREA DETERMINED BY APPROXIMATION) ACCORDING TO N.J.A.C.
- 15. STAGING, STORING AND STOCKPILING OF MATERIALS AND EQUIPMENT SHALL, TO THE MAXIMUM EXTENT ACTIVITIES IN THE RIPARIAN ZONE. THESE ACTIVITIES. AS WELL AS ACCESS TO THE UTILITY LINE DURING CONSTRUCTION, SHALL, TO THE MAXIMUM EXTENT PRACTICABLE, BE UNDERTAKEN IN ACTIVELY DISTURBED AREAS.

### REFERENCE NOTES

- 1. EXISTING CONDITIONS SHOWN HEREON ARE BASED UPON SURVEY INFORMATION PREPARED BY D.W. SMITH ASSOCIATES, INC. AND WILLIAMS TRANSCONTINENTAL PIPE LINE COMPANY, LLC.
- 2. THE VERTICAL DATUM REFERS TO NAVD 88 TOPOGRAPHICAL DATA. (CONVERSION TO NVGD 1929; + 1.04 FT.)
- 3. THE HORIZONTAL DATUM REFERS TO NAD83 NEW JERSEY STATE PLANE COORDINATE SYSTEM.
- 4. LOT LINES AND RIGHT-OF-WAY LINES SHOWN HEREON WERE TAKEN FROM INFORMATION AS REFERENCED ABOVE.
- 5. TOPOGRAPHIC CONTOURS BASED UPON FIELD SURVEY PERFORMED BY D.W. SMITH ASSOCIATES, LLC OCTOBER 2016-JUNE 2017, PROVIDED BY TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC.
- 6. PROPOSED SITE IMPROVEMENTS AND PROPOSED LIMITS OF DISTURBANCE TAKEN FROM PLANS ENTITLED "TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC POST CONSTRUCTION STORMWATER MANAGEMENT PLAN -COMPRESSOR STATION NO. 206 TRAP ROCK ACCESS ROAD", LAST REVISED JANUARY 15, 2020, PROPOSED BY AECOM.



	FL	OOD HAZARD AREA	METES AND BOUN	IDS
Line #	Length	Direction	START	END
L1	16.390	S1° 12' 48.59"E	N=572590.5184 E=465198.0982	N=572574.1324 E=465198.4453
L2	33.609	S8° 58' 56.56"E	N=572574.1324 E=465198.4453	N=572540.9358 E=465203.6927
L3	88.932	S2* 03' 55.39"W	N=572540.9358 E=465203.6927	N=572452.0613 E=465200.4875
L4	25.330	S7° 07' 37.92"W	N=572452.0613 E=465200.4875	N=572426.9268 E=465197.3448
L5	31.203	S15* 04' 51.26"E	N=572426.9268 E=465197.3448	N=572396.7982 E=465205.4633
L6	22.074	S45° 27' 06.17"E	N=572396.7982 E=465205.4633	N=572381.3129 E=465221.1948
L7	40.335	S29* 15' 06.43"E	N=572381.3129 E=465221.1948	N=572346.1213 E=465240.9044
L8	28.747	S26° 08' 47.26"E	N=572346.1213 E=465240.9044	N=572320.3159 E=465253.5723
L9	56.168	S6° 44' 53.41"W	N=572320.3159 E=465253.5723	N=572264.5371 E=465246.9723
L10	35.727	S25° 39′ 40.23″E	N=572264.5371 E=465246.9723	N=572232.3335 E=465262.4440
L11	35.388	SO* 25' 28.96"W	N=572232.3335 E=465262.4440	N=572196.9466 E=465262.1816
L12	42.555	S32* 13' 29.32"E	N=572196.9466 E=465262.1816	N=572160.9463 E=465284.8740
L13	15.355	S54° 19' 39.39"E	N=572160.9463 E=465284.8740	N=572151.9920 E=465297.3480
L14	18.974	S53° 14′ 24.10″E	N=572151.9920 E=465297.3480	N=572140.6365 E=465312.5493
L15	87.262	S22* 28' 08.89"E	N=572140.6365 E=465312.5493	N=572059.9987 E=465345.8997
L16	20.786	S37* 39' 49.96"E	N=572059.9987 E=465345.8997	N=572043.5445 E=465358.6004
L17	82.215	S50° 12′ 46.54″E	N=572043.5445 E=465358.6004	N=571990.9323 E=465421.7765
L18	25.279	S22° 47′ 49.51"E	N=571990.9323 E=465421.7765	N=571967.6282 E=465431.5712
L19	25.259	S43° 14' 15.91"E	N=571967.6282 E=465431.5712	N=571949.2266 E=465448.8743
L20	23.886	S79° 07' 11.24"E	N=571949.2266 E=465448.8743	N=571944.7179 E=465472.3312

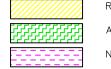
<u>N 71°54′17" W 29</u>6.<u>77</u>

N. 72:41'57" .W .412.29"

	FL	OOD HAZARD AREA	METES AND BOUN	DS
Line #	Length	Direction	START	END
L21	25.796	S63° 22' 32.86"E	N=571944.7179 E=465472.3312	N=571933.1576 E=465495.3922
L22	35.893	S28° 15' 16.81"E	N=571933.1576 E=465495.3922	N=571901.5413 E=465512.3836
L23	35.710	S5° 12' 36.14"E	N=571901.5413 E=465512.3836	N=571865.9793 E=465515.6263
L24	32.903	S27° 01' 14.58"E	N=571865.9793 E=465515.6263	N=571836.6682 E=465530.5744
L25	33.298	S50° 27′ 10.16″E	N=571836.6682 E=465530.5744	N=571815.4666 E=465556.2508
L26	22.493	S31° 48' 26.92"E	N=571815.4666 E=465556.2508	N=571796.3511 E=465568.1064
L27	43.134	S12° 25′ 48.69″E	N=571796.3511 E=465568.1064	N=571754.2284 E=465577.3909
L28	14.152	S4° 55' 02.83"E	N=571754.2284 E=465577.3909	N=571740.1285 E=465578.6041
L29	12.587	S54° 03' 12.48"E	N=571740.1285 E=465578.6041	N=571732.7396 E=465588.7940
L30	20.359	S67* 59' 34.20"E	N=571732.7396 E=465588.7940	N=571725.1104 E=465607.6700
L31	14.865	S41° 53' 51.82"E	N=571725.1104 E=465607.6700	N=571714.0456 E=465617.5972
L32	35.715	S8° 38' 51.01"E	N=571714.0456 E=465617.5972	N=571678.7369 E=465622.9671
L33	38.061	S21° 59' 02.48"E	N=571678.7369 E=465622.9671	N=571643.4430 E=465637.2152
L34	30.232	S35° 06′ 50.77″E	N=571643.4430 E=465637.2152	N=571618.7127 E=465654.6051
L35	1.443	S36° 14' 12.41"E	N=571618.7127 E=465654.6051	N=571617.5491 E=465655.4579
L36	8.205	S39° 30' 56.61"W	N=571617.5491 E=465655.4579	N=571611.2197 E=465650.2374
L37	44.559	S27° 49′ 37.01″W	N=571611.2197 E=465650.2374	N=571571.8138 E=465629.4373
L38	53.036	S12° 40' 50.04"W	N=571571.8138 E=465629.4373	N=571520.0714 E=465617.7951
L39	14.238	S11° 25' 08.44"E	N=571520.0714 E=465617.7951	N=571506.1148 E=465620.6141
L40	19.244	S13* 14' 07.28"E	N=571506.1148 E=465620.6141	N=571487.3819 E=465625.0200

Line #	Length	Direction	START	END
L41	73.495	S20° 13′ 55.32″W	N=571487.3819 E=465625.0200	N=571418.421 E=465599.603
L42	53.561	S17° 51' 25.33"E	N=571418.4211 E=465599.6036	N=571367.440 E=465616.027
L43	74.181	S10° 41′ 26.54″E	N=571367.4408 E=465616.0276	N=571294.547 E=465629.788
L44	63.251	S10° 28' 55.63"E	N=571294.5470 E=465629.7888	N=571232.351 E=465641.295
L45	44.573	S29° 34' 14.34"E	N=571232.3517 E=465641.2959	N=571193.584 E=465663.292
L47	56.087	S79° 34' 19.14"E	N=571193.5846 E=465663.2925	N=571183.432 E=465718.453
L48	55.444	N42° 45′ 03.26"E	N=571183.4328 E=465718.4531	N=571224.145 E=465756.089
L49	16.388	N29° 44' 10.93"E	N=571224.1459 E=465756.0891	N=571238.375 E=465764.217
L50	13.312	N13° 16' 42.62"E	N=571238.3757 E=465764.2176	N=571251.332 E=465767.275
L51	17.292	N88° 04' 24.87"E	N=571251.3320 E=465767.2752	N=571251.913 E=465784.557
L52	6.610	N29° 15' 50.40"E	N=571251.9133 E=465784.5576	N=571257.679 E=465787.788
L53	19.566	N38° 38′ 03.11″W	N=571257.6793 E=465787.7886	N=571272.963 E=465775.572
L54	15.071	N22° 22′ 03.75″E	N=571272.9631 E=465775.5727	N=571286.900 E=465781.307
L55	22.779	N76° 30' 51.47"E	N=571286.9000 E=465781.3079	N=571292.212 E=465803.459
L56	24.477	N28° 27′ 40.07″E	N=571292.2122 E=465803.4590	N=571313.731 E=465815.123
L57	17.038	N65° 52′ 59.53″E	N=571313.7310 E=465815.1239	N=571320.692 E=465830.674
L58	8.911	N83° 40′ 51.67″W	N=571320.6928 E=465830.6749	N=571321.673 E=465821.817
L59	35.806	N47° 11' 33.58"E	N=571321.6736 E=465821.8179	N=571346.005 E=465848.086





ACCESS TO THE PROJECT DISTURBANCE NEW UTILITY LINE DISTURBANCE

### WETLAND LEGEND

PALUSTRINE EMERGENT (PEM) PALUSTRINE EMERGENT DISTURBED PALUSTRINE FORESTED (PFO) PALUSTRINE FORESTED DISTURBED PALUSTRINE SCRUB-SHRUB (PSS) PALUSTRINE SCRUB-SHRUB DISTURBED TRANSITION AREA DISTURBANCE

TEMPORARY DISTURBANCE PERMANENT DISTURBANCE

> PS&S, LLC 1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727 PROFESSIONAL ENGINEER

DATE

SSUE

DESCRIPTION

08/24/18 REV PER NJDEP COMMENTS

2 | 02/04/19 | REV DRAINAGE PER NJDEP COMMENTS

3 04/30/19 REV TRANSITION AREA WIDTHS PER NUDER

5 06/07/19 REV DRAINAGE & LIMIT OF DISTURBANCE

6 06/24/19 REV FENCE AND LIMIT OF DISTURBANCE

7 | 10/11/19 | REV TITLE BLOCK FOR ACCESS RD LC

PROPERTY LINE

EXISTING CONTOURS

EXISTING SPOT ELEVATION PROPOSED CONTOURS

EXISTING STORM SEWER

EXISTING WATER MAIN

— PROPOSED SUCTION AND

EXISTING UTILITY POLE

PROPOSED TREELINE

EXISTING TREE

EXISTING FENCE

EASEMENT

DISTURBANCE STREAM LINE

TOP OF BANK

(SEE REPORT)

⑤→U-T09-002-1 PHOTO LOCATION

△ W-T19-001-006 WETLAND FLAGS

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER

THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND

THOMAS J. MURPHY, PLS

DW SMITH ASSOCIATES, LLC

1450 STATE ROUTE 34, WALL, NJ 07753

PROFESSIONAL LAND SURVEYOR

N.J. LIC. NO. 37207 COA NO. 24GA28122400

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LA' OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE

PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE

WILLIAM SALMON, P.E.

RIPARIAN BUFFER

PROPOSED FENCE

EXISTING PERMANENT

PROPOSED PERMANENT

PROPOSED LIMIT OF

WETLANDS BOUNDARY

APPROXIMATE NJFHADF

STATE OPEN WATERS FLAGS

STATE PLANE COORDINATES

OPEN WATER DATA POINTS

FRESHWATER WETLAND/STATE

EXISTING TREELINE/CANOPY

DISCHARGE PIPING EXISTING SIGN

EXISTING ELECTRIC SEWER

8 01/15/20 GENERAL REVISIONS

Q

<del>-x-x</del>-

—x ——

\_ \_ \_ \_ \_ \_ \_

\_\_\_\_

\_\_\_\_

\_ \_ \_ \_

(#5)

**+** 1609

PREPARED UNDER MY DIRECT SUPERVISION

LEGEND

GAS — EXISTING GAS MAIN

4 05/17/19 REV TRANSITION AREAS AND BASIN PER NJDEP COMMENTS







SARTOR, LLC. OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN TRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION.

DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOV

ILESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION IS EES DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEP IREIN, CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRU

NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED

### **COMPRESSOR STATION 206**

OCK 5.02, LOTS 1.02 (FORMERLY 9, 10, 12, 16 & 17), 11.02, 20 (FORMERLY 23) & 25 OWNSHIP OF FRANKLIN, SOMERSET COUNTY, NEW JERSEY

SHEET TITLE

### OVERALL SITE PLAN AND **GENERAL NOTES**

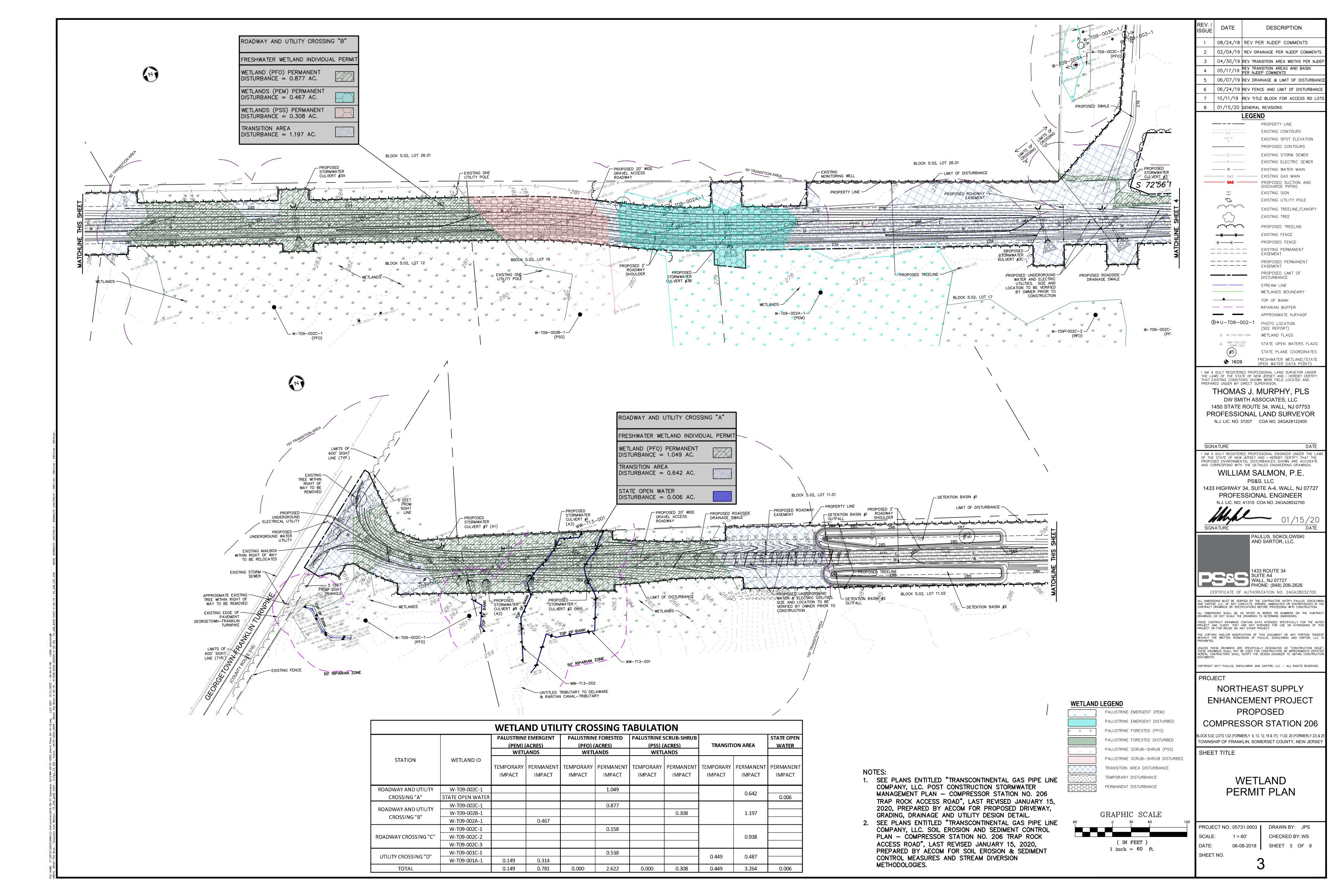
PROJECT NO.: 05731.0003 1 = 200' DATE: 06-08-2018

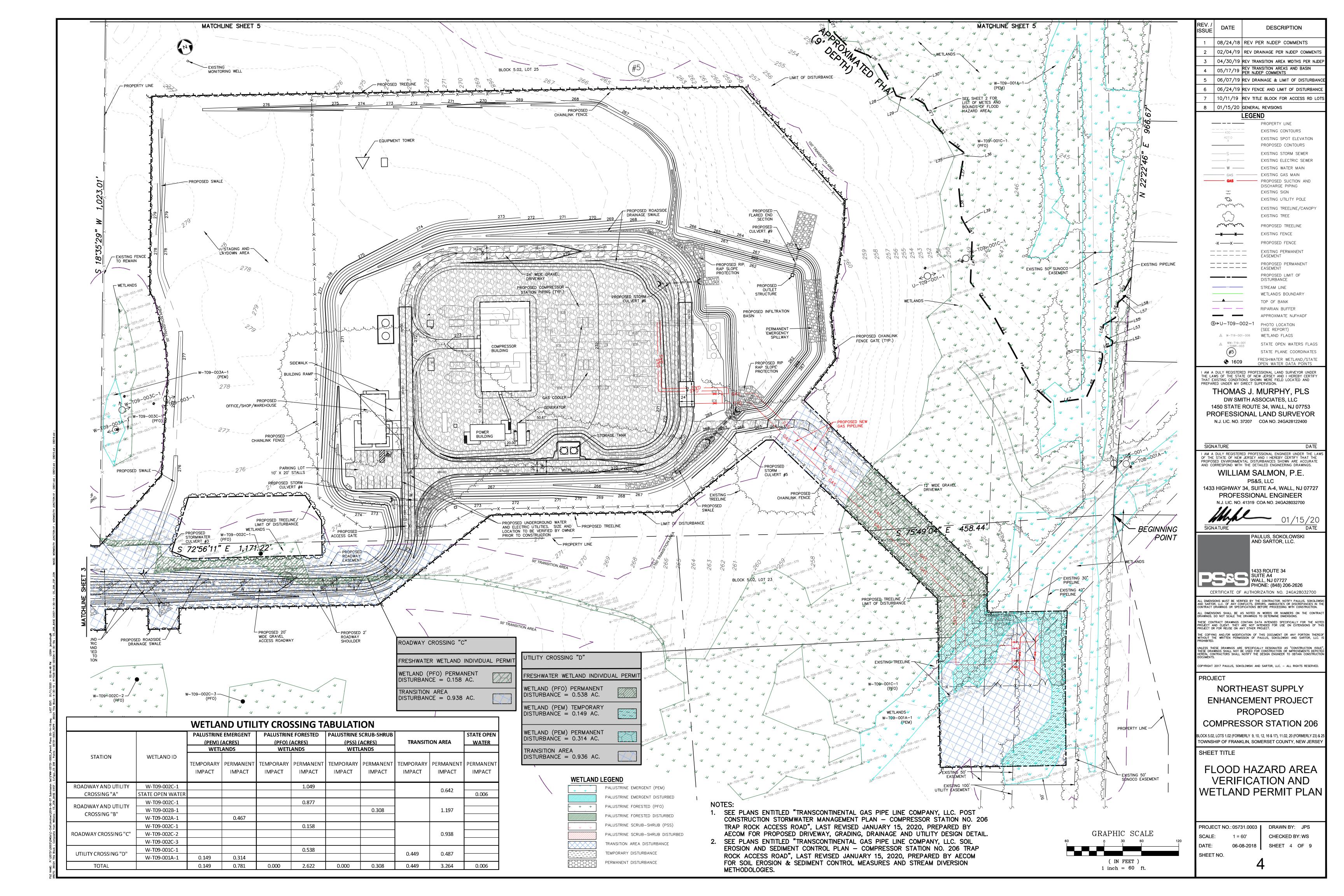
SHEET NO.

