Bell Bend Nuclear Power Plant
Wetland Mitigation Design Report
Confers Lane Site

Salem Township, Luzerne County, PA




Prepared for:
PPL Bell Bend, LLC.
38 Bomboy Lane, Suite 2
Berwick, Pennsylvania 18603

Prepared by:

Land Studies

315 North Street
Lititz, PA 17543
717-627-4440
www.landstudies.com

Rev 1, November 2010, Revised January 2011

Land Studies

Bell Bend Nuclear Power Plant

Wetland Mitigation Design Report – Confers Lane Site

Rev 1, January 2011

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1 Introduction

The purpose of the Confers Lane Mitigation Project is to provide compensatory wetland mitigation for the proposed Bell Bend Nuclear Power Plant. The total created wetland acreage provided in this project is 0.36 acres and the total enhanced wetland acreage is 0.04 acres. The Confers Lane Mitigation Project consists of re-connecting the existing wetlands on either side of Confers Lane. A portion of Confers Lane east of the proposed plant will be removed as part of the Grading Plan for the PPL Bell Bend Nuclear Power Plant. The existing road bed berm will be graded to the elevation of the existing wetlands on either side, the soil will be amended and native species will be planted to remediate the area.

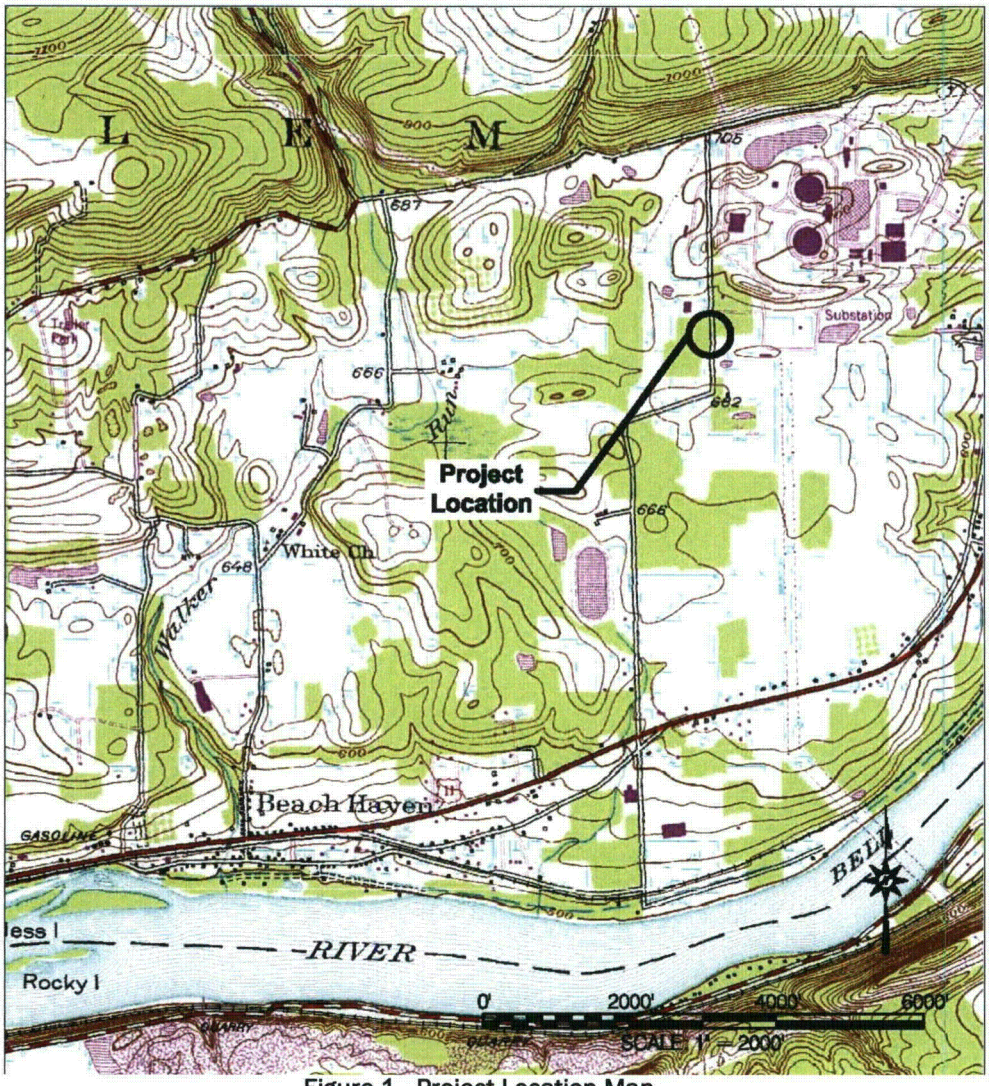


Figure 1 - Project Location Map
Wetland Mitigation Plan: Confers Lane Site
Location: 41°05'15" N 76°09'12"W, USGS 7.5 minute Quadrangle – Berwick, PA

2 Physiographic Region, Geology and Hydrology

2.1 Physiographic Region

The project site is part of the Susquehanna Lowland Section of the Ridge and Valley physiographic province (*see* Figure 2), which is characterized by a distinctive series of linear ridges and valleys that are the result of differential erosion of folded sedimentary rocks with varying degrees of resistance to weathering and erosion. Valleys are composed of less resistant rocks such as limestone and shale, whereas ridges and uplands are composed of more resistant rocks, particularly sandstone and siltstone. The North Branch of the Susquehanna River crosses these ridges as it flows generally from north to south. Its numerous tributaries form a trellis drainage network pattern as they flow through the valleys of less resistant rocks.

