



**Federal Energy
Regulatory
Commission**

**Office of
Energy
Projects**

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DRAFT ENVIRONMENTAL IMPACT STATEMENT

Volume II – Appendices

Atlantic Sunrise Project



TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

Federal Energy Regulatory Commission
Division of Gas – Environment and Engineering
888 First Street, NE, Washington, DC 20426

Cooperating Agency:



**U.S. Army Corps of
Engineers**

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Transcontinental Gas Pipe Line Company, LLC Atlantic Sunrise Project Draft Environmental Impact Statement

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DISTRIBUTION LIST

**APPENDIX A
DISTRIBUTION LIST**

Federal Government Agencies

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Federal Government Agencies (cont'd)

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Federal Senators and Representatives

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APPENDIX A (cont'd)

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APPENDIX A (cont'd)

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Dallas Township, Frank Vagner, PA

Dallas Township, PA

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East Cameron Township Board of Supervisors, Lambert Haupt, PA

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East Cameron Township Board of Supervisors, Wayne Kahler, PA

East Cameron Township Emergency Management, Wayne Kahler, PA

East Cameron Township Fire Department, James Reed Jr., PA

East Cameron Township, Wiest, Muolo, Noon and Sweinhart, PA

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East Donegal Township Board of Supervisors, Dennis J. Drager, PA

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East Donegal Township Fire Department, Adam Kosheba, PA

East Donegal Township Planning Commission, Charles Engle, PA

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East Donegal Township Police Department, Charles E. Haugh, PA

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Local Government Agencies (cont'd)

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Fire Company, Roger Funck, PA
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Gerald Long, PA
East Hanover Township Planning
Commission, Scott Gamber, PA
East Hanover Township, Howard Lerch, PA
East Hanover Township, Samuel G. Weiss,
Jr., PA
Eastern Pennsylvania Coalition for Abandoned
Mine Reclamation, Robert Hughes, PA
Eaton Township Board of Supervisors, Kenneth
White, PA
Eaton Township Board of Supervisors, Paul
Rowker, PA
Eaton Township Board of Supervisors, Randy
Ehrenzeller, PA
Eaton Township Emergency Management, Paul
Rowker, PA
Eaton Township Planning Commission, Paul
Binner, PA
Eaton Township Planning Commission, Walter
Dana, PA
Eaton Tunkanhok / Northumberland, Kenny
White, PA
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Eldred Township Emergency Management,
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Eldred Township Fire Department, Randy
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Elizabethtown Fire Department / Friendship Fire
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Fairmount Township Board of Supervisors, Lyle
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Fairmount Township Emergency Management,
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Fairmount Township Volunteer Fire and
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Falls Township Board of Supervisors, Eugene J.
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Falls Township Emergency Management,
Eugene Dziak, PA
Falls Township Planning Commission, Kevin
Slowey, PA
Falls Township Planning Commission, Willard
Sickles, PA
Falls Township, Anthony P. Litwin, Esquire, PA
Falls Township, Richard Dixon, PA
Fernville Volunteer Fire Company, PA
Fishing Creek Watershed Association
(Columbia Co.), PA
Fort Indiantown Gap Fire Department, PA
Frailey Township Board of Supervisors, Donald
Allar, PA
Frailey Township Board of Supervisors, Jack
Barnhart, PA
Frailey Township Board of Supervisors, Keith
Allar, PA
Frailey Township Fire Department and
Emergency Management, Edward
Kimmel, PA
Frailey Township, Derenzo and Zerbe, PA
Franklin Township Board of Supervisors, Aaron
Ritter, PA

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Franklin Township Board of Supervisors, David McDonald, PA
Franklin Township Board of Supervisors, Dorrance H. Berger, PA
Franklin Township Board of Supervisors, Edwin F. Lease, PA
Franklin Township Board of Supervisors, Matthew Bloom, PA
Franklin Township Board of Supervisors, Victor L. Marquardt, PA
Franklin Township Emergency Management, Steve Rogers, PA
Franklin Township Planning Commission, Gregory Inns, PA
Franklin Township Planning Commission, Raine Ohnmeiss, PA
Franklin Township Planning Commission, Ronald Rohrbach, PA
Franklin Township Planning Commission, Wayne Arthur, PA
Franklin Township Police Department, Leo Sokoloski, PA
Franklin Township Volunteer Fire Company, PA
Franklin Township, J. David Smith, Esquire, PA
Franklin Township, Michael Gregorowicz, Esquire, PA
Gainesville District Office, Pete Candland, VA
Goodwill Fire Company, Glenn Miller, PA
Greenpoint Fire Company, PA
Greenwood Township Board of Supervisors, Barry Rider, PA
Greenwood Township Board of Supervisors, Joseph Farr, PA
Greenwood Township Board of Supervisors, Keith Bangs, PA
Greenwood Township Emergency Management, Jermy Reese, PA
Greenwood Township Planning Commission, Edward Houseknecht, PA
Greenwood Township Planning Commission, Joseph Farr, PA
Greenwood Township Police Department, Jonathan Swank, PA
Greenwood Township, Michael Smith, Esquire, PA
Hallstead Fire, Bob Thatcher, Sr., PA
Harford Fire/EMS, Rhonda Smith, PA
Harry S. Smith Fire Department of Kunkle, PA

Harvey's Lake Fire and Ambulance Company, John Martinson, PA
Hegins Township Board of Supervisors, Brad Carl, PA
Hegins Township Board of Supervisors, Michael Begis, PA
Hegins Township Emergency Management, Dan Wagner, PA
Hegins Township Fire Department, Ty Leitzel, PA
Hegins Township Planning Commission, Ken Smeltz, PA
Hegins Township Planning Commission, Rick Lettich, PA
Hegins Township Police Department, Steven S. Lohr, PA
Hemlock Township Board of Supervisors, Albert Hunsinger, Jr., PA
Hemlock Township Board of Supervisors, Dan Carr, PA
Hemlock Township Board of Supervisors, David E. Bardo, PA
Hemlock Township Board of Supervisors, Frederick J. Klinger, PA
Hemlock Township Board of Supervisors, Mark Morrow, PA
Hemlock Township Emergency Management, Scott Traugh, PA
Hemlock Township Fire Department, Kenneth Wenner, Jr., PA
Hemlock Township Planning and Zoning / Planning Commission, Renee Moist, PA
Hemlock Township Planning Commission, Jay Fritz, Jr., PA
Hemlock Township Police Department, Michael D. Vandine, PA
Hemlock Township, Barry A. Lewis, PA
Hemlock Township, Stephanie Dunn Haney, PA
Highville Fire Company, PA
Hop Bottom Hose Co., Carol Ainey, PA
Hop Bottom Hose Co., Jody Nowalk, PA
Hop Bottom Hose Co., Mike Karanak, PA
Hop Bottom Hose Co., Pete Mecca, PA
Howard County Council, Courtney Watson, MD
Howard County Council, Greg Fox, MD
Howard County Department of Fire and Rescue Services, William F. Goodard, MD
Howard County Office of Emergency Management, Ryan Miller, MD
Howard County Planning Board, Jach Tzucker, MD

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Howard County Police Department, William J. McMahon, MD
Howard County Sheriff's Office, James F. Fitzgerald, MD
Howard County Soil Conservation, MD
Howard County, Ken Ulman, MD
Hughesville Fire Department, Steven Stiger, PA
Independent Hose Company of Jersey Shore, PA
Iredell County Board of Commissioners, David A. Boone, NC
Iredell County Board of Commissioners, Kenneth M. Robertson, Jr., NC
Iredell County Board of Commissioners, Marvin Norman, NC
Iredell County Board of Commissioners, Renee C. Griffith, NC
Iredell County Board of Commissioners, Stephen D. Johnson, NC
Iredell County Emergency Management, David Martin, NC
Iredell County Sheriff's Office, Phillip H. Redmond, NC
Jackson and North Annville Townships, Paul Bametzreider, Esquire, PA
Jackson and Sugarloaf Townships, Kim Hill, Esquire, PA
Jackson Township Board of Supervisors, Clayton Emery, PA
Jackson Township Board of Supervisors, Clyde E. Deck, PA
Jackson Township Board of Supervisors, Dean O. Moyer, PA
Jackson Township Board of Supervisors, Gregory D. Remley, Jr., PA
Jackson Township Board of Supervisors, Ronald Robbins, PA
Jackson Township Board of Supervisors, Thomas Houtz, PA
Jackson Township Emergency Management, Allen Kintzer, PA
Jackson Township Emergency Management, James Albertson, PA
Jackson Township Fire Department / Kutztown Fire Company, Tim Behm, PA
Jackson Township Planning Commission, Bruce Anderson, PA
Jackson Township Volunteer Fire Department, PA
Jordan Township Board of Supervisors, Dale L. Stackhouse, PA
Jordan Township Board of Supervisors, Melvin E. Swisher, Jr., PA
Jordan Township Board of Supervisors, Planning Commission, Robert L. Puderbach, PA
Jordan Township Emergency Management, Vera Doughty, PA
Jordan Township, J. Howard Langdon, Esquire, PA
Jr Davis Fire Company, Cindy Ann Blaine, PA
Keystone Hook and Ladder # 1, Jake Belleman, PA
Kunkle Fire and Ambulance, Jack Dodson, PA
Kunkle Fire Company, PA
Lairdsville Community Fire Company, PA
Lake Silkworth Volunteer Fire Department, Donna Chamberlain, PA
Lake Township Board of Supervisors, Lonnie Piatt, PA
Lake Township Board of Supervisors, Robert Pace, PA
Lake Township Board of Supervisors, Robert W. Grey, Sr., PA
Lake Township Emergency Management, Dennis Dobinick, PA
Lake Township Police Department, PA
Lake Township, Mark McNealis, Esquire, PA
Lake Winola Fire Company No. 1 Inc., Marty Bonifanti, PA
Lancaster Area Sewer Auth, PA
Lancaster Conservation District, Donald McNutt, PA
Lancaster County Commissioners, Andrea McCue, PA
Lancaster County Commissioners, Craig Lehman, PA
Lancaster County Commissioners, Dennis P. Stuckey, PA
Lancaster County Commissioners, Scott F. Martin, PA
Lancaster County Conservancy, Kate Gonick, PA
Lancaster County Conservancy, Kathie Shirk Gonick, PA
Lancaster County Conservancy, Mike Burcin, PA
Lancaster County Conservancy, PA
Lancaster County Democratic Committee, Jen Porter, PA
Lancaster County Emergency Management, Randall S. Gockley, PA

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Lancaster County Planning and Zoning, James R. Cowhey, Aicp, PA
Lancaster County Planning Commission, Dennis Groff, PA
Lancaster County Planning Commission, Leo Lutz, PA
Lancaster County, Crystal Clark, Esquire, PA
Lancaster County, Mark Reese, PA
Lancaster Public Library, Mountville Branch, PA
Lawn Fire Co, PA
Lebanon Conservation District, Lynette Gelsinger, PA
Lebanon County Commissioners, Jamie A. Wolgemuth, PA
Lebanon County Commissioners, Jo Ellen Litz, PA
Lebanon County Commissioners, Robert J. Phillips, PA
Lebanon County Commissioners, William E. Ames, PA
Lebanon County Emergency Management, John Wilson, PA
Lebanon County Planning and Zoning, Kristopher Troup, PA
Lebanon County Sheriff's Office, Michael Deleo, PA
Lebanon County, Bruce Klingler, PA
Lehman Township Board of Supervisors, Douglas W. Ide, PA
Lehman Township Board of Supervisors, Planning Commission, David H. Sutton, PA
Lehman Township Board of Supervisors, Raymond Iwanowski, PA
Lehman Township Emergency Management, James Welby, PA
Lehman Township Fire Department, William Hagenbaugh, PA
Lehman Township Planning Commission, Marian Deangelis, PA
Lehman Township Police Department, Howard Kocher, PA
Lehman Township Volunteer Fire Company Inc., PA
Lehman Township, M. John Haley, Esquire, PA
Lenox Township Board of Supervisors, Fred Benson, PA
Lenox Township Board of Supervisors, James Taylor, PA
Lenox Township Board of Supervisors, Leonard Wheatley, PA
Lenox Township Emergency Management, Leonard Wheatley, PA
Lickdale Community Fire Company, PA
Little Conestoga Watershed Alliance, Matthew Kofroth, PA
Luzerne Conservation District, Josh Longmore, PA
Luzerne County Commissioners, Edward A. Brominski, PA
Luzerne County Commissioners, Elaine Madden Curry, PA
Luzerne County Commissioners, Eugene Kelleher, PA
Luzerne County Commissioners, Harry Haas, PA
Luzerne County Commissioners, James Bobeck, PA
Luzerne County Commissioners, Linda McClosky Houck, PA
Luzerne County Commissioners, Rick Morelli, PA
Luzerne County Commissioners, Rick Williams, PA
Luzerne County Commissioners, Stephen A. Urban, PA
Luzerne County Commissioners, Stephen J. Urban, PA
Luzerne County Commissioners, Timothy McGinley, PA
Luzerne County Emergency Management, Stephen Beganich, PA
Luzerne County Planning Commission / Planning and Zoning, Adrian Merolli, PA
Luzerne County, Brian Herber, PA
Luzerne County, C. David Pedri, PA
Luzerne County, Robert C. Lawton, PA
Luzerne County, Thomas A. Pribula, PA
Luzerne County, Vito J. Deluca, PA
Lycoming Conservation District, Mark Davidson, PA
Lycoming County Commissioners, Ann Gehret, PA
Lycoming County Commissioners, Ernest P. Larson, PA
Lycoming County Commissioners, Jeff C. Wheeland, PA
Lycoming County Commissioners, Tony R. Mussare, PA

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Lycoming County Emergency Management,
John D. Yingling, PA
Lycoming County Planning and Zoning, Kurt
Hausammann Jr., PA
Lycoming County Planning Commission,
Christopher Keiser, PA
Lycoming County Planning Commission,
George Logue, Jr., PA
Lycoming County, Ann Gegret, PA
Lycoming County, Mark R. Lusk, PA
Madison County Board of Supervisors, Anthony
Dove, GA
Madison County Board of Supervisors,
District 2, Dewitt "Pete" Bond, GA
Madison County Board of Supervisors, Rhonda
S. Wooten, GA
Madison County Sheriff's Office, Kip C.
Thomas, GA
Main Township Volunteer Fire Company, PA
Manor Township Board of Supervisors, Amber
Green, PA
Manor Township Board of Supervisors, Brandon
C. Clark, PA
Manor Township Board of Supervisors, George
Mann, PA
Manor Township Board of Supervisors, Jay C.
Breneman, PA
Manor Township Board of Supervisors, John D.
Wenzell, PA
Manor Township Emergency Management,
Duane Hagelgans, PA
Manor Township Planning Commission, Jay
Provanzo, PA
Manor Township Police Department, Todd
Graeff, PA
Manor Township, Barry L. Smith, PA
Manor Township, Thomas L. Goodman, PA
Martic Township Board of Supervisors, Beth
Birchall, PA
Martic Township Board of Supervisors, Carl T.
Drexel, PA
Martic Township Board of Supervisors, Duane
Sellers, PA
Martic Township Board of Supervisors, Richard
C. Drumm, Jr., PA
Martic Township Board of Supervisors, Thomas
(Ted) Irwin, PA
Martic Township Emergency Management,
Tony Williams, Sr., PA

Martic Township Planning Commission, Chris
High, PA
Martic Township Planning Commission, Jon
Kloppmann, PA
Martic Township, PA
Mifflin Township Board of Supervisors, Donald
D. Murray, PA
Mifflin Township Board of Supervisors, Kevin
L. Griffith, PA
Mifflin Township Board of Supervisors, Robert
A. Paucke, PA
Mifflin Township Emergency Management,
Adam Ross, PA
Monroe Township, Anthony P. Litwin, PA
Monroe Township, Arlene Traver, PA
Monroe Township, Charles Wright, PA
Monroe Township, Nile Lee Clark, PA
Monroe Township, Steven Traver, PA
Monroe Township, Walter Derhammer Sr., PA
Monroe Township, Walter Derhammer, PA
Monroe Township, William Patton, PA
Montour Township Board of Supervisors,
Gerald Powers, PA
Montour Township Board of Supervisors,
Joseph Mullen, PA
Montour Township Board of Supervisors, Lori
Carl, PA
Montour Township Emergency Management,
Joseph Yeager, PA
Montour Township Fire Department, Brian
Fosse, PA
Montour Township Planning Commission,
Linda Woodward, PA
Montour Township Planning Commission,
Tracy May, PA
Montour Township Police Department, Terry
Eckart, PA
Montour Township, Brad Pater, PA
Montour Township, Richard Roberts,
Esquire, PA
Montour Township, Terry Eckard, PA
Mount Joy Borough Authority, Joseph M.
Ardini, PA
Mount Joy Borough Authority, Scott M.
Hershey, PA
Mount Joy Borough, John D. Leaman, PA
Mount Joy Borough, Joseph A. Ardini, PA
Mount Joy Borough, Scott M. Hershey, PA
Mount Joy Township Board of Supervisors,
David W. Sweigart, III, PA

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Mount Joy Township Board of Supervisors,
Debra E. Dupler, PA

Mount Joy Township Board of Supervisors,
Gerald F. Becker, PA

Mount Joy Township Board of Supervisors,
Gerald G. Cole, PA

Mount Joy Township Board of Supervisors, Lisa
S. Heilner, PA

Mount Joy Township Emergency Management,
Warren G. Mueller, Jr., PA

Mount Joy Township Forest Fire Company, PA

Mount Joy Township Planning Commission,
John W. Dice, PA

Mount Joy Township Planning Commission,
Mahlon R. Fuller, PA

Mount Joy Township, Morgan, Hallgren,
Crosswell and Kane, Pc, PA

Mount Joy Township, Mike Skelly, PA

Mount Joy Township, Stephen A. Gault, PA

Mount Pleasant Township Board of Supervisors,
John Gordner, PA

Mount Pleasant Township Board of Supervisors,
Tammy (Boz) Robbins, PA

Mount Pleasant Township Board of Supervisors,
Tod D. Fenstermacher, PA

Mount Pleasant Township Emergency
Management, Robert Black, PA

Mount Pleasant Township Planning
Commission, Coralee Kindt, PA

Mount Pleasant Township Planning
Commission, Gary Sitler, PA

Mount Pleasant Township, C. Cleveland
Hummel, Esquire, PA

Mount Pleasant Township, Carl Shaner, PA

Mount Pleasant Township, Donald B.
Brown, PA

Mount Pleasant Township, Jim Faus, PA

Mount Pleasant Township, John R. Gordner, PA

Mount Pleasant Township, Len Hornberger, PA

Mount Pleasant Township, Marie
Hornberger, PA

Mount Pleasant Township, Nelson Sherman, PA

Mount Pleasant Township, Sadi
Jenstermach, PA

Nicholson Borough, Anne Marie
Aylesworth, PA

Nicholson Township Board of Supervisors,
Joann Ritter, PA

Nicholson Township Board of Supervisors,
Victor Choplosky, PA

Nicholson Township Board of Supervisors,
William O. Smith, PA

Nicholson Township Board of Supervisors,
William Smith, PA

Nicholson Township Emergency Management,
Ron Wood, PA

Nicholson Township, Victor Chollocky, PA

Nicholson, Eaton, Tunkhannock, Lenox, and
Clinton Townships, Anthony P. Litwin III,
Esquire, PA

Nippenose Valley Volunteer Fire
Department, PA

Nokesville Volunteer Fire and Rescue
Department, Brian Hickerson, VA

North Annville Township Board of Supervisors,
Adam D. Wolfe, PA

North Annville Township Board of Supervisors,
Brent Kaylor, PA

North Annville Township Board of Supervisors,
Planning Commission, Randall Leisure, PA

North Annville Township Emergency
Management, William Johnson, PA

North Annville Township Fire Department,
Mark J. Blauch, PA

North Annville Township Planning
Commission, Clyde Meyer, PA

North Annville Township Police Department, L.
Randall Gingrich, PA

Northern Lebanon School District, PA

Northern Swatara Creek Watershed Assn.,
Robert Evanchalk, PA

Northmoreland Township, Anthony P. Litwin,
Esquire, PA

Northmoreland Township, Clinton Kyttle, PA

Northmoreland Township, James Rytte, PA

Northmoreland Township, Judy Rusinko, PA

Northmoreland Township, Paul Gates, PA

Northmoreland Township, Terrence Fisher, PA

Northmoreland Township, William Wagner, PA

Northumberland Conservation District, Judy
Becker, PA

Northumberland County Commissioners,
Christiano Julius, PA

Northumberland County Commissioners, Gary
L. Steffen, PA

Northumberland County Commissioners,
Granklin Red Ash, PA

Northumberland County Commissioners, James
J. McHale, PA

Northumberland County Commissioners,
Richard J. Shoch, PA

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Northumberland County Commissioners, Robert J. Leeser, PA
Northumberland County Commissioners, Stephen Bridy, PA
Northumberland County Commissioners, Vinny Clausi, PA
Northumberland County Conservation District, Judy Becker, PA
Northumberland County Conservation District, Michael McCleary, PA
Northumberland County Emergency Management, Stephen Jeffery, PA
Northumberland County Planning and Zoning, Patrick Mack, PA
Northumberland County Planning Commission, Edward Hovenstine, PA
Northumberland County Planning Commission, Mike Brinkash, PA
Northumberland County, Chad Reiner, PA
Northumberland County, Frank W. Garrigan, Esquire, PA
Northumberland County, Justin Dunkelberger, PA
Northwest Regional Police, Mark E. Mayberry, PA
Octorara Creek Watershed Assn, PA
Ono Fire Company, PA
Orange Township Board of Supervisors, Calvin Fox, PA
Orange Township Board of Supervisors, John Long, PA
Orange Township Board of Supervisors, Steven Hoffman, PA
Orange Township Emergency Management, Richard Megargell, PA
Orange Township Planning Commission, John Graybert, PA
Orange Township, Caroline Creasey, PA
Orange Township, Erica Burkhart, PA
Orange Township, Hummel and Lewis, PA
Overfield Township, Gerry Fritsch, PA
Overfield Township, John Manglnuiti, PA
Overfield Township, Susan Smith, PA
Penn and Mifflin Townships; Lycoming County, J. David Smith, PA
Penn Township Board of Supervisors, Charles Zook, PA
Penn Township Board of Supervisors, Daniel Dorman, PA
Penn Township Board of Supervisors, Keith Shaner, PA
Penn Township Emergency Management, Bryan Boyer, PA
Pennsylvania State Police Department Headquarters, PA
Pennsylvania State Police, PA
Pennsylvania State Police, Frank S. Balchane, PA
Pennsylvania State Police, William P. White, PA
Perserverance Fire Company, PA
Pine Grove Board of Supervisors, Diane D. Tobin, PA
Pine Grove Hose Hook and Ladder Fire Company 1, PA
Pine Grove North End Fire Company, PA
Pine Grove Township Board of Supervisors, Bruce J. Kosack, PA
Pine Grove Township Board of Supervisors, Diane D. Tobin, PA
Pine Grove Township Board of Supervisors, Jeffery Zimmerman, PA
Pine Grove Township Emergency Management, Bobby Milligan, PA
Pine Grove Township Fire Department / Ravine Fire Company 1, Greg Pijar, PA
Pine Grove Township Planning Commission, Cynthia Hummel, PA
Pine Grove Township Planning Commission, Frank Fox, PA
Pine Grove Township, Gino Dinicola, PA
Pine Grove Township, Kathy Ferguson, PA
Poplar Springs Fire Department, Ron Nordenbrock, SC
Porter Township Board of Supervisors, Bill Schaeffer, PA
Porter Township Board of Supervisors, Jeffrey Daub, PA
Porter Township Board of Supervisors, William Schaeffer, PA
Porter Township Emergency Management, Dave Koppenhaver, PA
Porter Township, James P. Diehl, PA
Prince William County Attorney, Angela Lemmon Horan, VA
Prince William County Authority Park, Debbie Andrew, VA
Prince William County Authority Park, Jose R. Calero Velez, VA
Prince William County Board of Supervisors, VA

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Prince William County Board of Supervisors,
Corey A. Stewart, VA

Prince William County Board of Supervisors,
Pete Candland, VA

Prince William County Board of Supervisors,
Wally Covington, VA

Prince William County Department of Fire and
Rescue – Station 24, Kevin McGee, VA

Prince William County Fire Marshall/S Office
and Emergency Management, Lance
McClintock, VA

Prince William County Fire Marshall/S Office
and Emergency Management, Curt
Brodie, VA

Prince William County Planning Commission,
Ray Utz, VA

Prince William County Planning Commission,
Teresa Taylor, VA

Prince William County Police Department,
Stephan M. Hudson, VA

Prince William County School Board, VA

Prince William County, Melissa S. Peacor, VA

Prince William County, Tracy Gordon, VA

Prince William Soil and Water Conservation
District, VA

PWC Board of County Supervisors, VA

Quittapahilla Watershed Association, David
Lasky, PA

Quittapahilla Watershed Association, Michael
Schroeder, PA

Ralpho Fire Company 1, PA

Ralpho Township Board of Supervisors, Blaine
P. Madara, PA

Ralpho Township Board of Supervisors, Daniel
T. Williams, PA

Ralpho Township Board of Supervisors, Stephen
A. Major, PA

Ralpho Township Board of Supervisors, Vincent
P. Daubert, PA

Ralpho Township Board of Supervisors,
William L. Wetzell, II, PA

Ralpho Township Emergency Coordinator,
Donald J. Spotts, PA

Ralpho Township Fire Department, Dennis W.
Kroh, PA

Ralpho Township Planning and Zoning, Daniel
T. Williams, PA

Ralpho Township Planning Commission,
Harvey Boyer, PA

Ralpho Township Police Department, Stuart
Appel, PA

Ralpho Township Public Safety, Vincent P.
Daubert, PA

Ralpho Township, Joseph J. Springer, PA

Ralpho Township, Schlessinger and
Kerstetter, PA

Rapho Fire Company 1, PA

Rapho Township, Darwin Nissley, PA

Rapho Township, Duane R. Martin, PA

Rapho Township, Jay Gainer, PA

Rapho Township, Jere Swarr, PA

Rapho Township, Joseph Stauffer, PA

Rapho Township, Lori Shenk, PA

Rapho Township, Lowell B. Fry, PA

Rapho Township, Sara Gibson, PA

Rapho Township, Stephen Kraybil, PA

Rawlinsville Volunteer Fire Company, Carl
Strickler, PA

Rheems Fire Department, PA

Robert Fulton Volunteer Fire Company, Tracy
L. Tomlinson, PA

Rockingham County, Robert Cardwell, NC

Rockingham County Board of Commissioners,
Craig Travis, NC

Rockingham County Board of Commissioners,
Keith Duncan, NC

Rockingham County Board of Commissioners,
Keith Mabe, NC

Rockingham County Board of Commissioners,
Mark Richardson, NC

Rockingham County Board of
Commissioners, Pamela McLain, NC

Rockingham County Board of Commissioners,
Zane Cardwell, NC

Rockingham County Conservation District, J.
Kevin Moore, NC

Rockingham County Office of Emergency
Management, Johnny Bowles, NC

Rockingham County Sheriff's Department, Sam
Page, NC

Rockingham County Sheriff's Department, Sam
Pass, NC

Rockingham County, NC

Ross Township Board of Supervisors, David A.
Williams, PA

Ross Township Board of Supervisors, Stanford
E. Davis, PA

Ross Township Board of Supervisors, William
Ferre, Jr., PA

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Ross Township Emergency Management,
Stanford Davis, PA

Ross Township Fire Department, Daniel E.
Rood, PA

Ross Township Municipal Officials, Dave
Williams, PA

Ross Township Police Department, PA

Ross Township, David R. Lipka, Esquire, PA

Ross Township, Terry Davis, PA

Schuylkill Conservation District, Elizabeth
Hinkel, PA

Schuylkill County Commissioners, Darlene
Laughlin, PA

Schuylkill County Commissioners, Frank J.
Staudenmeier, PA

Schuylkill County Commissioners, Gary J.
Hess, PA

Schuylkill County Commissioners, George F.
Halcovage, Jr., PA

Schuylkill County Emergency Management,
John M. Matz, PA

Schuylkill County Planning and Zoning, Susan
Smith, PA

Schuylkill County Planning Commission, Gary
Bender, PA

Schuylkill County Planning Commission, James
Setlock, PA

Schuylkill County, Al Marshall, Esquire, PA

Schuylkill County, Joseph Groody, PA

Schuylkill County, Mark Scarbinsky, PA

Shamokin Fire Bureau, PA

Shavertown Volunteer Fire Department, PA

Snake Creek Fire, Bob Chiarella, PA

Snake Creek Fire, Donald Gilbert, PA

Snake Creek Fire, William Darrow Sr., PA

Soil and Water Conservation District, Ray
Warriner, PA

Solicitor, David R. Warner, PA

South Annville Township Board of Supervisors,
Chester G. Horst, PA

South Annville Township Board of Supervisors,
Dale Hoover, PA

South Annville Township Board of Supervisors,
Donald H. Umberger, PA

South Annville Township Emergency
Management, John Breive, PA

South Annville Township Planning
Commission, Gordon Sheetz, PA

South Annville Township Planning
Commission, Peter Gluszko, PA

South Annville Township Police Department,
Ben Sutcliffe, PA

South Annville Township, Dale G. Hoover, PA

South Annville Township, Donald
Umberger, PA

South Londonderry Township Board of
Supervisors, Cliff Orley, PA

South Londonderry Township Board of
Supervisors, Doug Cheyney, PA

South Londonderry Township Board of
Supervisors, Rugh Henderson, PA

South Londonderry Township Emergency
Management, John Breive, PA

South Londonderry Township Planning
Commission, Dennis Hauenstein, PA

South Londonderry Township Police
Department, William Reigle, PA

South Londonderry Township, David Warner,
Jr., PA

South Londonderry Township, Thomas
Ernharth, PA

South Londonderry, Cliff Orley, PA

South Londonderry, Douglas Cheyney, PA

South Londonderry, Rugh Henderson, PA

South Londonderry, Scott Galbraith, PA

Spartanburg Conservation District, Bryan
Johnson, SC

Spartanburg County Council, Jeffrey A.
Horton, SC

Spartanburg County Council, Michael D.
Brown, SC

Spartanburg County Council, Roger Nutt, SC

Spartanburg County Office of Emergency
Management, Doug Bryson, SC

Spartanburg County Sheriff's Office, Chuck
Wright, SC

Spartanburg County, 7th Circuit, Barry
Barnette, SC

Suedburg Community Fire Company, PA

Sugarloaf Township Board of Supervisors,
Edward C. Sidinger, III, PA

Sugarloaf Township Board of Supervisors, Jerry
E. Laubach, PA

Sugarloaf Township Board of Supervisors,
Randy Swisher, PA

Sugarloaf Township Emergency Management,
Edward Sidinger, PA

Sugarloaf Township Fire Department / North
Mountain Volunteer Fire Company, Mike
Schumacher, PA

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Sugarloaf Township Planning Commission,
Dolly Hollinger, PA
Sugarloaf Township Planning Commission,
Edward Sidinger, PA
Sugarloaf Township, Terri Adams, PA
Susquehanna Conservation District, Jim
Garner, PA
Susquehanna County Commissioners, Alan M.
Hall, PA
Susquehanna County Commissioners, Constance
Hitchcock, PA
Susquehanna County Commissioners, Maryann
Warren, PA
Susquehanna County Commissioners, Michael
Giangrieco, PA
Susquehanna County Department of Planning
and Development, Robert G.
Templeton, PA
Susquehanna County Ema Ops/Training, Bob
Thatcher, Jr., PA
Susquehanna County Ema Ops/Training,
Stephen Paul, PA
Susquehanna County Emergency Management
Agency, Paul Johnson, PA
Susquehanna County Emergency Management,
Robert Stoud, PA
Susquehanna County Planning Commission,
Robert Templeton, PA
Susquehanna County Sheriff's Department,
Briana Hollenbeck, PA
Susquehanna County Soil and Water
Conservation District, Ray Warriner, PA
Susquehanna County, Lance Benedict, PA
Susquehanna County, RS Stoud, PA
Susquehanna County, Thomas F. Meagher
III, PA
Sweet Valley Volunteer Fire Company, PA
Town of Cleveland, NC
Town of Davidson Board of Commissioners,
Brian Jenest, NC
Town of Davidson Board of Commissioners,
Jim Fuller, NC
Town of Davidson Board of Commissioners,
Rodney Graham, NC
Town of Davidson Board of Commissioners,
Stacey Anderson, NC
Town of Davidson Fire Department, Darin
Mcintosh, NC
Town of Davidson Police Department, Jeanne
A. Miller, NC

Town of Davidson, John Woods, NC
Township of Annville, PA
Township of Annville, Timothy Sheffey, PA
Township of Dallas, PA
Township of East Hanover, PA
Township of Sugarloaf, PA
Tremont Borough Council Members, William
Allar, PA
Tremont Township Board of Supervisors,
Herman Lengle, PA
Tremont Township Board of Supervisors, John
R. Brommer, PA
Tremont Township Board of Supervisors,
Lawrence Bender, PA
Tremont Township Emergency Management,
Lester L. Kauffman, PA
Tremont Township, Mark Barket, Esquire, PA
Triton Hose Company 1, PA
Trucksville Volunteer Ems Fire and Rescue –
Kingston Township Ambulance and
Rescue, PA
Tunkhannock Borough Council, Norman
Ball, PA
Tunkhannock Township Board of Supervisors,
Glenn Shupp, PA
Tunkhannock Township Board of Supervisors,
Judy Gingher, PA
Tunkhannock Township Board of Supervisors,
Randy L. White, PA
Tunkhannock Township Board of Supervisors,
Veto Barziloski Jr., PA
Tunkhannock Township Emergency
Management, Randy L. White, PA
Tunkhannock Township Police Department /
Emergency Management, Stanley Ely
III, PA
Tunkhannock Township Volunteer Fire
Company, Joseph Balewski, PA
Union Hose Fire Company, Paul
Longenecker, PA
Union Township Board of Supervisors, Dennis
Firestone, PA
Union Township Board of Supervisors, Gary R.
Longenecker, PA
Union Township Board of Supervisors, Larry R.
Wolfe, PA
Union Township Emergency Management, Fire
Department, Roy Snyder, PA
Union Township Planning and Zoning, Spitler
and Kilgore, PA

APPENDIX A (cont'd)

Local Government Agencies (cont'd)

Union Township Planning Commission,
Elizabeth Freeman, PA
Union Township, Reilly, Wolfson,
Sheffey, Schrum and Lundberg Law
Offices, PA
Union Township, Renee Lehman, PA
United Fire, Thomas W. Bagel, PA
Unityville Volunteer Fire Company, Tim
Mordan, PA
Valley Chemical Fire Company, Mark
Sharrow, PA
West Friendship Volunteer Fire Department,
Howard (Mickey) Day, MD
West Hempfield Township Fire and Rescue Co.,
Jason Sauder, PA
West Hempfield Township Board of
Supervisors, David M. Dumeyer, PA
West Hempfield Township Board of
Supervisors, Edward C. Fisher, PA
West Hempfield Township Board of
Supervisors, Frank R. Burkhart, PA
West Hempfield Township Board of
Supervisors, Kent Gardner, PA
West Hempfield Township Board of
Supervisors, Naomi G. Martin, PA
West Hempfield Township Fire and Rescue
Company, Barry Carter, PA
West Hempfield Township Planning
Commission, Alice M. Yoder, PA
West Hempfield Township Planning
Commission, Ronald K. Beam, PA
West Hempfield Township Police Department /
Emergency Management, Mark Pugliese
I, PA
West Hempfield Township, Ron L. Yountz, PA
West Hempfield Township, Ron L. Youtz, PA
West Hempfield, Martic, and South Annville
Townships, Josele Cleary, Esquire, PA
Wyoming Conservation District, Doug
Deutch, PA
Wyoming County Commissioners, Judy Kraft
Mead, PA
Wyoming County Commissioners, Ronald P.
Williams, PA
Wyoming County Commissioners, Thomas S.
Henry, PA
Wyoming County Commissioners, William F.
Gaylord, PA
Wyoming County Conservation District, Doug
Deutsch, PA

Wyoming County Emergency Management,
Eugene Dziak, PA
Wyoming County Planning and Zoning, Nicole
Wootten, PA
Wyoming County Planning Commission, Randy
Ehrenzeller, PA
Wyoming County Planning Commission, Walter
Derhammer, PA
Wyoming County, Edward Sherman, PA
Wyoming County, James Davis, Esquire, PA
Wyoming County, Judy Mead, PA
Wyoming County, Tom Henry, PA

Native American Groups

Absentee Shawnee Tribe of Oklahoma,
Governor, George Blanchard, OK
Absentee Shawnee Tribe of Oklahoma, Tribal
Historic Preservation Officer, Specialist,
Carol Butler, OK
Absentee Shawnee Tribe of Oklahoma, Tribal
Historic Preservation Officer, Joseph
Blanchard, OK
Cayuga Nation, Chief, William Jacobs, NY
Delaware Nation, Tribal Historic Preservation
Officer, Tamara Francis, OK
Delaware Tribe of Indians, Chief, Paula
Pechonick, OK
Delaware Tribe of Indians, Nagpra Contact,
Brice Obermeyer, KS
Eastern Shawnee Tribe of Oklahoma, Chief,
Glenna Wallace, MO
Eastern Shawnee Tribe of Oklahoma, Cultural
Preservation Officer, Robin Dushane, MO
Oneida Nation, Historic Resource Specialist,
Jesse Bergevin, NY
Oneida Nation, Nation Representative, Ray
Halbritter, NY
Oneida Tribe of Indians of Wisconsin, Tribal
Historic Preservation Officer, Corina
Mrozinski, WI
Onondaga Indian Nation, Faithkeeper, Tony
Gonyea, NY
Saint Regis Mohawk Tribe, Chief, Randy
Hart, NY
Saint Regis Mohawk Tribe, Tribal Historic
Preservation Officer, Arnold Printup, NY
Seneca Nation of Indians, Tribal Historic
Preservation Officer, Melissa Bach, NY
Seneca-Cayuga Tribe of Oklahoma, Chief,
Leroy Howard, OK

APPENDIX A (cont'd)

Native American Groups (cont'd)

Seneca-Cayuga Tribe of Oklahoma, Historic Preservation Officer, Paul Barton, OK
Shawnee Tribe, Chairman, Ron Sparkman, OK
Shawnee Tribe, Tribal Historic Preservation Officer, Kim Jumper, OK
Stockbridge Munsee Community of Wisconsin, President, Robert Chicks, WI
Stockbridge Munsee Community of Wisconsin, Tribal Historic Preservation Officer, Sherry White, WI
Stockbridge-Munsee Tribal Historic Preservation, NY
The Delaware Nation, Director, Nekole Alligood, OK
Tonawanda Seneca Nation, Chief, Darwin Hill, NY
Tuscarora Nation, Chiefs Council, NY

Libraries

Gainsville Neighborhood Library, VA
James V. Brown Library, PA
Lancaster Public Library – Mountville Branch, PA
McNairy Library, PA
Nokesville Neighborhood Library, VA
Osterhout Free Library – Central Branch, PA
Pequea Valley Public Library, PA
Quarryville Library, PA
Ralpho Township Library, PA
Shamokin and Coal Township Public Library, PA
The Milanof-Schock Library, PA
Tunkhannock Public Library, PA

Media

Gainsville Times, VA
Lancaster Newspapers, PA
Lebanon Daily News, PA
Prince William Times, VA
Sun-Gazette, PA
The Citizens' Voice – Luzerne County Newspaper, PA
The News-Item, PA

Companies and Organizations

322 Storage LLC, PA
4P Realty LP Officer Mike Patercian, PA
Accokeek, Mattawoman, Piscataway Creeks Communities Council, Inc., John Carroll Holzer, MD
Adams Family Trust, Leroy Adams, Jr/Holly Adams, PA

Adorers of The Blood of Christ, MO
Alabama Gas Corporation, David A. Yonce, MO
Alecxi Realty, PA
Allegheny Defense Project, Ryan Talbott, OR
Allegheny Defense Project, Ryan Talbott, PA
American Legion Post 910, Adjutant Richard W. Stephen, Jr., PA
Amp Global Strategies, Alan Pugh, PA
Amp Incorporated, PA
Amtrack Tax and Insurance Department, DC
Annetta D. Dunkle, As Trustee Under Annetta D. Dunkle Living Trust, NY
Annville Township, Corey Lamoureux, PA
Aqua PA Inc., PA
Arro Consulting, Jimmy L. Dennis, PA
Arro Consulting, Mark Harman, PA
Arro Engineering and Environmental Consultants, Jimmy L. Dennis, L.O., PA
Ashway Farm, PA
Atlanta Gas Light Company, Elizabeth Wade, GA
Atlanta Gas Light Company, Gregory J. Becker, GA
Atmos Energy Marketing LLC, Jeff Perryman, TX
Audubon Pennsylvania, Paul T. Zeph, PA
B and D. Equity Property Tax, Doris H. Bowman, PA
Back Mountain Recreation, Inc., Executive Director David Sutton, PA
Balch and Bingham LLP, Scott B. Grover, Al
Balco Development, Inc., PA
Barbara A. Stansell Revocable Liv Trust, PA
Barley Farms LP, PA
Beacon Hill Hunting Club, PA
Bear Gap Cottage, LLC, A. Pennsylvania Limited Liability Company, PA
Bird Hill Farms Inc., FL
Bittner Family Limited Partnership, PA
Blood of Christ, MO
Bloomsburg University, Jennifer Haney, PA
Blue Ridge Trout Unlimited, Don Davidson, NC
Boys and Girls Club, PA
Bridgewater EMC, Douglas Lottern, PA
Bridgewater EMC, Jack Lasher, PA
Brubaker Connaughton Goss and Lucarelli LLC, Angela H. Sanders, PA
Brubaker Connaughton Goss and Lucarelli LLC, Rory O. Connaughton, PA
Bryant's R.V. Showcase, Bradley E. Bryant, PA

APPENDIX A (cont'd)

Companies and Organizations (cont'd)

Bull Run Plaza LLC, VA
Cabot Oil and Gas, PA
Cabot Oil and Gas Corporation, Deidre L. Shearer, TX
Calpine Energy Services, L.P., Brian Fields, TX
Calpine Energy Services, L.P., Jay Dibble, TX
Calpine Energy Services, L.P., Krystin M. Worsham, TX
Calpine Energy Services, L.P., Sarah G. Novosel, Esquire, DC
Camp Andrews Inc., PA
Canadian Pacific, Director of Engineering Daniel Sabatka, MN
Canadian Pacific, Director of Engineering Daniel Sabatka, IL
Central Piedmont Group of the NC Chapter of the Sierra Club, David Robinson, NC
Chesapeake Bay Foundation, Harry Campbell, PA
Chesapeake Bay Watershed Initiative, PA
Chevron Natural Gas, A. Division of Chevron USA, Inc., Charles R. Cook, TX
Chevron Texaco Global Gas, A. Division of Chevron USA, Inc., Jeanie J. Myers, TX
Chief Oil and Gas LLC, Andrew E. Levine, TX
Christopher Egolf and Kenneth Scavone, LLC, PA
Citizens For Pennsylvania's Future (Pennfuture), Michael D. Helbing, PA
Codorus Chapter of Trout Unlimited, Tom Feninez, PA
Coles Creek Sportsman Club, Richard Wilson, PA
Coles Creek Sportsman Club, Inc., PA
Columbia Chapter Trout Unlimited, Samantha Kutskel, PA
Commonwealth Telephone Co, PA
Conestoga Area Historical Society, Kenneth M. Hoak, PA
Conestoga Community Group, PA
Conococheague Hmstd Family Trust, PA
Conocophillips Company, Ben J. Schoene, TX
Conocophillips Company, Pete Frost, DC
Conocophillips Company, Stephanie D. Jones, TX
Consolidated Edison Company of New York, Inc., Paul Savage, NY
Consolidated Edison Company of New York, Inc., Scott Butler, NY
Corbett and Shreck, P.C., Matthew M. Schreck, TX
Cumberland Valley Chapter Trout Unlimited, Justin Pittman, PA
D and H. Railroad Company, Mary Pitman, MN
Delaware River Keepers, Faith Zerbe, PA
Delmar R. Zeisloft and James D. Zeisloft and T/A Zeisloft Construction Company, PA
Diocese of Harrisburg, Kevin Shervinskis, PA
Ditzler Farms Inc., PA
Doc Fritchey Chapter Trout Unlimited, Ed O’Gorman, PA
Dove Dhristian, PA
Ducks Unlimited, James Meadows, SC
Ducks Unlimited, Madison Chapter, Joseph Presley, WI
Ducks Unlimited, NC Western Region, Justin Harris, SC
Ducks Unlimited, Southern Regional Office, Scott Manley, MS
Duke Energy, John Trimble, NC
Duncan, Weinberg, Genzer and Pembroke, P.C., Kathleen Mazure, DC
Duncan, Weinberg, Genzer and Pembroke, P.C., Natalie M. Karas, DC
East Bloomsburg Properties, FL
Eastern Land and Resources Company, William Kurtz, PA
Eastern Land and Resources Corp, PA
Edward E. Buda and Estate of Eleanor T. Buda – Karen Jackowski, Executrix, PA
Emberclear Reserves Inc., AB
Emberclear Reserves Inc., KS
Emberclear Reserves Inc., PA
Empire Columbia LP, PA
Environmental Science and Policy, Emily West, PA
Estate of Erma Miller Deceased, R. Larry Miller, PA
Estate of Veral Grove Rishel, C/O Andrew Pruden, Exector, PA
Exelon Corporation, Carlos Thillet, PA
Exelon Corporation, Christopher Wilson, DC
Exelon Corporation, Lisa Michelle Simpkins, MD
Exelon Corporation, Michael S. Swerling, PA
Exelon Corporation/ Baltimore Gas and Electric Company, Gary E. Guy, MD
Exelon Corporation/ Baltimore Gas and Electric Company, Ronald T. Jennings, MD

APPENDIX A (cont'd)

Companies and Organizations (cont'd)

Exelon Corporation/ Constellation Energy
Commodities Group, Inc., Christopher D.
Young, MD
Falco Family Trust, PA
Fanhnestock Farms, PA
Federal National Mortgage Association, PA
Finn Gard, LLC., PA
Florida Power and Light Company, William
Lavarco, DC
Forest Lake Qrs, Sandra Dawson, PA
Forest Lake Vfc, Ronald Dawson, PA
Forry Farms Partnership, PA
Four Star Associates, PA
Fox Harbor Archers Assn, PA
Foxchase Manor LLC, VA
Franklin View Farms, Ruth B. Breneman, PA
Frantz Sbm Partnership and Land Management,
LP, PA
Friedland Farms LLC, PA
Future Power PA, LLC, Ks
Geisinger System Services, PA
Gene K. Elston Estate, PA
Generation Enterprises LLC, PA
Gerald M. Long, Trustee, PA
Giacinto, Miller and Foulk, A. Partnership; John
Giacinto, Richard G. Miller and Joanne
Foulk and Theodore Foulk Trust (As
Successors To Theodore Foulk), PA
Glenn R. Wenger Revocable Living Trust, PA
Gultch Rattlesnake Hunting Club, Ronald
Turner, et al., PA
Harford EMC, Doug Phelps, PA
Harford EMC, Steven Smith, PA
Harford EMC, Wayne Frederick, PA
Harford EMC, William Steven, PA
Hayfield Associates LLC, PA
Heydon Family Trust, PA
Hilltop Hollow Ltd Partnership, PA
Holly House Farm Limited Liability, MD
Hr Weaver Family Realty LP, PA
Hud Inc., PA
Hug Irrevocable Grantor Trust, PA
Husch Blackwell LLP, William F.
Demarest, DC
Inflection Energy LLC, Phillip Lord, Co
Integrity Land, Inc., PA
Izaack Walton League, MD
J Ivan Hanson, et al., Trustee, PA
JA and WN Miller Family LP, PA
James and Anna Trotta, Trustees of The Trotta
Living Trust, FL
James Hale Steinman Trust, PA
James J. Trotta and Anna M. Trotta, Trustees of
The Trotta Living Trust Dated July 23,
1997, FL
Jennings, Strouss and Salmon, P.L.C., Joel L.
Greene, DC
Jere R. Buch Executor, Estate of Dorothy G.
Buch, PA
John and Hengerer, Kevin M. Sweeney, DC
Joseph Leconte Group of The Sierra Club,
Andrew Hunt, GA
Ken-Dra Realty, LLC., PA
Kevin A. Hickman and Kurtis S. Hickman, Co-
Trustees Under The Hickman Irrevocable
Trust, PA
Key Trucking Inc., PA
Kimmels Coal and Packing, Inc., PA
Kinderhook Farm LP, PA
Kunkle Farms LLC, PA
Lackawanna Chapter Trout Unlimited, Gary
Smith, PA
Laclede Group, Mark Darrell, MO
Lancaster Against Pipelines, Ann Marie
Garti, NY
Lancaster Farmland Trust, Karen Martynick, PA
Landview Properties Inc., PA
Laurene B. Mahon Sep Ira Equity Trust Co., NJ
Law Offices of William R. Mapes, Jr., William
R. Mapes, DC
Lebanon Pipeline Awareness, Ann Pinca, PA
Lebanon Valley College, Don Santostefano, PA
Lebanon Valley College, Karen Feather, PA
Lebanon Valley College, Lewis Evitts
Thayne, PA
Lebanon Valley Conservancy, PA
Leep Lucky Gun Club, PA
Lemuel W. Futcher and Judith J. Futcher,
Trustees of The Futcher Family Trust, TX
Lickdale Associates LP, Construction Manager,
Jeff Camp, PA
Life Ministries, Administrator Daniel M.
Beachy, PA
Lloyd Wilson Chapter of Trout Unlimited, Bill
Bailey, PA
Lutheran Camping Corporation of Central
Penn, PA
Marcellusgas.Org, PA
Mary Misnik Trust, PA

APPENDIX A (cont'd)

Companies and Organizations (cont'd)

Mayer Brown LLP, Davis I. Bloom, DC
McCarter and English, LLP, James H. Byrd, DC
McGeary Grain Inc., PA
Meadow View Homeowners Group, Patrick Kesley, PA
Methodist Church Parsonage, Pastor Nancy Lycett, PA
Metis Nation of The U.S., Dennis One Wolf Kauffman, PA
MFS Inc., PA
MHC TT, Inc., PA
MI Homes of DC LLC, OH
Miller Family LP, PA
MJ Real Estate Holdings, LLC, PA
MMR Investments TG LLC, CA
Moore and Van Allen Pllc, James Jeffries, NC
Mosley Family Trust Jennifer R. Delmar, Trustee, PA
Mountain Bridge Trout Unlimited, Simons Welter, SC
Muddy Creek Chapter Trout Unlimited, Fred Hess, PA
Municipal Gas Authority of Georgia, Aurthur C. Corbin, GA
Musser Supply Inc., PA
N. Clayton Fetterman and Jessie M. Fetterman, Husband and Wife, Life Estate; and Randall N. Fetterman, Remainderman, PA
Nam Futures, LLC, PA
Nancy Y. Colver Irrevocable Grantor Trust, FL
National Fuel Gas Distribution Corporation, Michael E. Novak, NY
National Fuel Gas Distribution Corporation, Randy Rucinski, NY
National Grid/Keyspan Gas Delivery Companies, Kenneth Maloney, DC
National Trout Unlimited, VA
National Wild Turkey Federation, Pennsylvania State Chapter, Walter Bingaman, PA
Native Preserve and Lands Council, David Jones, PA
Natural Soil Products Holding Co, LLC, NY
Natural Soil Products Holding Co, LLC, PA
Neighborhood Preservation and Community Development Services, Randolph J. Harris, PA
Nelson S. Sherman and Sharon V. Sherman, Trustees of The Sherman Family Trust, PA
New Jersey Natural Gas Company, Doug Rudd, NJ
New Jersey Natural Gas Company, William Scharfenberg, NJ
New Milform EMC, Ken Bondurant, PA
New York State Public Service Commission, Alan T. Michaels, Esquire, NY
New York State Public Service Commission, Cynthia H. McCarran, NY
New York State Public Service Commission, Theodore F. Kelly, Esquire, NY
NiSource Corp./Columbia Gas of Virginia, Inc., Kenneth Christman, PA
NiSource Corporate Services Company, Deepak Raval, Oh
NJR Energy Services Company, Ginger Richman, NJ
Norfolk Southern, PA
North Branch Land Trust, PA
North Carolina Utilities Commission, Jeffery L. Davis, NC
North Carolina Utilities Commission, William Gilmore, NC
North Mountain Club, D. Miner, PA
Northcentral Pennsylvania Conservancy, PA
Nucapa, PA
Nygren Irrevocable Grantor Trust, PA
Nygren Irrevocable Grantor Trust, Robert and Ruth E. Nygren Trustee, PA
P P. & L. Inc., PA
Pace Family Trust et al., VA
Paramount Developers, Officer Joseph Prociak, PA
Patrick Industries Inc. Gene Weathersbee, Gm, PA
Patrick Industries Inc., PA
PA Suburban Water Company, PA
Peco Energy Co Re and Facil N3-3, PA
Penn State Seed Company, Inc., PA
Pennsy Supply Inc., PA
Pennsylvania Audubon Society, PA
Pennsylvania Ducks Unlimited, JF Felchock, PA
Pennsylvania Land Trust Association, PA
Pennsylvania Lines LLC C/O Norfolk Southern, Alex Rocca, PA
Pennsylvania Power and Light Company PPL – Real Estate Taxes, PA
Pepper Hamilton LLP, David Tshudy, PA
Pepper Hamilton LLP, Michelle Skjoldal, PA
Philadelphia Gas Works, Gregory Stunder, PA
Philadelphia Gas Works, Joseph F. Stengel, PA
Piedmont Natural Gas Company, Inc., Jane Lewis-Raymond, NC

APPENDIX A (cont'd)

Companies and Organizations (cont'd)

Piedmont Natural Gas Company, Inc., Michelle R. Mendoza, NC
Pipeline Safety Coalition, Lynda Farrell, PA
Pleasant View Mennonite Church, PA
Plumbers and Pipefitters Local Union # 520, William E. Lovell and Walter W. Walborn, PA
Plumbers and Pipefitters, PA
PP&L Inc., PA
PPL Holtwood LLC, PA
Prologis-A4 PA IV LLC, PA
PSEG Energy Resources and Trade LLC, Cara Lewis, NJ
PSEG Energy Resources and Trade LLC, David F. Caffery, NJ
Public Service Company of North Carolina/ Scana Corporation, Braxton Collins, SC
Puddlefield, Inc., PA
PWH I. LLC, MD
R Laverne Miller Trust, R. Larry Miller Trustee, PA
Rabin Chapter of Trout Unlimited, Terry Rivers, GA
Range Resources, Appalachia LLC, Elie G. Atme, PA
Range Resources-Appalachia LLC/ Law Office of William R. Mapes, Jr., William Mapes, DC
Rausch Creek Land, LP, PA
RCMS Investments, LP, A. Pennsylvania Limited Partnership, PA
Reading Anthracite Company, PA
Reading Blue Mountain and Northern Railroad Company, PA
Reading R/W Company Inc., PA
Redcay Industrial Development, PA
Reidlers Inc., PA
Rhea Baldwin and Thomas F. Edwards, Life Estate, PA
Richard and Gladys Baduini Trust, NJ
Robert P. Mausteller; Mae Mausteller, Trustees of the Mausteller Family Trust, Dated September P, 1998, PA
Rohrer Dairy Farms, PA
Rohrer Properties LP, PA
Ryvamat Inc., PA
Scheler Realty LLC, Fred Scheler, PA
Sebastian M. Bonaccorsi Family Trust, Sebastian M. Bonaccorsi, Trustee, PA

Seda-Cog Joint Rail Authority, Mary Pitman, PA
Seedco NP, LLC, PA
Seedco Residential, LLC, PA
Seneca Resources Corporation, Christopher M. Trejchel, PA
Sequent Energy Management, L.P., Russo C., TX
Sequent Energy Management, L.P./ AGL Resources Inc., Kathryn McCoy, TX
Sid Tool Co Inc., NY
Sierra Club of Western North Carolina, Judy Mattox, NC
Skupics, LLC, PA
Sonora Farms Partners, PA
South Londonderry Township, Lebanon County, Shawn Arbaugh, PA
Southern Company Services, Inc./ Balch and Bingham LLP, Alan Lovett, Al
Southern Company Services, Inc./ Balch and Bingham LLP, Scott Grover, Al
Southwestern Energy Services Company, LLC, Jason Kurtz, TX
Spiegel and McDiarmid LLP, David Pomper, DC
Spiegel and McDiarmid LLP, Jessica R. Bell, DC
Split Vein Coal Co Inc., PA
Stadium Dirt Designs, Inc., PA
Stan Cooper Sr. Chapter of Trout Unlimited, PA
Stanton Gun Club, James Bishop, NJ
Stone Hill Village LLC, PA
Stoner Family Trust, Glenn R. Stoner and Sally A. Stoner, PA
Sunrise Real Estate Dev LLC, PA
Susquehanna Chapter Trout Unlimited, PA
Susquehanna Coal Company, PA
Susquehanna Gateway Heritage Area, Mark N. Platts, PA
Susquehanna River Wetlands Trust, Donald Horn, Jr., PA
SWN Energy Services Company, LLC, Billy D. Dixon, TX
SWN Energy Services Company, LLC, Jason Kurtz, TX
SWN Energy Services Company, LLC/ Morgan, Lewis and Bockius, LLP, Brett Snyder, DC
Techhope LLC, MD
Teen Challenge Training Center, PA

APPENDIX A (cont'd)

Companies and Organizations (cont'd)

Teen Challenge Training Center, Reverend Joseph S. Batlock, PA

The Brecht Rohrbach Irrevocable Residential and Income Trust, Estate of George L. Rohrbach, Co-Executors, Kay M. Brecht and Ronald Lee Rohrbach, PA

The Brown Family Trust, PA

The Dale and Barbara Reese Irrevocable Trust, PA

The Delaware River Keepers, Faith Zerbe, PA

The Elsie Buyers Viehman Revocable Agreement of Trust, PA

The Hickman Irrevocable Trust, PA

The John Gilbert Leakway and Janice Louise Leakway Rlt, PA

The Kehler Irrevocable Residential and Income Trust, PA

The Kohr Farm Trust, PA

The Law Offices of Carl Engleman Jr., LLC, Carl J. Engleman, PA

The Law Offices of Carolyn Elefant, Pllc, Carolyn Elefant, DC

The Mahantongo Dutchman, PA

The Marguertie Keller Irrevocable Income Only Trust, PA

The Mausteller Family Trust, PA

The Nancy Y. Colver Irrevocable Trust, FL

The Nature Conservancy Southeast Pennsylvania, PA

The Nature Conservancy, GA

The Nature Conservancy, MD

The Nature Conservancy, North Carolina Field Office, NC

The Nature Conservancy, Pennsylvania Field Office, PA

The Sour Apple Hunting Club, PA

Thomas J. Zagami, P.A., MD

Thousand Trails Inc., Property Tax, PA

Transcontinental Gas Line, MD

Transcontinental Gas Pipe Line Company, LLC, Derrick Hughey, TX

Transcontinental Gas Pipe Line Company, LLC, Ingrid I. Germany, TX

Transcontinental Gas Pipe Line Company, LLC, Judith Neason, DC

Transcontinental Gas Pipe Line Company, LLC, Margaret Rose Camardello, TX

Transcontinental Gas Pipe Line Company, LLC, Marshia M. Younglund, DC

Transcontinental Gas Pipe Line Company, LLC, Scott Turkington, TX

Transcontinental Gas Pipe Line Company, LLC, Stephen Andrew Hatridge, Esquire, TX

Transcontinental Gas Pipe Line Company, LLC, William Hammons, TX

Transcontinental Gas Pipeline Co, VA

TRC, Denise M. Brinley, PA

TRC, Doree Dufresne, Co

Treasured Tyies Miniature Donkeys, Kathy Houck, PA

Trout Unlimited Foothills Chapter, NC

Ugi Corporation, PA

Ugi Distribution Companies, Mark Morrow, PA

VG Realty LLC, NY

Victory Lakes Community Association, Inc., VA

Village at Greenbriar Inc., Richard Angelico, PA

Virginia Ducks Unlimited, David Adamson, TN

Virginia Electric and Power Co, VA

W & A. Beinhower Living Trust, PA

Walmart Real Estate Business Trust, AR

Washington Gas Light Company, James Blasiak, VA

Washington Gas Light Company, Rose T. Lennon, DC

Wellington Road Associates, VA

West Creek Rod and Gun Club, Inc., PA

WGL Midstream, Inc., Telemac Chryssikos, DC

WGL Midstream, Inc./ Capitol Energy Ventures Corporation, Stephen R. Soule, DC

William M. Riggins, Trustee and Margaret H. Riggins, Trustee, De

Williams, Cindy Ivey, TX

Williams, Megan Stafford, TX

Williams/Transco, Amanda Herford, TX

Williams/Transco, Anne Allen, TX

WPS Westwood Generation, LLC, PA

Youth Association of Palmyra C/O World War Association of Palmyra, PA

Ziegler Excavating Inc., PA

APPENDIX A (cont'd)

Individuals

Aaron and Leah Duff, PA
Aaron L. Martin, et al., PA
Aaron L. Stoltzfus, PA
Aaron W., PA
Abby Hetrick, PA
Abe Harounzadeh, PA
Abigail Graffer, PA
Abram G. Barley Jr., PA
Abram G. Barley, PA
Abram G. Stoltzfoos, PA
Adam Roerig, PA
Adam Thomas Graby, PA
Adam W. Brant, et ux., PA
Adin David Mumma,
et al., PA
Adrienne Boullianne, PA
Adrienne Roth, PA
Alan Forney, PA
Alan H. Felty, PA
Alan M. Miller, et al., PA
Alan P. and Mildred
Kwiatkowski, PA
Alan P. Kwiatkowski,
et ux., PA
Alan T. Rosengrant, PA
Alan Weidner, et ux., PA
Albert & Cathy Zick Sr., PA
Albert C. Reinbold,
et ux., PA
Albert L. Hunsinger,
et ux., PA
Albert N. Shadle, et ux., PA
Albert R. Minnich, PA
Albert T. Breneman, PA
Albert T. Wolfe, et ux., PA
Alberta M. Wolfe, et al., PA
Alena Clatterbuck, PA
Alexander Lortorto, PA
Alfred D. Nagle, PA
Alfred J. Wargo, PA
Alfred T. Hughes, et ux., PA
Alice Swartz, PA
Alicia Burger-Shirk, PA
Alicia Herr, PA
Alicia Holland, PA
Alison Dryfoos Mazzie, PA
Allen Dohl, PA
Allen L. White, et ux., PA
Allen Lee Cornell, et ux., PA
Allison Dingle, PA

Allison Petryk, PA
Alma Czarnecki, PA
Alta T. Bomberger, PA
Alvin H. Scott Jr., PA
Alvin J. Luchas, PA
Alyce Hope Quinn, FL
Amanda L. Fox, PA
Amanda La Benfer, PA
Amie Wolfinger, PA
Ammon Stoltzfus, et ux., PA
Amos B. Zook, et al., PA
Amos F. Frey, Jr., et ux., PA
Amos Forrey Lighty,
et al., PA
Amos L. Kutz, et ux., PA
Amy Fetterolf, PA
Amy S. Robbins, PA
Amy S. Robbins-Gray,
et ux., PA
Amy Salansky, et vir, PA
Andrew Faist, PA
Andrew Fraunfelter,
et ux., PA
Andrew J. Kirchner,
et ux., PA
Andrew J. Schmalzried,
Jr., PA
Andrew J. Yorks, et al., PA
Andrew M. Zimmerman and
Jordan M. Smith, PA
Andrew S. Giessinger,
et ux., PA
Andrew S. Kusuplos, PA
Andrew Steransky, et ux., PA
Andrew Yuen, PA
Andy C. Strauch, et ux., PA
Andy Dynada, PA
Angela M. Cooper, MD
Anita K. Keagy, PA
Ann and Grey Day, PA
Ann C. Johnson, PA
Ann G. Schiel, et al., PA
Ann L. Clark, et ux., PA
Ann Marie Benoski, PA
Ann Simonetti, PA
Anna Dekonty, PA
Anne Birmingham,
et al., MD
Anne Sensenig, PA
Anne Wallace-Digarbo,
Ph.d., PA

Annette M. Hackner, MD
Annette Roland, PA
Annette Silverstein, PA
Anthony and Irene
Kitchnefsky, PA
Anthony B. Foglietta, PA
Anthony F. Henegar, Jr.,
et al., PA
Anthony Gelormini,
et ux., PA
Anthony J. Leeman,
et ux., PA
Anthony J. Wisnosky,
et ux., PA
Anthony M. Gilbert, PA
Anthony M. Matulewicz,
et al., PA
Anthony M. Yourey,
et ux., PA
Anthony Martin, PA
Anthony Michael
Calabro, PA
Anthony Muro, et ux., PA
Anthony N. Gillott,
et ux., PA
Anthony Sokol, PA
Anthony Troy Thorne, PA
Ariel Carl, PA
Arielle Petry, PA
Arlyn H. Rosengrant,
et al., PA
Arnold D. Roberts, et ux., PA
Arthur B. Wenger, et al., PA
Arthur F. Hess, PA
Arthur L. Kelsey et ux., PA
Arthur M. Bowser, PA
Arthur R. Troup, PA
Audrey Culver, PA
Audrey L. Cassady, PA
August J. Schulz, PA
Augusta C. Wilson, PA
B Mahon Sep, PA
B. Campbell, PA
Bailey Cash, NY
Bakhtiyar A. Khan, et al., PA
Bambi Hanson, PA
Barbara and Jere Long, PA
Barbara Erb, PA
Barbara K. Swingle, PA
Barbara Kempf Frey, PA
Barbara L. Hayos Jr., PA

APPENDIX A (cont'd)

Individuals (cont'd)

Barbara L. Hayos, PA
Barbara M. Splitt, et ux., PA
Barbara Ritzheimer, PA
Barry Dana Edwards, PA
Barry G. Bernstein, PA
Barry L. Burkey, et ux., PA
Barry L. Kremser, PA
Barry L. Miller, et al., PA
Barry L. Reichert, PA
Barry W. Cassel et ux., PA
Barton F. Hough, PA
Basil Their, PA
Becky S. Banham, PA
Becky S. Bonham, et vir, PA
Benedette, PA
Benjamin C. Bow et ux., PA
Benjamin F. Duke, Jr.,
et al., PA
Benjamin Moyer, et ux., PA
Benjamin S. Metzler,
et al., PA
Bernard F. Brown, et ux., PA
Bernard J. O'Malley, PA
Bessie A. Peters, PA
Beth Katz, PA
Beth Litwhiler, PA
Beth Yeager, PA
Betty J. Black, et al., NY
Betty L. Heyl, TX
Betty L. Jordan, PA
Betty Randolph, PA
Beverly Auvil, PA
Beverly Diltz, PA
Beverly Hollock, PA
Beverly J. Baslser, et al., PA
Beverly King, PA
Beverly Miller, PA
Bill Craven, PA
Bill Knapp, PA
Bill Weiss, PA
Billy K. Wilson, Jr.,
et al., PA
Blair B. and Megan E.
Mohn, PA
Blanche A. Ernest, PA
Bob Lowing, PA
Bob Pane, PA
Bobbie Bonham, PA
Bonnie Barrett, PA
Bonnie M. Swarr, PA
Bonnie Stoeckl, PA
Bower Haley, PA
Brad and Melissa
Anderson, PA
Brad S. Reichart, PA
Bradford N. Wenger,
et ux., PA
Bradley C. Ide, et al., PA
Bradley J. Brandt, et ux., PA
Bradley Nilsson, PA
Brandon C. Peters, et ux., PA
Brenda F. Deluca, PA
Brenda Jo R. George, PA
Brenda Kauffman, PA
Brenda Lisieuski, PA
Brenda Sieglitz, PA
Brent G. Neely, et al., PA
Brenten and Jen Lavelle, PA
Bret M. Levy, et ux., PA
Brett Seeley, PA
Brian Andreychek, PA
Brian C. Martin, et al., PA
Brian Earley, PA
Brian Fink, PA
Brian G. Fischer, PA
Brian Heintzman, PA
Brian Hoover, PA
Brian J. Eshbach, PA
Brian J. Laudenslager,
et ux., PA
Brian K. Kreiser, PA
Brian M. Woodring, PA
Brian Murphy, PA
Brian P. Campion, et ux., PA
Brian Palmer, PA
Brian Resh, PA
Brian S, PA
Brianna Williams, PA
Britton, Kennard, PA
Brooke Boretski, PA
Brooke Courdoine, PA
Brooke Kuehn, PA
Brooke Minnich, PA
Brooke Wolfinger, PA
Bruce A. Hemsarh,
et ux., PA
Bruce A. Rettew, PA
Bruce D. Schwalm,
et ux., PA
Bruce E. Beezer, et al., PA
Bruce J. Reese, et al., PA
Bruce K. Vernet, et ux., PA
Bruce R. Davis, PA
Bruce W. Althouse, et al., PA
Bruce W. Anderson,
et ux., PA
Bruce W. Dolly, et ux., PA
Bryan B. Schoener, PA
Bryan M. Hoover, et al., PA
Bryan M. Myers, et al., PA
Bryce Litwin, PA
Byron R. Himmelberger, PA
Byvonne Pisani, PA
C Richard Hunt, et al., PA
C Walter, PA
C.E. Manges, Jr., PA
Caitlin Metzinger, PA
Cara Lonjane-Hurst, PA
Carl A. Shaner, et ux., PA
Carl and Jody Hanson, PA
Carl E. Galantino et ux., PA
Carl F. Greenley, et al., PA
Carl F. Stuehrk, et ux., PA
Carl G. Harrison, et ux., PA
Carl Gerhard, PA
Carl J. Weidler, PA
Carl M. Kreider, et ux., PA
Carl O. Ishler, et al., PA
Carl Pensak, PA
Carl S. Millhouse, PA
Carl Yocum, PA
Carla Babrick, MO
Carol Bonham, PA
Carol Bromer, PA
Carol E. Kreiser, PA
Carol J. Bonham, PA
Carol Kerstetter, PA
Carol L. Shafer, PA
Carol Landry, PA
Carol M. Zick, PA
Carol Martin, PA
Carol Mohr, PA
Carol Teel, PA
Carol Wengert, PA
Caroline Raskiewicz, et
vir, PA
Caroline S. Nunan, et al., PA
Carolyn Braudis, PA
Carolyn Dryfoos, PA
Carolyn E. Rusonis, Et
Vir, PA
Carolyn Hostetter, PA