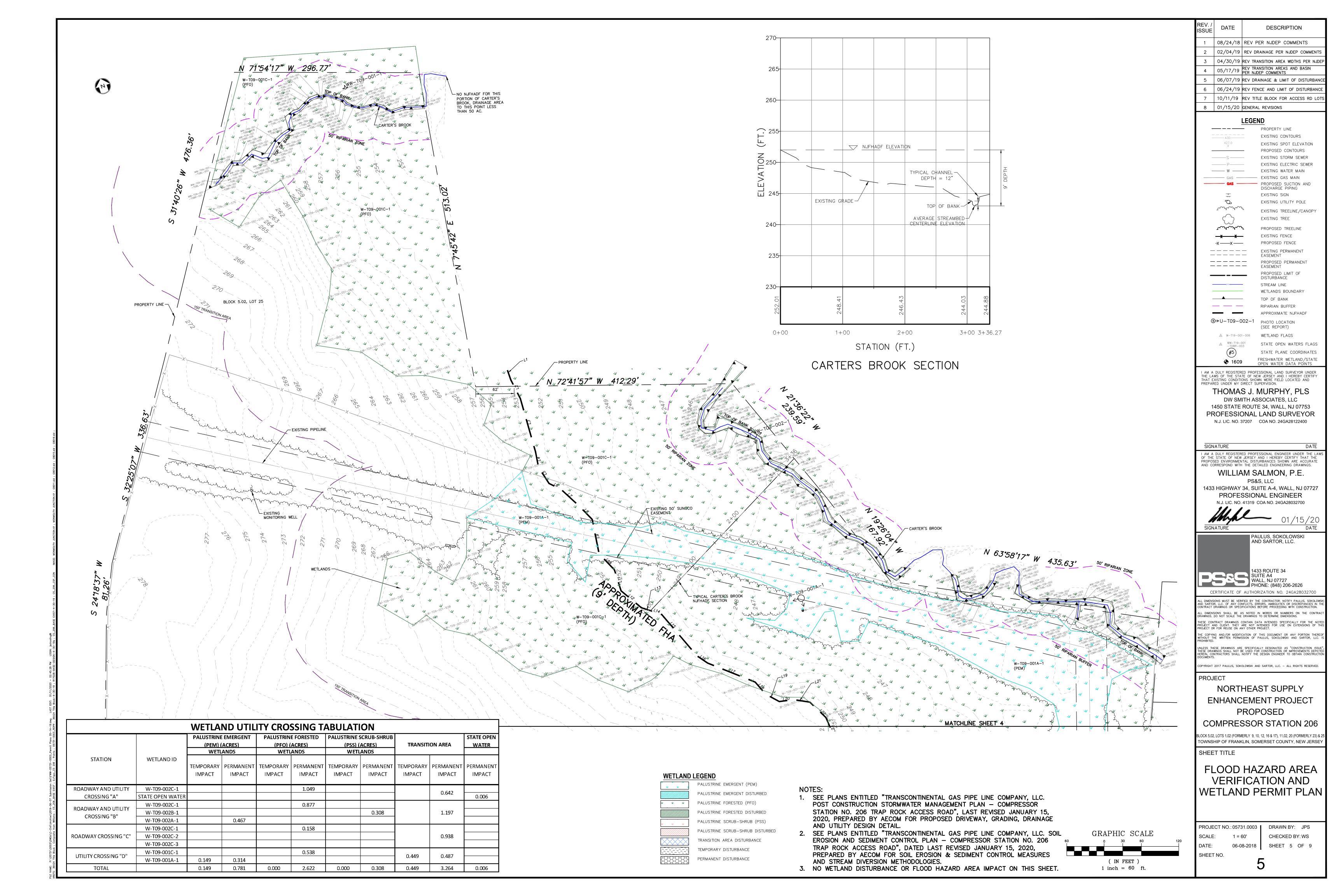
DRAWN BY: JPS

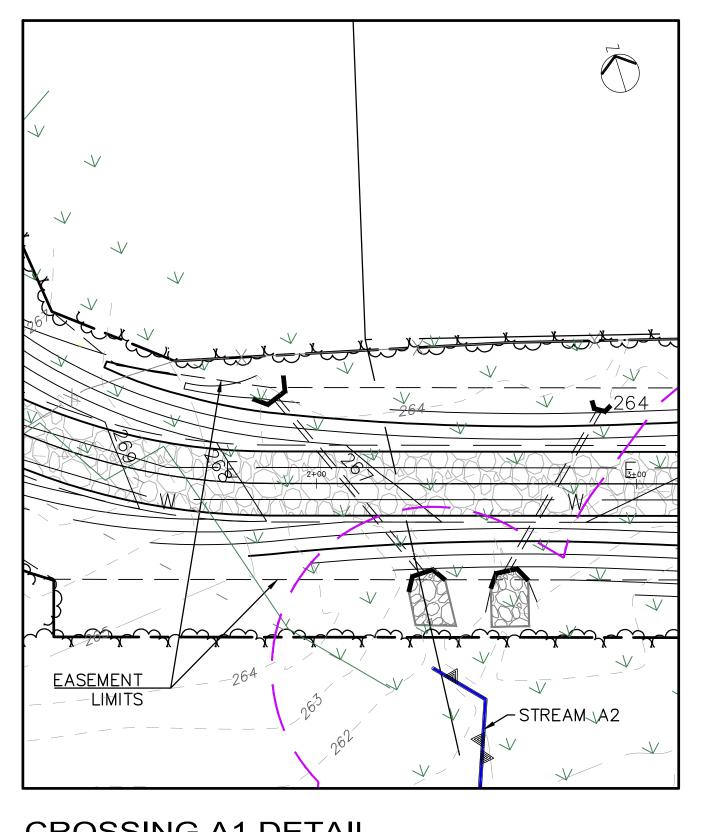
CHECKED BY: WS

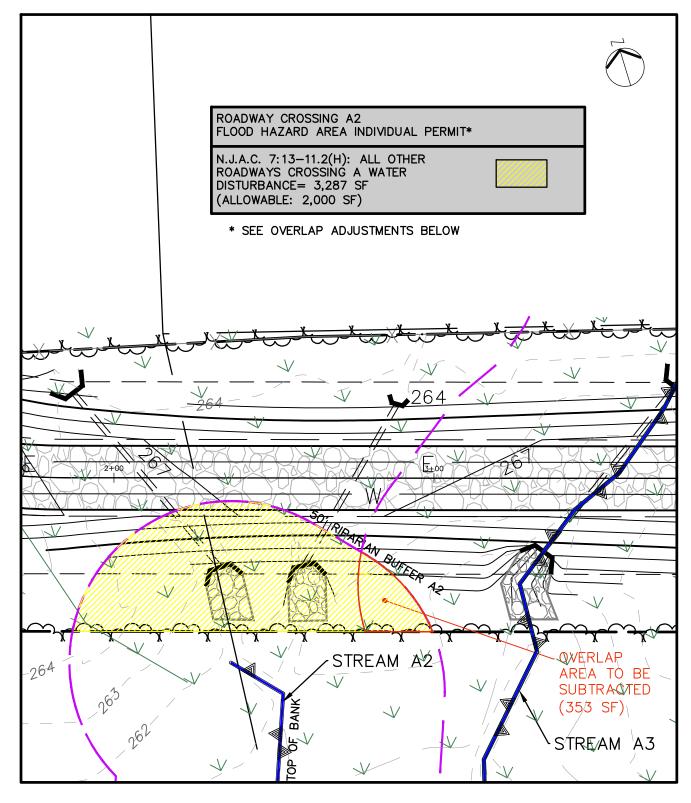
SHEET 2 OF 9



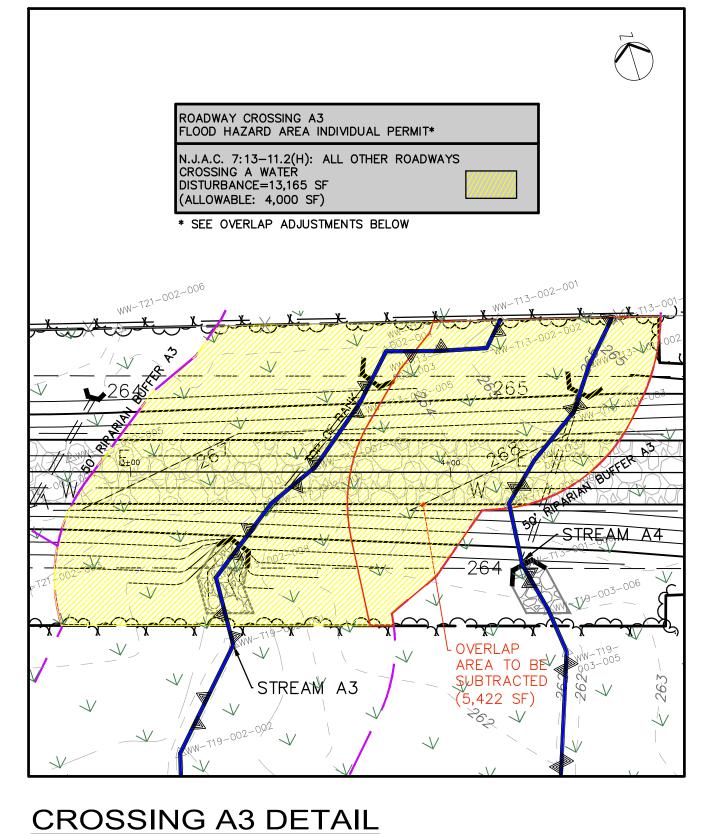


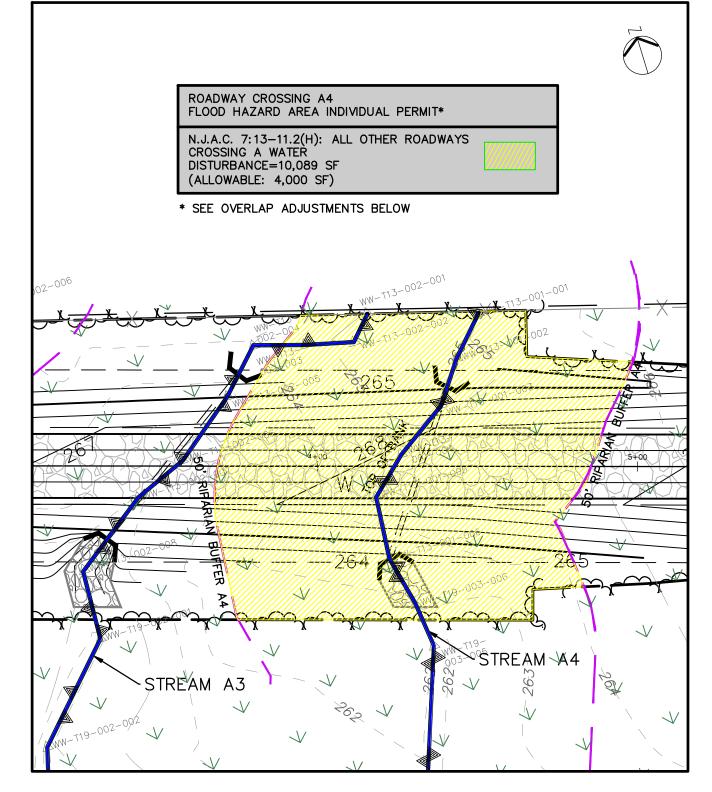






**CROSSING A2 DETAIL** 





CROSSING A4 DETAIL

GRAPHIC SCALE

EROSION AND SEDIMENT CONTROL PLAN - COMPRESSOR STATION NO. 206 TRAP

ROCK ACCESS ROAD". LAST REVISED JANUARY 15, 2020, PREPARED BY AECOM

FOR SOIL EROSION & SEDIMENT CONTROL MEASURES AND STREAM DIVERSION

3. SEE SHEET 4 FOR LOCATION OF APPROXIMATED FLOODPLAIN OF CARTER'S BROOK.

METHODOLOGIES.

( IN FEET )

1 inch = 30 ft.

### CROSSING A1 DETAIL

ARE	A OF DISTURBAN OVERLAP	ICE SUMMARY ADJUSTMENTS		′
	ROADWAY	CROSSING A	WATER (SF)	)
CROSSING LABLE	TOTAL DISTURBANCE	ALLOWABLE DISTURBANCE	EXCEEDED LIMITS	OVERLAF AREA
A1	_	_	_	_
A2	3,287	2,000	1,287	- 353
А3	13,165	4,000	9,165	-5,422
A4	10,089	4,000	6,089	
TOTAL	26,541	10,000	16,541	-5,775
TOTAL NET			10,766	

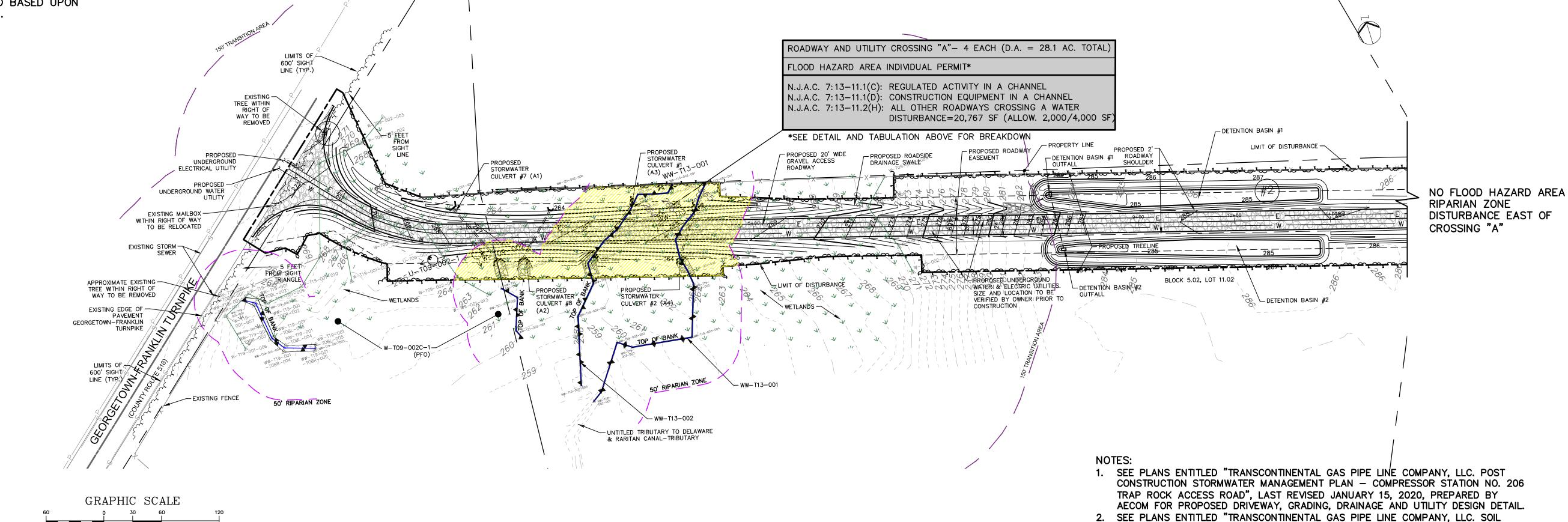
### NOTES:

1. TOTAL NET COMPENSATION=ROAD DISTURBANCE IN EXCEEDANCE OF ALLOWABLE LIMITS LESS OVERLAP AREA.

2. STREAM A1 ELIMINATED BASED UPON NJDEP WALK THROUGH.

( IN FEET )

1 inch = 60 ft.