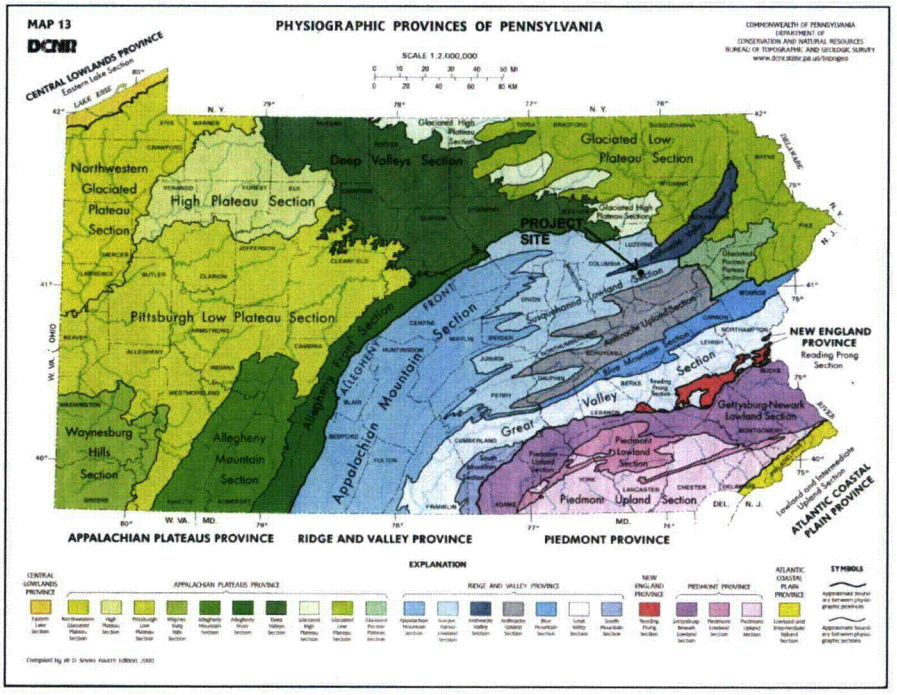


Figure 2 - Physiographic Provinces Map of Pennsylvania

2.2 Geology

The underlying bedrock consists of layered sedimentary rocks that are Devonian in age (~416 to 359 million years old). The vast majority of the BBNPP project boundary is underlain by dark-gray silty claystone of the Mahantango Formation (Dmh). Some of the northern-most portions of the BBNPP project boundary are underlain by dark-gray to grayish-black clay shale of the Harrel Formation (Dh) and dark-gray sandstone, siltstone, and shale of the Trimmers Rock Formation (Dtr). Source materials within Walker Run may include any of these formations as well as gray and bluish-gray sandstone, greenish-gray and grayish-red

siltstone, grayish-red claystone, and greenish-gray shale from the Irish Valley Member (Dci) of the Catskill Formation.

During the past 2 million years (approximate), the landscape has been modified by cyclical erosion and deposition associated with advancing and retreating ice sheets, up to several kilometers thick in places, that flowed southward from the northern polar regions. The most recent ice advance, known as the Wisconsinan, occurred about 45,000 to 15,000 years ago. The most recent part of this advance is referred to in this region as the Woodfordian, which is responsible for creating the most prominent glacial features in the BBNPP study area and the surrounding region. These features include a northwest-southeast trending Woodfordian terminal moraine complex that consists of boulder, poorly sorted sediment, and Woodfordian glaciofluvial (including kame) terraces along the Susquehanna River that consist of stratified sands and gravels. The terminal (end) and ground moraines deposited at the front of and beneath the ice sheet, respectively, are much coarser than the outwash sediments, and also are marked by kettles. Kettles are depressions on the ground surface that resulted from melting of ice blocks within the glacial deposits during deglaciation. After deglaciation, which ended approximately 10,000 yrs ago, the landscape of the BBNPP project boundary was mantled with fresh glacial and near-glacial deposits, which consisted of kame terrace sediments that were deposited along the sides of river valleys adjacent to ice margins, and of various types of till and outwash that formed at the leading edge of the Woodfordian ice sheet. Drainage was poor as a result of the near-glacial and glacial deposits, which typically consist of sediment that ranges from clay- to boulder-size, and resulted in widespread swampy conditions as streams adjusted to deglacial conditions.

2.3 Hydrology

Wetlands within the BBNPP project boundary are associated with two watersheds: Walker Run and the North Branch of the Susquehanna River (NBSR). Confers Lane currently serves as the divide between the two watersheds within the site. Despite being separated by Confers Lane, wetland 12.1 on the west side of the road and wetland 16 on the east side of the road retain similar characteristics and are thought to have been hydrologically connected in the past before they were dissected by the roadway. The numbering system of wetlands corresponds to the system used in the US Army Corps of Engineers Preliminary Jurisdictional Determination Application Document (Normandeau, February 2010), modified slightly by the Wetlands Functions and Values Assessment Report (LandStudies, October 2010).

Wetland 12.1 is located along the Eastern Tributary of Walker Run. Walker Run is classified as a wild trout stream; therefore wetland 12.1 is considered an exceptional value wetland (EV), per 25 Pa. Code Chapter 105.17. Since wetlands 12.1 and 16 were historically hydrologically connected, wetland 16 is also considered to be an exceptional value wetland.

Wetland 12.1 surrounds the north/south reach of the Eastern Tributary. The stream serves as an outlet for the wetland. The wetland has flat topography and the source of hydrology appears to be overland flow and spring upwellings when the groundwater table is high. Two channels created by surface water runoff from the "West Building" parking lot and from

Confers Lane join within the wetland and then flow to the Eastern Tributary as it begins to flow in an east-west direction. The Eastern Tributary has been artificially channelized (ditched) throughout the north-south section, especially behind the "West Building" where berms have been built on either side of the stream. The berms appear to be side-cast from digging out the channel.

Wetland 16 has no outlet and as a result tends to stay wetter during dry periods than Wetland 12.1. The long "tail" part of Wetland 16 that makes a 90-degree bend to the east is an extremely flat manmade channel formed between the elevated switchyard and a natural bedrock formation.

3 Visual Assessment of Project Area

Confers Lane is a two lane paved roadway that creates an unnatural berm through the middle of a once-hydrologically connected wetland (currently Wetlands 12.1 and 16). See Figure 3.

Figure 3. Confers Lane dividing Wetlands 12.1 and 16, facing south.

Both Wetland 12.1 and 16 are primarily Palustrine Forested (PFO) wetland, with some Palustrine Scrub-Shrub (PSS) and Palustrine Emergent (PEM) areas. Wildlife habitat serves as the principal function of these wetlands. Even with the artificial break between the two, there is adequate adjacent upland and wetland area to provide wildlife corridors for movement. Vegetation observed in Wetlands 12.1 and 16 include multiflora rose, sedge sp.,

skunk cabbage, highbush blueberry, spicebush, cattails, elderberry, swamp white oak, red maple, black gum, pin oak, yellow poplar, sensitive fern, silky dogwood, and arrowwood (LandStudies, October 2010).

4 Mitigation Design

The wetland mitigation design for Confers Lane involves removing the roadbed and grading the berm to the level of the existing wetlands to reconnect Wetlands 12.1 and 16. To connect the wetlands properly, a small amount of grading within the existing wetland will need to be performed. Upon completion of grading, however, the affected area will be re-planted and enhanced.

In the area of the existing roadbed, the existing surface shall be scarified to a depth of at least eight (8) inches. Clean, native topsoil shall be amended with 25% compost and placed on wetland to proposed final grade elevations (1' minimum) to provide a good growing medium for the native species to be planted. Several native shrub and tree species, including hickory, swamp white oak, red maple and silver maple, will be planted within the created wetland area and the entire disturbed area will be planted with a wetland seed mix (see Figures 4-6).

Trees

Key	Botanical Name	Common Name	Size	Qty.	Spacing	I.S.	Notes
	Acer rubrum	Red Maple	1"-1.5"	10	20'-30'	FAC	
	Acer saccharinum	Silver Maple	1"-1.5"	8	20'-30'	FACW	
CO	*Carya ovata*	Shagbark Hickory	1"-1.5"	8	20'-30'	FACU	Upland areas only
	Quercus bicolor	Swamp White Oak	1"-1.5"	11	20'-30	FACW	
				37			

Figure 4. Tree planting schedule.

Shrubs

Key	Botanical Name	Common Name	Size	Qty	Spacing	I.S.	Notes
	Ilex verticillata	Winterberry	#5	18	4'-6'	FACW	1 male for every 8 female
	Lindera benzoin	Spicebush	#5	18	4'-6'	FACW	
	Vaccinium corymbosum	Highbush Blueberry	#5	16	4'-6'	FACW -	
	Viburnum trilobum	Cranberry Bush	#5	10	4'-6'	FACW	
				62			

Figure 5. Shrub planting schedule.