APPENDIX A (cont'd)

Individuals (cont'd)

Casey Groff, PA
Casey L. Willis, PA
Casey Pegg, PA
Catherine Gray, PA
Catherine H. Hozempa, PA
Catherine K. Noreika, PA
Catherine Pifcho, PA
Catherine R. Lee, et vir, PA
Cathryn Maloney, PA
Cecelia and David
Daubert, PA
Cecile Cazort Zorach, PA
Chad E. Rankin, PA
Chad L. and Jennifer S.
Kelley, PA
Chantal Strausser, PA
Chantel Levardi, PA
Charlene M. Stabley, PA
Charlene R. Kreider, PA
Charles and Ruth Ann
Williams, PA
Charles B. Dresch, et ux., PA
Charles D. Ghilani,
et ux., PA
Charles E. Vollmar, PA
Charles Eugene Krise,
et ux., PA
Charles F. and Jane Ross, PA
Charles F. Long, et ux., PA
Charles F. Long, Jr et ux., PA
Charles F. Ross, et ux., PA
Charles G. Masse, PA
Charles G. Massen, PA
Charles H. Fritz, PA
Charles Kritch, et ux., NJ
Charles L. and Candie T.
Funson, PA
Charles Pfahler, et ux., PA
Charles W. Gordon, PA
Charles W. Marks, et ux., PA
Charlotte Puterbaugh, PA
Cheryl A. Klinger, et al., PA
Cheryl and James Ehmer, PA
Chester Browski Jr., PA
Chris A. Felty, PA
Chris P. Keiper, et ux., PA
Chris Ziomek, MD
Christ K. Stoltzfus, et ux., PA
Christie Weismantel, PA
Christine Crawford
Brady, PA
Christine N. Luttrell, PA
Christine Welch, PA
Christopher Angelo
Bertinelli, PA
Christopher B. McWilliams,
et al., PA
Christopher Balmoos,
et ux., PA
Christopher C. Steenburg, PA
Christopher E.
Czyszczonek, PA
Christopher Eugene
Kovalchick, et al., PA
Christopher J. Brown,
et ux., PA
Christopher J. Warnig,
et ux., PA
Christopher LB McWilliams
et al., PA
Christopher Pass, PA
Christopher Ries, et ux., PA
Christopher Troy
McCallum, PA
Christopher White, et ux., PA
Christy Harrison, PA
Cindy Adams Dunn, PA
Cindy Schrecengost, PA
Cindy Truitt, PA
Cindy Weitsich, PA
Clair D. Wagner et al., PA
Clair E. Manges, et al., PA
Clair R. Dunkelberger III,
et al., PA
Claire Martin, PA
Clarence A. Davis et ux., PA
Clarence L. Houseknecht,
Jr., PA
Clark E. Bohr, Jr., Ca
Claude Andrews, NC
Claudia Strycharz, PA
Clay Bierly, PA
Cletus F. Kemmick, PA
Cletus L. Balmer, et al., PA
Clifton D. Miller, et al., PA
Colin Moore, PA
Colleen Caputo, PA
Colleen Moyer, et al., PA
Connie Bolcarovic, FL
Connie E. Hack, PA
Connie E. Lloyd, PA
Connie Giyer, PA
Connie J. Baysore, et ux., PA
Connie L. Giger, PA
Connie L. O'Donnell,
et al., PA
Connie M. Ament, et al., PA
Connie Stahl, PA
Connor McCue, PA
Conrad King, et ux., PA
Coralee Fitzkee, PA
Corrine Smith, PA
Cory A. and William S.
Schaller, PA
Courtney N. Whiting, MD
Craig A. Frey, et al., PA
Craig E. Steiner, PA
Craig R. Taylor, et al., PA
Craig Rome, PA
Craig S. Allen, et al., PA
Crist L. Espenshade
et ux., PA
Cristina Bartles, PA
Crystal D. Snyder, et ux., PA
Curtis D. Hoffman, et al., PA
Curtis E. Shambaugh, PA
Curtis Haldy, PA
Curtis L. Fullom, et ux., FL
Curtis L. Martin, et ux., PA
Curtis Swanson, et ux., NY
Cylde L. Houseknecht, PA
Cynthia A. Heiland, PA
Cynthia and Brian Rhane, PA
Cynthia Koepisch, PA
Cynthia L. Hanna, MD
Cynthia M. Bomgardner,
et al., PA
Cynthia Wetzal, PA
D Michael Cook, et ux., PA
Dale A. Wilkie, PA
Dale E. Bushong, et ux., PA
Dale E. Heagy, et ux., PA
Dale E. Zimmerman,
et ux., PA
Dale Gow, PA
Dale Jaffe, PA
Dale Kitchnefsky, PA
Dale L. Longenberger,
et ux., PA
Dale L. Reese et ux., PA

APPENDIX A (cont'd)

Individuals (cont'd)

Dale L. Stackhouse,
et ux., PA
Dale P. Tseitline, PA
Dale R. Barto, PA
Dale Seidel, PA
Dale Wilkie, PA
Damon A. Young, et ux., PA
Daniel and Karen
Thrasher, PA
Daniel B. Farnham,
et ux., PA
Daniel Buranich, PA
Daniel Cotterman, PA
Daniel D. Brown, PA
Daniel E. Light, et ux., PA
Daniel Erdman, PA
Daniel F. Lapp, et ux., PA
Daniel G. Chorba Jr., PA
Daniel H. Spencer Sr.,
et ux., PA
Daniel J. H. Bode, et ux., PA
Daniel K. Lapp, et ux., PA
Daniel L. Rupp, et al., PA
Daniel Loys Hartman,
et ux., PA
Daniel M. Beachy, et al., PA
Daniel M. Coyne, PA
Daniel M. Light, et ux., PA
Daniel N. Downs, PA
Daniel R. Kroitavich, PA
Daniel R. Kutz, et al., PA
Daniel Rupp, et al., PA
Daniel S. Ottaviani,
et ux., PA
Daniel Slowikowski, PA
Daniel W. Dietrich Jr.,
et al., PA
Daniela King Brickman, PA
Danielle Belcher, PA
Daphne Bowers, PA
Dara Grasley, PA
Darin Torrey, PA
Darl E. Venditti, PA
Darlene E. Martenas, PA
Darlene Stutzcage, PA
Darrell E. Yoder, PA
Darryl W. Lock, PA
Daryl L. Beakler, et ux., PA
Daryl L. Alger, PA
Dave and Jane Moyer, PA
Dave and Sascha
Primeau, PA
Dave Hanks, PA
Dave Koser, PA
Dave Sprecher, PA
David A. Folk, PA
David A. Lutz, et ux., PA
David A. Roberts, et ux., TN
David A. Sollenberger,
et al., PA
David Albright, et ux., PA
David and Barbara Ruth, PA
David and Linda Kriner, PA
David Blackwolf, et al., PA
David Bomgardner, PA
David Brown, PA
David C. Findley, et ux., PA
David C. Kazmerski,
et ux., PA
David C. Mosner, et ux., NJ
David C. Otto, et ux., PA
David Compton, PA
David D. Daubert, et ux., PA
David D. Ruckle, PA
David Daniel Hartenstine, PA
David Danilack, et al., PA
David Dekonty, PA
David E. Kozlowski, PA
David Emmanuel, PA
David G. Brown, PA
David G. Davies, et ux., PA
David G. Kapson, et ux., PA
David Gomber, PA
David H. Foltz, III, et ux., PA
David H. Hummel, et ux., PA
David Howard, PA
David J. Barnett, et ux., PA
David J. Buzalewski, PA
David J. Lightner et ux., PA
David J. Roskos, et ux., PA
David J. Lightner, et ux., PA
David K. Hoy, PA
David Konrad, et ux., PA
David L. Booth, Jr.,
et ux., PA
David L. Nye, et ux., PA
David L. Reese et ux., PA
David L. Wagner, et al., NY
David M. Amon, et ux., PA
David M. Burt, et ux., PA
David M. Kline, et al., PA
David M. Schnable,
et ux., PA
David M. Stahr, et ux., PA
David McConnell, PA
David McMahan, PA
David N. Bomgardner,
et ux., PA
David N. Ferrick, et ux., PA
David P. Baloga, et ux., PA
David R. and Charlotte M.
Hack, PA
David R. Hilliard, MD
David R. King, et ux., PA
David R. Olt, et ux., PA
David R. Pyle, PA
David Riley, PA
David S. Banta, et ux., PA
David S. Robbins, et ux., PA
David T. Belcher, PA
David W. Kolk, et ux., PA
David Weist, et ux., PA
David Zimmerman, et al., PA
Dawn C. Farlow, PA
Dawn M. Heydon, et al., PA
Deacon C. Kinsey, et ux., PA
Dean E. Baker Jr. and
Patricia L. Baker,
H/W, PA
Dean H. Marshall, PA
Dean L. and Edith M.
Minnick, PA
Dean Reynolds, et ux., PA
Deanna Coho, PA
Deb Pure, PA
Deborah A. Baker, PA
Deborah A. Peterman, PA
Deborah Funk, PA
Deborah L. Piatt, et vir, PA
Deborah Little Antanitis, PA
Deborah Morgan, PA
Debra A. Frear, et ux., PA
Debra Ann Mengel, et al., PA
Debra J. Agnew, PA
Debra Martin-Berkowski, PA
Debra P. Benjamin, PA
Debra Zaktansky, PA
Deie Gallagher, PA
Deirdre Lally, PA
Dennis A. Huber, et al., PA
Dennis C. Schneck, PA
Dennis Dowd, PA

APPENDIX A (cont'd)

Individuals (cont'd)

Dennis E. Funck, et ux., PA
Dennis E. O'Neil, PA
Dennis F. Schaeffer,
et al., PA
Dennis Fox, PA
Dennis G. Rebuck, et ux., PA
Dennis George, PA
Dennis Gold, PA
Dennis Hauenstein, PA
Dennis J. Frazier, et ux., PA
Dennis J. Herr, et ux., PA
Dennis L. Schneck, PA
Dennis M. College, PA
Dennis R. Hauenstein,
et ux., PA
Dennis Starr, PA
Dennis Witmer, PA
Devon M. Williams, PA
Diana Ginutz, PA
Diana Lynn Orley, PA
Diane A. and Debra A.
Griffiths, PA
Diane Croship, PA
Diane Sucouff, PA
Dick Minnich, PA
Dina K. Hutson, et ux., PA
Dolores E. Garrett, PA
Dominic P. Fino, Jr and
Kristin A. Fino, PA
Dominic Passante and Maria
Boyce-Passante, PA
Don Mitchell, PA
Don S. Kelsey, et ux., PA
Donal M. Newcomer,
et ux., PA
Donald A. Artsma, PA
Donald A. Dennis, et ux., PA
Donald and Phyllis Ide, PA
Donald and Roberta
Gallagher, PA
Donald Bowers, et ux., PA
Donald D. Traver, et ux., PA
Donald E. Bowman, PA
Donald F. Johnson et ux., De
Donald G. Casterline, PA
Donald H. Buckwalter,
et ux., PA
Donald Hart, PA
Donald Houseal, PA

Donald J. Bowman,
et ux., PA
Donald J. Dieffenbacher,
et ux., PA
Donald J. Dobson, et ux., PA
Donald J. Lowe, et al., PA
Donald L. Hart, PA
Donald L. Potts, et ux., PA
Donald L. Shellenberger,
et ux., PA
Donald Lee Aston, et al., PA
Donald Pahl, PA
Donald R. Zimmerman, PA
Donald Steltz, PA
Donald Traugh, PA
Donald W. Faus, et al., PA
Donald W. Witmer,
et ux., PA
Donald Wademan, et ux., PA
Donna and Edward Fritz, PA
Donna Berry, PA
Donna Bushong, PA
Donna Getz Ide, PA
Donna Kilgore, PA
Donna L. Haines, et ux., PA
Donna L. Williams, PA
Donna Parsons, PA
Donna Stickler, PA
Donny Williams, MD
Doreen E. Lamela, PA
Doris H. Bowman, PA
Dorothy Ann Kraft,
et al., MD
Dorothy Bartko, PA
Dorothy M. Martin, PA
Dorothy Frank, PA
Doug and Susan Beck, PA
Doug Evans, PA
Douglas A. Berlin, et al., PA
Douglas A. Gross, et ux., PA
Douglas B. Koller, PA
Douglas C. White, et ux., PA
Douglas E. Chamberlain, MD
Douglas E. Weaber,
et ux., PA
Douglas Lorenzen, PA
Douglas M. Wolfgang, PA
Douglas S. Engle, et al., PA
Duane S. Bonham, PA
Duanee E. Lehman, et al., PA
Ed and Pam Johnson, PA

Ed Guinther, PA
Ed Padlo, PA
Edgar R. Womelsdorf,
et ux., PA
Edith Ann Keller, et ux., PA
Edith Hartman, et ux., PA
Edmund A. Kodish, PA
Edmund E. Hagan, MD
Edward A. Bisch, et ux., PA
Edward A. Long, et ux., PA
Edward and Mary Steele, PA
Edward Baker, et al., PA
Edward Buda, PA
Edward D. Smith et ux., PA
Edward E. Oncay, et ux., PA
Edward E. Rhoat, PA
Edward E. Shadle, et ux., PA
Edward F. Saar, PA
Edward K. Dinkel, PA
Edward K. Walmsley, et ux.
Edward L. Heagy, et al., PA
Edward M. Haas, et ux., PA
Edward Oncay, PA
Edward R. Murach, PA
Edward R. Rhoat, PA
Edward R. Saxton, PA
Edward Soja, PA
Edward T. Maciejewski, PA
Edward W. Rupp, et ux., PA
Edwards, Roger J, PA
Edwin E. Kitzmiller II, PA
Eileen Frank, PA
Eileen Gibson, PA
Eileen Stroup, PA
Elaine Bell Brett, PA
Elaine Digirolamo, Et
Vir, PA
Elaine I. Kehler, PA
Elaine Lapp Esch, PA
Eleanor R. Holzhauser,
et al., PA
Elisa and Aaron Bello, PA
Elise Kucirka, PA
Elise Salahub, PA
Elizabeth Joa Haas, PA
Elizabeth Pursel, PA
Elizabeth Skrapits, PA
Elizabeth Wargo, Et Vir, PA
Ellie Salahub, PA
Elmer H. Wenger, et al., PA
Eloise Morris, et al., PA

APPENDIX A (cont'd)

Individuals (cont'd)

Elvin B. Reiff, et al., PA
Elvin H. Mease, et ux., PA
Elvin Martin, PA
Elvin Terry Ditzler, et al., PA
Emanuel Fisher, PA
Emerson C. Douts, et ux., PA
Emily Broich, PA
Emily Krafjack, PA
Emily Michael, PA
Emily S. Strausser, TX
Emily Steiner, KS
Emily Von Harten, PA
Emma Fritz Kile, et al., PA
Emma Oberholtzer, PA
Emogene Kirkpatrick,
et al., PA
Emory G. Meyerhoffer, PA
Enrique Batista-Luciano,
et al., PA
Ephraim R. Lapp, PA
Eric A. Hanson, et ux., MO
Eric A. Steenburg, et ux., PA
Eric Younker, PA
Erika Burkhart, PA
Ernest B. Hippenstiel,
et ux., PA
Ernest J. Adams, et al., PA
Estee Lynch, PA
Esther H. Hess, PA
Ethan Myer, PA
Eugene A. Parker, et ux., PA
Eugene and Linda
Brown, PA
Eugene E. Brown, et ux., PA
Eugene E. Menges,
et ux., PA
Eugene F. Gladfelter, PA
Eugene Kemp Frey,
et ux., PA
Eugene P. Janiczek,
et ux., PA
Eva Telesco, PA
Evelyn E. Ralston, et al., PA
Evelyn G. Jerauld, PA
Evelyn Hardie, PA
Evelyn Vian, PA
F Leon Zimmerman, PA
Factoryville Fire
Company, PA
Fannie A. Gochnauer, PA
Fausey M. Wayne, et al., PA
Fawn Cotton, PA
Feri and Shirley C.
Fester, PA
Fern E. Hartman, et al., PA
Fisher McGettigan, PA
Flint W. and Sharon J.
Kressler, PA
Florence Brady, et ux., PA
Florence Wolfe, PA
Floyd R. Wertz Jr. and Debra
A. Wertz, H/W, PA
Fox Gail, PA
Fran Wysocky, PA
Frances G. Gouveia, PA
Francis Deeter, PA
Francis H. Ditzler, Jr.,
et al., PA
Francis H. Sickler, et ux., PA
Francis Richard Sutton,
et ux., PA
Francis W. Ditzler, et al., PA
Francis W. Gerrity, PA
Francis W. Duplessis, PA
Francis X. Bennawit, PA
Frank Billings, et ux., PA
Frank D. Cooper, et al., PA
Frank E. Lashinski, PA
Frank E. Tregan, PA
Frank E. Via, PA
Frank G. Hess, PA
Frank J. Krammes, PA
Frank S. Dunham, PA
Frank S. Hubler IV, PA
Frank Sherman, et ux., PA
Frank T. Yakupcin, PA
Frank, Janet, and Hughie
Curran, PA
Franklin J. Williams, PA
Franklin S. Beiishline,
et al., PA
Franklin W. Pingley, WV
Fred A. Hollopeter, et al., PA
Fred and Amy Harriger, PA
Fred D. Daum, PA
Fred E. Thomas, et ux., PA
Fred J. Smith Living
Trust, PA
Fred J. Smith, PA
Fred P. Granese, MD
Fred Sylvester, PA
Fred W. Allnutt, MD
Frederick A. Snyder, PA
Frederick D. Hess, et al., PA
Frederick E. Ainsworth,
et ux., PA
Frederick G. Foster,
et ux., PA
Frederick G. Lewert,
et al., PA
Frederick H. Mingle
et ux., PA
Frederick Marks Jr., PA
Frederick O. Benson Sr., PA
Frederick R. Keiser,
et al., PA
Frederick S. Watkins,
et al., PA
Fredrick and Lorraine
Ainsworth, PA
Fredrick O. Benson Sr., PA
G David Ginder, PA
G Grant Shultz, et al., PA
G Lind, PA
G Nevin Dressler, et al., PA
Gabe Sidonia, PA
Gale Hess, PA
Galen R. Kopp, et al., PA
Galen R. Walters, PA
Galin Z. Martin, et ux., PA
Garry and Bonnie Gross, PA
Garry L. Geibe, et ux., PA
Garry W. Burgard et al., PA
Gary A. Lupinski, et al., PA
Gary and Linda Giger, PA
Gary C. Keller, et ux., PA
Gary E. Buck et al., PA
Gary E. Gross, et ux., PA
Gary J. McMahon, MD
Gary J. Sagan, et ux., PA
Gary K. Strauch, et al., PA
Gary Longenecker, et ux., PA
Gary Marks, et al., PA
Gary P. Cook, et al., NJ
Gary P. Mihal, et ux., PA
Gary S. Robson, et ux., PA
Gary Zurin, et al., PA
George A. Speck, PA
George and Cathy
Hopstetter, PA
George Broody, PA

APPENDIX A (cont'd)

Individuals (cont'd)

George C. Gundrum,
et ux., PA
George Fortel Jr., PA
George H. Zook, PA
George I. Leonovich,
et ux., PA
George J. Duffy, PA
George Lioudis, NJ
George M. McAlanis, PA
George P. Dobrinski, PA
George R. and Donna L.
Flick, PA
George R. Fenimore,
et ux., PA
George R. Shanahan, PA
George S. Huntzinger, PA
George S. McWilliams,
et al., PA
George Vastine, PA
Gerald Arcuri, Etal, PA
Gerald Bruce, PA
Gerald E. Schott, et ux., PA
Gerald H. Cohoon, et ux., PA
Gerald H. Lefever, PA
Gerald I. Stover, et ux., PA
Gerald J. Martyniak,
et al., PA
Gerald L. Marstell, et ux., PA
Gerald L. Splitt, et ux., PA
Gerald L. Woolcock,
et ux., PA
Gerald Lewis, PA
Gerald M. Long, et ux., PA
Gerald R. Colvin, PA
Gerald R. Doughty et ux., PA
Geraldine T. Nesbitt, PA
Gerard R. Lockwood,
et ux., PA
Gerri Jesse, PA
Gerry Gammache, PA
Gilbert N. Martin, et ux., PA
Ginger P. Woolcock, PA
Gladys I. Kohr, PA
Glen L. Ebert, et ux., PA
Glenda and Frank Gehrig, PA
Glenn A. Meily, et ux., PA
Glenn A. Nulton, et al., PA
Glenn A. Weidler, et al., PA
Glenn C. Keiser et ux., PA
Glenn E. Shelley, et ux., PA
Glenn H. Kneasel, PA
Glenn R. Ament, et ux., PA
Glenn R. Coombe, et ux., PA
Glenn R. Houck, et ux., PA
Grant Taylor, et ux., PA
Greg and Lois Harris, PA
Greg Geist, PA
Greg Szczyrbak, PA
Gregory B. Werni, PA
Gregory Gass, PA
Gregory Hoffer, PA
Gregory J. Santaniello, PA
Gregory W. Inns, PA
Gus Gatanas, et al., NJ
Guy Charles Michalowski
Sr., et ux., PA
Guy F. Militello, PA
H Glenn Esbenshade, PA
H Lorraine Forry, PA
H Robert Schwartz, et al., PA
Harold E. Flack, et ux., PA
Harold E. Kile, et al., PA
Harold E. Merkey, PA
Harold Flack II, et ux., PA
Harold L. Frey, et ux., PA
Harold W. Cornell, et al., PA
Harry and Linda Snyder, PA
Harry C. Hause, et ux., PA
Harry C. Mathias, Jr., PA
Harry D. Middleton, AK
Harry D. Middleton, UT
Harry E. Ashelman,
et ux., PA
Harry E. Fetterman, PA
Harry E. K. Youtz, et ux., PA
Harry Fithian, et al., PA
Harry J. Falco, PA
Harry L. Colvin, et ux., PA
Harry Magee Katerman, PA
Harry O. Martenas,
et ux., PA
Harry W. Vaow II, et ux., PA
Harvey Hause, et ux., PA
Heather and Sam Temple, PA
Heidi L. Gordon, PA
Helen A. Boston, PA
Helen A. Frantz, et al., PA
Helen and Clarence Harner,
et al., PA
Helen E. Jerauld
Mendegro, PA
Helen M. Nace, PA
Helen McGee, PA
Helen R. Light, PA
Henry Berger, PA
Henry C. Weaver, et al., PA
Henry F. Sadler, MD
Henry M. Berger, et ux., PA
Herbert F. Reinbold, PA
Herman J. Hornberger,
et ux., PA
Hershey M. Hershey, PA
Hilary Byerly, PA
Ho Ching Yung, MD
Hoagland Lynn L. and
Carol C, PA
Holly A. Neville, PA
Holly Veight, PA
Howard D. Brochys,
et ux., PA
Howard Hess, et ux., PA
Howard Jacoby, PA
Howard O. Custer, Jr.,
et ux., PA
Howard S. Long, et ux., PA
Howard W. Fritz, et al., PA
I. Sulyok, PA
Ide Elliot, et al., PA
Ik Bee Kim, MD
Irene and Donald
Murphy, PA
Irma Falls, PA
Irvin C. and Joan
Martenas, PA
Irvin Low, et ux., PA
Ismael Khan, NY
J A. Walsh, Ireland
J A. Walsh, PA
J Anthony Haverstick,
et al., PA
J Earl Breneman, et al., PA
J Robert Findley, PA
Jace A. Moore, et ux., PA
Jacelyn Bailey, PA
Jack A. Lowery, et al., PA
Jack A. Mihalik, et ux., PA
Jack D. Vandermer, MD
Jack G. Messenger II, PA
Jack H. Hess, PA
Jack L. Newcomer, et al., PA
Jack Like Like, PA
Jackie Nachmias, PA

APPENDIX A (cont'd)

Individuals (cont'd)

Jaclyn Smith, PA
Jacob H. Breneman,
et al., PA
Jacob Stroud, PA
Jacqueline L. Doyle, PA
Jacquelyn C. Priester, PA
James and Deb Keefer, PA
James C. Rosenbloom, MD
James C. Wisk, et ux., PA
James D. Harkins, PA
James Dewitt, et ux., PA
James E. Elslager, PA
James E. Hershey, et ux., PA
James E. Labatch, et ux., PA
James E. Plummer, Jr.,
et al., PA
James E. Rank, PA
James E. Rogers, PA
James E. Rudy, PA
James F. Brosius, PA
James Francis Owens, PA
James G. Day, et al., PA
James G. Trombly, et ux., PA
James H. Breneman, PA
James H. Willman, et ux., PA
James Hoover, PA
James J. H. Kohr, et ux., PA
James J. Oren, VA
James J. Schilling, PA
James J. Smith et ux., PA
James Jenzano, PA
James King, PA
James Kosh, Jr., et ux., PA
James L. Dankers, PA
James L. Hepler, et ux., PA
James L. Spangenberg,
et ux., PA
James M. Delp, et ux., PA
James M. McKee et al., PA
James M. Slaymaker,
et ux., PA
James McGettigan, PA
James P. Bridy, et al., CA
James P. Hickey, et ux., PA
James R. Bitzer, et ux., PA
James R. Reisinger, et al., PA
James S. Headley, PA
James S. Lamoreaux,
et ux., PA
James Schlonger, PA
James Slaymaker, PA
James T. Joline, et ux., PA
James Thiele and Jacklyn
Harrison, PA
James Vicendese, Jr., MD
James W. Bunting, et ux., PA
James W. Faus, et ux., PA
James W. Harvey, PA
James W. Hostetter,
et al., PA
James Walters, et ux., PA
James Yanaris, PA
Jamie J. Spencer, PA
Jamie Nolan et al., PA
Jamison E. Sgarlat, PA
Jan and David Smeal, PA
Jan and Robert Dudo, PA
Jan J. Dubbs, PA
Jana Schwartz, PA
Jane C. Maneval, PA
Jane Druce, PA
Jane M. Hess, PA
Jane Mensch, PA
Jane Popko, PA
Janet A. Fidler, PA
Janet K. and Kevin W.
Niemiec, PA
Janet L. Stein, et al., VT
Janet L. Stein, et al., PA
Janet McGowan, PA
Janet P. Lucas Et Vir, PA
Janet R. Rice, Etal, PA
Janet Stackhouse, PA
Jasmine Yeager, PA
Jason and Lisa Jeremiah, PA
Jason and Michelle
Gordner, PA
Jason G. Propst, et ux., PA
Jason K. Hollinger,
et ux., PA
Jason L. Perritt, PA
Jason Lee Kurtz, et al., PA
Jason M. Kehoe, et ux., PA
Jason R. Maciejewski, PA
Jason Watts, PA
Jay A. Mull, et ux., PA
Jay and Lois Boll, PA
Jay D. Bomgardner,
et ux., PA
Jay Frank Brink, PA
Jay Ivan Newswanger, PA
Jay L. Bleacher, et al., PA
Jay L. Hess, PA
Jay M. and Gail J. Elston, PA
Jay M. Smoker, et al., PA
Jay P. Weaver et al., PA
Jay Parrish, PA
Jay R. Kulp, et al., PA
Jay Thomas Frey, et ux., PA
Jayme M. Oulton, Et Vir, PA
Jean B. Laird, MO
Jean Johnson, PA
Jean P. Flack, PA
Jeanne Sickler, PA
Jeannette Ezzyk, PA
Jeannette Moyer, PA
Jeff and Judy Stoner, PA
Jeff and Valerie
Fellenbaum, PA
Jeff B. Ginger, PA
Jeff Eric Miller, et ux., PA
Jeff Hynick, PA
Jeff Landis, PA
Jeffery G. Mullin, PA
Jeffery Geiser, PA
Jeffery Koller, PA
Jeffrey A. and Susan A.
Wolfe, PA
Jeffrey A. Hartman, PA
Jeffrey A. Kann, et ux., PA
Jeffrey A. May, et ux., PA
Jeffrey A. Wolfe, et ux., PA
Jeffrey B. Snider, PA
Jeffrey D. Steckbeck, PA
Jeffrey Foust, PA
Jeffrey H. Mussmon,
et ux., PA
Jeffrey Hynick, PA
Jeffrey J. Belch, PA
Jeffrey L. Lefever, et al., PA
Jeffrey Morgan, et al., PA
Jeffrey R. Parmer, PA
Jeffrey S. Groff, et al., PA
Jeffrey Scott Young, PA
Jeffrey W. Esbin, PA
Jeffrey W. Higgins,
et ux., PA
Jen Seltzer, PA
Jennie Elaine Porter, PA
Jennifer and Greg Simas, PA
Jennifer and Jason
Weikel, PA

APPENDIX A (cont'd)

Individuals (cont'd)

Jennifer Berlin, PA
Jennifer Brown, PA
Jennifer Carter, PA
Jennifer Corearan, PA
Jennifer D. Scott, PA
Jennifer Hamilton, PA
Jennifer Karns, et vir, PA
Jennifer L. Cleary, et ux., PA
Jennifer L. Wyman, PA
Jennifer Michael, PA
Jennifer S. Shadle, et ux., PA
Jennifer Spangler, PA
Jennifer Wentzel, PA
Jere Snyder, PA
Jeremy Guy Walters,
et ux., PA
Jeremy M. Salsman, PA
Jeremy M. Zimmerman,
et ux., PA
Jerry A. Wise, et ux., PA
Jerry C. Eckman, PA
Jerry Harrison, PA
Jess W. Oren, III, et al., PA
Jesse A. Long, et al., PA
Jesse J. Hepler, et ux., PA
Jesse M. Ziegler, et ux., PA
Jessica Albertson, PA
Jessica Fay, PA
Jessica Kelly, PA
Jessica Robenolt, PA
Jill M. Deihl, PA
Jim P. Greenley, et ux., PA
Jo Ellen Litz, PA
Jo Garvin, PA
Joan A. Daro, PA
Joan Byron, PA
Joan E. Ivey, PA
Joan Foust, PA
Joan Hawkins, PA
Joan Keller, PA
Joan King, PA
Joan Pauley, PA
Joan Weaber, PA
Joanna Faith Kurtz, et al., PA
Joanne Callahan, PA
Joanne Scalleat, PA
Jodi Coombs, PA
Jodi Stauffer, PA
Jodi Webster, PA
Jody L. Hummel, et al., PA

Jody Leighty, PA
Joe Shirley, PA
Joel King, PA
Joel Pompella, PA
Joel T. Rosengrant,
et ux., PA
John A. Bebey, PA
John A. Colella, PA
John A. Francioni Jr.,
et ux., PA
John A. Galleazzi, MD
John A. Linton Jr. et ux., PA
John A. Martin, et ux., PA
John A. Miller, PA
John A. Scaldara, MD
John A. Swingle, PA
John A. Trimble, et al., PA
John A. Linton, Jr., et ux., PA
John Allan, PA
John and Andrea Harrell, PA
John and Andrea W.
Harrell, PA
John and Anne Smeltzer, PA
John and Deborah
Sowers, PA
John and Jenny Wing, PA
John and Patti Zerbe, PA
John and Sarah Dodson, PA
John B. Butcho, et ux., PA
John B. Roeder, PA
John C. Jenzano, PA
John C. Reeser, et ux., PA
John Clinton Klingerman, PA
John Cosgrove, PA
John D. Bomgardner,
et ux., PA
John D. Flaud, PA
John D. Lapp, et ux., PA
John D. Martin, et ux., PA
John D. Rank-Christman,
et al., PA
John D. Rebman, PA
John D. Lahr, PA
John David Estep, et ux., PA
John David Martin, PA
John Dewitt Nicholson, PA
John E. Butts, PA
John E. Edwards, PA
John E. Ground, PA
John E. Teahl, et ux., PA
John E. Berger, PA

John F. and Connie J.
Fritz, PA
John Friedberg, PA
John G. Leakway and
Stephanie A.
Leakway, PA
John G. Teichmoeller, MD
John Gabreski, PA
John Gilbert Leakway and
Janice Louise Leakway
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John Herr, PA
John J. Andrewson,
et ux., PA
John J. Baker, PA
John J. Garrison Sr., PA
John J. Maciejewski, PA
John J. Scott et ux., PA
John Jenzano, PA
John Kauffman, PA
John Kimmel, et ux., PA
John L. Brown, et ux., PA
John L. Hynes, MD
John L. Walker, PA
John Lynch, PA
John M. Burkholder,
et ux., PA
John M. Krohn, et ux., PA
John M. Lausch, PA
John M. Reinbold, Jr.,
et ux., PA
John M. Seidel, et ux., PA
John M. Their, PA
John McGurk, PA
John Mishanski, PA
John Murr, PA
John P. Blaski, et ux., PA
John Puskar, PA
John R. Felty, PA
John R. Greenley, et ux., PA
John R. Haldeman, et ux., PA
John R. Holt and Michael E.
Wood, PA
John R. Stout, NC

APPENDIX A (cont'd)

Individuals (cont'd)

John R. Swanson, et ux., PA
John R. Gerdy and E. Follin
Smith, PA
John R. Greenley, et ux., PA
John R. Sendy, PA
John Rehrer, PA
John Roelof Lanting, MD
John Rohrer, PA
John Rossi, PA
John S. Gladys, et ux., PA
John Salahub, PA
John T. Melick, PA
John T. Wiker, PA
John T. Wocniski, PA
John T. Gross, PA
John Timothy Gross, PA
John Trallo, Sr., PA
John W. Harrell III,
et ux., PA
John W. Pfeiffer, et ux., PA
John W. Roberts, et ux., PA
John, PA
Jon S. Jaeger, PA
Jona Stackhouse, PA
Jonas W. Cash, MD
Jonathan B. Herschberger,
et ux., PA
Jonathan J. Richwine, PA
Jonathan Pompella, PA
Jonathon Bancroft Colon, PA
Jones Sherry, PA
Jordan A. Waybright,
et al., PA
Joseph and Becki
Brandenburg, PA
Joseph D. Ritter, PA
Joseph Deleo, PA
Joseph E. Brandenburg, PA
Joseph G. Kappen, PA
Joseph G. Kappen, PA
Joseph G. Schneiderite
Jr., PA
Joseph Guastella, Jr., PA
Joseph J. Maskalis, PA
Joseph Justik, PA
Joseph M. Demeio,
et ux., PA
Joseph M. Stec Jr., PA
Joseph M. Wenson, NJ
Joseph M. Zoller, MD

Joseph Michael
Diangelo, MD
Joseph Mislevy, et al., PA
Joseph P. Waldman,
et ux., PA
Joseph Pinamonti, Jr.,
et ux., PA
Joseph R. Paterson, PA
Joseph Radick, PA
Joseph S. Kugler, et al., PA
Joseph S. Volz, PA
Joseph Spaltro, NJ
Joseph W. Fischer, PA
Joseph Weidow, et ux., PA
Joseph Wieczorek, Jr., PA
Josh Brotaw, PA
Josh Graupera, PA
Joshua Gerlach, PA
Joshua Matulevich, PA
Joshua R. Steiner, PA
Joy and Kaylee Blasick, PA
Joy Nachmias, PA
Joy Schuler, et vir, PA
Joyce Ann Thrush, PA
Judi Rocha, PA
Judith F. Evanko, et vir, FL
Judith J. Hoff, et al., PA
Judith Max, PA
Judith Mueller, PA
Judson R. Smales, et ux., PA
Judy A. O'Brien, PA
Judy Davis, PA
Judy Ginter, PA
Judy Leaman, PA
Julie Brown, PA
Julie E. Diltz, et ux., PA
Julien Lurowist, PA
June Lynn, et al., PA
Justin Craig Earp, MD
Justin D. Noll, PA
Justin L. Cappiello, et al., PA
Justin R. Fisher, PA
Justin S. Weidler, et ux., PA
Justin Strawser, PA
Justina Kelp, PA
K Danowski, PA
K Garber John, PA
Kailyn Stewart, PA
Kara Day Flood, PA
Kara Winter, PA
Karen Ament, PA

Karen and David Smith, PA
Karen Belli, PA
Karen John, PA
Karen Miller, PA
Karl A. Kanode, et ux., PA
Karl H. Perritt et al., PA
Karl H. Peters, et al., PA
Karl Heinbach, et ux., PA
Karl Kenneth Brown, II,
et al., PA
Karl Macdonald, PA
Karl R. Hinkle, PA
Karla Sexton, PA
Karolina Cimochoowski,
et al., PA
Kate Hafer, PA
Katelyn Erb, PA
Kathi A. Wodehouse, PA
Kathryn Healery, PA
Kathy Pope, PA
Katie Faust, PA
Katie Lee Cross, PA
Kavin E. Shelley, PA
Keeney Jaegen, PA
Keith A. Hansford, MD
Keith A. Harris, et ux., PA
Keith A. Leighow, PA
Keith A. Zimmerman, PA
Keith E. McHenry, PA
Keith H. Martin, et al., PA
Keith Lamar Kurtz,
et ux., PA
Kelli Eachus, PA
Kelli Nachbar, PA
Ken Brooks, PA
Ken McCawley, PA
Kenia, Rose, PA
Kenneth A. Bond, PA
Kenneth A. Gainer, PA
Kenneth A. Kindt, PA
Kenneth Alan Eads, MD
Kenneth and Kathy Bond, PA
Kenneth Benjamin Moyer,
et al., PA
Kenneth Bond, PA
Kenneth Brown, PA
Kenneth D. Stickler, PA
Kenneth E. Decker,
et ux., PA
Kenneth Foust, PA
Kenneth Goss, PA

APPENDIX A (cont'd)

Individuals (cont'd)

Kenneth J. Scavone, PA
Kenneth J. Werni, PA
Kenneth L. Goss, et ux., PA
Kenneth L. Wenner,
et ux., PA
Kenneth Marshman, PA
Kenneth Miller, et ux., PA
Kenneth P. Shannon, PA
Kenneth S. Kok, et ux., PA
Kenton E. Kreider, PA
Kerek D. Musser, et al., PA
Kerry J. Fritz, et ux., PA
Keven M. Loy, et ux., PA
Kevin C. Becraft, MD
Kevin Dembitsky, et ux., PA
Kevin Hurst, PA
Kevin M. Myer, PA
Kevin Mekosh, et al., PA
Kevin Mooney, PA
Kevin R. Norris, PA
Kevin T. Zimmerman, PA
Kiertsen Eddinger, PA
Kim and Jon Clemens, PA
Kim C. Keefer, PA
Kim D. Williams, et vir, Co
Kim Kann, PA
Kim R. Houseknecht,
et al., PA
Kimberly Grant, PA
Kimberly Winder, PA
Kirby L. Swope, PA
Kirk Liddell, PA
Kirk N. Lehman, et ux., PA
Kratzner K. Keiser, PA
Krista Kutney, et al., PA
Kristen Carpenter, PA
Kristi Cirelli, PA
Kristin Hale, PA
Kristin Isenberg, NY
Kyle H. Brightbill, et ux., PA
L. G., PA
L. Leshner, PA
Lamar E. Kanagy, et ux., PA
Lancosky Helga, PA
Larry A. Deer, PA
Larry C. Sheerer, PA
Larry D. Hepler et al., PA
Larry E. Douts, et ux., PA
Larry E. Kreiser, et al., PA
Larry E. Eisenhart, PA
Larry G. Puderbach
et ux., PA
Larry H. Klinger et ux., PA
Larry L. Shearer, PA
Larry L. Waltz, et al., PA
Larry Lansberry, et al., PA
Larry M. Davidhizar,
et ux., PA
Larry Martin, PA
Larry R. Kortright, PA
Larry R. Wolfe, et al., PA
Larry W. Fausey, et al., PA
Laszo Varju, NJ
Lauback Karen, PA
Laura Kemmick, PA
Laura Levy, PA
Laura Long, PA
Laura Newcomer, PA
Laura Wilson, PA
Lauren Johnson, PA
Laurie A. Dekonty, PA
Laurie Long, PA
Laurie Wurster, PA
Lawrence H. Cox, MD
Lawrence L. Strang, MD
Lawrence M. Shaw Jr.,
et ux., PA
Lawrence M. Shaw, Jr., PA
Lawrence Recla Jr., et al., PA
Lawrence Spadine, PA
Lawrence Thomas, et ux., PA
Leanne Ferree, PA
Leanne Mazurick, PA
Lee Edward Gearheart, PA
Lee R. Hitz, et ux., PA
Lela M. Forry, PA
Leland C. Sickler, PA
Lelia K. Drake, PA
Lemuel and Judith
Futcher, TX
Leo S. Dragon, Jr., PA
Leona Bennett, PA
Leonard Beecher, PA
Leonard Browski, PA
Leonard F. Cecco, PA
Leonard R. Beecher,
et ux., PA
Leroy Adams, Sr., et ux., PA
Leroy Baker, PA
Leroy W. Jordan, et ux., PA
Les Jarrard, PA
Leslie W. Black, et ux., PA
Lester and Beatrice
Martin, PA
Lester B. Weaver, et al., PA
Lester G. Oberholtzer,
et ux., PA
Levi S. Esh, et ux., PA
Lewis Harter, PA
Lewis Wesley Shore, Jr., PA
Lexi Zola, PA
Lillian R. Smith, PA
Linda and John
Dietrichson, PA
Linda and Tom Shuman, PA
Linda C. L., PA
Linda Dewalt, PA
Linda G. Quodomine, PA
Linda Hafer, PA
Linda Hartung, PA
Linda J. Hess, PA
Linda L. Farst, PA
Linda Loretz, MD
Linda McCormick, PA
Linda Pencek, et vir, PA
Linda Pipon, PA
Linda Pyle, PA
Linda Resseguie, PA
Linda Snyder, PA
Linda Tomasacci, PA
Lindsey A. Nauman,
et al., PA
Lindsey Edgell, PA
Linnea Miller, PA
Lisa Aichele, PA
Lisa M. Longenecker, PA
Lisa R. Garrett, PA
Lisa Stickley, PA
Lloyd E. Kremser, PA
Lois F. Stauder, PA
Lois H. Stredny, PA
Lois J. Williams Ide, PA
Lois Stauder, PA
Loren J. Klingaman, PA
Lori A. Longenecker, PA
Lori Benner, PA
Lori Boysha, PA
Lori Lockwood, PA
Lorraine L. Light, PA
Lorraine Paulewicz, PA
Lorrie and Bill Bernoski, PA
Louis F. Foshay, et ux., PA

APPENDIX A (cont'd)

Individuals (cont'd)

Louis Spadine, Jr., PA
Louise King, PA
Louise McClurg, Oh
Lowell L. Brubaker,
et al., PA
Lucille C. Conahan, PA
Luella W. Jardine, Etal, VA
Luis A. Vargas, et ux., PA
Luke and Leslie Bunting, PA
Luke Vastine, PA
Lulu Kman, NY
Lura Wasieslu Good, PA
Lycholaj, Daniel E., PA
Lydell E. Nolt, PA
Lynda Like, et al., PA
Lynette Fisk, PA
Lynn C. Appelman, PA
Lynn Evans, PA
Lynn L. Hoagland, et al., PA
Lynn N. Bender, PA
M F. Kelley Jr et ux., PA
M. Hippey, PA
M. L., PA
M.F. Kelley Jr et ux., PA
Madeline G. Snyder, PA
Madison Shiner, PA
Mae Diehl, et al., PA
Malcolm Parry, et ux., PA
Malinda Clatterbuck, PA
Marc Regula, PA
Marchel Robin Wilson, MD
Marcia J. Klinger et ux., PA
Marcie Natale, PA
Marcus Adams, PA
Marcus C. Jurgenson,
et ux., PA
Marcus Casaldi, PA
Marcy Perry, PA
Margaret A. Spiese, PA
Margaret Justick, PA
Margaret Manzer, et vir, PA
Margaret Woodcock, PA
Margo Farneth, PA
Margot L. Brubaker, PA
Marian M. Spangler, PA
Marianne Freeman,
et ux., PA
Marie D. Swicklik, PA
Marie Fetterolf, PA
Marilyn Murphy, PA
Marina G. Nantier, VA
Mario Chiariello, PA
Mark A. Dimock, PA
Mark Alan Deitzler,
et ux., PA
Mark Atlee, PA
Mark Brown, PA
Mark C. Carr, et ux., PA
Mark C. Kohreherr,
et ux., PA
Mark Conforth, et ux., PA
Mark Gerrish, PA
Mark Harris, PA
Mark Heuer, PA
Mark Hinkley, et al., PA
Mark J. Davies, PA
Mark L. Werni, PA
Mark M. Gatti, PA
Mark W. Hess, et ux., PA
Mark Wayne Woodward, PA
Marlene A. Newburn, PA
Marlin G. Wenger, et al., PA
Marsha J. Kline-Cooper, PA
Martee Dollman, PA
Martha Casaldi, PA
Martha F. Herr, et al., PA
Martin B. Heistand, et al., PA
Marvin Seward, et ux., PA
Marvin W. Johnson, Jr., PA
Mary Ann Fisher, PA
Mary Ann Hopfer, PA
Mary Ann Schlegel, PA
Mary Anna Bowers,
et al., PA
Mary E. Haverstick, PA
Mary E. Kristunas, et al., PA
Mary F. Pickarski, PA
Mary Ferris, PA
Mary Francis Azary, PA
Mary G. Whitman, et al., PA
Mary Glazier, PA
Mary Gummerson, PA
Mary Jacob, PA
Mary Jane Kreisler, PA
Mary Jo Baloga, et al., PA
Mary Kathryn Estep, PA
Mary Kay Briganti, et al., CT
Mary L. Thomas, PA
Mary Louisa Urquhart
Bryant, NC
Mary N. Urban, PA
Mary Ruth Gertz, PA
Mary S. Heistand, PA
Mary, PA
Maryan McCormick, PA
Mary-Lynn McBride, PA
Mathew Banashefski, FL
Matthew A. Keperling,
et al., PA
Matthew Deihl, PA
Matthew Hiltz, et ux., PA
Matthew J. Bomgardner,
et ux., PA
Matthew J. Heisler et ux., PA
Matthew J. McCrone,
et ux., PA
Matthew R. Collura,
et ux., PA
Matthew Thomes, PA
Matthew Wengert, PA
Max R. Robbins et ux., PA
Meade G. Peters, et al., PA
Megan Detter, PA
Megan Swartz, PA
Meghan Houseal, NJ
Melissa Ann Ritsick, et
vir, PA
Melissa Gerlach, PA
Melvin and Patti Yvonne
Morris, PA
Melvin R. Caldwell,
et al., PA
Melvin R. Weaver, et al., PA
Menno B. Stoltzfus,
et ux., PA
Merle M. Aukamp, et ux., PA
Merle W. Martin, et al., PA
Merrill Dan Borntreger, PA
Merritt S. Saxe, et ux., PA
Mervin and Janet
Kreider, PA
Mervin D. Shenk, et ux., PA
Mervin R. Smoker, et ux., PA
Michael A. Bressi, et ux., PA
Michael A. Morris, PA
Michael B, PA
Michael Bartko, PA
Michael Bressi, PA
Michael C. Troop, et ux., PA
Michael Cupinski, PA
Michael D. Shireman, PA
Michael D. Vandine, PA

APPENDIX A (cont'd)

Individuals (cont'd)

Michael Demarco and Elaine Pongratz, PA
Michael E. Houseknecht et ux., PA
Michael E. Lawrence, et al., PA
Michael E. Nissly, et ux., PA
Michael Eshleman, PA
Michael Fiorentino, PA
Michael G. Pavlides, MD
Michael G. Wisnosky, PA
Michael Garman, PA
Michael J. Derhammer, et ux., PA
Michael J. Irish, et al., PA
Michael J. Konon, et ux., PA
Michael J. Paone, PA
Michael Kast, PA
Michael King, PA
Michael Manganella, et ux., PA
Michael Martin, PA
Michael Matylewicz, PA
Michael Pearson, MD
Michael R. Barnes, PA
Michael R. Guinto et al., PA
Michael S. Giamber, PA
Michael S. Ressler, et al., PA
Michael S. Shuey, PA
Michael S. and Deirdre E. Everhart, PA
Michael Strendy, PA
Michael T. Fruit, PA
Michael T. Measley, PA
Michael W. Richards, et ux., PA
Michael W. Stine, et al., PA
Michale R. Perry, et al., PA
Michele Bretski, PA
Michelle Casaldi, et vir, PA
Michelle Cioffi, PA
Michelle Krum et al., PA
Michelle Spitko, PA
Mikaula Chakon, PA
Mike Brown, PA
Mike Horst, PA
Mike Hreben, PA
Mildred L. Kline, et al., PA
Mirabelli, Doris Catherine, PA

Mitchell S. Weaver, et ux., PA
Mitchell Weaver, PA
Mitchell, Meryllil, and Mark Tombasco, PA
Mitzi Lennartz, PA
Monica A. Hatton, PA
Monta D. Labs, et ux., PA
Monty D. Hittle, et al., PA
Moriajeanne Fitzgerald, PA
Myrl L. Hershey, PA
Myrl L. Troutman, et ux., PA
N. Clayton Fetterman, et al., PA
Nancy Blechschmidt, PA
Nancy E. Jeffries, PA
Nancy L. Tipka, PA
Nancy M. Starr, PA
Nancy P. Haudenschild, PA
Nathan D. Roberts, PA
Nathan S. and Tina M. Wiggins, PA
Ned Lurowist, PA
Neil Bushong, et ux., PA
Neil G. Reeb, et al., PA
Neil R. Bushong, et ux., PA
Neil R. Wingenroth, PA
Neil Ward, PA
Nelson and Sharon Sherman, PA
Nelson J. Ashburner, PA
Nelson L. Fahnestock, et al., PA
Nelson Martin, et ux., PA
Nelson N. Weaver, et al., PA
Nicholas A. Snavely, et ux., PA
Nick Bergstrom, et ux., PA
Nick Gallagher, PA
Nick Martin, PA
Nikolay Chinikaylo, et ux., PA
Norman O. Lingenfelter, MD
Olga L. Treadwell, MD
Omar S. Kauffman, et ux., PA
Osvalds Daugulis, PA
Pamela Adams, PA
Pamela Fisher, et vir, PA
Pamela Weedo, et al., NJ
Particia Fonzi, PA

Pasquale Monaco, PA
Pat Eiserer, PA
Patricia A. Belsinger, MD
Patricia A. Griffin, PA
Patricia A. Kent, PA
Patricia A. Lewin, PA
Patricia A. Weaver, PA
Patricia Galezniak, PA
Patricia Gottschall, PA
Patricia Herr, PA
Patricia Parisio, PA
Patricia Wetzel, PA
Patricia Witmer, PA
Patrick and Sandra Boyle, PA
Patrick D. Wood, PA
Patrick J. Kerwin, et ux., PA
Patrick J. McGoldrick, et ux., PA
Patrick J. Sceppa, et al., PA
Patrick T. Holgate, et ux., PA
Patrick W. Geddes, MD
Patsy Danley, PA
Patti Evans, PA
Patti Kramer, PA
Patty Y. Barley, PA
Paul A. Miles, PA
Paul and Bonnie Stoeckl, PA
Paul B. Zechman, PA
Paul Bruhaller, PA
Paul C. Schatz, PA
Paul D. Funk, et ux., PA
Paul Dronek, PA
Paul E. Hawryliak et ux., PA
Paul E. Snyder, et ux., PA
Paul Gangemi, MD
Paul H. Reinbold, Sr., et ux., PA
Paul Heaps, PA
Paul Joseph Hansen, PA
Paul K. Harnish, et ux., PA
Paul Kettering, PA
Paul L. Luttrell, et ux., PA
Paul L. Stutzman, Jr., et al., PA
Paul M. Fahnestock, et al., PA
Paul N. Newcomer, et al., PA
Paul R. Carr, et ux., PA
Paul R. Henning, PA
Paul Rowlands, et ux., PA
Paul Salansky, et ux., PA

APPENDIX A (cont'd)

Individuals (cont'd)

Paul T. Flinchbaugh,
et ux., PA
Paul V. Nissley, et ux., PA
Paul W. Navarro, PA
Paul Z. Bogart, et al., PA
Paula A. Weatherill,
et ux., PA
Paula R. Schadel, PA
Paulette Zardecki, PA
Peggy Wenger, PA
Penni A. Schaffer et ux., PA
Peter B. Thompson, et ux.,
FL
Peter Doyle, et ux., PA
Peter G. Tipka, PA
Peter I. Hanson, et ux., PA
Peter J. Brandner, et ux., NJ
Peter J. Masteroianni,
et ux., PA
Peter J. Obourn, et ux., PA
Peter Petokas, et ux., PA
Peter Polinsky Jr., et al., PA
Philip D. Nolt, et al., PA
Philip M. Hershey, PA
Philip O. Shank, et al., PA
Phillip L. Smith, PA
Phillip R. Barley, PA
Phyllis Lott, MD
Phyllis Robert, PA
R L, PA
R Merle Breneman, et al., PA
R Scott Hoover, PA
R. Jill Snavely, PA
R. Lynn Lunger, TN
Rachel Rood, et al., PA
Rachelle Rogers, et vir, PA
Ralph D. Bennett, MD
Ralph Duquette, PA
Ralph E. Green, et al., PA
Ralph F. Marks et al., PA
Ralph Freed, PA
Ralph Henry Maurer,
et ux., PA
Ralph J. Casaldi, et ux., PA
Ralph W. and Debra A.
Siefken, PA
Randall L. Tietsworth,
et ux., PA
Randall P. Voorhees, PA
Randall Walsh, PA
Randy and Diane
Winters, PA
Randy G. Brown, PA
Randy J. Hostetter, et al., PA
Randy Winters, et ux., PA
Raphl Mark Huber,
et ux., PA
Ray Applegate and Nicole
Trefsger, PA
Ray K. Simpson, GA
Ray Smith, NY
Raymend Frantz, et al., PA
Raymond and Joyce
Zakrewsky, PA
Raymond C. Cahoon, PA
Raymond Finnen III, PA
Raymond Frantz, et al., PA
Raymond H. Perritt,
et al., PA
Raymond J. Sokol, et ux., PA
Raymond Jackloski Jr., PA
Raymond Mohler, PA
Raymond Oscar Fisher,
et ux., PA
Raymond S. Mohler,
et ux., PA
Raymond Victor Miller, PA
Reagan Hynick, Et Vir, PA
Reagan Lynn, et al., PA
Reaves F. Goehring, III, PA
Rebecca Pawlik, PA
Regan Jones, PA
Rehm Erricke, PA
Renee Didrio, PA
Reuben B. Zook, et ux., PA
Reuben H. Wenger,
et ux., PA
Rex T. Mohr, PA
Richard A. Bombick,
et ux., PA
Richard A. Conner,
et ux., PA
Richard A. Ivey, et ux., PA
Richard A. Kroh, et ux., PA
Richard A. Rarba, et ux., PA
Richard and Cynthia
Moses, PA
Richard and Kristen
Angelicola, et ux., PA
Richard B. Drager, PA
Richard Bechetti, et ux., PA
Richard Blouch, PA
Richard Burroughs, VA
Richard C. Stroud, et al., PA
Richard Demond, PA
Richard E. Bowman,
et ux., PA
Richard E. Nye, et ux., PA
Richard E. Weeks, et ux., PA
Richard H. Maciejewski, PA
Richard J. Dabulis, et ux., PA
Richard J. Newell, PA
Richard J. Withelder,
et ux., PA
Richard K. Deibler, PA
Richard Kingsbury, PA
Richard L. Custer et al., PA
Richard L. Fetterman,
et al., PA
Richard L. Gearhart, PA
Richard L. Gochnauer,
et ux., PA
Richard L. Mitchell,
et ux., NJ
Richard L. Lind, PA
Richard M. Davis, et ux., PA
Richard M. Savidge,
et ux., PA
Richard Mertz, PA
Richard R. Jerauld, PA
Richard Roberts, PA
Richard Rupert et al., PA
Richard S. Kauffman,
et al., PA
Richard S. Miller, PA
Richard Sranski, PA
Richard Stine, et al., PA
Richard Vreeland, et al., PA
Richard W. Brown,
et ux., PA
Richard W. Jeffries, PA
Richard, Whitney, Sharon,
and Eric
Heydenreich, PA
Richarda M. Dehl, PA
Rick D. Rye, et ux., PA
Rick Newcomber, PA
Rickey A. Garvin, et ux., PA
Rifat Abousy, MD
Rob Fisher, PA
Robert A. Funk, et al., PA
Robert A. Housel, et ux., PA

APPENDIX A (cont'd)

Individuals (cont'd)

Robert A. Puchalski, PA
Robert A. Shebelsky,
et ux., PA
Robert A. Sowers, et al., PA
Robert Alan Concini, PA
Robert and Carolyn
Kilgour, PA
Robert and Jo A. Wright, PA
Robert and Melanie
Engelhardt and Sharon
Hopping, PA
Robert B. Barton, IV, PA
Robert B. Barton, PA
Robert B. Weinstock,
et al., PA
Robert Barna, PA
Robert C. Boyles, et ux., PA
Robert C. Lee, PA
Robert D. Atkinson, PA
Robert D. Klinger, et ux., PA
Robert Derhammer,
et ux., PA
Robert E. Baer, PA
Robert E. Becker, PA
Robert E. Kopitsky, PA
Robert E. McMaster
et al., PA
Robert E. Long, PA
Robert F. Cross, et al., PA
Robert G. Adams et ux., PA
Robert G. Ryan, et ux., PA
Robert G. Witmer, PA
Robert Gordon, et ux., PA
Robert H. Fruit, et ux., PA
Robert H. Harbaugh,
et al., PA
Robert Heydenreich, PA
Robert J. Keagy, et al., PA
Robert J. Koons, et ux., PA
Robert J. Maciejewski, PA
Robert J. Wienckoski,
et ux., PA
Robert L. Altomare,
et ux., PA
Robert L. Ciravolo, PA
Robert L. Hilton, et al., PA
Robert L. Koppenhaver,
et ux., PA
Robert Long, et al., PA
Robert M. Chaney, PA
Robert M. Kalinoski, PA
Robert M. Wisdo, et ux., PA
Robert M. Adams, PA
Robert Matylewicz,
et ux., PA
Robert Mazzerle, et ux., PA
Robert N. Brandt, et ux., PA
Robert N. Rishel, et ux., PA
Robert O. Erisman, Jr.,
et al., PA
Robert O. Tyler, et al., PA
Robert P. Donough, PA
Robert R. Houser et ux., PA
Robert S. Kunkle, PA
Robert T. Kay, et ux., NY
Robert Vian, PA
Robert W. Callahan, Jr.,
et ux., PA
Robert W. Callahan, Jr.,
et ux., PA
Robert W. Leventhall, PA
Robert Webber, PA
Robin Maguire, PA
Robyn Kochar, PA
Rodney Fiddler, PA
Rodney L. Fidler, PA
Rodney L. Shaner, et ux., PA
Roger D. Conrad, NJ
Roger Mitchell, PA
Roger Savage, PA
Roger Shenk, et al., PA
Roland C. Steiner, MD
Rolland Hockenbroch, PA
Roman P. Kostyk, PA
Ron Beer, PA
Ronald Alan Long and Sylvia
Marie Long, PA
Ronald B. Moore, et ux., PA
Ronald B. Whitesell,
et ux., PA
Ronald C. Detwiler, PA
Ronald Dietz, et al., PA
Ronald E. Mansell, et ux., PA
Ronald E. Roye, et ux., PA
Ronald H. Knoebel, PA
Ronald Hess, PA
Ronald J. Filarski, et ux., PA
Ronald J. Reed, PA
Ronald L. Boltz, Jr., PA
Ronald L. Bortner,
Ronald L. Laughlin, PA
Ronald Lahr, et al., PA
Ronald Long, PA
Ronald M. and Darlene
Zimmerman, PA
Ronald Mutkus, PA
Ronald P. Wert et ux., PA
Ronald R. and Camilla Ann
Diltz, PA
Ronald R. Hileman and
Shirley J. Hileman, PA
Ronald R. Schamber, PA
Ronnie and Linda Shopf, PA
Rose Stackhouse, PA
Rosemary A. Moore, PA
Roy and Mindy Ronald, PA
Roy L. Brandt, et al., PA
Roy Robert Trudel, MD
Russell C. Seward, PA
Russell D. Olt, et ux., PA
Russell E. Mercer Jr., PA
Russell H. Beishline,
et ux., PA
Russell Kolody, PA
Russell Stepanchak,
et al., PA
Russo, La Sr Salvatore, PA
Ruth E. Shellenberger, PA
Ruth Ginder Borntreger, PA
Ruth Justice, PA
Ruth Linker, PA
Ryan A. Bast, PA
Ryan D. Funk, PA
Ryan J. Regec, et ux., PA
Ryan J. Skibo, et al., PA
Ryan McNulty, PA
S Emily Vincent, et ux., PA
S Russell Davis, PA
Sabine Spring, PA
Sallie Deichert, PA
Sallie Smith Dvm, PA
Sally and Daniel O'Neill
Towne, PA
Sally Wilson, PA
Salvatore La Russo, Sr., PA
Sam Joder, PA
Sam S. Fisher, MD
Samantha Milheim, PA
Samuel C. Stephens,
et al., NJ
Samuel E. Bryant, PA
Samuel E. Webb, PA

APPENDIX A (cont'd)

Individuals (cont'd)

Samuel F. Robbins,
et ux., PA
Samuel Gingerich, PA
Samuel Glick, et ux., PA
Samuel K. Stoltzfoos,
et ux., PA
Samuel Koplinka-Loehr, PA
Samuel Saylor, PA
Sandra Ann Chiampi, PA
Sandra Baker, PA
Sandra G. Suld, PA
Sandra J. Elderkin, PA
Sandra J. Shenk, PA
Sandra J. Thomas, et al., PA
Sandra Jewell, Et Vir, PA
Sandra L. Weaver, et al., PA
Sandra Robinson, PA
Sara C. Keam, PA
Sara C. Ream, PA
Sarah Lamoreaux, PA
Sarah M. Kelley, PA
Sarita Farnelli, PA
Savage, William, PA
Scot Bowers, PA
Scott A. Brown, PA
Scott A. Smith, et al., PA
Scott A. Wolfe, PA
Scott and Glenda
Johnson, PA
Scott and Karen Edwards, PA
Scott B. Gates, PA
Scott D. and Mona L.
Bartholomew, PA
Scott D. Bartholomew,
et ux., PA
Scott Masich, PA
Scott McGary, PA
Scott Simons, PA
Scott, PA
Sean P. Stackhouse,
et al., PA
Seung Dae Moon, MD
Shannon Watson, PA
Sharon and Russell Olt, PA
Sharon L. Snyder, PA
Sharon, Gary, Saura
Rohrbach, PA
Shawn David Arters, PA
Shawn K. McCoy, et ux., PA
Sheila E. Lunger, PA
Sheila Riley, PA
Shelby Harrison, PA
Shelby Moser, PA
Sherrie Ann Marlow, PA
Sherry McNeil, PA
Sheryl Goss, PA
Sheryl McGettigan, PA
Shirley Bonham, et al., PA
Shirley Hartman, et al., PA
Shirley L. Davis, PA
Sidney R. Eachus, II,
et al., PA
Sierra Dumbaugh, PA
Simone Nicholson, MD
Sirik Sheila, PA
Sisto M. Moffa, PA
Sondra Wolferman, PA
Spencer Johnson, MA
Stacey Fague, PA
Stacy Robinson, PA
Stacy Wallick, PA
Stanley and Edith Martin, PA
Stanley H. Williams,
et ux., PA
Stanley Jaslar, et al., PA
Stefani Hauck, PA
Steph Leakway, PA
Stephanie J. Hanna, et al., PA
Stephen C. Landis, PA
Stephen D. Ashworth,
et ux., PA
Stephen D. Hoffman, PA
Stephen G. Aldinger,
et ux., PA
Stephen J. Myers, PA
Stephen J. Schweitzer, PA
Stephen J. Ruof, PA
Stephen L. Myers, PA
Stephen Lauback, PA
Stephen N. Midkiff,
et ux., PA
Stephen P. H. Clute IV, PA
Stephen R. Fetterman,
et al., TX
Stephen R. Havrilla III, PA
Stephen R. Schulze,
et ux., PA
Stephen Seier, et al., PA
Stephen Z. Fisher, et ux., PA
Steve A. Reigel, PA
Steve Bartholomew, PA
Steve Bergdoll, PA
Steve Erdly, PA
Steve Heim, PA
Steve Hendrickson, PA
Steve Kubik, et ux., PA
Steve Murray, PA
Steven C. Matukaitis, PA
Steven D. Zimmerman,
et ux., PA
Steven F. Henry, PA
Steven G. Miller, PA
Steven H. Stryker, PA
Steven Jamison Stover, MD
Steven L. Masteller,
et ux., PA
Steven L. and Debra A.
Appel, PA
Steven M. Manz, PA
Steven R. Sabol, PA
Steven T. Lancaster, PA
Steven T. Scoble, et ux., PA
Stever and Betsy Hribik, PA
Stuart A. Vosburg, et al., MD
Sue O'Donnell, PA
Sue Yoncuski, PA
Summer Konopinski, PA
Susan Fague, PA
Susan L. Shebel, MD
Susan L. Vance, PA
Susan Leiby Paldo, PA
Susan Nierenber, NJ
Susan Pantalone, PA
Susan R. Hopper, PA
Susan Richards, PA
Suzanne Hilner, PA
Suzanne M. Burgio, PA
Tabatha Smith, PA
Tamera Auten, PA
Tammy Chapin, PA
Tammy Jo Rhodes, PA
Tammy Kline, et vir, PA
Taylor Britton, PA
Ted E. Derrick, et al., PA
Terrance R. Beaver,
et ux., PA
Terri L. Curtis, et vir, PA
Terrie McAndrew, PA
Terry D. Rowe, et al., PA
Terry Jones, PA
Terry M. Nantier, VA

APPENDIX A (cont'd)

Individuals (cont'd)