08/24/18 REV PER NJDEP COMMENTS 2 02/04/19 REV DRAINAGE PER NJDEP COMMENT 3 | 04/30/19 REV TRANSITION AREA WIDTHS PER NJDE 4 05/17/19 REV TRANSITION AREAS AND BASIN PER NJDEP COMMENTS 5 06/07/19 REV DRAINAGE & LIMIT OF DISTURBANC 6 06/24/19 REV FENCE AND LIMIT OF DISTURBANC 7 10/11/19 REV TITLE BLOCK FOR ACCESS RD L 8 01/15/20 GENERAL REVISIONS \_\_\_\_ PROPERTY LINE EXISTING CONTOURS EXISTING SPOT ELEVATION PROPOSED CONTOURS EXISTING STORM SEWER EXISTING ELECTRIC SEWER EXISTING WATER MAIN —— W —— - EXISTING GAS MAIN PROPOSED SUCTION AND DISCHARGE PIPING EXISTING SIGN Q EXISTING UTILITY POLE EXISTING TREELINE/CANOPY EXISTING TREE  $\tau_{u}$ PROPOSED TREELINE EXISTING FENCE <del>-x x</del> PROPOSED FENCE -x -----x -----\_\_\_\_\_ \_\_\_\_\_ EASEMENT \_\_\_\_\_ PROPOSED PERMANENT \_\_\_\_\_ EASEMENT PROPOSED LIMIT OF \_\_\_\_ STREAM LINE WETLANDS BOUNDARY TOP OF BANK RIPARIAN BUFFFR APPROXIMATE NJFHADF ⑤→U-T09-002-1 PHOTO LOCATION (SEE REPORT) WETLAND FLAGS STATE OPEN WATERS FLAGS STATE PLANE COORDINATES FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS **4** 1609 I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION. THOMAS J. MURPHY, PLS DW SMITH ASSOCIATES, LLC 1450 STATE ROUTE 34, WALL, NJ 07753 PROFESSIONAL LAND SURVEYOR N.J. LIC. NO. 37207 COA NO. 24GA28122400

DATE

ISSUE

DESCRIPTION

SIGNATURE

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAY
OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE
PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE
AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWNGS.

WILLIAM SALMON, P.E.
PS&S, LLC

1433 HIGHWAY 34 SUITE A-4 WALL NUOT727

1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727 PROFESSIONAL ENGINEER N.J. LIC. NO. 41319 COA NO. 24GA28032700

PAULUS, SOKOLOWSK AND SARTOR, LLC.

1433 ROUTE 34
SUITE A4
WALL, NJ 07727
PHONE: (848) 206-2626

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

\*\*\*LL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR, NOTIFY PAULUS, SOKOLOV ND SARTOR, LLC. OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN ONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION.

DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT INGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS.

CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED COT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS COT OR FOR REUSE ON ANY OTHER PROJECT.

COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF UT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC. IS BITED.

NLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUBLES DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICE BREIN, CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCT OCUMENTS.

PYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC. — ALL RIGHTS RESERVED

PROJECT

NORTHEAST SUPPLY
ENHANCEMENT PROJECT
PROPOSED

COMPRESSOR STATION 206

BLOCK 5.02, LOTS 1.02 (FORMERLY 9, 10, 12, 16 & 17), 11.02, 20 (FORMERLY 23) & 25 TOWNSHIP OF FRANKLIN, SOMERSET COUNTY, NEW JERSEY

SHEET TITLE

RIPARIAN ZONE PERMIT PLAN

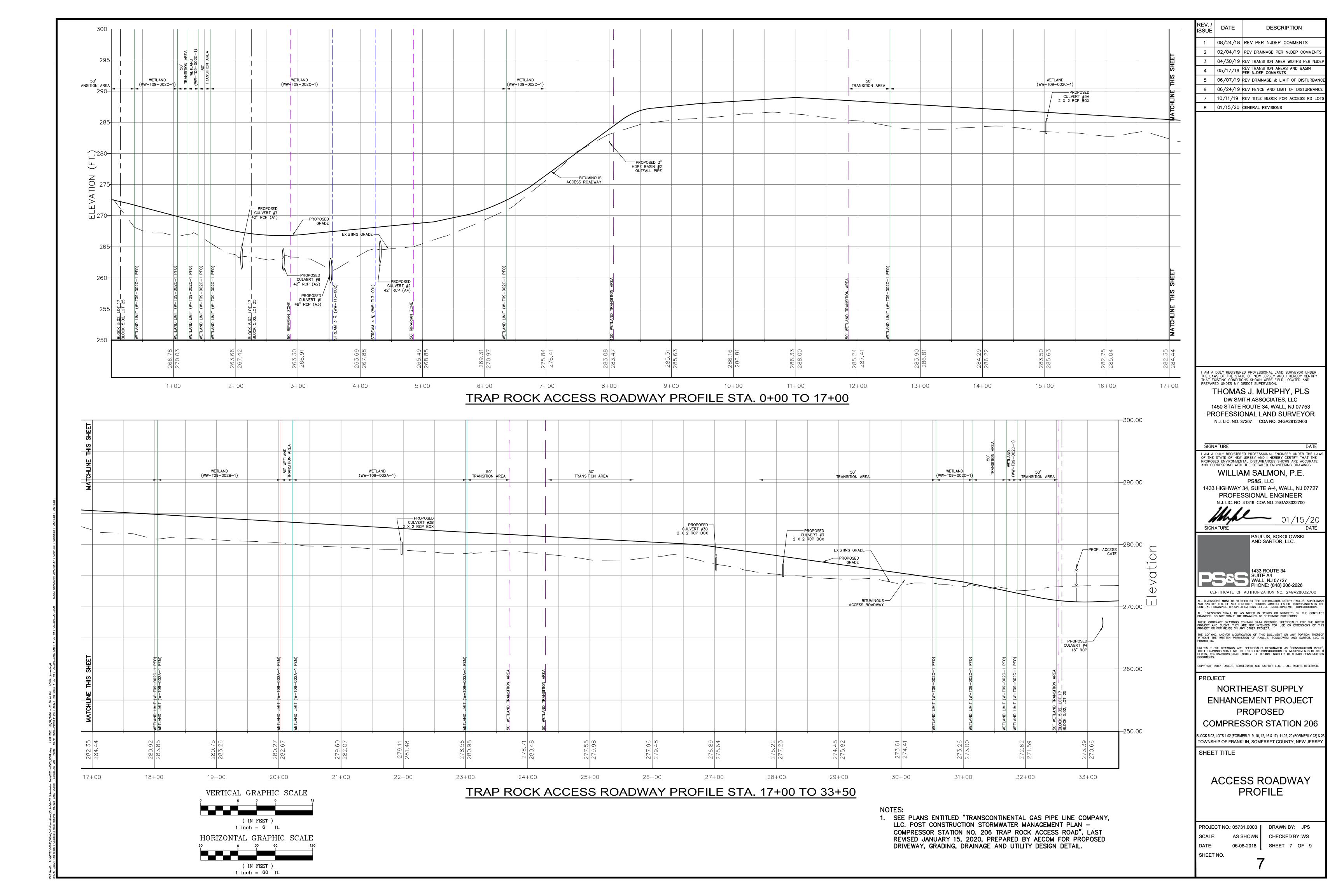
PROJECT NO.: 05731.0003 |
SCALE: 1 = 60'
DATE: 06-08-2018

SHEET NO.

CHECKED BY: WS
SHEET 6 OF 9

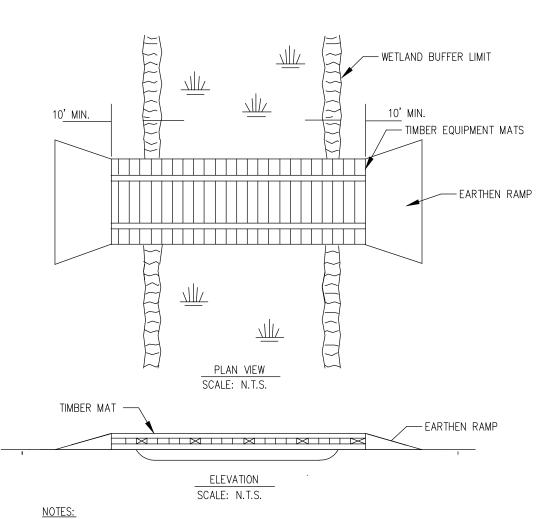
DRAWN BY: JPS

6



CONSTRUCTION PROCEDURE NOTES:

- 1. FLAG WETLAND BOUNDARIES AND INSTALL BOUNDARY SIGNS PRIOR TO CLEARING.
- 2. NO OVERNIGHT PARKING OR REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND. PLACE "NO FUELING" SIGN POSTS 100 FEET BACK FROM WETLAND BOUNDARY. REFUEL STATIONARY EQUIPMENT AS PER SPCC PLAN.
- 3. INSTALL TEMPORARY SLOPE BREAKERS UPSLOPE OF WETLAND BOUNDARIES AS SHOWN ON DRAWINGS AND SPECIFICATIONS.
- 4. INSTALL PREFABRICATED EQUIPMENT MATS THROUGH ENTIRE WETLAND AREA ON THE WORKING SIDE OF THE CONSTRUCTION CORRIDOR
- 5. AVOID ADJACENT WETLANDS. INSTALL SEDIMENT BARRIERS AT OUTER BOUNDARIES OF THE WETLAND. INSTALL SEDIMENT BARRIERS ALONG THE EDGE OF THE SPOIL SIDE OF THE CONSTRUCTION CORRIDOR THROUGH THE WETLAND AND ALONG THE DOWN SLOPE EDGE OF THE WETLAND. IF THE DOWN SLOPE EDGE OF THE WETLAND IS THE SPOIL SIDE, THEN SEDIMENT BARRIERS ARE NOT REQUIRED ON THE WORKING SIDE OF THE CORRIDOR UNLESS EQUIPMENT TRAVERSING THROUGH THE WETLAND CAUSES SPOIL AND SEDIMENT TO EXIT THE CONSTRUCTION CORRIDOR
- 5. LIMIT PULLING OF TREE STUMPS AND GRADING ACTIVITIES TO DIRECTLY OVER THE TRENCH LINE. DO NOT GRADE OR REMOVE STUMPS OR ROOT SYSTEMS FROM THE REST OF THE RIGHT-OF-WAY IN WETLANDS UNLESS THE CHIEF INSPECTOR AND COMPANY ENVIRONMENTAL INSPECTOR DETERMINE THAT SAFETY RELATED CONSTRUCTION CONSTRAINTS REQUIRE REMOVAL OF TREE STUMPS FROM UNDER THE WORKING SIDE OF THE RIGHT-OF-WAY.
- CONDUCT TRENCH LINE TOPSOIL STRIPPING (IF TOPSOIL IS NOT SATURATED). SALVAGE TOPSOIL TO ACTUAL DEPTH OR A MAXIMUM DEPTH OF 12 INCHES, AS DETERMINED BY THE COMPANY ENVIRONMENTAL INSPECTOR. SEGREGATED TOPSOIL PILE MAY BE LOCATED ON SPOIL SIDE, AS REQUIRED.
- 8. LEAVE HARD PLUGS AT THE EDGES OF WETLAND UNTIL JUST PRIOR TO TRENCHING.
- 9. TRENCHING THROUGH WETLANDS MAY PROCEED WHEN THE PIPE SECTION IS FABRICATED AND READY TO LAY. ONCE TRENCHING COMMENCES, CONSTRUCTION THROUGH THE WETLAND IS TO PROCEED CONTINUOUSLY UNTIL THE CROSSING IS COMPLETED, BACK FILLED AND RESTORED IN ORDER TO MINIMIZE THE LENGTH OF TIME THE TRENCH IS OPEN.
- 10. PIPE SECTION MAY BE FABRICATED WITHIN THE WETLAND ADJACENT TO PIPE TRENCH, OR IN STAGING AREA OUTSIDE THE WETLAND AND WALKED IN. NO CONCRETE COATING ACTIVITY WITHIN 100 FEET OF WETLAND BOUNDARY UNLESS APPROVED BY COMPANY ENVIRONMENTAL INSPECTOR.
- 11. LOWER-IN PIPE. PRIOR TO BACK FILLING TRENCH, INSTALL TRENCH PLUGS IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS. 12. RESTORE GRADE TO NEAR PRE-CONSTRUCTION TOPOGRAPHY, REPLACE TOPSOIL AND INSTALL PERMANENT EROSION CONTROL.
- 13. REMOVE PREFABRICATED MATS FROM WETLANDS UPON COMPLETION.
- 14. SEED DISTURBED WETLANDS AREA AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR AND AS SHOWN ON

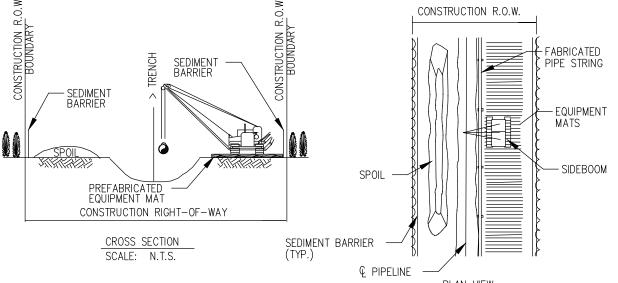


- 1. PERIODICALLY CHECK INSTALLATION AND REMOVE BUILD-UP OF SEDIMENT OR
- 2. MATERIALS PLACED IN WETLANDS SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP. REMOVAL OF THIS STRUCTURE IS NOT CONTINGENT UPON ESTABLISHMENT OF PERMANENT VEGETATION.
- 3. IF A WATERBODY IS LOCATED WITHIN A WETLAND SYSTEM, EXTEND TIMBER EQUIPMENT MATS TO THE BRIDGE EQUIPMENT CROSSING (BEC) USED TO CROSS THE WATERBODY IN ORDER TO ALLOW FOR CONTINUOUS TIMBER EQUIPMENT MAT COVERAGE THROUGH THE WETLAND AND WATERBODY AREA.
- 4. USE ADDITIONAL TIMBER MAT LAYERS TO RAISE CROSSING ABOVE GRADE WHERE POOR SOIL CONDITIONS EXIST.

CONSTRUCT EARTHEN RAMPS.

- 5. TIMBER EQUIPMENT MATS SHALL EXTEND A MINIMUM OF 10 FEET OUTSIDE OF THE WETLAND BOUNDARIES.
- 6. INSTALL EARTHEN RAMP APPROACHES TO TIMBER EQUIPMENT MATS. EARTHEN RAMPS TO BE CONSTRUCTED OF UPLAND MATERIAL, TOP SOIL SHALL NOT BE USED TO

WETLAND EQUIPMENT CROSSING TEMPORARY EROSION CONTROL MEASURE

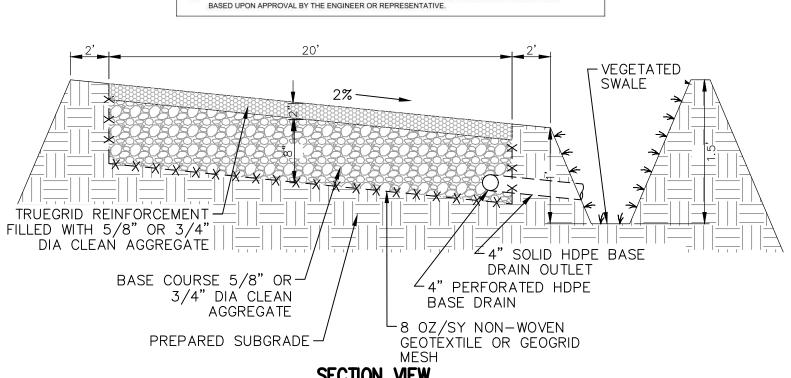


CONSTRUCTION PROCEDURE NOTES:

ALONG BOTH WETLAND EDGES.

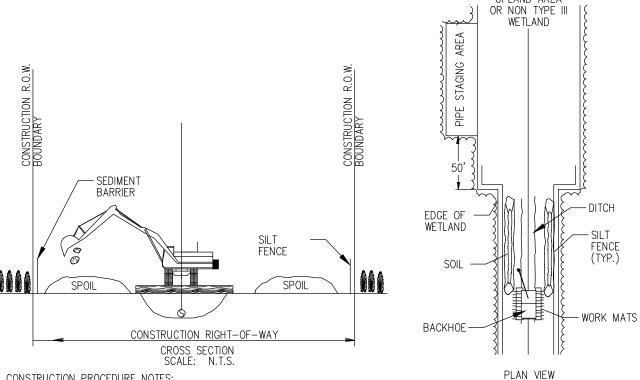
- 1. FLAG WETLAND BOUNDARIES AND INSTALL BOUNDARY SIGNS PRIOR TO CLEARING NO OVERNIGHT PARKING OR REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND.
- PLACE "NO FUELING" SIGN POSTS 100 FEET BACK FROM WETLAND BOUNDARY. REFUEL STATIONARY EQUIPMENT AS PER SPCC PLAN. 3. INSTALL TEMPORARY SLOPE BREAKERS UPSLOPE OF WETLAND BOUNDARIES AS SHOWN ON DRAWINGS AND SPECIFICATIONS.
- 4. INSTALL PREFABRICATED EQUIPMENT MATS THROUGH ENTIRE WETLAND AREA ON THE WORKING SIDE OF
- 5. AVOID ADJACENT WETLANDS. INSTALL SEDIMENT BARRIERS AT OUTER BOUNDARIES OF WETLAND AND
- 6. LIMIT PULLING OF TREE STUMPS AND GRADING ACTIVITIES TO DIRECTLY OVERTHE TRENCHLINE DO NOT GRADE OR REMOVE STUMPS OR ROOT SYSTEMS FROM THE REST OF THE RIGHT-OF-WAY IN WETLANDS JNLESS THE CHIEF INSPECTOR AND COMPANY ENVIRONMENTAL INSPECTOR DETERMINE THAT SAFETY RELATED CONSTRUCTION CONSTRAINTS REQUIRE REMOVAL OF TREE STUMPS FROM UNDER THE WORKING SIDE OF
- 7. TOPSOIL STRIPPING SHALL NOT BE REQUIRED IN SATURATED SOIL CONDITIONS.
- 8. LEAVE HARD PLUGS AT THE EDGES OF WETLAND UNTIL JUST PRIOR TO TRENCHING.
- 9. TRENCHING THROUGH WETLANDS MAY PROCEED WHEN THE PIPE SECTION IS FABRICATED AND READY TO LAY. ONCE TRENCHING COMMENCES, CONSTRUCTION THROUGH THE WETLAND IS TO PROCEED CONTINUOUSLY UNTIL THE CROSSING IS COMPLETED, BACKFILLED AND RESTORED IN ORDER TO MINIMIZE THE LENGTH OF TIME THE
- 10. PIPE SECTION MAY BE FABRICATED WITHIN THE WETLAND ADJACENT TO PIPE TRENCH, OR IN STAGING AREA OUTSIDE THE WETLAND AND WALKED IN. NO CONCRETE COATING ACTIVITY WITHIN 100 FEET OF WETLAND BOUNDARY, UNLESS APPROVED BY COMPANY ENVIRONMENTAL INSPECTOR.
- 11. LOWER-IN PIPE. PRIOR TO BACKFILLING, INSTALL TRENCH PLUGS IN ACCORDANCE WITH DRAWINGS AND
- 12. RESTORE GRADE TO PRE-CONSTRUCTION TOPOGRAPHY AND INSTALL PERMANENT EROSION CONTROL.
- 13. REMOVE PREFABRICATED MATS FROM WETLANDS UPON COMPLETION. 14. SEED DISTURBED WETLAND AREA AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR AND AS SHOWN ON

