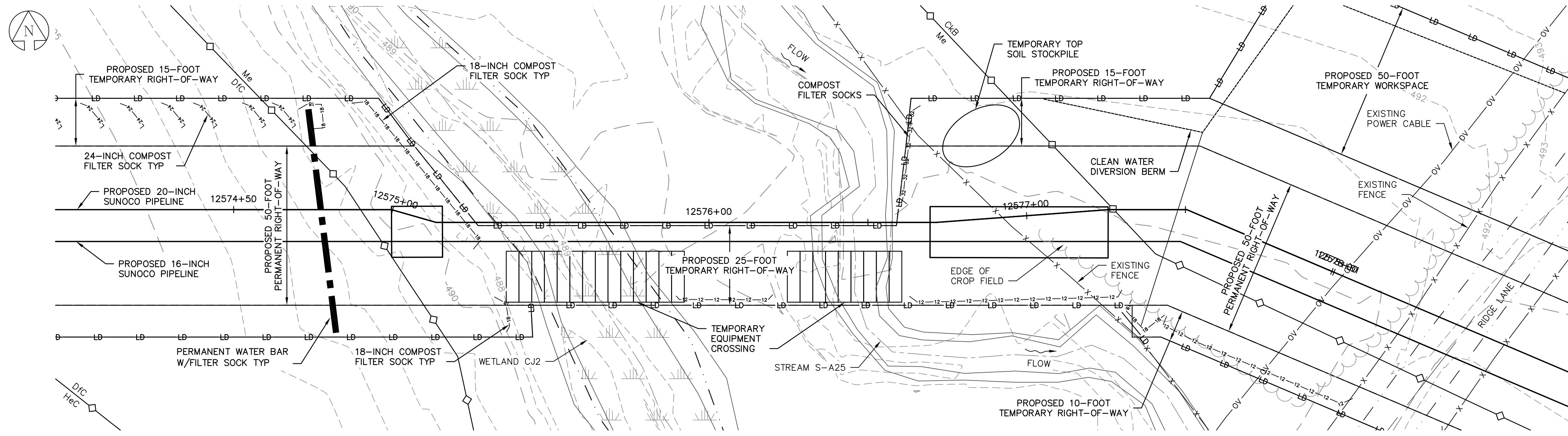
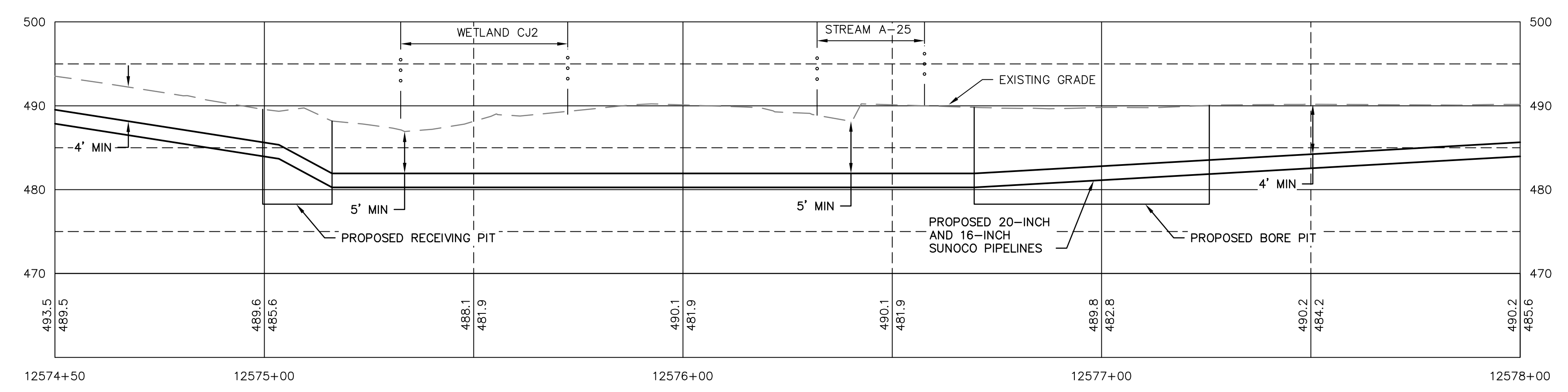