Thaddeus Olshefski,
et ux., PA
The Heirs and Devisees of
Edward Soja, PA
The Heirs and Devisees of
Richard A. Lanning, PA
Theodore L. Esbenshade,
et al., PA
Theresa Oneskourn, PA
Theresa S. Chesney, PA
Theresa Walasek, et al., FL
Thomas A. Breneman,
et ux., PA
Thomas A. Fisher, et ux., PA
Thomas A. Graby, et ux., PA
Thomas A. Kristunas, PA
Thomas A. Williams,
et ux., PA
Thomas and Rachel
Minnich, PA
Thomas and Susan
Wilson, PA
Thomas Balko, et ux., PA
Thomas Brody, et ux., PA
Thomas Brown, et ux., PA
Thomas Clark, PA
Thomas D. Shuey, et ux., PA
Thomas D. and Geraldine
Grassel, PA
Thomas E. Heffernan, FL
Thomas E. Lloyd, MD
Thomas E. Mecca, PA
Thomas E. Nauman,
et ux., PA
Thomas E. Rhone, et ux., PA
Thomas E. Smith, et ux., PA
Thomas F. Edwards,
et al., PA
Thomas F. Leibel, PA
Thomas F. Minnich, PA
Thomas F. Nikolaus, PA
Thomas F. Zimmerman, PA
Thomas F. Edwards,
et al., PA
Thomas G. Bomgardner,
et ux., PA
Thomas J. Perna, MD
Thomas J. Ware, et ux., PA
Thomas L. Ohl, et al., PA
Thomas M. Roberts Jr.
et ux., PA
Thomas M. Shadle, et al., PA
Thomas M. Shirey, et ux., PA
Thomas M. Smith, PA
Thomas N. Batchelor II, PA
Thomas R. Brown, PA
Thomas R. Kensinger,
et al., PA
Thomas Voda, et al., PA
Thomas W. Bryon, et ux., PA
Thomas W. Voda, et al., PA
Thomas Williams, TX
Tiffany Hunsinger, PA
Tiffany M. Coho, PA
Tim Fornadley, PA
Tim Pezzoli, DC
Timothy and Melissa
Keener, PA
Timothy Beaver, PA
Timothy Cotmer, PA
Timothy E. Haddle, PA
Timothy Inns, et al., PA
Timothy J. Desmond, PA
Timothy J. Eshleman, PA
Timothy K. McWilliams,
et ux., PA
Timothy L. Spiese, PA
Timothy M. Captain,
et ux., NJ
Timothy W. McAndrew, PA
Tina Kistler, PA
Tina Westover, PA
Tobin A. Shank, PA
Todd Ament, PA
Todd R. Schwalm, PA
Todd R. Singley, et ux., PA
Todd W. Studebaker,
et ux., PA
Tom and Mary
Gummerson, PA
Tom Barnand, PA
Tom Campbell, PA
Tom Droege, PA
Tom Seltzer, PA
Tony Crocamo, PA
Torrance R. Gensel,
et ux., PA
Townsend F. Hug, PA
Tracey Rohrer McVey, PA
Tracy G. Beck, et ux., PA
Tracy Niedzwiecki,
et ux., PA
Trenton A. Miller, PA
Trish Hafer, PA
Troy D. Shepro, PA
Troy H. Knerr, PA
Turner L. Newburn,
et ux., PA
Tyler E. Ernst, et al., PA
Tyler Lanning, et al., PA
Valerie Coulson, PA
Valerie Hendrickson,
et al., PA
Valerie L. Miller, PA
Vera and Verner Lewis, PA
Vernon Piersol, PA
Vernon W. Heisey, et al., PA
Veronica Shevock, et al., MD
Vicki Bennick, PA
Vicki L. Grove, PA
Victor C. Choplosky, PA
Victor G. Pursel, et ux., PA
Victor L. Boers, et ux., PA
Victor Nestico, PA
Victoria Jones, PA
Victoria S. Reeves, et ux., FL
Vincent J. Masco, PA
Vito Pilosi Jr., PA
Voilet Kozubal, et vir, PA
Vreeland Vreeland, et al., PA
W. D., PA
W. Harry Schaffer, PA
W. Pursel, PA
W.S. Robert Shaw, PA
Wade P. Frantz, PA
Walter and Robyn
Kochan, PA
Walter E. Minto, et ux., PA
Walter G. Heck, PA
Walter Harris Howell Jr., PA
Walter Mackiw, PA
Walter Mikus, et ux., PA
Walter R. Lindenmuth,
et ux., PA
Walter S. Woznicki, PA
Walter V., PA
Walter W. Kochan and
Robyn Sterling
Kochan, PA
Warren N. Reiff, et ux., PA
Wayne Bizup, et ux., NJ

APPENDIX A (cont'd)

Individuals (cont'd)

Wayne Bizup, et ux., PA
Wayne E. Shultz, et al., PA
Wayne Fetty, PA
Wayne Frederick, et ux., PA
Wayne J. Newman, PA
Wayne M. Fausey, et ux., PA
Wayne Mutchler, PA
Wayne Reno, PA
Wayne Watts, PA
Wayne Weaver, et ux., PA
Wende Swartz, PA
Wendy Gable, PA
Wesley C. Nolan, PA
Wesley E. Murry, PA
Wilbur Stout, PA
Wilfredo Perez, et ux., PA
Will Christensen and Tabitha
Gheen, PA
Willard Comstock, et al., PA
Willard J. Race Jr., PA
Willard Novitch, PA
Willard R. Bullock, PA
William and Constance
Morgan, PA
William and Dolores
Smith, PA
William B. Allegar,
et ux., PA
William B. Everett,
et ux., PA
William C. Bard, PA
William Celmer, PA
William D. Brown, et ux., PA
William D. Graby, PA
William D. Paterson Jr., VA
William Dean Zewan, PA
William Derhammer,
et ux., PA
William E. Zick, et ux., PA
William F. Bennett, et al., PA
William G. Bastian,
et ux., PA
William G. Belloff, et al., PA
William G. Bernoski,
et ux., PA
William G. Dengler,
et ux., PA
William G. Pencek,
et ux., PA
William Gordon, PA
William H. Wainwright,
et al., PA
William J. Bernheisel,
et ux., PA
William J. Billets, et ux., PA
William J. Miller, et ux., PA
William J. Napier, et ux., PA
William J. Petkavich, Jr., PA
William K. Poust et ux., PA
William K. Johnson, PA
William Karis, et al., PA
William L. Bake, MD
William L. Jesse, PA
William L. Weber, PA
William Leavy, NM
William M. Deibler
et ux., PA
William M. Regitz, PA
William M. Riggins, De
William M. Savage, PA
William M. Smith, Jr.,
et ux., PA
William M. Smith, PA
William R. Allison,
et ux., PA
William R. Rohrer, PA
William Readler, PA
William S. and Nancy M.
Rankin, PA
William V. Weiler et ux., PA
Williams E. Streater,
et al., PA
Williard Comstock,
et ux., PA
Wilmer K. Smucker,
et ux., PA
Yvonne and Neil Young, PA
Yvonne M. Katerman, PA
Zack Kanfel, PA
Zhi He, MD
Zigmond Rezykowski,
et ux., PA

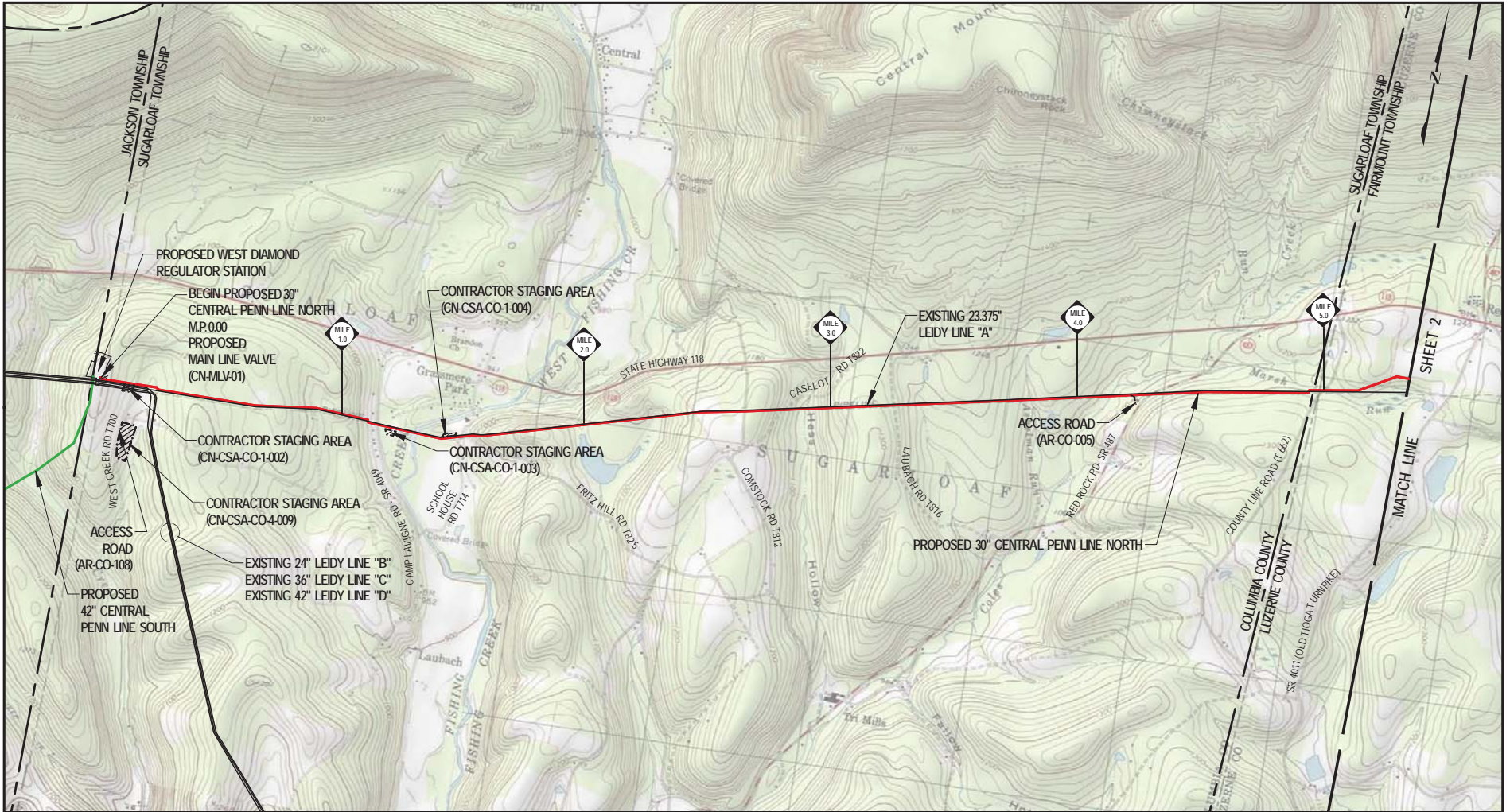
APPENDIX B

**PROJECT OVERVIEW MAPS, CATHODIC PROTECTION WORKSPACE DRAWINGS,
BEST MANAGEMENT PRACTICE FIGURES, AND TYPICAL RIGHT-OF-WAY DRAWINGS**

PROJECT OVERVIEW MAPS

Central Penn Line North

B-5



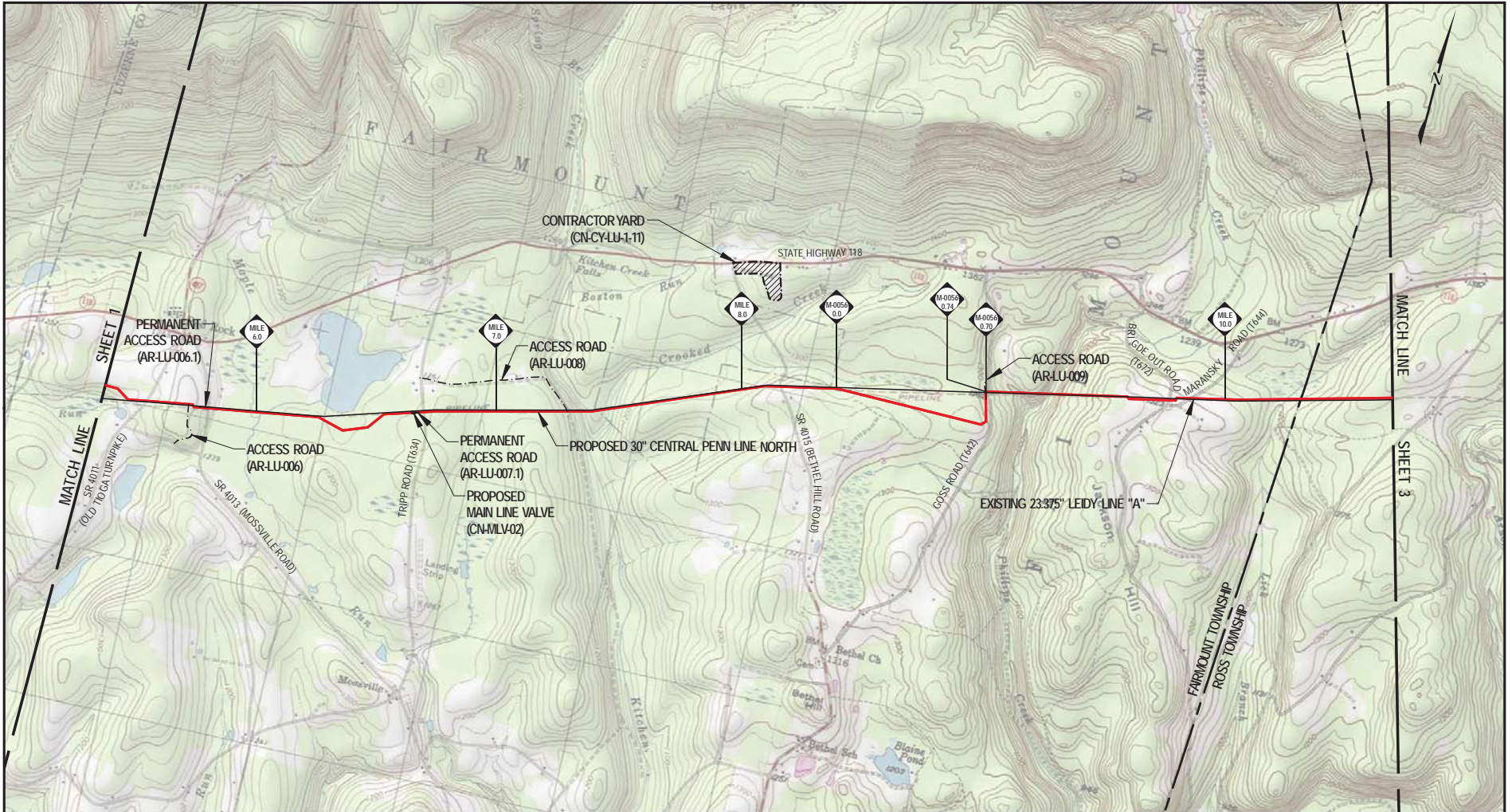
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- PROPOSED 30" CENTRAL PENN LINE NORTH
- PROPOSED 42" CENTRAL PENN LINE SOUTH
- EXISTING PIPELINE
- x- FENCE LINE
- - - ACCESS ROADS
- - - - - COUNTY/TOWNSHIP BOUNDARY
- CONTRACTOR STAGING AREA
- CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
 41076-C4 (ELK GROVE, PA)
 41076-C3 (RED ROCK, PA)

0 2,000 4,000 6,000
 SCALE IN FEET

Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line North



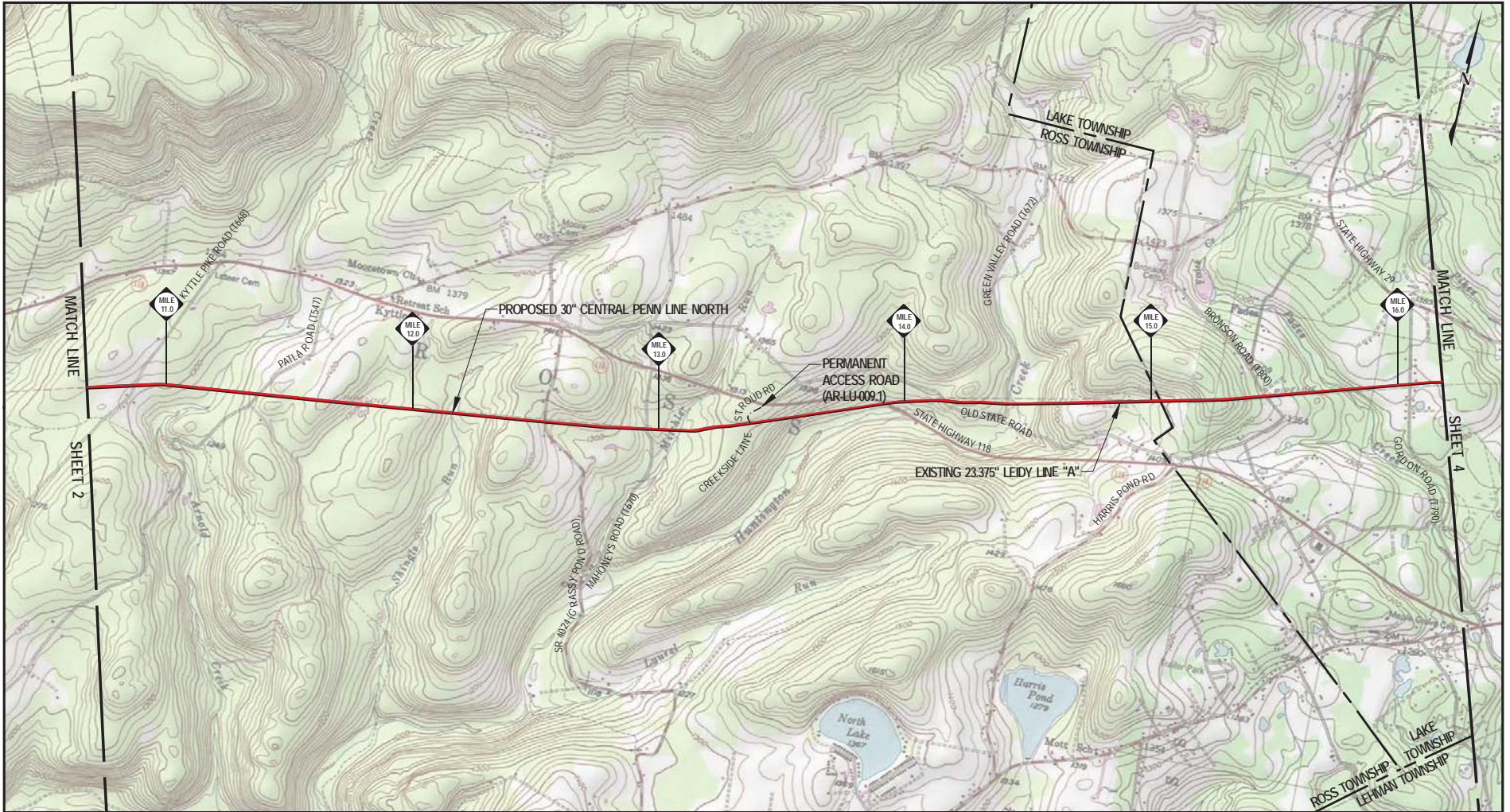
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- PROPOSED 42" CENTRAL PENN LINE SOUTH
- EXISTING PIPELINE
- x- FENCE LINE
- - - ACCESS ROADS
- - - COUNTY/TOWNSHIP BOUNDARY
- CONTRACTOR STAGING AREA
- CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41076-C3 (RED ROCK, PA)
41076-C2 (SWEET VALLEY, PA)

0 2,000 4,000 6,000
SCALE IN FEET

Appendix B
Atlantic Sunrise Project
Project Overview Maps
Central Penn Line North



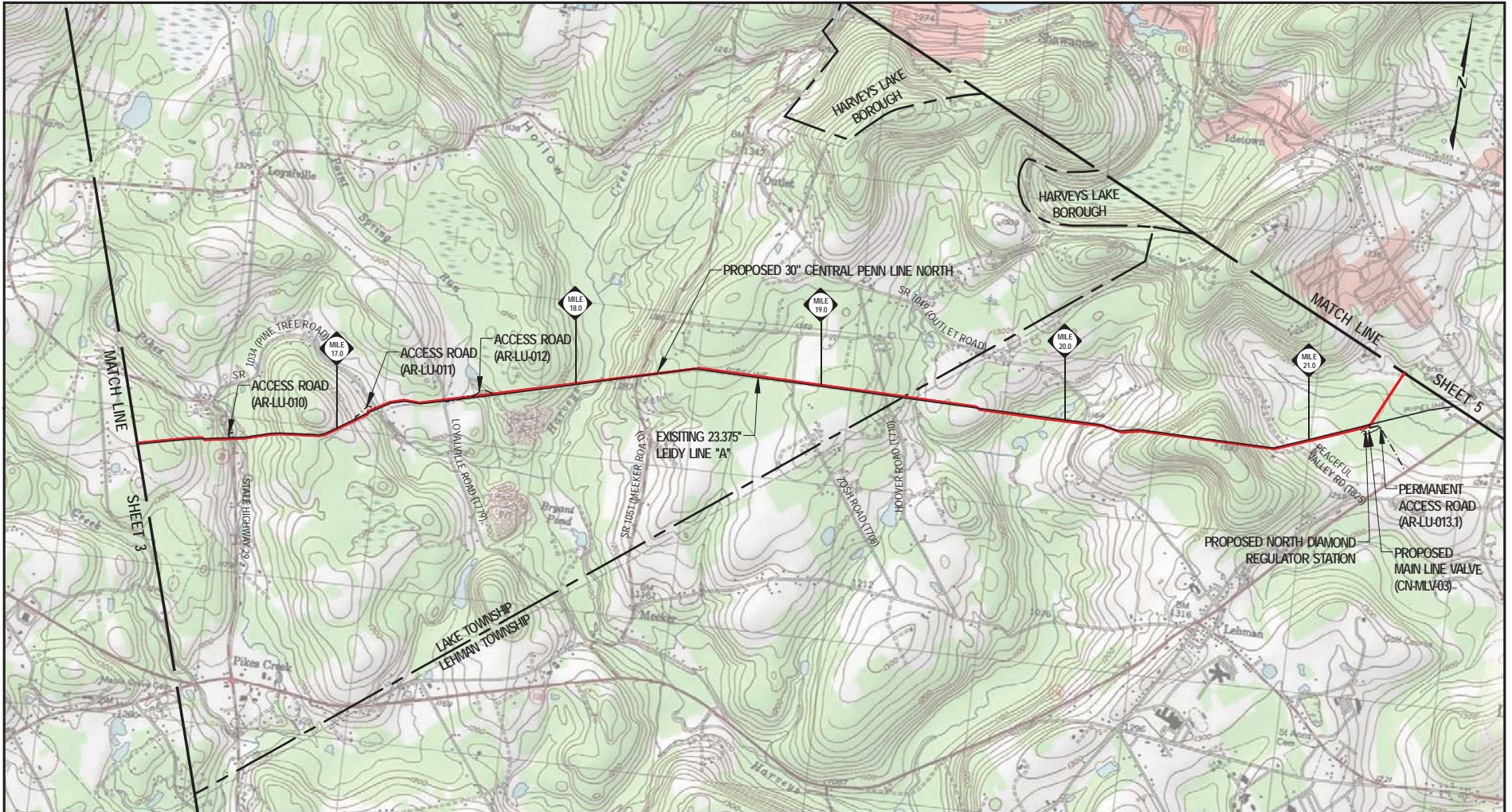
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- PROPOSED 42" CENTRAL PENN LINE SOUTH
- EXISTING PIPELINE
- X- FENCE LINE
- - - ACCESS ROADS
- - - COUNTY/TOWNSHIP BOUNDARY
- CONTRACTOR STAGING AREA
- CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
 41076-C2 (SWEET VALLEY, PA)
 41076-C1 (HARVY'S LAKE, PA)

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 SCALE IN FEET

Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line North



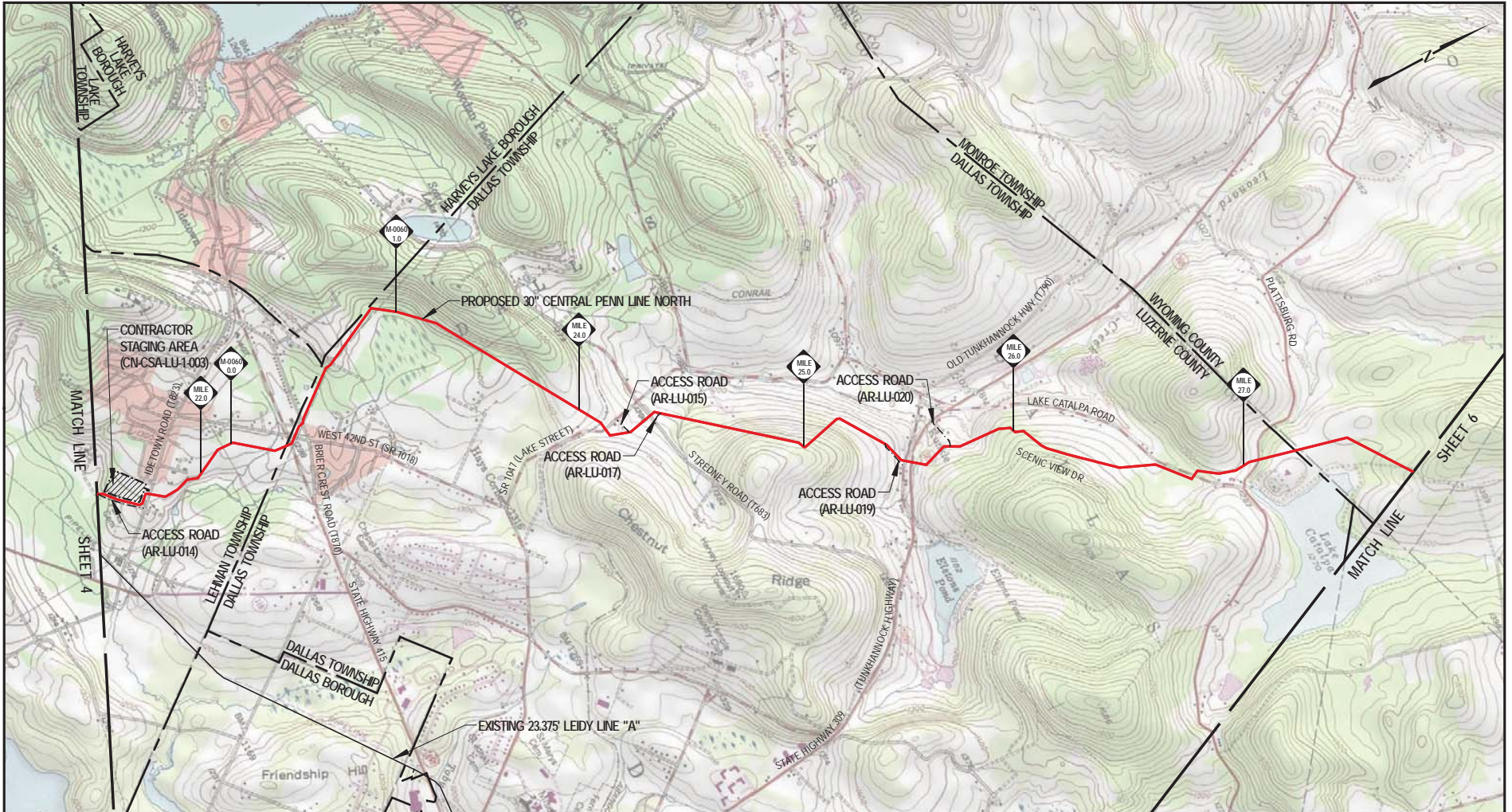
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	FENCE LINE
	ACCESS ROADS
	COUNTY/TOWNSHIP BOUNDARY
	CONTRACTOR STAGING AREA
	CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41076-C1 (HARVEYS LAKE, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Central Penn Line North

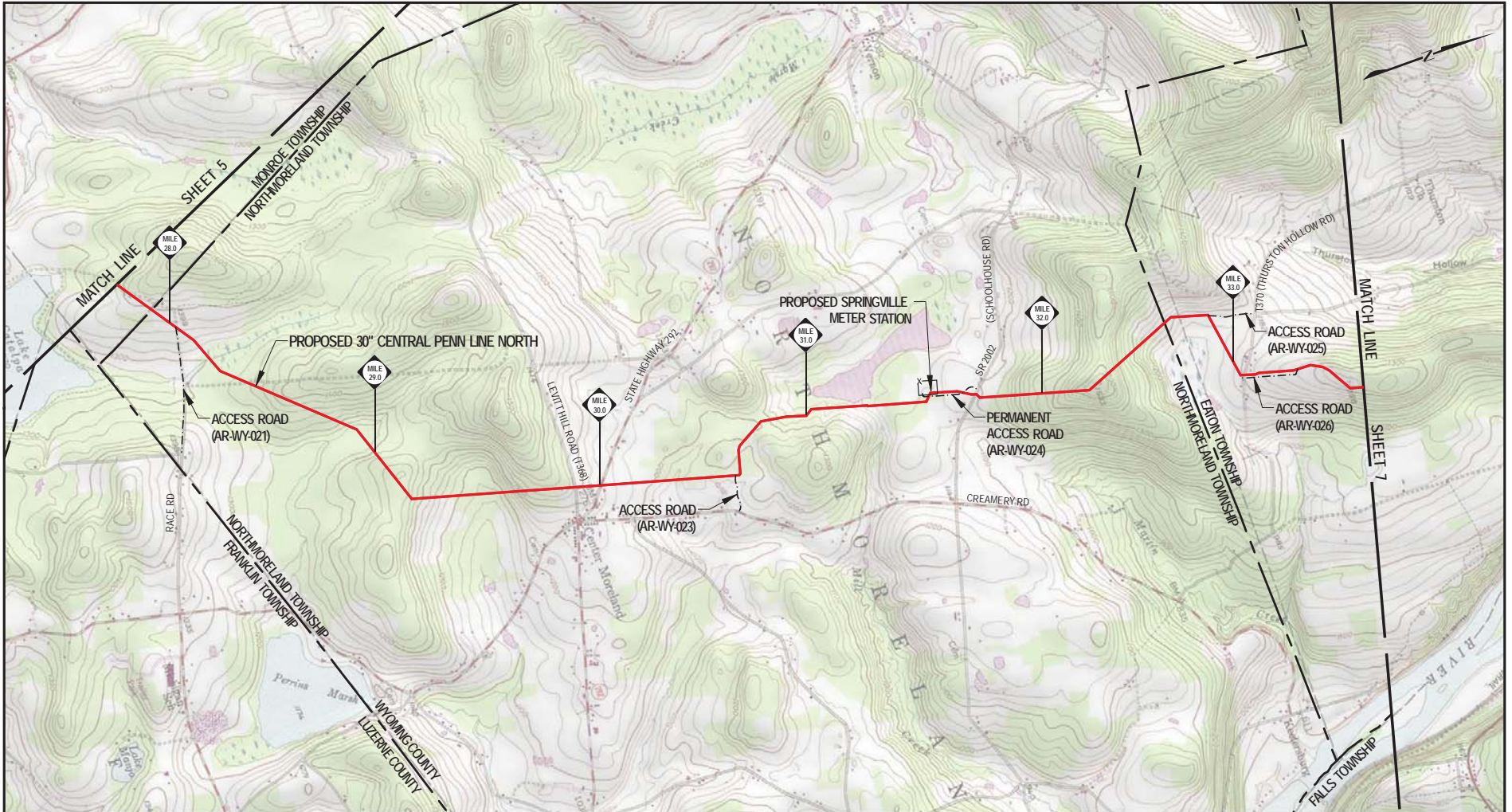


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- PROPOSED 30" CENTRAL PENN LINE NORTH
 - PROPOSED 42" CENTRAL PENN LINE SOUTH
 - EXISTING PIPELINE
 - - - FENCE LINE
 - - - ACCESS ROADS
 - - - COUNTY/TOWNSHIP BOUNDARY
 - CONTRACTOR STAGING AREA
 - CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
 41076-C1 (HARVEY'S LAKE, PA)
 41075-C8 (KINGSTON, PA)
 41075-D8 (CENTER MORELAND, PA)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line North



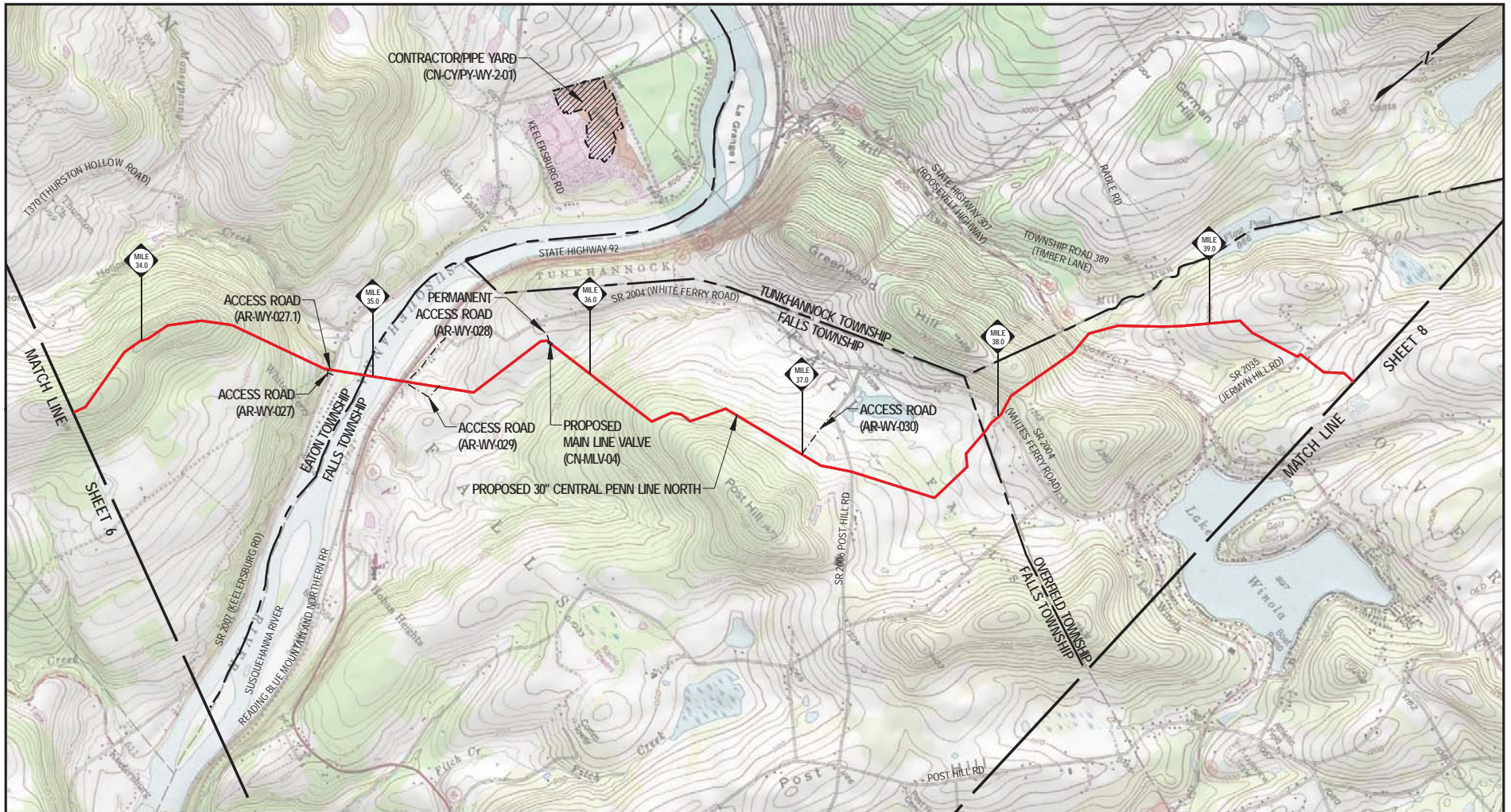
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	EXISTING PIPELINE
	FENCE LINE
	ACCESS ROADS
	COUNTY/TOWNSHIP BOUNDARY
	CONTRACTOR STAGING AREA
	CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41075-08 (CENTER MORELAND, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Central Penn Line North



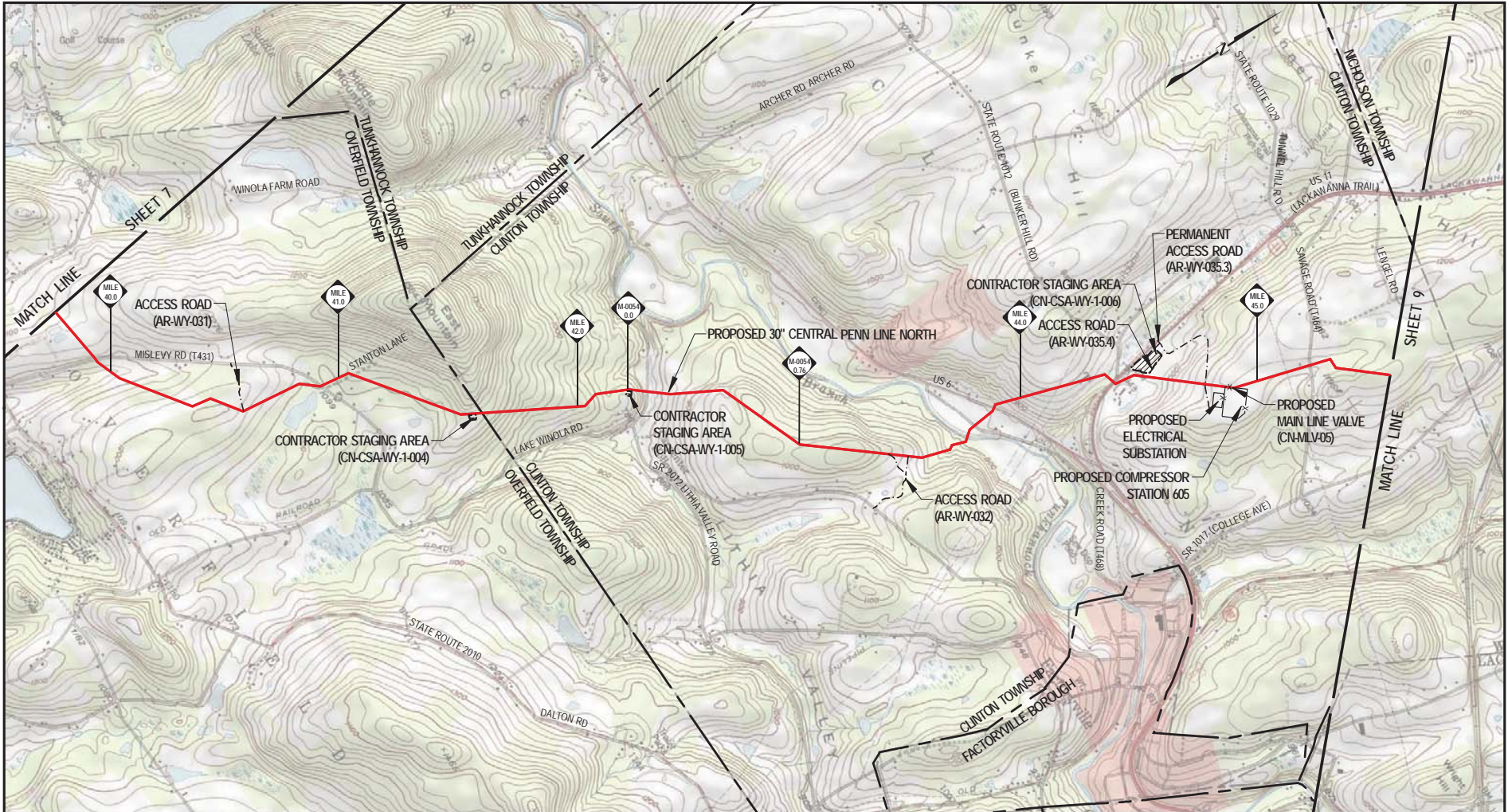
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- PROPOSED 30" CENTRAL PENN LINE NORTH
- PROPOSED 42" CENTRAL PENN LINE SOUTH
- EXISTING PIPELINE
- X- FENCE LINE
- - - ACCESS ROADS
- - - COUNTY/TOWNSHIP BOUNDARY
- CONTRACTOR STAGING AREA
- CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
 41075-D8 (CENTER MORELAND, PA)
 41075-D7 (RANSOM, PA)
 41075-E7 (FACTORYVILLE, PA)

0 2,000 4,000 6,000
 SCALE IN FEET

Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line North

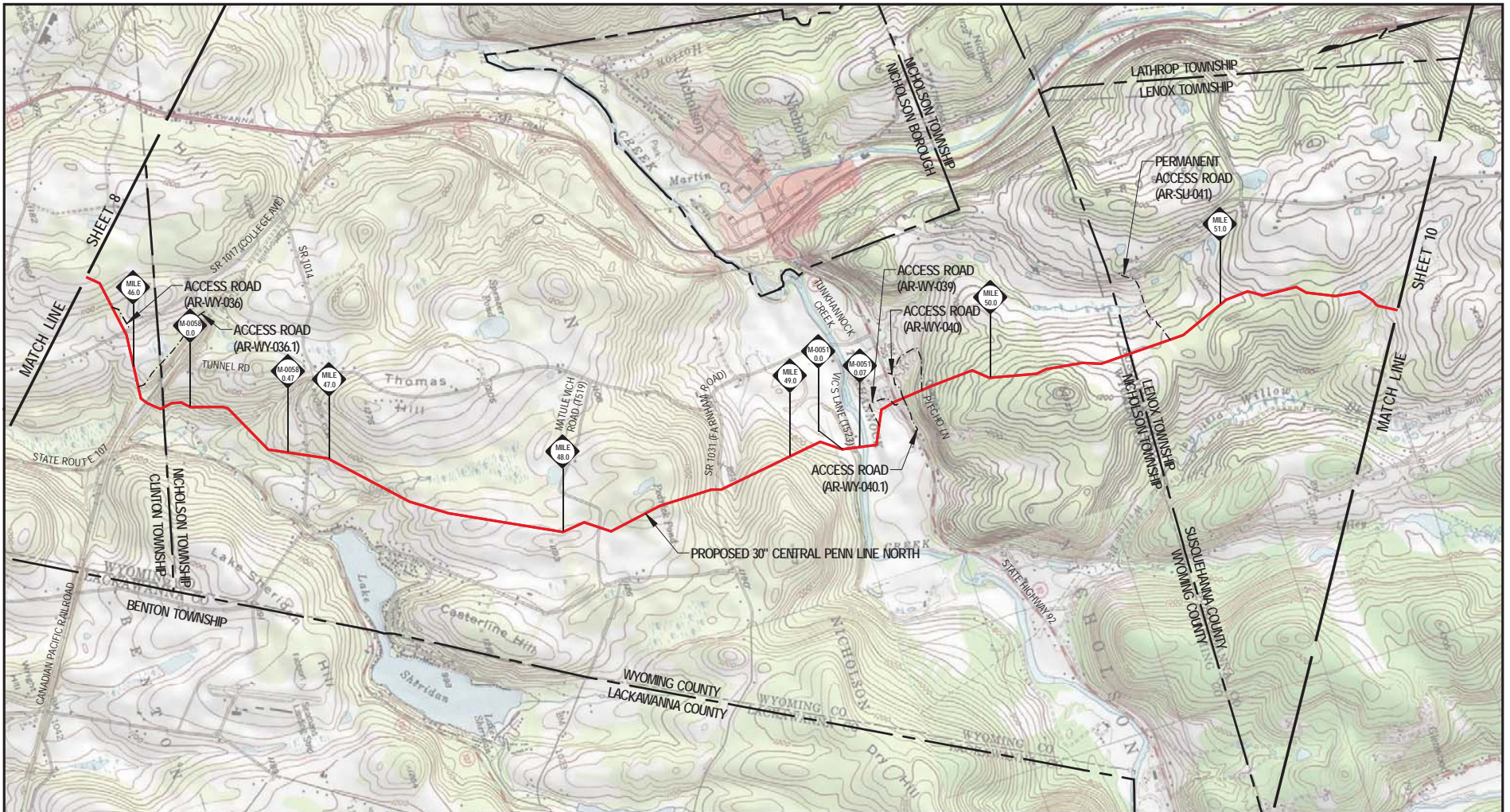


- LEGEND**
- PROPOSED 30" CENTRAL PENN LINE NORTH
 - PROPOSED 42" CENTRAL PENN LINE SOUTH
 - EXISTING PIPELINE
 - X- FENCE LINE
 - - - ACCESS ROADS
 - - - COUNTY/TOWNSHIP BOUNDARY
 - CONTRACTOR STAGING AREA
 - CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41075-E7 (FACTORYVILLE, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Central Penn Line North



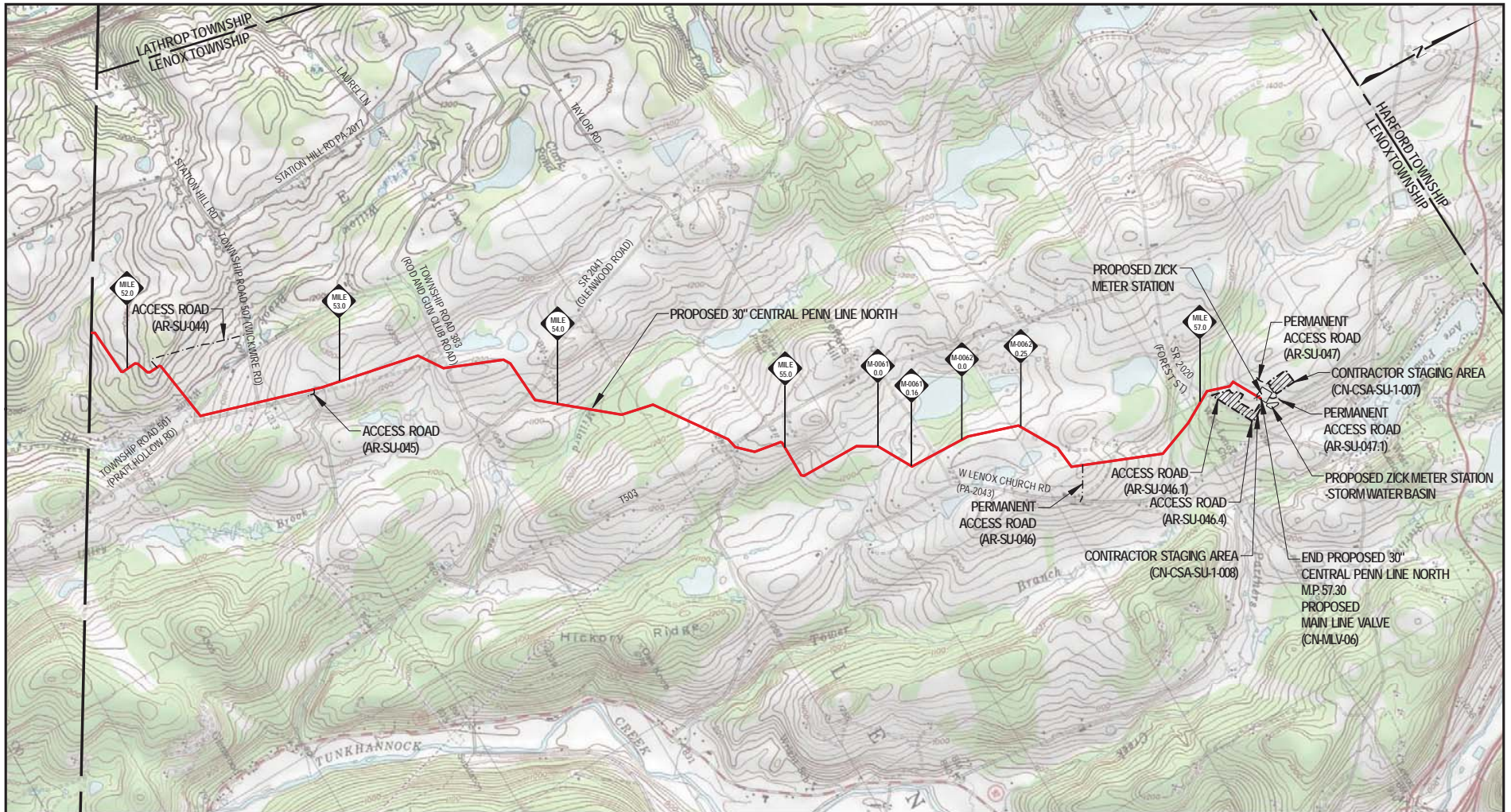
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- PROPOSED 42" CENTRAL PENN LINE SOUTH
- EXISTING PIPELINE
- X- FENCE LINE
- - - ACCESS ROADS
- - - COUNTY/TOWNSHIP BOUNDARY
- CONTRACTOR STAGING AREA
- CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
 41075-E7 (FACTORYVILLE, PA)
 41075-F7 (HOP BOTTOM, PA)

0 2,000 4,000 6,000
 SCALE IN FEET

Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line North

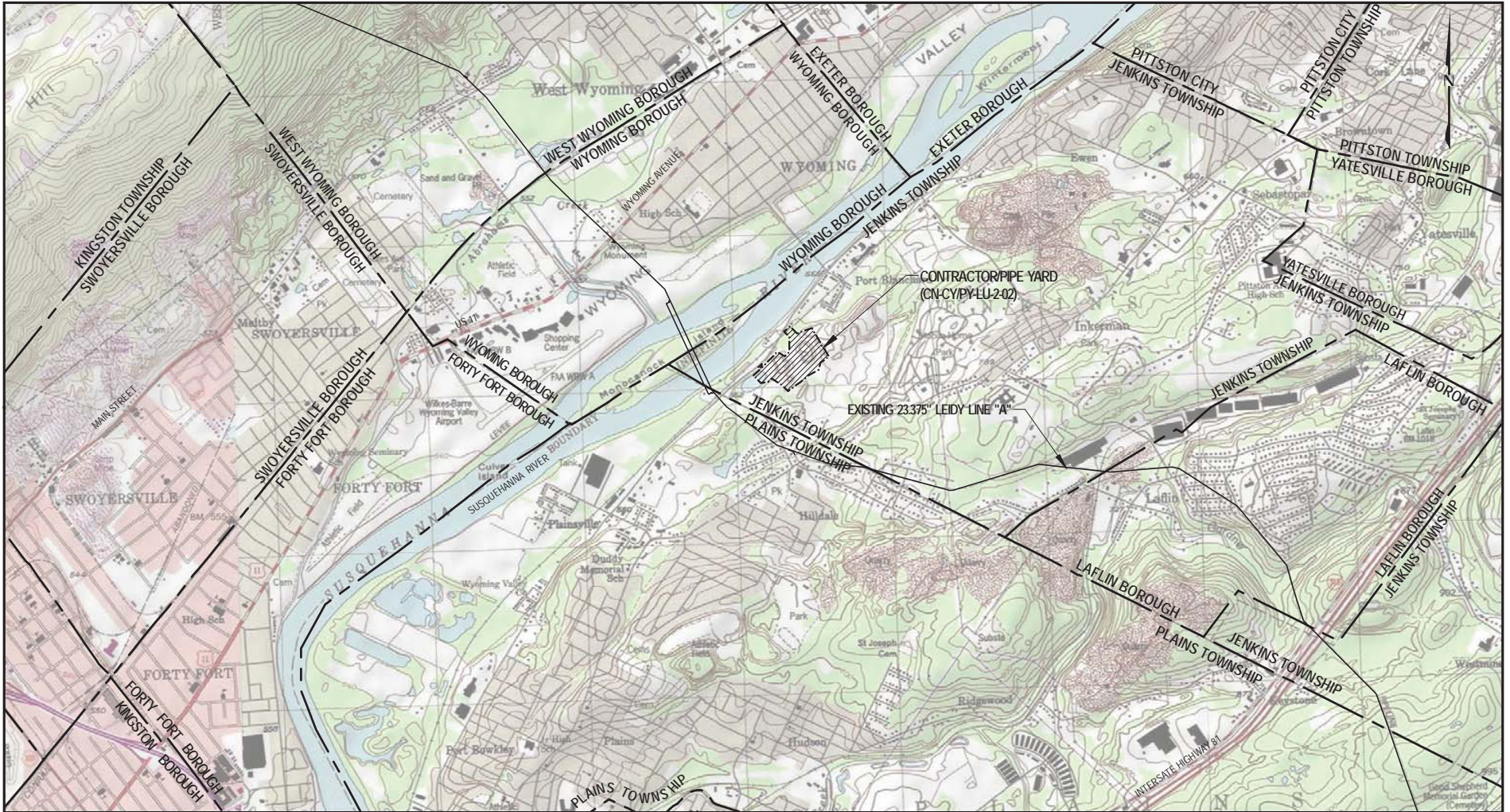


- LEGEND**
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 - PROPOSED 42" CENTRAL PENN LINE SOUTH
 - EXISTING PIPELINE
 - X- FENCE LINE
 - - - ACCESS ROADS
 - - - COUNTY/TOWNSHIP BOUNDARY
 - CONTRACTOR STAGING AREA
 - CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41075-F6 (LENOXVILLE, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Central Penn Line North



LEGEND

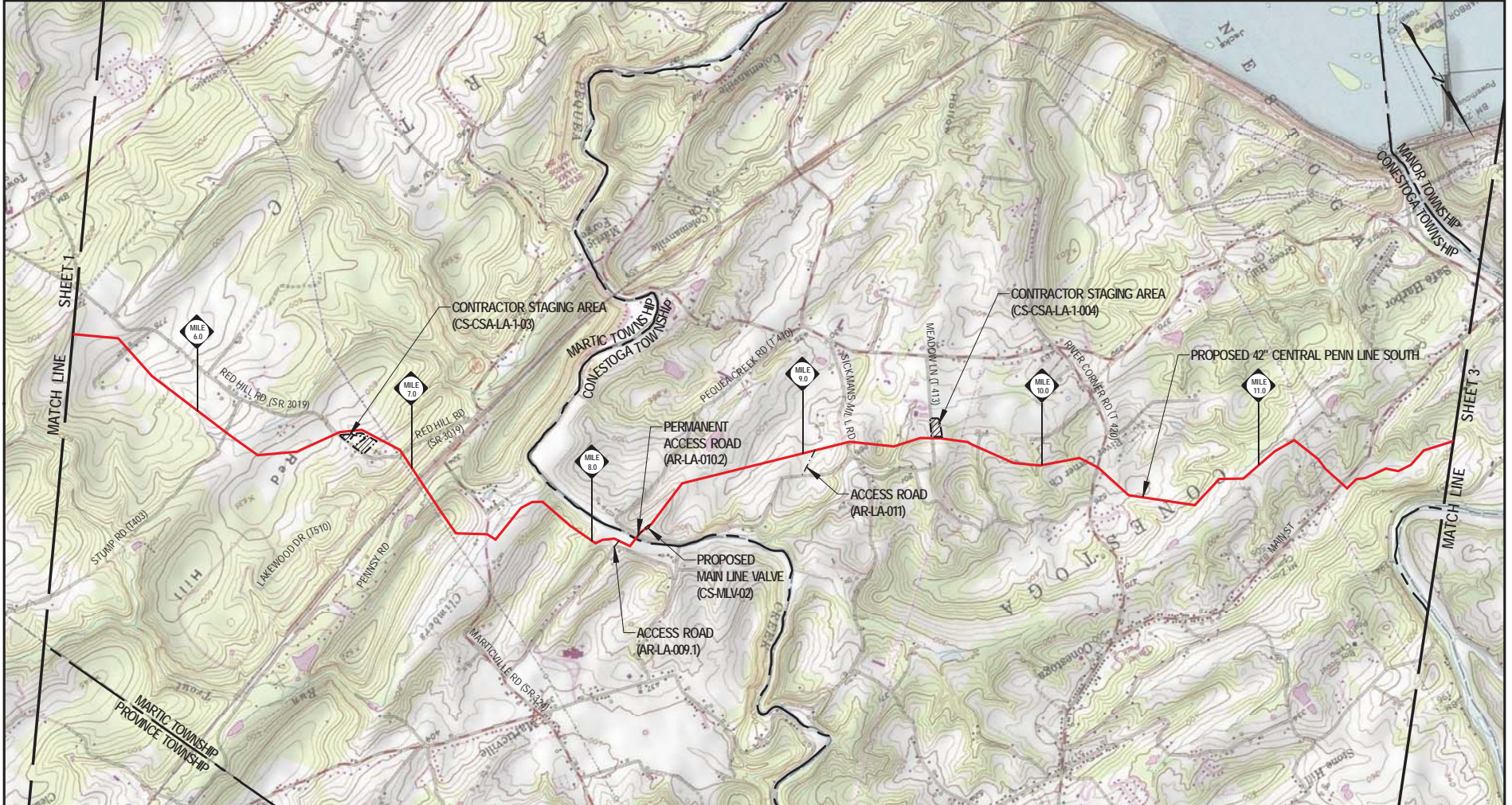
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- PROPOSED 42" CENTRAL PENN LINE SOUTH
- EXISTING PIPELINE
- x- FENCE LINE
- - - ACCESS ROADS
- - - - - COUNTY/TOWNSHIP BOUNDARY
- ▨ CONTRACTOR STAGING AREA
- ▨ CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41075-88 (WILKES-BARRE WEST, PA)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line North

Central Penn Line South



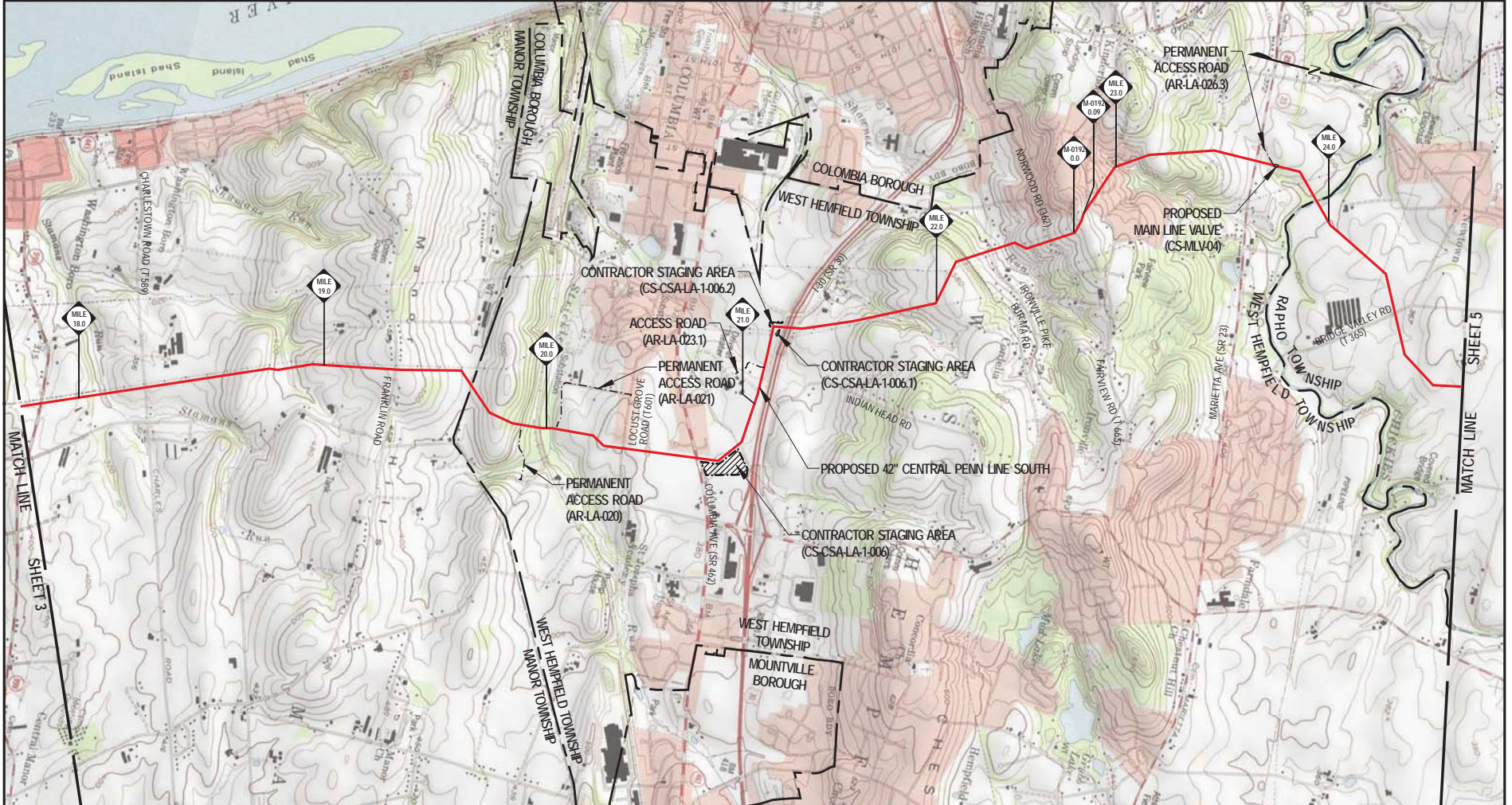
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	PROPOSED 30" CENTRAL PENN LINE NORTH
	EXISTING PIPELINE
	FENCE LINE
	ACCESS ROADS
	PROPOSED EASEMENT
	COUNTY/TOWNSHIP BOUNDARY
	CONTRACTOR STAGING AREA
	CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP
 39076-H3 (CONESTOGA, PA)
 39076-H4 (SAFE HARBOR, PA)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line South

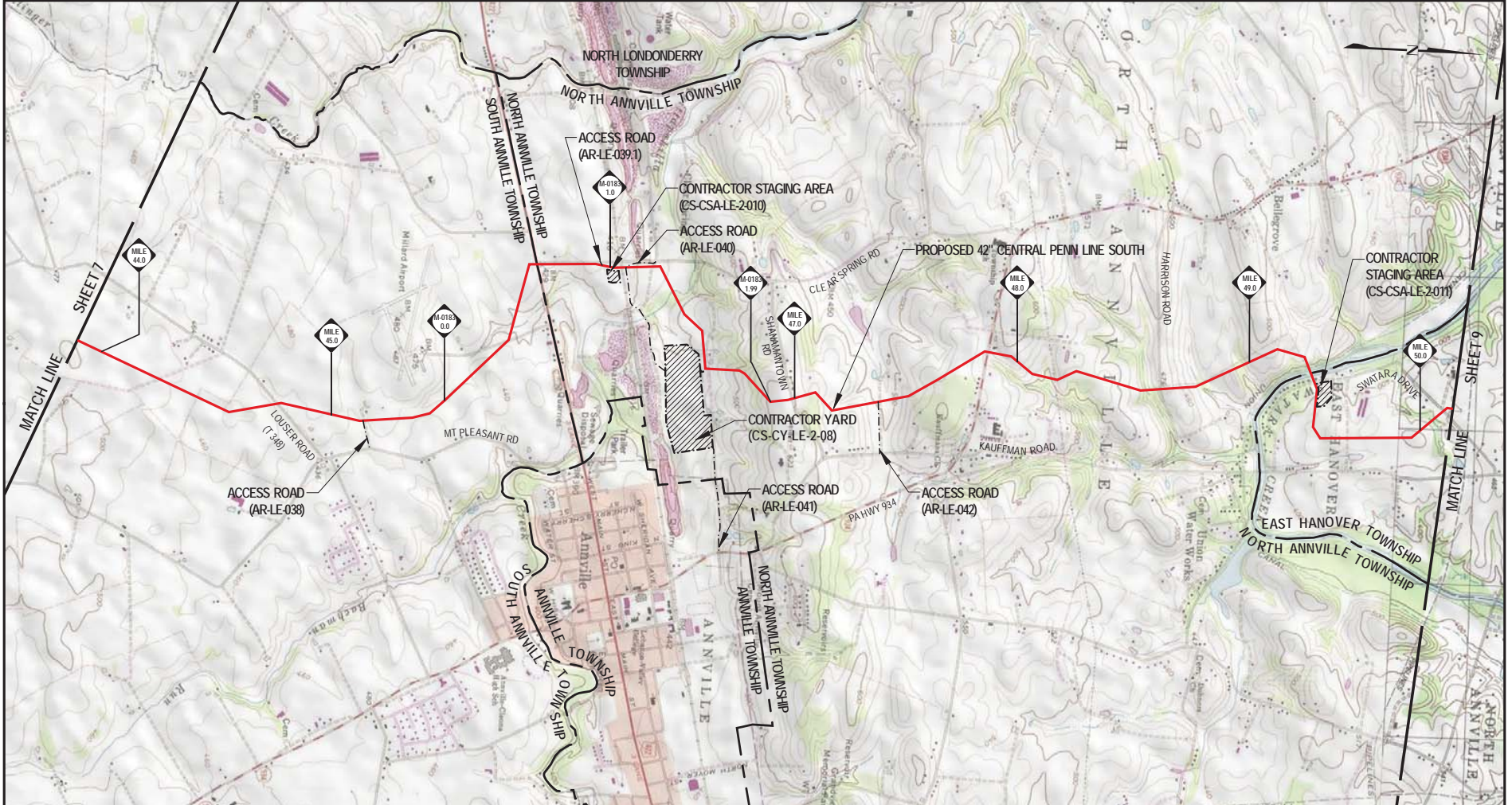


- LEGEND**
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 - PROPOSED 30" CENTRAL PENN LINE NORTH
 - EXISTING PIPELINE
 - X FENCE LINE
 - ACCESS ROADS
 - PROPOSED EASEMENT
 - COUNTY/TOWNSHIP BOUNDARY
 - ▨ CONTRACTOR STAGING AREA
 - ▨ CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP,
40076-A4 (COLUMBIA EAST, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Central Penn Line South



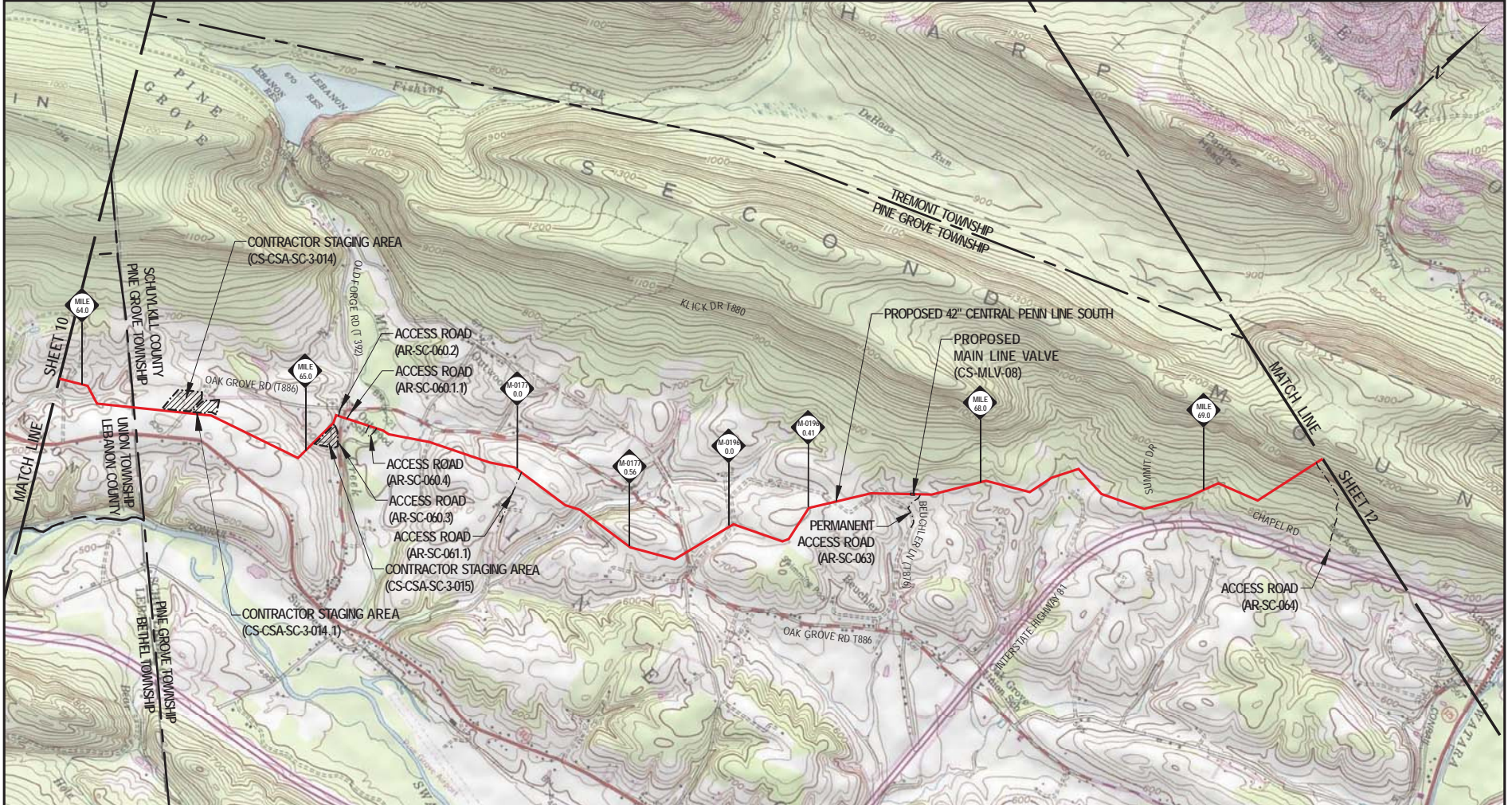
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	EXISTING PIPELINE
	FENCE LINE
	ACCESS ROADS
	PROPOSED EASEMENT
	COUNTY/TOWNSHIP BOUNDARY
	CONTRACTOR STAGING AREA
	CONTRACTOR YARD/ PIPE YARD

DRC 7.5 MIN. QUAD MAP
 40076-C5 (PALMYRA, PA)
 40076-05 (INDIANTOWN, PA)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line South