To possed through association of	RIPARIAN BUFFER MIX (ERNMX-178)	
APPLICATION RA	ATE: 20 LBS PER ACRE OR 1/2 LB PER 1,000	SQUARE FEET
SCIENTIFIC NAME	COMMON NAME	PERCENT COMPOSITION
PANICUM CLANDESTINUM	DEERTONGUE	13%
CAREX VULPENOIDEA	FOX SEDGE	10%
LYMUS VIRGINICUS	VIRGINIA WILDRYE	8%
CHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	8%
LYMUS RIPARIUS	RIVERBANK WILDRYE	8%
SORGHASTRUM NUTANS	INDIANGRASS	7%
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	6%
CORNUS AMOMUM	SILKY DOGWOOD	6%
NDROPOGON GERARDII	BIG BLUESTEM	5%
PANICUM VIRGATUM	SWITCHGRASS	4%
RUDBECKIA HIRTA	BLACKEYED SUSAN	3%
APTISIA AUSTRALIS	BLUE O INDIGO	3%
'ERBENA HASTATA	BLUE VERVAIN	3%
IBURNUM DENTATUM	ARROWWOOD	2%
IONARDA PUNCTATA	SPOTTED BEEBALM	2%
ERNONIA GIGANTEA	GIANT IRONWEED	2%
UPATORIUM PERFOLIATUM	BONESET	2%
UNCUS EFFUSUS	SOFT RUSH	2%
JELIODOIO HELIANTHOIDEO	OXEYE SUNFLOWER	2%
UTHAMIA GRAMINIFOLIA	GRASSLEAF GOLDENROD	1%
EUTHAMIA GRAMINIFOLIA PARTHENIUM INTEGRIFOLIUM	WILD QUININE	1%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPHILITICA ELENIUM AUTUMNALE OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER.	1% 1% 1% 1%
FUTHAMIA GRAMINIFOLIA PARTHENIUM INTEGRIFOLIUM OBELIA SIPHILITICA HELENIUM AUTUMNALE HOTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ER!	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.	1% 1% 1% 1%
ZONE 1 AND ZONE 2 OF THÈ R  THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0	1% 1% 1% 1% 1% D GROUND SURFACE WITHIN LITERNATIVE MAY BE USED
EUTHAMIA GRAMINIFOLIA PARTHENIUM INTEGRIFOLIUM ODBELIA SIPPILITICA HELENIUM AUTUMNALE HOTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE. FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0 COMMON NAME	1% 1% 1% 1% D GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION
CIENTIFIC NAME  APPLICATION RATIO  APPLICATION RATI	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0 COMMON NAME  VIRGINIA WILDRYE	1% 1% 1% 1% 00 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20%
APPLICATION RATIO  APPLICATION RATIO  APPLICATION RATIO  APPLICATION RATIO  APPLICATION RATIO  APPLICATION RATIO  CIENTIFIC NAME  ELYMUS VIRGINICUS  CAREX VULPENOIDEA	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. UST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE	1% 1% 1% 1% 1% D GROUND SURFACE WITHIN LITERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPPILITICA ELENIUM AUTUMNALE  OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE. FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0 COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE	1% 1% 1% 1% 0 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14%
CIENTIFIC NAME  CIENTIFIC NAME  CIENTIFIC NAME  CIENTIFIC NAME  CIENTIFIC NAME  CIENTIFIC NAME  CORPORATION  CORPORATION  CORPORT  CORPORATION  CORPORT  COR	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. SIT CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANGRASS	1% 1% 1% 1% 00 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10%
ELYMLOS VIRGINICUS  APPLICATION RATIO  APPLICATION RATIO  APPLICATION RATIO  APPLICATION RATIO  APPLICATION RATIO  APPLICATION RATIO  CIENTIFIC NAME  ELYMUS VIRGINICUS  CAREX VULPENOIDEA  APPLICATION MAIN  CORGHASTRUM NUTANS  ENDROPOGON GERARDII	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. UST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANGRASS BIG BLUESTEM	1% 1% 1% 1% 1% 1% D GROUND SURFACE WITHIN LTERNATIVE MAY BE USED  000 SQUARE FEET  PERCENT COMPOSITION 20% 20% 14% 10% 10%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPPILITICA ELENIUM AUTUMNALE  OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM ORGHASTRUM NUTANS NDROPOGON GERARDII ANICUM VIRGATUM	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANCRASS BIG BLUESTEM SWITCHGRASS	1% 1% 1% 1% 1% 0 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 00 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 5%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPHILITICA ELENIUM AUTUMNALE  OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM ORGHASTRUM NUTANS NDROPOGON GERARDII ANICUM VIRGATUM AREX CRINITA	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. UST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANGRASS BIG BLUESTEM SWITCHGRASS FRINGED (NODDING) SEDGE	1% 1% 1% 1% 1% 00 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 10% 5% 4%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPPILITICA ELENIUM AUTUMNALE  OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM ORCHASTRUM NUTANS NDROPOGON GERARDII ANICUM VIRGATUM AREX CRINITA ELENIUM AUTUMNALE	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. UST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANGRASS BIG BLUESTEM SWITCHGRASS FRINGED (NODDING) SEDGE COMMON SNEEZEWEED	1% 1% 1% 1% 1% 1% 0 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 10% 5% 4% 3%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPPILITICA ELENIUM AUTUMNALE  OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM ORGHASTRUM NUTANS NDROPOGON GERARDII ANICUM VIRGATUM AREX CRINITA ELENIUM AUTUMNALE ERBENA HASTATA	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANCRASS BIG BLUESTEM SWITCHGRASS FRINGED (NODDING) SEDGE COMMON SNEEZEWEED BLUE VERVAIN	1% 1% 1% 1% 1% 1% 00 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 00 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 5% 4% 3% 3% 3%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM DBELIA SIPHILITICA ELENIUM AUTUMNALE  DTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENCIDEA ANICUM CLANDESTINUM DORGHASTRUM NUTANS NDROPOGON GERARDII ARICUM VIRGATUM AREX CRINITA ELENIUM AUTUMNALE ERBENA HASTATA ELIOPSIS HELEANTHOIDES	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. UST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANGRASS BIG BLUESTEM SWITCHGRASS FRINGED (NODDING) SEDGE COMMON SNEEZEWEED BLUE VERVAIN OXEYE SUNFLOWER	1% 1% 1% 1% 1% 1% 00 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 10% 5% 4% 3% 3% 3% 3% 2%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM DBELIA SIPHILITICA ELENIUM AUTUMNALE  DTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM DORGHASTRUM NUTANS NOROPOGON GERARDII ANICUM VIRGATUM AREX CRINITA ELENIUM AUTUMNALE ERBENA HASTATA ELIOPSIS HELEANTHOIDES UPATORIUM PERFOLIATUM	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANGRASS BIG BLUESTEM SWITCHGRASS FRINGED (NODDING) SEDGE COMMON SNEEZEWEED BLUE VERVAIN OXEYE SUNFLOWER BONESET	1% 1% 1% 1% 1% 1% 1% 1% 0 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 5% 4% 3% 3% 3% 2% 2% 2%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPHILITICA ELENIUM AUTUMNALE  OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ER! BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM ORGHASTRUM NUTANS NOROPOGON GERARDII ANICUM VIRGATUM AREX CRINITA ELENIUM AUTUMNALE ERBENA HASTATA ELIOPSIS HELEANTHOIDES UPATORIUM PERFOLIATUM STER PUNICEUS  STER PUNICEUS	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. UST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANCRASS BIG BLUESTEM SWITCHGRASS FRINGED (NODDING) SEDGE COMMON SNEEZEWEED BLUE VERVAIN OXEYE SUNFLOWER BONESET PURPLESTEM ASTER	1% 1% 1% 1% 1% 1% 1% 00 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 5% 4% 3% 3% 3% 3% 2% 2% 2%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPHILITICA IELENIUM AUTUMNALE OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM ORGHASTRUM NUTANS NDROPOGON GERARDII ANICUM VIRGATUM AREX CRINITA ELENIUM AUTUMNALE ERBENA HASTATA ELIOPSIS HELEANTHOIDES UPATORIUM PERFOLIATUM STER PUNICEUS SCLEPIAS INCARNATA	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANGRASS BIG BLUESTEM SWITCHGRASS FRINGED (NODDING) SEDGE COMMON SNEEZEWEED BLUE VERVAIN OXEYE SUNFLOWER BONESET PURPLESTEM ASTER SWAMP MILKWEED	1% 1% 1% 1% 1% 1% 1% 00 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 10% 10% 5% 4% 3% 3% 2% 2% 2% 2% 11%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPHILITICA GELENIUM AUTUMNALE OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM ORGHASTRUM NUTANS NDROPOGON GERARDII ANICUM VIRGATUM AREX CRINITA ELENIUM AUTUMNALE ERBENA HASTATA ELELOPSIS HELEANTHOIDES UPATORIUM PERFOLIATUM STER PUNICEUS SCLEPIAS INCARNATA UDWIGIA ALTERNIFOLIA	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANGRASS BIG BLUESTEM SWITCHGRASS FRINGED (NODDING) SEDGE COMMON SNEEZEWEED BLUE VERVAIN OXEYE SUNFLOWER BONESET PURPLESTEM ASTER SWAMP MILKWEED SEEDBOX	1% 1% 1% 1% 1% 1% 1% 1% 0 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 5% 4% 33% 33% 2% 2% 2% 2% 2% 1% 1%
UTHAMIA GRAMINIFOLIA ARTHENIUM INTEGRIFOLIUM OBELIA SIPHILITICA IELENIUM AUTUMNALE OTES: THIS MIX WILL BE APPLIED (SE ZONE 1 AND ZONE 2 OF THE R THIS MIX IS PREPARED BY ERI BASED UPON APPROVAL BY TI  APPLICATION RATI  CIENTIFIC NAME  LYMUS VIRGINICUS AREX VULPENOIDEA ANICUM CLANDESTINUM ORGHASTRUM NUTANS NDROPOGON GERARDII ANICUM VIRGATUM AREX CRINITA ELENIUM AUTUMNALE ERBENA HASTATA ELIOPSIS HELEANTHOIDES UPATORIUM PERFOLIATUM STER PUNICEUS SCLEPIAS INCARNATA	WILD QUININE GREAT BLUE LOBELIA COMMON SNEEZEWEED  EDED AND MULCHED) OVER ANY EXPOSE ESTORED FORESTED RIPARIAN BUFFER. NST CONSERVATION SEED. A SUITABLE A HE ENGINEER OR REPRESENTATIVE.  FLOOD PLAIN MIX (ERNMX-154) E: 15 LBS PER ACRE OR 1/3 - 1/2 LB PER 1,0  COMMON NAME  VIRGINIA WILDRYE FOX SEDGE DEERTONGUE INDIANGRASS BIG BLUESTEM SWITCHGRASS FRINGED (NODDING) SEDGE COMMON SNEEZEWEED BLUE VERVAIN OXEYE SUNFLOWER BONESET PURPLESTEM ASTER SWAMP MILKWEED	1% 1% 1% 1% 1% 1% 1% 00 GROUND SURFACE WITHIN LTERNATIVE MAY BE USED 000 SQUARE FEET PERCENT COMPOSITION 20% 20% 14% 10% 10% 10% 5% 4% 3% 3% 2% 2% 2% 2% 11%



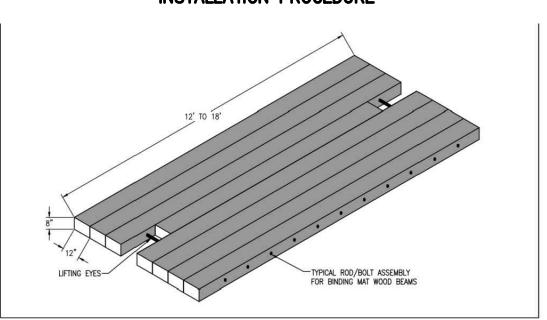
NOTES:

- 1. ONCE SUBGRADE HAS BEEN PREPARED, INSTALL GEOTEXTILE OR GEOGRID MESH.
- 2. INSTALL BASE DRAIN AND BACKFILL BASE COURSE MATERIAL IN 4-INCH LIFTS, LEVELED AND COMPACTED TO LOCK IN ANGULAR STONE.
- 3. INSTALL TRUEGRID REINFORCEMENT UNITS BY PLACING CELLS FACE UP, RE-CONFIGURED AND CUT AS NECESSARY TO MEET THE PROJECT
- 4. BACKFILL SURFACE COURSE MATERIAL BY BACK DUMPING DIRECTLY FROM DUMP TRUCKS OR FROM BUCKETS MOUNTED TO TRACTORS. HAND SHOVELING IS ALSO ACCEPTABLE. SPREAD MATERIAL USING STEER LOADERS, POWER BROOMS, BLADES, FLAT-BOTTOMED SHOVELS, AND/OR
- WIDE "ASPHALT RAKES" TO FILL THE CELLS. ONCE CELLS ARE AT CAPACITY, COMPACT AGGREGATE WITH A ROLLER OR VIBRATING PLATE. 5. ALL AGGREGATE SHALL BE UNIFORMLY GRADED AND CLEAN PRIOR TO INSTALLATION
- 6. REFER TO PLANS FOR VEGETATED SWALE LOCATIONS AND DETAILS FOR LINING AND DIMENSION REQUIREMENTS
- 7. BASE DRAIN SHALL DAYLIGHT A MINIMUM OF 200' FEET OF LINEAR ROAD AT A MINIMUM SLOPE OF 0.5%
- 8. SEE PLANS ENTITLED "TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC. POST CONSTRUCTION STORMWATER MANAGEMENT PLAN - COMPRESSOR STATION NO. 206 TRAP ROCK ACCESS ROAD", LAST REVISED JANUARY 15, 2020, PREPARED BY



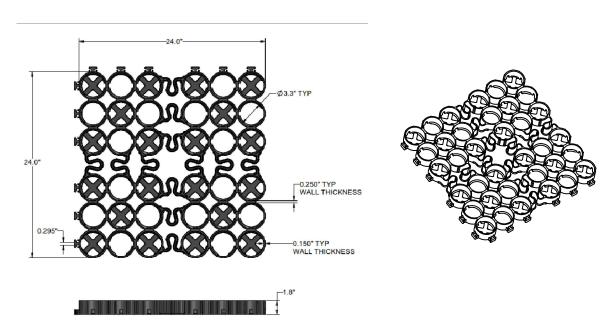
CONSTRUCTION PROCEDURE NOTES:

- 1. FLAG WETLAND BOUNDARIES AND INSTALL WETLAND BOUNDARY SIGNS PRIOR TO CLEARING
- 2. NO OVERNIGHT PARKING OR REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND. PLACE "NO FUELING" SIGN POSTS 100 FEET BACK FROM WETLAND BOUNDARY. REFUEL STATIONARY EQUIPMENT AS PER SPCC PLAN.
- 3. INSTALL TEMPORARY SLOPE BREAKERS UPSLOPE OF WETLAND BOUNDARIES AS SHOWN ON DRAWINGS
- 4. AVOID ADJACENT WETLANDS. INSTALL SEDIMENT BARRIERS AT OUTER BOUNDARIES OF WETLAND AND ALONG BOTH WETLAND EDGES.
- 5. LIMIT PULLING OF TREE STUMPS AND GRADING ACTIVITIES TO DIRECTLY OVER TRENCH LINE. DO NOT GRADE OR REMOVE STUMPS OR ROOT SYSTEMS FROM THE REST OF THE RIGHT-OF-WAY IN WETLANDS UNLESS THE CHIEF INSPECTOR AND COMPANY ENVIRONMENTAL INSPECTOR DETERMINE THAT SAFETY RELATED CONSTRUCTION CONSTRAINTS REQUIRE REMOVAL OFTREE STUMPS FROM UNDER THE WORKING SIDE OF THE RIGHT-OF-WAY.
- 6. TOPSOIL STRIPPING SHALL NOT BE REQUIRED IN SATURATED SOIL CONDITIONS.
- 7. UTILIZE AMPHIBIOUS EXCAVATORS (PONTOON MOUNTED BACKHOES) OR TRACKED BACKHOES SUPPORTED BY PREFABRICATED EQUIPMENT MATS OR FLOATS, TO EXCAVATE TRENCH. IF PREFABRICATED EQUIPMENT MATS ARE USED FOR STABILIZATION, THE BACKHOE SHALL GRADUALLY MOVE ACROSS THE WETLAND BY MOVING THE MATS FROM IMMEDIATELY BEHIND TO IMMEDIATELY IN FRONT OF THE
- 8. FABRICATE PIPE IN A STAGING AREA OUTSIDE THE TYPE III WETLAND AS INDICATED ON THE CONSTRUCTION DRAWINGS.NO CONCRETE COATING ACTIVITY WITHIN 100 FEET OF WETLAND
- BOUNDARY, UNLESS APPROVED BY COMPANY ENVIRONMENTAL INSPECTOR. 9. LEAVE HARD PLUGS AT THE EDGE OF TYPE III WETLAND UNTIL JUST PRIOR TO PIPE PLACEMENT.
- 10. FLOAT PIPE IN PLACE, LOWER-IN, INSTALL TRENCH PLUGS IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS, AND BACKFILL.
- 11. RESTORE GRADE TO NEAR PRE-CONSTRUCTION TOPOGRAPHY AND INSTALL PERMANENT EROSION CONTROL.
- 12. REMOVE ANY MATS UTILIZED TO SUPPORT AMPHIBIOUS EQUIPMENT FROM WETLANDS UPON COMPLETION.
- 13. WETLANDS CROSSED USING PUSH/PULL METHOD TEND TO BE TOO WET FOR EFFECTIVE SEEDING. HOWEVER, IF THE SITE IS DRY ENOUGH AND IF DIRECTED BY THE ENVIRONMENTAL INSPECTOR, THE RIGHT-OF-WAY SHALL BE SEEDED IN ACCORDANCE WITH DRAWINGS.