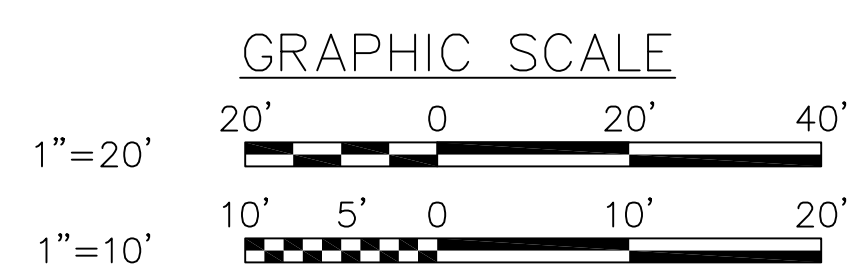
EXISTING CONDITIONS PLAN
SCALE: 1"=20'



EROSION & SEDIMENTATION CONTROL PLAN
SCALE: 1"=20'



PROFILE
HORZ SCALE: 1"=20'
VERT SCALE: 1"=10'



GENERAL NOTES:

1. REFERENCE E&S PLAN AND SITE RESTORATION NOTES AND DETAILS FOR ADDITIONAL CONSTRUCTION SEQUENCING, TYPICAL DETAILS AND NOTES (ES-0.01-ES-0.23); AND PLAN SHEETS FOR ADDITIONAL PLANS AND TOPOGRAPHY.
2. ALL EXISTING UTILITY INFORMATION IS APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. MAINTAIN 2'-0" MINIMUM VERTICAL SEPARATION BETWEEN THE PROPOSED PIPELINE AND OTHER UTILITIES.
4. THE BACKGROUND TOPOGRAPHY WAS OBTAINED FROM TOPOGRAPHIC SURVEYS PERFORMED IN SEPTEMBER 2016.
5. THE PROJECT IS LOCATED IN NAD83 PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE), NAVD88.
6. EXCAVATION IS LIMITED TO THE CENTERLINE WITH A TYPICAL TRENCH WIDTH OF 4-5' FOR 16"/20" PIPELINE.

WETLAND CROSSING NOTES:

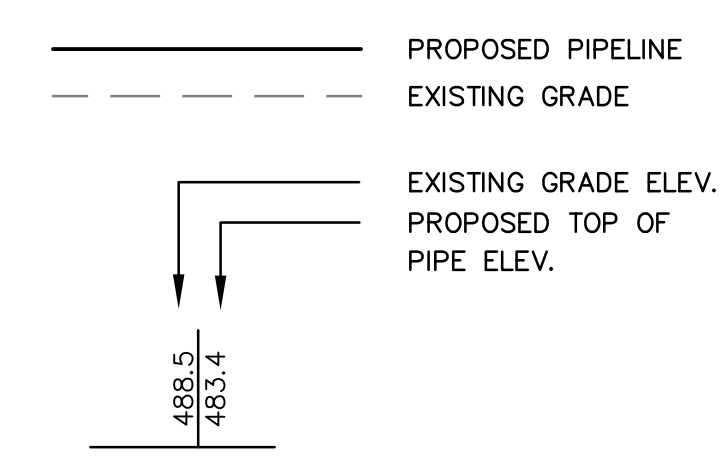
1. REFERENCE NOTES AND DETAILS FOR WETLAND CONSTRUCTION SEQUENCING AND WETLAND RESTORATION (ES-0.03, ES-0.08, ES-0.10, AND ES-0.15).
2. A MINIMUM OF 4 FEET COVER UNDER WETLANDS AND UPLANDS IS REQUIRED.
3. FOR TEMPORARY TIMBER MAT REFERENCE (ES-0.10)
4. EROSION CONTROL BLANKET SHALL BE PLACED A MINIMUM OF 50 FEET EDGE OF WETLAND OR 100 FEET FROM EDGE OF WETLAND FOR SPECIAL PROTECTION WATERS (HQ OR EV).