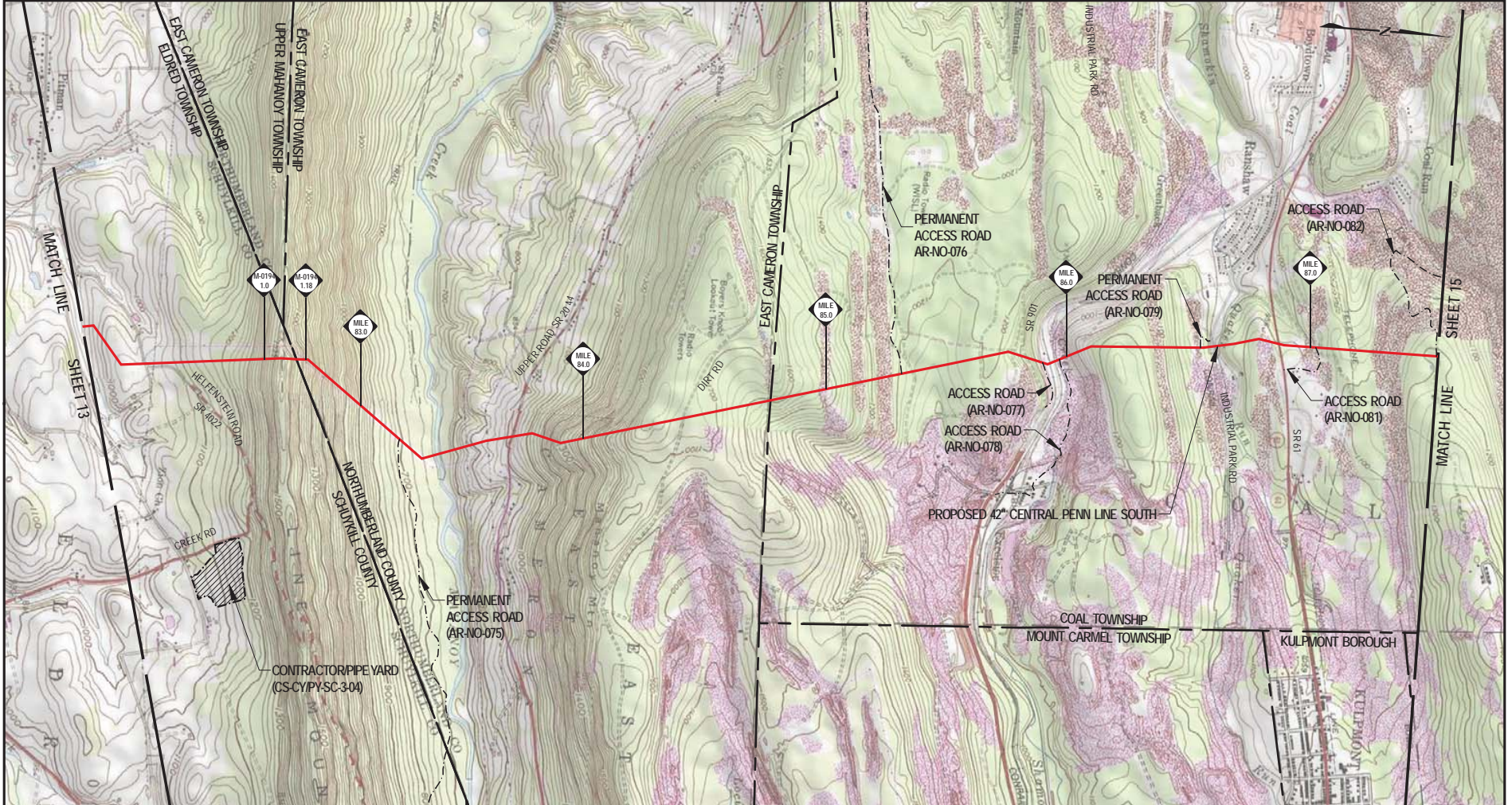


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 - PROPOSED 30" CENTRAL PENN LINE NORTH
 - EXISTING PIPELINE
 - X- FENCE LINE
 - - - ACCESS ROADS
 - - - PROPOSED EASEMENT
 - - - COUNTY/TOWNSHIP BOUNDARY
 - CONTRACTOR STAGING AREA
 - CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP:
40076-E4 (PINE GROVE, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Central Penn Line South

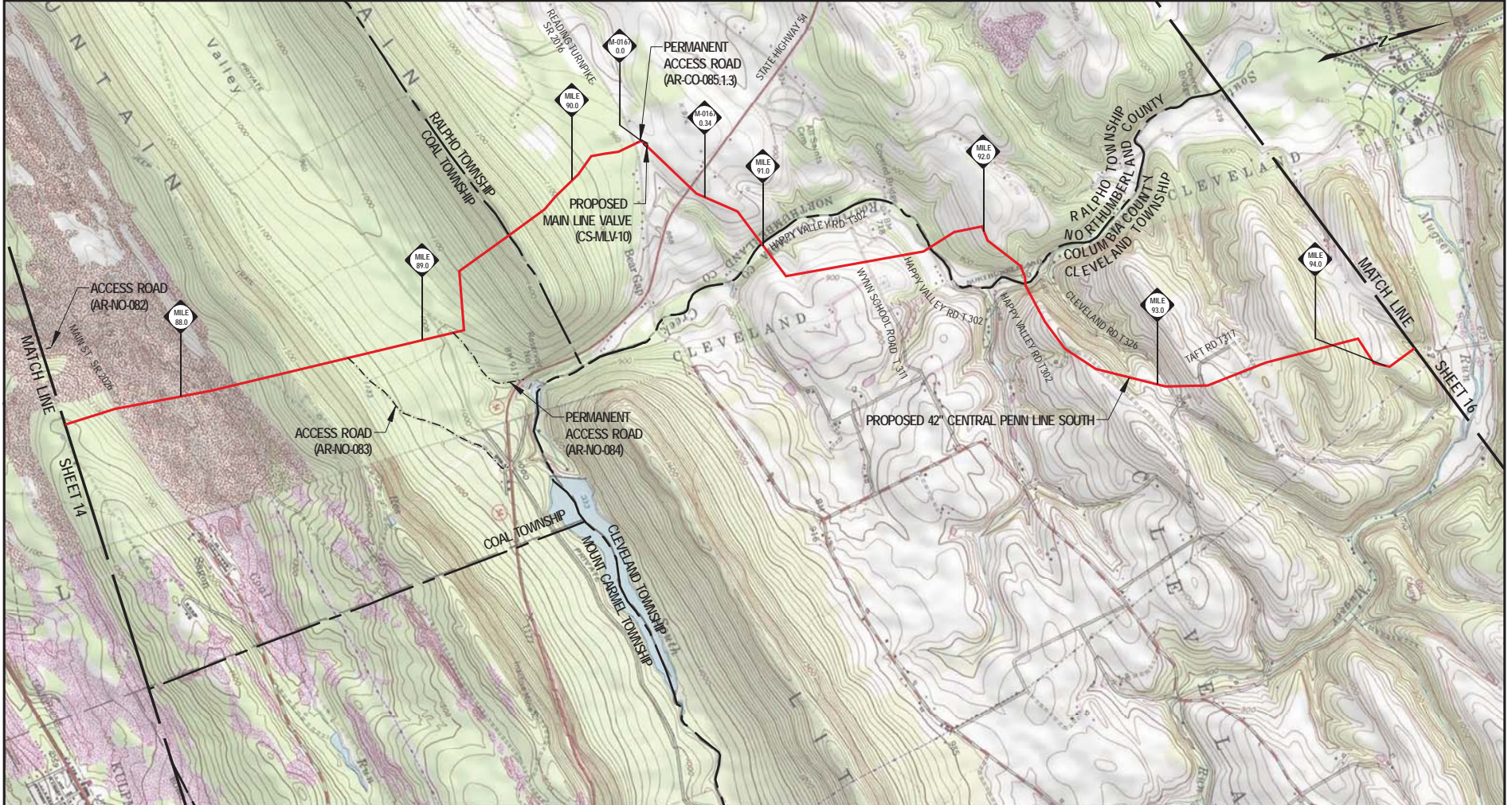


- LEGEND**
- PROPOSED 42" CENTRAL PENN LINE SOUTH
 - PROPOSED 30" CENTRAL PENN LINE NORTH
 - EXISTING PIPELINE
 - X- FENCE LINE
 - - - ACCESS ROADS
 - - - PROPOSED EASEMENT
 - - - COUNTY/TOWNSHIP BOUNDARY
 - CONTRACTOR STAGING AREA
 - CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP
 40076-F5 (VALLEY VIEW, PA)
 40076-F4 (TREMONT, PA)
 40076-G4 (MOUNT CARMEL, PA)
 40076-G5 (SHAMOKIN, PA)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line South



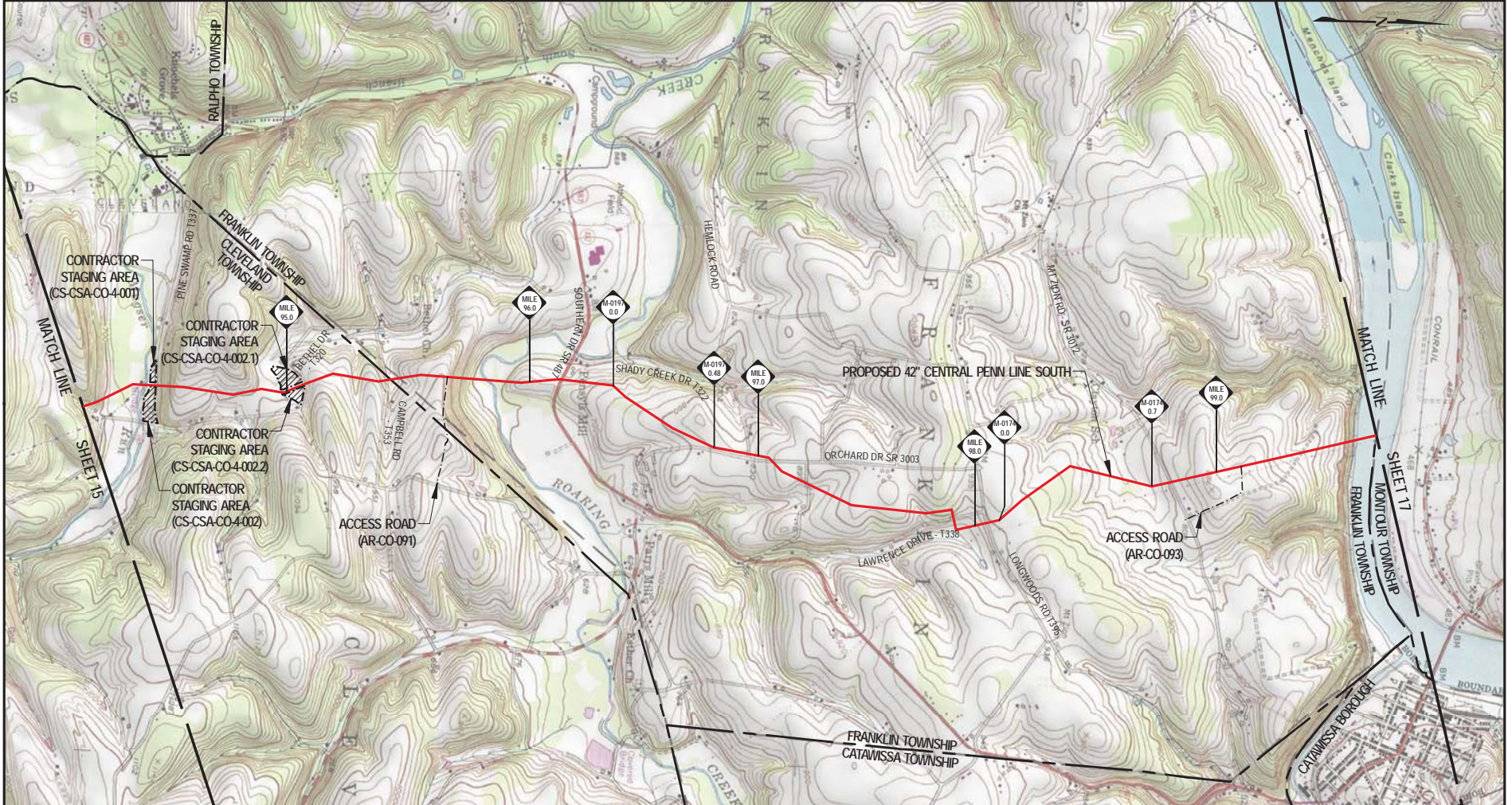
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	PROPOSED 30" CENTRAL PENN LINE NORTH
	EXISTING PIPELINE
	FENCE LINE
	ACCESS ROADS
	PROPOSED EASEMENT
	COUNTY/TOWNSHIP BOUNDARY
	CONTRACTOR STAGING AREA
	CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP
 40076-G5 (SHAMCKIN, PA)
 40076-G4 (MOUNT CARMEL, PA)
 40076-H4 (CATAWISSA, PA)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line South



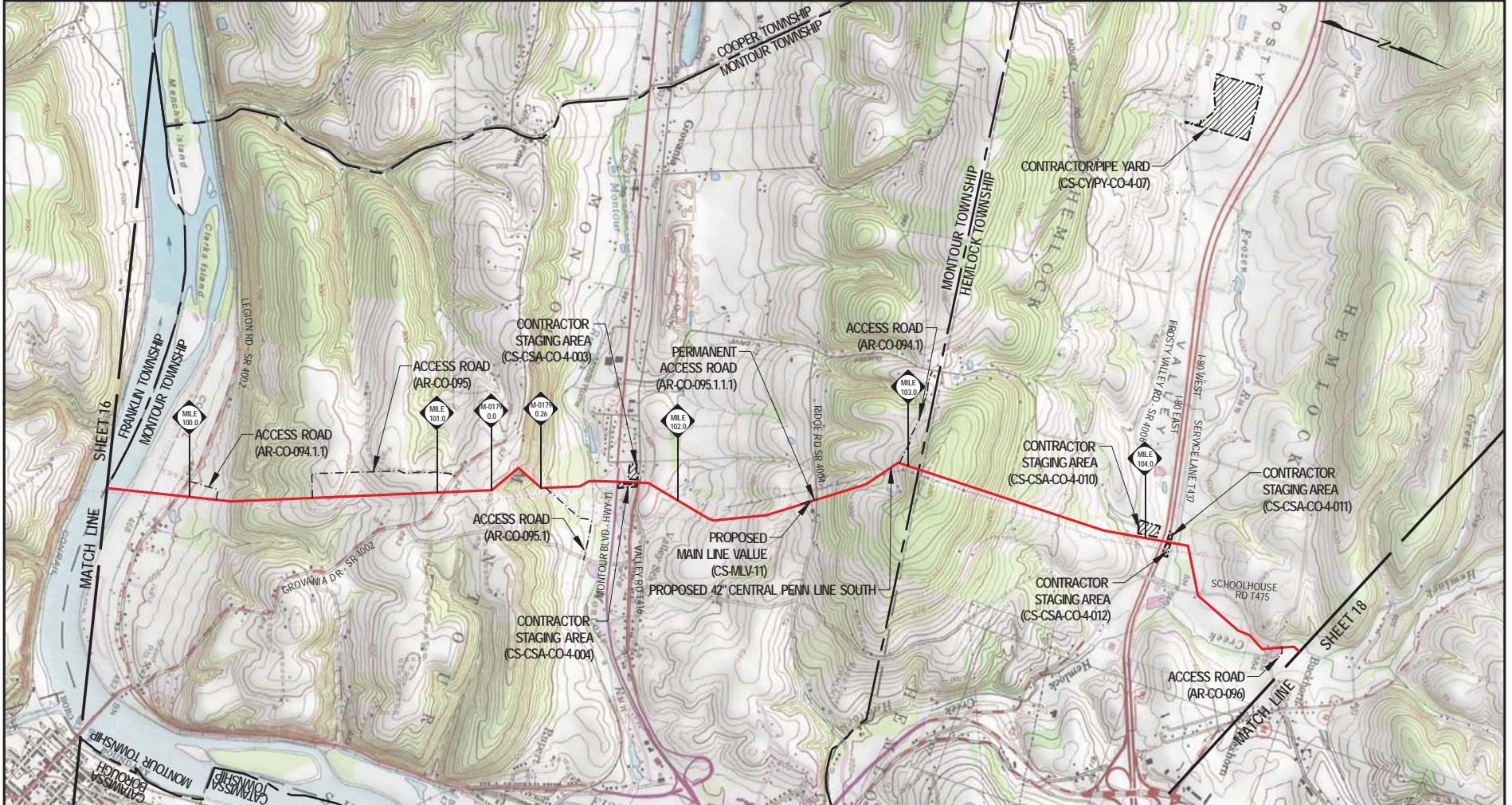
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	EXISTING PIPELINE
	FENCE LINE
	ACCESS ROADS
	PROPOSED EASEMENT
	COUNTY/TOWNSHIP BOUNDARY
	CONTRACTOR STAGING AREA
	CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP:
40076-HH (CATAWISSA, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Central Penn Line South



- LEGEND**
- PROPOSED 42" CENTRAL PENN LINE SOUTH
 - PROPOSED 30" CENTRAL PENN LINE NORTH
 - EXISTING PIPELINE
 - X- FENCE LINE
 - - - ACCESS ROADS
 - - - PROPOSED EASEMENT
 - - - COUNTY/TOWNSHIP BOUNDARY
 - CONTRACTOR STAGING AREA
 - CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP
 40076-M (CATARISSA, PA)
 41076-A4 (BLOOMBURG, PA)
 41076-A4 (MILLVILLE, PA)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line South



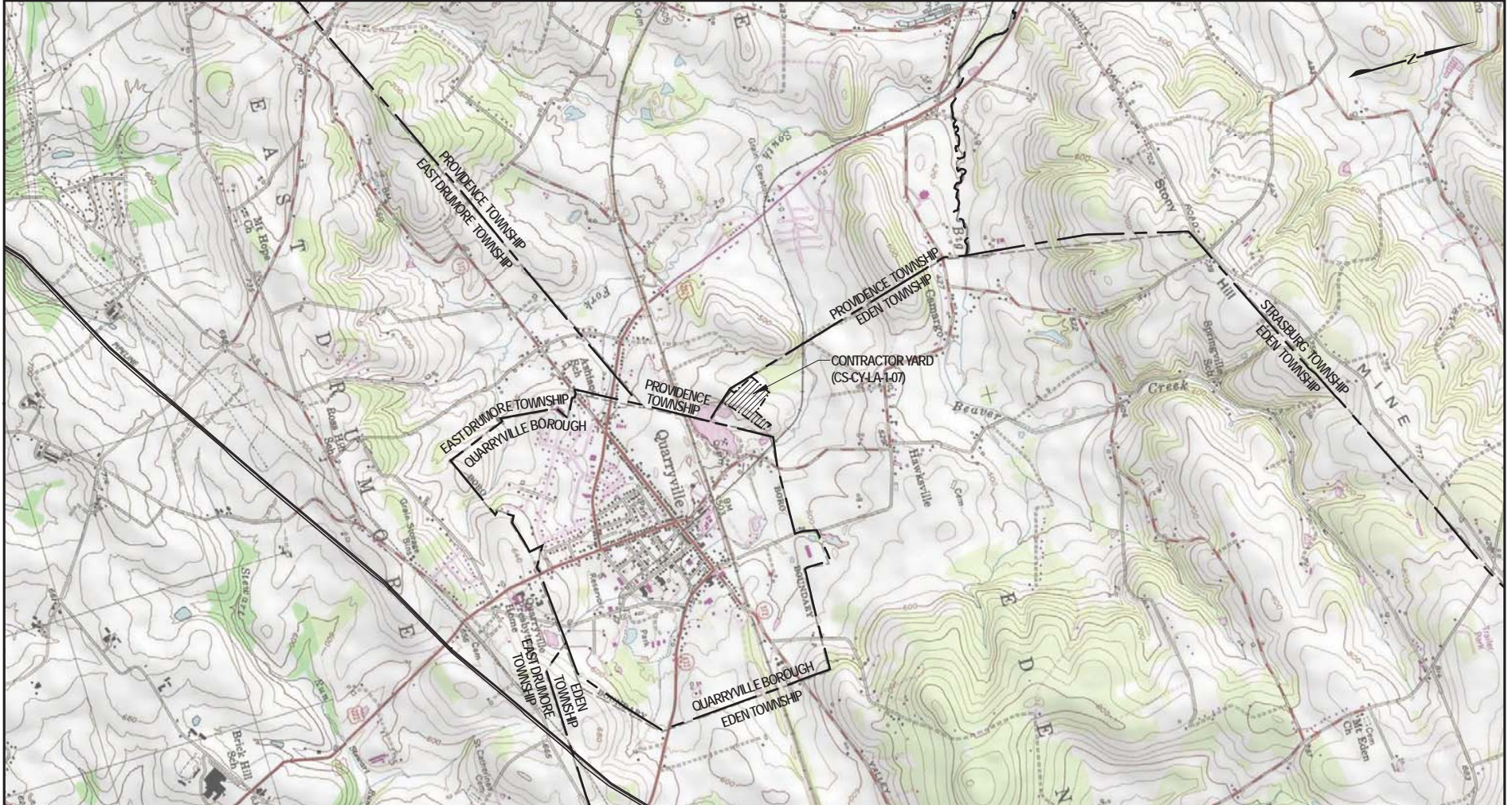
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	EXISTING PIPELINE
	FENCE LINE
	ACCESS ROADS
	PROPOSED EASEMENT
	COUNTY/TOWNSHIP BOUNDARY
	CONTRACTOR STAGING AREA
	CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41076-A4 (BLOOMBURG, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Central Penn Line South



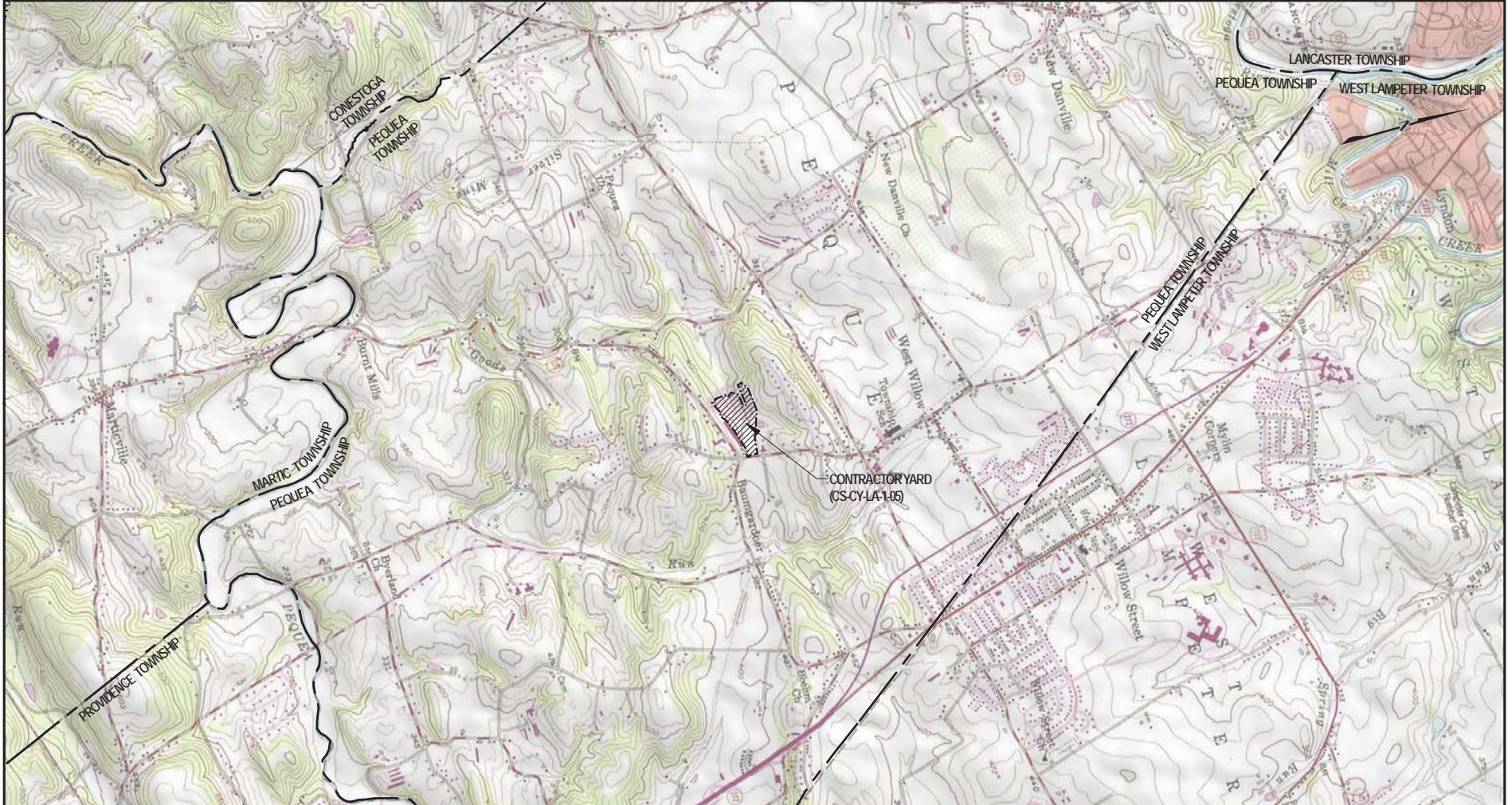
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	PROPOSED 30" CENTRAL PENN LINE NORTH
	EXISTING PIPELINE
	FENCE LINE
	ACCESS ROADS
	PROPOSED EASEMENT
	COUNTY/TOWNSHIP BOUNDARY
	CONTRACTOR STAGING AREA
	CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP:
 39076-G2 (WAKEFIELD)
 39076-H2 (QUARRYVILLE)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line South



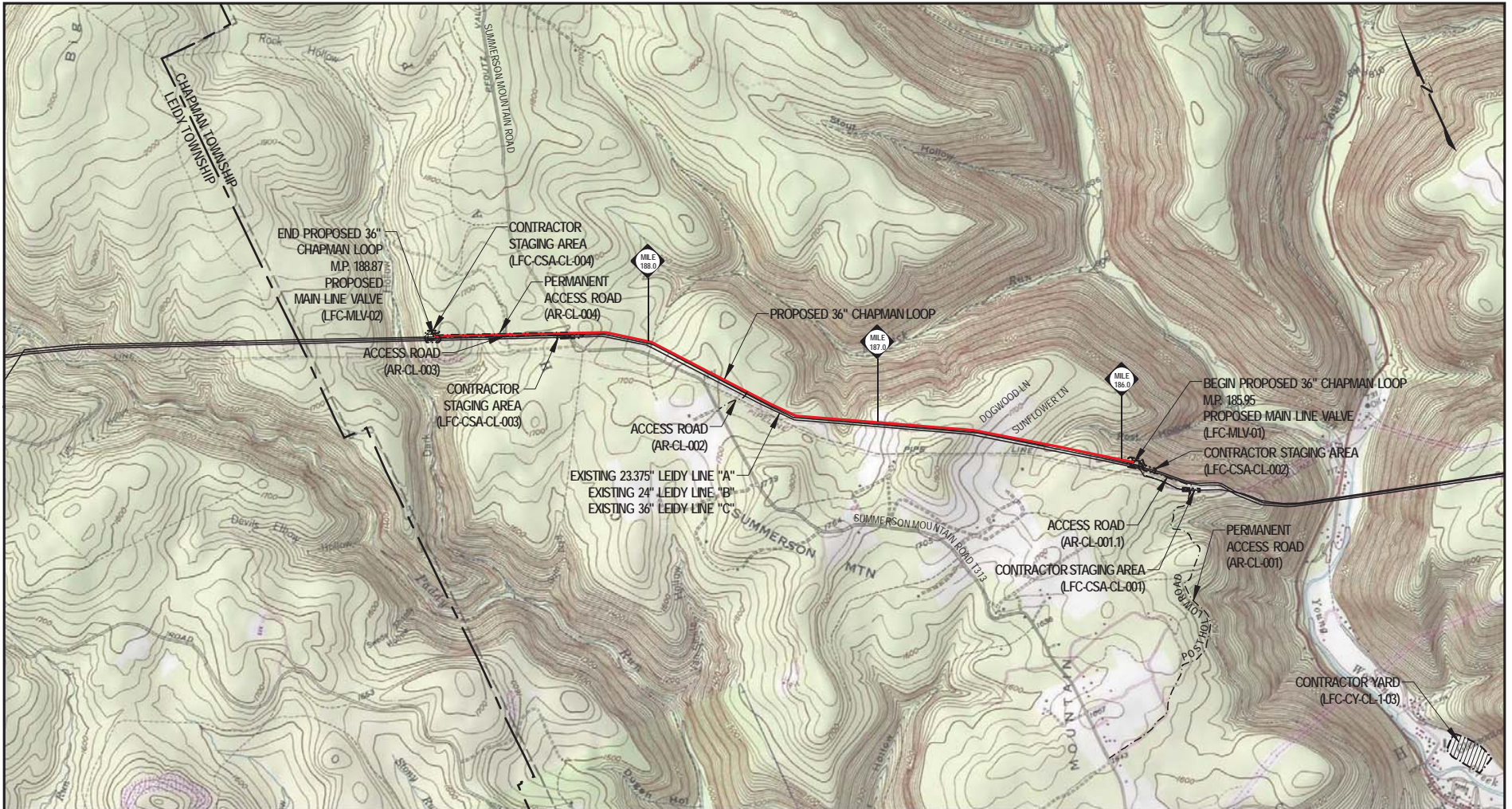
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 - PROPOSED 30" CENTRAL PENN LINE NORTH
 - EXISTING PIPELINE
 - X- FENCE LINE
 - - - ACCESS ROADS
 - - - PROPOSED EASEMENT
 - - - COUNTY/TOWNSHIP BOUNDARY
 - ▨ CONTRACTOR STAGING AREA
 - ▨ CONTRACTOR YARD/ PIPE YARD

DRG 7.5 MIN. QUAD MAP
 39076-H3 (CONESTOGA)
 40076-A3 (LANCASTER)
 39076-H2 (QUARRYVILLE)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Central Penn Line South

Chapman Loop



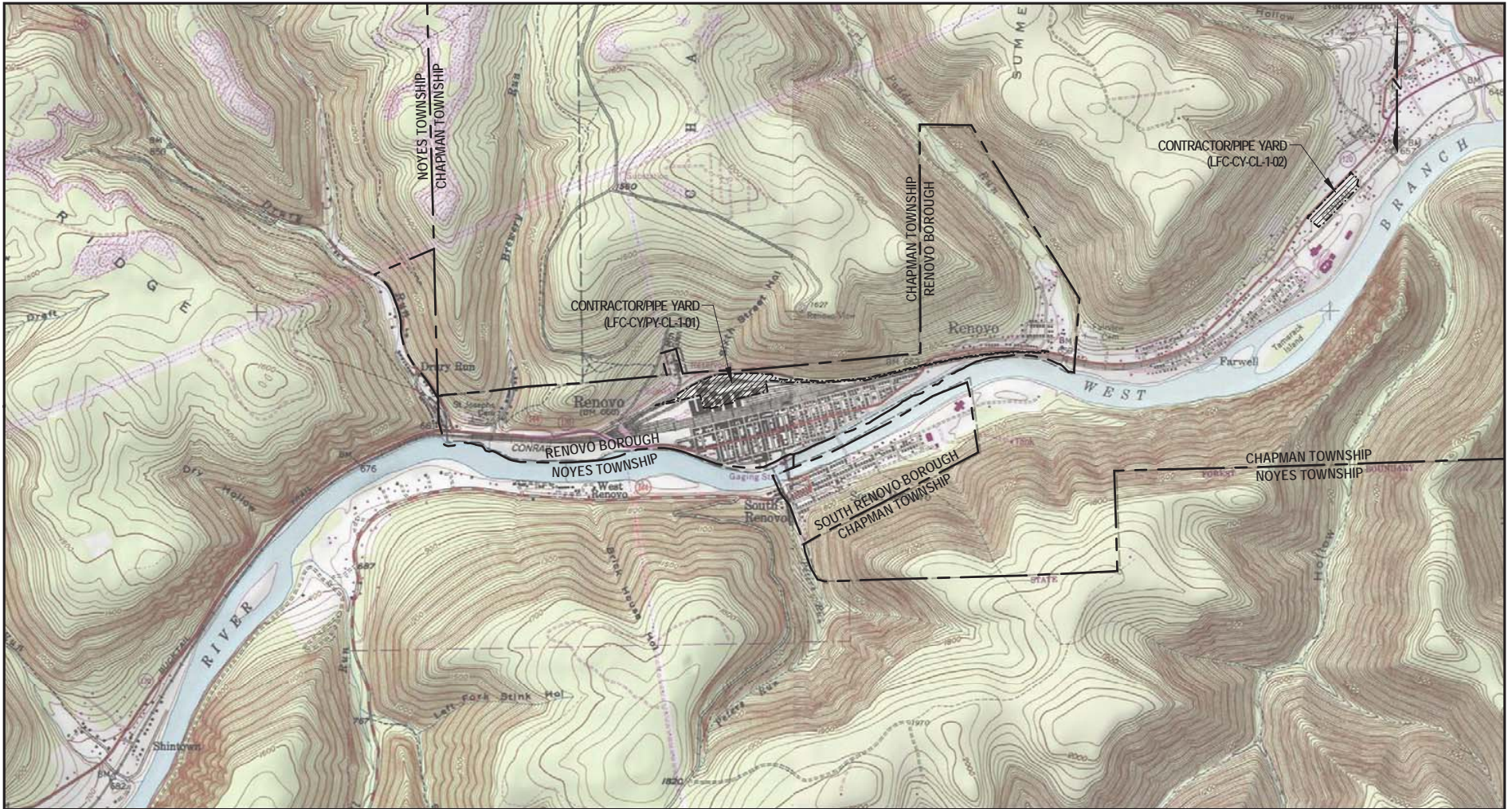
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	PROPOSED 36" CHAPMAN LOOP
	EXISTING PIPELINE
	FENCE LINE
	ACCESS ROADS
	COUNTY/TOWNSHIP BOUNDARY
	CONTRACTOR STAGING AREA/ CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41077-D6 (YOUNG WOMAN'S CREEK, PA)
41077-D7 (TAMARACK, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Chapman Loop



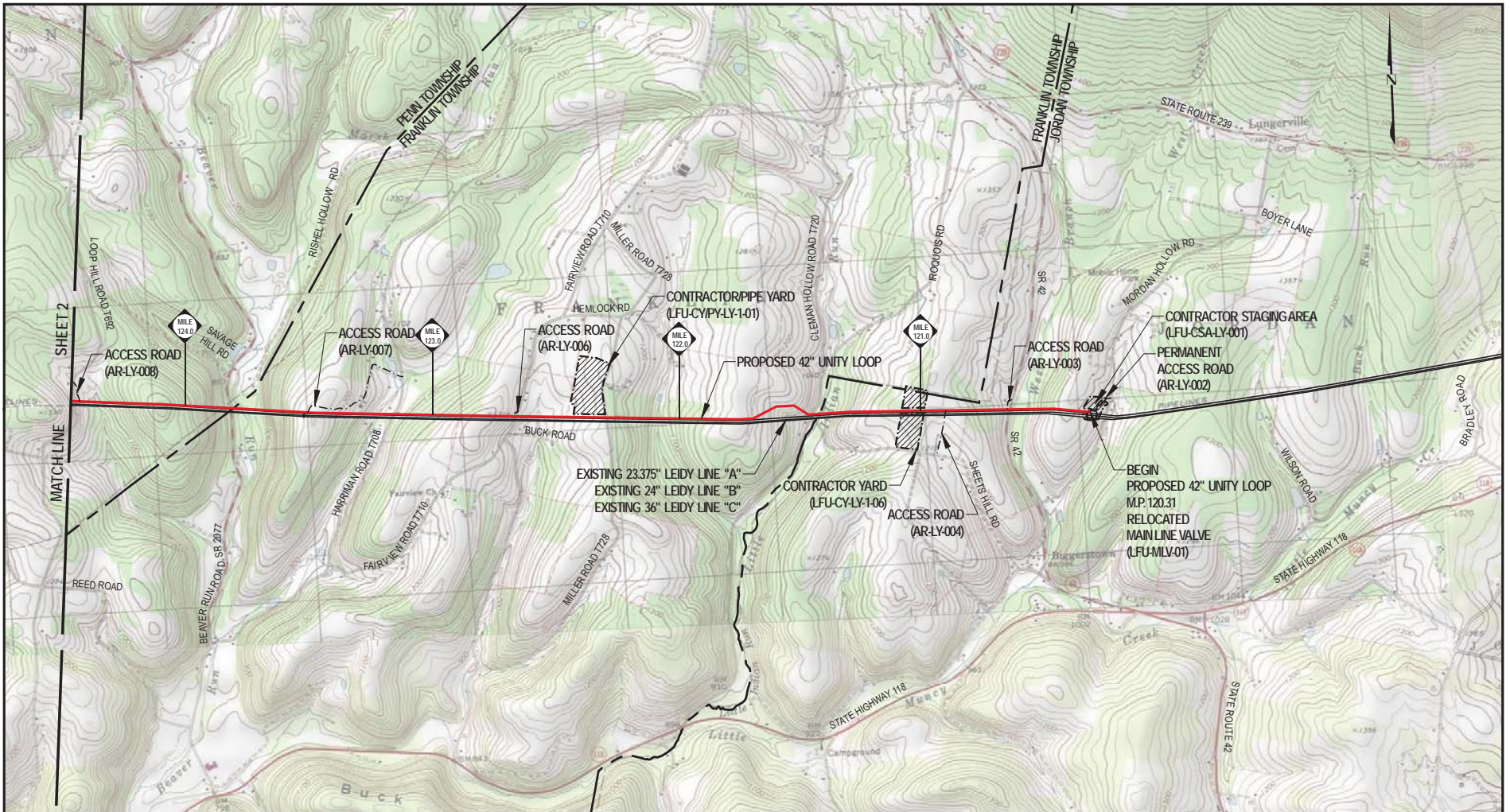
- LEGEND**
- PROPOSED 36" CHAPMAN LOOP
 - EXISTING PIPELINE
 - X — FENCE LINE
 - - - ACCESS ROADS
 - - - COUNTY/TOWNSHIP BOUNDARY
 - CONTRACTOR STAGING AREA/
CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41077-C7 (RENOVO WEST, PA)
41077-C6 (RENOVO EAST, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Chapman Loop

Unity Loop

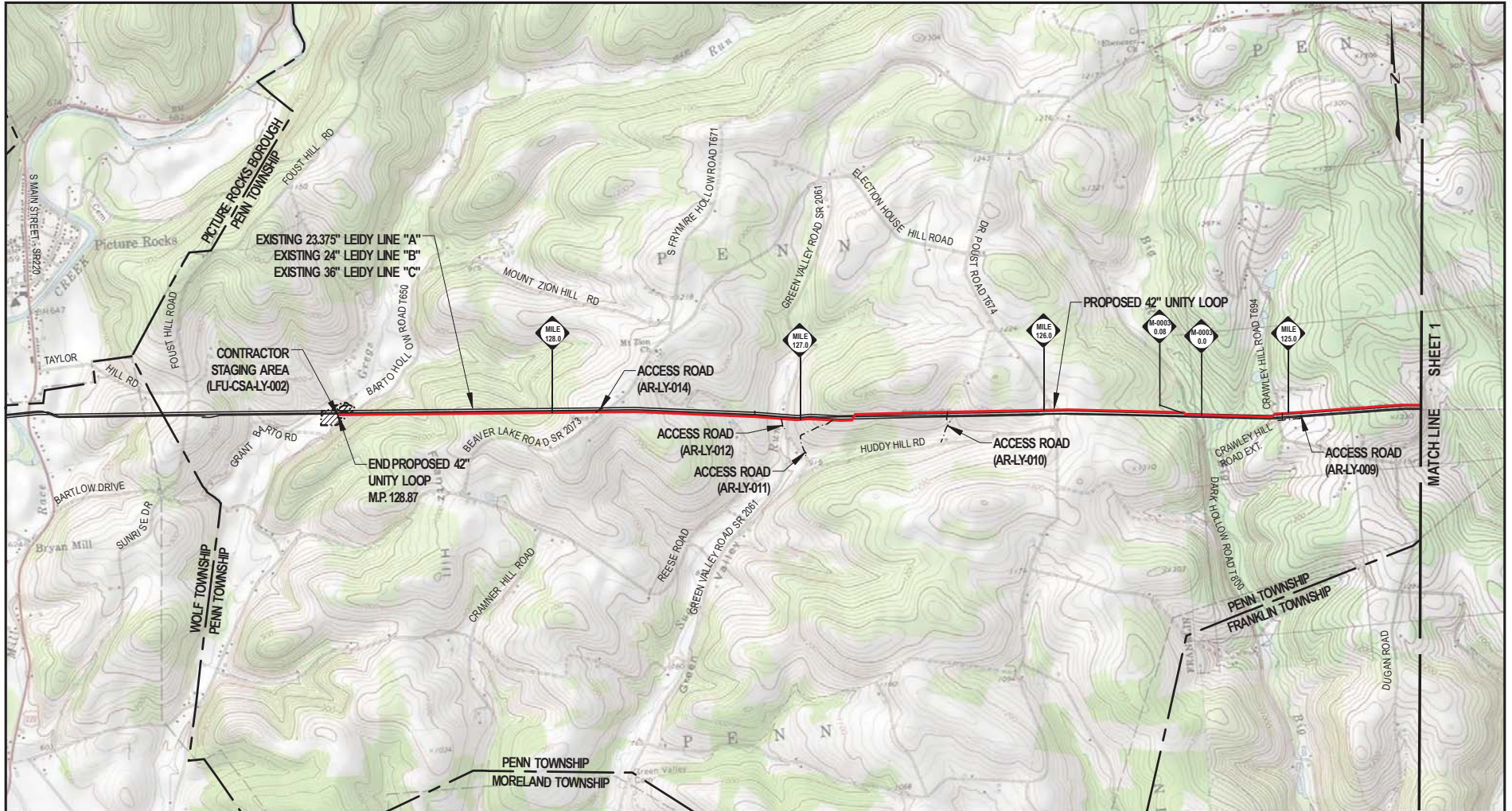


- LEGEND**
- PROPOSED 42" UNITY LOOP
 - EXISTING PIPELINE
 - - - ACCESS ROADS
 - - - COUNTY/TOWNSHIP BOUNDARY
 - CONTRACTOR STAGING AREA/
CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41076-C5 (SONESTOWN, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Unity Loop



MATCH LINE SHEET 1

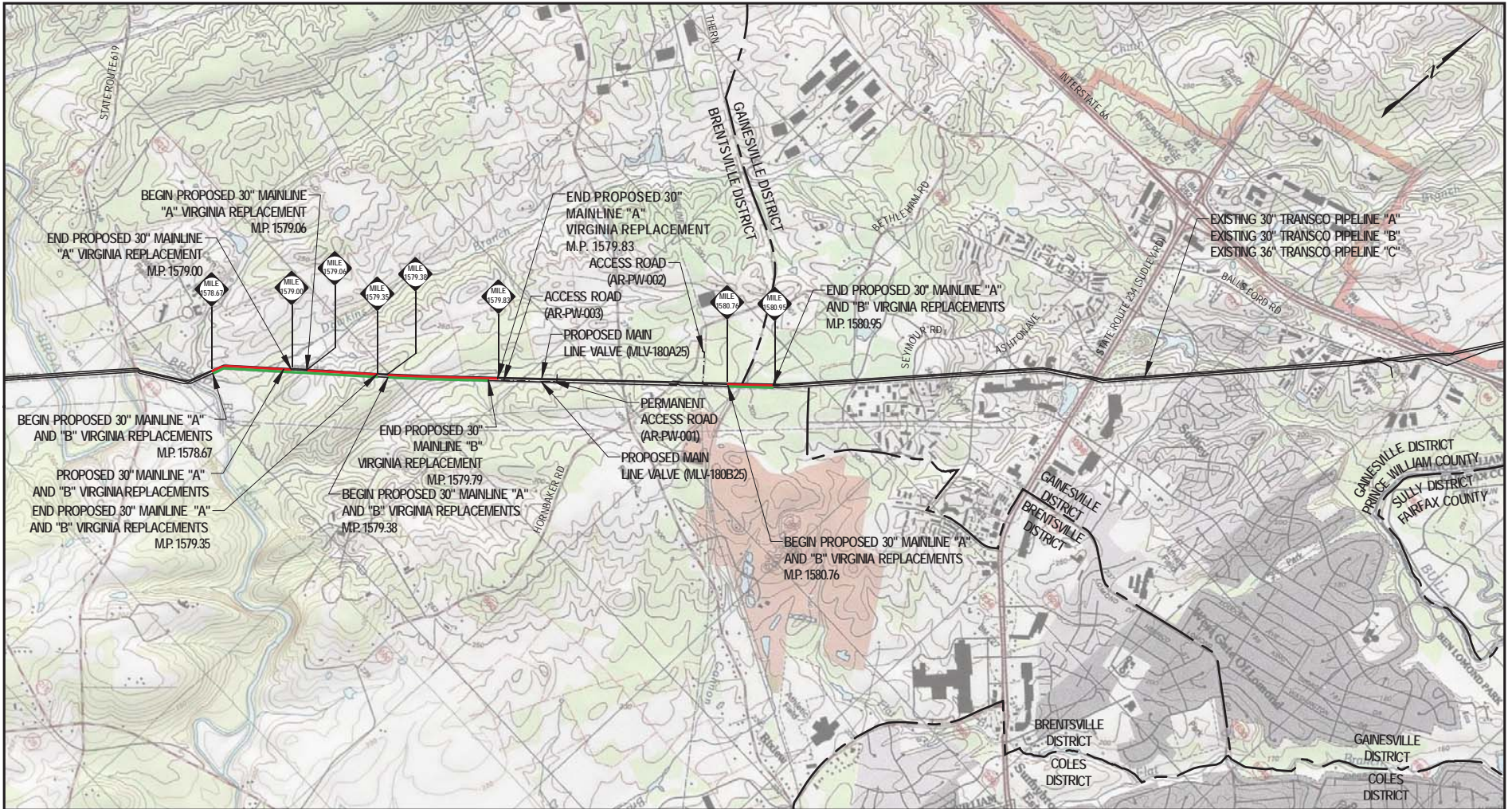
- LEGEND**
- PROPOSED 42" UNITY LOOP
 - EXISTING PIPELINE
 - - - ACCESS ROADS
 - - - COUNTY/TOWNSHIP BOUNDARY
 - ▨ CONTRACTOR STAGING AREA/
CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
41076-C5 (SONESTOWN, PA)
41076-C6 (PICTURE ROCKS, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Unity Loop

Mainline A and B Replacements



LEGEND

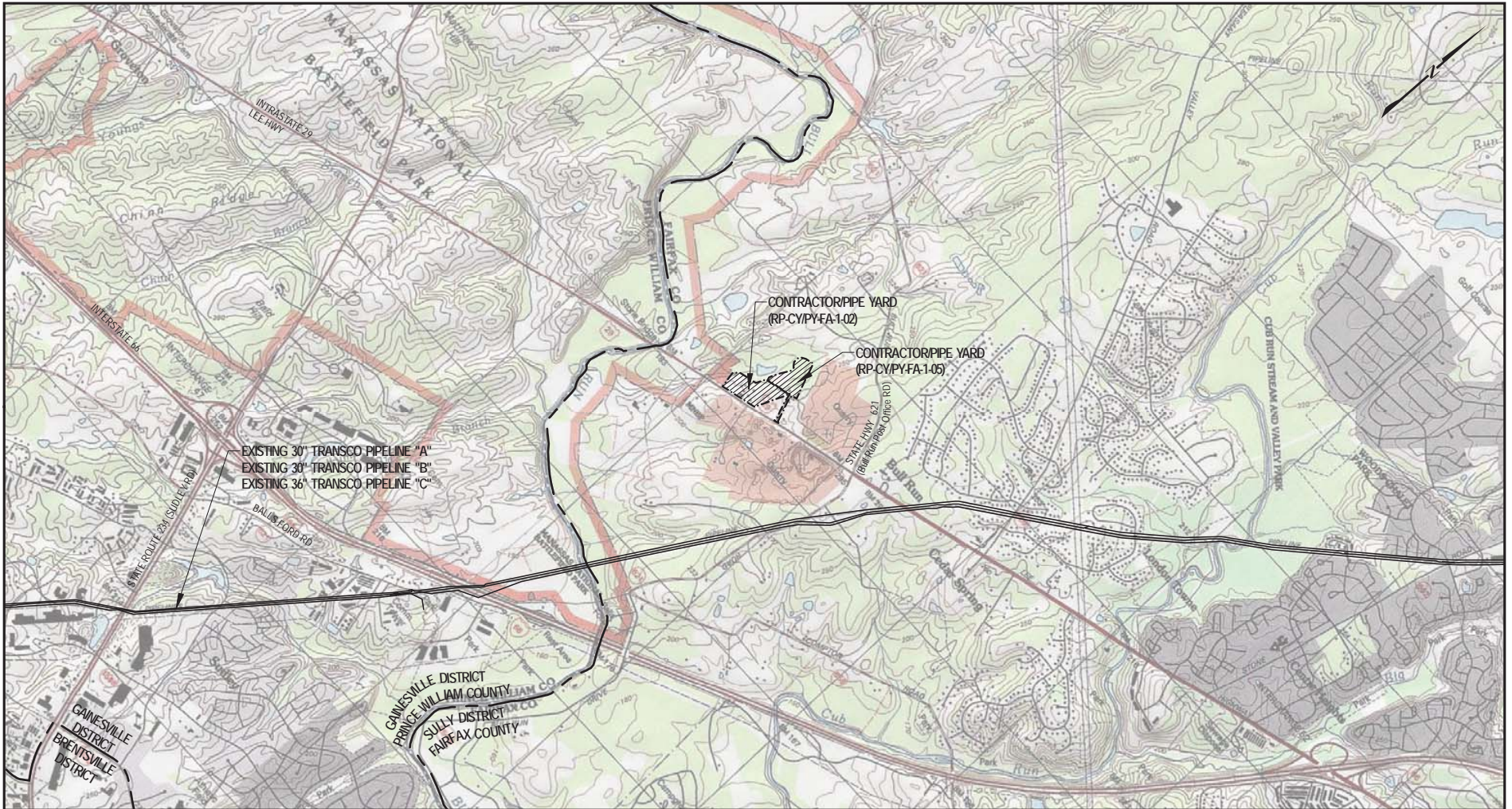
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- PROPOSED 30" MAINLINE "B" VIRGINIA REPLACEMENT
- EXISTING PIPELINE
- - - - ACCESS ROADS
- - - - COUNTY/TOWNSHIP BOUNDARY
- CONTRACTOR STAGING AREA/
CONTRACTOR YARD/PIPE YARD

DRG 7.5 MIN. QUAD MAP:
38077-F5 (NOKESVILLE, VA)

0 2,000 4,000 6,000

SCALE IN FEET

Appendix B
Atlantic Sunrise Project
Project Overview Maps
Mainline A and B Replacements



LEGEND

- PROPOSED 30" MAINLINE "A" VIRGINIA REPLACEMENT
- PROPOSED 30" MAINLINE "B" VIRGINIA REPLACEMENT
- EXISTING PIPELINE
- - - ACCESS ROADS
- COUNTY/TOWNSHIP BOUNDARY
- CONTRACTOR STAGING AREA/
CONTRACTOR YARD/PIPE YARD

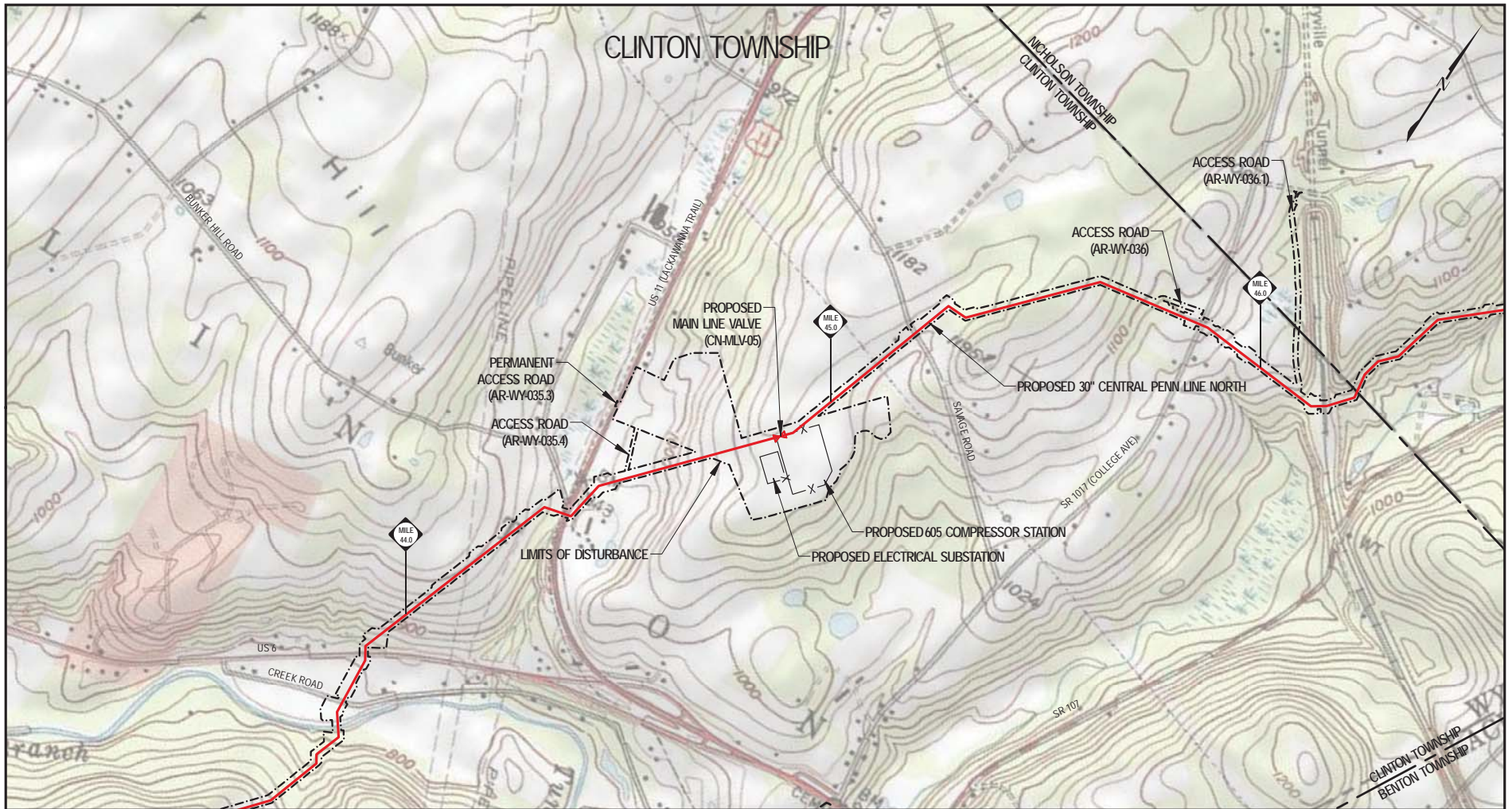
DRG 7.5 MIN. QUAD MAP:
38077-G4 (MANASSAS, VA)

0 2,000 4,000 6,000

SCALE IN FEET

Appendix B
Atlantic Sunrise Project
Project Overview Maps
Mainline A and B Replacements

New and Existing Compressor Stations



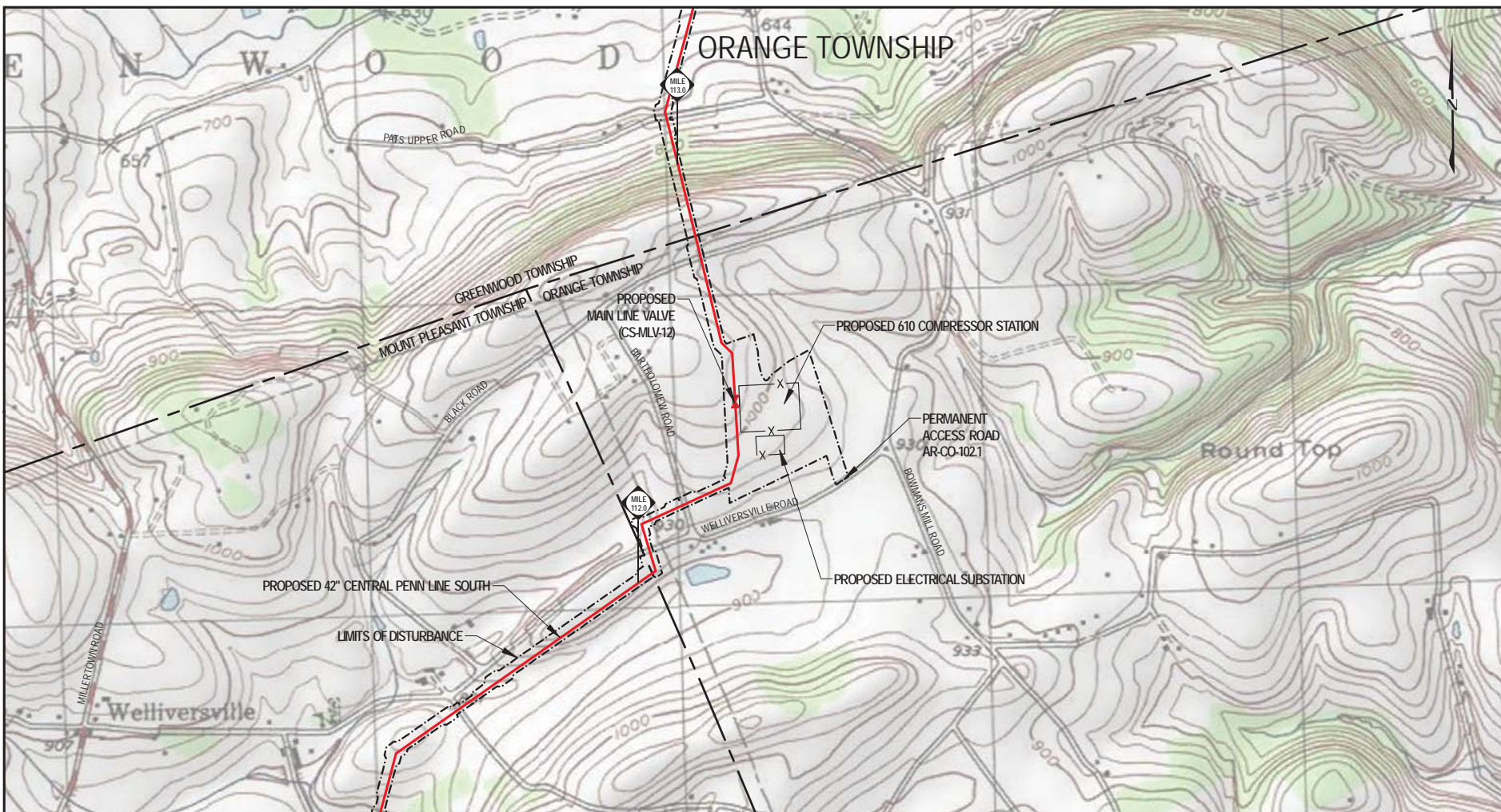
- LEGEND**
- PROPOSED 30" CENTRAL PENN LINE NORTH
 - X — PROPOSED FENCE LINE
 - - - - - LIMITS OF DISTURBANCE
 - - - - - COUNTY/TOWNSHIP BOUNDARY
 - CONTRACTOR STAGING AREA/
CONTRACTOR YARD/
PIPE STORAGE YARD

NOTE:
DRG 7.5 MIN. QUAD MAP.
41075-E7 (FACTORYVILLE, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Proposed Compressor Station 605

B-60

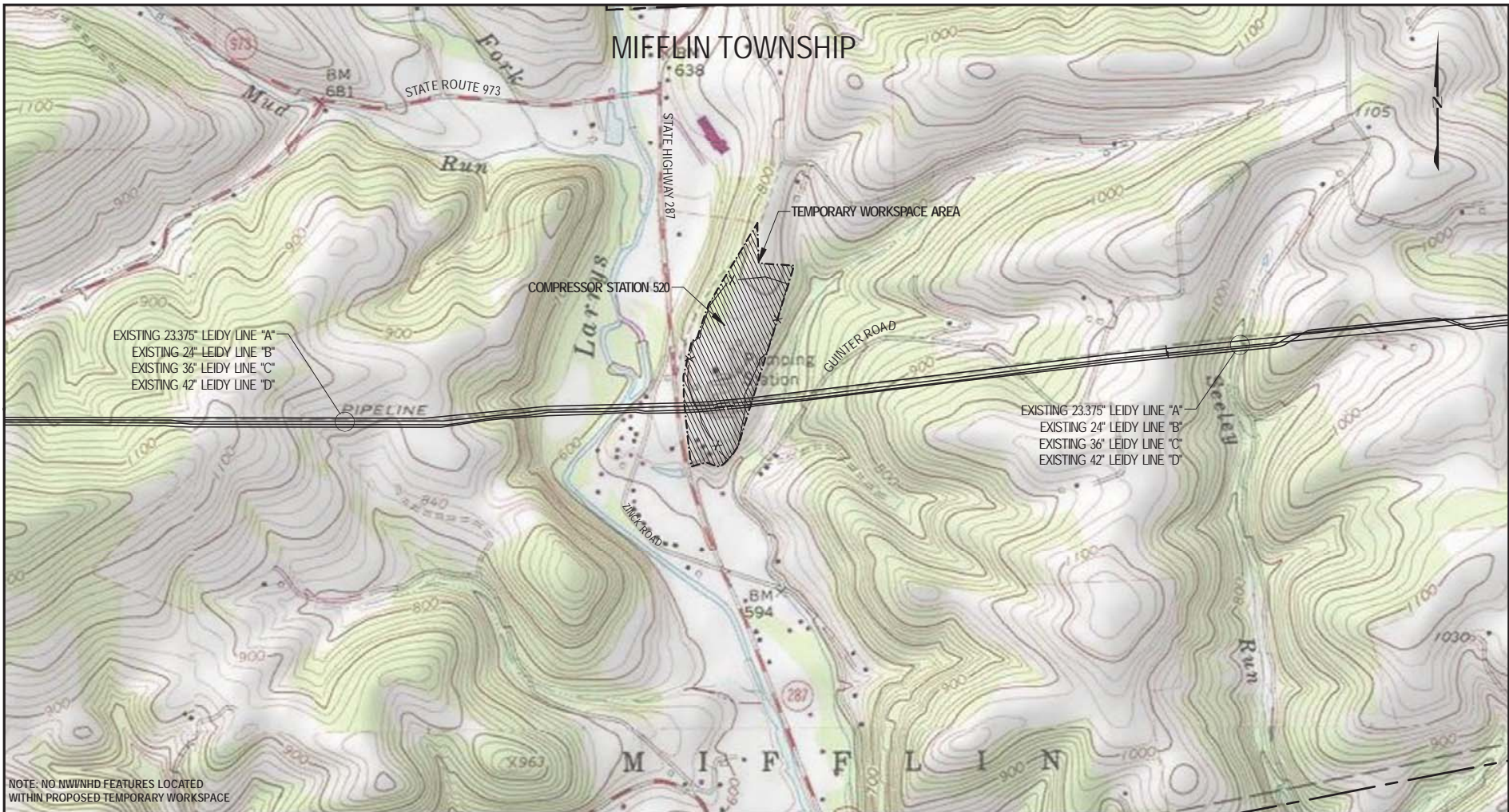


- LEGEND**
- PROPOSED 42" CENTRAL PENN LINE SOUTH
 - X — PROPOSED FENCE LINE
 - - - - - LIMITS OF DISTURBANCE
 - - - - - COUNTY/TOWNSHIP BOUNDARY
 - ▨ CONTRACTOR STAGING AREA/
CONTRACTOR YARD/
PIPE STORAGE YARD

DRG 7.5 MIN. QUAD MAP:
41076-A4 (BLOOMSBURG, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Proposed Compressor Station 610



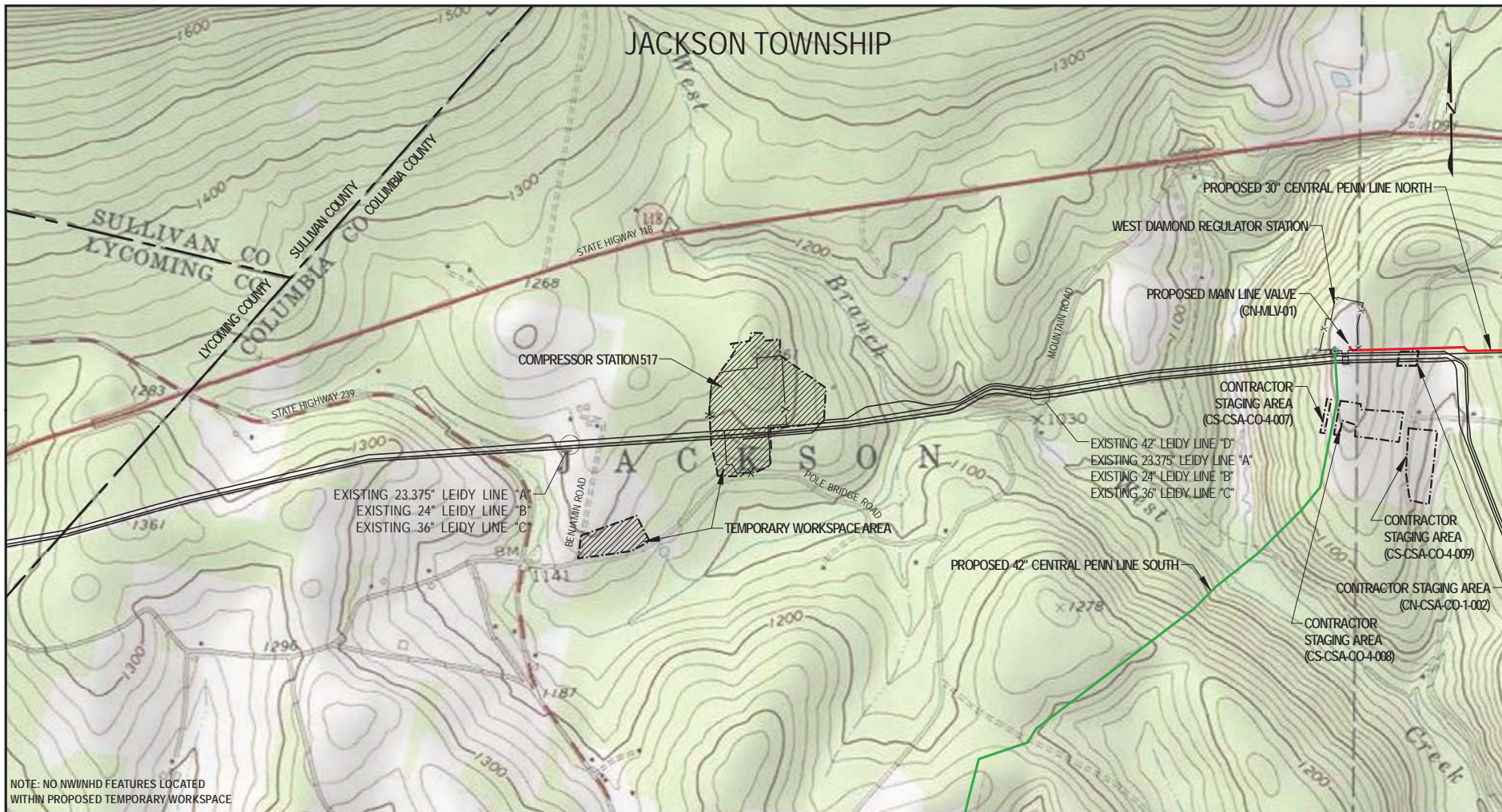
NOTE: NO NW/HD FEATURES LOCATED
WITHIN PROPOSED TEMPORARY WORKSPACE

LEGEND	
	EXISTING PIPELINE
	EXISTING FENCELINE
	COUNTY/TOWNSHIP BOUNDARY
	TOTAL AREA OF TEMPORARY WORKSPACE.....36.10 ACRES

DRG 7.5 MIN. QUAD MAP:
4107-C2 (SALLADSBURG, PA)



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Compressor Station 520



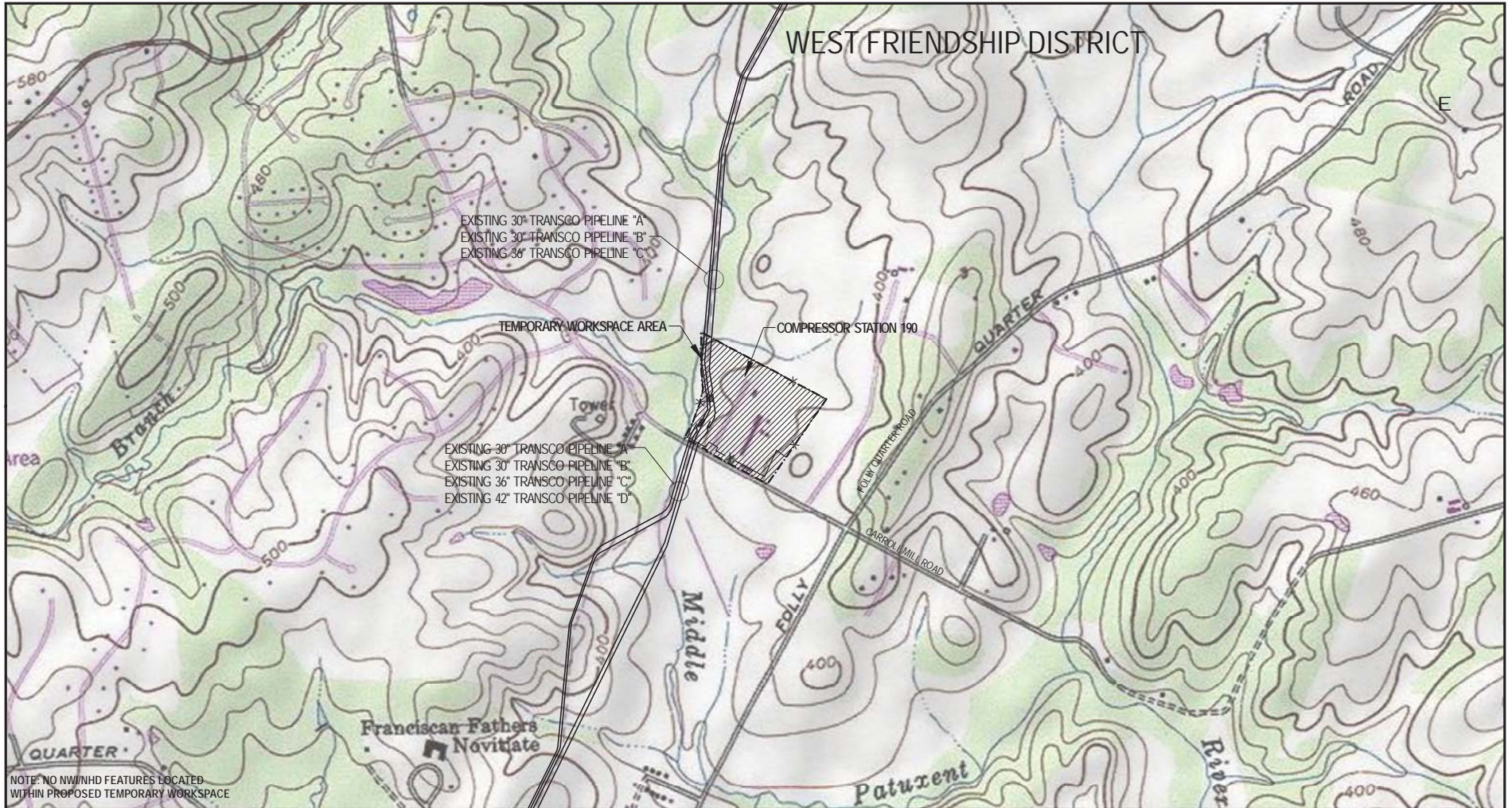
NOTE: NO NW1/4ND FEATURES LOCATED WITHIN PROPOSED TEMPORARY WORKSPACE

LEGEND	
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	PROPOSED 42" CENTRAL PENN LINE SOUTH
	EXISTING PIPELINE
	EXISTING FENCELINE
	COUNTY/TOWNSHIP BOUNDARY
	TOTAL AREA OF TEMPORARY WORKSPACE.....32.01 ACRES