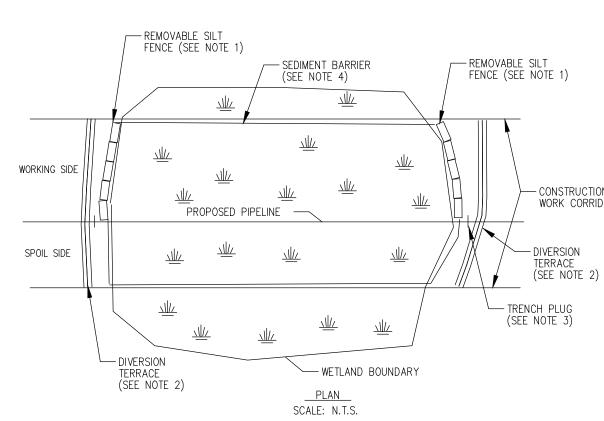
PRE-FABRICATED CONSTRUCTION MATTING CM TEMPORARY EROSION CONTROL MEASURE

1. CONSTRUCTION MATTING SHALL BE INSTALLED THROUGHOUT ENTIRE WORKING SITE WORKSPACE WHEN WITHIN FRESHWATER WETLANDS, WETLANDS BUFFERS AND RIPARIAN ZONES. 2. RESTORATION AND STABILIZATION TO OCCUR UPON REMOVAL OF TEMPORARY ACCESS ROADS.



### TRUEGRID BLOCK REFERENCE VIEW

PREASSEMBLED & DELIVERED IN 4' X 4' SHEET RECONFIGURE AS NEEDED. NO EXTRA TOOLING OR ACCESSORIES REQUIRED



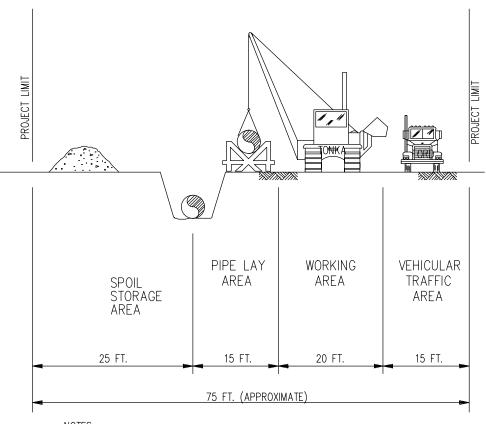
SCALE: N.T.S.

- 1. INSTALL REMOVABLE SEDIMENT BARRIERS (HAY BALES) OR DRIVEABLE BERMS ACROSS THE TRAVEL LANE AT BOTH WETLAND BOUNDARIES. THE REMOVABLE SEDIMÉNT BARRIERS CAN BE REMOVED DURING THI CONSTRUCTION DAY, BUT MUST BE RE-INSTALLED AFTER CONSTRUCTION HAS STOPPED FOR THE DAY AND/OR WHEN HEAVY PRECIPITATION IS IMMINENT.
- 2. INSTALL DIVERSION TERRACES IMMEDIATELY UPSLOPE OF BOTH WETLAND BOUNDARIES TO PREVENT SEDIMENT FROM ENTERING THE WETLAND.
- 3. INSTALL TRENCH PLUGS AT BOTH WETLAND BOUNDARIES TO PREVENT DIVERSION OF WATER INTO UPLAND

PORTIONS OF THE PIPELINE TRENCH AND TO KEEP ANY ACCUMULATED UPLAND TRENCH WATER OUT OF WETLAND.

4. FOR TYPE II ("SATURATED") AND TYPE III ("FLOODED") WETLANDS, INSTALL SEDIMENT BARRIERS AT WETLAND BOUNDARIES AND ALONG BOTH WETLAND EDGES. FOR TYPE I ("DRY") WETLANDS, INSTALL SEDIMENT BARRIERS AT WETLAND BOUNDARIES, ALONG THE EDGE OF THE SPOIL SIDE OF THE CONSTRUCTION CORRIDOR AND ALONG THE DOWNSLOPE EDGE OF THE WETLAND. IF THE DOWNSLOPE EDGE OF THE WETLAND IS THE SPOIL SIDE, THEN SEDIMENT BARRIERS ARE NOT REQUIRED ON THE WORKING SIDE OF THE CORRIDOR UNLESS EQUIPMENT TRAVERSING THROUGH THE WETLAND CAUSES SPOIL AND SEDIMENT TO EXIT THE CONSTRUCTION

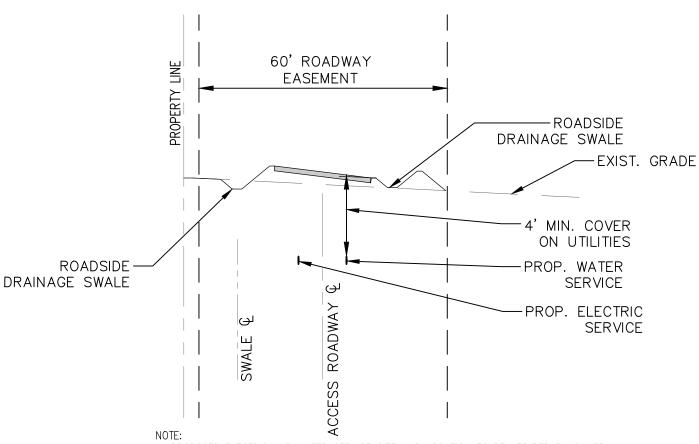
# WETLAND CROSSING CONFIGURATION



NOTES:

- 1. ALL DIMENSIONS ARE APPROXIMATE
- 2. ADDITIONAL WIDTH MAY BE DICTATED BY SOIL CONDITIONS, SLOPES
- 3. SOIL REMOVED DURING TRENCHING SHOULD BE PLACED UPSLOPE OF THE TRENCH WHEREVER POSSIBLE.

TYPICAL SECTION OF CONSTRUCTION RIGHT-OF-WAY



1. PROPOSED ELECTRIC AND WATER SERVICE SIZE AND LOCATION TO BE VERIFIED BY OWNER PRIOR TO CONSTRUCTION. 2. ROADWAY SLOPE AND CROWN VARY. SEE SHEETS 3, 4 AND 6.

### ROADWAY AND EASEMENT CROSS-SECTION

SCALE: N.T.S. NOTES:

- 1. SEE PLANS ENTITLED "TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC. POST CONSTRUCTION STORMWATER MANAGEMENT PLAN - COMPRESSOR STATION NO. 206 TRAP ROCK ACCESS ROAD", LAST REVISED JANUARY 15, 2020, PREPARED BY AECOM FOR PROPOSED DRIVEWAY, GRADING, DRAINAGE AND UTILITY DESIGN DETAIL AND LOCATION OF BRUSH SEED MIX APPLICATION.
- SEE PLANS ENTITLED "TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC. SOIL EROSION AND SEDIMENT CONTROL PLAN - COMPRESSOR STATION NO. 206 TRAP ROCK ACCESS ROAD", LAST REVISED JANUARY 15, 2020, PREPARED BY AECOM FOR SOIL EROSION & SEDIMENT CONTROL MEASURES AND STREAM DIVERSION METHODOLOGIES.

AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER

THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY

THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND

### REPARED UNDER MY DIRECT SUPERVISION. THOMAS J. MURPHY, PLS

DW SMITH ASSOCIATES, LLC 1450 STATE ROUTE 34, WALL, NJ 07753 PROFESSIONAL LAND SURVEYOR N.J. LIC. NO. 37207 COA NO. 24GA28122400

DATE

DESCRIPTION

08/24/18 REV PER NJDEP COMMENTS

05/17/19 REV TRANSITION AREAS AND BASIN PER NJDEP COMMENTS

02/04/19 REV DRAINAGE PER NJDEP COMMENT

04/30/19 REV TRANSITION AREA WIDTHS PER NJD

06/07/19 REV DRAINAGE & LIMIT OF DISTURBAN 06/24/19 REV FENCE AND LIMIT OF DISTURBANC

10/11/19 REV TITLE BLOCK FOR ACCESS RD LO

01/15/20 GENERAL REVISIONS

OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATION. ID CORRESPOND WITH THE DETAILED ENGIN WILLIAM SALMON, P.E.

PS&S, LLC 1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727

PROFESSIONAL ENGINEER N.J. LIC. NO. 41319 COA NO. 24GA28032700

> PAULUS, SOKOLOWSKI AND SARTOR, LLC.

1433 ROUTE 34 SUITE A4 WALL, NJ 07727 PHONE: (848) 206-2626

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700 LL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOW ND SARTOR, LLC. OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN ONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. HESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE N ROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF ROJECT OR FOR REUSE ON ANY OTHER PROJECT.

PROJECT

NORTHEAST SUPPLY **ENHANCEMENT PROJECT PROPOSED** 

OPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC. — ALL RIGHTS RESERVED

**COMPRESSOR STATION 206** 

BLOCK 5.02, LOTS 1.02 (FORMERLY 9, 10, 12, 16 & 17), 11.02, 20 (FORMERLY 23) & 2 OWNSHIP OF FRANKLIN, SOMERSET COUNTY, NEW JERSE

SHEET TITLE

SHEET NO.

### CONSTRUCTION **DETAILS**

DRAWN BY: JPS AS SHOWN CHECKED BY: WS DATE: 06-08-2018 SHEET 8 OF 9

REINFORCED GRAVEL ACCESS ROAD

ONCE A PROJECT IS AUTHORIZED, PROJECT SPONSORS CAN REQUEST FURTHER CHANGES AS VARIANCES TO THE MEASURES IN THESE PROCEDURES (OR THE APPLICANT'S APPROVED PROCEDURES). THE DIRECTOR OF THE OFFICE OF ENERGY PROJECTS (DIRECTOR) WILL CONSIDER APPROVAL OF VARIANCES UPON THE PROJECT SPONSOR'S WRITTEN REQUEST, IF THE DIRECTOR

1. PROVIDES EQUAL OR BETTER ENVIRONMENTAL PROTECTION; 2. IS NECESSARY BECAUSE A PORTION OF THESE PROCEDURES IS INFEASIBLE OR UNWORKABLE BASED ON PROJECT-SPECIFIC CONDITIONS; OR 3. IS SPECIFICALLY REQUIRED IN WRITING BY ANOTHER FEDERAL, STATE, OR NATIVE AMERICAN LAND MANAGEMENT AGENCY FOR THE PORTION OF THE PROJECT ON ITS LAND OR UNDER ITS

SPONSORS OF PROJECTS PLANNED FOR CONSTRUCTION UNDER THE AUTOMATIC AUTHORIZATION PROVISIONS IN THE FERC'S REGULATIONS MUST RECEIVE WRITTEN APPROVAL

FOR ANY VARIANCES IN ADVANCE OF CONSTRUCTION PROJECT-RELATED IMPACTS ON NON-WETLAND AREAS ARE ADDRESSED IN THE STAFF'S UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN (PLAN).

B. DEFINITIONS 1. "WATERBODY" INCLUDES ANY NATURAL OR ARTIFICIAL STREAM, RIVER, OR DRAINAGE WITH PERCEPTIBLE FLOW AT THE TIME OF CROSSING, AND OTHER PERMANENT WATERBODIES SUCH

> A. "MINOR WATERBODY" INCLUDES ALL WATERBODIES LESS THAN OR EQUAL TO 10 FEET WIDE AT THE WATER'S EDGE AT THE TIME OF CROSSING; B. "INTERMEDIATE WATERBODY" INCLUDES ALL WATERBODIES GREATER THAN 10 FEET WIDE BUT LESS THAN OR EQUAL TO 100 FEET WIDE AT THE WATER'S EDGE AT THE TIME OF CROSSING: AND

C. "MAJOR WATERBODY" INCLUDES ALL WATERBODIES GREATER THAN 100 FEET WIDE AT THE WATER'S EDGE AT THE TIME OF CROSSING. 2. "WETLAND" INCLUDES ANY AREA THAT IS NOT IN ACTIVELY CULTIVATED OR ROTATED CROPLAND AND THAT SATISFIES THE REQUIREMENTS OF THE CURRENT FEDERAL

II. PRECONSTRUCTION FILING

A. THE FOLLOWING INFORMATION MUST BE FILED WITH THE SECRETARY OF THE FERC (SECRETARY) PRIOR TO THE BEGINNING OF CONSTRUCTION, FOR THE REVIEW AND WRITTEN APPROVAL BY THE

METHODOLOGY FOR IDENTIFYING AND DELINEATING WETLANDS.

1. SITE-SPECIFIC JUSTIFICATIONS FOR EXTRA WORK AREAS THAT WOULD BE CLOSER THAN 50 FEET FROM A WATERBODY OR WETLAND; AND 2. SITE-SPECIFIC JUSTIFICATIONS FOR THE USE OF A CONSTRUCTION RIGHT-OF-WAY GREATER

THAN 75-FEET-WIDE IN WETLANDS. B. THE FOLLOWING INFORMATION MUST BE FILED WITH THE SECRETARY PRIOR TO THE BEGINNING OF CONSTRUCTION. THESE FILING REQUIREMENTS DO NOT APPLY TO PROJECTS CONSTRUCTED UNDER THE AUTOMATIC AUTHORIZATION PROVISIONS IN THE FERC'S REGULATIONS:

1. SPILL PREVENTION AND RESPONSE PROCEDURES SPECIFIED IN SECTION IV.A; 2. A SCHEDULE IDENTIFYING WHEN TRENCHING OR BLASTING WILL OCCUR WITHIN EACH WATERBODY GREATER THAN 10 FEET WIDE, WITHIN ANY DESIGNATED COLDWATER FISHERY. AND WITHIN ANY WATERBODY IDENTIFIED AS HABITAT FOR FEDERALLY-LISTED THREATENED OR ENDANGERED SPECIES. THE PROJECT SPONSOR WILL REVISE THE SCHEDULE AS NECESSARY TO PROVIDE FERC STAFF AT LEAST 14 DAYS ADVANCE NOTICE. CHANGES WITHIN THIS LAST 14-DAY PERIOD MUST PROVIDE FOR AT LEAST 48 HOURS ADVANCE NOTICE; 3. PLANS FOR HORIZONTAL DIRECTIONAL DRILLS (HDD) UNDER WETLANDS OR WATERBODIES SPECIFIED IN SECTION V.B.6.D:

4. SITE-SPECIFIC PLANS FOR MAJOR WATERBODY CROSSINGS, DESCRIBED IN SECTION V.B.9; 5. A WETLAND DELINEATION REPORT AS DESCRIBED IN SECTION VI.A.1, IF APPLICABLE; AND THE HYDROSTATIC TESTING INFORMATION SPECIFIED IN SECTION VII.B.3.

III. ENVIRONMENTAL INSPECTORS

A. AT LEAST ONE ENVIRONMENTAL INSPECTOR HAVING KNOWLEDGE OF THE WETLAND AND WATERBODY CONDITIONS IN THE PROJECT AREA IS REQUIRED FOR EACH CONSTRUCTION SPREAD. THE NUMBER AND EXPERIENCE OF ENVIRONMENTAL INSPECTORS ASSIGNED TO EACH CONSTRUCTION SPREAD SHALL BE APPROPRIATE FOR THE LENGTH OF THE CONSTRUCTION SPREAD AND THE NUMBER/SIGNIFICANCE OF RESOURCES AFFECTED.

B. THE ENVIRONMENTAL INSPECTOR'S RESPONSIBILITIES ARE OUTLINED IN THE UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN (PLAN).

IV. PRECONSTRUCTION PLANNING

A. THE PROJECT SPONSOR SHALL DEVELOP PROJECT-SPECIFIC SPILL PREVENTION AND RESPONSE PROCEDURES THAT MEET APPLICABLE REQUIREMENTS OF STATE AND FEDERAL AGENCIES. A COPY MUST BE FILED WITH THE SECRETARY PRIOR TO CONSTRUCTION AND MADE AVAILABLE IN THE FIELD ON EACH CONSTRUCTION SPREAD. THIS FILING REQUIREMENT DOES NOT APPLY TO PROJECTS CONSTRUCTED UNDER THE AUTOMATIC AUTHORIZATION PROVISIONS IN THE FERC'S REGULATIONS.

1. IT SHALL BE THE RESPONSIBILITY OF THE PROJECT SPONSOR AND ITS CONTRACTORS TO STRUCTURE THEIR OPERATIONS IN A MANNER THAT REDUCES THE RISK OF SPILLS OR THE ACCIDENTAL EXPOSURE OF FUELS OR HAZARDOUS MATERIALS TO WATERBODIES OR WETLANDS. THE PROJECT SPONSOR AND ITS CONTRACTORS MUST, AT A MINIMUM, ENSURE

> A. ALL EMPLOYEES HANDLING FUELS AND OTHER HAZARDOUS MATERIALS ARE PROPERLY TRAINED;

B. ALL EQUIPMENT IS IN GOOD OPERATING ORDER AND INSPECTED ON A REGULAR

C. FUEL TRUCKS TRANSPORTING FUEL TO ON-SITE EQUIPMENT TRAVEL ONLY ON APPROVED ACCESS ROADS: D. ALL EQUIPMENT IS PARKED OVERNIGHT AND/OR FUELED AT LEAST 100 FEET FROM A WATERBODY OR IN AN UPLAND AREA AT LEAST 100 FEET FROM A WETLAND

BOUNDARY. THESE ACTIVITIES CAN OCCUR CLOSER ONLY IF THE ENVIRONMENTAL INSPECTOR DETERMINES THAT THERE IS NO REASONABLE ALTERNATIVE, AND THE PROJECT SPONSOR AND ITS CONTRACTORS HAVE TAKEN APPROPRIATE STEPS (INCLUDING SECONDARY CONTAINMENT STRUCTURES) TO PREVENT SPILLS AND PROVIDE FOR PROMPT CLEANUP IN THE EVENT OF A SPILL;

E. HAZARDOUS MATERIALS. INCLUDING CHEMICALS, FUELS, AND LUBRICATING OILS, ARE NOT STORED WITHIN 100 FEET OF A WETLAND, WATERBODY, OR DESIGNATED MUNICIPAL WATERSHED AREA, UNLESS THE LOCATION IS DESIGNATED FOR SUCH USE BY AN APPROPRIATE GOVERNMENTAL AUTHORITY. THIS APPLIES TO STORAGE OF THESE MATERIALS AND DOES NOT APPLY TO NORMAL OPERATION OR USE OF EQUIPMENT IN THESE AREAS;

F. CONCRETE COATING ACTIVITIES ARE NOT PERFORMED WITHIN 100 FEET OF A WETLAND OR WATERBODY BOUNDARY, UNLESS THE LOCATION IS AN EXISTING INDUSTRIAL SITE DESIGNATED FOR SUCH USE. THESE ACTIVITIES CAN OCCUR CLOSER ONLY IF THE ENVIRONMENTAL INSPECTOR DETERMINES THAT THERE IS NO REASONABLE ALTERNATIVE, AND THE PROJECT SPONSOR AND ITS CONTRACTORS HAVE TAKEN APPROPRIATE STEPS (INCLUDING SECONDARY CONTAINMENT STRUCTURES) TO PREVENT SPILLS AND PROVIDE FOR PROMPT CLEANUP IN THE EVENT OF A SPILL:

G. PUMPS OPERATING WITHIN 100 FEET OF A WATERBODY OR WETLAND BOUNDARY UTILIZE APPROPRIATE SECONDARY CONTAINMENT SYSTEMS TO PREVENT SPILLS;

H. BULK STORAGE OF HAZARDOUS MATERIALS, INCLUDING CHEMICALS, FUELS, AND LUBRICATING OILS HAVE APPROPRIATE SECONDARY CONTAINMENT SYSTEMS TO PREVENT SPILLS.