Floodplain Seed Mix

%	Botanical Name	Common Name	I.S.
10	*Elymus virginicus, PA*	Virginia Wild Rye, PA Ecotype	FACW
10	*Panicum ridigulum, PA*	Redtop Panic Grass, PA Ecotype	FACW+
8	*Elymus canadensis, PA*	Canada Wild Rye, PA Ecotype	FACU
5	*Carex vulpinoidea, PA Ecotype*	Fox Sedge, PA Ecotype	OBL
5	*Panicum clandestinum*	Deer Tongue 'Tioga', PA Ecotype	FAC+
5	*Elymus riparius, PA*	Riverbank Wild Rye, PA Ecotype	FACW
5	*Agrostis perennans, APB*	Autumn Bentgrass, APB	FACU
5	*Agrostis scabra, PA*	Ticklegrass, PA Ecotype (rough bentgrass)	FAC
5	*Carex scoparia*	Blunt Broom Sedge	FACW
5	*Festuca rubra*	Creeping Red Fescue	FACU
4	*Carex comosa*	Bristly Sedge	OBL
4	*Chasmanthium latifolium, PA*	River Oats, PA Ecotype	FACU
3	*Carex stipata*	Awl Sedge	OBL
3	*Elymus hystrix, PA*	Bottlebrush Grass, PA Ecotype	NI
3	*Juncus effusus, PA*	Soft Rush, PA Ecotype	FACW+
2	*Asclepias incarnata*	Swamp Milkweed	OBL
2	*Bidens aristosa*	Bur Marigold, 'Suther' NC Ecotype	FACW-
2	*Carex lurida*	Lurid Sedge	OBL
2	*Juncus tenuis*	Path Rush	FAC-
2	*Poa palustris*	Fowl Bluegrass	FACW
1	*Aster prenanthoides*	Zigzag Aster	FAC
1	*Aster laevis*	Smooth Blue Aster	NI
1	*Aster novae-angliae*	New England Aster	FACW-
1	*Carex crinta*	Fringed Sedge	OBL
1	*Iris versicolor*	Blue Flag Iris	OBL
1	*Lobelia cardinalis*	Cardinal Flower	FACW+
1	*Lobelia siphilitica*	Great Blue Lobelia	FACW+
1	*Scirpus validus*	Soft-stem Bulrush	OBL
1	*Solidago riddellii*	Riddell's Goldenrod	OBL
1	*Solidago rugosa*	Wrinkle Leaf Goldenrod	FAC
100		***Application Rate: 15-20 lbs/acre***	

Figure 6. Wetland Seed Mix.

The total created wetland acreage for the Confers Lane wetland is 0.36 acres and the total wetland enhancement acreage at Confers Lane is 0.04 acres.

5 References

Bell Bend Nuclear Power Plant COLA Revision 1. 2008. Unistar Nuclear Services LLC.

Bush, R. Dennis. 1973. Soil Survey of Luzerne County, Pennsylvania.

Soil Survey of Luzerne County. 1981. United States Department of Agriculture.

United States Army Corps of Engineers Preliminary Jurisdictional Determination Application Document. February 2010. Normandeau Associates, Inc.

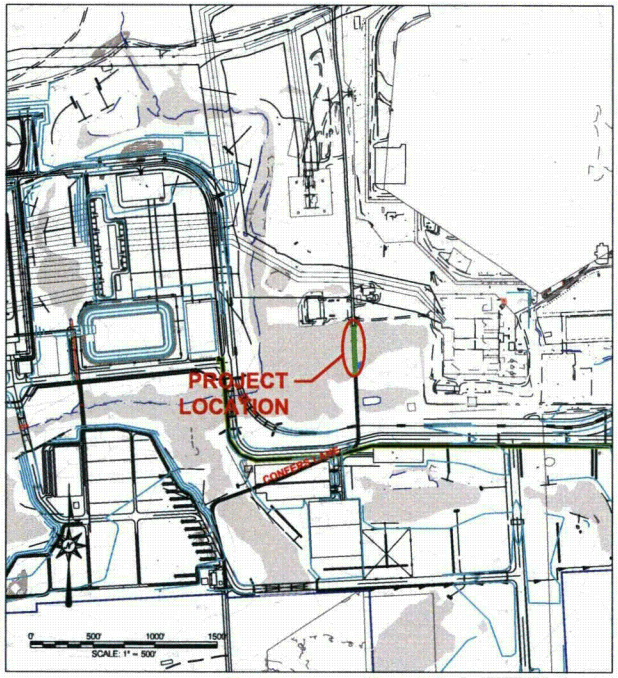
Wetland Delineation and Exceptional Value Wetlands Analysis Report for the Proposed Bell Bend Nuclear Power Plant Site, Luzerne County, PA. July 2010. Normandeau Associates, Inc.

Wetlands Functions and Values Assessment. October 2010. LandStudies, Inc.

BELL BEND NUCLEAR POWER PLANT
WETLAND MITIGATION PLAN
CONFERS LANE SITE

SALEM TOWNSHIP, LUZERNE COUNTY, PENNSYLVANIA

PLAN DATE: OCTOBER 29, 2010
REVISION 1: AUGUST 12, 2011



SITE MAP
1" = 500'

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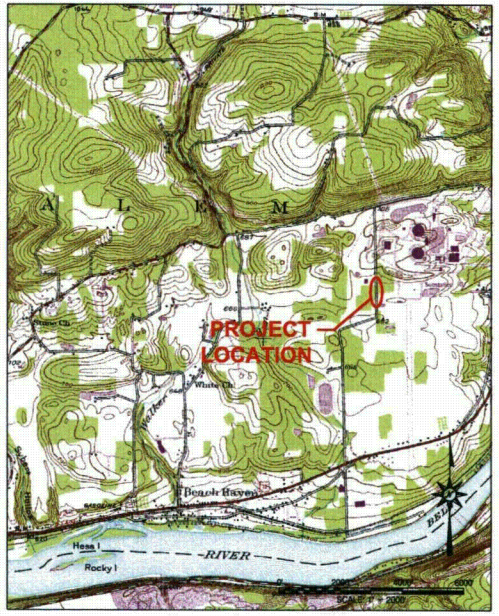


LOCATION MAP
1" = 2,000'

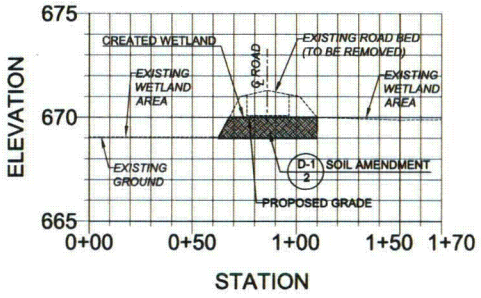
CLIENT ADDRESS:
PPL BELL BEND, LLC.
38 BOMBOY LANE, SUITE 2
BERWICK, PENNSYLVANIA 18603
PHONE: (570) 802-5636
FAX: (570) 802-5639

Land Studies
717-627-4440
fax: 717-627-4660
landstudies.com
land@landstudies.com
315 North Street | Lititz, PA 17543
PA 04234

NOTES:
1. BACKGROUND TOPOGRAPHIC MAPPING WAS PRODUCED BY PETERS CONSULTANTS, INC. IN NOV. 2007, JAN. 2008 AND APRIL 2010. THE HORIZONTAL COORDINATE SYSTEM SHOWN ON THIS DRAWING IS PENNSYLVANIA'S STATE PLAN COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83). THE VERTICAL CONTOURS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. THE BBNPP PLOT PLAN IS FROM SARGENT & LUNDY, LLC., DRAWING SK-12198-400-001, REV. 4, REV. DATE 9-09-10.
3. THE WETLAND BOUNDARIES ARE FROM NORMANDEAU ASSOCIATES, INC. BELL BEND WETLANDS DELINEATION REPORT, REV. 3, JULY 2010.