DRG 7.5 MIN. QUAD MAPS:
41076-C4 (ELK GROVE, PA)



Appendix B Atlantic Sunrise Project Project Overview Maps Compressor Station 517



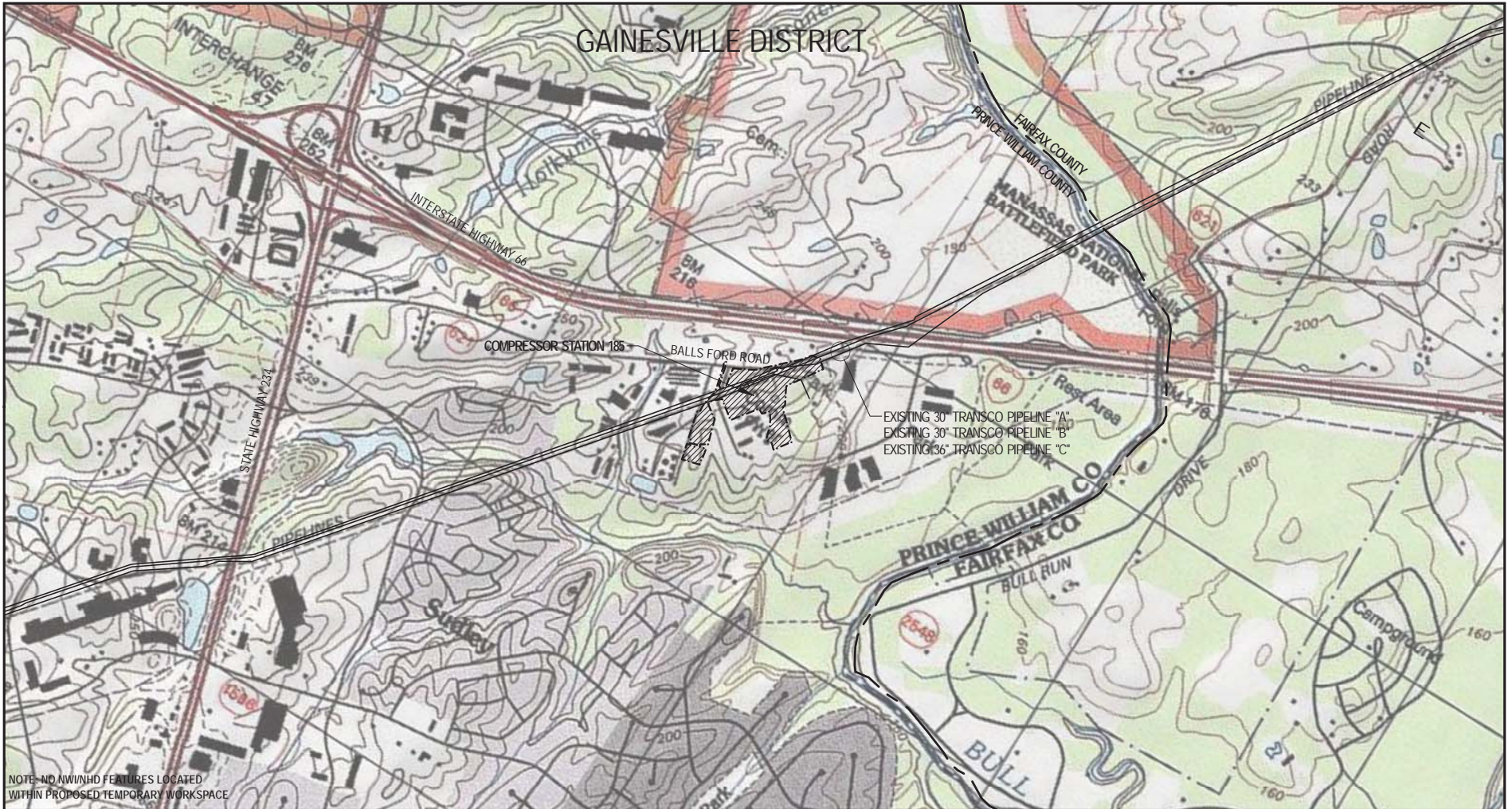
LEGEND

	EXISTING PIPELINE
	EXISTING FENCELINE
	COUNTY/TOWNSHIP BOUNDARY
	TOTAL AREA OF TEMPORARY WORKSPACE.....30.00 ACRES

DRG 7.5 MIN. QUAD MAPS:
 39076-C3 (SYKESVILLE, MA)



Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Compressor Station 190



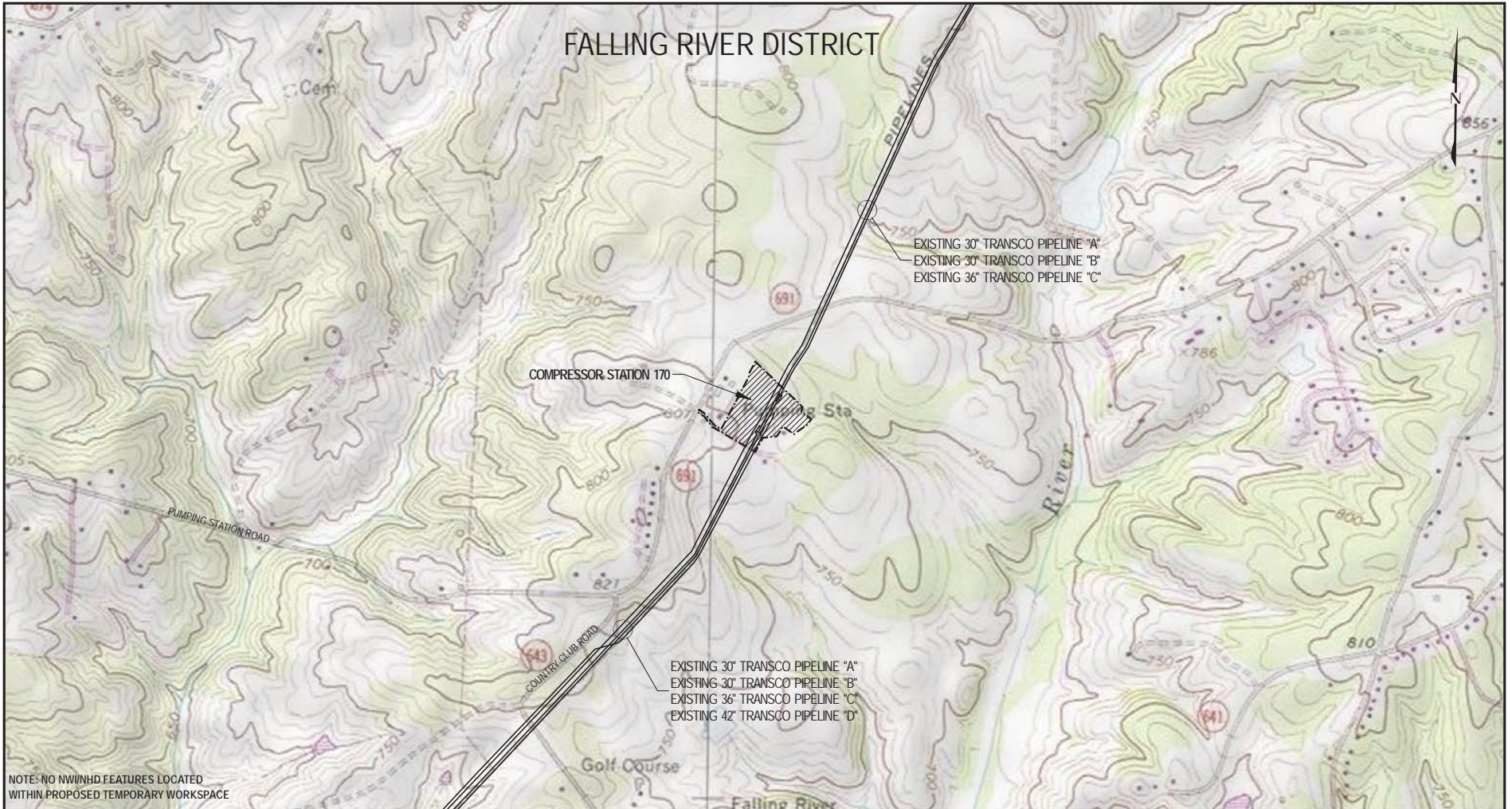
NOTE: NO NW1/4ND FEATURES LOCATED
WITHIN PROPOSED TEMPORARY WORKSPACE

LEGEND	
	EXISTING PIPELINE
	COUNTY/TOWNSHIP BOUNDARY
	TOTAL AREA OF TEMPORARY WORKSPACE.....13.68 ACRES

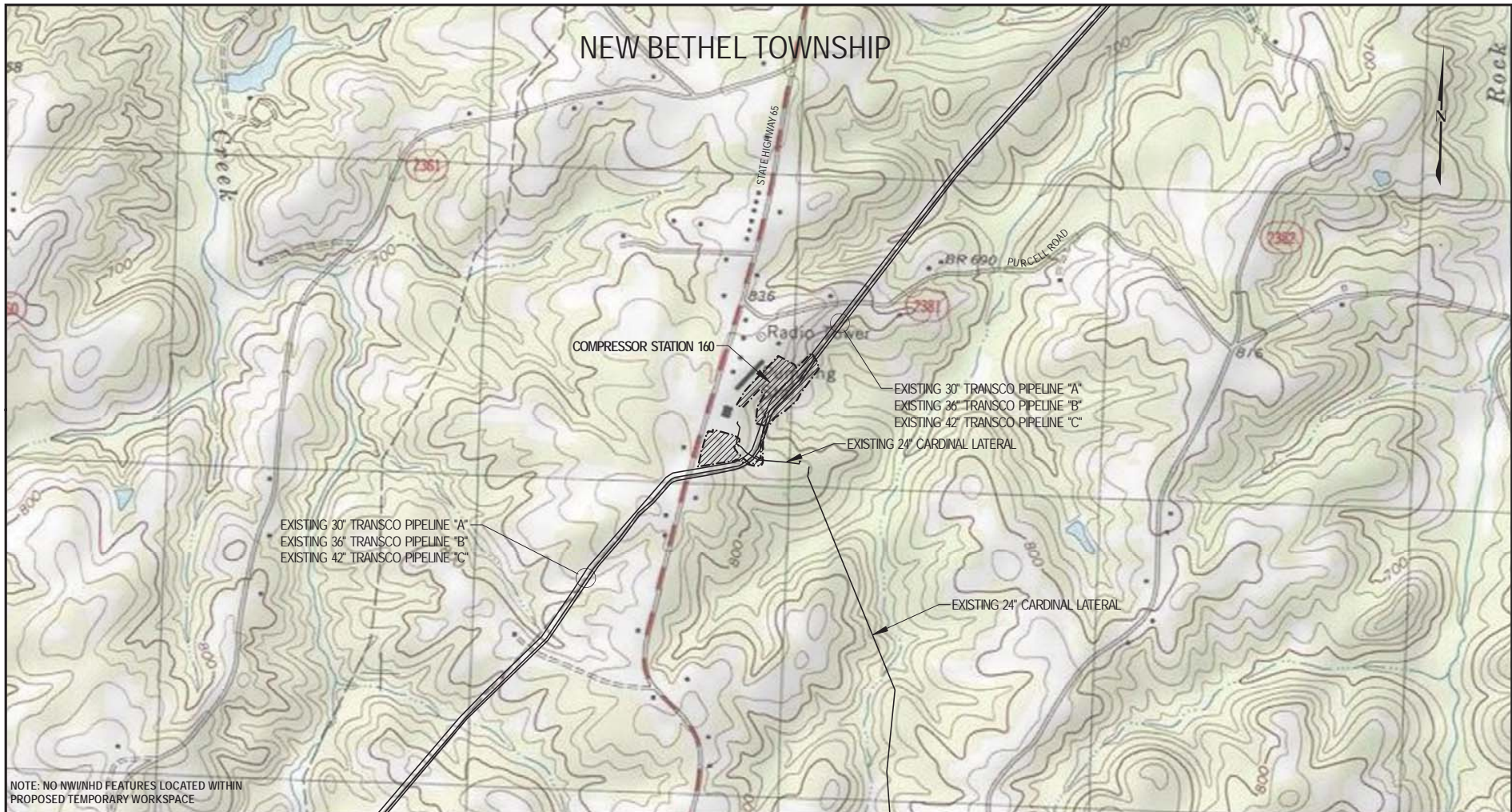
DRG 7.5 MIN. QUAD:
380775-G5 (GAINESVILLE, VA)



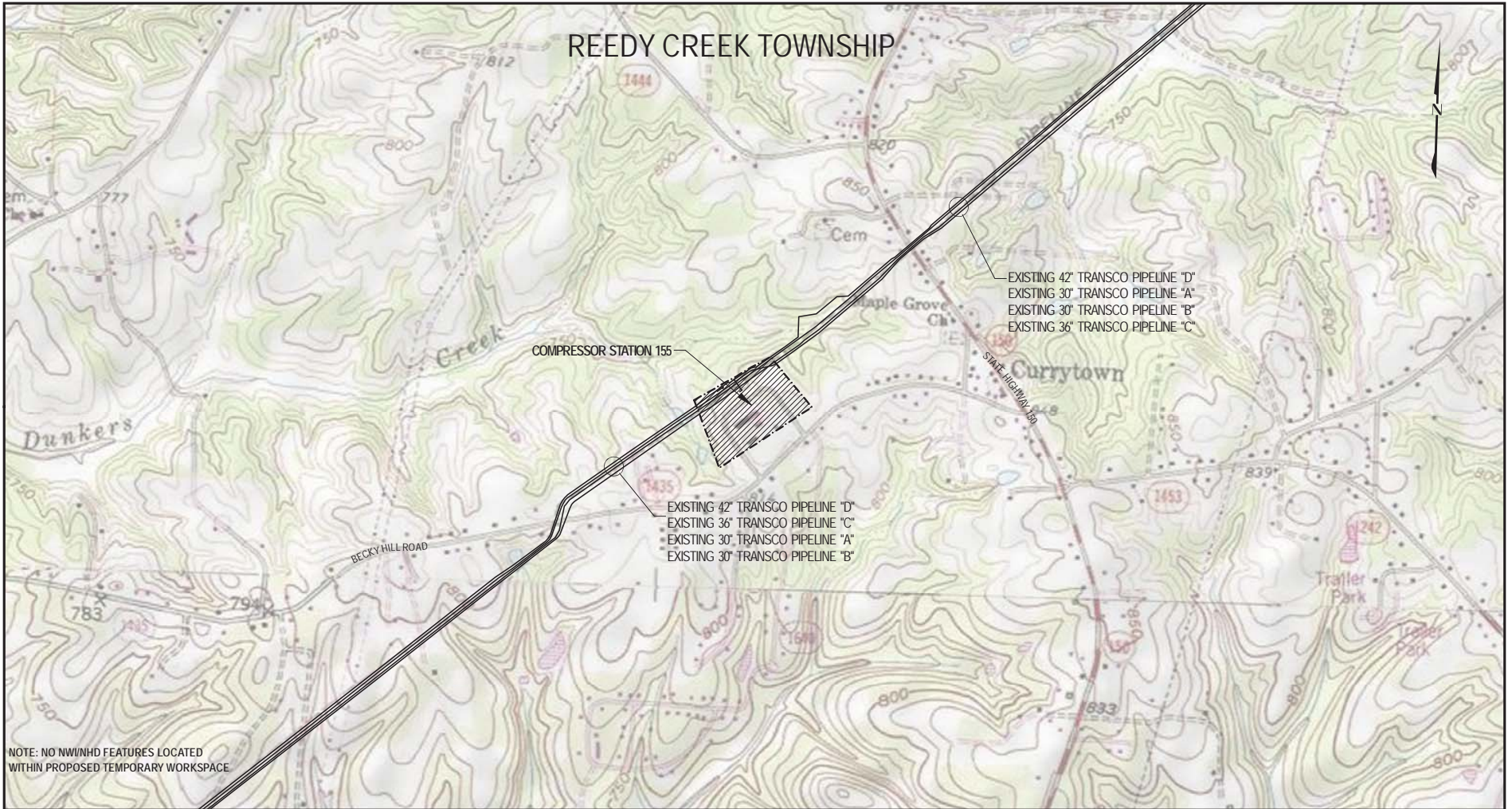
Appendix B
Atlantic Sunrise Project
Project Overview Maps
Compressor Station 185



<p>LEGEND</p> <p>— EXISTING PIPELINE</p> <p>- - - COUNTY/TOWNSHIP BOUNDARY</p> <p>▨ TOTAL AREA OF TEMPORARY WORKSPACE.....10.73 ACRES</p>	<p>DRG 7.5 MIN. QUAD MAPS: 37078-C8 (CONCORD, VA) 37078-C7 (APPOMATTOX, VA)</p>	<p>Appendix B Atlantic Sunrise Project Project Overview Maps Compressor Station 170</p>
<p>0 1,000 2,000 3,000</p> <p>SCALE IN FEET</p>		

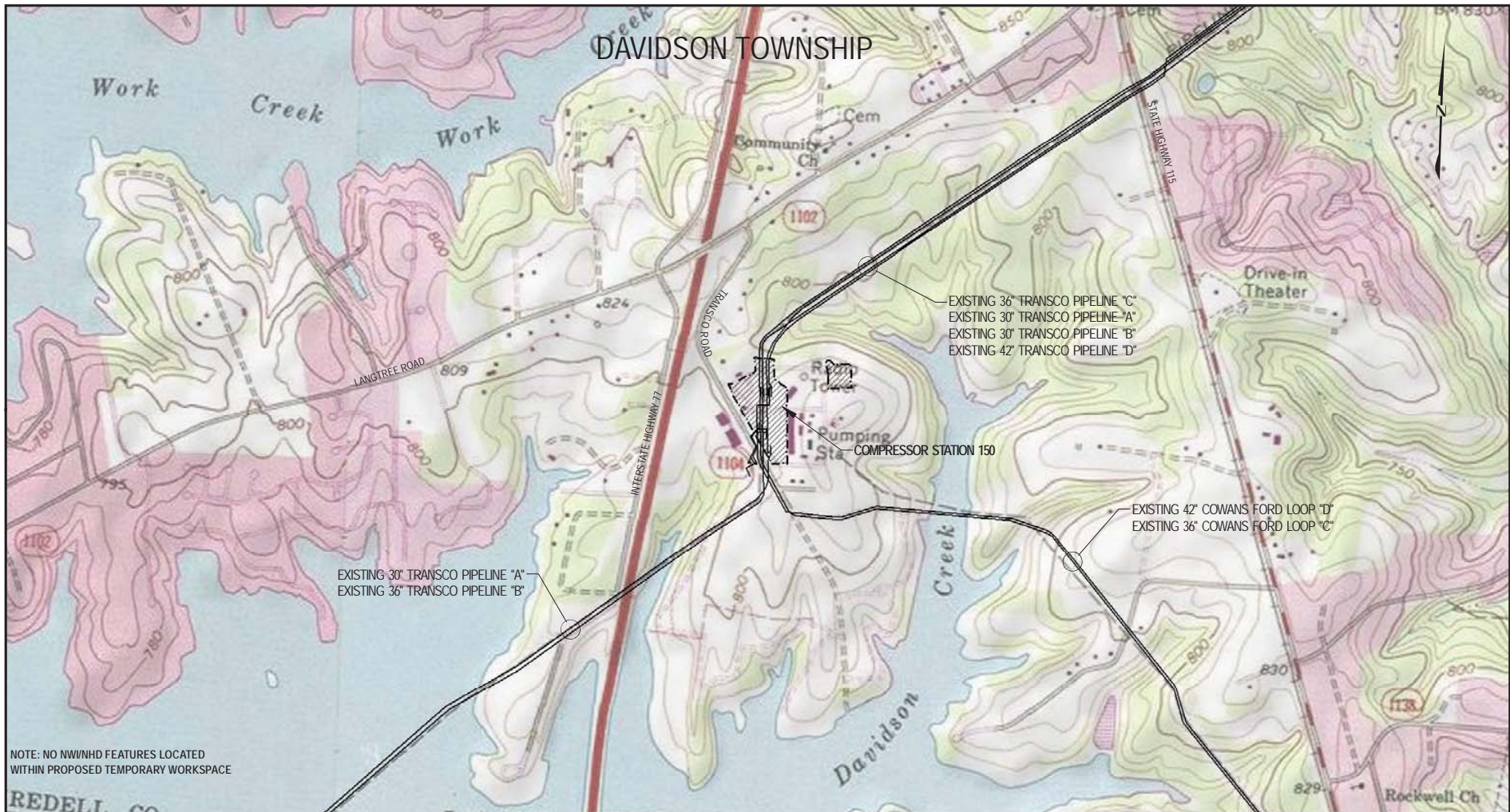


<p>LEGEND</p> <p>— EXISTING PIPELINE</p> <p>- - - COUNTY/TOWNSHIP BOUNDARY</p> <p>▨ TOTAL AREA OF TEMPORARY WORKSPACE.....10.45 ACRES</p>	<p>DRG 7.5. MIN. QUAD MAP: 36079-C7 (BETHANY, NC)</p> <p>0 1,000 2,000 3,000</p> <p>SCALE IN FEET</p>	<p>Appendix B Atlantic Sunrise Project Project Overview Maps Compressor Station 160</p>
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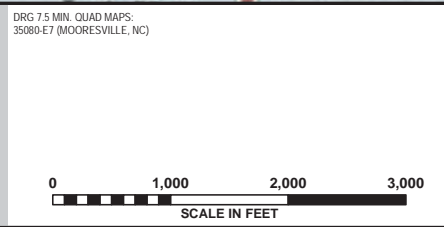


NOTE: NO NW/HD FEATURES LOCATED
WITHIN PROPOSED TEMPORARY WORKSPACE

<p>LEGEND</p> <ul style="list-style-type: none"> — EXISTING PIPELINE - - - COUNTY/TOWNSHIP BOUNDARY ▨ TOTAL AREA OF TEMPORARY WORKSPACE.....17.55 ACRES 	<p>DRG 7.5 MIN. QUAD MAP: 35080H3 (WELCOME, NC)</p> <p>0 1,000 2,000 3,000 SCALE IN FEET</p>	<p>Appendix B Atlantic Sunrise Project Project Overview Maps Compressor Station 155</p>
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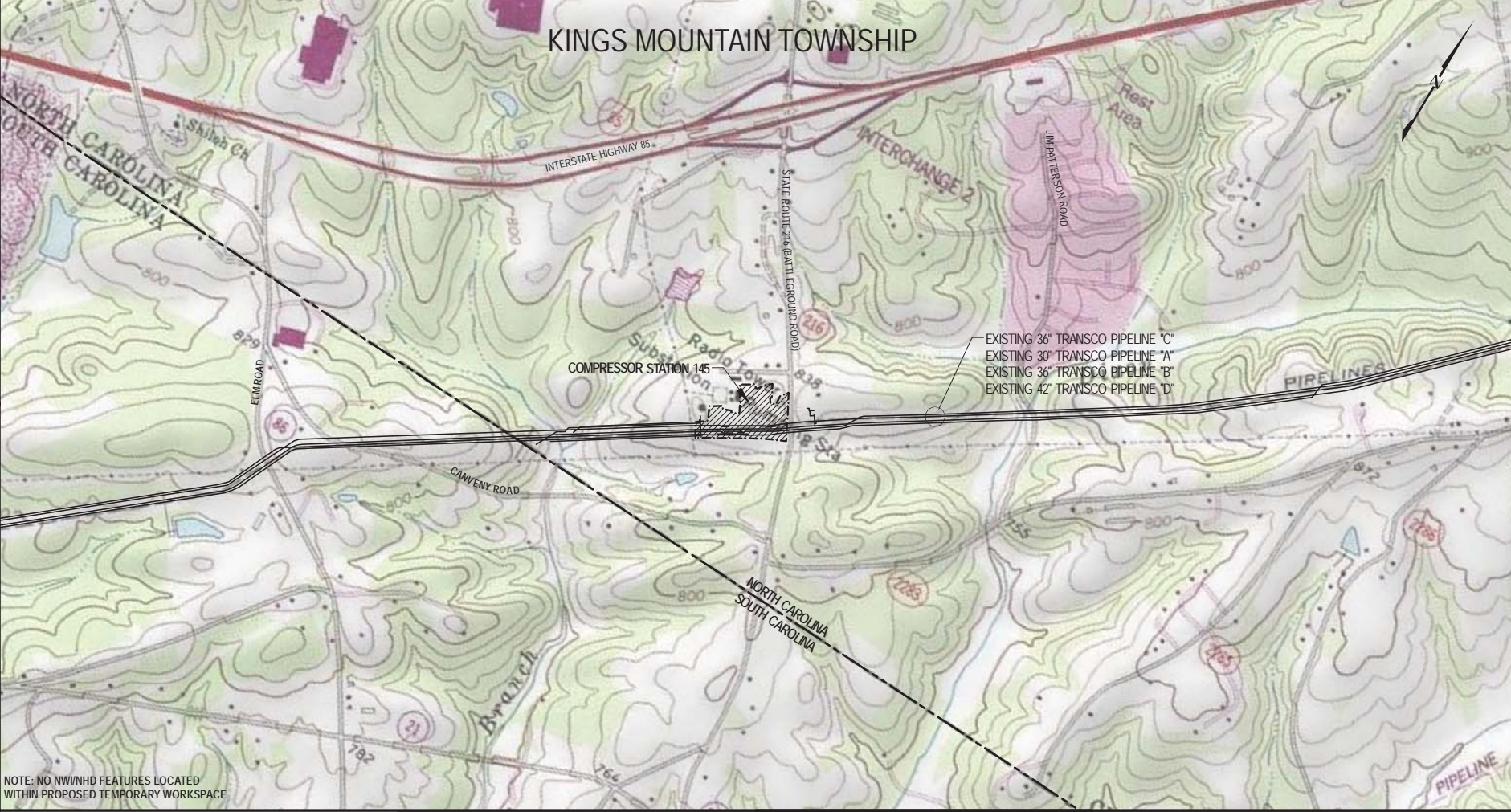


LEGEND	
	EXISTING PIPELINE
	COUNTY/TOWNSHIP BOUNDARY
	TOTAL AREA OF TEMPORARY WORKSPACE.....11.24 ACRES



Appendix B
Atlantic Sunrise Project
Project Overview Maps
Compressor Station 150

KINGS MOUNTAIN TOWNSHIP






EXISTING 36" TRANSCO PIPELINE "C"
 EXISTING 30" TRANSCO PIPELINE "A"
 EXISTING 36" TRANSCO PIPELINE "B"
 EXISTING 42" TRANSCO PIPELINE "D"

COMPRESSOR STATION 145

NOTE: NO NW/HD FEATURES LOCATED WITHIN PROPOSED TEMPORARY WORKSPACE

LEGEND

-  EXISTING PIPELINE
-  STATE BOUNDARY
-  TOTAL AREA OF TEMPORARY WORKSPACE.....8.95 ACRES

DRG 7.5 MIN. QUAD MAPS:
 35081-B4 (GROVER, NC)

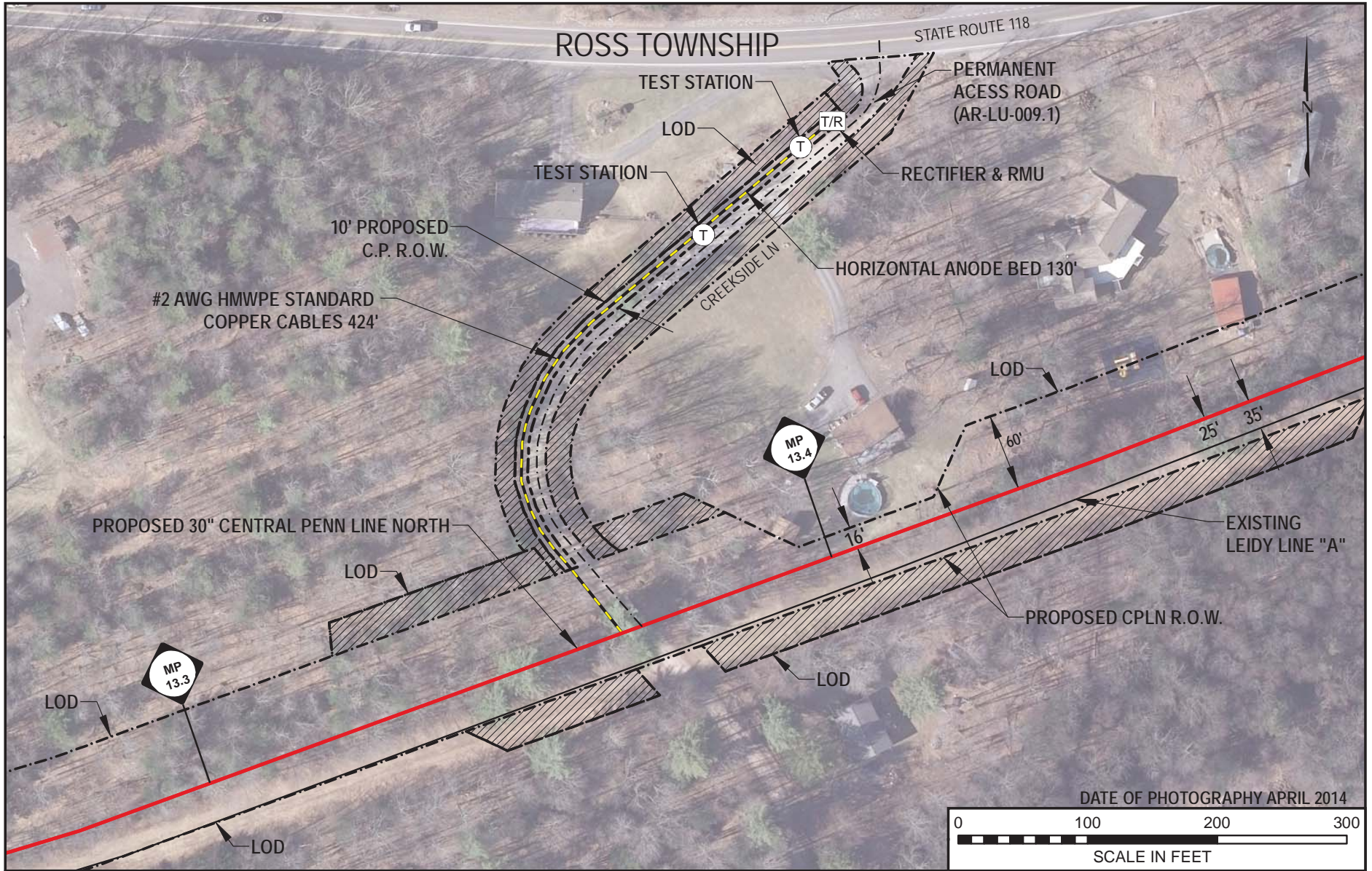


Appendix B
Atlantic Sunrise Project
 Project Overview Maps
 Compressor Station 145

B-69

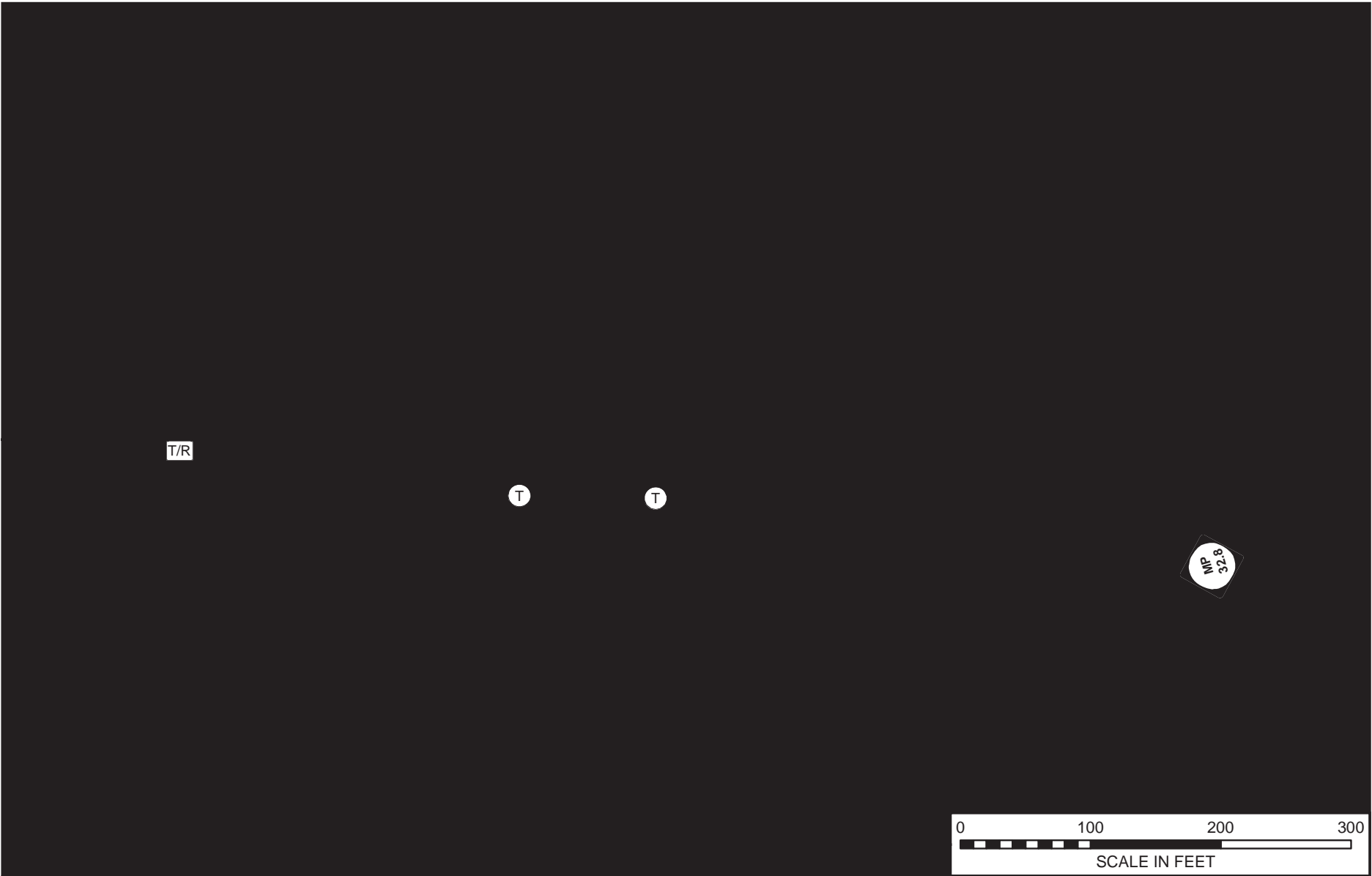
CATHODIC PROTECTION WORKSPACE DRAWINGS

B-73










LEGEND	
	PROPOSED 30" CENTRAL PENN LINE NORTH
	LIMITS OF DISTURBANCE (LOD)
	PROPOSED RIGHT OF WAY
	CATHODIC PROTECTION (C.P.)
	ADDITIONAL TEMPORARY WORKSPACE
	RECTIFIER & RMU
	TEST STATION

Appendix B
Atlantic Sunrise Project
 Cathodic Protection Workspace Drawings
 Central Penn Line North, Milepost 13.40

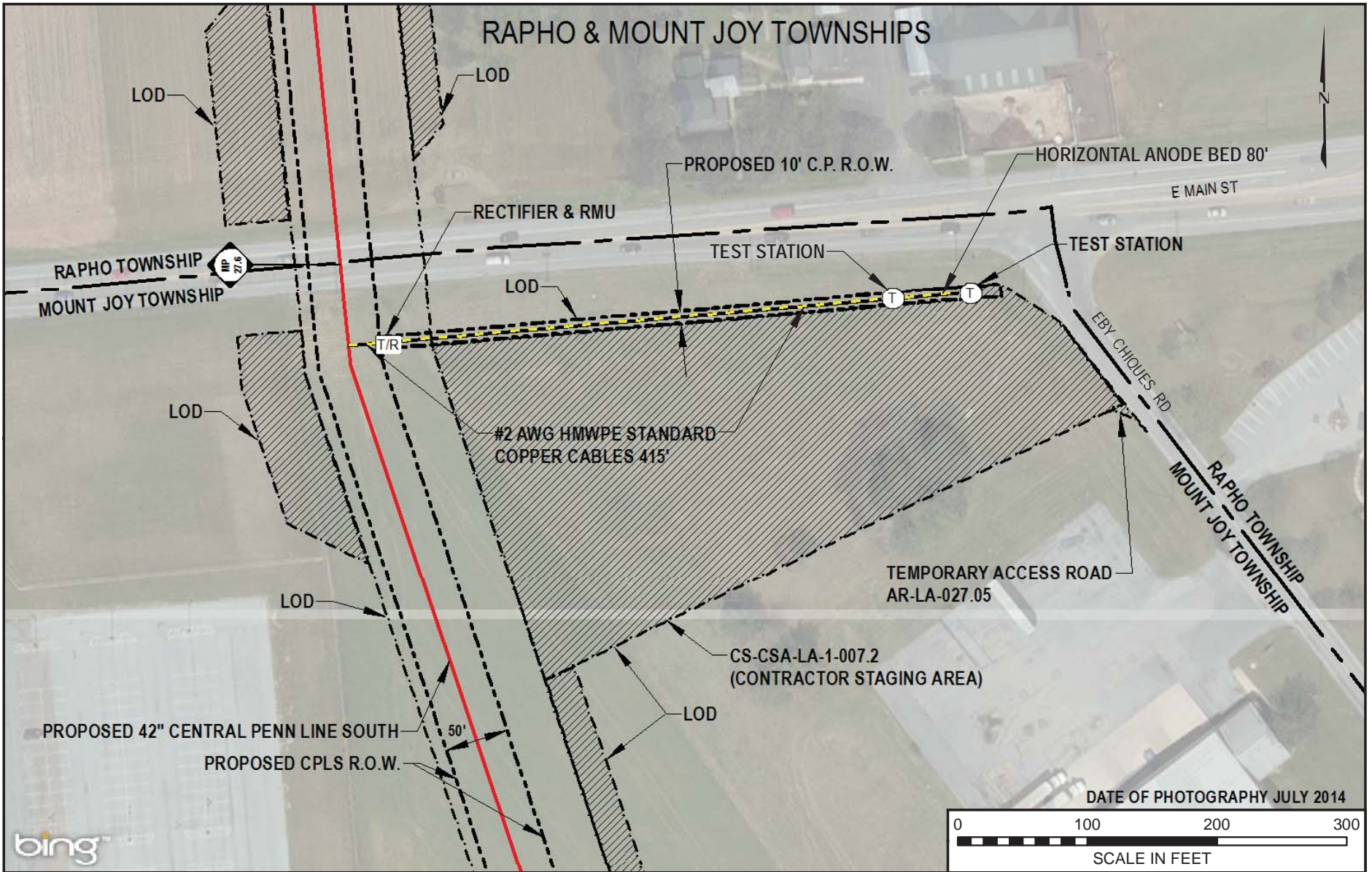


LEGEND

-  PROPOSED 30" CENTRAL PENN LINE NORTH
-  LIMITS OF DISTURBANCE (LOD)
-  PROPOSED RIGHT OF WAY (R.O.W.)
-  ADDITIONAL TEMPORARY WORKSPACE
-  CATHODIC PROTECTION (C.P.)
-  RECTIFIER & RMU
-  TEST STATION

Appendix B
Atlantic Sunrise Project
 Cathodic Protection Workspace Drawings
 Central Penn Line North, Milepost 32.80

RAPHO & MOUNT JOY TOWNSHIPS



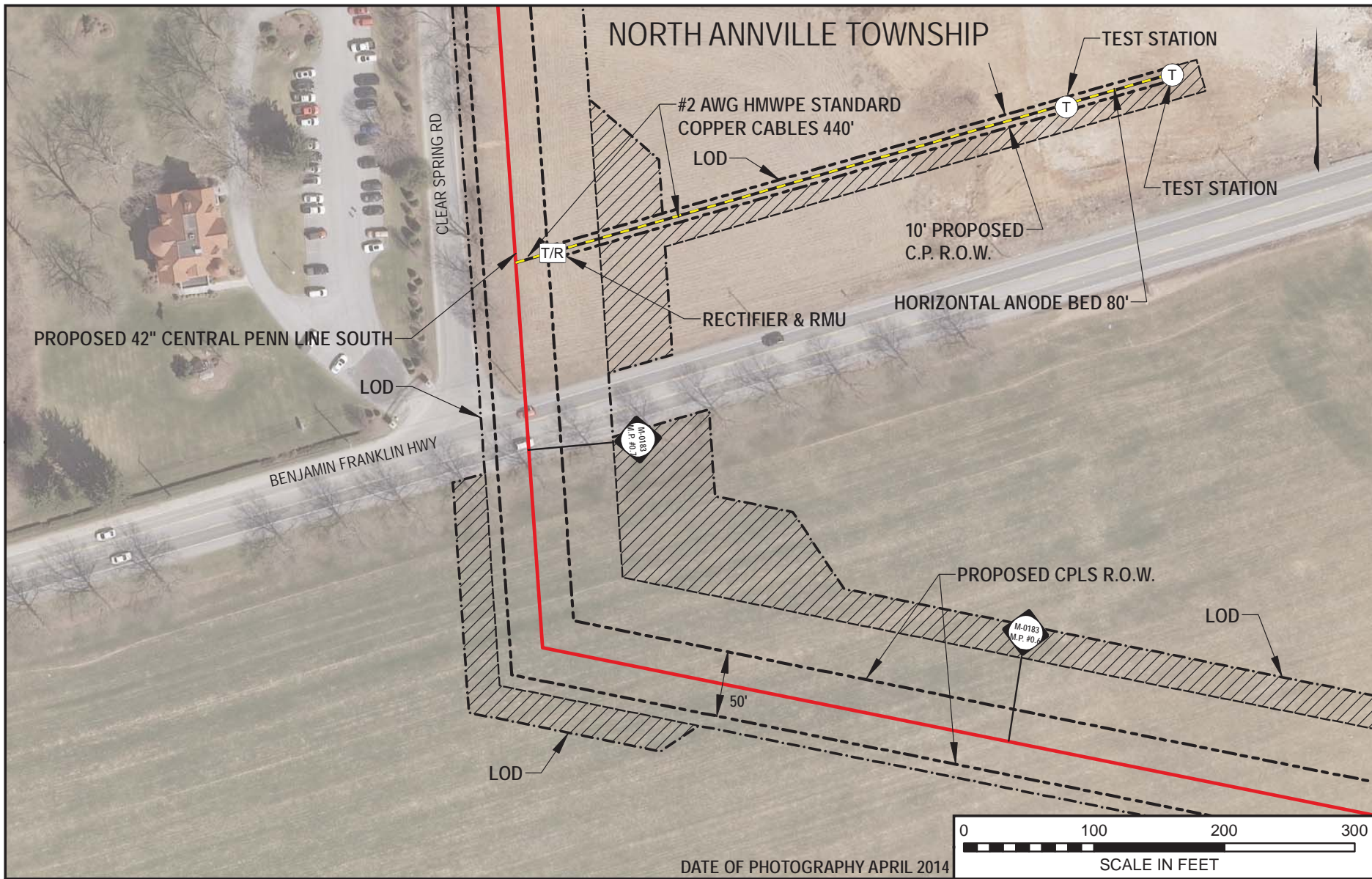
B-77

- LEGEND**
- PROPOSED 42" CENTRAL PENN LINE SOUTH
 - - - - - LIMITS OF DISTURBANCE (LOD)
 - - - - - PROPOSED RIGHT OF WAY (R.O.W.)
 - ||||| ADDITIONAL TEMPORARY WORKSPACE
 - - - - - CATHODIC PROTECTION (C.P.)
 - T/R RECTIFIER & RMU
 - T TEST STATION

Appendix B
Atlantic Sunrise Project
 Cathodic Protection Workspace Drawings
 Central Penn Line North, Milepost 27.60



B-78



DATE OF PHOTOGRAPHY APRIL 2014



LEGEND

	PROPOSED 42" CENTRAL PENN LINE SOUTH
	LIMITS OF DISTURBANCE (LOD)
	PROPOSED RIGHT OF WAY (R.O.W.)
	ADDITIONAL TEMPORARY WORKSPACE
	CATHODIC PROTECTION (C.P.)
	RECTIFIER & RMU
	TEST STATION

Appendix B
Atlantic Sunrise Project
 Cathodic Protection Workspace Drawings
 Central Penn Line North, Milepost M-0183 0.7



LEGEND	
	PROPOSED 42" CENTRAL PENN LINE SOUTH
	LIMITS OF DISTURBANCE (LOD)
	PROPOSED RIGHT OF WAY (R.O.W.)
	ADDITIONAL TEMPORARY WORKSPACE
	CATHODIC PROTECTION (C.P.)
	RECTIFIER & RMU
	TEST STATION

Appendix B
Atlantic Sunrise Project
Cathodic Protection Workspace Drawings
Central Penn Line North, Milepost 61.40

B-80



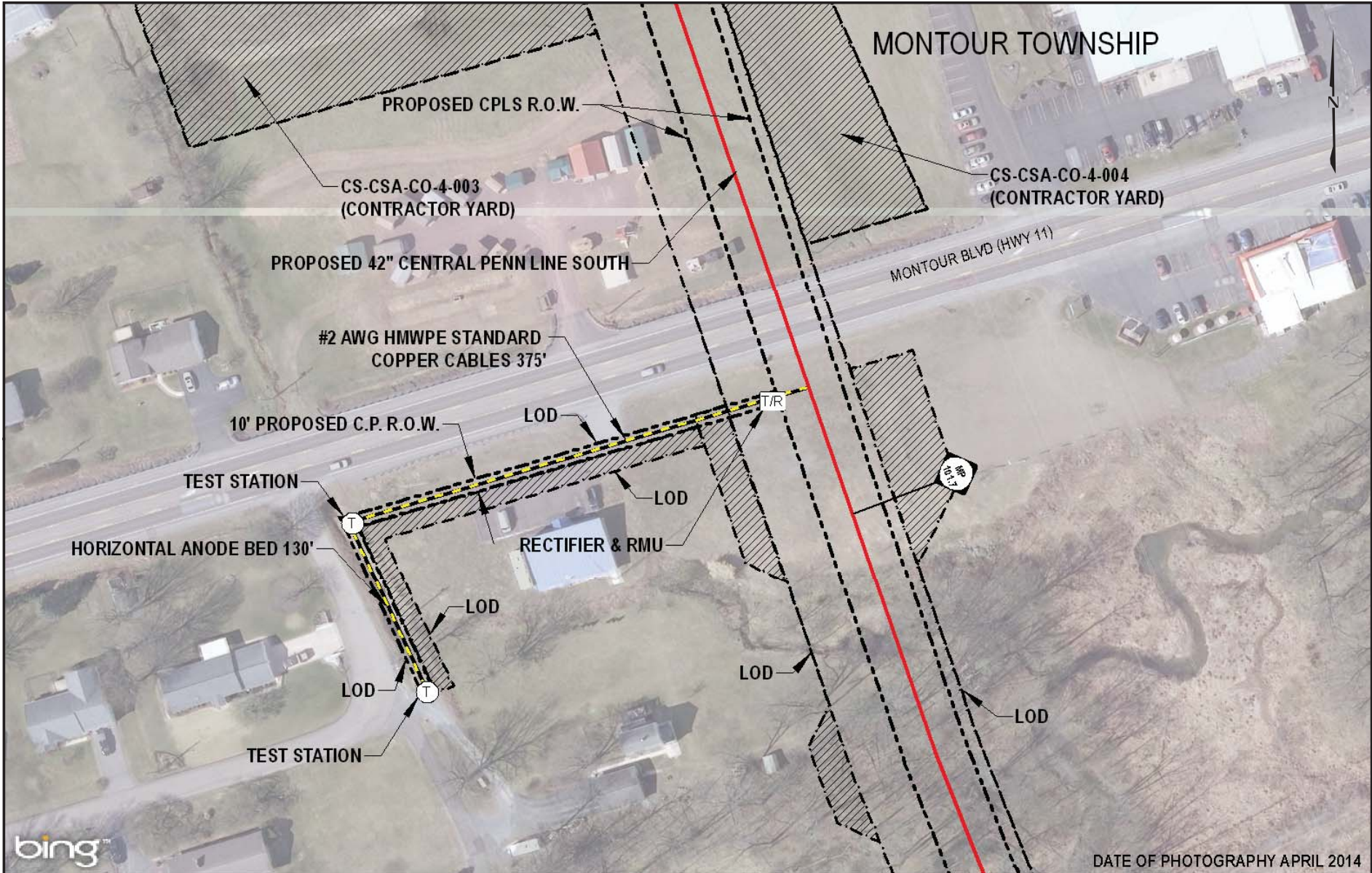
DATE OF PHOTOGRAPHY APRIL 2014



LEGEND

	PROPOSED 42" CENTRAL PENN LINE SOUTH
	LIMITS OF DISTURBANCE (LOD)
	PROPOSED RIGHT OF WAY (R.O.W.)
	ADDITIONAL TEMPORARY WORKSPACE
	CATHODIC PROTECTION (C.P.)
	RECTIFIER & RMU
	TEST STATION

Appendix B
Atlantic Sunrise Project
 Cathodic Protection Workspace Drawings
 Central Penn Line North, Milepost 78.47



B-81

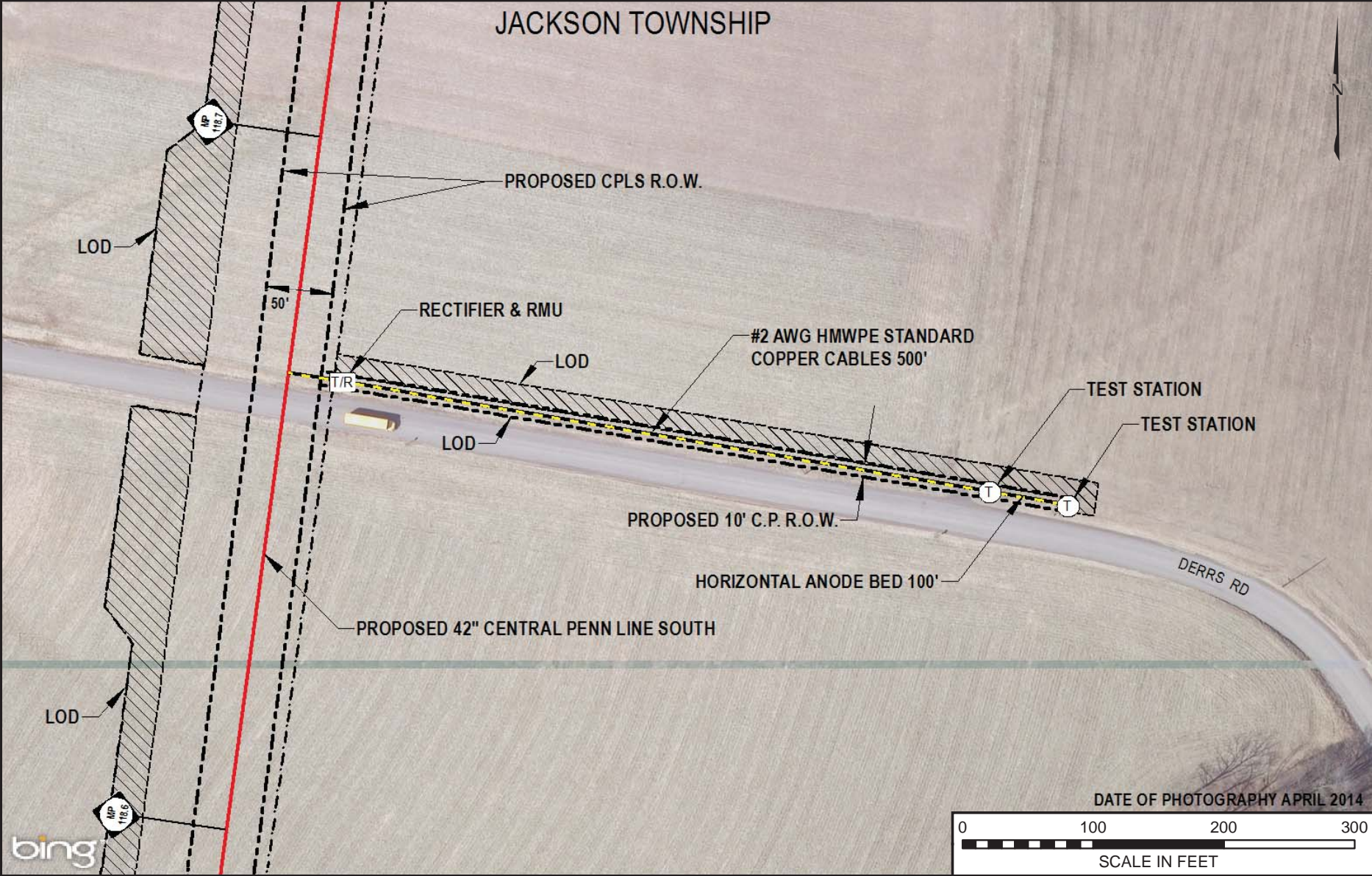
LEGEND

- PROPOSED 42" CENTRAL PENN LINE SOUTH
- - - - - LIMITS OF DISTURBANCE (LOD)
- - - - - PROPOSED RIGHT OF WAY (R.O.W.)
- ADDITIONAL TEMPORARY WORKSPACE
- CATHODIC PROTECTION (C.P.)
- T/R RECTIFIER & RMU
- T TEST STATION

Appendix B
Atlantic Sunrise Project
 Cathodic Protection Workspace Drawings
 Central Penn Line North, Milepost 101.70

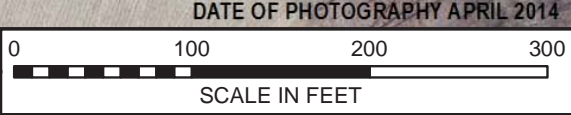
DATE OF PHOTOGRAPHY APRIL 2014

JACKSON TOWNSHIP



B-82

- LEGEND**
- PROPOSED 42" CENTRAL PENN LINE SOUTH
 - - - - LIMITS OF DISTURBANCE (LOD)
 - - - - PROPOSED RIGHT OF WAY (R.O.W.)
 - ADDITIONAL TEMPORARY WORKSPACE
 - CATHODIC PROTECTION (C.P.)
 - T/R RECTIFIER & RMU
 - T TEST STATION



Appendix B
Atlantic Sunrise Project
 Cathodic Protection Workspace Drawings
 Central Penn Line North, Milepost 118.66

**BEST MANAGEMENT PRACTICE FIGURES AND
TYPICAL RIGHT-OF-WAY DRAWINGS**

List of Best Management Practices

Fig #	TITLE
1	ROCK CONSTRUCTION ENTRANCE
2	WATERBAR
3	TEMP STREAM CROSSING - MULTIPLE PIPES
4	PUMPED WATER FILTER BAG
5	COMPOST FILTER SOCK
6	SEDIMENT BARRIER HOOK OUTLET STRUCTURE
7	REINFORCED SEDIMENT BARRIER HOOK OUTLET STRUCTURE
8	ROCK FILTER OUTLET STRUCTURE
9	FILTER SOCK HOOK OUTLET STRUCTURE
10	ROCK FILTER OUTLET
11	STANDARD SILT FENCE
12	REINFORCED SILT FENCE
13	SUPER SILT FENCE
14	TRENCH PLUG INSTALLATION
15	TRENCHED ROAD CROSSING
16	BORED ROAD/RAILROAD CROSSING
17	UNSATURATED WETLAND INSTALLATION PROCEDURE
18	SATURATED WETLAND INSTALLATION PROCEDURE
19	INUNDATED WETLAND INSTALLATION PROCEDURE
20	WETLAND CROSSING CONFIGURATION
21	WETLAND EQUIPMENT CROSSING
22	BRIDGE EQUIPMENT CROSSING
23	TRENCH DEWATERING
24	HYDROSTATIC DEWATERING STRUCTURE
25	RIP RAP STREAM STABILIZATION
26	FLUME CROSSING
27	COFFER DAM
28	STRAW BALE EROSION CONTROL
29	HORIZONTAL DIRECTIONAL DRILL
30	ENERGY DISSIPATOR
31	TYPICAL ACCESS RD X-SECTION
32	RIDGE TOP CONSTRUCTION PROCEDURE
33	TWO TONE SIDE SLOPE
34	EROSION CONTROL BLANKET
35	WET INTERMEDIATE WATERBODY CROSSING
36	WET MINOR WATERBODY CROSSING
37	DAM AND PUMP CROSSING

Typical Right-of-Way Cross-Sections

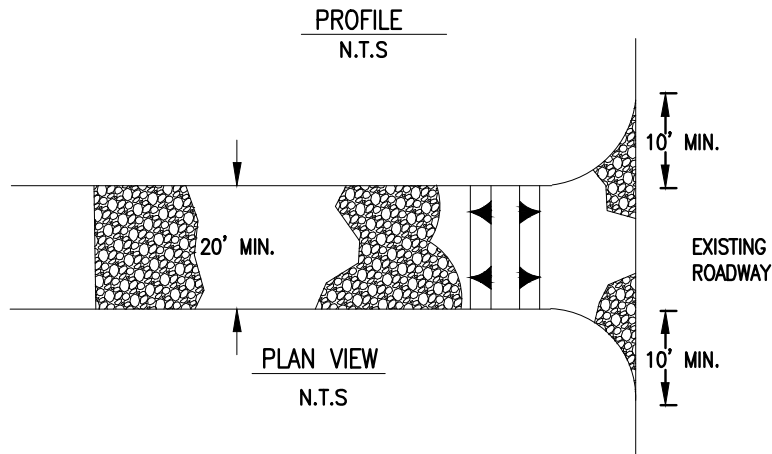
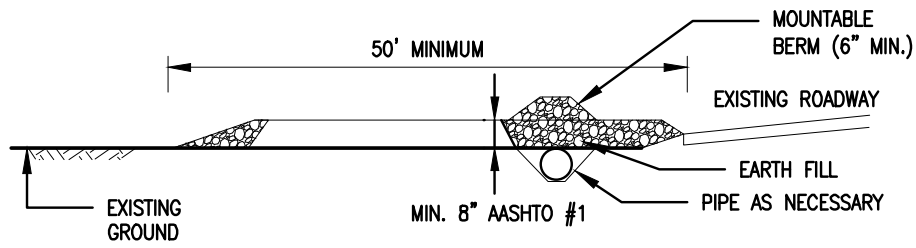
PROPOSED 30" CENTRAL PENN LINE NORTH

PROPOSED 42" CENTRAL PENN LINE SOUTH

PROPOSED 36" CHAPMAN LOOP

PROPOSED 42" UNITY LOOP

PROPOSED 30" MAINLINE "A" AND "B" VIRGINIA REPLACEMENTS



*MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

1. TOPSOIL TO BE REMOVED PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
2. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
3. MOUNTABLE BERM SHOULD BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE TO BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
4. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

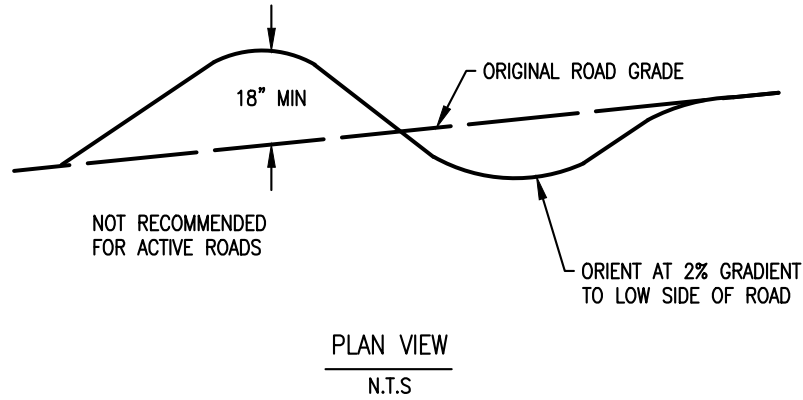
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL



ROCK CONSTRUCTION ENTRANCE





NOTES:

1. WATERBARS MUST DISCHARGE TO A STABLE AREA.
2. WATERBARS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED OR ERODED WATERBARS SHALL BE RESTORED TO ORIGINAL DIMENSIONS WITHIN 24 HOURS OF INSPECTION.
3. MAINTENANCE OF WATERBARS SHALL BE PROVIDED UNTIL ROADWAY, SKIDTRAIL, OR RIGHT-OF-WAY HAS ACHIEVED PERMANENT STABILIZATION.
4. WATERBARS ON RETIRED ROADWAYS, SKIDTRAILS, AND RIGHT-OF-WAYS SHALL BE LEFT IN PLACE AFTER PERMANENT STABILIZATION HAS BEEN ACHIEVED.
ALL WATERBARS SHOWN ON THE PLANS ARE INTENDED TO BE PERMANENT BMP'S.
5. ADDITIONAL WATERBARS MAY BE INSTALLED AS APPROPRIATE DURING CONSTRUCTION.
6. WATERBARS SHOULD BE CONSTRUCTED TO DISCHARGE TO ALTERNATE SIDES OF THE ROW, WHERE POSSIBLE/PRACTICAL.
7. A "SOFT" TRENCH PLUG MAY BE USED TO CONTROL INSTANCES WHERE A WATERBAR DISCHARGES TO THE TRENCH IN STEEP SLOPE AREAS.
8. A "J-HOOK" OUTLET MAY BE USED AT WATERBARS TO CONTROL THE FLOW OF RUNOFF. HAY BALES, SILT SOCKS OR SUPER SILT FENCE TRENCHED IN MAY BE USED AS "J-HOOK" OUTLETS.
9. THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN (PCSM) FOR THE LINEAR PORTION OF THIS PROJECT IS TO RESTORE THE CONSTRUCTION RIGHT-OF-WAY TO ITS ORIGINAL CONTOURS FOLLOWING PIPELINE INSTALLATION AND RESTORATION. THE ENTIRE AREA WILL BE PERMANENTLY RE-VEGETATED OR STABILIZED WITH PERVIOUS MATERIAL. WATER BARS INSTALLED DURING CONSTRUCTION ACTIVITIES WILL REMAIN AS PERMANENT WATER BARS AND ACT AS PCSM BMP'S.

TABLE 3.1 – MAXIMUM WATERBAR SPACING

PERCENT SLOPE	SPACING (FT)
<5	N/A
5-15	300
15-30	200
>30	100

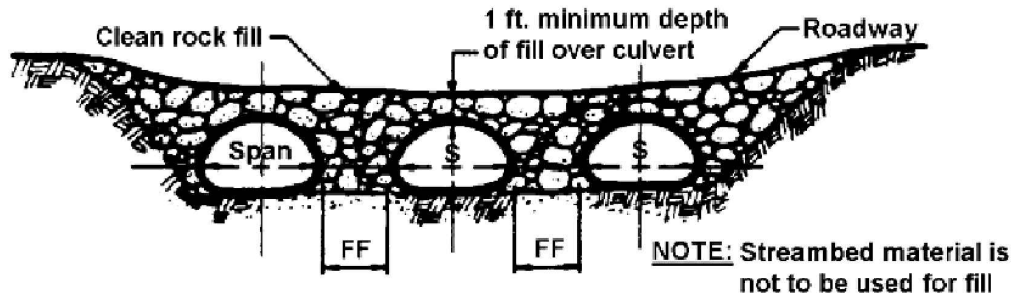
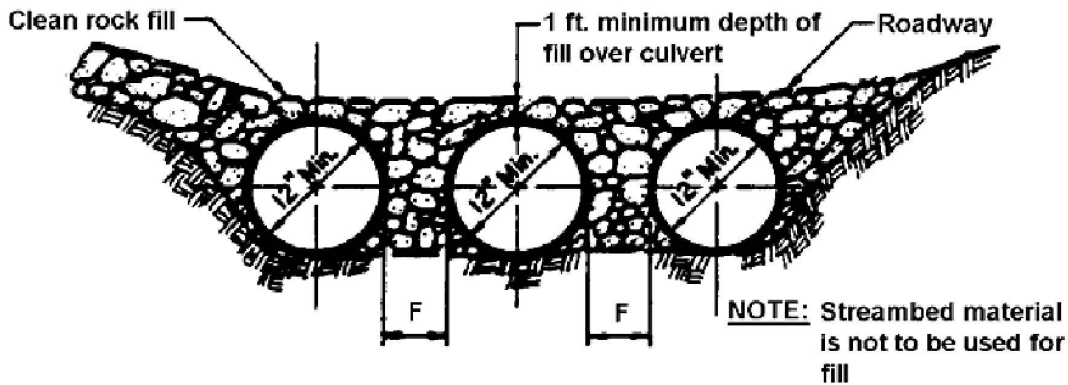
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

WB

WATER BAR





SECTIONS

NOT TO SCALE

TABLE 3.5 – MINIMUM DISTANCE BETWEEN CULVERT PIPES

PIPE DIAMETER	MINIMUM DISTANCE (F)
12" TO 24"	12"
24" TO 72"	½ DIAMETER (D)
72" TO 120"	36"
PIPE ARCH SIZE (IN.)	MINIMUM DISTANCE (FF)
18" X 11" TO 25" X 16"	12"
25" X 16" TO 72" X 44"	1/3 SPAN OF PIPE ARCH
ABOVE 72" X 44"	30"

NOTES:

1. MULTIPLE PIPES AND MULTIPLE SPAN BRIDGES AND CULVERTS WHICH MAY TEND TO COLLECT DEBRIS, CONTRIBUTE TO THE FORMATION OF ICE JAMS AND INCREASE HEAD LOSSES SHALL BE AVOIDED TO THE MAXIMUM EXTENT PRACTICABLE. CROSSINGS OF LESS THAN 15 FEET SHALL BE BY ONE SPAN, EXCEPT WHERE CONDITIONS MAKE IT IMPRACTICAL TO AFFECT THE CROSSING WITHOUT MULTIPLE SPANS (PA. DEP).
2. PROVIDE 50' STABILIZED ACCESS TO CROSSING ON BOTH SIDES OF STREAM CHANNEL (STANDARD CONSTRUCTION DETAIL AA-TYP-0018).
3. PIPES SHALL EXTEND BEYOND THE TOE OF THE ROADWAY.
4. RUNOFF FROM THE ROADWAY SHALL BE DIVERTED OFF THE ROADWAY AND INTO A SEDIMENT REMOVAL BMP BEFORE IT REACHES THE ROCK APPROACH TO THE CROSSING.
5. MAINTENANCE:
 - a. TEMPORARY STREAM CROSSINGS SHALL BE INSPECTED ON A DAILY BASIS.
 - b. DAMAGED CROSSINGS SHALL BE REPAIRED WITHIN 24 HOURS OF THE INSPECTION AND BEFORE ANY SUBSEQUENT USE.
 - c. SEDIMENT DEPOSITS ON THE CROSSING OR ITS APPROACHES SHALL BE REMOVED WITHIN 24 HOURS OF THE INSPECTION.
6. AS SOON AS THE TEMPORARY CROSSING IS NO LONGER NEEDED, IT SHALL BE REMOVED. ALL MATERIALS SHALL BE DISPOSED OF PROPERLY AND DISTURBED AREAS STABILIZED.