2. THE PROJECT SPONSOR AND ITS CONTRACTORS MUST STRUCTURE THEIR OPERATIONS IN A MANNER THAT PROVIDES FOR THE PROMPT AND EFFECTIVE CLEANUP OF SPILLS OF FUEL AND OTHER HAZARDOUS MATERIALS. AT A MINIMUM, THE PROJECT SPONSOR AND ITS CONTRACTORS MUST:

A. ENSURE THAT EACH CONSTRUCTION CREW (INCLUDING CLEANUP CREWS) HAS ON HAND SUFFICIENT SUPPLIES OF ABSORBENT AND BARRIER MATERIALS TO ALLOW THE RAPID CONTAINMENT AND RECOVERY OF SPILLED MATERIALS AND KNOWS THE PROCEDURE FOR REPORTING SPILLS AND UNANTICIPATED DISCOVERIES OF

CONTAMINATION; B. ENSURE THAT EACH CONSTRUCTION CREW HAS ON HAND SUFFICIENT TOOLS AND MATERIAL TO STOP LEAKS; C. KNOW THE CONTACT NAMES AND TELEPHONE NUMBERS FOR ALL LOCAL, STATE, AND FEDERAL AGENCIES (INCLUDING, IF NECESSARY, THE U.S. COAST GUARD AND THE NATIONAL RESPONSE CENTER) THAT MUST BE NOTIFIED OF A SPILL; AND

D. FOLLOW THE REQUIREMENTS OF THOSE AGENCIES IN CLEANING UP THE SPILL, IN

EXCAVATING AND DISPOSING OF SOILS OR OTHER MATERIALS CONTAMINATED BY A

SPILL, AND IN COLLECTING AND DISPOSING OF WASTE GENERATED DURING SPILL

B. AGENCY COORDINATION THE PROJECT SPONSOR MUST COORDINATE WITH THE APPROPRIATE LOCAL, STATE, AND FEDERAL AGENCIES AS OUTLINED IN THESE PROCEDURES AND IN THE FERC'S ORDERS.

V. WATERBODY CROSSINGS

A. NOTIFICATION PROCEDURES AND PERMITS

1. APPLY TO THE U.S. ARMY CORPS OF ENGINEERS (COE), OR ITS DELEGATED AGENCY, FOR THE APPROPRIATE WETLAND AND WATERBODY CROSSING PERMITS. 2. PROVIDE WRITTEN NOTIFICATION TO AUTHORITIES RESPONSIBLE FOR POTABLE SURFACE WATER SUPPLY INTAKES LOCATED WITHIN 3 MILES DOWNSTREAM OF THE CROSSING AT LEAST

1 WEEK BEFORE BEGINNING WORK IN THE WATERBODY, OR AS OTHERWISE SPECIFIED BY THAT

3. APPLY FOR STATE-ISSUED WATERBODY CROSSING PERMITS AND OBTAIN INDIVIDUAL OR GENERIC SECTION 401 WATER QUALITY CERTIFICATION OR WAIVER. 4. NOTIFY APPROPRIATE FEDERAL AND STATE AUTHORITIES AT LEAST 48 HOURS BEFORE BEGINNING TRENCHING OR BLASTING WITHIN THE WATERBODY, OR AS SPECIFIED IN APPLICABLE PERMITS.

**B. INSTALLATION** 

AUTHORITY

1. TIME WINDOW FOR CONSTRUCTION UNLESS EXPRESSLY PERMITTED OR FURTHER RESTRICTED BY THE APPROPRIATE FEDERAL OR STATE AGENCY IN WRITING ON A SITE-SPECIFIC BASIS, INSTREAM WORK, EXCEPT THAT REQUIRED TO INSTALL OR REMOVE EQUIPMENT BRIDGES, MUST OCCUR DURING THE FOLLOWING TIME WINDOWS:

A. COLDWATER FISHERIES - JUNE 1 THROUGH SEPTEMBER 30; AND B. COOLWATER AND WARMWATER FISHERIES - JUNE 1 THROUGH NOVEMBER 30.

2. EXTRA WORK AREAS A. LOCATE ALL EXTRA WORK AREAS (SUCH AS STAGING AREAS AND ADDITIONAL SPOIL STORAGE AREAS) AT LEAST 50 FEET AWAY FROM WATER'S EDGE, EXCEPT WHERE THE ADJACENT UPLAND CONSISTS OF CULTIVATED OR ROTATED CROPLAND OR OTHER DISTURBED LAND.

B. THE PROJECT SPONSOR SHALL FILE WITH THE SECRETARY FOR REVIEW AND WRITTEN APPROVAL BY THE DIRECTOR, SITE-SPECIFIC JUSTIFICATION FOR EACH EXTRA WORK AREA WITH A LESS THAN 50-FOOT SETBACK FROM THE WATER'S EDGE. EXCEPT WHERE THE ADJACENT UPLAND CONSISTS OF CULTIVATED OR ROTATED CROPLAND OR OTHER DISTURBED LAND. THE JUSTIFICATION MUST SPECIFY THE CONDITIONS THAT WILL NOT PERMIT A 50-FOOT SETBACK AND MEASURES TO ENSURE THE WATERBODY IS ADEQUATELY PROTECTED. C. LIMIT THE SIZE OF EXTRA WORK AREAS TO THE MINIMUM NEEDED TO CONSTRUCT THE WATERBODY CROSSING.

3. GENERAL CROSSING PROCEDURES A. COMPLY WITH THE COE, OR ITS DELEGATED AGENCY, PERMIT TERMS AND

B. CONSTRUCT CROSSINGS AS CLOSE TO PERPENDICULAR TO THE AXIS OF THE WATERBODY CHANNEL AS ENGINEERING AND ROUTING CONDITIONS PERMIT. C. WHERE PIPELINES PARALLEL A WATERBODY, MAINTAIN AT LEAST 15 FEET OF UNDISTURBED VEGETATION BETWEEN THE WATERBODY (AND ANY ADJACENT WETLAND) AND THE CONSTRUCTION RIGHT-OF-WAY, EXCEPT WHERE MAINTAINING THIS OFFSET WILL RESULT IN GREATER ENVIRONMENTAL IMPACT. D. WHERE WATERBODIES MEANDER OR HAVE MULTIPLE CHANNELS, ROUTE THE PIPELINE TO MINIMIZE THE NUMBER OF WATERBODY CROSSINGS. E. MAINTAIN ADEQUATE WATERBODY FLOW RATES TO PROTECT AQUATIC LIFE, AND

PREVENT THE INTERRUPTION OF EXISTING DOWNSTREAM USES. F. WATERBODY BUFFERS (E.G., EXTRA WORK AREA SETBACKS, REFUELING RESTRICTIONS) MUST BE CLEARLY MARKED IN THE FIELD WITH SIGNS AND/OR HIGHLY VISIBLE FLAGGING UNTIL CONSTRUCTION-RELATED GROUND DISTURBING ACTIVITIES ARE COMPLETE.

G. CROSSING OF WATERBODIES WHEN THEY ARE DRY OR FROZEN AND NOT FLOWING MAY PROCEED USING STANDARD UPLAND CONSTRUCTION TECHNIQUES IN ACCORDANCE WITH THE PLAN, PROVIDED THAT THE ENVIRONMENTAL INSPECTOR VERIFIES THAT WATER IS UNLIKELY TO FLOW BETWEEN INITIAL DISTURBANCE AND FINAL STABILIZATION OF THE FEATURE. IN THE EVENT OF PERCEPTIBLE FLOW, THE PROJECT SPONSOR MUST COMPLY WITH ALL APPLICABLE PROCEDURE REQUIREMENTS FOR "WATERBODIES" AS DEFINED IN SECTION I.B.1.

4. SPOIL PILE PLACEMENT AND CONTROL

A. ALL SPOIL FROM MINOR AND INTERMEDIATE WATERBODY CROSSINGS. AND UPLAND SPOIL FROM MAJOR WATERBODY CROSSINGS, MUST BE PLACED IN THE CONSTRUCTION RIGHT-OF-WAY AT LEAST 10 FEET FROM THE WATER'S EDGE OR IN ADDITIONAL EXTRA WORK AREAS AS DESCRIBED IN SECTION V.B.2. B. USE SEDIMENT BARRIERS TO PREVENT THE FLOW OF SPOIL OR SILT-LADEN WATER INTO ANY WATERBODY.

5. EQUIPMENT BRIDGES A. ONLY CLEARING EQUIPMENT AND EQUIPMENT NECESSARY FOR INSTALLATION OF EQUIPMENT BRIDGES MAY CROSS WATERBODIES PRIOR TO BRIDGE INSTALLATION. LIMIT THE NUMBER OF SUCH CROSSINGS OF EACH WATERBODY TO ONE PER PIECE OF CLEARING EQUIPMENT.

B. CONSTRUCT AND MAINTAIN EQUIPMENT BRIDGES TO ALLOW UNRESTRICTED FLOW AND TO PREVENT SOIL FROM ENTERING THE WATERBODY, EXAMPLES OF SUCH BRIDGES INCLUDE:

(1) EQUIPMENT PADS AND CULVERT(S):

(2) EQUIPMENT PADS OR RAILROAD CAR BRIDGES WITHOUT CULVERTS; (3) CLEAN ROCK FILL AND CULVERT(S); AND (4) FLEXI-FLOAT OR PORTABLE BRIDGES.

ADDITIONAL OPTIONS FOR EQUIPMENT BRIDGES MAY BE UTILIZED THAT ACHIEVE THE PERFORMANCE OBJECTIVES NOTED ABOVE. DO NOT USE SOIL TO CONSTRUCT OR STABILIZE EQUIPMENT BRIDGES. C. DESIGN AND MAINTAIN EACH EQUIPMENT BRIDGE TO WITHSTAND AND PASS THE

HIGHEST FLOW EXPECTED TO OCCUR WHILE THE BRIDGE IS IN PLACE. ALIGN CULVERTS TO PREVENT BANK EROSION OR STREAMBED SCOUR. IF NECESSARY, INSTALL ENERGY DISSIPATING DEVICES DOWNSTREAM OF THE CULVERTS. D. DESIGN AND MAINTAIN EQUIPMENT BRIDGES TO PREVENT SOIL FROM ENTERING THE WATERBODY.

E. REMOVE TEMPORARY EQUIPMENT BRIDGES AS SOON AS PRACTICABLE AFTER PERMANENT SEEDING

STATE AGENCY FOR PERMANENT BRIDGES.

F. IF THERE WILL BE MORE THAN 1 MONTH BETWEEN FINAL CLEANUP AND THE BEGINNING OF PERMANENT SEEDING AND REASONABLE ALTERNATIVE ACCESS TO THE RIGHT-OF-WAY IS AVAILABLE, REMOVE TEMPORARY EQUIPMENT BRIDGES AS SOON AS PRACTICABLE AFTER FINAL CLEANUP. G. OBTAIN ANY NECESSARY APPROVAL FROM THE CODE, OR THE APPROPRIATE

6. DRY-DITCH CROSSING METHODS A. UNLESS APPROVED OTHERWISE BY THE APPROPRIATE FEDERAL OR STATE AGENCY, INSTALL THE PIPELINE USING ONE OF THE DRY-DITCH METHODS OUTLINED BELOW FOR CROSSINGS OF WATERBODIES UP TO 30 FEET WIDE (AT THE WATER'S EDGE AT THE TIME OF CONSTRUCTION) THAT ARE STATE-DESIGNATED AS EITHER COLDWATER OR SIGNIFICANT COOLWATER OR WARMWATER FISHERIES, OR FEDERALLY-DESIGNATED AS CRITICAL HABITAT.

B. DAM AND PUMP (1) THE DAM-AND-PUMP METHOD MAY BE USED WITHOUT PRIOR APPROVAL FOR CROSSINGS OF WATERBODIES WHERE PUMPS CAN ADEQUATELY TRANSFER STREAMFLOW VOLUMES AROUND THE WORK AREA, AND THERE ARE NO CONCERNS ABOUT SENSITIVE SPECIES PASSAGE. (2) IMPLEMENTATION OF THE DAM-AND-PUMP CROSSING METHOD MUST

MEET THE FOLLOWING PERFORMANCE CRITERIA: (I) USE SUFFICIENT PUMPS, INCLUDING ON-SITE BACKUP PUMPS, TO MAINTAIN DOWNSTREAM FLOWS; (II) CONSTRUCT DAMS WITH MATERIALS THAT PREVENT SEDIMENT AND OTHER POLLUTANTS FROM ENTERING THE WATERBODY (E.G.,

SANDBAGS OR CLEAN GRAVEL WITH PLASTIC LINER); (III) SCREEN PUMP INTAKES TO MINIMIZE ENTRAINMENT OF FISH; (IV) PREVENT STREAMBED SCOUR AT PUMP DISCHARGE; AND (V) CONTINUOUSLY MONITOR THE DAM AND PUMPS TO ENSURE PROPER OPERATION THROUGHOUT THE WATERBODY CROSSING.

C. FLUME CROSSING THE FLUME CROSSING METHOD REQUIRES IMPLEMENTATION OF THE FOLLOWING

BANK IS COMPLETE.

(1) INSTALL FLUME PIPE AFTER BLASTING (IF NECESSARY), BUT BEFORE ANY (2) USE SAND BAG OR SAND BAG AND PLASTIC SHEETING DIVERSION STRUCTURE OR EQUIVALENT TO DEVELOP AN EFFECTIVE SEAL AND TO DIVERT STREAM FLOW THROUGH THE FLUME PIPE (SOME MODIFICATIONS TO THE STREAM BOTTOM MAY BE REQUIRED TO ACHIEVE AN EFFECTIVE SEAL); (3) PROPERLY ALIGN FLUME PIPE(S) TO PREVENT BANK EROSION AND

STREAMBED SCOUR: (4) DO NOT REMOVE FLUME PIPE DURING TRENCHING, PIPELAYING, OR BACKFILLING ACTIVITIES, OR INITIAL STREAMBED RESTORATION EFFORTS: (5) REMOVE ALL FLUME PIPES AND DAMS THAT ARE NOT ALSO PART OF THE

EQUIPMENT BRIDGE AS SOON AS FINAL CLEANUP OF THE STREAM BED AND

D. HORIZONTAL DIRECTIONAL DRILL FOR EACH WATERBODY OR WETLAND THAT WOULD BE CROSSED USING THE HDD METHOD, FILE WITH THE SECRETARY FOR THE REVIEW AND WRITTEN APPROVAL BY

(1) SITE-SPECIFIC CONSTRUCTION DIAGRAMS THAT SHOW THE LOCATION OF

MUD PITS, PIPE ASSEMBLY AREAS, AND ALL AREAS TO BE DISTURBED OR CLEARED FOR CONSTRUCTION: (2) JUSTIFICATION THAT DISTURBED AREAS ARE LIMITED TO THE MINIMUM NEEDED TO CONSTRUCT THE CROSSING;

(3) IDENTIFICATION OF ANY ABOVEGROUND DISTURBANCE OR CLEARING BETWEEN THE HDD ENTRY AND EXIT WORKSPACES DURING CONSTRUCTION; (4) A DESCRIPTION OF HOW AN INADVERTENT RELEASE OF DRILLING MUD WOULD BE CONTAINED AND CLEANED UP; AND

(5) A CONTINGENCY PLAN FOR CROSSING THE WATERBODY OR WETLAND IN THE EVENT THE HDD IS UNSUCCESSFUL AND HOW THE ABANDONED DRILL HOLE WOULD BE SEALED. IF NECESSARY THE REQUIREMENT TO FILE HDD PLANS DOES NOT APPLY TO PROJECTS CONSTRUCTED UNDER THE AUTOMATIC AUTHORIZATION PROVISIONS IN THE

FERC'S REGULATIONS. 7. CROSSINGS OF MINOR WATERBODIES

THE DIRECTOR, A PLAN THAT INCLUDES:

WHERE A DRY-DITCH CROSSING IS NOT REQUIRED, MINOR WATERBODIES MAY BE CROSSED USING THE OPEN-CUT CROSSING METHOD, WITH THE FOLLOWING RESTRICTIONS: A. EXCEPT FOR BLASTING AND OTHER ROCK BREAKING MEASURES, COMPLETE INSTREAM CONSTRUCTION ACTIVITIES (INCLUDING TRENCHING, PIPE INSTALLATION, BACKFILL, AND RESTORATION OF THE STREAMBED CONTOURS) WITHIN 24 HOURS. STREAMBANKS AND UNCONSOLIDATED STREAMBEDS MAY REQUIRE ADDITIONAL RESTORATION AFTER THIS PERIOD:

B. LIMIT USE OF EQUIPMENT OPERATING IN THE WATERBODY TO THAT NEEDED TO CONSTRUCT THE CROSSING: AND

C. EQUIPMENT BRIDGES ARE NOT REQUIRED AT MINOR WATERBODIES THAT DO NOT HAVE A STATE-DESIGNATED FISHERY CLASSIFICATION OR PROTECTED STATUS (E.G., AGRICULTURAL OR INTERMITTENT DRAINAGE DITCHES). HOWEVER, IF AN EQUIPMENT BRIDGE IS USED IT MUST BE CONSTRUCTED AS DESCRIBED IN SECTION V.B.5. 8. CROSSINGS OF INTERMEDIATE WATERBODIES

WHERE A DRY-DITCH CROSSING IS NOT REQUIRED, INTERMEDIATE WATERBODIES MAY BE CROSSED USING THE OPEN-CUT CROSSING METHOD, WITH THE FOLLOWING RESTRICTIONS: A. COMPLETE INSTREAM CONSTRUCTION ACTIVITIES (NOT INCLUDING BLASTING AND OTHER ROCK BREAKING MEASURES) WITHIN 48 HOURS, UNLESS SITE-SPECIFIC CONDITIONS MAKE COMPLETION WITHIN 48 HOURS INFEASIBLE:

B. LIMIT USE OF EQUIPMENT OPERATING IN THE WATERBODY TO THAT NEEDED TO CONSTRUCT THE CROSSING; AND C. ALL OTHER CONSTRUCTION EQUIPMENT MUST CROSS ON AN EQUIPMENT BRIDGE AS SPECIFIED IN SECTION V.B.5.