PROJECT: WETLAND MITIGATION PLAN: CONFERS LANE SITE
PROJECT #: E-7764.8 | DRAWING #: MIT-CL-001 | DATE: OCTOBER 29, 2010
COUNTY: LUZERNE COUNTY | REVISION: 1 | DATE: 8/12/2011

TYPICAL CROSS SECTION CONFERS LANE



SCALE:
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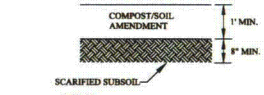
V: 1" = 3'

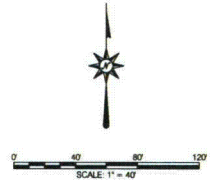


NOTES:
1. SUBSOIL MUST BE DRY WHEN SCARIFYING IS PERFORMED.
2. SOIL, COMPOST MIX SHALL BE 75% CLEAN, NATIVE SOIL, 25% COMPOST

D-1 / 2 SOIL AMENDMENT
NTS

LEGEND

- EXISTING CONTOUR (MINOR)
- EXISTING CONTOURS (MAJOR)
- PROPOSED CONTOUR (MINOR)
- PROPOSED CONTOURS (MAJOR)
- EXISTING WETLANDS
- CREATED WETLANDS
- ENHANCED WETLANDS
- EXISTING PAVEMENT (TO BE REMOVED)



PA 042354
717-627-4440
fax: 717-627-4660
landstudies.com
land@landstudies.com
315 North Street | Lititz, PA 17543

PROJECT:
BELL BEND NUCLEAR POWER PLANT
PPL BELL BEND, LLC.
38 BOMBOY LANE, SUITE 2
BERWICK, PENNSYLVANIA 18603

SHEET TITLE:
GRADING PLAN
WETLAND MITIGATION PLAN - CONFERS LANE SITE
SALEM TOWNSHIP
LUZERNE COUNTY, PENNSYLVANIA

REVISIONS		
NO.	DATE	DESCRIPTION
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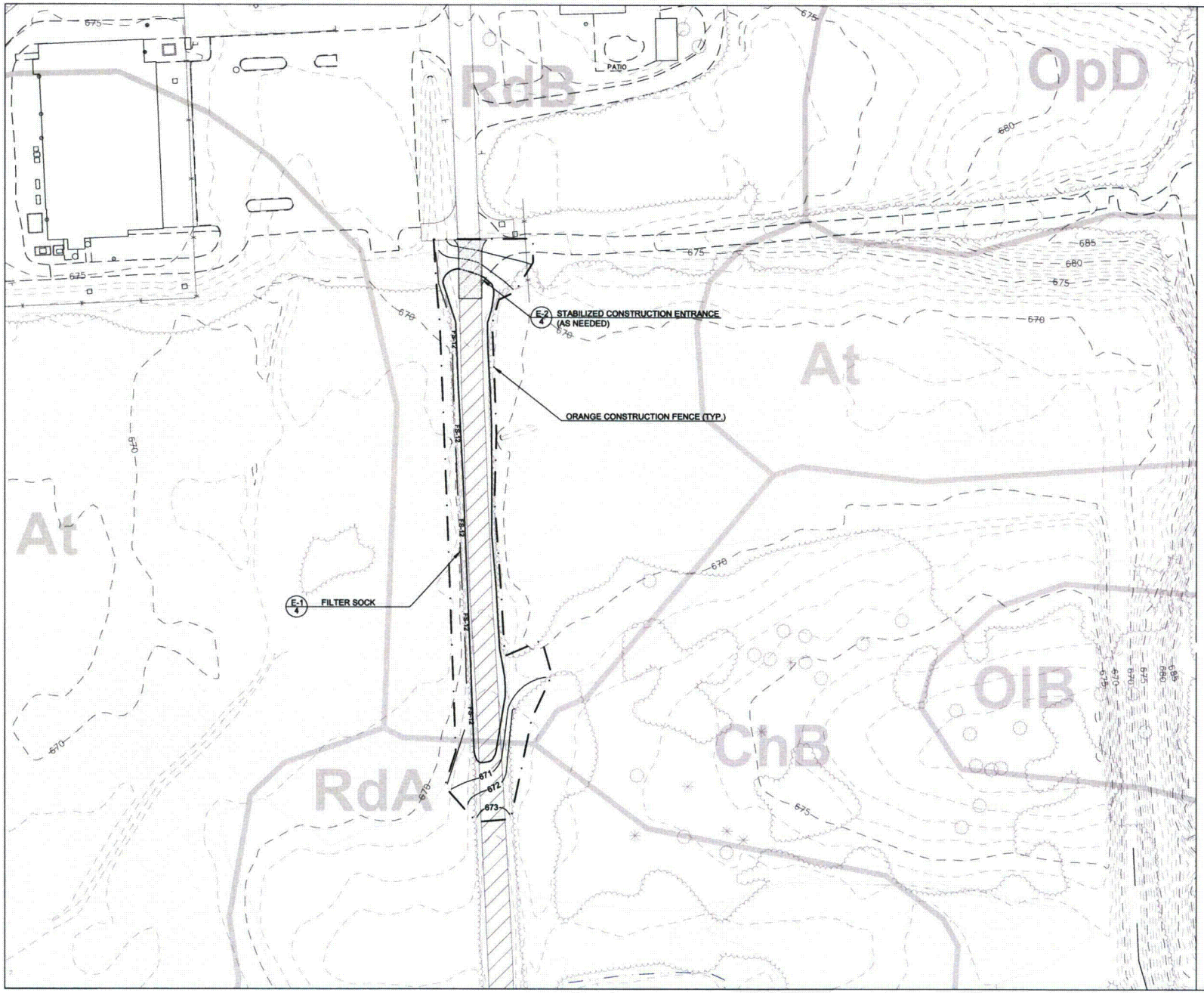
PROJECT NUMBER: E-726-L8
DRAWN BY: EPJ
CHECKED BY: BJE
DATE: OCTOBER 29, 2010
SCALE: 1"=40'
DRAWING NUMBER: MIT-CL-002
SHEET NUMBER:



LEGEND

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- EXISTING CONTOURS (MAJOR)
- PROPOSED CONTOUR (MINOR)
- PROPOSED CONTOURS (MAJOR)
- FS-12 FILTER SOCK
- LIMIT OF DISTURBANCE
- EXISTING WETLANDS
- EXISTING PAVEMENT (TO BE REMOVED)
- SOIL BOUNDARY
- At SOIL MAPPING UNIT