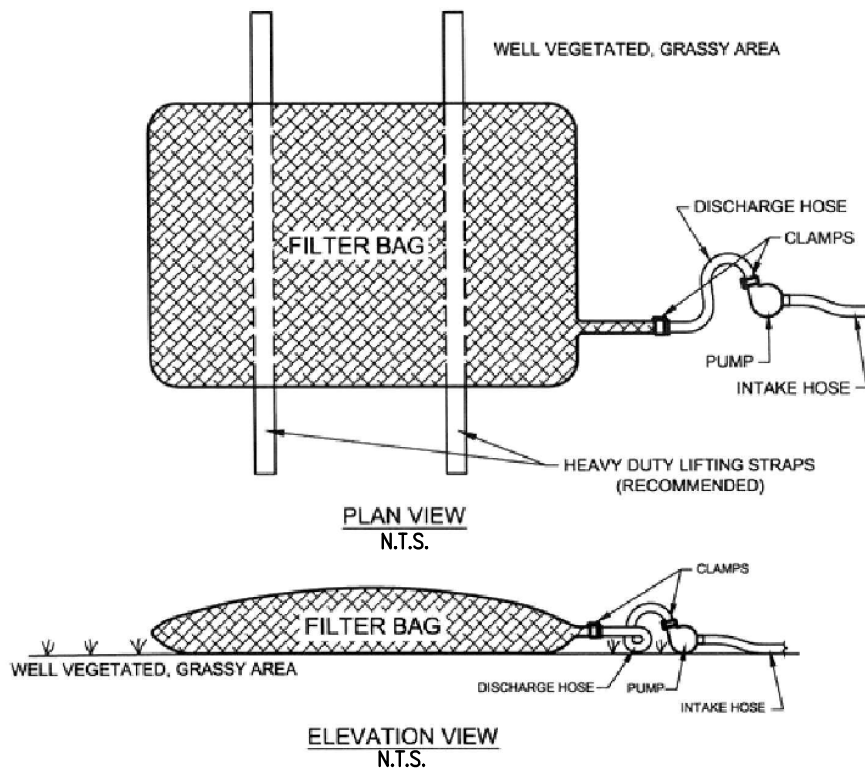
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

(TSC.2)

TEMPORARY STREAM CROSSING
MULTI PIPES





LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS MAY BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS TO BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK TO BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

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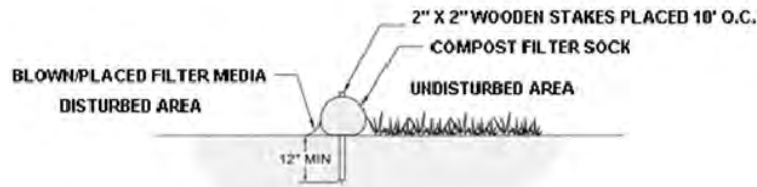
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A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
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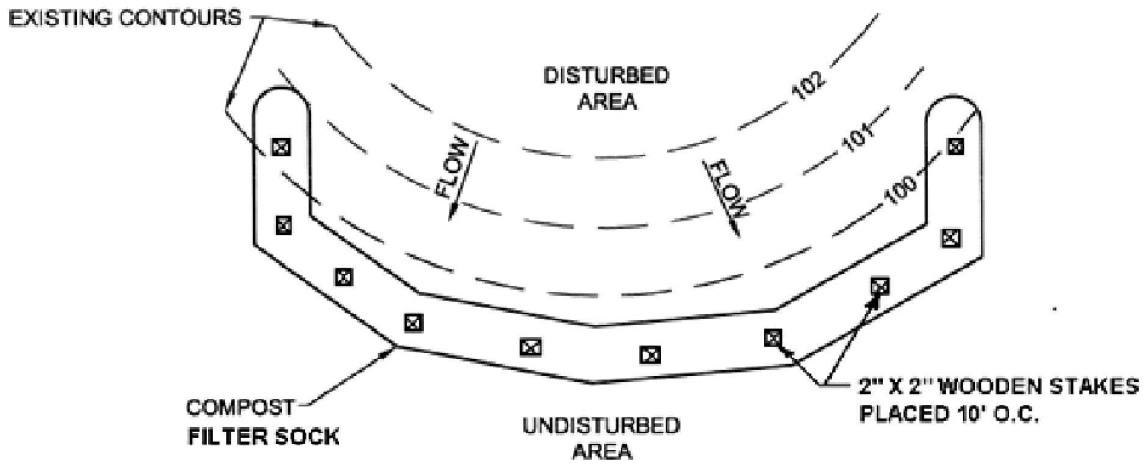
(PWB)

PUMP WATER FILTER BAG





SECTION VIEW
NTS



PLAN VIEW
NOT TO SCALE

1. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (FIGURE 4.1, PA DEP BMP MANUAL MARCH 2012). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE 4.2. (FIGURE 4.1, PA DEP BMP MANUAL MARCH 2012). STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
2. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST SOCKS.
3. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES $\frac{1}{2}$ THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
4. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
5. BIODEGRADABLE COMPOST SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT

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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

CFS STANDARD CONSTRUCTION DETAIL # 4-1
COMPOST FILTER SOCK



TABLE 4.1.
COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12"	12"	12"	12"	12"
	18"	18"	18"	18"	18"
Mesh Opening		24"	24"	24"	24"
		32"	32"	32"	32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-ply systems					
Inner Containment Netting	HDPE biaxial net				
	Continuously wound				
	Fusion-welded junctures				
Outer Filtration Mesh	3/4" X 3/4" Max. aperture size				
	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)				
	3/16" Max. aperture size				
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1.
COMPOST SHALL MEET THE FOLLOWING STANDARDS:

ORGANIC MATTER CONTENT	80%–100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 – 8.0
MOISTURE CONTENT	35% – 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 DS/M (MMHOS/CM) MAXIMUM

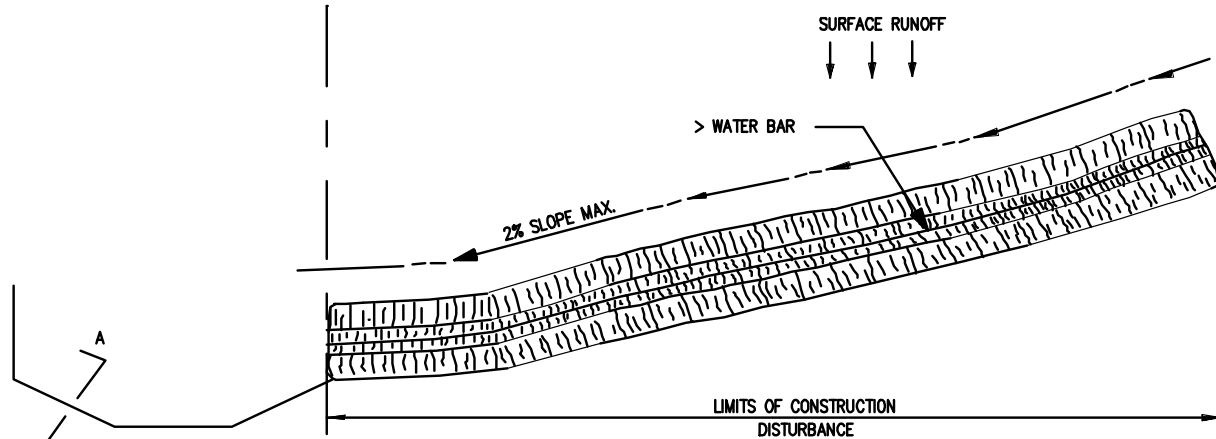
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

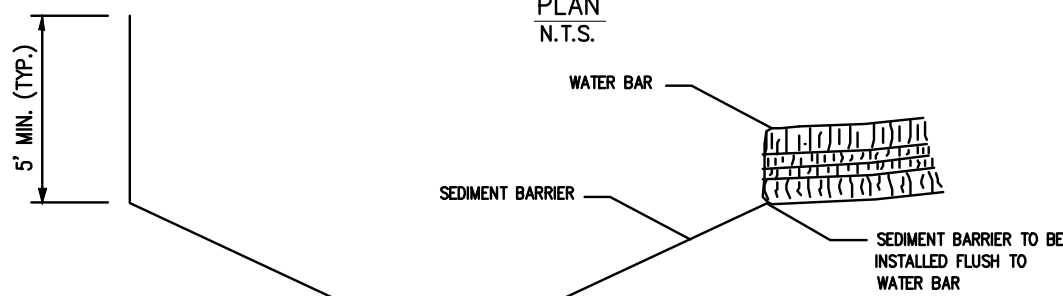
(CFS) STANDARD CONSTRUCTION DETAIL # 4-1
COMPOST FILTER SOCK



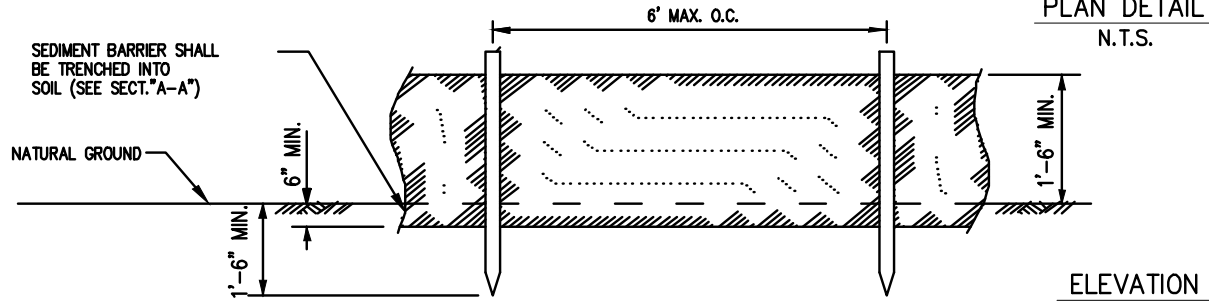
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2 OF 2



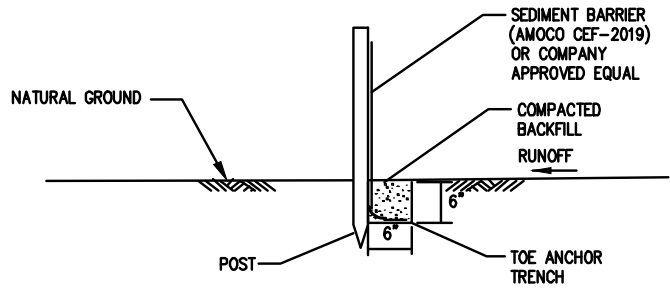
PLAN
N.T.S.



PLAN DETAIL
N.T.S.



ELEVATION
N.T.S.



SEDIMENT BARRIER
VERTICAL SECTION A-A
N.T.S.

NOTES:

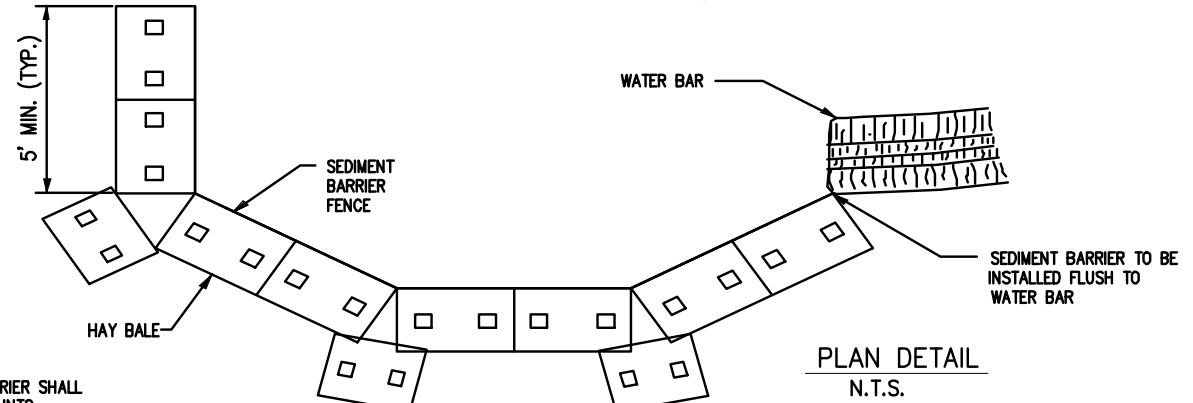
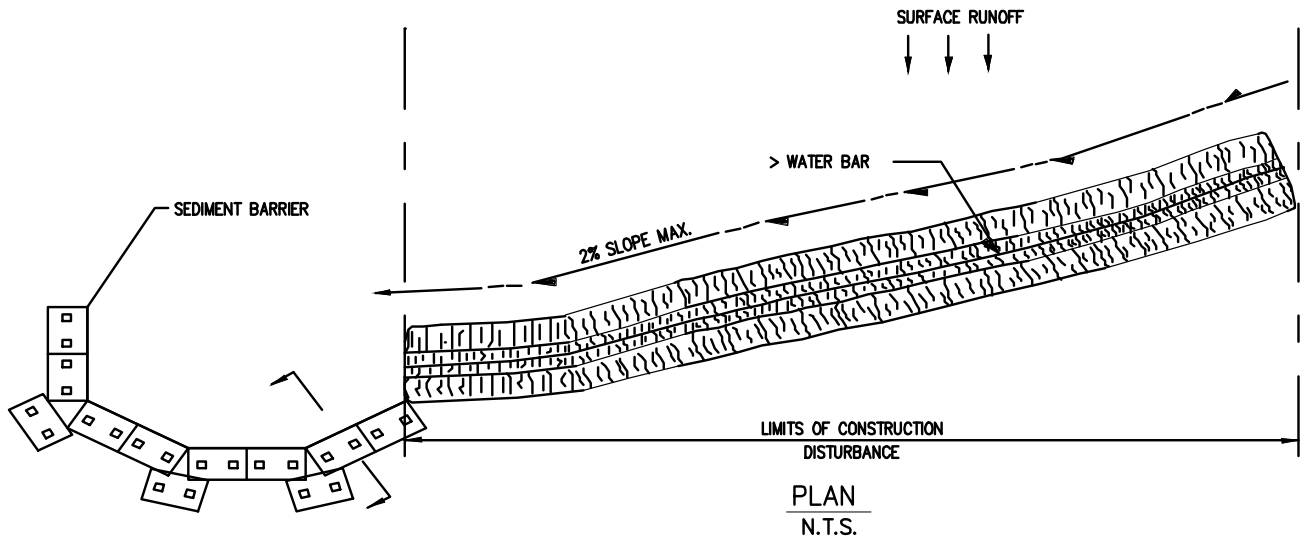
1. SEDIMENT BARRIER HOOKS SHALL BE PLACED AT THE OUTLET OF WATER BARS AS SHOWN ON THE PLAN.
2. ONCE THE DISTURBED AREA IS STABILIZED, THE SEDIMENT BARRIER HOOK SHALL BE REMOVED AND ANY DISTURBED AREAS CAUSED BY REMOVAL SHALL BE RETURNED TO ORIGINAL CONDITION AND REVEGETATED.
3. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 15" OR 1/2 THE HEIGHT OF THE SEDIMENT BARRIER.

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

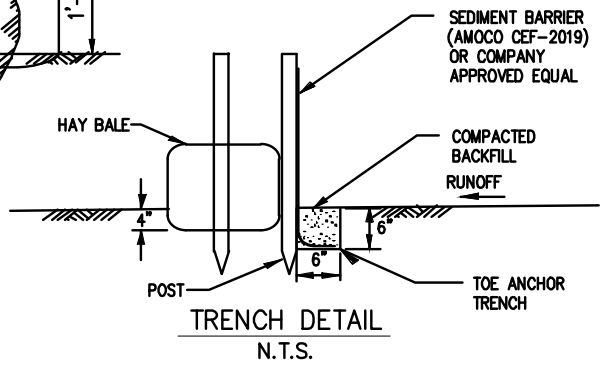
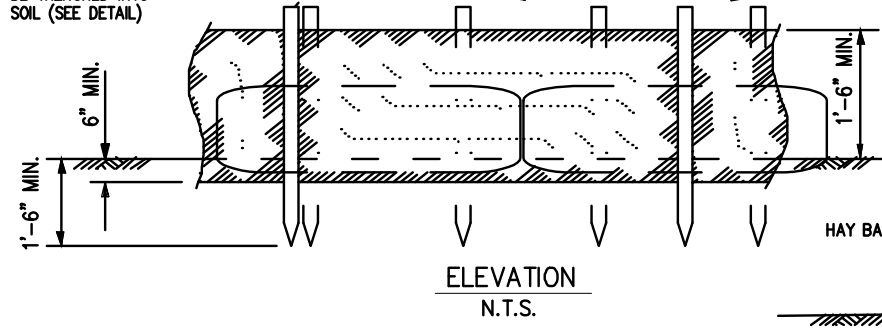
TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

OS1 SEDIMENT BARRIER





SEDIMENT BARRIER SHALL BE TRENCHED INTO SOIL (SEE DETAIL)



- NOTES:**
1. REINFORCED SEDIMENT BARRIER HOOKS SHALL BE PLACED AT THE OUTLET OF WATER BARS AS SHOWN ON THE PLAN.
 2. ONCE THE DISTURBED AREA IS STABILIZED, THE REINFORCED SEDIMENT BARRIER HOOK SHALL BE REMOVED AND ANY DISTURBED AREAS CAUSED BY REMOVAL SHALL BE RETURNED TO ORIGINAL CONDITION AND REVEGETATED.
 3. SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SEDIMENT BARRIER.

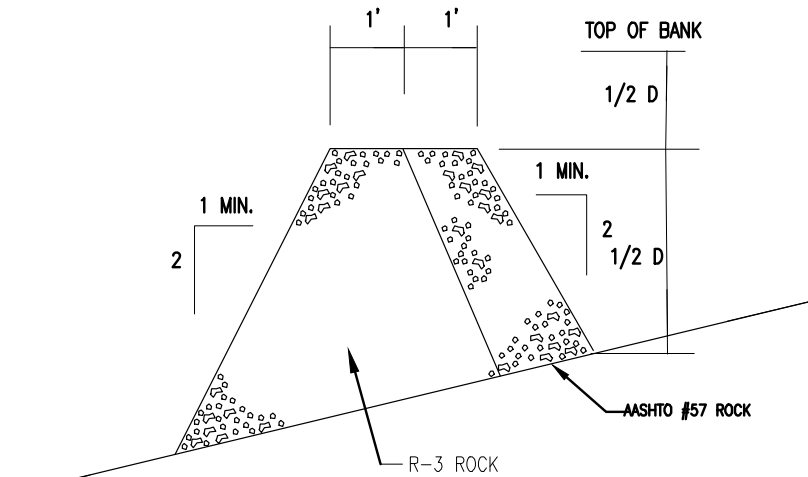
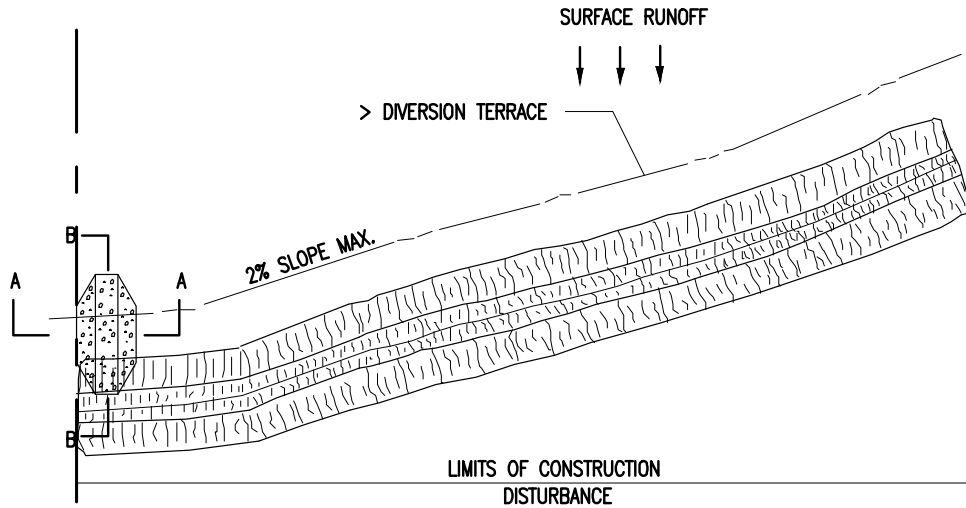
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

OS2

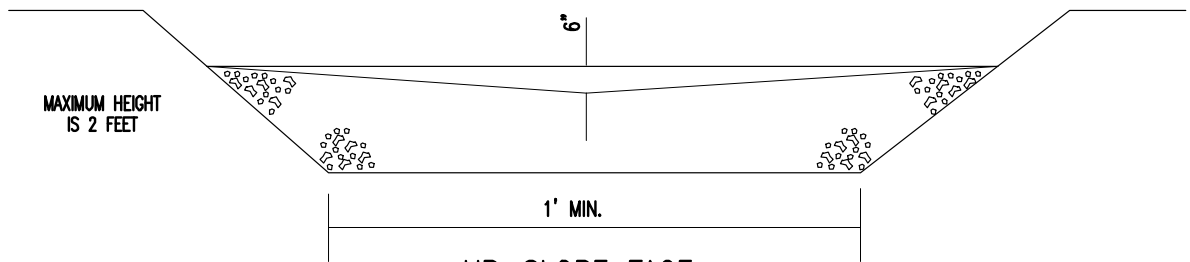
REINFORCED SEDIMENT BARRIER
HOOK OUTLET STRUCTURE





OUTLET CROSS-SECTION

SECTION A-A



UP-SLOPE FACE

SECTION B-B

NOTES:

1. ROCK FILTER OUTLETS SHALL BE PLACED WITHIN THE DIVERSION CHANNEL AS SHOWN ON THE PLAN. THE ROCK FILTER OUTLET IS NOT INTENDED TO BE PLACED IN STEAMS, RIVERS, CREEKS OR DITCHES WHICH NORMALLY HAVE FLOWING WATER.
2. ONCE THE DISTURBED AREA IS STABILIZED, THE ROCK FILTER OUTLET SHALL BE REMOVED AND ANY DISTURBED AREAS CAUSED BY REMOVAL SHALL BE RETURNED TO ORIGINAL CONDITION AND REVEGETATED.
3. SEDIMENT MUST BE REMOVED FROM THE ROCK FILTER OUTLET WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.
4. INSTALL NSA-R3 ROCK AT THE OUTLET SIDE OF THE DIVERSION TERRACE AS SHOWN IN THE DETAIL. AFTER INSTALLING NSA-R2 ROCK, INSTALL AASHTO #57 ROCK AT THE INLET SIDE OF THE ROCK FILTER OUTLET TO CREATE AN ADEQUATE FILTER STONE FACE FOR THE OUTLET STRUCTURE.
5. REFER TO DIVERSION TERRACE DETAIL FOR ADDITIONAL INFORMATION.

ROCK FILTER OUTLET
OUTLET STRUCTURE

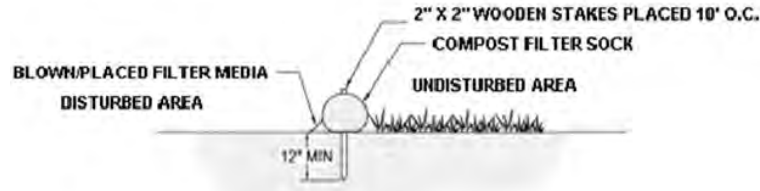
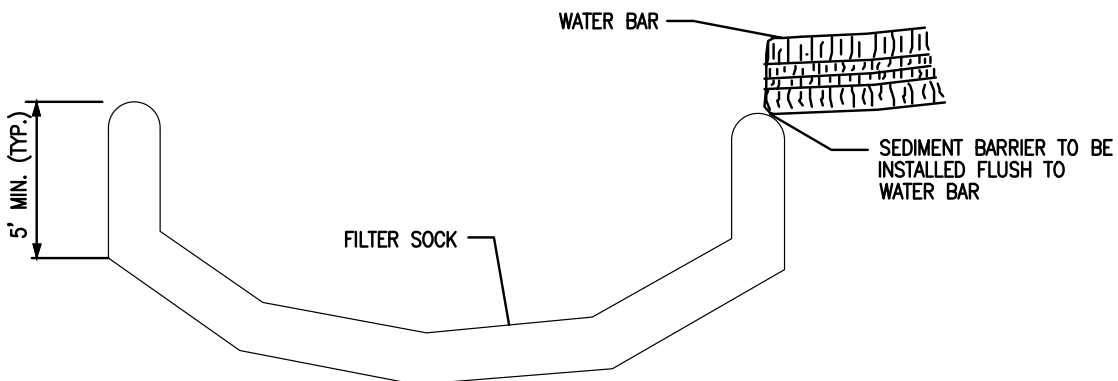
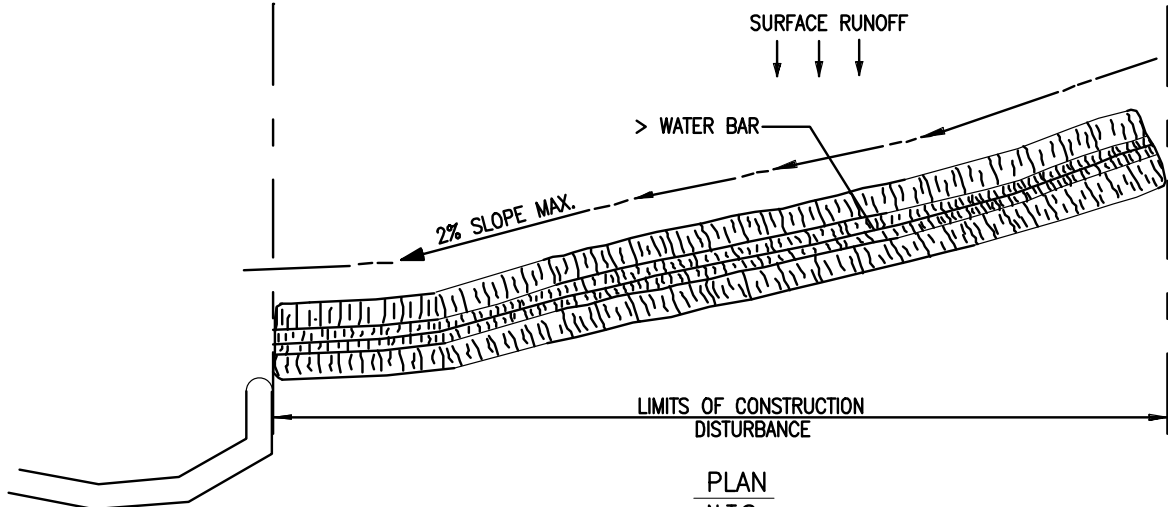
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

OS3

ROCK FILTER OUTLET





SECTION VIEW
N.T.S.

FILTER SOCK
VERTICAL SECTION A-A
N.T.S.

- NOTES:**
1. SEDIMENT BARRIER HOOKS SHALL BE PLACED AT THE OUTLET OF DIVERSION TERRACES AS SHOWN ON THE PLAN.
 2. ONCE THE DISTURBED AREA IS STABILIZED, THE SEDIMENT BARRIER HOOK SHALL BE REMOVED AND ANY DISTURBED AREAS CAUSED BY REMOVAL SHALL BE RETURNED TO ORIGINAL CONDITION AND REVEGETATED.
 3. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 15" OR 1/2 THE HEIGHT OF THE SEDIMENT BARRIER.

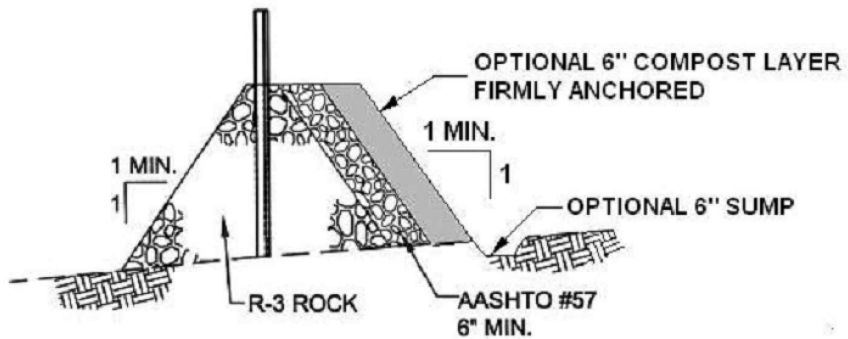
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

OS4

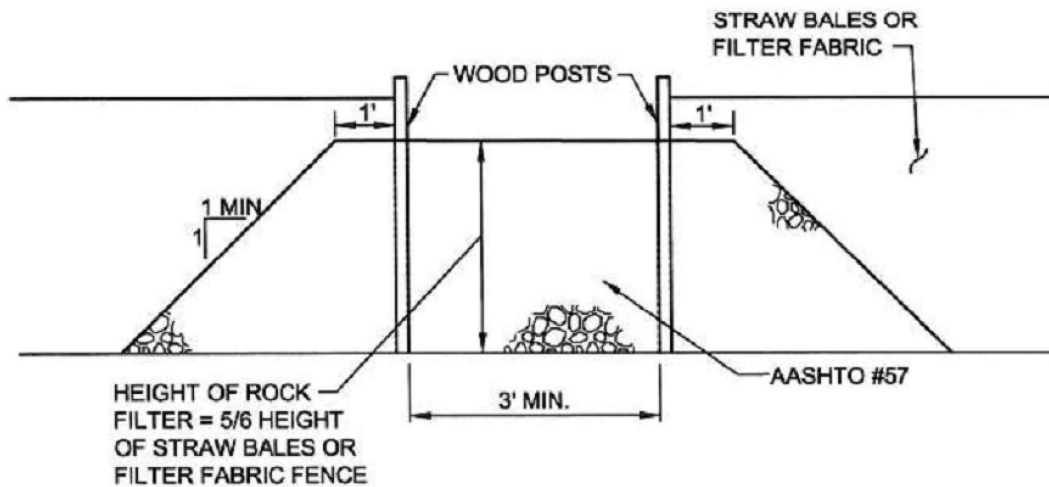
FILTER SOCK
HOOK OUTLET STRUCTURE





OUTLET CROSS-SECTION

N.T.S.



UP-SLOPE FACE

N.T.S.

1. A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A STRAW BALE BARRIER OR FILTER FABRIC FENCE HAS OCCURRED DUE TO CONCENTRATED FLOW.
2. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

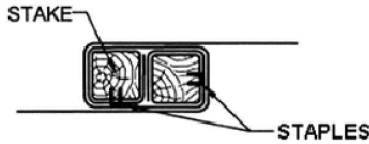
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A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

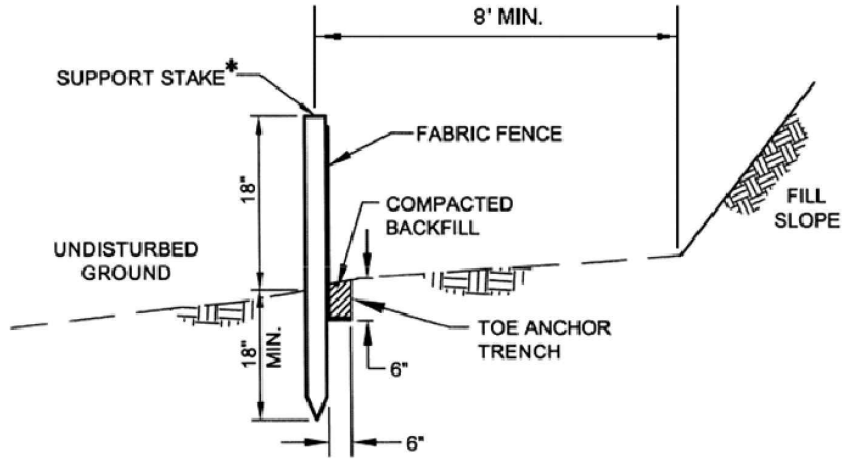
(RFO) STANDARD CONSTRUCTION DETAIL # 4-6
ROCK FILTER OUTLET



*STAKES SPACED @ 8' MAX.
USE 2" x 2" (± 3/8") WOOD
OR EQUIVALENT STEEL
(U OR T) STAKES



JOINING FENCE SECTIONS



ELEVATION VIEW

N.T.S.

AT A MINIMUM, THE FABRIC SHALL HAVE THE FOLLOWING PROPERTIES:

FABRIC PROPERTY	MINIMUM ACCEPTABLE VALUE	TEST METHOD
GRAB TENSILE STRENGTH (LB)	120	ASTM D1682
ELONGATION AT FAILURE (%)	20% MAX.	ASTM D1682
MULLEN BURST STRENGTH (PSI)	200	ASTM D 3786
TRAPEZOIDAL TEAR STRENGTH (LB)	50	
PUNCTURE STRENGTH (LB)	40	ASTM D 751 (MODIFIED)
SLURRY FLOW RATE (GAL/MIN/SF)	0.3	
EQUIVALENT OPENING SIZE	30	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY (%)	80	ASTM G-26

ADAPTED FROM NEW YORK DEC AND PENN-DOT PUB 408
MAXIMUM SLOPE LENGTHS FOR SILT FENCE

SLOPE-PERCENT	MAXIMUM SLOPE LENGTH (FT)
2 (OR LESS)	150
5	100
10	50
15	35
20	25
25	20
30	15
35	15
40	15
45	10
50	10

1. FABRIC WIDTH SHALL BE 30" MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.
2. SILT FENCE MUST BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT (SEE FIGURE 4.1).
3. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.
4. ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4-6).
5. FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.
6. SILT FENCE SHOULD BE PLACED ON CONTOURS TO THE EXTENT PRACTICAL. SILT FENCE SHOULD NOT BE USED TO DELINEATE THE LIMITS OF THE CONSTRUCTION RIGHT-OF-WAY.
7. SILT FENCE IS NOT ALLOWED IN CERTAIN SPECIAL PROTECTION WATERSHEDS; SILT SOCKS SHALL BE USED.

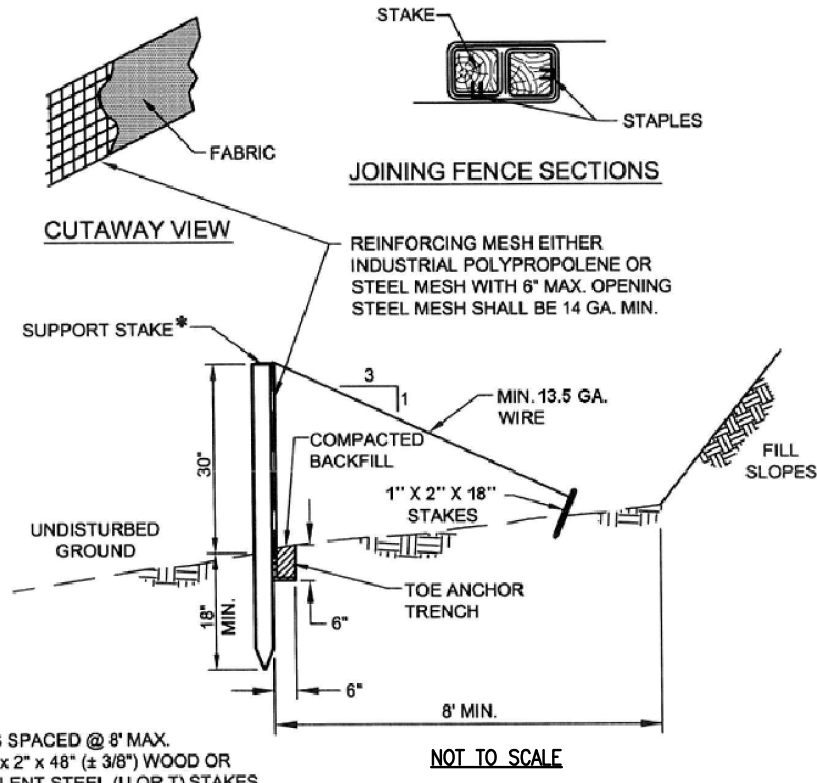
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

(SF) STANDARD CONSTRUCTION DETAIL #4-7
STANDARD SILT FENCE (18" HIGH)





* STAKES SPACED @ 8" MAX.
USE 2" x 2" x 48" (± 3/8") WOOD OR
EQUIVALENT STEEL (U OR T) STAKES

NOT TO SCALE

AT A MINIMUM, THE FABRIC SHALL HAVE THE FOLLOWING PROPERTIES:

FABRIC PROPERTY	MINIMUM ACCEPTABLE VALUE	TEST METHOD
GRAB TENSILE STRENGTH (LB)	120	ASTM D1682
ELONGATION AT FAILURE (%)	20% MAX.	ASTM D1682
MULLEN BURST STRENGTH (PSI)	200	ASTM D 3786
TRAPEZOIDAL TEAR STRENGTH (LB)	50	
PUNCTURE STRENGTH (LB)	40	ASTM D 751 (MODIFIED)
SLURRY FLOW RATE (GAL/MIN/SF)	0.3	
EQUIVALENT OPENING SIZE	30	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY (%)	80	ASTM G-26

ADAPTED FROM NEW YORK DEC AND PENN-DOT PUB 408

MAXIMUM SLOPE LENGTHS FOR REINFORCED SILT FENCE

SLOPE-PERCENT	MAXIMUM SLOPE LENGTH (FT)
2 (OR LESS)	500
5	250
10	150
15	100
20	70
25	55
30	45
35	40
40	35
45	30
50	25

- FABRIC WIDTH SHALL BE 42' MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES. 18" SUPPORT STAKE SHALL BE DRIVEN 12" MIN. INTO UNDISTURBED GROUND.
- SILT FENCE SHALL BE INSTALLED AT EXISTING LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION SHALL BE EXTENDED AT LEAST 8 FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT (FIGURE 4.1).
- SEDIMENT SHALL BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.
- ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL * 4-6).
- FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTAR AREA IS PERMANENTLY STABILIZED.
- SILT FENCE SHOULD BE PLACED ON CONTOURS TO THE EXTENT PRACTICAL. SILT FENCE SHOULD NOT BE USED TO DELINEATE THE LIMITS OF THE CONSTRUCTION RIGHT-OF-WAY.
- SILT FENCE IS NOT ALLOWED IN CERTAIN SPECIAL PROTECTION WATERSHEDS; SILT SOCKS SHALL BE USED.

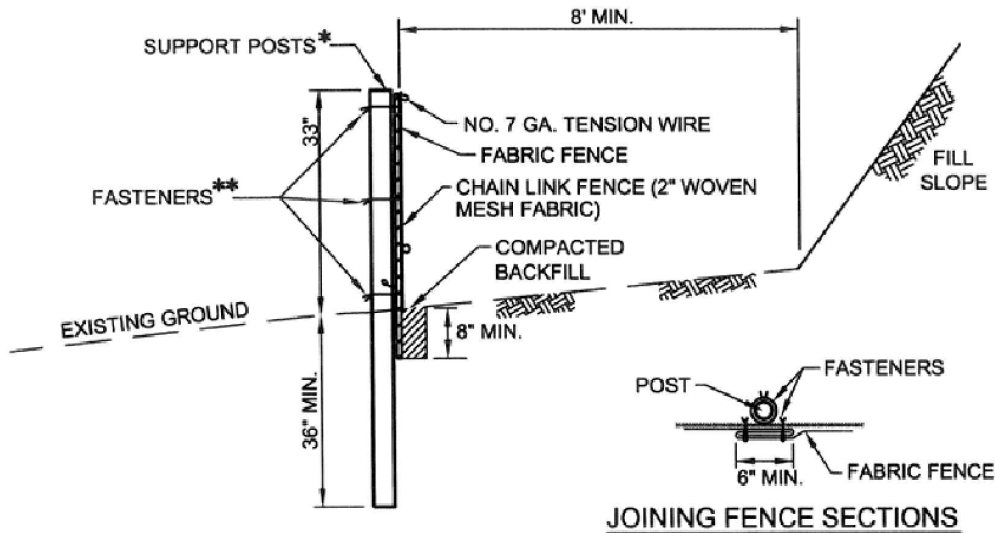
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NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

(RSF) STANDARD CONSTRUCTION DETAIL #4-8
REINFORCED SILT FENCE (30" HIGH)





NOT TO SCALE

* POSTS SPACED @ 10' MAX. USE 2 1/2" DIA. HEAVY DUTY GALVANIZED OR ALUMINUM POSTS.

** CHAIN LINK TO POST FASTENERS SPACED @ 14" MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED STEEL PRE-FORMED CLIPS. CHAIN LINK TO TENSION WIRE FASTENERS SPACED @ 60" MAX. USE NO. 13.5 GA. GALVANIZED STEEL WIRE. FABRIC TO CHAIN LINK FASTENERS SPACED @ 24" MAX C. TO C.

AT A MINIMUM, THE FABRIC SHALL HAVE THE FOLLOWING PROPERTIES:

FABRIC PROPERTY	MINIMUM ACCEPTABLE VALUE	TEST METHOD
GRAB TENSILE STRENGTH (LB)	120	ASTM D1682
ELONGATION AT FAILURE (%)	20% MAX.	ASTM D1682
MULLEN BURST STRENGTH (PSI)	200	ASTM D 3786
TRAPEZOIDAL TEAR STRENGTH (LB)	50	
PUNCTURE STRENGTH (LB)	40	ASTM D 751 (MODIFIED)
SLURRY FLOW RATE (GAL/MIN/SF)	0.3	
EQUIVALENT OPENING SIZE	30	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY (%)	80	ASTM G-26

ADAPTED FROM NEW YORK DEC AND PENN-DOT PUB 408

MAXIMUM SLOPE LENGTHS FOR SUPER SILT FENCE

SLOPE-PERCENT	MAXIMUM SLOPE LENGTH (FT)
2 (OR LESS)	1000
5	550
10	325
15	215
20	175
25	135
30	100
35	85
40	75
45	60
50	50

1. FILTER FABRIC WIDTH SHALL BE 42" MINIMUM.
2. POSTS SHALL BE INSTALLED USING A POSTHOLE DRILL.
3. CHAIN LINK SHALL BE GALVANIZED NO. 11.5 GA. STEEL WIRE WITH 2 1/4" OPENING, NO. 11 GA. ALUMINUM COATED STEEL WIRE IN ACCORDANCE WITH ASTM-A-491, OR GALVANIZED NO. 9 GA. STEEL WIRE TOP AND BOTTOM WITH GALVANIZED NO. 11 GA. STEEL INTERMEDIATE WIRES. NO. 7 GAGE
4. TENSION WIRE TO BE INSTALLED HORIZONTALLY THROUGH HOLES AT TOP AND BOTTOM OF CHAIN-LINK FENCE OR ATTACHED WITH HOG RINGS AT 5' (MAX.) CENTERS.
5. SILT FENCE SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UPSLOPE AT 45 DEGREES TO MAIN BARRIER ALIGNMENT (FIGURE 4.1).
6. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.
7. FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.
8. SILT FENCE SHOULD BE PLACED ON CONTOURS TO THE EXTENT PRACTICAL. SILT FENCE SHOULD NOT BE USED TO DELINEATE THE LIMITS OF THE CONSTRUCTION RIGHT-OF-WAY.
9. SILT FENCE IS NOT ALLOWED IN CERTAIN SPECIAL PROTECTION WATERSHEDS; SILT SOCKS SHALL BE USED.

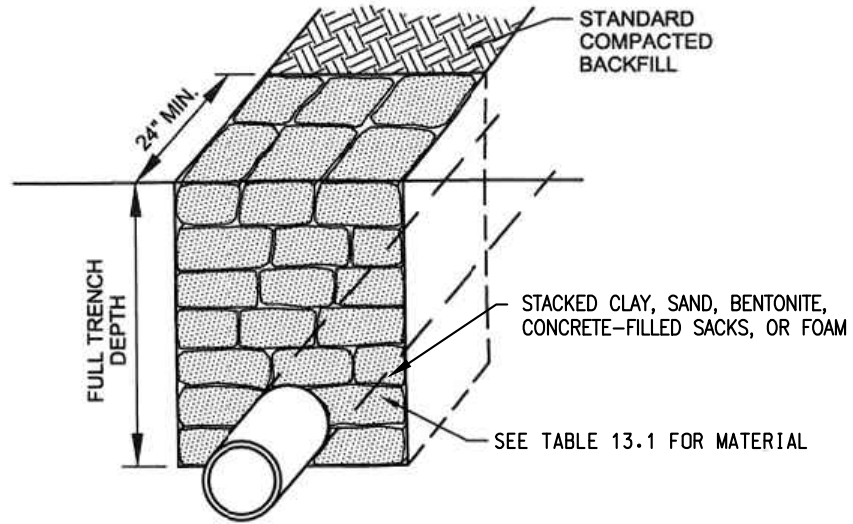
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NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

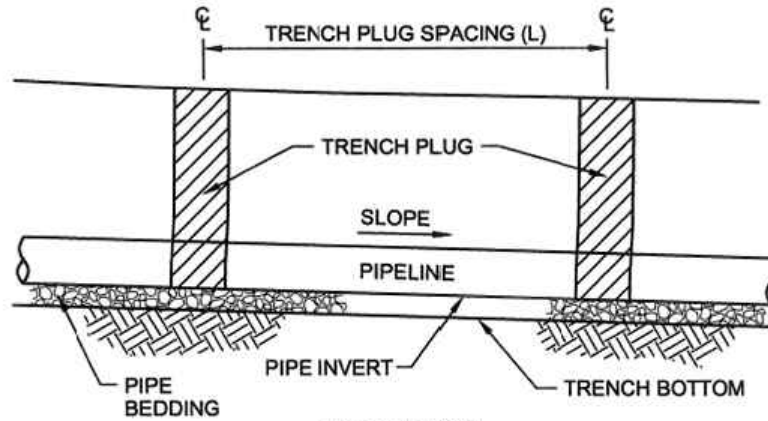
TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

SSF STANDARD CONSTRUCTION DETAIL #4-10
SUPER SILT FENCE (30" HIGH)





SECTION VIEW
NOT TO SCALE



ELEVATION
NOT TO SCALE

TABLE 13.1
MAXIMUM SPACING AND MATERIALS FOR TRENCH PLUGS

SEE TABLE 13.1 FOR MATERIAL

TRENCH SLOPE (%)	SPACING L (FT)	
<5	1,000	
5 - 15	500	
15 - 25	300	
25 - 35	200	
35 - 100	100	
>100	50	

*TOPSOIL MAY NOT BE USED TO FILL SACKS.

IMPERVIOUS TRENCH PLUGS ARE REQUIRED FOR ALL STREAM, RIVER, WETLAND, OR OTHER WATER BODY CROSSINGS.

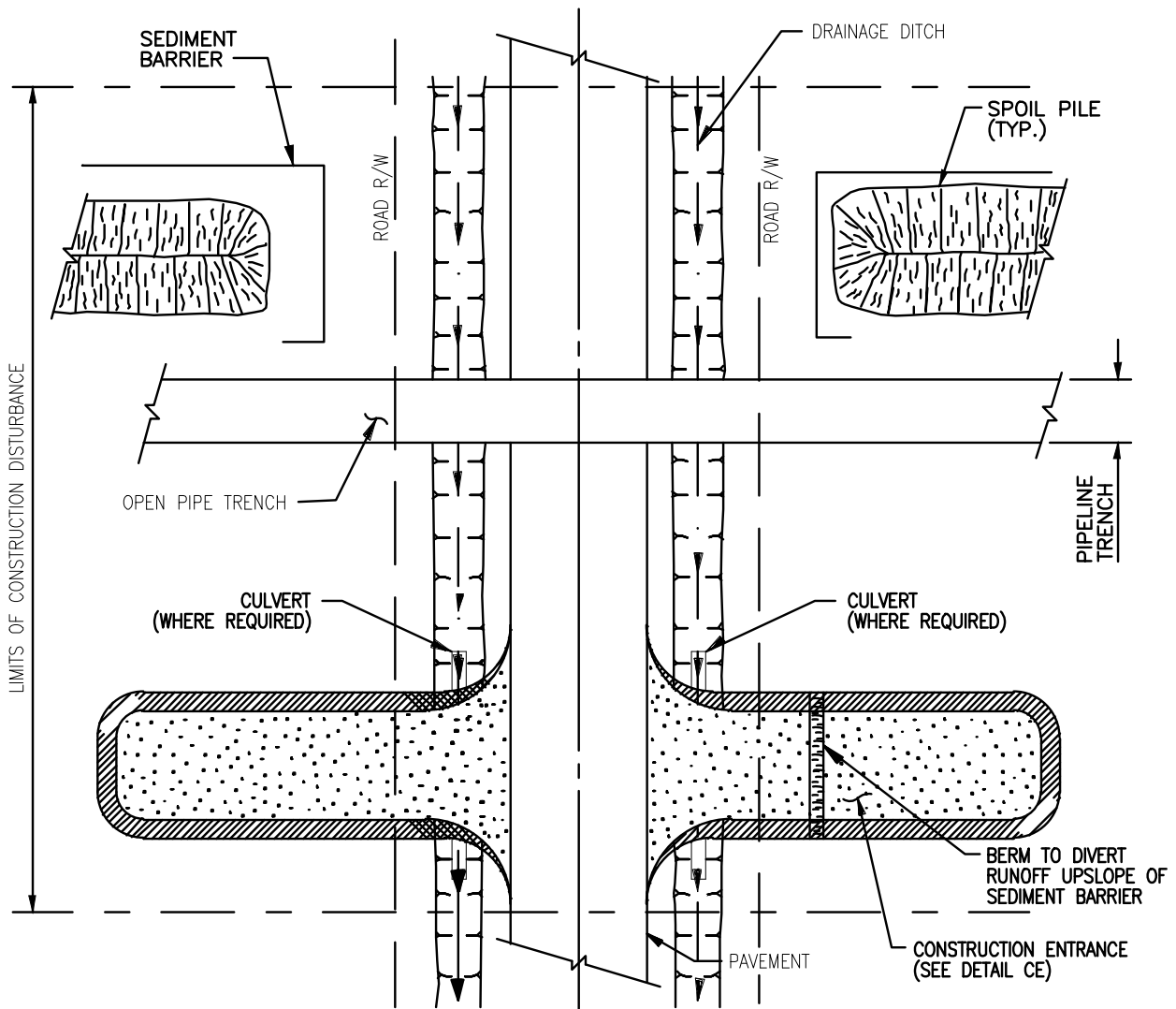
ADAPTED FROM MARYLAND DOE

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
A	03/24/15	MF	ISSUED FOR FERC FILING	1161503	EL	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

TP TRENCH PLUG INSTALLATION





PLAN
N.T.S.

NOTES:

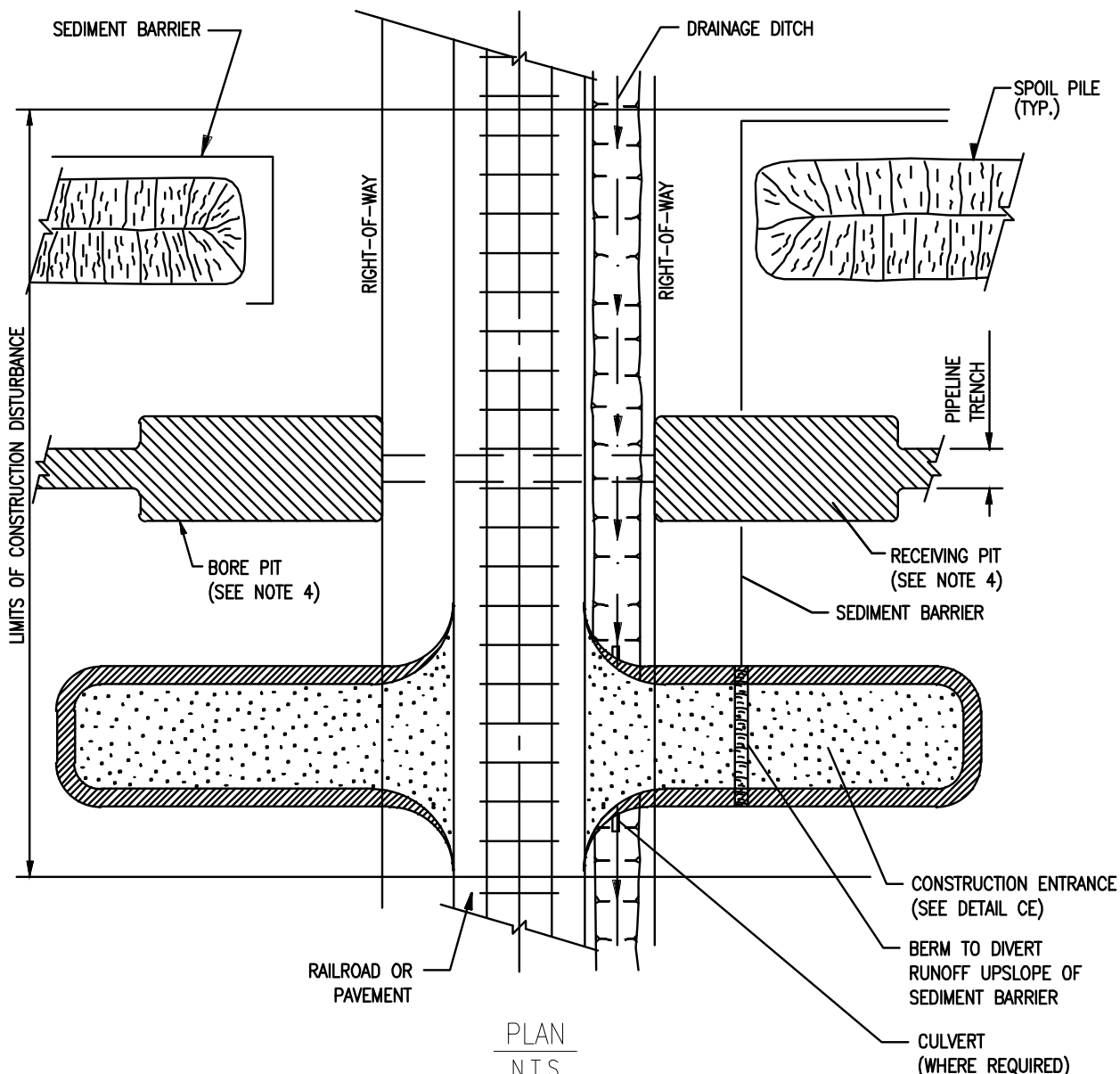
1. SEDIMENT BARRIER SHALL BE INSTALLED AT THE BASE OF SLOPES ADJACENT TO ROAD CROSSINGS WHERE VEGETATION IS DISTURBED, TO INTERCEPT SURFACE RUNOFF.
2. PROTECTION FOR SPOIL PILES SHALL BE INSTALLED ONLY WHERE SEDIMENT BARRIERS ACROSS THE ENTIRE DISTURBED AREA ARE NOT REQUIRED.
3. SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL PERMANENT REVEGETATION IS ESTABLISHED.
4. CULVERTS TO BE SIZED AND PLACED WHERE REQUIRED TO MAINTAIN WATER FLOW.
5. CONTRACTOR SHALL BE REQUIRED TO KEEP THE ROAD CLEAN OF DEBRIS AT ALL TIMES.
6. CONTRACTOR MAY ELECT TO UTILIZE SHEET PILING IN ORDER TO STABILIZE PIPE TRENCH.
7. CONTRACTOR MAY ELECT TO UTILIZE WELL-POINTS IN ORDER TO REDUCE THE WATER TABLE PRIOR TO COMMENCING EXCAVATION.
8. DEPENDING ON TOPOGRAPHY AND STATE REQUIREMENTS, SEDIMENT BARRIER MAY BE REQUIRED ACROSS THE ENTIRE CONSTRUCTION RIGHT-OF-WAY AT THE EDGE OF ROAD. IN ADDITION TO THIS DETAIL, REFER TO THE ENVIRONMENTAL ALIGNMENT DRAWINGS FOR PLACEMENT OF SEDIMENT BARRIERS.
9. CONSTRUCTION ENTRANCE NEEDED AS SHOWN ON SPECIFIC PLAN.

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

(RX.1) TRENCHED ROAD CROSSING





NOTES:

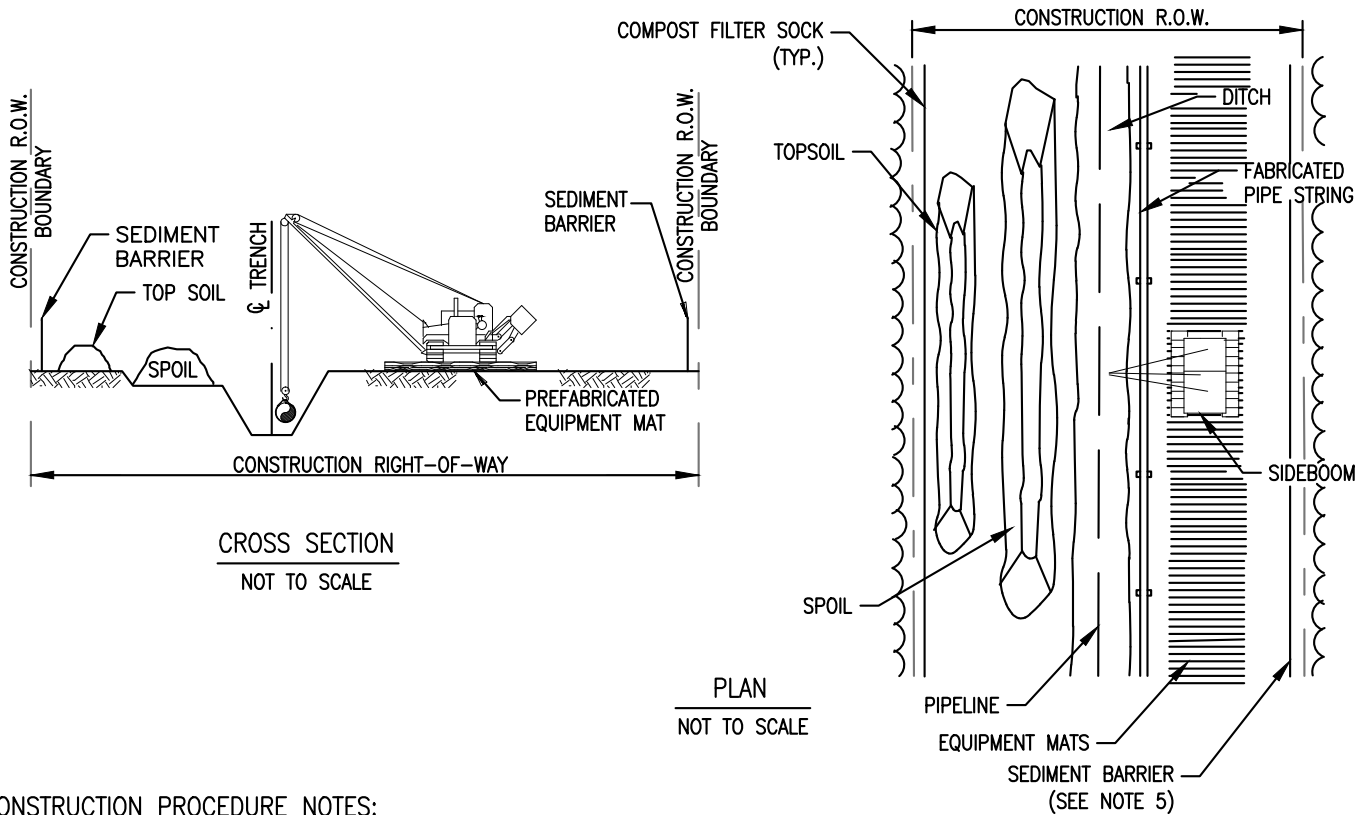
1. SEDIMENT BARRIER SHALL BE INSTALLED AT THE BASE OF SLOPES ADJACENT TO ROAD CROSSINGS WHERE VEGETATION IS DISTURBED, TO INTERCEPT SURFACE RUNOFF.
2. PROTECTION FOR SPOIL PILES SHALL BE INSTALLED ONLY WHERE SEDIMENT BARRIERS ACROSS THE ENTIRE DISTURBED AREA ARE NOT REQUIRED.
3. SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL PERMANENT REVEGETATION IS ESTABLISHED.
4. WATER REMOVED FROM BORE PIT AND RECEIVING PIT SHALL BE FILTERED THROUGH A DEWATERING STRUCTURE OR FILTER BAG.
5. IF WELL POINTING IS REQUIRED PRIOR TO EXCAVATING BORE PITS, CONTRACTOR SHALL CONSULT WITH COMPANY'S ENVIRONMENTAL INSPECTOR PRIOR TO COMMENCEMENT OF WORK IN ORDER TO DETERMINE PROPER DEWATERING LOCATION.
6. CONTRACTOR SHALL BE REQUIRED TO KEEP THE ROAD CLEAN OF DEBRIS AT ALL TIMES.
7. CONTRACTOR MAY ELECT TO UTILIZE SHEET PILING IN ORDER TO STABILIZE BORE PITS.
8. DEPENDING ON TOPOGRAPHY AND STATE REQUIREMENTS, SEDIMENT BARRIER MAY BE REQUIRED ACROSS THE ENTIRE CONSTRUCTION RIGHT OF WAY AT THE EDGE OF ROAD. IN ADDITION TO THIS DETAIL, REFER TO THE ENVIRONMENTAL ALIGNMENT DRAWINGS FOR PLACEMENT OF SEDIMENT BARRIERS.

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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

(RX.2) BORED ROAD/RAILROAD CROSSING





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.
6. 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.
7. 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 DRAWINGS.

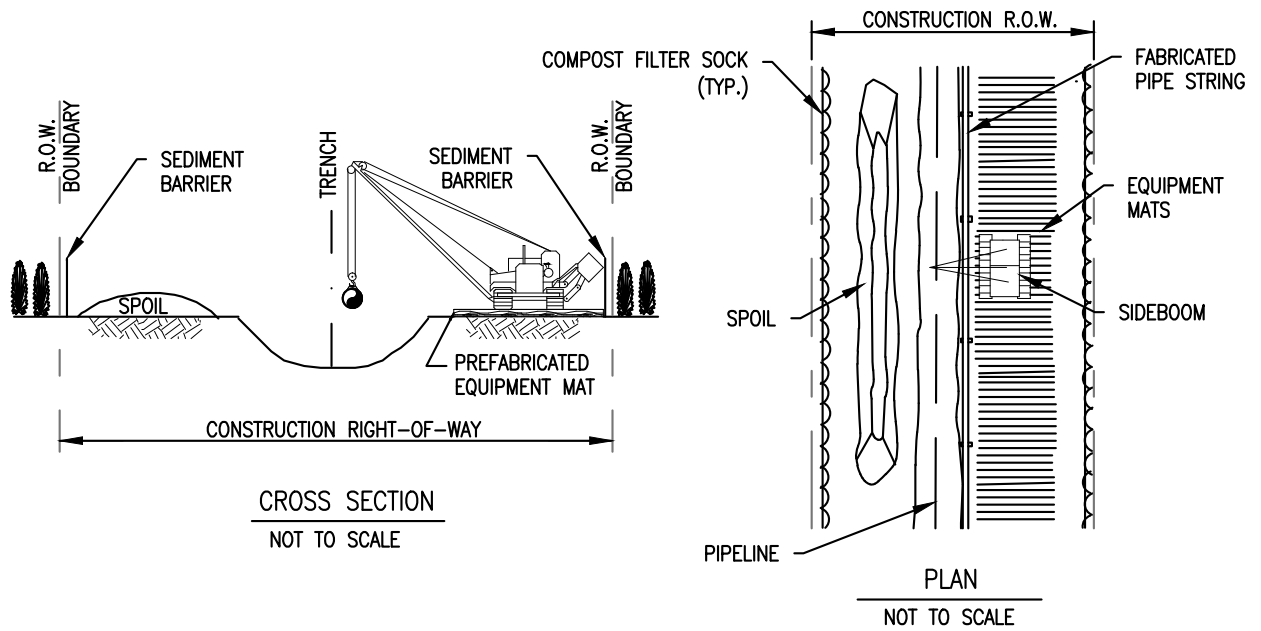
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

(WCC.1)

"UNSATURATED WETLAND"
INSTALLATION PROCEDURE





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 UP SLOPE 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 WETLAND AND ALONG BOTH WETLAND EDGES.
6. 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.
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, 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 BACKFILLING, INSTALL TRENCH PLUGS IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS.
12. RESTORE GRADE TO NEAR 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 DRAWINGS.

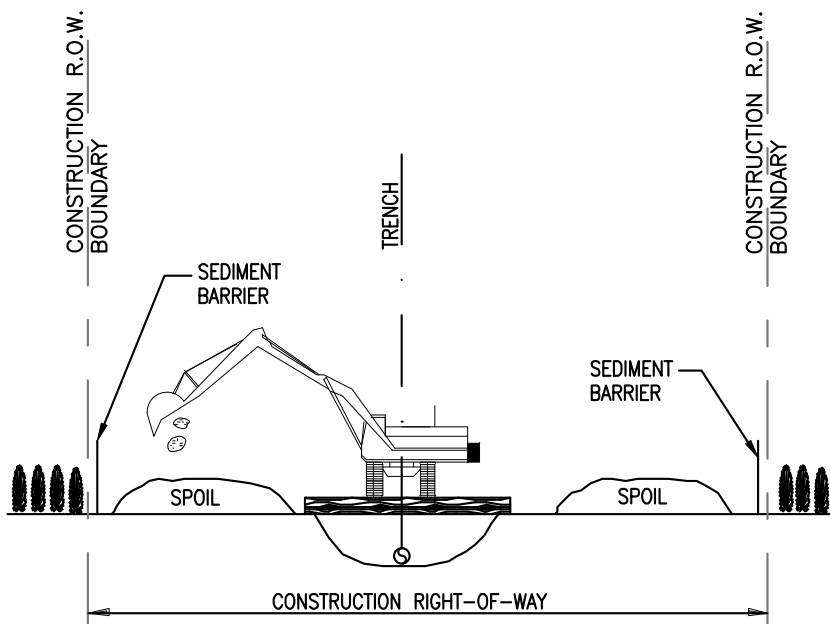
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

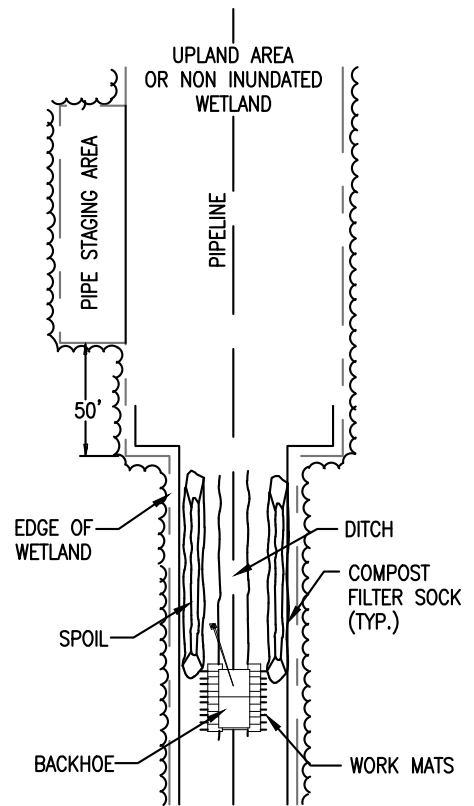
"SATURATED WETLAND"
INSTALLATION PROCEDURE

WCC.2





CROSS SECTION
NOT TO SCALE



PLAN
NOT TO SCALE

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 AND SPECIFICATIONS.
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 OF TREE 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 BACKHOE'S PATH.
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 "INUNDATED 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 SEEDING IN ACCORDANCE WITH DRAWINGS.

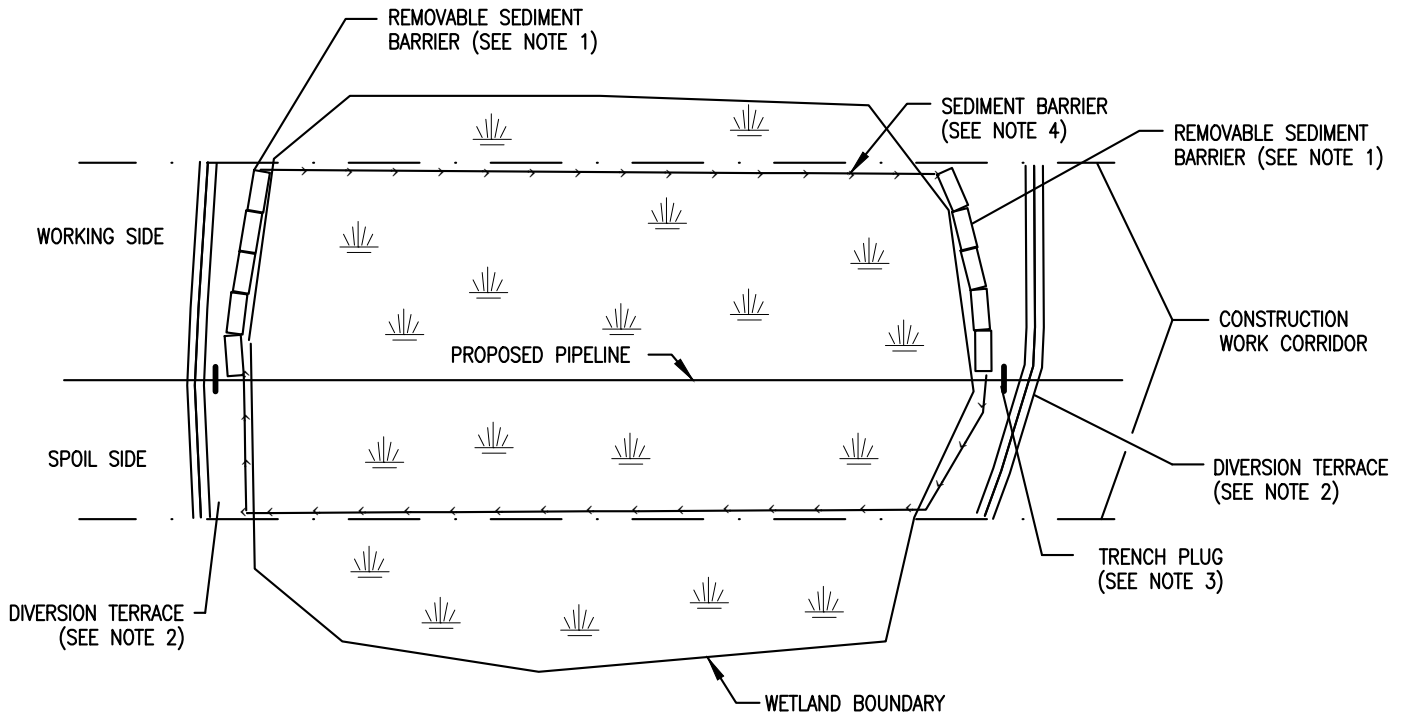
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

WCC.3

"INUNDATED WETLAND"
INSTALLATION PROCEDURE





PLAN
NOT TO SCALE

NOTES:

1. INSTALL REMOVABLE SEDIMENT BARRIERS (COMPOST FILTER SOCK) OR DRIVEABLE BERMS ACROSS THE TRAVEL LANE AT BOTH WETLAND BOUNDARIES. THE 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.
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. 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 CORRIDOR.