STREAM CROSSING NOTES:

1. REFERENCE NOTES AND DETAILS FOR STREAM CONSTRUCTION SEQUENCING AND STREAM RESTORATION (ES-0.01-ES-0.17).
2. FOR TEMPORARY EQUIPMENT CROSSINGS REFERENCE (ES-0.10).
3. SITE CONDITIONS MAY ALLOW FOR IMPLEMENTATION OF OTHER APPROVED PIPELINE INSTALLATION METHODS REFERENCED WITH THE NOTES AND DETAILS (ES-0.11-ES-0.14).
4. THE PIPELINES SHALL MAINTAIN A MINIMUM OF 5 FEET OF COVER UNDER STREAMS FROM THE TOP OF PIPE TO THE STREAM BED. THIS COVER WILL BE MAINTAINED AT A MINIMUM FROM TOP OF BANK TO TOP OF BANK.
5. REFERENCE THE STREAM BANK STABILIZATION DETAIL AND STREAM RESTORATION TABLE IN THE NOTES AND DETAILS WHERE RIP-RAP IS PROPOSED (ES-0.18).
6. EROSION CONTROL BLANKET SHALL BE PLACED A MINIMUM OF 50 FEET FROM TOP OF BANK OR 100 FEET FROM TOP OF BANK FOR SPECIAL PROTECTION WATERS (HQ OR EV).
7. TIMBER MATS SHALL EXTEND A MINIMUM OF 20 FEET BEYOND TOP OF BANK.
8. COMPOST FILTER SOCKS SHALL BE INSTALLED ALONG THE TOP OF THE STREAM BANK ACROSS THE RIGHT-OF-WAY WHEN PUMP BYPASS IS NOT IN PLACE.

SYMBOL	DESCRIPTION
—	PROPOSED 16-INCH & 20-INCH SUNOCO PIPELINES
- - -	PROPOSED SUNOCO RIGHT-OF-WAY
—HPPP—	EXISTING SUNOCO PIPELINE
- - - 910 - - -	MAJOR CONTOUR
- - - - -	MINOR CONTOUR
—	STREAM CENTERLINE
—	TOP/BOTTOM OF BANK
—	EXISTING EDGE OF PAVED ROADWAY
—	EXISTING EDGE OF UNPAVED ROADWAY
—	EXISTING VEGETATION
—	EDGE OF WATER
—	SOIL TYPE BOUNDARY
—	WETLAND
—	PROPOSED ROCK CONSTRUCTION ENTRANCE
—	LIMIT OF DISTURBANCE
—	CONSTRUCTION FENCE
—12—12—12—12—	12-INCH COMPOST FILTER SOCK
—18—18—18—18—	18-INCH COMPOST FILTER SOCK
—24—24—24—24—	24-INCH COMPOST FILTER SOCK
—32—32—32—32—	32-INCH COMPOST FILTER SOCK
—	PERMANENT WATER BAR W/FILTER SOCK
—	TRENCH PLUG
—	TEMPORARY EQUIPMENT CROSSING
—	SANDBAG DAM
—	PUMP
—	SCREENED INLET
—	ENERGY DISSIPATER
—	DEWATERING FACILITY
—	CULVERT PIPE
—	EROSION CONTROL BLANKET
—	STREAM RESTORATION

PROFILE LEGEND:



STV
Baltimore, MD Bismarck, ND Denver, CO Douglassville, PA
Houston, TX Pittsburgh, PA Williamsport, PA

THE LOCATION OF THE PIPELINE FACILITIES AS SHOWN HEREON MUST BE CONSIDERED AS APPROXIMATE ONLY. BEFORE DIGGING OR FOR AN EXACT LOCATION PLEASE CONTACT YOUR STATES UNDERGROUND UTILITY LOCATION SERVICE.

STV PROJECT No.: 38-17335

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER D. ANTONI
No. PE-057385-E
11/30/16

CHRISTOPHER D. ANTONI
PE-057385-E

ENGINEERING RECORD

DRAWN BY	PDZ
CHECKED BY	RJC
APPROVED BY	CDA
DATE	11/30/16
SCALE	AS NOTED

OLD DRAWING NO.