0 40' 80' 120'
SCALE: 1" = 40'

PA 042334
717-627-4440
fax: 717-627-4660
landstudies.com
land@landstudies.com
315 North Street | Lititz, PA 17543

PROJECT:
BELL BEND NUCLEAR POWER PLANT
PPL BELL BEND, LLC.
38 BOMBOY LANE, SUITE 2
BERWICK, PENNSYLVANIA 18603

SHEET TITLE:
EROSION & SEDIMENT POLLUTION CONTROL PLAN
WETLAND MITIGATION PLAN - CONFERS LANE SITE
SALEM TOWNSHIP
LUZERNE COUNTY, PENNSYLVANIA

REVISIONS		
NO.	DATE	DESCRIPTION
1	8/12/11	ADD DRAWING NUMBER

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DRAWN BY: EPJ
CHECKED BY: BJE
DATE: OCTOBER 29, 2010
SCALE: 1" = 40'
DRAWING NUMBER: MIT-CL-003
SHEET NUMBER: 3
OF 5

EROSION AND SEDIMENTATION CONTROL NOTES

A. GENERAL EROSION AND SEDIMENTATION CONTROL GUIDELINES

CONTRACTORS RESPONSIBILITIES

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE LUZERNE COUNTY CONSERVATION DISTRICT (LCCD) 72 HOURS PRIOR TO CONSTRUCTION AND 72 HOURS PRIOR TO LEAVING THE SITE. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.
   LUZERNE COUNTY CONSERVATION DISTRICT
   485 SMITHS POND ROAD
   SHAVERTOWN, PA 18708
   (570) 674-7991
2. A COPY OF THIS E&SC PLAN SHALL BE KEPT AVAILABLE FOR INSPECTION ON THE CONSTRUCTION SITE AT ALL TIMES DURING EARTH MOVING ACTIVITY AND UNTIL THE SITE IS STABILIZED.
3. THE CONTRACTOR SHALL MINIMIZE MUD OR SEDIMENT-LADEN WATER EXITING THE CONSTRUCTION SITE TO THE GREATEST EXTENT POSSIBLE. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO DOWNSTREAM PROPERTIES AS A RESULT OF HIS/HER FAILURE TO PREVENT SUCH DAMAGES.
4. THE INTENT OF THIS PLAN/NARRATIVE IS TO INDICATE GENERAL MEANS OF COMPLIANCE WITH THE REQUIREMENTS OF THE RULES AND REGULATIONS OF CHAPTER 102 OF THE PENNSYLVANIA CLEAN STREAMS LAW. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT THESE METHODS PLUS ADDITIONAL METHODS AS MAY BE NECESSARY BECAUSE OF THE CONDITIONS, AND/OR CONSTRUCTION PROCEDURES IN ORDER TO ASSURE COMPLIANCE WITH APPLICABLE LAW. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SEDIMENT AND EROSION CONTROL FACILITIES SO THAT THEY PERFORM AS REQUIRED BY LAW.
5. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
6. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LUZERNE COUNTY CONSERVATION DISTRICT.
7. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A PREPAREDNESS, PREVENTION, AND CONTIGENCY (PPC) PLAN DESCRIBING ANY POTENTIAL HAZARDOUS MATERIALS THAT MAY BE STORED OR USED ON SITE AND EMERGENCY CLEAN-UP OR SPILL REMEDIATION PROCEDURES. THE PPC PLAN SHALL BE KEPT ON THE CONSTRUCTION SITE AT ALL TIMES.

B. GENERAL SEDIMENT AND EROSION CONTROL METHODS/PROCEDURES

1. ALL RELATED SEDIMENT AND EROSION CONTROL FACILITIES SHALL BE IN PLACE AND CAPABLE OF FUNCTIONING AS INTENDED PRIOR TO EARTH MOVING ACTIVITY WITHIN THEIR CONTRIBUTING WATERSHED AREAS. ALL SEDIMENT AND EROSION CONTROL FACILITIES SHALL REMAIN SO UNTIL UNIFORM OF THE UPLAND DRAINAGE AREA IS STABILIZED WITH PERMANENT GROUND COVER.
2. REDUCE BY THE GREATEST EXTENT PRACTICABLE THE AREA AND DURATION OF EXPOSURE OF READILY ERODIBLE SOILS.
3. EXCAVATED MATERIAL (SPOIL) SHALL BE HAULED AWAY FROM THE MITIGATION SITE AND DISPOSED OF WITHIN THE BELL BEND NUCLEAR POWER PLANT PROJECT AREA.
4. EXISTING WETLAND VEGETATION WILL BE PROTECTED TO THE GREATEST EXTENT POSSIBLE.
5. UPON COMPLETION OF EARTH MOVING, DISTURBED AREAS SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION.
6. THE CONTRACTOR SHALL PROVIDE PROTECTION AGAINST DISCHARGE OF POLLUTANTS SUCH AS CHEMICALS, FUEL, LUBRICANTS, SEWAGE, ETC. INTO STREAMS OR STORM WATER FACILITIES.
7. CONSTRUCTION ACCESS INTO UNPAVED AREAS FROM PAVED AREAS OR STREETS (PUBLIC OR PRIVATE) SHALL BE VIA A STABILIZED CONSTRUCTION ENTRANCE.
8. SEDIMENT SPILLED, DROPPED OR TRACKED ONTO PAVED SURFACES SHALL BE REMOVED IMMEDIATELY.
9. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
10. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
11. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM 70% UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
12. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPS MUST BE STABILIZED IMMEDIATELY.

C. MAINTENANCE OF SEDIMENT AND EROSION CONTROL FACILITIES

1. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO LUZERNE COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS, ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
2. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS MUST BE MAITAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
3. ALL SEDIMENT AND EROSION CONTROL FACILITIES MUST BE MAINTAINED IN OPERATING CONDITION UNTIL UPSTREAM AREAS ARE OF UNIFORM 70% STABILIZED WITH UNIFORM PERENNIAL VEGETATIVE COVER.
4. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
5. ALL NON-USABLE MATERIAL AND DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
6. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

D. RECYCLING AND DISPOSAL OF WASTE MATERIALS

1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
2. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE LUZERNE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
3. RE-USE OR RECYCLE SANDBAGS, CULVERTS, AND FLEXIBLE PIPE.
4. PROPERLY DISPOSE OF SEDIMENT FILTER BAGS, SILT FENCE, STAKES, AND FILTER SOCK MATERIAL.
5. DISPERSE COMPOST MATERIAL FROM FILTER SOCKS ON SITE, AS DIRECTED.