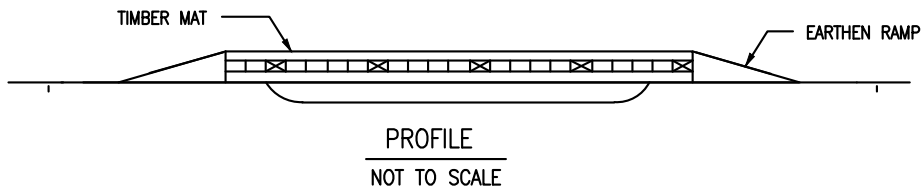
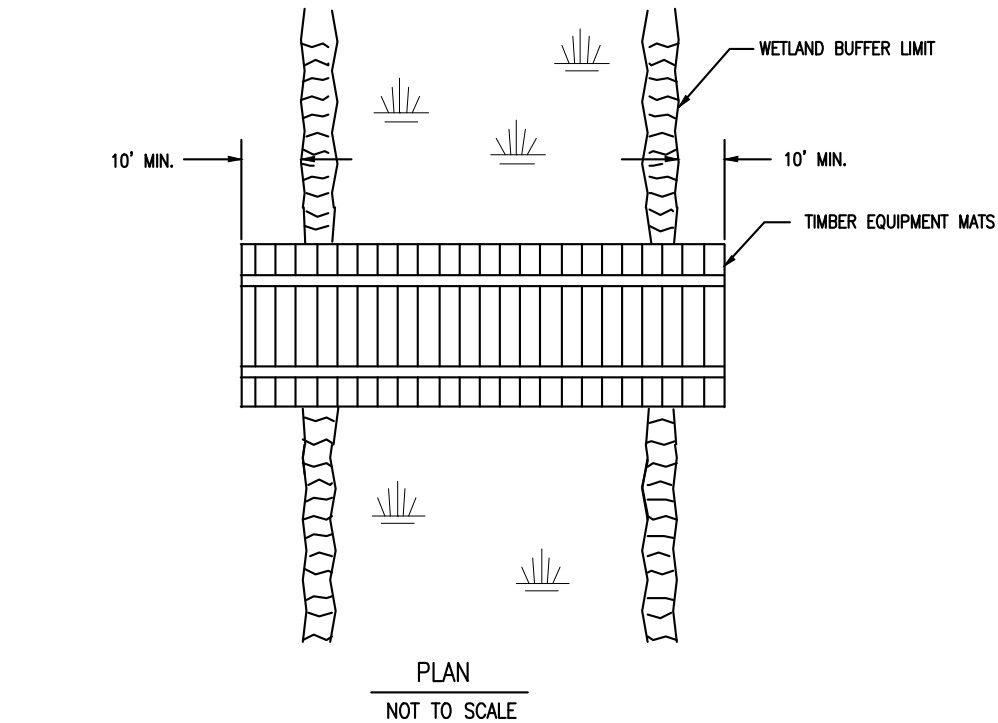
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL



WETLAND CROSSING CONFIGURATION





NOTES:

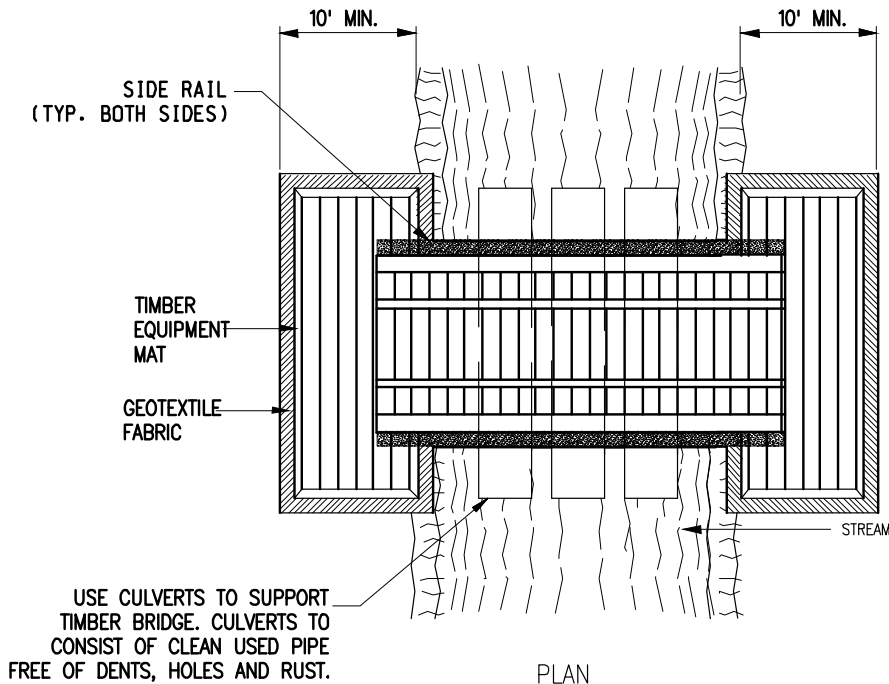
1. PERIODICALLY CHECK INSTALLATION AND REMOVE BUILD-UP OF SEDIMENT OR DEBRIS.
2. MATERIALS PLACED IN WETLANDS SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP. REMOVAL OF THIS STRUCTURE IS NOT CONTINGENT UPON ESTABLISHMENT OF PERMANENT VEGETATION.
3. IF A WATERBODY IS LOCATED WITHIN A WETLAND SYSTEM, 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.
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 CONSTRUCT EARTHEN RAMPS.

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STANDARD ENVIRONMENTAL DETAIL

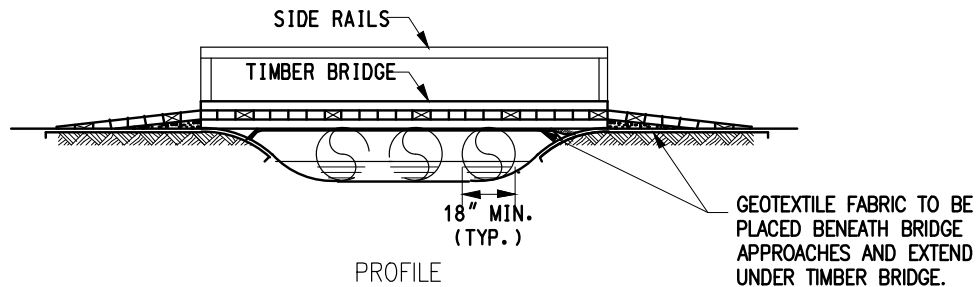
WEC WETLAND EQUIPMENT CROSSING





PLAN

SCALE: N.T.S.



PROFILE

SCALE: N.T.S.

NOTES:

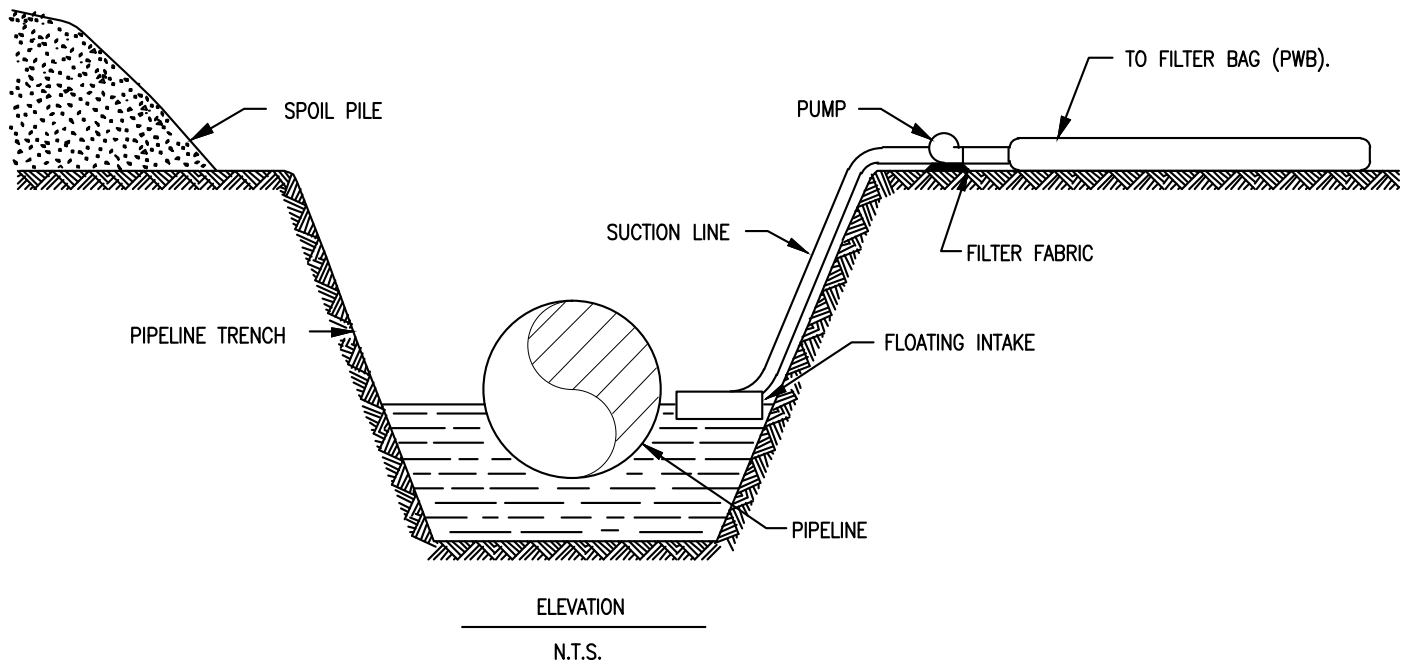
1. TIMBER BRIDGES SHALL BE ADEQUATELY ANCHORED AT BOTH ENDS.
2. PERIODICALLY CHECK BRIDGE INSTALLATION AND REMOVE BUILD-UP OF SEDIMENT OR DEBRIS ON BRIDGE.
3. BRIDGE APPROACHES SHALL BE TIMBER EQUIPMENT MATS.
4. MATERIALS PLACED ALONG STREAM CHANNEL SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP. REMOVAL OF THIS STRUCTURE IS NOT CONTINGENT UPON ESTABLISHMENT OF PERMANENT VEGETATION.
5. CULVERTS SHALL BE USED TO SUPPORT THE TIMBER BRIDGE TO PREVENT SETTLEMENT OF THE BRIDGE, IF THE GEOMETRY OF THE STREAM ALLOWS FOR SUCH INSTALLATION. THE TIMBER BRIDGE AND GEOTEXTILE FABRIC SHALL REMAIN ABOVE THE WATER SURFACE ELEVATION AT ALL TIMES. THE GRADE OF THE CULVERT PIPE SHALL BE AT LEAST 0.25" PER FOOT.
6. SIDE RAILS SHALL BE INSTALLED ON BOTH SIDES OF THE BRIDGE EQUIPMENT CROSSING IN ORDER TO PREVENT SEDIMENT FROM ENTERING THE WATERBODY. SIDE RAILS TO BE CONSTRUCTED OF PLYWOOD NAILED TO THE OUTER EDGES OF THE TIMBER EQUIPMENT MATS.
7. TIMBER EQUIPMENT MATS SHALL EXTEND A MINIMUM OF 10 FEET OUTSIDE OF THE WATERBODY OR WETLAND BOUNDARIES.
8. THE STRUCTURE SHALL BE LARGE ENOUGH TO CONVEY FLOW EXPECTED FROM A 2-YEAR FREQUENCY, 24-HOUR DURATION STORM WITHOUT APPRECIABLY ALTERING THE STREAM FLOW CHARACTERISTICS.

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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

BEC BRIDGE EQUIPMENT CROSSING





NOTES:

1. WATER PUMPED OUT OF TRENCH SHALL NOT BE DISCHARGED INTO WATERWAYS. WATER SHALL BE DISCHARGED INTO A FILTER BAG OR DEWATERING STRUCTURE.
2. PUMP SHALL BE CONTROLLED SO THAT DISCHARGE DOES NOT OVERFLOW DEWATERING STRUCTURE.
3. PUMP SUCTION HOSE MUST NOT BE ALLOWED TO COME IN CONTACT WITH TRENCH BOTTOM. PROVISIONS MUST BE MADE TO ELEVATE THE SUCTION HOSE TO AT LEAST ONE FOOT ABOVE THE BOTTOM OF THE PIPE TRENCH UNTIL BOTTOM DEWATERING IS NECESSARY.
4. DEWATERING SHALL NOT OCCUR DURING TIMES OF HEAVY RAINFALL EXCEPT AS REQUIRED TO PREVENT FLOODING OF CONSTRUCTION EQUIPMENT LOCATED IN BORE PITS AND TRENCHES.
5. PUMPS UTILIZED DURING DEWATERING SHALL BE PLACED WITHIN SECONDARY CONTAINMENT IF POSITIONED WITHIN 100 FEET OF A WETLAND OR WATERBODY.

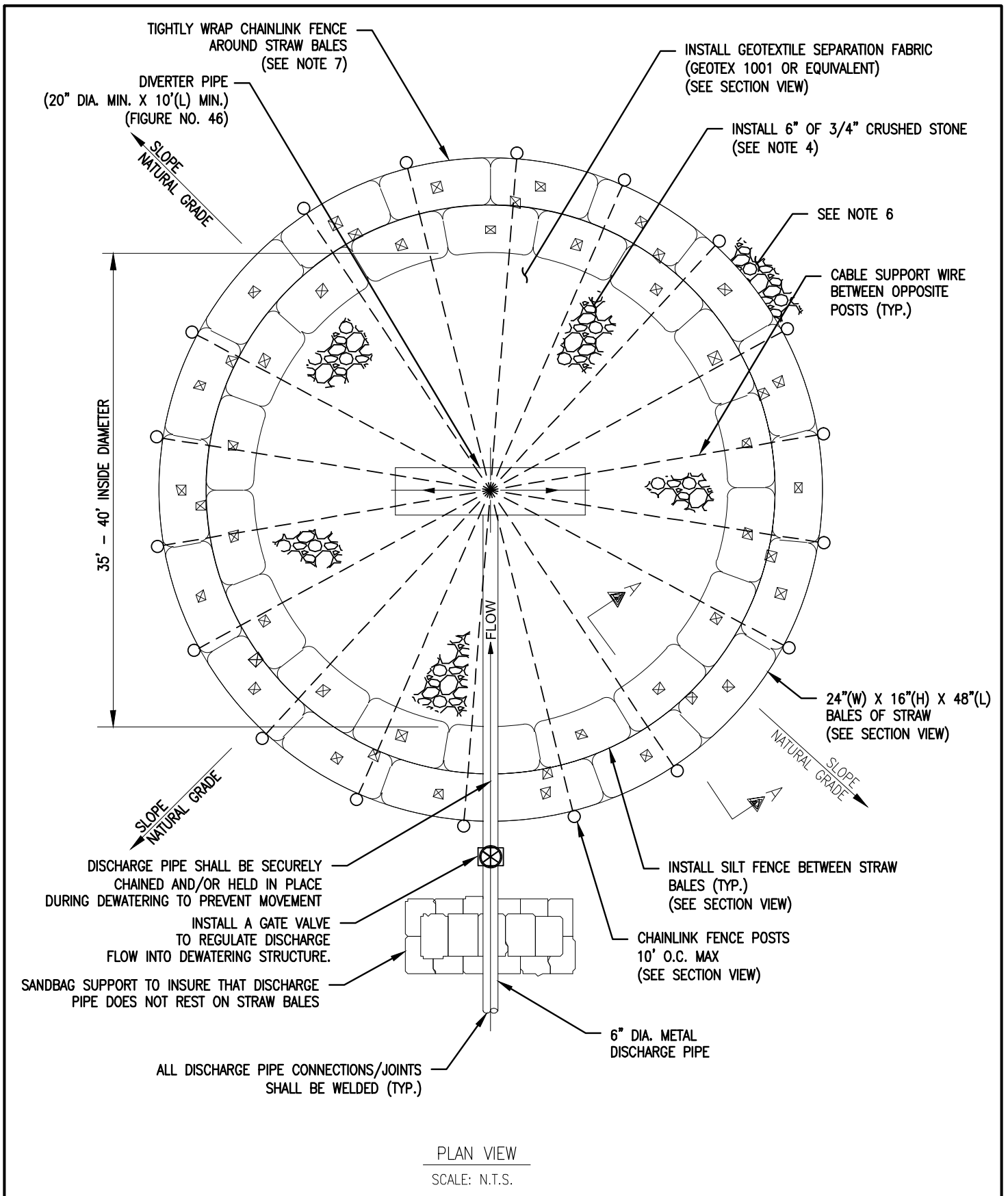
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

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TRENCH DEWATERING





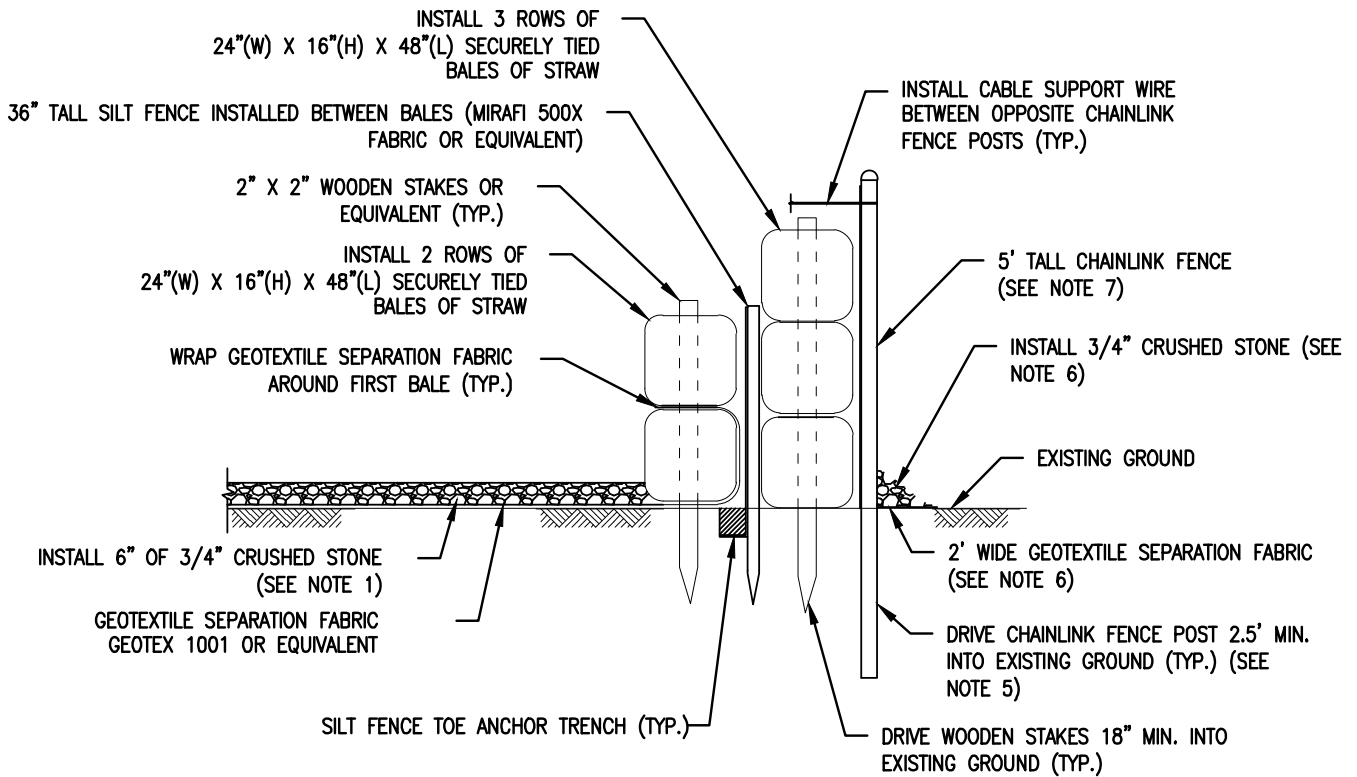
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

(DS) HYDROSTATIC DEWATERING STRUCTURE

Williams

1 OF 2 24a



SECTION A-A

SCALE: N.T.S.

NOTES:

1. STRUCTURE SHALL BE PLACED ON A LEVEL WELL VEGETATED SITE SUCH THAT WATER WILL FLOW AWAY FROM STRUCTURE AND WORK AREAS AND MINIMIZE EROSION OF THE SURROUNDING AREA TO THE EXTENT PRACTICABLE.
2. AT THE DISCRETION OF THE ENVIRONMENTAL INSPECTOR, ADDITIONAL EROSION AND SEDIMENTATION CONTROL DEVICES (E.G. RIPRAP CHECK DAMS, COMPOST FILTER SOCKS, ETC.) MAY BE REQUIRED TO BE INSTALLED DOWNSTREAM OF THE STRUCTURE IF EROSION BECOMES APPARENT DURING DEWATERING.
3. FLOW RATES THROUGH DISCHARGE AND DIVERTER PIPES SHALL BE SUCH THAT STRUCTURE WILL NOT OVERFLOW. A MINIMUM FREEBOARD OF 3", MEASURED FROM THE TOP OF THE THIRD ROW OF STRAW BALES TO THE WATER SURFACE ELEVATION, SHALL BE MAINTAINED AT ALL TIMES.
4. THE 3/4" CRUSHED STONE INSTALLED WITHIN THE BASIN SHALL BE WASHED TO REMOVE ALL DIRT/FINE PARTICLES PRIOR TO INSTALLATION.
5. THE CHAINLINK FENCE POSTS SHALL BE DRIVEN A MINIMUM OF 2.5 FT. INTO STABLE, EXISTING GROUND. THE CONTRACTOR MAY BE REQUIRED TO INSTALL THE POLES DEEPER IF STABLE SUBSOILS ARE NOT ACHIEVED WITHIN 2.5 FT.
6. AT THE DISCRETION OF THE ENVIRONMENTAL INSPECTOR, ADDITIONAL GEOTEXTILE SEPARATION FABRIC AND 3/4" CRUSHED STONE MAY BE REQUIRED TO BE INSTALLED AROUND THE OUTSIDE EDGE OF THE DEWATERING STRUCTURE.
7. CHAINLINK FENCE SHALL INSTALLED TIGHTLY AGAINST THE STRAW BALES AND SECURELY FASTENED TOGETHER AT ALL JOINTS WITH CABLE TENSION WIRE AND STRETCHER BARS.
8. THE ENVIRONMENTAL INSPECTOR SHALL HAVE THE AUTHORITY TO MODIFY THE DESIGN AS REQUIRED TO PREVENT EROSION AND SEDIMENTATION DOWNSTREAM OF THE STRUCTURE.
9. STRAW BALES SHALL BE STACKED SUCH THAT THE JOINTS ARE STAGGERED.

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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
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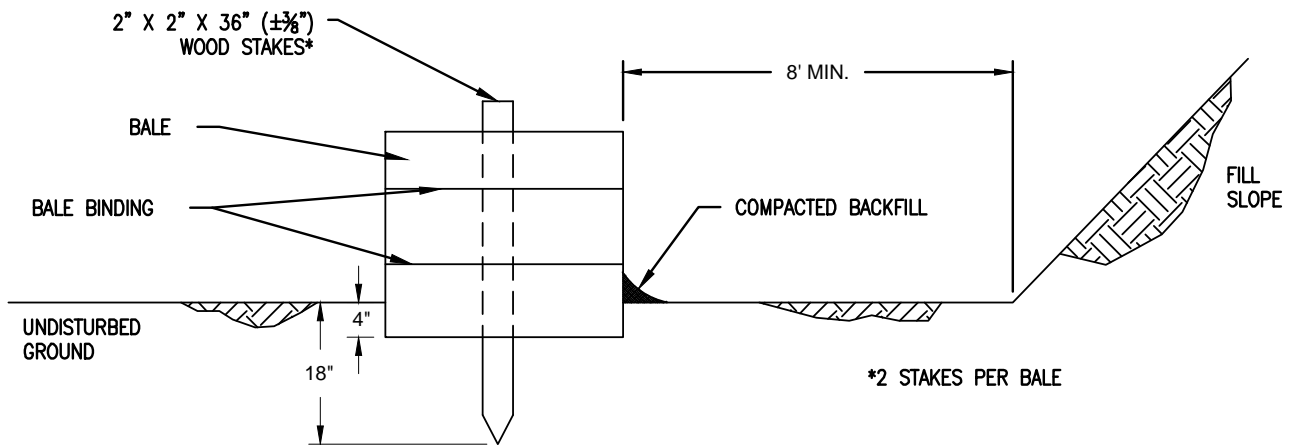
DS HYDROSTATIC DEWATERING STRUCTURE



TABLE 4.5
Maximum Slope Length for Straw Bale Barriers and Wood Chip Filter Berms

Slope - Percent	Maximum Slope Length (ft) Above Barrier
2 (or less)	150
5	100
10	50
15	35
20	25
25	20
30	15
35	15
40	15
45	10
50	10
> 50	Not Permitted

P.A. DEP



NOTES:

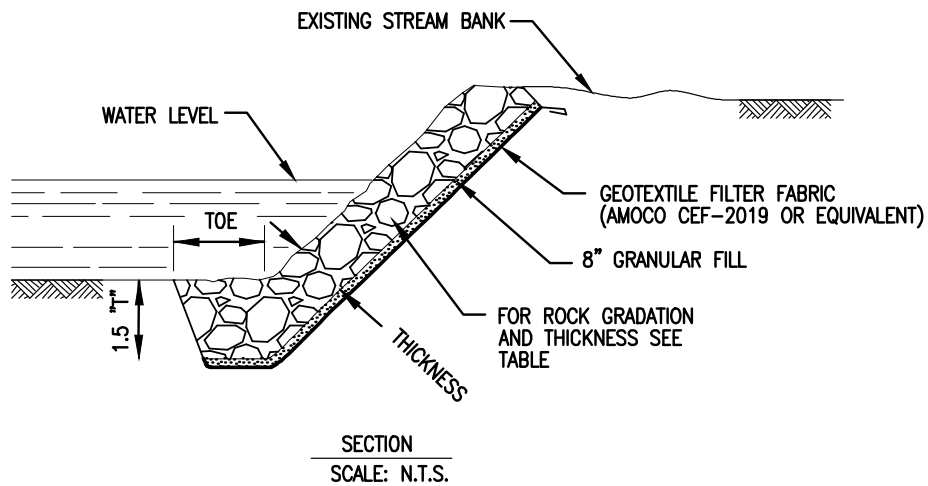
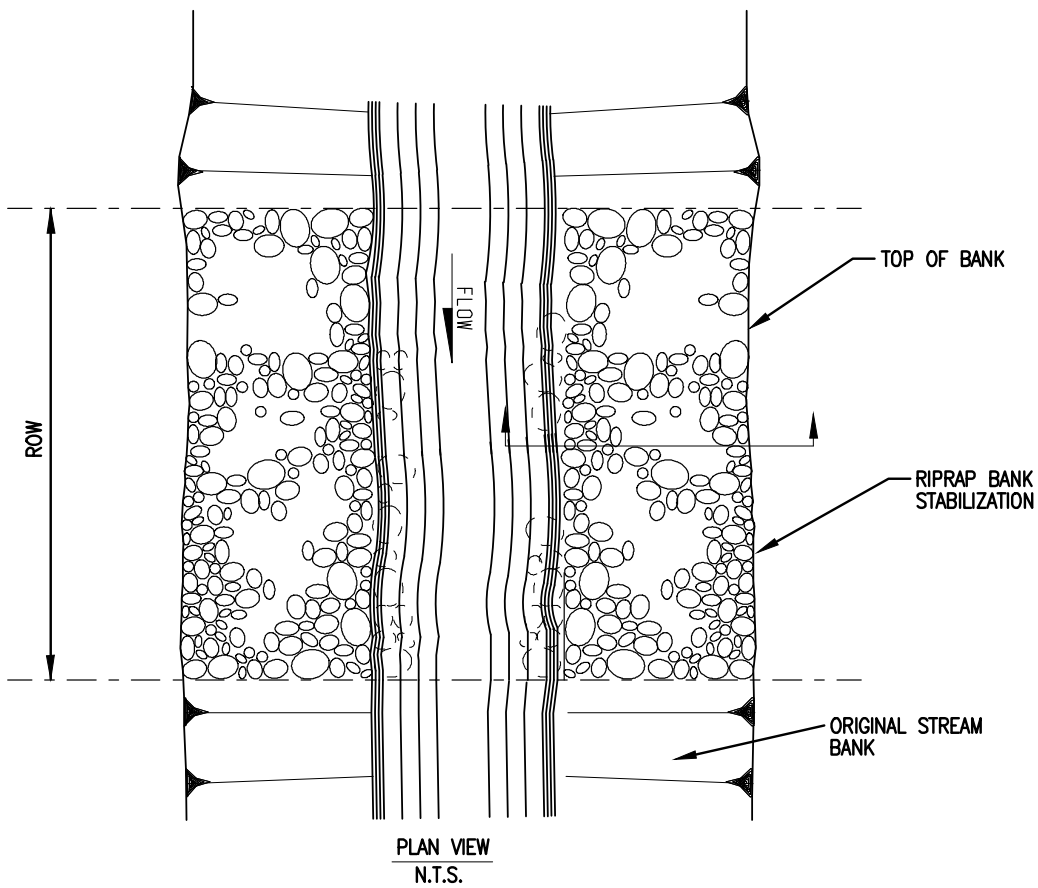
1. STRAW BALE BARRIERS SHALL NOT BE USED FOR PROJECTS EXTENDING MORE THAN 3 MONTHS.
2. STRAW BALE BARRIERS SHALL BE PLACED AT EXISTING LEVEL GRADE WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES. FIRST STAKE OF EACH BALE SHALL BE ANGLED TOWARD ADJACENT BALE TO DRAW BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE TOP OF THE BALE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT.
3. COMPACTED BACKFILL SHALL EXTEND APPROXIMATELY 4 INCHES ABOVE GROUND LEVEL.
4. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE ABOVEGROUND HEIGHT OF THE BARRIER. DAMAGED OR DETERIORATED BALES SHALL BE REPLACED IMMEDIATELY UPON INSPECTION.
5. ANY SECTION OF STRAW BALE BARRIER WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.
6. BALES SHALL BE REMOVED WHEN THE TRIBUTARY AREA HAS BEEN PERMANENTLY STABILIZED.

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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
 STANDARD ENVIRONMENTAL DETAIL

SEC STRAW BALE EROSION CONTROL





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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

RSS

STREAM BANK STABILIZATION



26a
1 OF 2

RIPRAP GRADATION TABLE					
NATIONAL STONE ASSOCIATION NUMBER	SIZE OF ROCKS (INCHES)			MIN. THICKNESS OF RIPRAP LAYER (IN.) T	TOE (FEET)
	MAXIMUM	d50 AVERAGE *	MINIMUM **		
R-1	1.5	0.75	NO. 8	2	1
R-2	3	1.5	1	4	1.25
R-3	6	3	2	8	1.5
R-4	12	6	3	15	2.5
R-5	18	9	5	23	4
R-6	24	12	7	30	4
R-7	30	15	12	38	5
R-8	48	24	15	60	6

* THE "AVERAGE SIZE", OR d50, IS DEFINED AS A SIZE THAT IS EXCEEDED BY AT LEAST 50% OF THE TOTAL WEIGHT SHIPPED. (I.E. 50% OF THE TONNAGE SHIPPED CONSISTS OF PIECES LARGER THAN THE "AVERAGE SIZE" SHOWN IN CHART.)

** PIECES SMALLER THAN THE "MINIMUM SIZE" SHOWN SHALL NOT EXCEED 15% OF THE TONNAGE SHIPPED.

NOTES:

- ROCK UTILIZED FOR RIPRAP SHALL CONSIST OF SOUND, DURABLE ROCK, INSOLUBLE IN WATER, AND RESISTANT TO WEATHERING.
- ALL MATERIAL SHALL BE FREE OF STRUCTURAL DEFECTS, SHALE SEAMS AND ORGANIC MATTER.
- INDIVIDUAL PIECES SHOULD BE SHARPLY ANGULAR, BLOCK SHAPED AND HAVE A MINIMUM SPECIFIC GRAVITY OF 2.5.
- NO PIECE SHALL HAVE A LENGTH EXCEEDING THREE (3) TIMES ITS WIDTH OR DEPTH.
- EACH LOAD OF ROCK SHALL BE OF WELL-GRADED MIXTURE. A WELL-GRADED MIXTURE, AS USED HEREIN, IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF LARGER STONE, BUT WITH A SUFFICIENT MIXTURE OF SMALLER SIZES TO FILL THE VOIDS.
- MATERIAL SHALL MEET NSA SPECIFICATIONS - SEE TABLE ABOVE.
- IF STREAM WIDTH IS EQUAL TO OR LESS THAN 2 TIMES THE TOE WIDTH, RIPRAP SHALL BE PLACED ACROSS THE ENTIRE STREAM WIDTH.
- RIPRAP SHALL BE PLACED TO THE FULL COURSE THICKNESS IN ONE CONTINUOUS OPERATION. OPERATIONS WHICH CAUSE SEGREGATION OF THE MATERIALS SHALL NOT BE PERMITTED. INDIVIDUAL ROCKS MAY BE REARRANGED, AND THE VOIDS FILLED WITH HAND PLACED SMALLER ROCK IN ORDER TO ACHIEVE THE DESIRED UNIFORM ARMOR.
- SLOPE SHALL BE GRADED TO 2:1 OR FLATTER PRIOR TO PLACING GRANULAR FILL, FILTER FABRIC, OR RIPRAP.
- ENDS OF THE RIPRAP SHALL BE KEYED INTO A STABLE BANK. WHEN TYING INTO OTHER STRUCTURES, LARGER RIPRAP CAN BE LAID IN STEPS OR STACKED AS NEEDED TO FIT. STONES LARGER THAN THOSE DESIGNED FOR FLOW SHALL BE USED FOR THIS PURPOSE.
- REMAINING DISTURBED AREAS SHALL BE GRADED AND PERMANENTLY SEEDED AND MULCHED.

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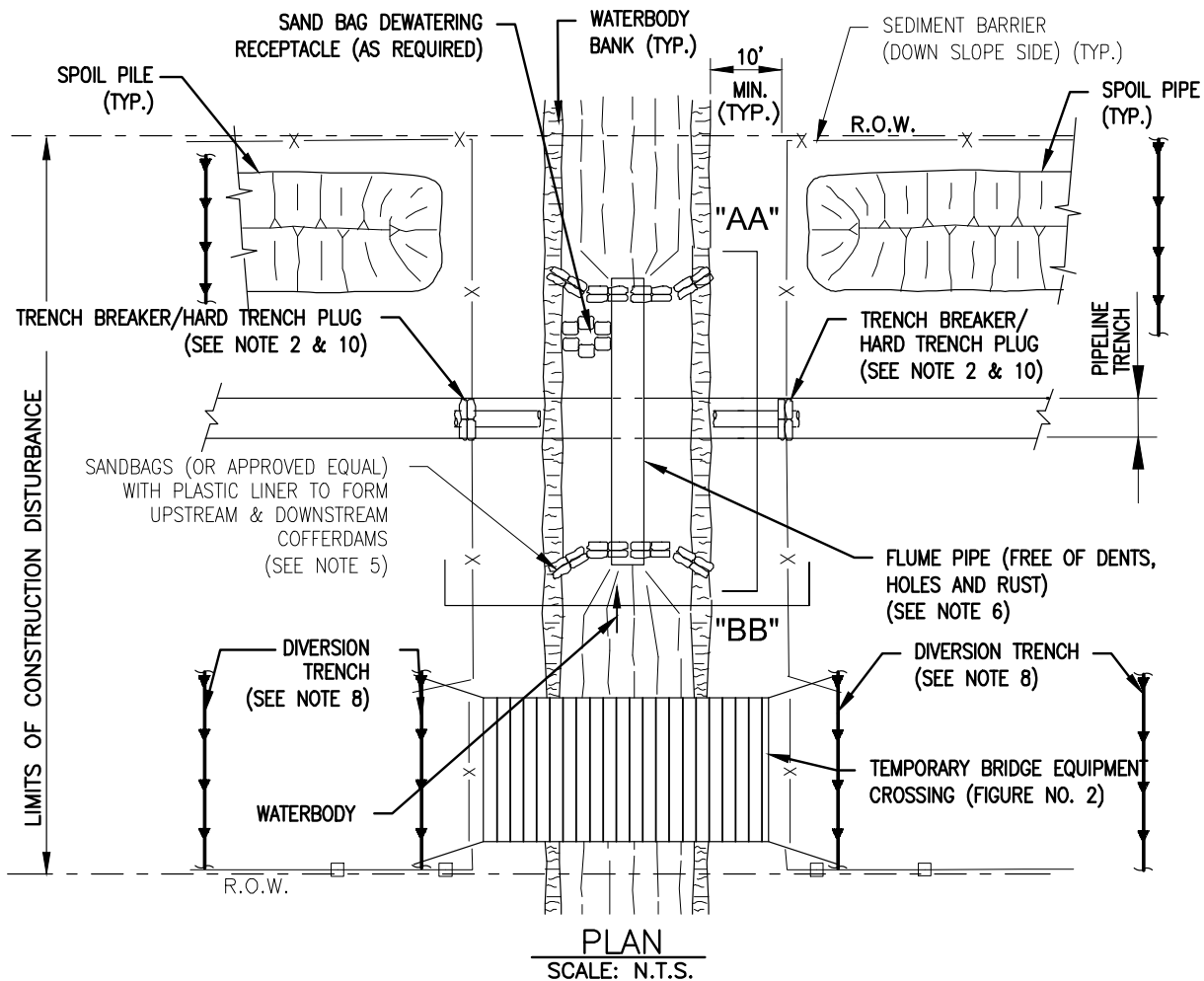
TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL



STREAM BANK STABILIZATION



26b
2 OF 2



NOTES:

1. SEDIMENT BARRIERS SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT-OF-WAY.
2. HARD TRENCH PLUGS MUST REMAIN IN PLACE AT CONVENIENT LOCATIONS TO SEPARATE THE MAINLINE DITCH FROM THE WATERBODY CROSSING UNTIL THE WATERBODY CROSSING IS INSTALLED AND BACKFILLED.
3. EQUIPMENT OPERATING IN THE WATERBODY SHALL BE LIMITED TO THAT NEEDED TO PERFORM CONSTRUCTION. IF OTHER TYPES OF EQUIPMENT MUST CROSS THE WATERBODY, THE CONTRACTOR SHALL PROVIDE AND USE A TEMPORARY BRIDGE EQUIPMENT CROSSING.
4. STAGING AREA(S) FOR WATERBODY CROSSING(S), WHEN REQUIRED, SHALL BE LOCATED AT LEAST 50 FEET FROM THE WATER'S EDGE AND SHALL BE OF A MINIMUM SIZE NEEDED FOR CONVENIENT PREPARATION.
5. FLUME CROSSING METHOD REQUIREMENTS INCLUDE:
 - (A) INSTALL FLUME PIPE(S) AFTER BLASTING (IF NECESSARY), BUT BEFORE ANY TRENCHING.
 - (B) USE SAND BAG OR SAND BAG AND PLASTIC SHEETING DIVERSION STRUCTURES OR EQUIVALENT TO DEVELOP AN EFFECTIVE SEAL AND TO DIVERT WATERBODY FLOW THROUGH THE FLUME PIPE (SOME MINOR MODIFICATIONS TO THE WATERBODY BOTTOM MAY BE REQUIRED TO ACHIEVE AN EFFECTIVE SEAL).
 - (C) PROPERLY ALIGN FLUME PIPE(S) TO PREVENT BANK EROSION AND WATERBODY CHANNEL BED SCOUR.
 - (D) DO NOT REMOVE FLUME PIPE DURING TRENCHING, PIPE LAYING, OR BACKFILLING ACTIVITIES, OR INITIAL STREAM BED RESTORATION EFFORTS.
 - (E) 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 BANK IS COMPLETE.

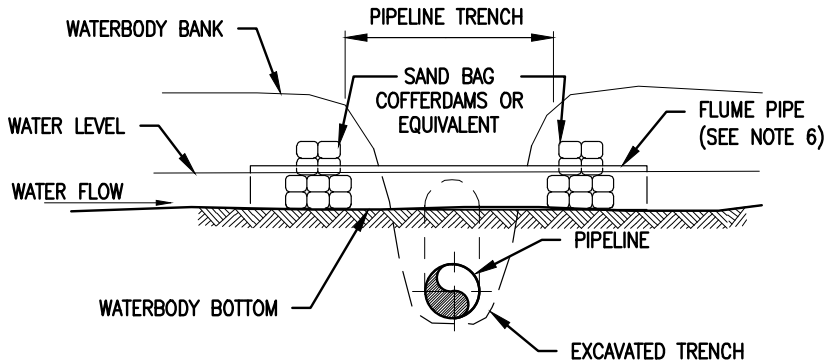
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

FX FLUME CROSSING

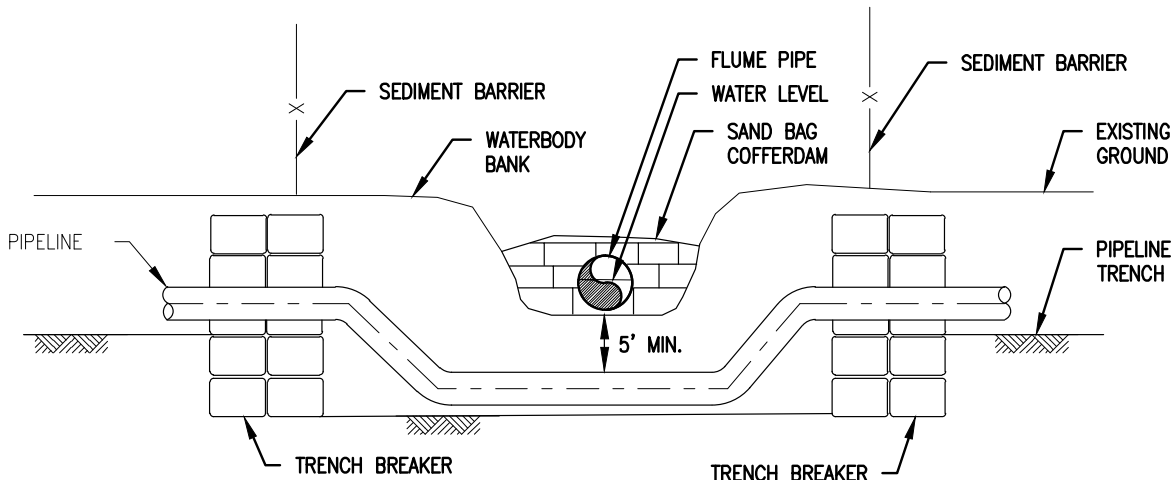


27a
1 OF 2



SECTION "A-A"

SCALE: N.T.S.



SECTION "B-B"

SCALE: N.T.S.

6. THE FLUME PIPE MUST BE SIZED TO ADEQUATELY CONVEY MAXIMUM ANTICIPATED FLOW RATES AT THE TIME OF THE CROSSING WITHOUT FLOODING THE TRENCH, WHILE TO MAINTAINING ADEQUATE FLOW RATES TO PROTECT AQUATIC LIFE AND PREVENT THE INTERRUPTION OF EXISTING DOWNSTREAM USES.
7. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED DAILY AND REPAIRED IF NECESSARY.
8. INSTALL DIVERSION TRENCHES AT THE BASE OF ALL SLOPES ADJACENT TO THE WATERBODY AND AT 50' FROM WATERBODY BANKS.
9. CHEMICALS, FUELS AND LUBRICATING OILS SHALL NOT BE STORED AND EQUIPMENT SHALL NOT BE REFUELED WITHIN 100 FEET OF THE WATERBODY UNLESS OTHERWISE APPROVED BY THE ENVIRONMENTAL INSPECTOR.
10. ANY WATER ACCUMULATING IN THE WORK SPACE SHALL BE PUMPED TO A FILTER BAG PRIOR TO DISCHARGE TO A WATERBODY.
11. INSTALL TRENCH BREAKERS ON BOTH SIDES OF THE WATERBODY TO PREVENT DIVERSION OF WATER INTO UPLAND PORTIONS OF THE PIPELINE TRENCH AND TO KEEP ANY ACCUMULATED TRENCH WATER OUT OF THE WATERBODY.
13. EXCEPT FOR BLASTING AND OTHER ROCK BREAKING MEASURES, THE CONTRACTOR SHALL COMPLETE IN WATERBODY CONSTRUCTION ACTIVITIES (INCLUDING TRENCHING, PIPE INSTALLATION, BACKFILL, AND RESTORATION OF THE WATERBODY CHANNEL CONTOURS) WITHIN 24 HOURS. WATERBODY BANKS AND UNCONSOLIDATED WATERBODY CHANNELS MAY REQUIRE ADDITIONAL RESTORATION AFTER THIS PERIOD.
14. THE CONTRACTOR SHALL COORDINATE THE ENVIRONMENTAL INSPECTOR TO DETERMINE THE APPROPRIATE DRY CROSSING METHOD THAT SHOULD BE UTILIZED DURING CONSTRUCTION.

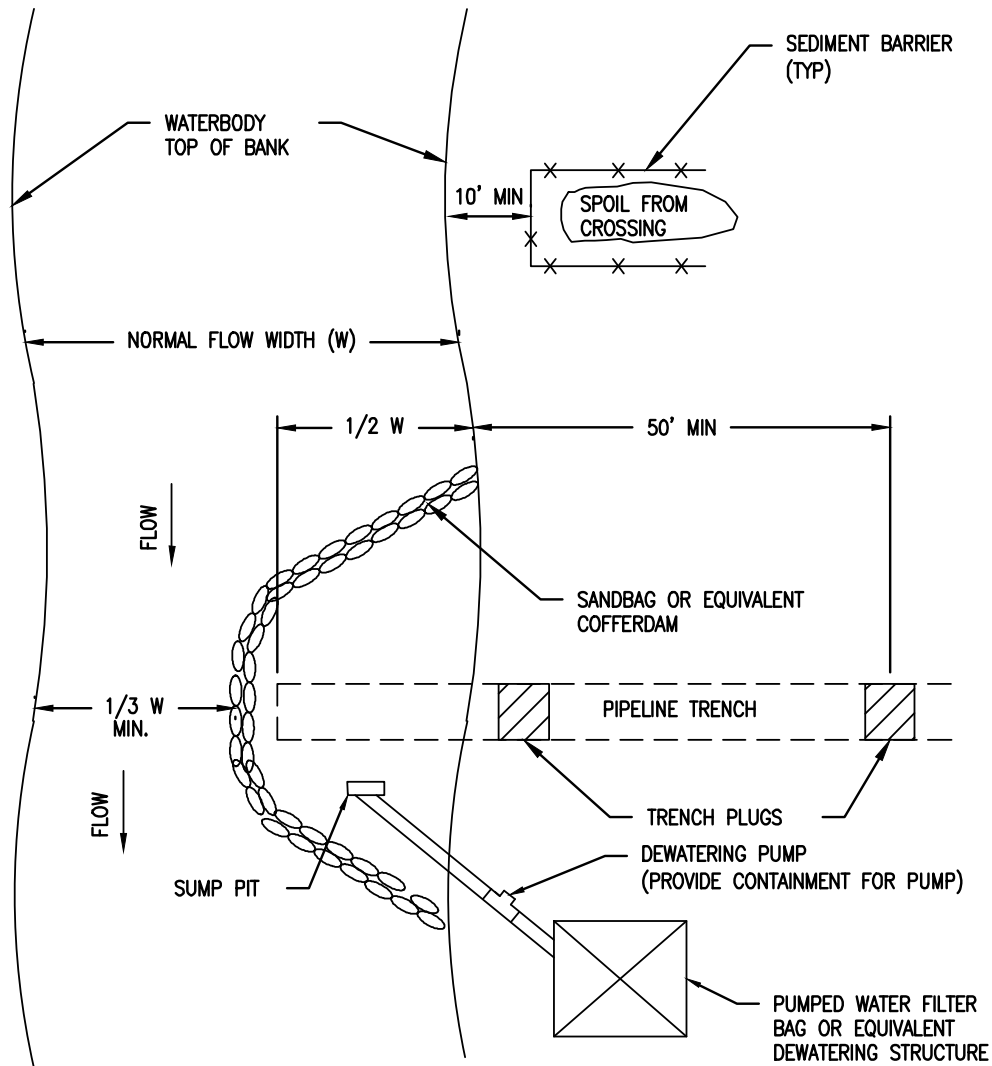
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

FX FLUME CROSSING



27b
2 OF 2



PLAN VIEW
N.T.S

NOTES:

1. TRENCH BREAKER SHALL BE INSTALLED WITHIN THE TRENCH ON BOTH SIDES OF THE WATERBODY CHANNEL.
2. WATER ACCUMULATING WITHIN THE WORK AREA SHALL BE PUMPED TO A PUMPED WATER FILTER BAG OR SEDIMENT TRAP PRIOR TO DISCHARGING INTO ANY SURFACE WATER.
3. HAZARDOUS OR POLLUTANT MATERIAL STORAGE AREAS SHALL BE LOCATED AT LEAST 100 FEET BACK FROM THE TOP OF WATERBODY BANK.
4. ALL EXCESS EXCAVATED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE WATERBODY CROSSING AREA.
5. ALL DISTURBED AREAS WITHIN 50 FEET OF TOP-OF-BANK SHALL BE BLANKETED OR MATTED WITHIN 24 HOURS OF INITIAL DISTURBANCE FOR MINOR WATERBODIES OR 48 HOURS OF INITIAL DISTURBANCE FOR INTERMEDIATE WATERBODIES UNLESS OTHERWISE AUTHORIZED.
6. APPROPRIATE WATERBODY BANK PROTECTION SHALL BE PROVIDED WITHIN THE CHANNEL.
7. THE WATERBODY CROSSING WILL GENERALLY BE COMPLETED IN 2 STAGES. THE DETAIL DEPICTS STAGE 1. STAGE 2 WILL GENERALLY BE COMPLETED USING THE SAME CONFIGURATION FROM THE OPPOSITE BANK.

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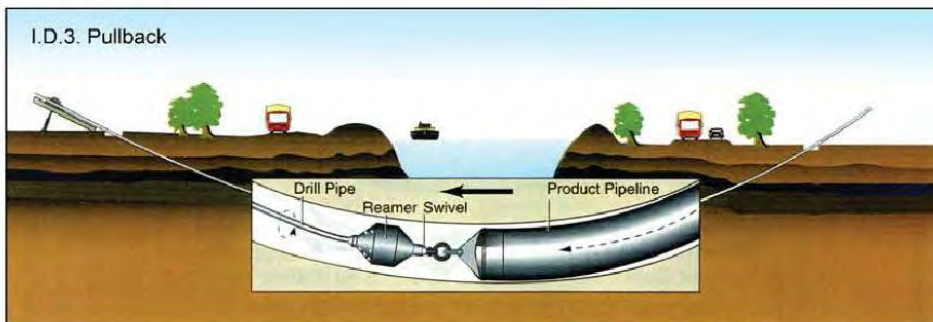
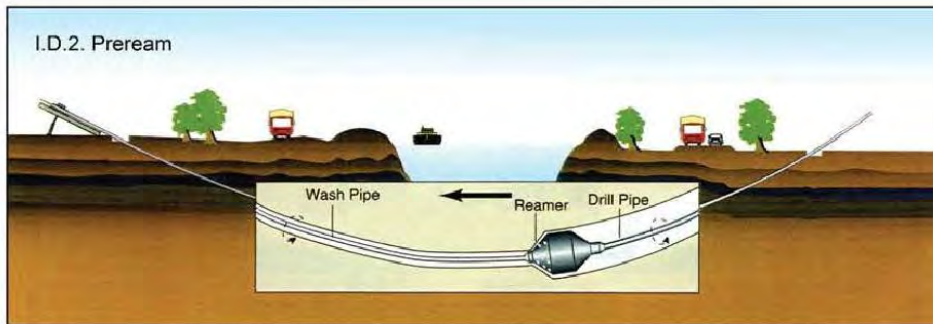
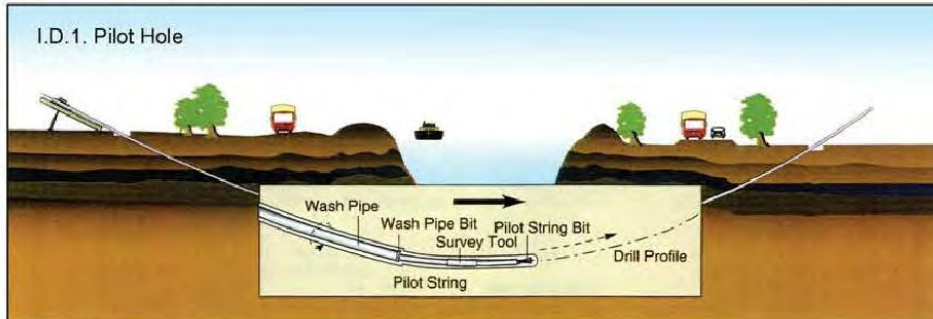
TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL



CD

COFFER DAM

Figure 1. Technique



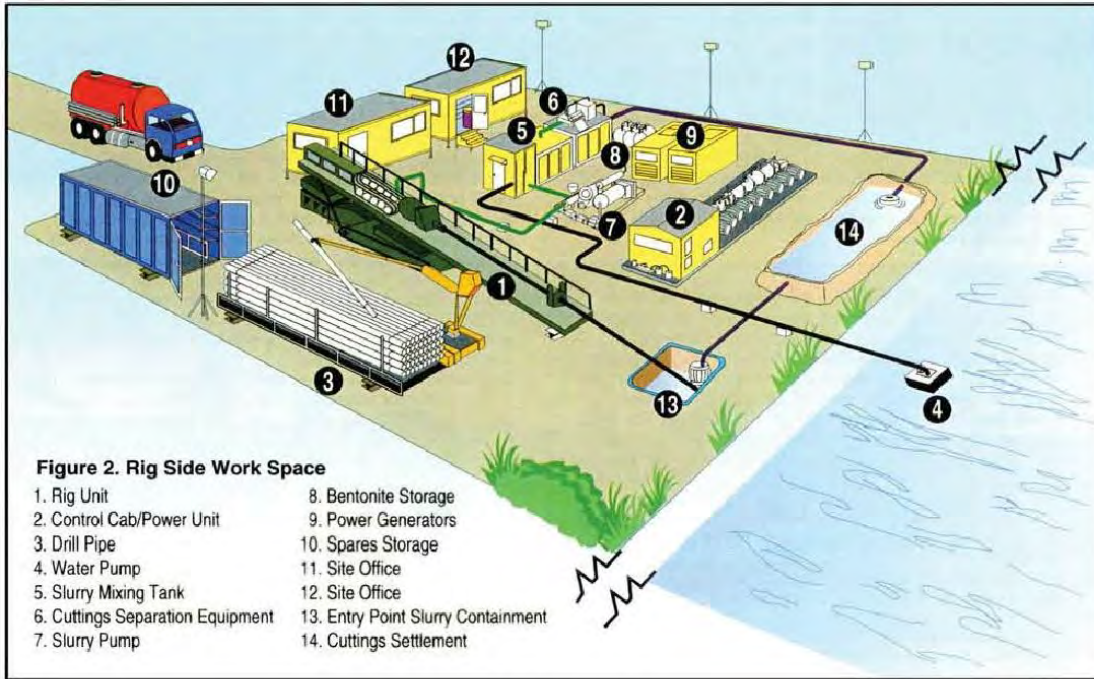
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
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HDD HORIZONTAL DIRECTIONAL DRILL



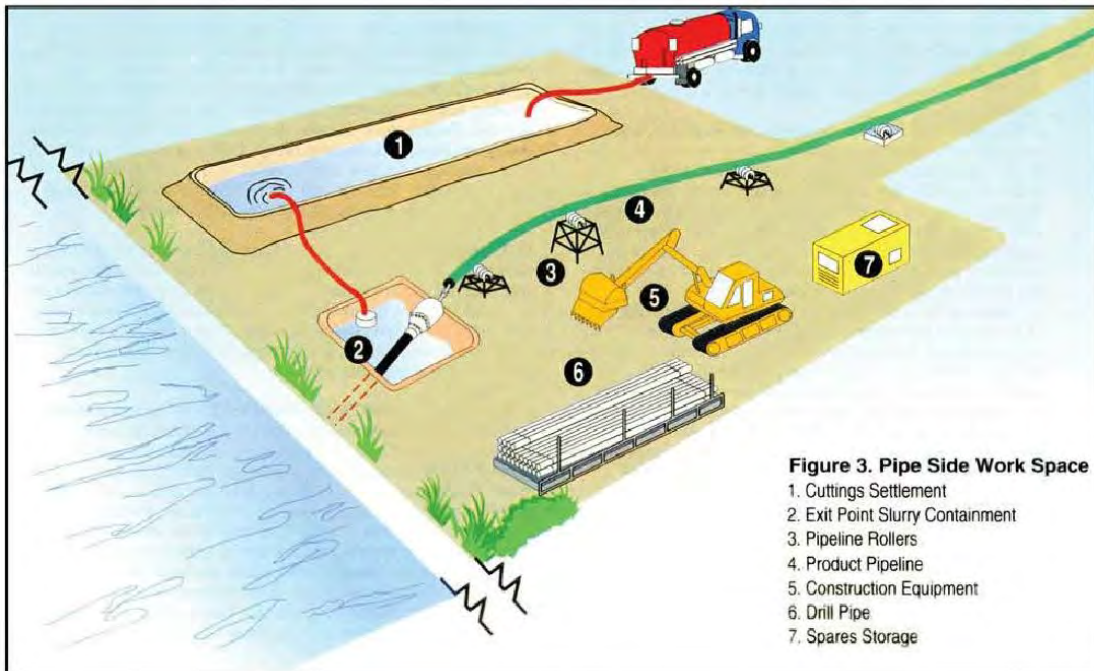
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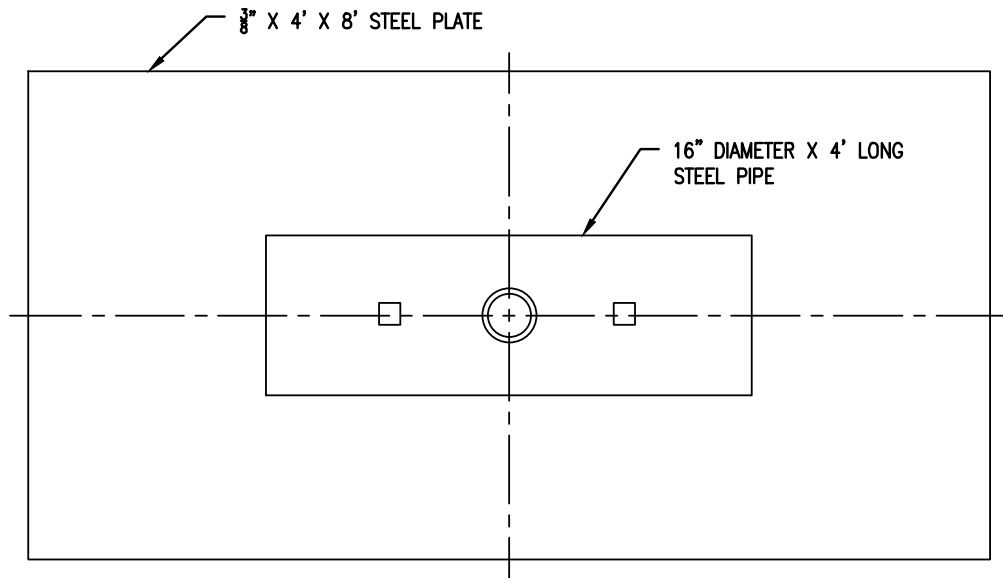
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STANDARD ENVIRONMENTAL DETAIL

HDD HORIZONTAL DIRECTIONAL DRILL

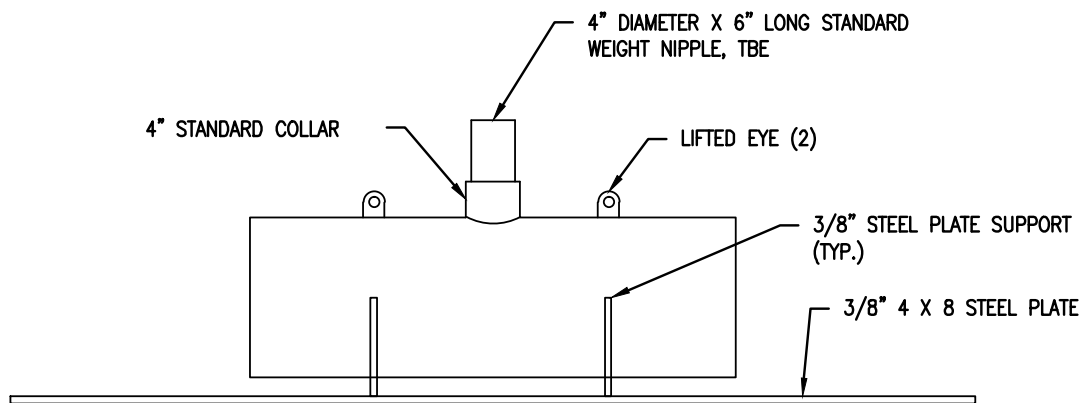


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2 OF 2



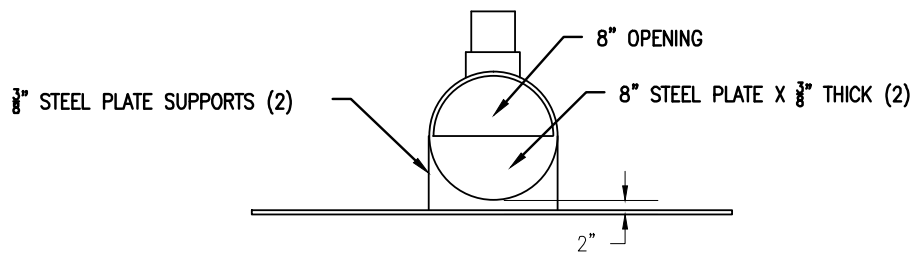
PLAN VIEW

N.T.S.



SECTION VIEW

N.T.S.



PROFILE VIEW

N.T.S.

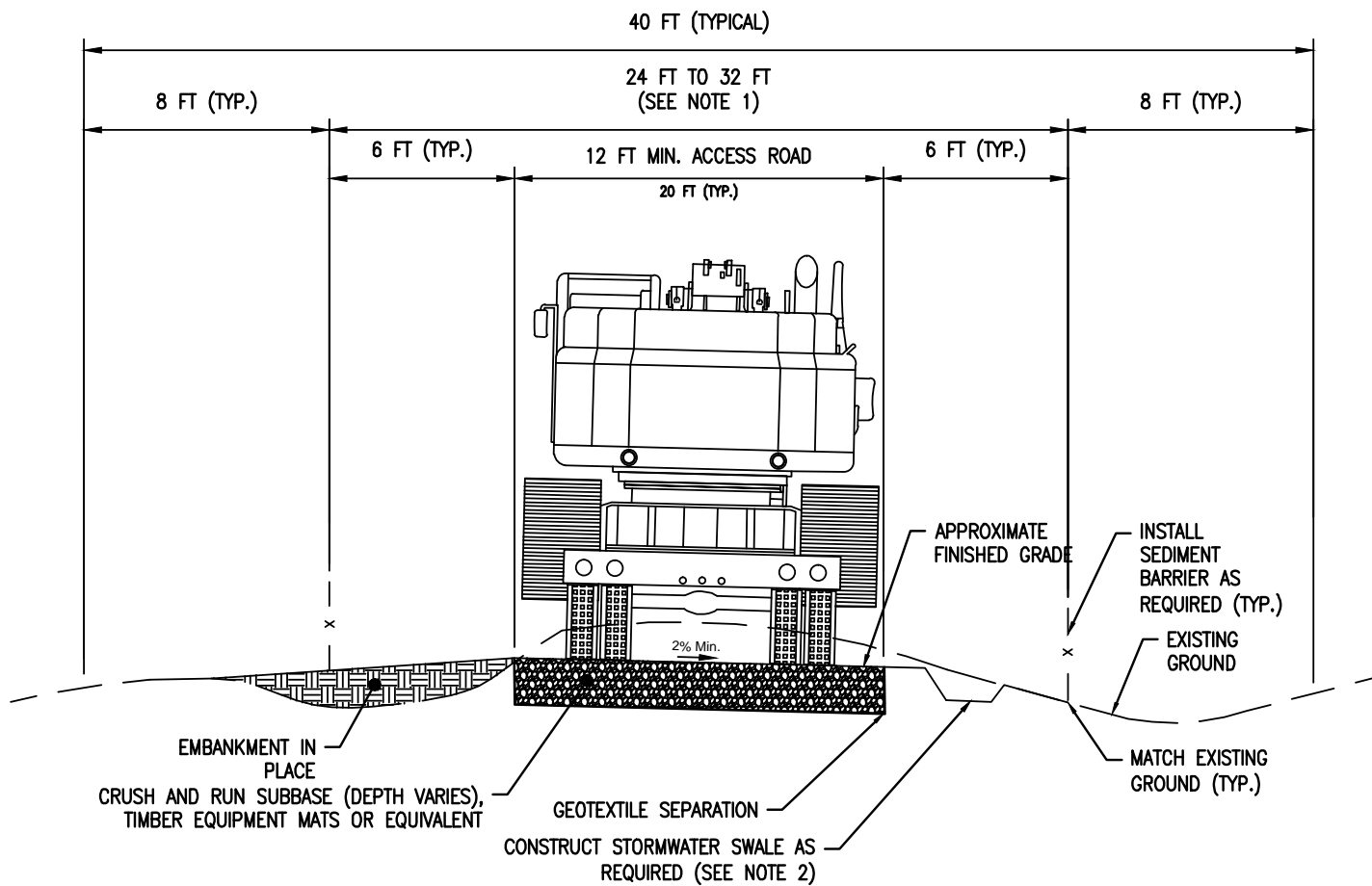
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

ED

ENERGY DISSIPATER





NOTES:

1. ACCESS ROADS WILL TYPICALLY INCLUDE A 12 FT TO 20 FT TRAVEL LANE AND 12 FT OF GRADING DISTURBANCE. THE GRADING DISTURBANCE WILL BE REQUIRED TO MATCH INTO EXISTING GROUND AND CONSTRUCT REQUIRED EROSION CONTROL MEASURES AND SEDIMENT CONTROL DEVICES. ADDITIONAL CONSTRUCTION WIDTH MAY BE REQUIRED IN AREAS THAT REQUIRED TRUCK PULL OFFS, TRUCK TURNAROUNDS, AND AROUND SHARP CURVES WHERE EQUIPMENT TRAILERS HAVE LARGE TURNING RADII.
2. REFER TO THE STORMWATER SWALE TABLES FOR LOCATIONS AND SIZES OF ALL SWALES REQUIRED ALONG ACCESS ROADS.