REV.	DATE	APP#	DESCRIPTION	APPROVAL

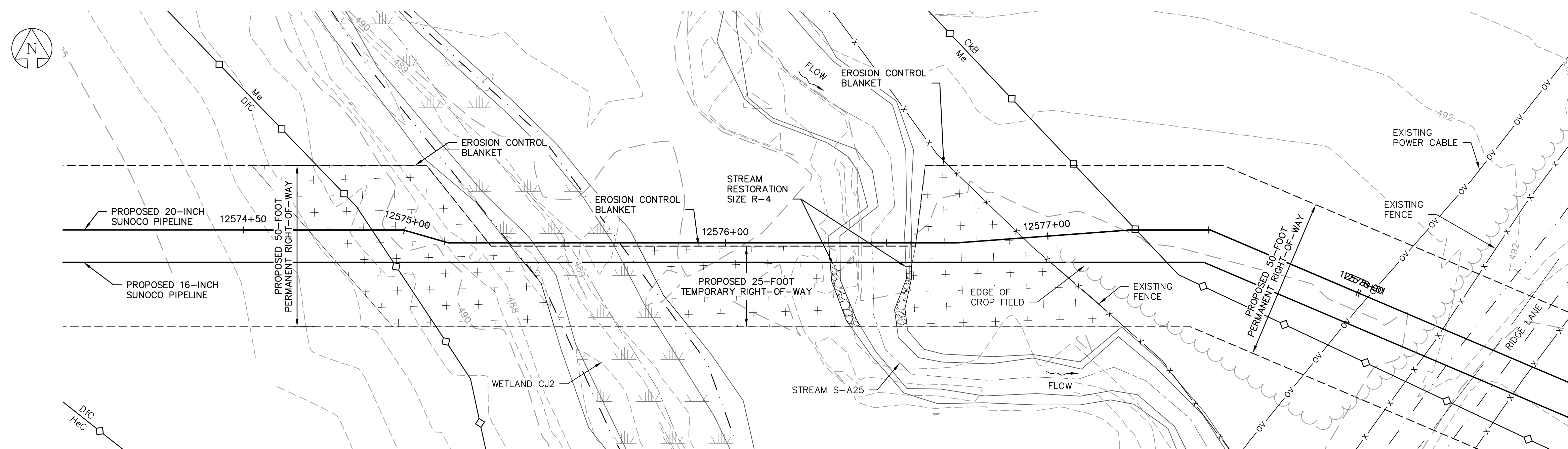
Sunoco Logistics Partners L.P.