E. RESTORATION OF PLANTING AREAS

1. FINAL RESTORATION SHALL BE PERFORMED NO LATER THAN THE START OF THE NEXT PLANTING SEASON FOLLOWING CONSTRUCTION. THE PLANTING SEASON SHALL BE AS ESTABLISHED BY THE U.S. AGRICULTURAL SERVICE FOR THE AREA OF CONSTRUCTION.
2. TOPSOIL SHALL BE FREE FROM SUBSOIL, BRUSH, WEEDS, OR OTHER LITTER, CLAY LUMPS AND STONES, BUT MAY CONTAIN DECAYING VEGETABLE MATTER AS IS PRESENT IN GOOD TOPSOIL.
3. TOPSOIL SHALL BE IMPORTED FROM OFF-SITE IF NECESSARY AS DETERMINED BY PROJECT DESIGNER.
4. PRECAUTIONS SHALL BE EXERCISED AS NECESSARY TO CONFORM WITH LAWS RELATING TO EROSION AND SEDIMENT CONTROL.
5. SEED SHALL NOT HAVE LESS THAN 90% GERMINATION. GERMINATION TESTS OF SEEDS SHALL BE MADE NOT MORE THAN SIX (6) MONTHS PRIOR TO SEEDING. SEED WHICH HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED SHALL NOT BE USED.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PRODUCE A STAND OF GRASS OR WETLAND VEGETATION IN ALL SEEDED OR SODDED AREAS. EROSION, DROUGHT, OR ANY OTHER CONDITION ENCOUNTERED SHALL NOT RELIEVE THE CONTRACTOR OF THIS REQUIREMENT.

F. SITE STABILIZATION

1. ALL DISTURBED WETLAND AREAS WITHIN THE PROPOSED WETLANDS WILL BE SEEDED WITH THE PROPOSED SEED MIX AS SPECIFIED IN THE SEEDING RESTORATION TABLE WITHIN 48 HOURS OF COMPLETING EARTH MOVING ACTIVITIES OR BY THE END OF A WORK DAY IF A PRECIPITATION EVENT IS FORECASTED.
2. ALL DISTURBED AREAS OUTSIDE OF THE PROPOSED WETLANDS WILL BE SEEDED WITH THE PROPOSED STABILIZATION SEED MIX AND MULCHED UPON THE COMPLETION OF EARTH MOVING ACTIVITIES.
3. MULCH AND STRAW WILL BE SPREAD AT 3 TONS/ACRE. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
4. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.

SOIL DESCRIPTIONS

SYMBOL	NAME	DESCRIPTION	HYDRIC?
At	ATHERTON, SILT LOAM	SOILS ARE POORLY OR VERY POORLY DRAINED WITH LOW RUNOFF POTENTIAL AND PONDING WATER. THEY HAVE A SEASONALLY HIGH WATER TABLE NEAR OR AT THE SOIL SURFACE. THESE NEARLY LEVEL SOILS ARE FOUND PRIMARILY IN DEPRESSION IN GLACIAL OUTWASH TERRACES, OLDER STREAM TERRACES, AND KAME-KETTLE LAND FORMATIONS.	YES
RdB	REXFORD LOAM, 3-8% SLOPES	DEEP, SOMEWHAT POORLY DRAINED AND POORLY DRAINED SOILS LOCATED IN SMOOTH LOW-LYING CONCAVE DEPRESSIONS ON GLACIAL OUTWASH TERRACES DESCRIBES REXFORD LOAM SOILS. THIS SOIL COMMONLY HAS A FRAGIPAN AT 15 TO 24 INCHES WHICH SLOWS THE DOWNWARD MOVEMENT OF WATER. THE SEASONAL HIGH WATER TABLE IS SIX INCHES TO ONE FOOT.	YES

PA1 SYSTEM, INC. CALL BEFORE YOU DIG! PENNSYLVANIA LAW REQUIRES (3) WORKING DAYS NOTICE FOR CONSTRUCTION PLANS AND ONE WORKING DAY IN EMERGENCY SITUATIONS. STOP! CALL!
SERIAL NUMBER: #20103051570

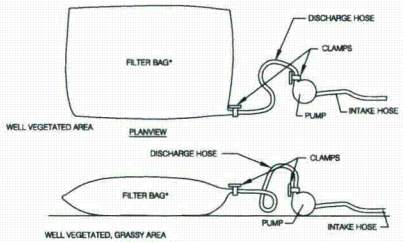
CONSTRUCTION SEQUENCE:

CONSTRUCTION NOTES:

- AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING BUT NOT LIMITED TO: THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND A REPRESENTATIVE FROM THE LUZERNE COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE LUZERNE COUNTY CONSERVATION DISTRICT 72 HOURS PRIOR TO CONSTRUCTION AND 72 HOURS PRIOR TO LEAVING THE SITE.
- CLEAN EXCAVATED MATERIAL SHALL BE HAULED FROM THE SITE AND DISPOSED OF WITHIN THE PROJECT AREA.
- IF WATER NEEDS TO BE PUMPED FROM THE EXCAVATED AREA, IT SHALL BE PUMPED THROUGH A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
- THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
- GRADED AREAS WITHIN THE PROPOSED WETLAND SHALL BE STABILIZED WITH THE PROPOSED CONSERVATION SEED MIX PRIOR TO PLANTINGS.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENT.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

CONSTRUCTION STAGES:

1. STAKE OUT LIMIT OF DISTURBANCE IN THE FIELD.
2. INSTALL ORANGE CONSTRUCTION FENCE WHERE LOD IS ADJACENT TO EXISTING WETLANDS TO PREVENT ADDITIONAL DISTURBANCE TO THESE WETLANDS.
3. INSTALL FILTER SOCK AS SHOWN ON THE PLAN
4. PERFORM NECESSARY CLEARING AND GRUBBING WITHIN PROPOSED LIMIT OF DISTURBANCE.
5. REMOVE EXISTING PAVEMENT AND STONE BASE.
6. EXCAVATE PROPOSED WETLAND AREA TO PROPOSED SUB-GRADE ELEVATIONS. SCARIFY SUBSOIL TO A DEPTH OF AT LEAST EIGHT (8) INCHES.
7. ADD COMPOST AND TOPSOIL MIXTURE WITH A RATIO OF 75% CLEAN, NATIVE SOIL AND 25% COMPOST. SOIL/COMPOST SHALL BE THOROUGHLY MIXED.
8. PLACE SOIL/COMPOST MIXTURE ON WETLAND TO PROPOSED FINAL GRADE ELEVATIONS (1' MIN.).
9. SEED DISTURBED AREA WITH FLOODPLAIN SEED MIX, PER THE LANDSCAPE PLAN ON SHEET 5 OF 5. MULCH SEEDED AREA WITH STRAW AT 3 TONS PER ACRE.
10. INSTALL PROPOSED VEGETATION WITHIN GRADED WETLAND PER THE LANDSCAPE PLAN AND DETAILS ON SHEETS 5 &6 OF THIS PLAN SET.
11. REMOVE FILTER SOCK AFTER DISTURBED AREAS HAVE ACHIEVED A MINIMUM OF 70% VEGETATIVE COVER. STABILIZE ANY AREAS DISTURBED WHILE REMOVING THIS BMP WITH THE PROPOSED STABILIZATION SEED MIX AND MULCH.



Filter bags shall be made from non-woven geotextile material sewn with high strength, double stitched "J" type seams. They shall be capable of trapping particles larger than 150 microns.

A suitable means of accessing the bag with machinery required for disposal purposes must be provided. Filter bags shall be replaced when they become ½ full. Spare bags shall be kept available for replacement of those that have failed or are filled.