CROSSINGS OF MAJOR WATERBODIES BEFORE CONSTRUCTION, THE PROJECT SPONSOR SHALL FILE WITH THE SECRETARY FOR THE REVIEW AND WRITTEN APPROVAL BY THE DIRECTOR A DETAILED, SITE-SPECIFIC CONSTRUCTION PLAN AND SCALED DRAWINGS IDENTIFYING ALL AREAS TO BE DISTURBED BY CONSTRUCTION FOR EACH MAJOR WATERBODY CROSSING (THE SCALED DRAWINGS ARE NOT REQUIRED FOR ANY OFFSHORE PORTIONS OF PIPELINE PROJECTS). THIS PLAN MUST BE DEVELOPED IN CONSULTATION WITH THE APPROPRIATE STATE AND FEDERAL AGENCIES AND SHALL INCLUDE EXTRA WORK AREAS, SPOIL STORAGE AREAS, SEDIMENT CONTROL STRUCTURES, ETC., AS WELL AS MITIGATION FOR NAVIGATIONAL ISSUES. THE REQUIREMENT TO FILE MAJOR WATERBODY CROSSING PLANS DOES NOT APPLY TO PROJECTS CONSTRUCTED UNDER THE AUTOMATIC AUTHORIZATION PROVISIONS OF THE FERC'S REGULATIONS. THE ENVIRONMENTAL INSPECTOR MAY ADJUST THE FINAL PLACEMENT OF THE EROSION AND SEDIMENT CONTROL STRUCTURES IN THE FIELD TO MAXIMIZE EFFECTIVENESS.

TEMPORARY EROSION AND SEDIMENT CONTROL INSTALL SEDIMENT BARRIERS (AS DEFINED IN SECTION IV.F.3.A OF THE PLAN) IMMEDIATELY AFTER INITIAL DISTURBANCE OF THE WATERBODY OR ADJACENT UPLAND. SEDIMENT BARRIERS MUST BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION AND REINSTALLED AS NECESSARY (SUCH AS AFTER BACKFILLING OF THE TRENCH) UNTIL REPLACED BY PERMANENT EROSION CONTROLS OR RESTORATION OF ADJACENT UPLAND AREAS IS COMPLETE. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE ADDRESSED IN MORE DETAIL IN THE PLAN; HOWEVER, THE FOLLOWING SPECIFIC MEASURES MUST BE IMPLEMENTED AT

A. INSTALL SEDIMENT BARRIERS ACROSS THE ENTIRE CONSTRUCTION RIGHT-OF-WAY AT ALL WATERBODY CROSSINGS, WHERE NECESSARY TO PREVENT THE FLOW OF SEDIMENTS INTO THE WATERBODY. REMOVABLE SEDIMENT BARRIERS (OR DRIVEABLE BERMS) MUST BE INSTALLED ACROSS THE TRAVEL LANE. THESE REMOVABLE SEDIMENT BARRIERS CAN BE REMOVED DURING THE CONSTRUCTION DAY, BUT MUST BE RE-INSTALLED AFTER CONSTRUCTION HAS STOPPED FOR THE DAY AND/OR WHEN HEAVY PRECIPITATION IS IMMINENT;

B. WHERE WATERBODIES ARE ADJACENT TO THE CONSTRUCTION RIGHT-OF-WAY AND THE RIGHT-OF-WAY SLOPES TOWARD THE WATERBODY, INSTALL SEDIMENT BARRIERS ALONG THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY AS NECESSARY TO CONTAIN SPOIL WITHIN THE CONSTRUCTION RIGHT-OF-WAY AND PREVENT SEDIMENT FLOW INTO THE WATERBODY; AND

C. USE TEMPORARY TRENCH PLUGS AT ALL WATERBODY CROSSINGS, AS NECESSARY TO PREVENT DIVERSION OF WATER INTO UPLAND PORTIONS OF THE PIPELINE TRENCH AND TO KEEP ANY ACCUMULATED TRENCH WATER OUT OF THE WATERBODY.

11 TRENCH DEWATERING DEWATER THE TRENCH (EITHER ON OR OFF THE CONSTRUCTION RIGHT-OF-WAY) IN A MANNER THAT DOES NOT CAUSE EROSION AND DOES NOT RESULT IN SILT-LADEN WATER FLOWING INTO ANY WATERBODY. REMOVE THE DEWATERING STRUCTURES AS SOON AS PRACTICABLE AFTER

THE COMPLETION OF DEWATERING ACTIVITIES. C. RESTORATION 1. USE CLEAN GRAVEL OR NATIVE COBBLES FOR THE UPPER 1 FOOT OF TRENCH BACKFILL IN

ALL WATERBODIES THAT CONTAIN COLDWATER FISHERIES. 2. FOR OPEN-CUT CROSSINGS, STABILIZE WATERBODY BANKS AND INSTALL TEMPORARY SEDIMENT BARRIERS WITHIN 24 HOURS OF COMPLETING INSTREAM CONSTRUCTION ACTIVITIES. FOR DRY-DITCH CROSSINGS, COMPLETE STREAMBED AND BANK STABILIZATION BEFORE RETURNING FLOW TO THE WATERBODY CHANNEL

3. RETURN ALL WATERBODY BANKS TO PRECONSTRUCTION CONTOURS OR TO A STABLE ANGLE OF REPOSE AS APPROVED BY THE ENVIRONMENTAL INSPECTOR. 4. INSTALL EROSION CONTROL FABRIC OR A FUNCTIONAL EQUIVALENT ON WATERBODY BANKS AT THE TIME OF FINAL BANK RECONTOURING. DO NOT USE SYNTHETIC MONOFILAMENT MESH/NETTED EROSION CONTROL MATERIALS IN AREAS DESIGNATED AS SENSITIVE WILDLIFE HABITAT UNLESS THE PRODUCT IS SPECIFICALLY DESIGNED TO MINIMIZE HARM TO WILDLIFE ANCHOR EROSION CONTROL FABRIC WITH STAPLES OR OTHER APPROPRIATE DEVICES. 5. APPLICATION OF RIPRAP FOR BANK STABILIZATION MUST COMPLY WITH COE, OR ITS DELEGATED AGENCY, PERMIT TERMS AND CONDITIONS.

6. UNLESS OTHERWISE SPECIFIED BY STATE PERMIT, LIMIT THE USE OF RIPRAP TO AREAS WHERE FLOW CONDITIONS PRECLUDE EFFECTIVE VEGETATIVE STABILIZATION TECHNIQUES SUCH AS SEEDING AND EROSION CONTROL FABRIC. 7. REVEGETATE DISTURBED RIPARIAN AREAS WITH NATIVE SPECIES OF CONSERVATION

GRASSES, LEGUMES, AND WOODY SPECIES, SIMILAR IN DENSITY TO ADJACENT UNDISTURBED 8. INSTALL A PERMANENT SLOPE BREAKER ACROSS THE CONSTRUCTION RIGHT-OF-WAY AT THE BASE OF SLOPES GREATER THAN 5 PERCENT THAT ARE LESS THAN 50 FEET FROM THE

WATERBODY, OR AS NEEDED TO PREVENT SEDIMENT TRANSPORT INTO THE WATERBODY. IN ADDITION, INSTALL SEDIMENT BARRIERS AS OUTLINED IN THE PLAN. IN SOME AREAS, WITH THE APPROVAL OF THE ENVIRONMENTAL INSPECTOR, AN EARTHEN BERM MAY BE SUITABLE AS A SEDIMENT BARRIER ADJACENT TO THE WATERBODY.

9. SECTIONS V.C.3 THROUGH V.C.7 ABOVE ALSO APPLY TO THOSE PERENNIAL OR INTERMITTENT STREAMS NOT FLOWING AT THE TIME OF CONSTRUCTION. D. POST-CONSTRUCTION MAINTENANCE

> 1. LIMIT ROUTINE VEGETATION MOWING OR CLEARING ADJACENT TO WATERBODIES TO ALLOW A RIPARIAN STRIP AT LEAST 25 FEET WIDE, AS MEASURED FROM THE WATERBODY'S MEAN HIGH WATER MARK, TO PERMANENTLY REVEGETATE WITH NATIVE PLANT SPECIES ACROSS THE ENTIRE CONSTRUCTION RIGHT-OF-WAY. HOWEVER, TO FACILITATE PERIODIC CORROSION/LEAK SURVEYS, A CORRIDOR CENTERED ON THE PIPELINE AND UP TO 10 FEET WIDE MAY BE CLEARED AT A FREQUENCY NECESSARY TO MAINTAIN THE 10-FOOT CORRIDOR IN AN HERBACEOUS STATE. IN ADDITION, TREES THAT ARE LOCATED WITHIN 15 FEET OF THE PIPELINE THAT HAVE ROOTS THAT COULD COMPROMISE THE INTEGRITY OF THE PIPELINE COATING MAY BE CUT AND REMOVED FROM THE PERMANENT RIGHT-OF-WAY. DO NOT CONDUCT ANY ROUTINE VEGETATION MOWING OR CLEARING IN RIPARIAN AREAS THAT ARE BETWEEN HDD ENTRY AND EXIT POINTS.

2. DO NOT USE HERBICIDES OR PESTICIDES IN OR WITHIN 100 FEET OF A WATERBODY EXCEPT AS ALLOWED BY THE APPROPRIATE LAND MANAGEMENT OR STATE AGENCY. 3. TIME OF YEAR RESTRICTIONS SPECIFIED IN SECTION VII.A.5 OF THE PLAN (APRIL 15 - AUGUST 1 OF ANY YEAR) APPLY TO ROUTINE MOWING AND CLEARING OF RIPARIAN AREAS.

VI. WETLAND CROSSINGS

A. GENERAL 1. THE PROJECT SPONSOR SHALL CONDUCT A WETLAND DELINEATION USING THE CURRENT FEDERAL METHODOLOGY AND FILE A WETLAND DELINEATION REPORT WITH THE SECRETARY BEFORE CONSTRUCTION. THE REQUIREMENT TO FILE A WETLAND DELINEATION REPORT DOES NOT APPLY TO PROJECTS CONSTRUCTED UNDER THE AUTOMATIC AUTHORIZATION PROVISIONS IN THE FERC'S REGULATIONS. THIS REPORT SHALL IDENTIFY:

A. BY MILEPOST ALL WETLANDS THAT WOULD BE AFFECTED; B. THE NATIONAL WETLANDS INVENTORY (NWI) CLASSIFICATION FOR EACH C. THE CROSSING LENGTH OF EACH WETLAND IN FEET; AND

D. THE AREA OF PERMANENT AND TEMPORARY DISTURBANCE THAT WOULD OCCUR IN EACH WETLAND BY NWI CLASSIFICATION TYPE THE REQUIREMENTS OUTLINED IN THIS SECTION DO NOT APPLY TO WETLANDS IN ACTIVELY CULTIVATED OR ROTATED CROPLAND. STANDARD UPLAND PROTECTIVE MEASURES, INCLUDING WORKSPACE AND TOPSOILING REQUIREMENTS, APPLY TO

THESE AGRICULTURAL WETLANDS. 2. ROUTE THE PIPELINE TO AVOID WETLAND AREAS TO THE MAXIMUM EXTENT POSSIBLE. IF A WETLAND CANNOT BE AVOIDED OR CROSSED BY FOLLOWING AN EXISTING RIGHT-OF-WAY, ROUTE THE NEW PIPELINE IN A MANNER THAT MINIMIZES DISTURBANCE TO WETLANDS. WHERE LOOPING AN EXISTING PIPELINE, OVERLAP THE EXISTING PIPELINE RIGHT-OF-WAY WITH THE NEW CONSTRUCTION RIGHT-OF-WAY. IN ADDITION, LOCATE THE LOOP LINE NO MORE THAN 25 FEET AWAY FROM THE EXISTING PIPELINE UNLESS SITE-SPECIFIC CONSTRAINTS WOULD ADVERSELY AFFECT THE STABILITY OF THE EXISTING PIPELINE.

3. LIMIT THE WIDTH OF THE CONSTRUCTION RIGHT-OF-WAY TO 75 FEET OR LESS. PRIOR WRITTEN APPROVAL OF THE DIRECTOR IS REQUIRED WHERE TOPOGRAPHIC CONDITIONS OR SOIL LIMITATIONS REQUIRE THAT THE CONSTRUCTION RIGHT-OF-WAY WIDTH WITHIN THE BOUNDARIES OF A FEDERALLY DELINEATED WETLAND BE EXPANDED BEYOND 75 FEET. EARLY IN THE PLANNING PROCESS THE PROJECT SPONSOR IS ENCOURAGED TO IDENTIFY SITE-SPECIFIC AREAS WHERE EXCESSIVELY WIDE TRENCHES COULD OCCUR AND/OR WHERE SPOIL PILES COULD BE DIFFICULT TO MAINTAIN BECAUSE EXISTING SOILS LACK ADEQUATE UNCONFINED COMPRESSIVE STRENGTH.

SIGNS AND/OR HIGHLY VISIBLE FLAGGING UNTIL CONSTRUCTION-RELATED GROUND DISTURBING ACTIVITIES ARE COMPLETE. 5. IMPLEMENT THE MEASURES OF SECTIONS V AND VI IN THE EVENT A WATERBODY CROSSING IS LOCATED WITHIN OR ADJACENT TO A WETLAND CROSSING. IF ALL MEASURES OF SECTIONS V AND VI CANNOT BE MET, THE PROJECT SPONSOR MUST FILE WITH THE SECRETARY A SITE-SPECIFIC CROSSING PLAN FOR REVIEW AND WRITTEN APPROVAL BY

4. WETLAND BOUNDARIES AND BUFFERS MUST BE CLEARLY MARKED IN THE FIELD WITH

THE DIRECTOR BEFORE CONSTRUCTION. THIS CROSSING PLAN SHALL ADDRESS AT A MINIMUM: A. SPOIL CONTROL; B. EQUIPMENT BRIDGES;

C. RESTORATION OF WATERBODY BANKS AND WETLAND HYDROLOGY; D. TIMING OF THE WATERBODY CROSSING: E. METHOD OF CROSSING; AND F. SIZE AND LOCATION OF ALL EXTRA WORK AREAS.

6. DO NOT LOCATE ABOVEGROUND FACILITIES IN ANY WETLAND, EXCEPT WHERE THE LOCATION OF SUCH FACILITIES OUTSIDE OF WETLANDS WOULD PROHIBIT COMPLIANCE WITH U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS.

B. INSTALLATION 1. EXTRA WORK AREAS AND ACCESS ROADS

A. LOCATE ALL EXTRA WORK AREAS (SUCH AS STAGING AREAS AND ADDITIONAL SPOIL STORAGE AREAS) AT LEAST 50 FEET AWAY FROM WETLAND BOUNDARIES, EXCEPT WHERE THE ADJACENT UPLAND CONSISTS OF CULTIVATED OR ROTATED CROPLAND OR OTHER DISTURBED LAND

B. THE PROJECT SPONSOR SHALL FILE WITH THE SECRETARY FOR REVIEW AND WRITTEN APPROVAL BY THE DIRECTOR, SITE-SPECIFIC JUSTIFICATION FOR EACH EXTRA WORK AREA WITH A LESS THAN 50-FOOT SETBACK FROM WETLAND BOUNDARIES, EXCEPT WHERE ADJACENT UPLAND CONSISTS OF CULTIVATED OR ROTATED CROPLAND OR OTHER DISTURBED LAND. THE JUSTIFICATION MUST SPECIFY THE SITE-SPECIFIC CONDITIONS THAT WILL NOT PERMIT A 50-FOOT SETBACK AND MEASURES TO ENSURE THE WETLAND IS ADEQUATELY PROTECTED. C. THE CONSTRUCTION RIGHT-OF-WAY MAY BE USED FOR ACCESS WHEN THE WETLAND SOIL IS FIRM ENOUGH TO AVOID RUTTING OR THE CONSTRUCTION RIGHT-OF-WAY HAS BEEN APPROPRIATELY STABILIZED TO AVOID RUTTING (E.G. WITH TIMBER RIPRAP, PREFABRICATED EQUIPMENT MATS, OR TERRA MATS). IN WETLANDS THAT CANNOT BE APPROPRIATELY STABILIZED, ALL CONSTRUCTION EQUIPMENT OTHER THAN THAT NEEDED TO INSTALL THE WETLAND CROSSING

USE ACCESS ROADS LOCATED IN UPLAND AREAS. WHERE ACCESS ROADS IN UPLAND AREAS DO NOT PROVIDE REASONABLE ACCESS, LIMIT ALL OTHER CONSTRUCTION EQUIPMENT TO ONE PASS THROUGH THE WETLAND USING THE

CONSTRUCTION RIGHT-OF-WAY. D. THE ONLY ACCESS ROADS, OTHER THAN THE CONSTRUCTION RIGHT-OF-WAY, THAT CAN BE USED IN WETLANDS ARE THOSE EXISTING ROADS THAT CAN BE USED WITH NO MODIFICATIONS OR IMPROVEMENTS, OTHER THAN ROUTINE REPAIR, AND NO IMPACT ON THE WETLAND.