PENNSYLVANIA PIPELINE PROJECT
STREAM S-A25
EXISTING CONDITIONS/EROSION & SEDIMENTATION CONTROL PLANS

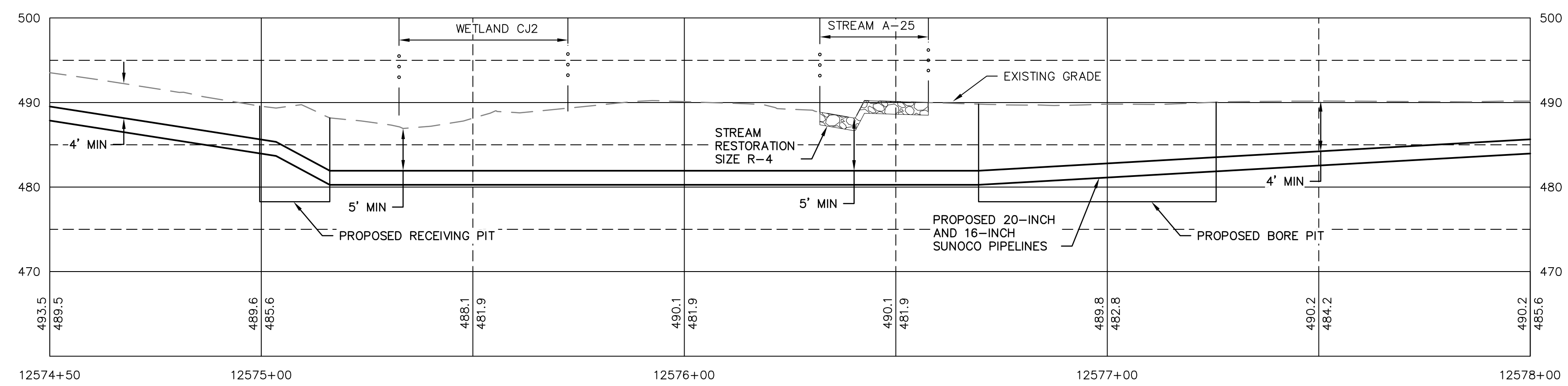
LEBANON COUNTY, PA

DWG. NO.
P-A1-A

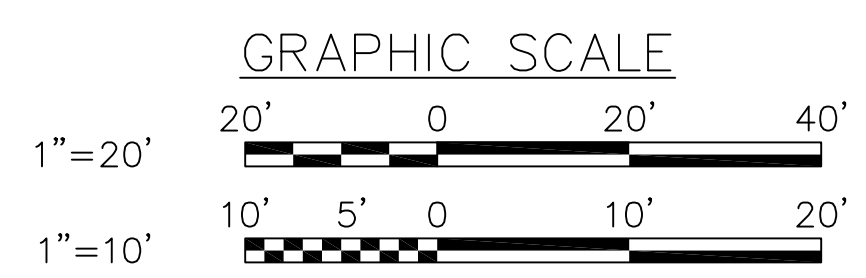
REV. NO.
0



PLAN
SCALE: 1"=20'
FOR STREAM RESTORATION DETAILS,
SEE DRAWING P-A1-103.



RESTORED GRADE PROFILE
HORZ SCALE: 1"=20'
VERT SCALE: 1"=10'



GENERAL NOTES:

1. REFERENCE E&S PLAN AND SITE RESTORATION NOTES AND DETAILS FOR ADDITIONAL CONSTRUCTION SEQUENCING, TYPICAL DETAILS AND NOTES (ES-0.01-ES-0.23); AND PLAN SHEETS FOR ADDITIONAL PLANS AND TOPOGRAPHY.
2. ALL EXISTING UTILITY INFORMATION IS APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. MAINTAIN 2'-0" MINIMUM VERTICAL SEPARATION BETWEEN THE PROPOSED PIPELINE AND OTHER UTILITIES.
4. THE BACKGROUND TOPOGRAPHY WAS OBTAINED FROM TOPOGRAPHIC SURVEYS PERFORMED IN SEPTEMBER 2016.
5. THE PROJECT IS LOCATED IN NADB3 PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE), NAVD88.
6. EXCAVATION IS LIMITED TO THE CENTERLINE WITH A TYPICAL TRENCH WIDTH OF 4'-5" FOR 16"/20" PIPELINE.

WETLAND CROSSING NOTES:

1. REFERENCE NOTES AND DETAILS FOR WETLAND CONSTRUCTION SEQUENCING AND WETLAND RESTORATION (ES-0.03, ES-0.08, ES-0.10, AND ES-0.15).
2. A MINIMUM OF 4 FEET COVER UNDER WETLANDS AND UPLANDS IS REQUIRED.
3. FOR TEMPORARY TIMBER MAT REFERENCE (ES-0.10)
4. EROSION CONTROL BLANKET SHALL BE PLACED A MINIMUM OF 50 FEET EDGE OF WETLAND OR 100 FEET FROM EDGE OF WETLAND FOR SPECIAL PROTECTION WATERS (HQ OR EV).

STREAM CROSSING NOTES:

1. REFERENCE NOTES AND DETAILS FOR STREAM CONSTRUCTION SEQUENCING AND STREAM RESTORATION (ES-0.01-ES-0.17).
2. FOR TEMPORARY EQUIPMENT CROSSINGS REFERENCE (ES-0.10).
3. SITE CONDITIONS MAY ALLOW FOR IMPLEMENTATION OF OTHER APPROVED PIPELINE INSTALLATION METHODS REFERENCED WITH THE NOTES AND DETAILS (ES-0.11-ES-0.14).
4. THE PIPELINES SHALL MAINTAIN A MINIMUM OF 5 FEET OF COVER UNDER STREAMS FROM THE TOP OF PIPE TO THE STREAM BED. THIS COVER WILL BE MAINTAINED AT A MINIMUM FROM TOP OF BANK TO TOP OF BANK.
5. REFERENCE THE STREAM BANK STABILIZATION DETAIL AND STREAM RESTORATION TABLE IN THE NOTES AND DETAILS WHERE RIP-RAP IS PROPOSED (ES-0.18).
6. EROSION CONTROL BLANKET SHALL BE PLACED A MINIMUM OF 50 FEET FROM TOP OF BANK OR 100 FEET FROM TOP OF BANK FOR SPECIAL PROTECTION WATERS (HQ OR EV).
7. TIMBER MATS SHALL EXTEND A MINIMUM OF 20 FEET BEYOND TOP OF BANK.
8. COMPOST FILTER SOCKS SHALL BE INSTALLED ALONG THE TOP OF THE STREAM BANK ACROSS THE RIGHT-OF-WAY WHEN PUMP BYPASS IS NOT IN PLACE.

SYMBOL	DESCRIPTION
— — — — —	PROPOSED 16-INCH & 20-INCH SUNOCO PIPELINES
- - - - -	PROPOSED SUNOCO RIGHT-OF-WAY
— HPPP — HPPP —	EXISTING SUNOCO PIPELINE
- - - 910 - - -	MAJOR CONTOUR
- - - - -	MINOR CONTOUR
— — — — —	STREAM CENTERLINE
— — — — —	TOP/BOTTOM OF BANK
— — — — —	EXISTING EDGE OF PAVED ROADWAY
— — — — —	EXISTING EDGE OF UNPAVED ROADWAY
— — — — —	EXISTING VEGETATION
- - - - -	EDGE OF WATER
— — — — —	SOIL TYPE BOUNDARY
— — — — —	WETLAND
— — — — —	PROPOSED ROCK CONSTRUCTION ENTRANCE
— LD — LD — LD —	LIMIT OF DISTURBANCE
— CF — CF —	CONSTRUCTION FENCE
-12-12-12-12-	12-INCH COMPOST FILTER SOCK
-18-18-18-18-	18-INCH COMPOST FILTER SOCK
-24-24-24-24-	24-INCH COMPOST FILTER SOCK
-32-32-32-32-	32-INCH COMPOST FILTER SOCK
— — — — —	PERMANENT WATER BAR W/FILTER SOCK
— — — — —	TRENCH PLUG
— — — — —	TEMPORARY EQUIPMENT CROSSING
— — — — —	SANDBAG DAM
— — — — —	PUMP
— — — — —	SCREENED INLET
— — — — —	ENERGY DISSIPATER
— — — — —	DEWATERING FACILITY
— — — — —	CULVERT PIPE
— — — — —	EROSION CONTROL BLANKET
— — — — —	STREAM RESTORATION

PROFILE LEGEND:

- — — — — PROPOSED PIPELINE
- - - - - EXISTING GRADE
- — — — — EXISTING GRADE ELEV.
- — — — — PROPOSED TOP OF PIPE ELEV.

REV.	DATE	APP#	DESCRIPTION	APPROVAL

ENGINEERING RECORD

DRAWN BY	PDZ
CHECKED BY	RJC
APPROVED BY	CDA
DATE	11/30/16
SCALE	AS NOTED

CHRISTOPHER D. ANTONI
PE-057385-E

STV
Baltimore, MD Bismarck, ND Denver, CO Douglassville, PA
Houston, TX Pittsburgh, PA Williamsport, PA

THE LOCATION OF THE PIPELINE FACILITIES AS SHOWN HEREON MUST BE CONSIDERED AS APPROXIMATE ONLY. BEFORE DIGGING OR FOR AN EXACT LOCATION PLEASE CONTACT YOUR STATES UNDERGROUND UTILITY LOCATION SERVICE.

STV PROJECT No.: 38-17335

PENNSYLVANIA PIPELINE PROJECT
STREAM S-A25 RESTORATION PLAN

Sunoco Logistics Partners L.P.

LEBANON COUNTY, PA

DWG. NO. **P-A1-B**

REV. NO. **0**

I:\Projects\3817335\3817335_000166_CAD Models and Sheets\CAD_PPP_SheetSP46-0000.dwg, 11/30/2016 8:55:05 PM, Page: 11