Bags shall be located in well-vegetated (grassy) area, and discharge onto stable, erosion resistant areas. Where this is not possible, a geotextile flow path shall be provided. Bags shall not be placed on slopes greater than 5%.

The pump discharge hose shall be inserted into the bags in a manner specified by the manufacturer and securely clamped.

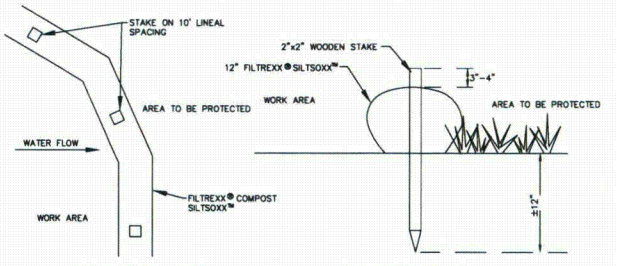
The pumping rate shall be no greater than 750 gpm or ½ the maximum specified by the manufacturer, whichever is less. Pump intakes should be floating and screened.

E-3 / 4 PUMPED WATER FILTER BAG
NTS

Filter bags may be used to filter water pumped from disturbed areas prior to discharging to water of the Commonwealth. They may also be used to filter water pumped from the sediment storage areas of sediment basins.

The pumping rate should be specified on the plan drawings next to the typical detail. Pumping rates will vary depending on the size of the filter bag, and the type and amount of sediment discharged to the bag.

Filter bags should be installed according to the details shown in Standard Construction Detail #26.

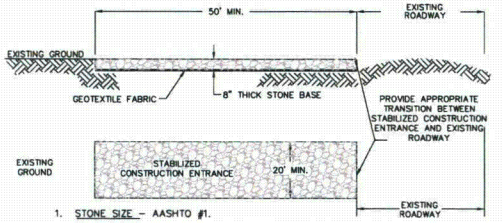


FILTREXX® SILTSOXX™ PLAN VIEW

FILTREXX® SILTSOXX™ SECTION

NOTES:
1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. SILTSOXX™ COMPOST/JSOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
3. SILTSOXX™ DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
5. LOCAL FILTREXX CONTACT: KEYL GROFF AT GARDENIQUE (610-972-9018).

E-1 / 4 FILTER SOCK (FILTREXX)
NTS



1. STONE SIZE – AASHTO #1.
2. LENGTH – AS REQUIRED TO BE EFFECTIVE, BUT NOT LESS THAN 50'.
3. THICKNESS – NOT LESS THAN 8".
4. WIDTH – FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS, BUT NOT LESS THAN 20'.
5. WASHING – WHEELS SHALL BE CLEAN PRIOR TO ENTRANCE ONTO EXISTING ROADWAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO EXISTING ROADWAY, THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO EXISTING ROADWAYS MUST BE REMOVED IMMEDIATELY. CONSTRUCTION ENTRANCE MUST BE INSPECTED DAILY.

E-2 / 4 STABILIZED CONSTRUCTION ENTRANCE
NTS

PA 043324

717-627-4440
fax: 717-627-4660
landstudies.com
land@landstudies.com
315 North Street | Lititz, PA 17543

Land Studies

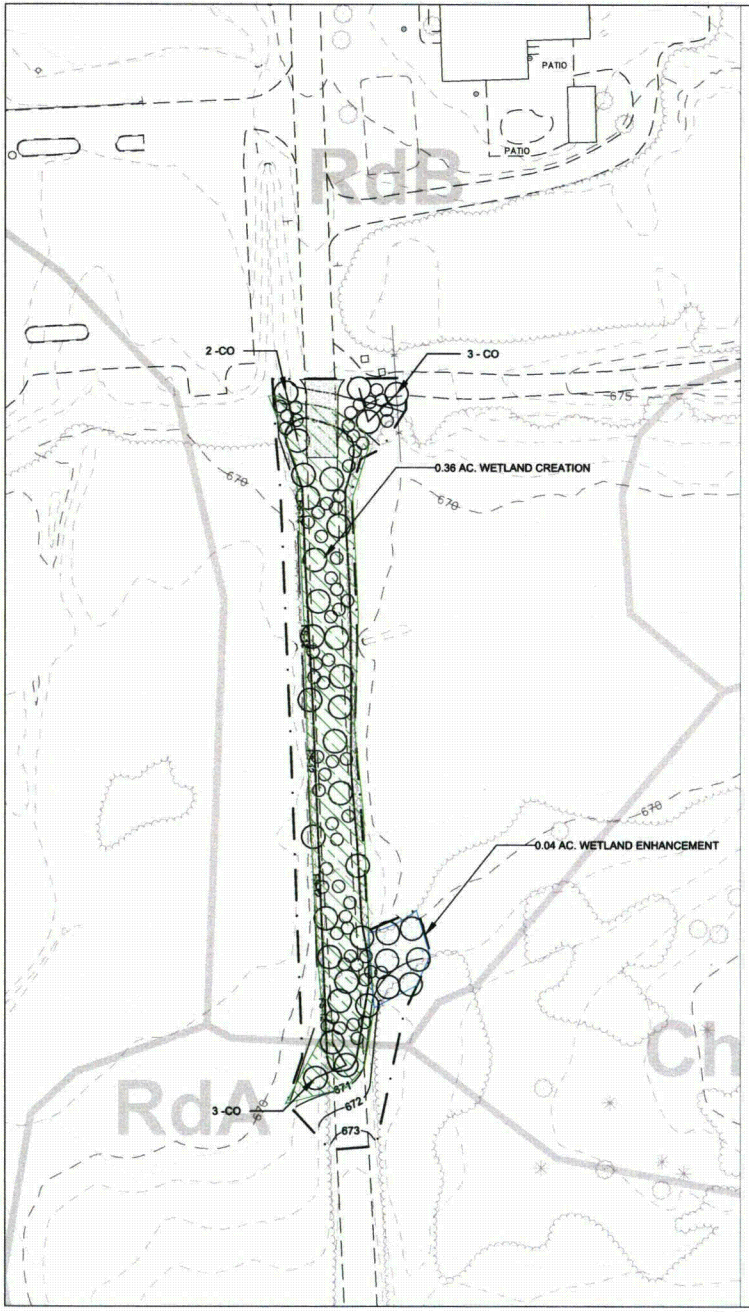
PROJECT: BELL BEND NUCLEAR POWER PLANT
PPL BELL BEND, LLC.
38 BOWDOY LANE SUITE 2
BERWICK, PENNSYLVANIA 18603

SHEET TITLE: EROSION & SEDIMENT POLLUTION CONTROL NARRATIVE AND DETAILS
WETLAND MITIGATION PLAN - CONIFERS LANE
SALEM TOWNSHIP
LUZERNE COUNTY, PENNSYLVANIA

REVISIONS

NO.	DATE	DESCRIPTION
1	8/12/11	ADD DRAWING NUMBER

PROJECT NUMBER: E-726-L8
DRAWN BY: EPJ
CHECKED BY: BJE
DATE: OCTOBER 29, 2010
SCALE: AS NOTED
DRAWING NUMBER: MIT-CL-004
SHEET NUMBER: 4 OF 5



SEEDING RESTORATION TABLE

LOCATION	TOPSOIL	STARTER FERTILIZER	LIME	SEED MIX
WETLAND	YES	N/A	N/A	FLOODPLAIN SEED MIX APPLICATION RATE: 15-20 LBS/ACRE
OTHER DISTURBED AREAS	NO	N/A	N/A	TEMPORARY STABILIZATION SEED MIX SEE SEED MIX FOR SEEDING

DUE TO SOIL LIMITATIONS NEITHER FERTILIZER NOR LIME WILL BE APPLIED TO THE GRADED WETLAND. IT IS ANTICIPATED THAT THE SPREADING OF TOPSOIL AND THE CLOSE PROXIMITY TO EXISTING WATER TABLE WILL PROMOTE RAPID GERMINATION OF PROPOSED SEED.