2. CROSSING PROCEDURES A. COMPLY WITH COE, OR ITS DELEGATED AGENCY, PERMIT TERMS AND

CONDITIONS. B. ASSEMBLE THE PIPELINE IN AN UPLAND AREA UNLESS THE WETLAND IS DRY ENOUGH TO ADEQUATELY SUPPORT SKIDS AND PIPE. C. USE "PUSH-PULL" OR "FLOAT" TECHNIQUES TO PLACE THE PIPE IN THE TRENCH WHERE WATER AND OTHER SITE CONDITIONS ALLOW. D. MINIMIZE THE LENGTH OF TIME THAT TOPSOIL IS SEGREGATED AND THE TRENCH IS OPEN. DO NOT TRENCH THE WETLAND UNTIL THE PIPELINE IS ASSEMBLED AND READY FOR LOWERING IN. E. LIMIT CONSTRUCTION EQUIPMENT OPERATING IN WETLAND AREAS TO THAT NEEDED TO CLEAR THE CONSTRUCTION RIGHT-OF-WAY, DIG THE TRENCH. FABRICATE AND INSTALL THE PIPELINE, BACKFILL THE TRENCH, AND RESTORE THE

CONSTRUCTION RIGHT-OF-WAY. F. CUT VEGETATION JUST ABOVE GROUND LEVEL, LEAVING EXISTING ROOT SYSTEMS IN PLACE, AND REMOVE IT FROM THE WETLAND FOR DISPOSAL. THE PROJECT SPONSOR CAN BURN WOODY DEBRIS IN WETLANDS, IF APPROVED BY THE COE AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS, ENSURING THAT ALL REMAINING WOODY DEBRIS IS REMOVED FOR DISPOSAL G. LIMIT PULLING OF TREE STUMPS AND GRADING ACTIVITIES TO DIRECTLY OVER THE TRENCHLINE. DO NOT GRADE OR REMOVE STUMPS OR ROOT SYSTEMS FROM THE REST OF THE CONSTRUCTION RIGHT-OF-WAY IN WETLANDS UNLESS THE CHIEF INSPECTOR AND ENVIRONMENTAL INSPECTOR DETERMINE THAT SAFETY-RELATED CONSTRUCTION CONSTRAINTS REQUIRE GRADING OR THE REMOVAL OF TREE STUMPS FROM UNDER THE WORKING SIDE OF THE CONSTRUCTION RIGHT-OF-WAY.

H. SEGREGATE THE TOP 1 FOOT OF TOPSOIL FROM THE AREA DISTURBED BY TRENCHING, EXCEPT IN AREAS WHERE STANDING WATER IS PRESENT OR SOILS

SATURATED. IMMEDIATELY AFTER BACKFILLING IS COMPLETE, RESTORE THE

I. DO NOT USE ROCK, SOIL IMPORTED FROM OUTSIDE THE WETLAND, TREE

SEGREGATED TOPSOIL TO ITS ORIGINAL LOCATION.

STUMPS, OR BRUSH RIPRAP TO SUPPORT EQUIPMENT ON THE CONSTRUCTION RIGHT-OF-WAY. J. IF STANDING WATER OR SATURATED SOILS ARE PRESENT, OR IF CONSTRUCTION EQUIPMENT CAUSES RUTS OR MIXING OF THE TOPSOIL AND SUBSOIL IN WETLANDS, USE LOW-GROUND-WEIGHT CONSTRUCTION EQUIPMENT, OR OPERATE NORMAL EQUIPMENT ON TIMBER RIPRAP, PREFABRICATED EQUIPMENT MATS, OR

TERRA MATS. K. REMOVE ALL PROJECT-RELATED MATERIAL USED TO SUPPORT EQUIPMENT ON THE CONSTRUCTION RIGHT-OF-WAY UPON COMPLETION OF CONSTRUCTION. 3. TEMPORARY SEDIMENT CONTROL

INSTALL SEDIMENT BARRIERS (AS DEFINED IN SECTION IV.F.3.A OF THE PLAN) IMMEDIATELY AFTER INITIAL DISTURBANCE OF THE WETLAND OR ADJACENT UPLAND. SEDIMENT BARRIERS MUST BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION AND REINSTALLED AS NECESSARY (SUCH AS AFTER BACKFILLING OF THE TRENCH). EXCEPT AS NOTED BELOW IN SECTION VI.B.3.C, MAINTAIN SEDIMENT BARRIERS UNTIL REPLACED BY PERMANENT EROSION CONTROLS OR RESTORATION OF ADJACENT UPLAND AREAS IS COMPLETE. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE ADDRESSED IN MORE DETAIL IN THE PLAN.

A. INSTALL SEDIMENT BARRIERS ACROSS THE ENTIRE CONSTRUCTION RIGHT-OF-WAY IMMEDIATELY UPSLOPE OF THE WETLAND BOUNDARY AT ALL WETLAND CROSSINGS WHERE NECESSARY TO PREVENT SEDIMENT FLOW INTO

B. WHERE WETLANDS ARE ADJACENT TO THE CONSTRUCTION RIGHT-OF-WAY AND THE RIGHT-OF-WAY SLOPES TOWARD THE WETLAND, INSTALL SEDIMENT BARRIERS ALONG THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY AS NECESSARY TO CONTAIN SPOIL WITHIN THE CONSTRUCTION RIGHT-OF-WAY AND PREVENT SEDIMENT FLOW INTO THE WETLAND.

C. INSTALL SEDIMENT BARRIERS ALONG THE EDGE OF THE CONSTRUCTION RIGHT-OF-WAY AS NECESSARY TO CONTAIN SPOIL AND SEDIMENT WITHIN THE CONSTRUCTION RIGHT-OF-WAY THROUGH WETLANDS. REMOVE THESE SEDIMENT BARRIERS DURING RIGHT-OF-WAY CLEANUP. 4. TRENCH DEWATERING

DEWATER THE TRENCH (EITHER ON OR OFF THE CONSTRUCTION RIGHT-OF-WAY) IN A MANNER THAT DOES NOT CAUSE EROSION AND DOES NOT RESULT IN SILT-LADEN WATER FLOWING INTO ANY WETLAND. REMOVE THE DEWATERING STRUCTURES AS SOON AS PRACTICABLE AFTER THE COMPLETION OF DEWATERING ACTIVITIES.

C. RESTORATION

I. WHERE THE PIPELINE TRENCH MAY DRAIN A WETLAND, CONSTRUCT TRENCH BREAKERS AT THE WETLAND BOUNDARIES AND/OR SEAL THE TRENCH BOTTOM AS NECESSARY TO MAINTAIN THE ORIGINAL WETLAND HYDROLOGY.

2. RESTORE PRE-CONSTRUCTION WETLAND CONTOURS TO MAINTAIN THE ORIGINAL

3. FOR EACH WETLAND CROSSED, INSTALL A TRENCH BREAKER AT THE BASE OF SLOPES NEAR THE BOUNDARY BETWEEN THE WETLAND AND ADJACENT UPLAND AREAS. INSTALL A PERMANENT SLOPE BREAKER ACROSS THE CONSTRUCTION RIGHT-OF-WAY AT THE BASE OF SLOPES GREATER THAN 5 PERCENT WHERE THE BASE OF THE SLOPE IS LESS THAN 50 FEET FROM THE WETLAND, OR AS NEEDED TO PREVENT SEDIMENT TRANSPORT INTO THE WETLAND. IN ADDITION, INSTALL SEDIMENT BARRIERS AS OUTLINED IN THE PLAN. IN SOME AREAS, WITH THE APPROVAL OF THE ENVIRONMENTAL INSPECTOR, AN EARTHEN BERM MAY BE SUITABLE AS A SEDIMENT BARRIER ADJACENT TO THE WETLAND. 4. DO NOT USE FERTILIZER, LIME, OR MULCH UNLESS REQUIRED IN WRITING BY THE

APPROPRIATE FEDERAL OR STATE AGENCY. 5. CONSULT WITH THE APPROPRIATE FEDERAL OR STATE AGENCIES TO DEVELOP A PROJECT-SPECIFIC WETLAND RESTORATION PLAN. THE RESTORATION PLAN SHALL INCLUDE MEASURES FOR RE-ESTABLISHING HERBACEOUS AND/OR WOODY SPECIES, CONTROLLING THE INVASION AND SPREAD OF INVASIVE SPECIES AND NOXIOUS WEEDS (E.G., PURPLE LOOSESTRIFE AND PHRAGMITES), AND MONITORING THE SUCCESS OF THE

UPON REQUEST. 6. UNTIL A PROJECT-SPECIFIC WETLAND RESTORATION PLAN IS DEVELOPED AND/OR IMPLEMENTED. TEMPORARILY REVEGETATE THE CONSTRUCTION RIGHT-OF-WAY WITH ANNUAL RYEGRASS AT A RATE OF 40 POUNDS/ACRE (UNLESS STANDING WATER IS PRESENT).

REVEGETATION AND WEED CONTROL EFFORTS. PROVIDE THIS PLAN TO THE FERC STAFF

7. ENSURE THAT ALL DISTURBED AREAS SUCCESSFULLY REVEGETATE WITH WETLAND HERBACEOUS AND/OR WOODY PLANT SPECIES. 8. REMOVE TEMPORARY SEDIMENT BARRIERS LOCATED AT THE BOUNDARY BETWEEN WETLAND AND ADJACENT UPLAND AREAS AFTER REVEGETATION AND STABILIZATION OF ADJACENT UPLAND AREAS ARE JUDGED TO BE SUCCESSFUL AS SPECIFIED IN SECTION VII.A.4 OF THE PLAN.

D. POST-CONSTRUCTION MAINTENANCE AND REPORTING

1, DO NOT CONDUCT ROUTINE VEGETATION MOWING OR CLEARING OVER THE FULL WIDTH OF THE PERMANENT RIGHT-OF-WAY IN WETLANDS. HOWEVER, TO FACILITATE PERIODIC CORROSION/LEAK SURVEYS, A CORRIDOR CENTERED ON THE PIPELINE AND UP TO 10 FEET WIDE MAY BE CLEARED AT A FREQUENCY NECESSARY TO MAINTAIN THE 10-FOOT CORRIDOR IN AN HERBACEOUS STATE. IN ADDITION, TREES WITHIN 15 FEET OF THE PIPELINE WITH ROOTS THAT COULD COMPROMISE THE INTEGRITY OF PIPELINE COATING MAY BE SELECTIVELY CUT AND REMOVED FROM THE PERMANENT RIGHT-OF-WAY. DO NOT CONDUCT ANY ROUTINE VEGETATION MOWING OR CLEARING IN WETLANDS THAT ARE BETWEEN HDD ENTRY AND EXIT POINTS.

2. DO NOT USE HERBICIDES OR PESTICIDES IN OR WITHIN 100 FEET OF A WETLAND, EXCEPT AS ALLOWED BY THE APPROPRIATE FEDERAL OR STATE AGENCY. 3. TIME OF YEAR RESTRICTIONS SPECIFIED IN SECTION VII.A.5 OF THE PLAN (APRIL 15 -AUGUST 1 OF ANY YEAR) APPLY TO ROUTINE MOWING AND CLEARING OF WETLAND AREAS. 4. MONITOR AND RECORD THE SUCCESS OF WETLAND REVEGETATION ANNUALLY UNTIL WETLAND REVEGETATION IS SUCCESSFUL

5. WETLAND REVEGETATION SHALL BE CONSIDERED SUCCESSFUL IF ALL OF THE FOLLOWING CRITERIA ARE SATISFIED: A. THE AFFECTED WETLAND SATISFIES THE CURRENT FEDERAL DEFINITION FOR A

> WETLAND (I.E., SOILS, HYDROLOGY, AND VEGETATION): B. VEGETATION IS AT LEAST 80 PERCENT OF EITHER THE COVER DOCUMENTED FOR THE WETLAND PRIOR TO CONSTRUCTION, OR AT LEAST 80 PERCENT OF THE COVER IN ADJACENT WETLAND AREAS THAT WERE NOT DISTURBED BY

C. IF NATURAL RATHER THAN ACTIVE REVEGETATION WAS USED, THE PLANT SPECIES COMPOSITION IS CONSISTENT WITH EARLY SUCCESSIONAL WETLAND PLANT COMMUNITIES IN THE AFFECTED ECOREGION; AND D. INVASIVE SPECIES AND NOXIOUS WEEDS ARE ABSENT, UNLESS THEY ARE ABUNDANT IN ADJACENT AREAS THAT WERE NOT DISTURBED BY CONSTRUCTION.

6. WITHIN 3 YEARS AFTER CONSTRUCTION, FILE A REPORT WITH THE SECRETARY IDENTIFYING THE STATUS OF THE WETLAND REVEGETATION EFFORTS AND DOCUMENTING SUCCESS AS DEFINED IN SECTION VI.D.5, ABOVE. THE REQUIREMENT TO FILE WETLAND RESTORATION REPORTS WITH THE SECRETARY DOES NOT APPLY TO PROJECTS CONSTRUCTED UNDER THE AUTOMATIC AUTHORIZATION, PRIOR NOTICE, OR ADVANCE NOTICE PROVISIONS IN THE FERC'S REGULATIONS.

FOR ANY WETLAND WHERE REVEGETATION IS NOT SUCCESSFUL AT THE END OF 3 YEARS AFTER CONSTRUCTION, DEVELOP AND IMPLEMENT (IN CONSULTATION WITH A PROFESSIONAL WETLAND ECOLOGIST) A REMEDIAL REVEGETATION PLAN TO ACTIVELY REVEGETATE WETLANDS. CONTINUE REVEGETATION EFFORTS AND FILE A REPORT ANNUALLY DOCUMENTING PROGRESS IN THESE WETLANDS UNTIL WETLAND

VII. HYDROSTATIC TESTING

REVEGETATION IS SUCCESSFUL.

A. NOTIFICATION PROCEDURES AND PERMITS 1. APPLY FOR STATE-ISSUED WATER WITHDRAWAL PERMITS, AS REQUIRED. 2. APPLY FOR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) OR STATE-ISSUED DISCHARGE PERMITS, AS REQUIRED. 3. NOTIFY APPROPRIATE STATE AGENCIES OF INTENT TO USE SPECIFIC SOURCES AT LEAST 48 HOURS BEFORE TESTING ACTIVITIES UNLESS THEY WAIVE THIS REQUIREMENT IN

WRITING. B. GENERAL

> 1. PERFORM 100 PERCENT RADIOGRAPHIC INSPECTION OF ALL PIPELINE SECTION WELDS OR HYDROTEST THE PIPELINE SECTIONS, BEFORE INSTALLATION UNDER WATERBODIES OR WETLANDS. 2. IF PUMPS USED FOR HYDROSTATIC TESTING ARE WITHIN 100 FEET OF ANY WATERBODY OR WETLAND, ADDRESS SECONDARY CONTAINMENT AND REFUELING OF THESE PUMPS IN THE PROJECT'S SPILL PREVENTION AND RESPONSE PROCEDURES. 3. THE PROJECT SPONSOR SHALL FILE WITH THE SECRETARY BEFORE CONSTRUCTION A

DOES NOT APPLY TO PROJECTS CONSTRUCTED UNDER THE AUTOMATIC AUTHORIZATION PROVISIONS OF THE FERC'S REGULATIONS.

C. INTAKE SOURCE AND RATE 1. SCREEN THE INTAKE HOSE TO MINIMIZE THE POTENTIAL FOR ENTRAINMENT OF FISH. 2. DO NOT USE STATE-DESIGNATED EXCEPTIONAL VALUE WATERS, WATERBODIES WHICH PROVIDE HABITAT FOR FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES, OR WATERBODIES DESIGNATED AS PUBLIC WATER SUPPLIES, UNLESS APPROPRIATE FEDERAL, STATE, AND/OR LOCAL PERMITTING AGENCIES GRANT WRITTEN PERMISSION. 3. MAINTAIN ADEQUATE FLOW RATES TO PROTECT AQUATIC LIFE, PROVIDE FOR ALL WATERBODY USES, AND PROVIDE FOR DOWNSTREAM WITHDRAWALS OF WATER BY EXISTING USERS.

LIST IDENTIFYING THE LOCATION OF ALL WATERBODIES PROPOSED FOR USE AS A

HYDROSTATIC TEST WATER SOURCE OR DISCHARGE LOCATION. THIS FILING REQUIREMENT

4. LOCATE HYDROSTATIC TEST MANIFOLDS OUTSIDE WETLANDS AND RIPARIAN AREAS TO THE MAXIMUM EXTENT PRACTICABLE.

D. DISCHARGE LOCATION, METHOD, AND RATE

1. REGULATE DISCHARGE RATE, USE ENERGY DISSIPATION DEVICE(S), AND INSTALL SEDIMENT BARRIERS, AS NECESSARY, TO PREVENT EROSION, STREAMBED SCOUR. SUSPENSION OF SEDIMENTS, OR EXCESSIVE STREAMFLOW 2. DO NOT DISCHARGE INTO STATE-DESIGNATED EXCEPTIONAL VALUE WATERS, WATERBODIES WHICH PROVIDE HABITAT FOR FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES, OR WATERBODIES DESIGNATED AS PUBLIC WATER SUPPLIES UNLESS APPROPRIATE FEDERAL, STATE, AND LOCAL PERMITTING AGENCIES GRANT WRITTEN PERMISSION.

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND REPARED UNDER MY DIRECT SUPERVISION. THOMAS J. MURPHY, PLS DW SMITH ASSOCIATES, LLC

1450 STATE ROUTE 34, WALL, NJ 07753

DESCRIPTION

08/24/18 REV PER NJDEP COMMENTS

4 05/17/19 REV TRANSITION AREAS AND BASIN PER NJDEP COMMENTS

01/15/20 GENERAL REVISIONS

02/04/19 REV DRAINAGE PER NJDEP COMMENT

04/30/19 REV TRANSITION AREA WIDTHS PER NJDI

06/07/19 REV DRAINAGE & LIMIT OF DISTURBAN

06/24/19 REV FENCE AND LIMIT OF DISTURBANG

10/11/19 REV TITLE BLOCK FOR ACCESS RD LO

PROFESSIONAL LAND SURVEYOR N.J. LIC. NO. 37207 COA NO. 24GA28122400

OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATION. CORRESPOND WITH THE DETAILED ENGI WILLIAM SALMON, P.E.

PS&S, LLC 1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727 PROFESSIONAL ENGINEER N.J. LIC. NO. 41319 COA NO. 24GA28032700

> PAULUS, SOKOLOWSKI AND SARTOR, LLC

1433 ROUTE 34 SUITE A4 WALL, NJ 07727 PHONE: (848) 206-2626

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700 LL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOW ND SARTOR, LLC. OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN ONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. HESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NO ROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF ROJECT OR FOR REUSE ON ANY OTHER PROJECT.

PYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC. — ALL RIGHTS RESERVED

NORTHEAST SUPPLY **ENHANCEMENT PROJECT PROPOSED** 

**COMPRESSOR STATION 206** BLOCK 5.02, LOTS 1.02 (FORMERLY 9, 10, 12, 16 & 17), 11.02, 20 (FORMERLY 23) & 2

OWNSHIP OF FRANKLIN, SOMERSET COUNTY, NEW JERSE SHEET TITLE

CONSTRUCTION

PROJECT NO.: 05731.0003 AS SHOWN DATE:

CHECKED BY: WS 06-08-2018 SHEET 9 OF 9 SHEET NO.

DRAWN BY: JPS