Temporary Stabilization Seed Mix

%	Botanical Name	Common Name	Seeding Window	Application Rate
100	*Secale cereale*	Cereal Rye	Sep. 1 - Oct. 16	30 lbs/acre
100	*Avena sativa*	Oats	May. 1 - Sept. 15	30 lbs/acre

%	Botanical Name	Common Name	I.S.
10	*Elymus virginicus, PA*	Virginia Wild Rye, PA Ecotype	FACW
10	*Panicum ridigulum, PA*	Redtop Panic Grass, PA Ecotype	FACW+
8	*Elymus canadensis, PA*	Canada Wild Rye, PA Ecotype	FACU
5	*Carex vulpinoidea, PA Ecotype*	Fox Sedge, PA Ecotype	OBL
5	*Panicum clandestinum*	Deer Tongue 'Tioga', PA Ecotype	FAC+
5	*Elymus riparius, PA*	Riverbank Wild Rye, PA Ecotype	FACW
5	*Agrostis perennans, APB*	Autumn Bentgrass, APB	FACU
5	*Agrostis scabra, PA*	Ticklegrass, PA Ecotype (rough bentgrass	FAC
5	*Carex scoparia*	Blunt Broom Sedge	FACW
5	*Festuca rubra*	Creeping Red Fescue	FACU
4	*Carex comosa*	Bristly Sedge	OBL
4	*Chasmanthium latifolium, PA*	River Oats, PA Ecotype	FACU
3	*Carex stipata*	Awl Sedge	OBL
3	*Elymus hystrix, PA*	Bottlebrush Grass, PA Ecotype	NI
3	*Juncus effusus, PA*	Soft Rush, PA Ecotype	FACW+
2	*Asclepias incarnata*	Swamp Milkweed	OBL
2	*Bidens aristosa*	Bur Marigold, 'Suther' NC Ecotype	FACW-
2	*Carex lurida*	Lurid Sedge	OBL
2	*Juncus tenuis*	Path Rush	FAC-
2	*Poa palustris*	Fowl Bluegrass	FACW
1	*Aster prenanthoides*	Zigzag Aster	FAC
1	*Aster laevis*	Smooth Blue Aster	NI
1	*Aster novae-angliae*	New England Aster	FACW-
1	*Carex crinita*	Fringed Sedge	OBL
1	*Iris versicolor*	Blue Flag Iris	OBL
1	*Lobelia cardinalis*	Cardinal Flower	FACW+
1	*Lobelia siphilitica*	Great Blue Lobelia	FACW+
1	*Scirpus validus*	Soft-stem Bulrush	OBL
1	*Solidago riddellii*	Riddell's Goldenrod	OBL
1	*Solidago rugosa*	Wrinkle Leaf Goldenrod	FAC
100		***Application Rate: 15-20 lbs/acre***	

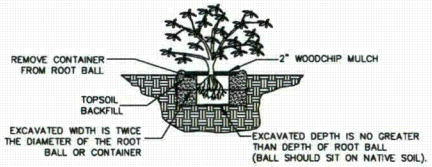
PLANT SCHEDULE

Trees

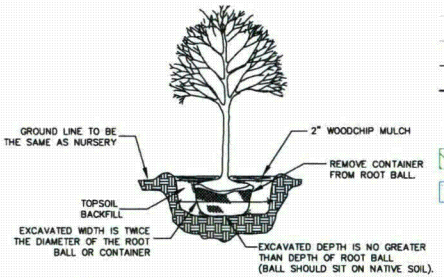
Key	Botanical Name	Common Name	Size	Qty.	Spacing	I.S.	Notes
	Acer rubrum	Red Maple	1"-1.5"	10	20'-30'	FAC	
	Acer saccharinum	Silver Maple	1"-1.5"	8	20'-30'	FACW	
CO	*Carya ovata*	Shagbark Hickory	1"-1.5"	8	20'-30'	FACU	Upland areas only
	Quercus bicolor	Swamp White Oak	1"-1.5"	11	20'-30	FACW	
				37			

Shrubs

Key	Botanical Name	Common Name	Size	Qty.	Spacing	I.S.	Notes
	Ilex verticillata	Winterberry	#5	18	4'-6'	FACW	1 male for every 8 female
	Lindera benzoin	Spicebush	#5	18	4'-6'	FACW	
	Vaccinium corymbosum	Highbush Blueberry	#5	16	4'-6'	FACW-	
	Viburnum trilobum	Cranberry Bush	#5	10	4'-6'	FACW	
				62			



L-1 / 5 TYPICAL SHRUB PLANTING - CONTAINER
NTS



L-2 / 5 TREE PLANTING DETAIL
NTS

PLANT SPECIFICATIONS :

1. THE TREES AND SHRUBS SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE PROJECT.
2. SET PLANTS AT SAME FINISHED GRADE AS GROWN IN THE NURSERY.
3. ALL TREES AND SHRUBS SHALL HAVE A NORMAL HABIT OF GROWTH AND SHALL BE SOUND, HEALTHY AND VIGOROUS, THEY SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS, AND LARVAE.
4. ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE.

LEGEND

- EXISTING CONTOUR (MINOR)
- EXISTING CONTOURS (MAJOR)
- PROPOSED CONTOUR (MINOR)
- PROPOSED CONTOURS (MAJOR)
- EXISTING WETLANDS
- CREATED WETLANDS
- ENHANCED WETLANDS
- PROPOSED TREE
- PROPOSED SHRUB

0' 40' 80' 120'
SCALE: 1" = 40'

PA 042324

717-627-4440
fax: 717-627-4660
landstudies.com
land@landstudies.com
315 North Street | Lititz, PA 17543

Land Studies

PROJECT:
BELL BEND NUCLEAR POWER PLANT
PPL BELL BEND, LLC.
38 BOMBOY LANE, SUITE 2
BERWICK, PENNSYLVANIA 18603

SHEET TITLE:
LANDSCAPING PLAN
WETLAND MITIGATION PLAN - CONFERS LANE
SALEM TOWNSHIP
LUZERNE COUNTY, PENNSYLVANIA

REVISIONS		
NO.	DATE	DESCRIPTION
1	8/12/11	ADD DRAWING NUMBER

PROJECT NUMBER: E-726-L8
DRAWN BY: ---
CHECKED BY: ---
DATE: OCTOBER 29, 2010
SCALE: 1"=40'
DRAWING NUMBER: MIT-CL-005
SHEET NUMBER:

5
OF 5