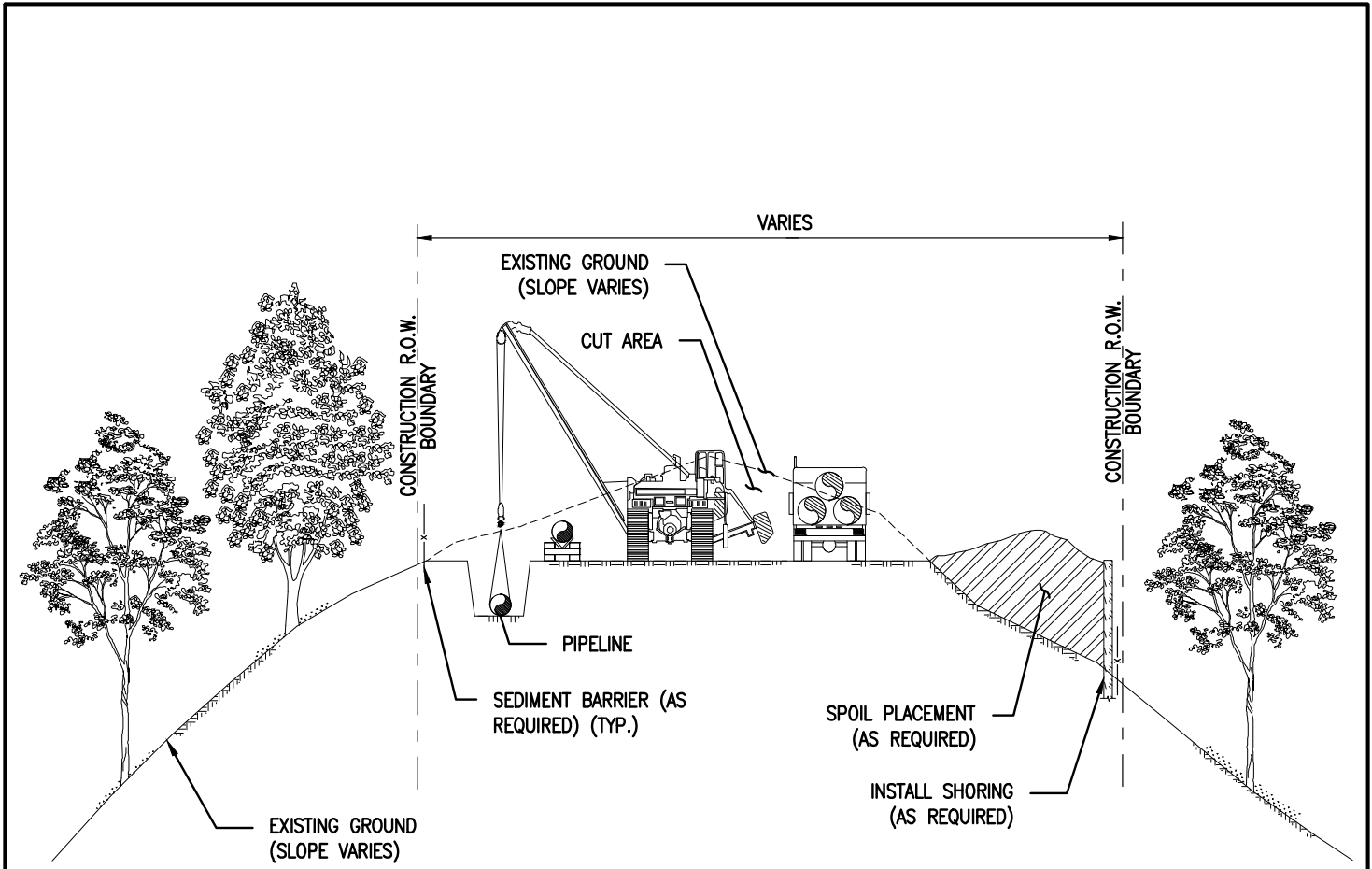
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

TAR

TYPICAL ACCESS ROAD
CROSSING SECTION





CROSS SECTION
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NOTES:

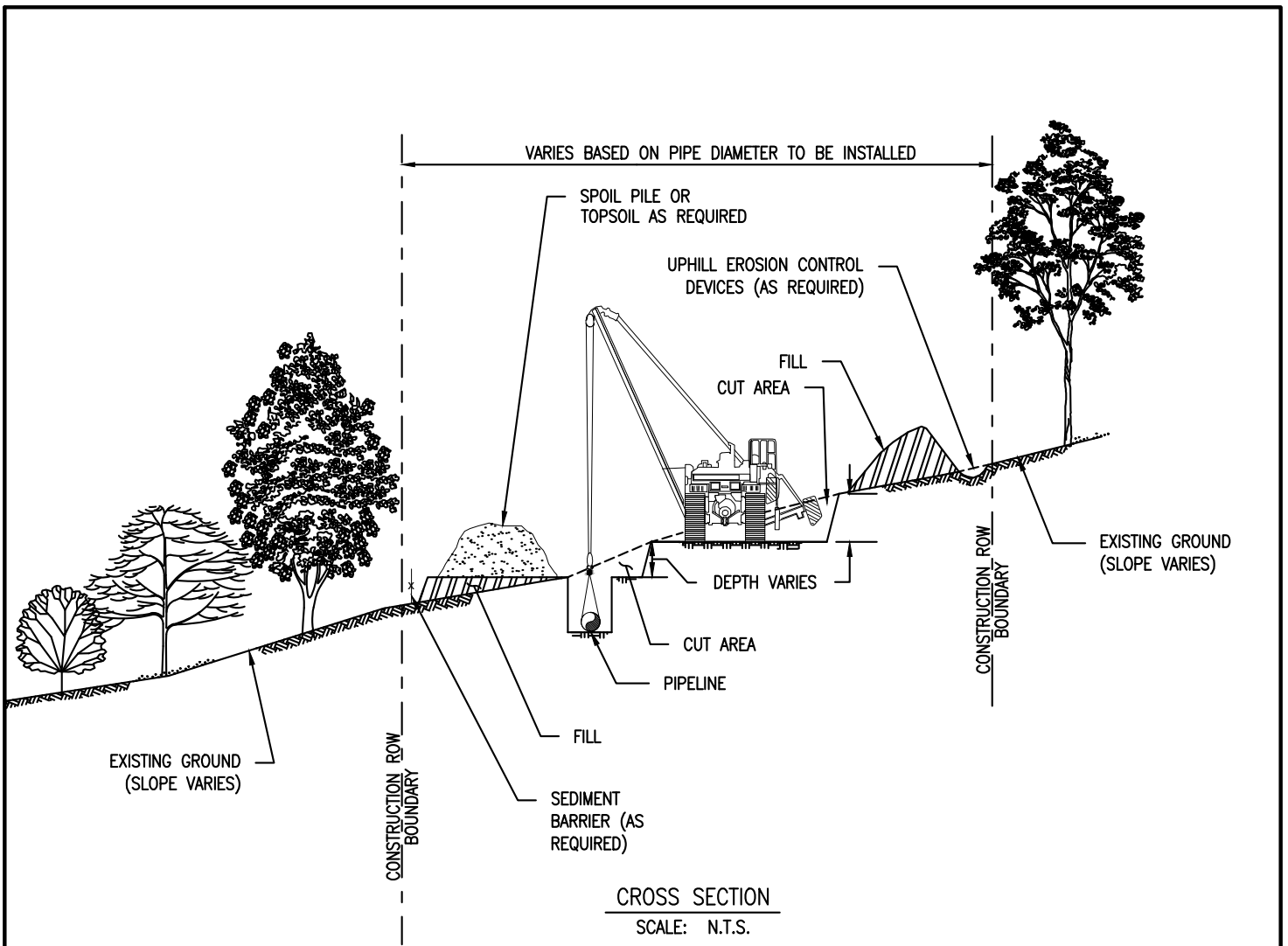
1. EMPLOY EROSION CONTROL MEASURES SUCH AS WATERBARS, CROSS DITCHES, TEMPORARY DRAINAGE PIPES, TEMPORARY SWALES, TEMPORARY OUTLET PROTECTION, ETC. AS REQUIRED TO PREVENT EROSION AND SEDIMENTATION OUTSIDE OF THE CONSTRUCTION RIGHT-OF-WAY. CLEAR AND STAKE ADDITIONAL RIGHT-OF-WAY TO ALLOW FOR EXTRA SPOIL.
2. ENSURE SIDE BOOM TRACTORS ARE EQUIPPED WITH BOOM EXTENDERS AND COUNTERWEIGHTS IF REQUIRED.
3. USE BACKHOE TO ASSIST BULLDOZERS WITH REPLACING CUTS.
4. RESTORE GRADE TO NEAR PRE-CONSTRUCTION TOPOGRAPHY, REPLACE TOPSOIL AND INSTALL PERMANENT EROSION CONTROL MEASURES AS REQUIRED.
5. REVEGETATE / SEED DISTURBED AREAS AS NOTED IN THE CONSTRUCTION DOCUMENTS OR AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR.

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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

RTC RIDGE TOP CONSTRUCTION PROCEDURE





NOTES:

1. TWO-TONE THE RIGHT-OF-WAY TO LIMIT THE NEED FOR DEEP CUTS AND ADDITIONAL RIGHT-OF-WAY ON STEEP SLOPES. THE MINIMUM WORKSPACE WIDTH ALONG STEEP SIDE SLOPES WILL VARY DEPENDING ON THE DIAMETER OF PIPE TO BE INSTALLED. ADDITIONAL TEMPORARY WORKSPACE MAY BE REQUIRED FOR WORKER SAFETY DEPENDING ON THE SEVERITY OF THE GRADE.
2. EMPLOY EROSION CONTROL MEASURES SUCH AS WATERBARS, CROSS DITCHES, TEMPORARY DRAINAGE PIPES, TEMPORARY SWALES, TEMPORARY OUTLET PROTECTION, ETC. AS REQUIRED TO PREVENT EROSION AND SEDIMENTATION OUTSIDE OF THE CONSTRUCTION RIGHT-OF-WAY. CLEAR AND STAKE ATWS TO ALLOW FOR EXTRA SPOIL.
3. ENSURE SIDE BOOM TRACTORS ARE EQUIPPED WITH BOOM EXTENDERS AND COUNTERWEIGHTS IF REQUIRED.
4. USE BACKHOE TO ASSIST BULLDOZERS WITH REPLACING CUTS.
5. RESTORE GRADE TO NEAR PRE-CONSTRUCTION TOPOGRAPHY, REPLACE TOPSOIL AND INSTALL PERMANENT EROSION CONTROL MEASURES AS REQUIRED.
6. REVEGETATE / SEED DISTURBED AREAS AS NOTED IN THE CONSTRUCTION DOCUMENTS OR AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR.

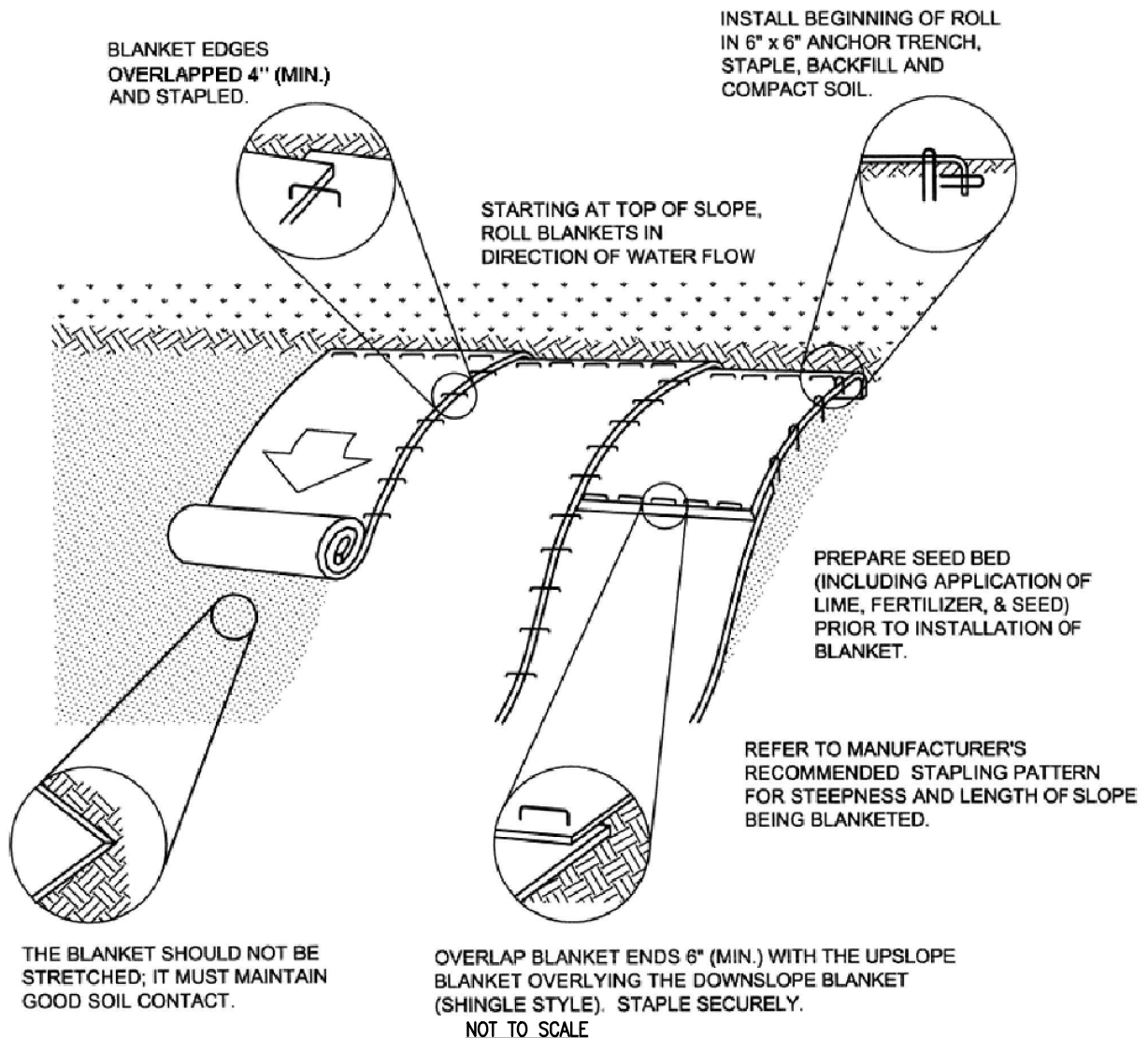
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL



SIDE SLOPE (TWO-TONE)
CONSTRUCTION PROCEDURE





1. SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
2. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
3. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
4. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
5. STAPLING OF THE BLANKET SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.
7. BIODEGRADABLE STAPLES SHALL BE USED.

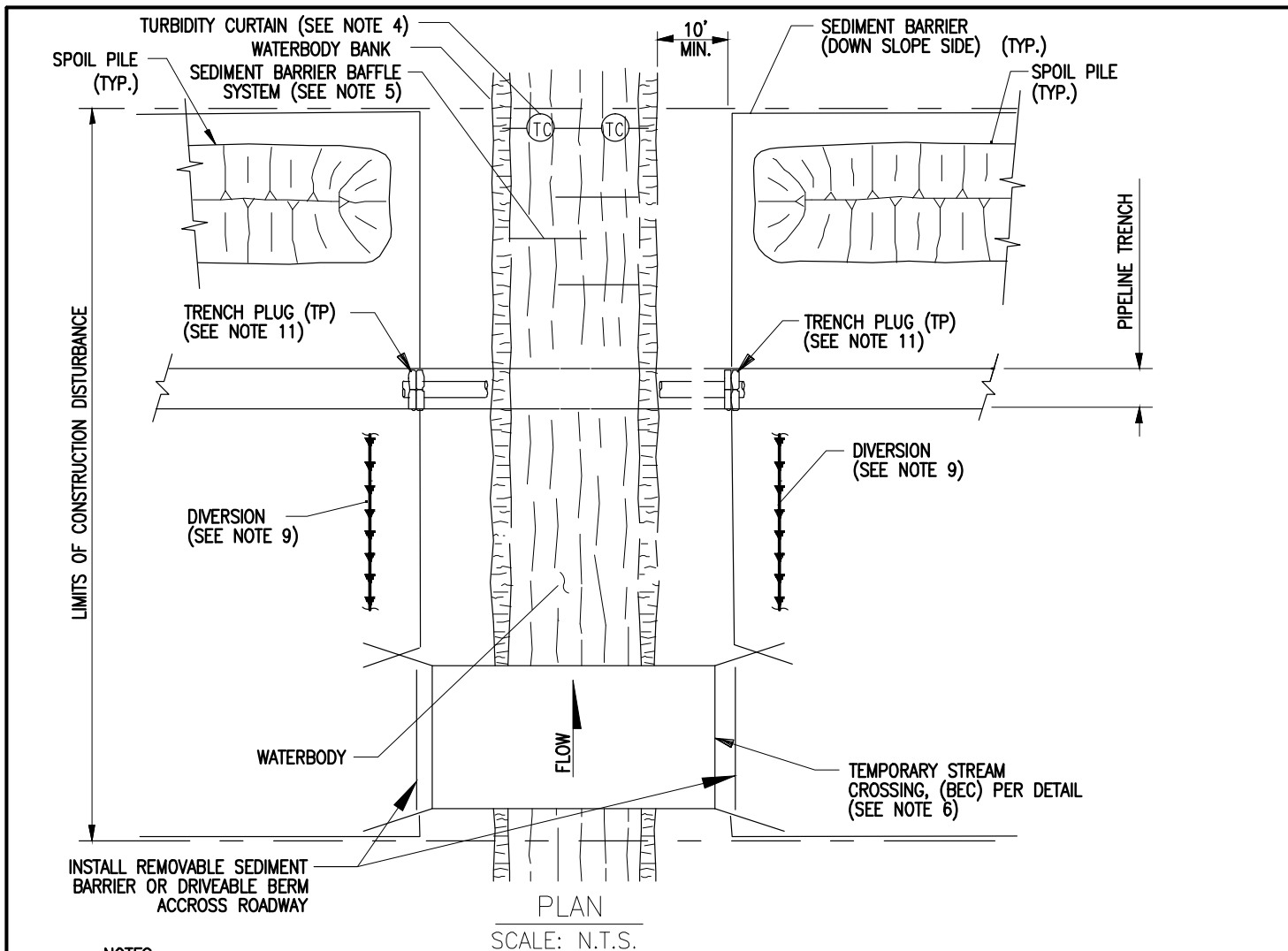
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

ECB STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION





NOTES:

1. THIS METHOD APPLIES TO INTERMEDIATE WATERBODY CROSSINGS THAT ARE DEFINED AS WATERBODIES THAT ARE GREATER THAN 10 FEET WIDE BUT LESS THAN OR EQUAL TO 100 FEET WIDE AT THE WATERS EDGE AT THE TIME OF CONSTRUCTION.
2. SEDIMENT BARRIERS SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVILY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT OF WAY.
3. HARD DITCH PLUGS MUST REMAIN IN PLACE AT CONVENIENT LOCATIONS TO SEPARATE MAINLINE DITCH FROM THE WATERBODY CROSSING UNTIL THE WATERBODY IS INSTALLED AND BACK FILLED.
4. INSTALL TURBIDITY CURTAINS DOWNSTREAM OF CROSSING AT EDGE OF WORK CORRIDOR IF STREAM FLOW IS CONDUCIVE TO SUCH AN INSTALLATION.
5. IF FLOW OF WATERBODY IS SUCH THAT TURBIDITY CURTAIN CAN NOT BE INSTALLED, THEN INSTALL DOWNSTREAM SEDIMENT BARRIER BAFFLE SYSTEM AS DEPICTED.
6. EQUIPMENT OPERATING IN THE WATERBODY SHALL BE LIMITED TO THAT NEEDED TO PERFORM CONSTRUCTION. IF OTHER TYPES OF EQUIPMENT MUST CROSS THE WATERBODY, CONTRACTOR SHALL PROVIDE AND USE TEMPORARY STREAM CROSSING (BEC).
7. STAGING AREA(S) FOR WATERBODY CROSSING(S), WHEN REQUIRED, SHALL BE LOCATED AT LEAST 50 FEET FROM WATER'S EDGE AND SHALL BE OF A MINIMUM SIZE NEEDED FOR CONVENIENT PREPARATION.
8. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED DAILY AND REPAIRED IF NECESSARY.
9. INSTALL DIVERSION TRENCHES AT THE BASE OF ALL SLOPES ADJACENT TO THE WATERBODY.
10. CHEMICALS, FUELS AND LUBRICATING OILS SHALL NOT BE STORED AND EQUIPMENT SHALL NOT BE REFUELED WITHIN 100 FEET OF THE WATERBODY.
11. INSTALL TRENCH PLUGS ON BOTH SIDES OF THE WATERBODY TO PREVENT DIVERSION OF WATER INTO UPLAND PORTIONS OF THE PIPELINE TRENCH AND TO KEEP ANY ACCUMULATED TRENCH WATER OUT OF THE WATERBODY.
12. CONTRACTOR SHALL POSTPONE GRADING OF RIGHT-OF-WAY ADJACENT TO WATERBODY UNTIL STAGING AREA IS PREPARED AND WORK IN THE WATERBODY IS READY TO COMMENCE.
13. COMPLETE IN STREAM CONSTRUCTION ACTIVITIES (NOT INCLUDING BLASTING AND OTHER ROCK BREAKING MEASURES) WITHIN 24 HOURS, UNLESS SITE SPECIFIC CONDITIONS MAKE COMPLETION WITHIN 48 HOURS INFEASIBLE.

(APPLIES TO WATERBODIES GREATER THAN 10' WIDE BUT LESS THAN 100' WIDE AT WATERS EDGE AT TIME OF CROSSING)

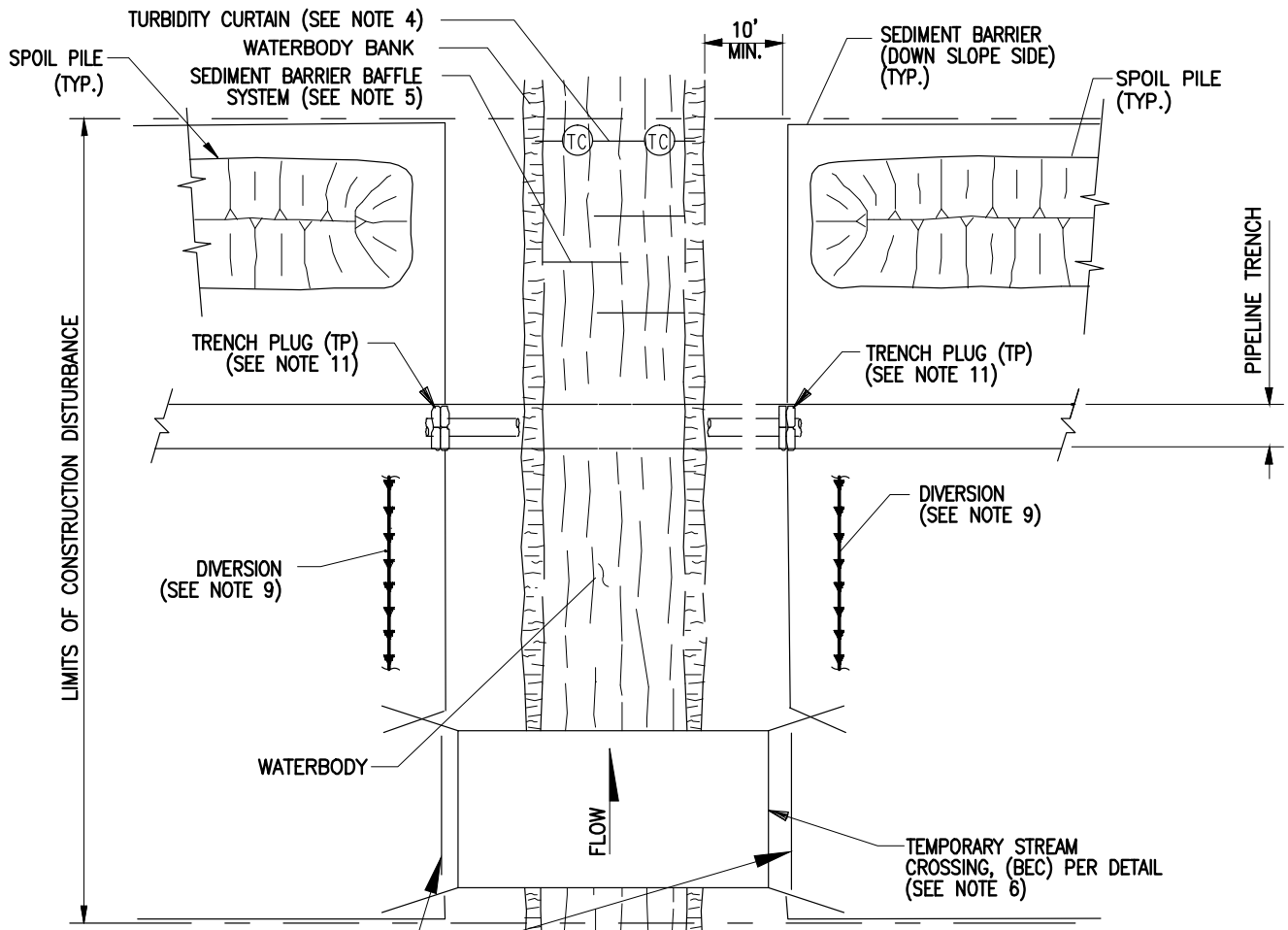
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STANDARD ENVIRONMENTAL DETAIL



WET INTERMEDIATE WATERBODY CROSSING





INSTALL REMOVABLE SEDIMENT BARRIER OR DRIVEABLE BERM ACCROSS ROADWAY

PLAN

SCALE: N.T.S.

NOTES:

1. THIS METHOD APPLIES TO MINOR WATERBODY CROSSINGS THAT ARE DEFINED AS WATERBODIES THAT ARE LESS THAN OR EQUAL TO 10 FEET AT WATERS EDGE AT THE TIME OF CROSSING.
2. SEDIMENT BARRIERS SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVILY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT OF WAY.
3. HARD DITCH PLUGS MUST REMAIN IN PLACE AT CONVENIENT LOCATIONS TO SEPARATE MAINLINE DITCH FROM THE WATERBODY CROSSING UNTIL THE WATERBODY IS INSTALLED AND BACK FILLED.
4. INSTALL TURBIDITY CURTAINS DOWNSTREAM OF CROSSING AT EDGE OF WORK CORRIDOR IF STREAM FLOW IS CONDUCIVE TO SUCH AN INSTALLATION.
5. IF FLOW OF WATERBODY IS SUCH THAT TURBIDITY CURTAIN CAN NOT BE INSTALLED, THEN INSTALL DOWNSTREAM SEDIMENT BARRIER BAFFLE SYSTEM AS DEPICTED.
6. EQUIPMENT OPERATING IN THE WATERBODY SHALL BE LIMITED TO THAT NEEDED TO PERFORM CONSTRUCTION. IF OTHER TYPES OF EQUIPMENT MUST CROSS THE WATERBODY, CONTRACTOR SHALL PROVIDE AND USE TEMPORARY STREAM CROSSING (BEC).
7. STAGING AREA(S) FOR WATERBODY CROSSING(S), WHEN REQUIRED, SHALL BE LOCATED AT LEAST 50 FEET FROM WATER'S EDGE AND SHALL BE OF A MINIMUM SIZE NEEDED FOR CONVENIENT PREPARATION.
8. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED DAILY AND REPAIRED IF NECESSARY.
9. INSTALL DIVERSION TRENCHES AT THE BASE OF ALL SLOPES ADJACENT TO THE WATERBODY.
10. CHEMICALS, FUELS AND LUBRICATING OILS SHALL NOT BE STORED AND EQUIPMENT SHALL NOT BE REFUELED WITHIN 100 FEET OF THE WATERBODY.
11. INSTALL TRENCH PLUGS ON BOTH SIDES OF THE WATERBODY TO PREVENT DIVERSION OF WATER INTO UPLAND PORTIONS OF THE PIPELINE TRENCH AND TO KEEP ANY ACCUMULATED TRENCH WATER OUT OF THE WATERBODY.
12. CONTRACTOR SHALL POSTPONE GRADING OF RIGHT-OF-WAY IMMEDIATELY ADJACENT TO WATERBODY UNTIL STAGING AREA IS PREPARED AND WORK IN THE WATERBODY IS READY TO COMMENCE.
13. EXCEPT FOR BLASTING AND OTHER ROCK BREAKING MEASURES, COMPLETE IN STREAM CONSTRUCTION ACTIVITIES (INCLUDING TRENCHING, PIPE INSTALLATION, BACKFILL, AND RESTORATION OF THE STREAM BED CONTOURS) WITHIN 24 HOURS. STREAM BANKS AND UNCONSOLIDATED STREAM BEDS MAY REQUIRE ADDITIONAL RESTORATION AFTER THIS PERIOD.

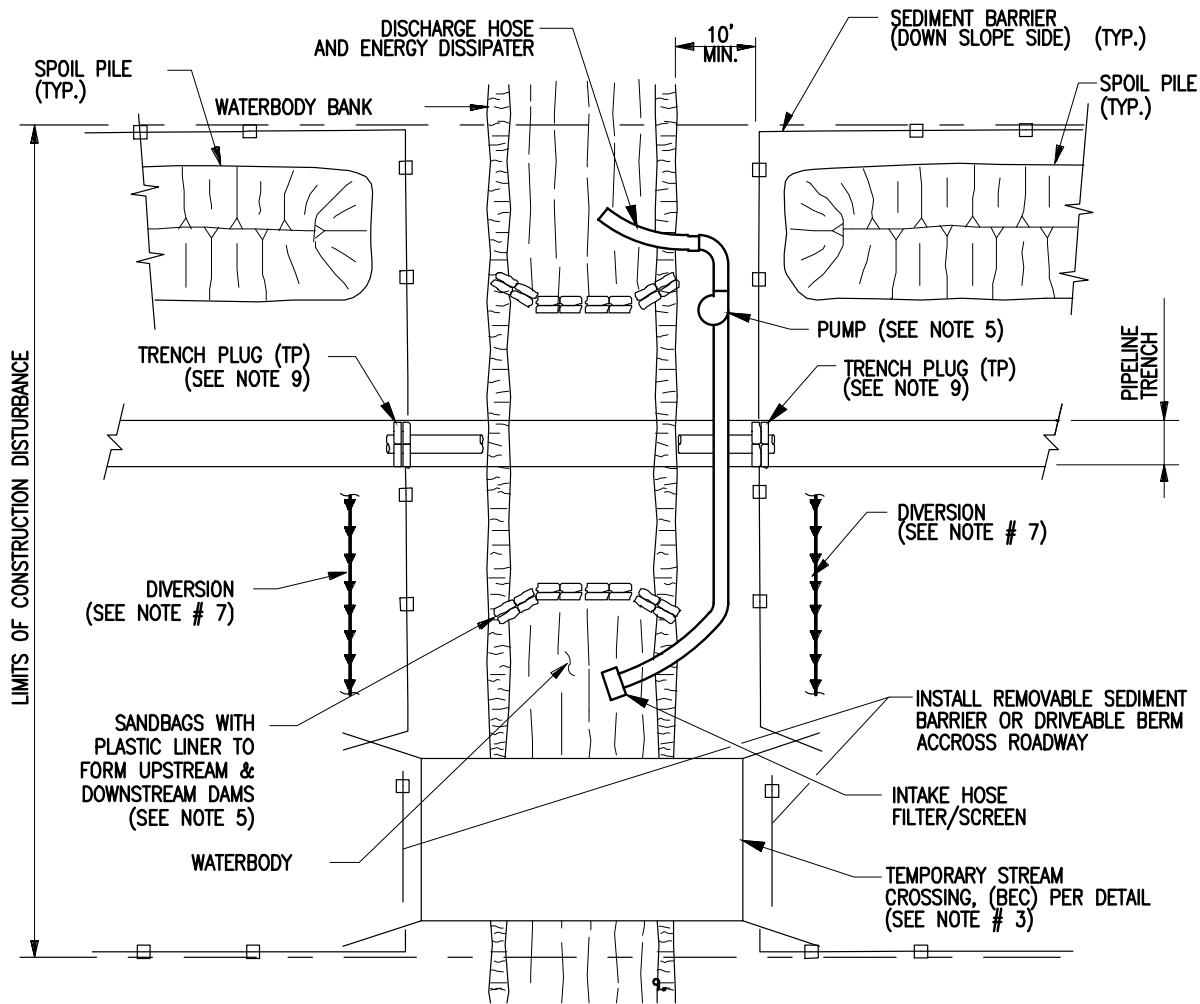
(APPLIES TO WATERBODIES 10' WIDE OR LESS AT WATERS EDGE AT TIME OF CROSSING)

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STANDARD ENVIRONMENTAL DETAIL

MWC WET MINOR WATERBODY CROSSING





NOTES:

1. SEDIMENT BARRIERS SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT-OF-WAY.
2. HARD DITCH PLUGS MUST REMAIN IN PLACE AT CONVENIENT LOCATIONS TO SEPARATE MAINLINE DITCH FROM THE WATERBODY CROSSING UNTIL THE WATERBODY CROSSING IS INSTALLED AND BACKFILLED.
3. EQUIPMENT OPERATING IN THE WATERBODY SHALL BE LIMITED TO THAT NEEDED TO PERFORM CONSTRUCTION. IF OTHER TYPES OF EQUIPMENT MUST CROSS THE WATERBODY, CONTRACTOR SHALL PROVIDE AND USE A TEMPORARY STREAM CROSSING (BEC).
4. STAGING AREA(S) FOR WATERBODY CROSSING(S), WHEN REQUIRED, SHALL BE LOCATED AT LEAST 50 FEET FROM WATER'S EDGE AND SHALL BE OF A MINIMUM SIZE NEEDED FOR CONVENIENT PREPARATION.
5. IMPLEMENTATION OF THE DAM-AND-PUMP CROSSING METHOD MUST MEET THE FOLLOWING PERFORMANCE CRITERIA:
 - (A) USE SUFFICIENT PUMPS, INCLUDING ON-SITE BACKUP PUMPS, TO MAINTAIN DOWNSTREAM FLOWS.
 - (B) CONSTRUCT DAMS WITH MATERIALS THAT PREVENT SEDIMENT AND OTHER POLLUTANTS FROM ENTERING THE WATERBODY (E.G., SANDBAGS OR CLEAN GRAVEL WITH PLASTIC LINER).
 - (C) SCREEN PUMP INTAKES;
 - (D) PREVENT STREAMBED SCOUR AT PUMP DISCHARGE.
 - (E) MONITOR THE DAM AND PUMPS TO ENSURE PROPER OPERATION THROUGHOUT THE WATERBODY CROSSING.
6. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED DAILY AND REPAIRED IF NECESSARY.
7. INSTALL DIVERSION TRENCHES AT THE BASE OF ALL SLOPES ADJACENT TO THE WATERBODY.
8. CHEMICALS, FUELS AND LUBRICATING OILS SHALL NOT BE STORED AND EQUIPMENT SHALL NOT BE REFUELED WITHIN 100 FEET OF THE WATERBODY.
9. INSTALL TRENCH PLUGS ON BOTH SIDES OF THE WATERBODY TO PREVENT DIVERSION OF WATER INTO UPLAND PORTIONS OF THE PIPELINE TRENCH AND TO KEEP ANY ACCUMULATED TRENCH WATER OUT OF THE WATERBODY.
10. CONTRACTOR SHALL POSTPONE GRADING OF RIGHT-OF-WAY ADJACENT TO WATERBODY UNTIL STAGING AREA IS PREPARED AND WORK IN THE WATERBODY IS READY TO COMMENCE.
11. PUMP INTAKE SHALL BE MAINTAINED TO A SUFFICIENT DISTANCE FROM BOTTOM TO PREVENT SEDIMENT FROM ENTERING THE SYSTEM.
12. DO NOT EXCAVATE A SUMP FOR THE PUMP INTAKE.

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
STANDARD ENVIRONMENTAL DETAIL

DPX

DAM AND PUMP CROSSING
TEMPORARY EROSION CONTROL MEASURE





Transcontinental Gas Pipe Line Company LLC

TYPICAL RIGHT-OF-WAY CROSS-SECTIONS
ATLANTIC SUNRISE PROJECT
PROPOSED 30" CENTRAL PENN LINE NORTH
M.P. 0.00 TO M.P. 57.30
PENNSYLVANIA


F-XS-CPLN-A-01

DATE: 03/31/2015 REV. 0

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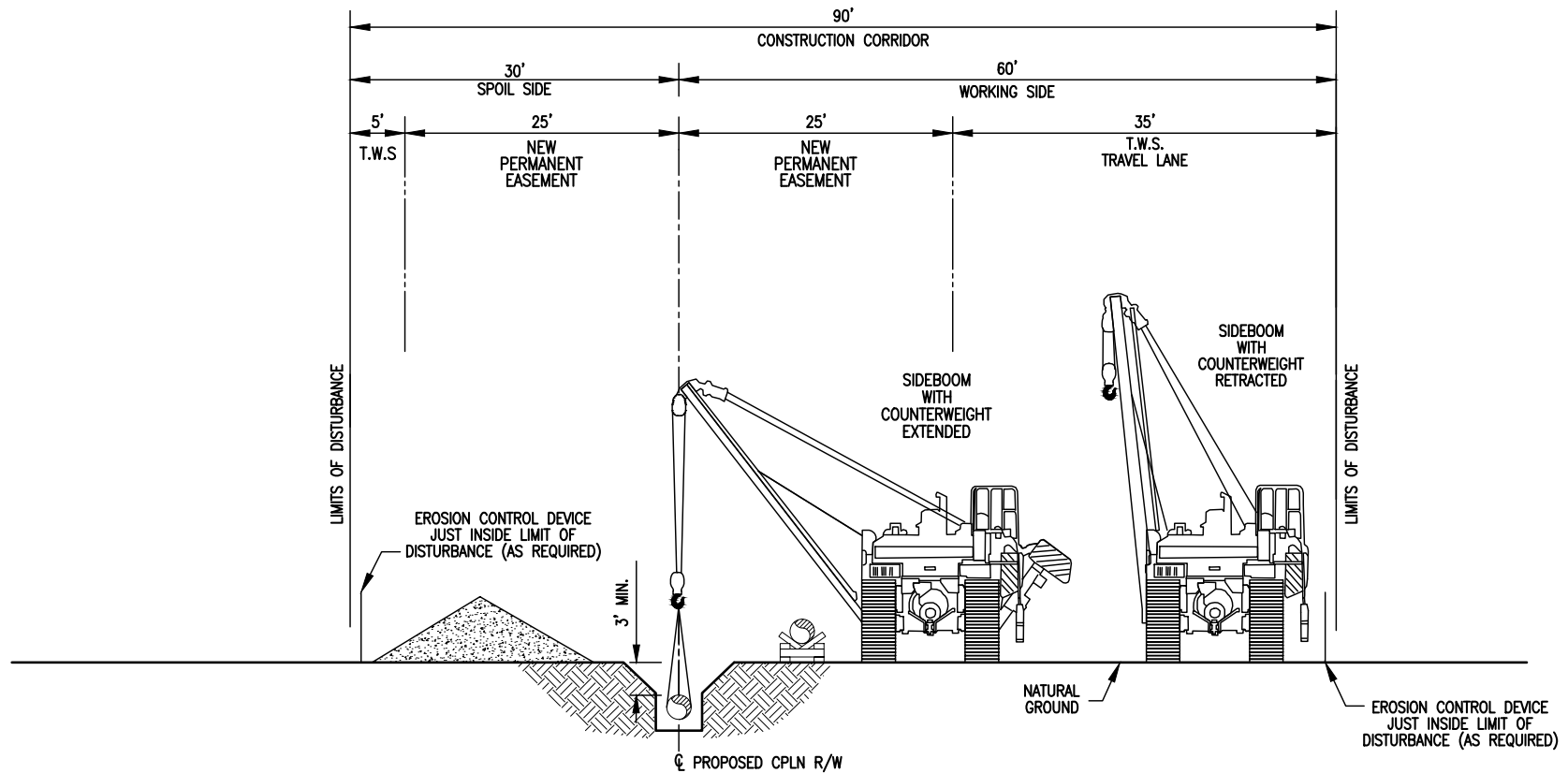
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F-XS-CPLN-A-01	01		COVERSHEET	0	03/31/2015
F-XS-CPLN-A-01	02		TABLE OF CONTENTS	0	03/31/2015
F-XS-CPLN-A-01	03	90	NO TOPSOIL STRIPPING - NOT ADJACENT TO EXISTING PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	04	110	FULL WIDTH TOPSOIL STRIPPING - NOT ADJACENT TO EXISTING PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	05	110	MODERATE SIDESLOPE CONSTRUCTION - ADJACENT TO EXISTING FOREIGN PIPELINE (CUT)	0	03/31/2015
F-XS-CPLN-A-01	06	110	FULL WIDTH TOPSOIL STRIPPING - ADJACENT TO EXISTING FOREIGN PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	07	90	NO TOPSOIL STRIPPING - ADJACENT TO EXISTING FOREIGN PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	08	110	MODERATE SIDESLOPE CONSTRUCTION - NOT ADJACENT TO EXISTING PIPELINE (FILL)	0	03/31/2015
F-XS-CPLN-A-01	09	110	MODERATE SIDESLOPE CONSTRUCTION - NOT ADJACENT TO EXISTING PIPELINE (CUT)	0	03/31/2015
F-XS-CPLN-A-01	10	110	MODERATE SIDESLOPE CONSTRUCTION - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE (FILL)	0	03/31/2015
F-XS-CPLN-A-01	11	110	MODERATE SIDESLOPE CONSTRUCTION - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE (CUT)	0	03/31/2015
F-XS-CPLN-A-01	12	110	TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	13	90	NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	14	75	WITHIN SATURATED WETLAND AREAS - ADJACENT TO TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	15	75	WITHIN SATURATED WETLAND AREAS	0	03/31/2015
F-XS-CPLN-A-01	16	75	NO TOPSOIL STRIPPING - WORKING OVER EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	17	75	WITHIN SATURATED WETLAND AREAS - ADJACENT TO EXISTING FOREIGN PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	18	100	FULL WIDTH TOPSOIL STRIPPING (SPOIL SIDE) - NOT ADJACENT TO EXISTING PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	19	75	WITHIN SATURATED WETLAND AREAS ADJACENT TO TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-CPLN-A-01	20	75	WITHIN UNSATURATED WETLAND AREAS	0	03/31/2015
F-XS-CPLN-A-01	21	75	WITHIN UNSATURATED WETLAND AREAS ADJACENT TO TRANSCONTINENTAL PIPELINE	0	03/31/2015

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" CENTRAL PENN LINE NORTH PENNSYLVANIA						
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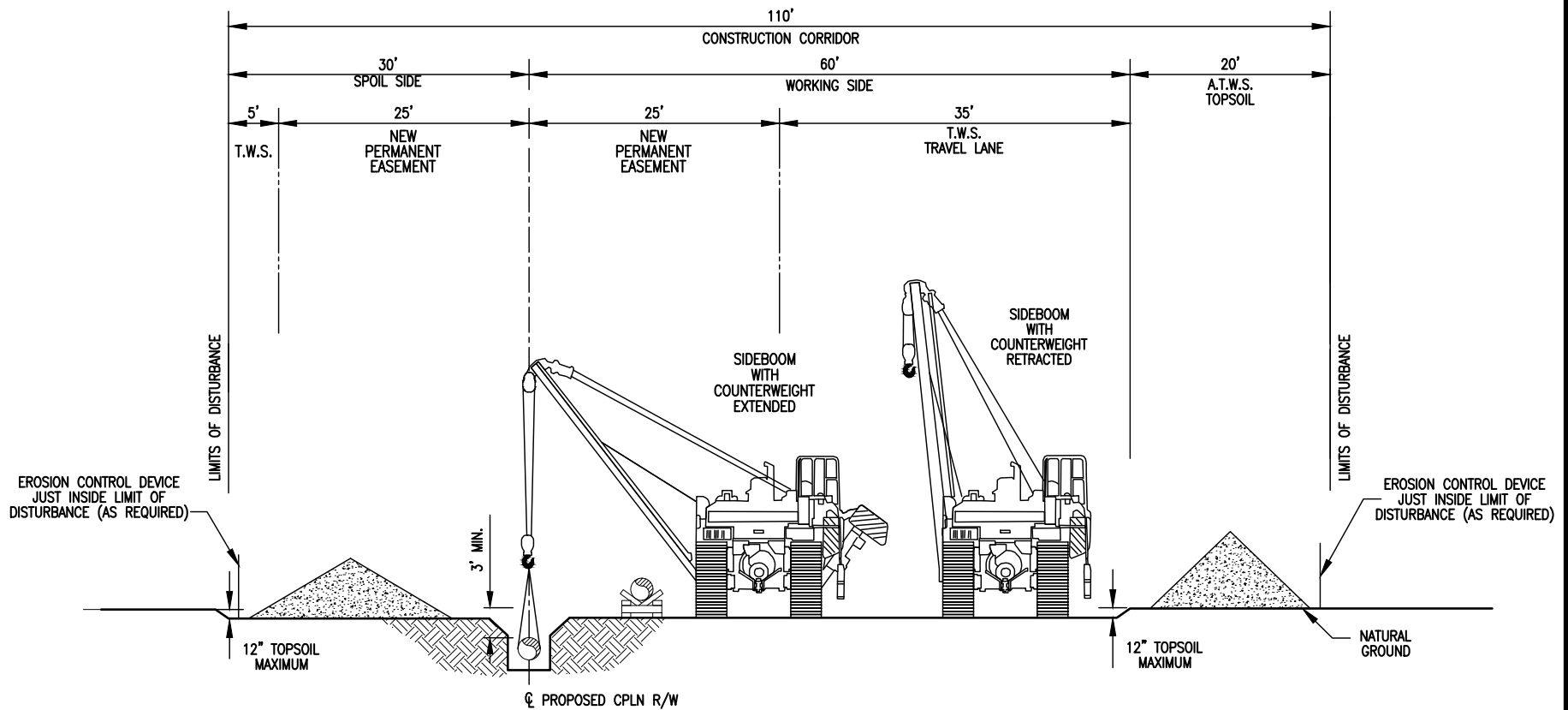
TYPICAL CROSS SECTION FOR 30" PIPELINE
NO TOPSOIL STRIPPING – NOT ADJACENT TO EXISTING PIPELINE

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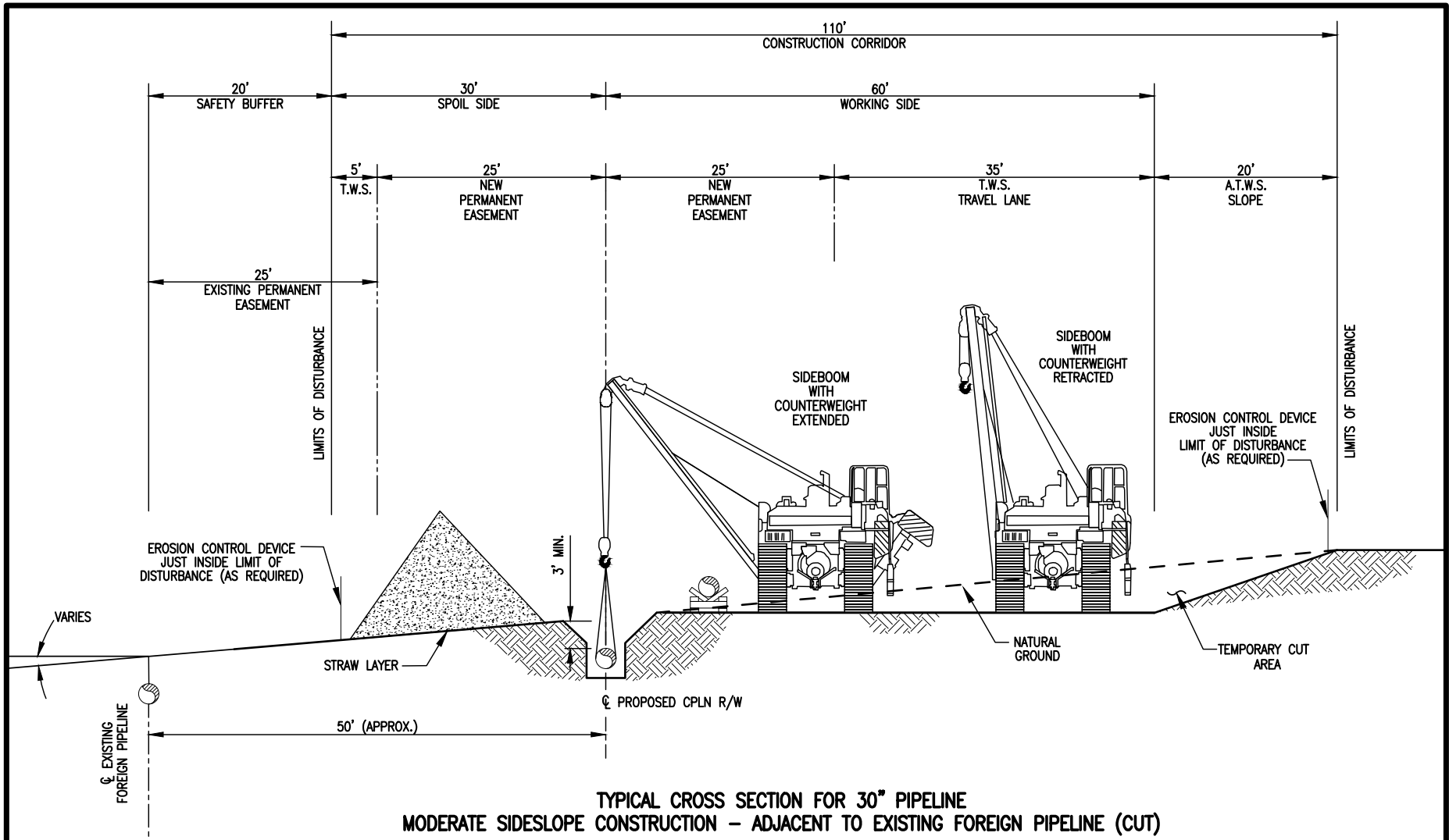
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TYPICAL CROSS SECTION FOR 30" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION - ADJACENT TO EXISTING FOREIGN PIPELINE (CUT)

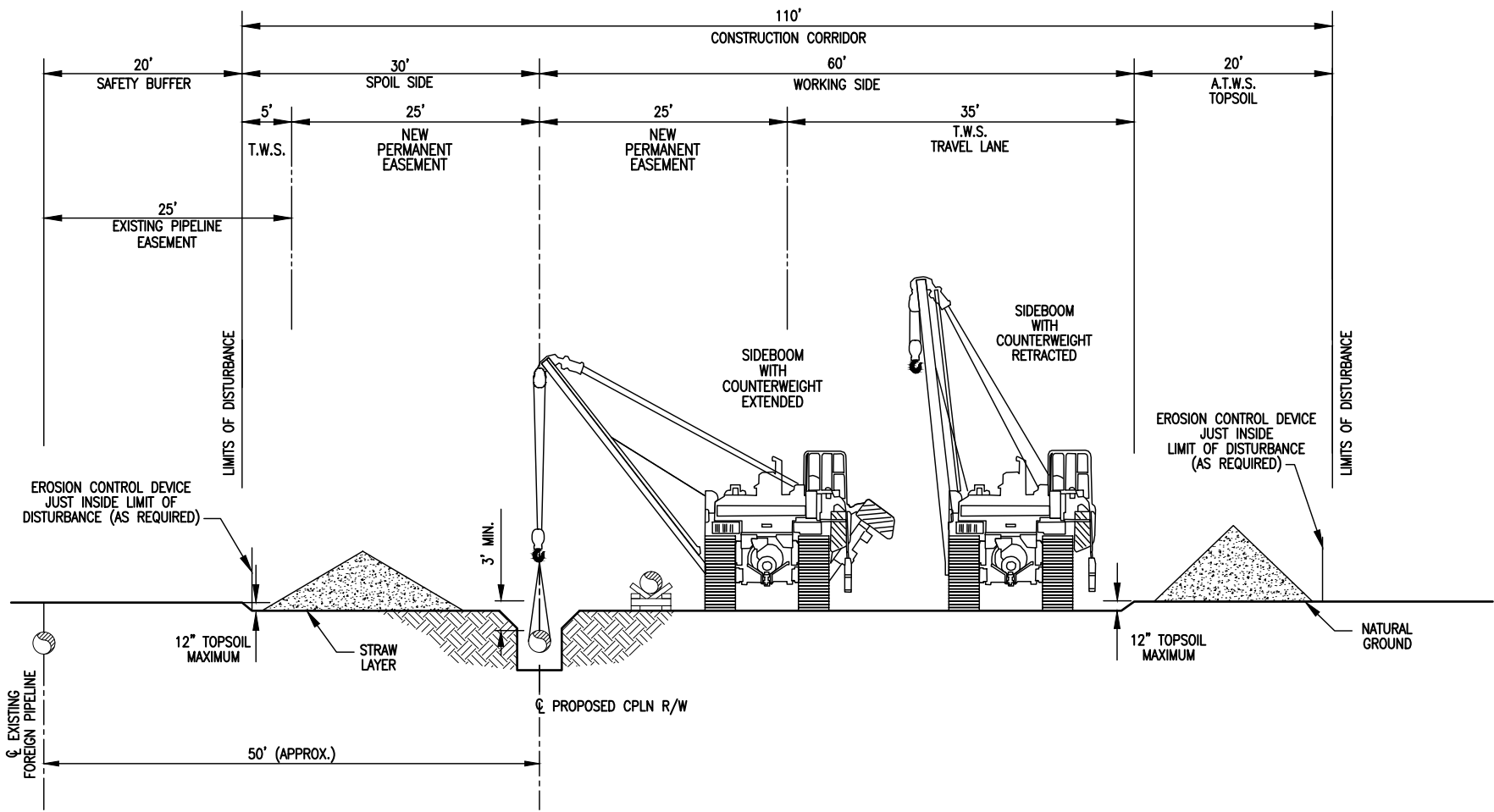
NOTES:
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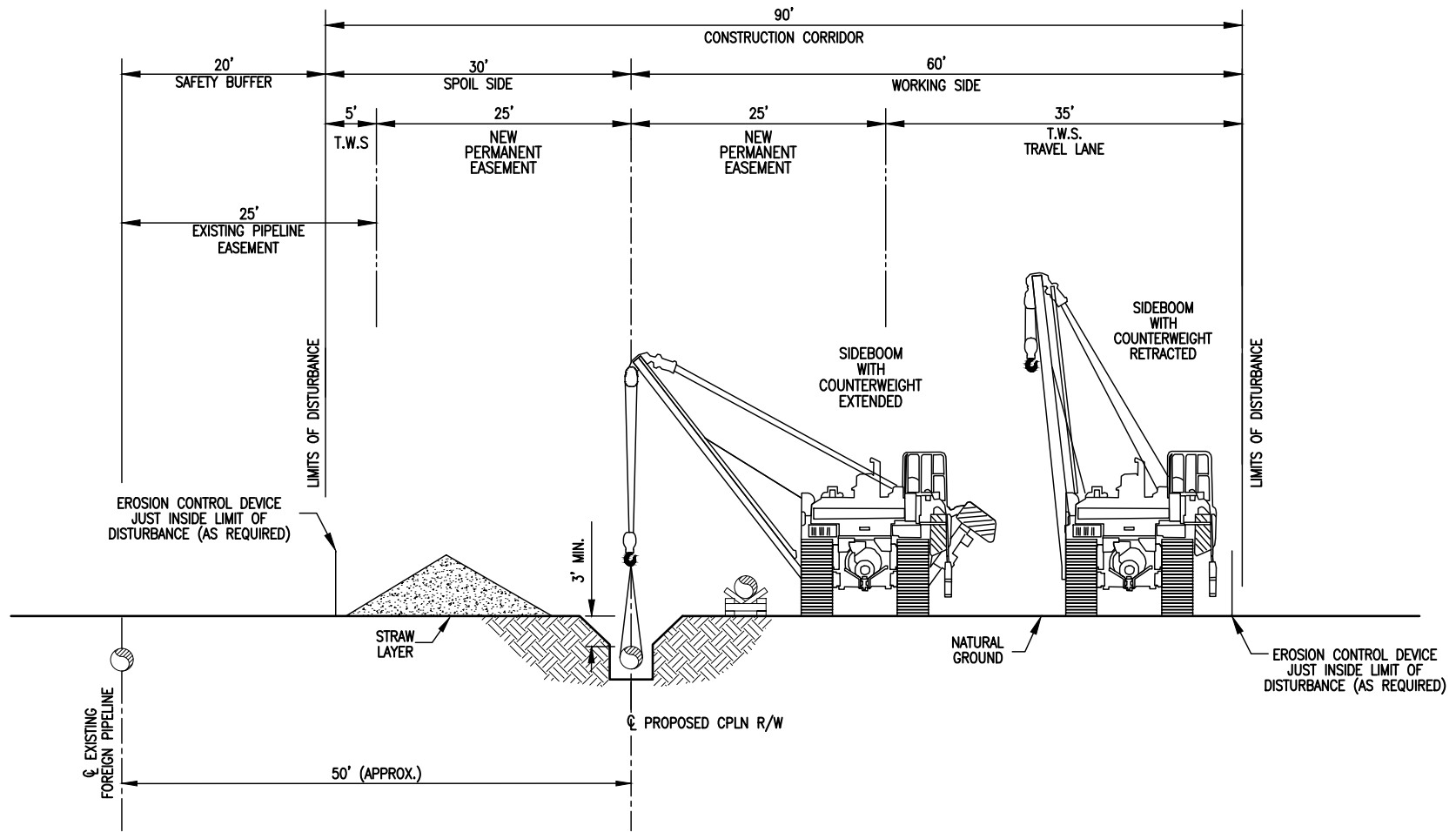
TYPICAL CROSS SECTION FOR 30" PIPELINE
 FULL WIDTH TOPSOIL STRIPPING - ADJACENT TO EXISTING FOREIGN PIPELINE

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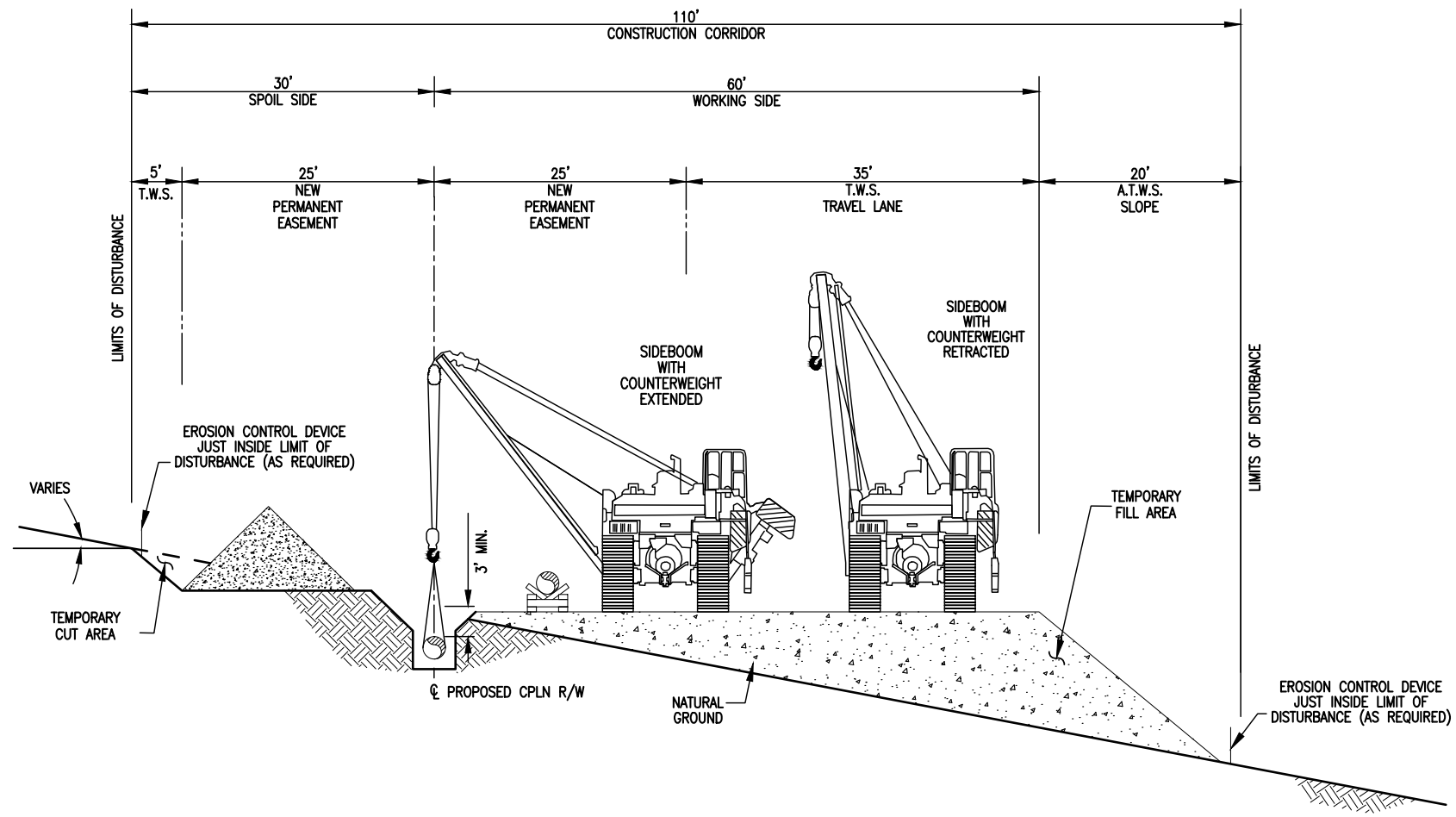
TYPICAL CROSS SECTION FOR 30" PIPELINE
NO TOPSOIL STRIPPING – ADJACENT TO EXISTING FOREIGN PIPELINE

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TYPICAL CROSS SECTION FOR 30" PIPELINE
 MODERATE SIDESLOPE CONSTRUCTION - NOT ADJACENT TO EXISTING PIPELINE (FILL)

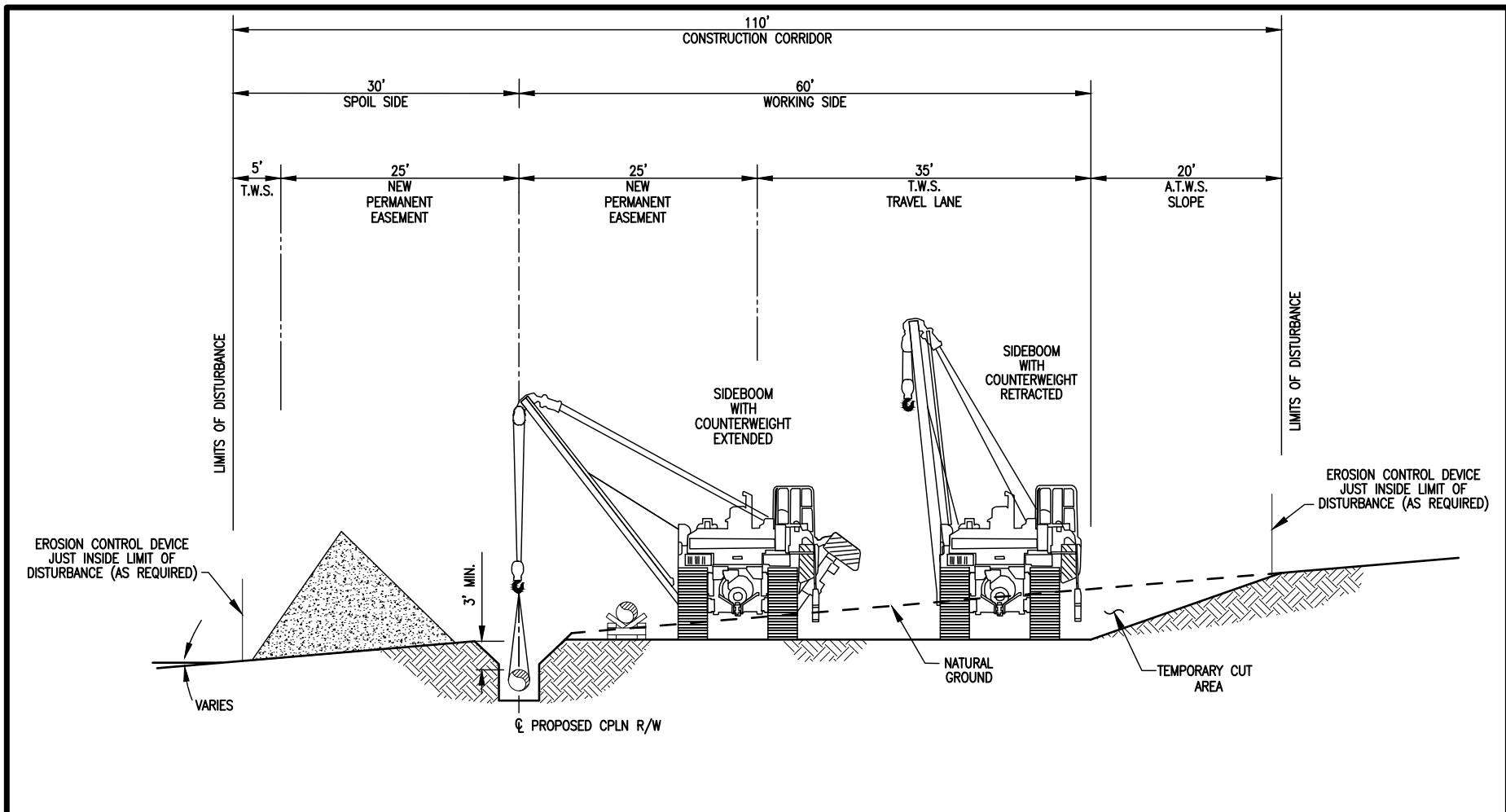
NOTES:
 1. UPON COMPLETION OF INSTALLATION OF PIPE,
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**TYPICAL CROSS SECTION FOR 30" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION - NOT ADJACENT TO EXISTING PIPELINE (CUT)**

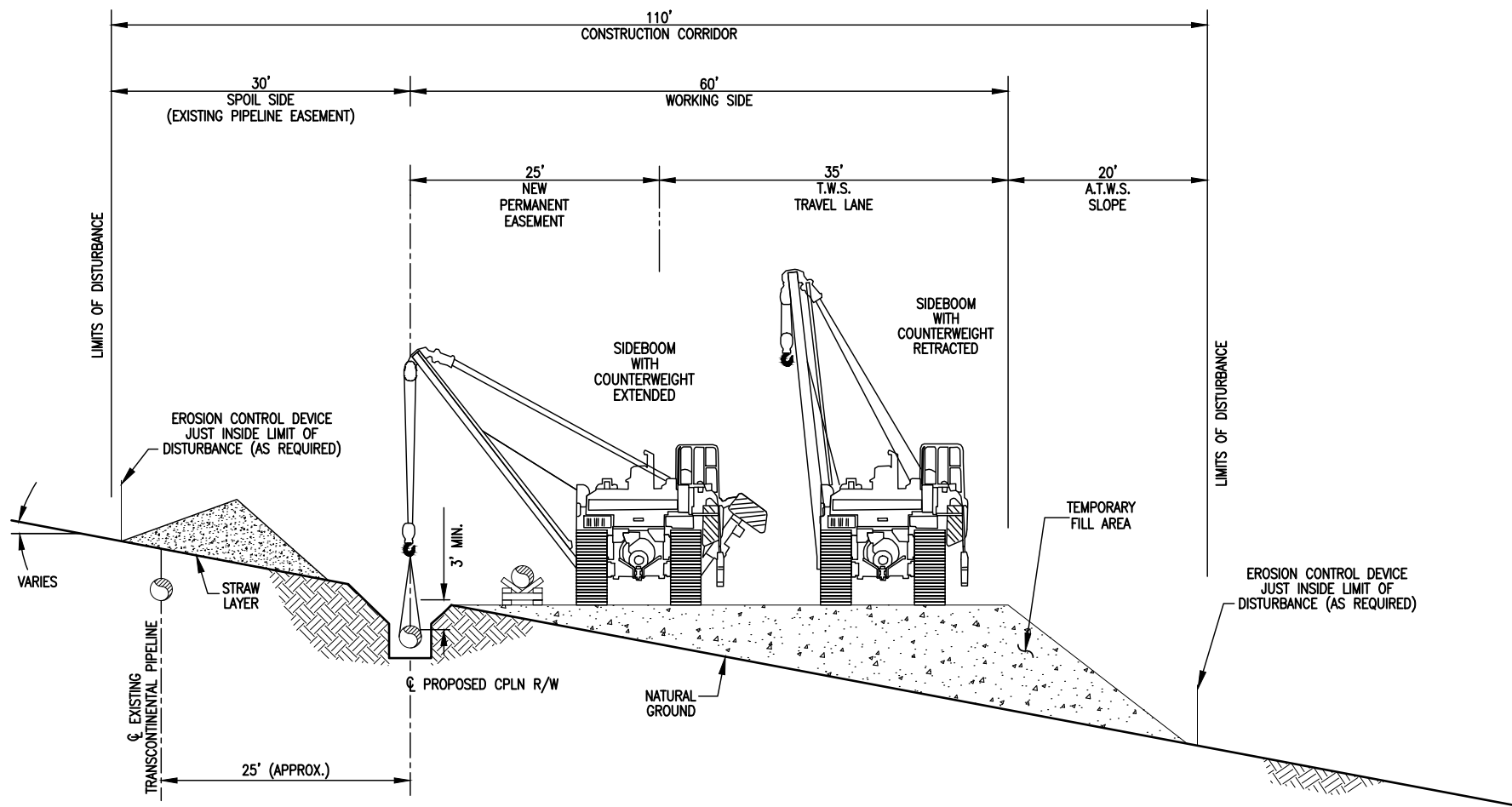
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**TYPICAL CROSS SECTION FOR 30" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE (FILL)**

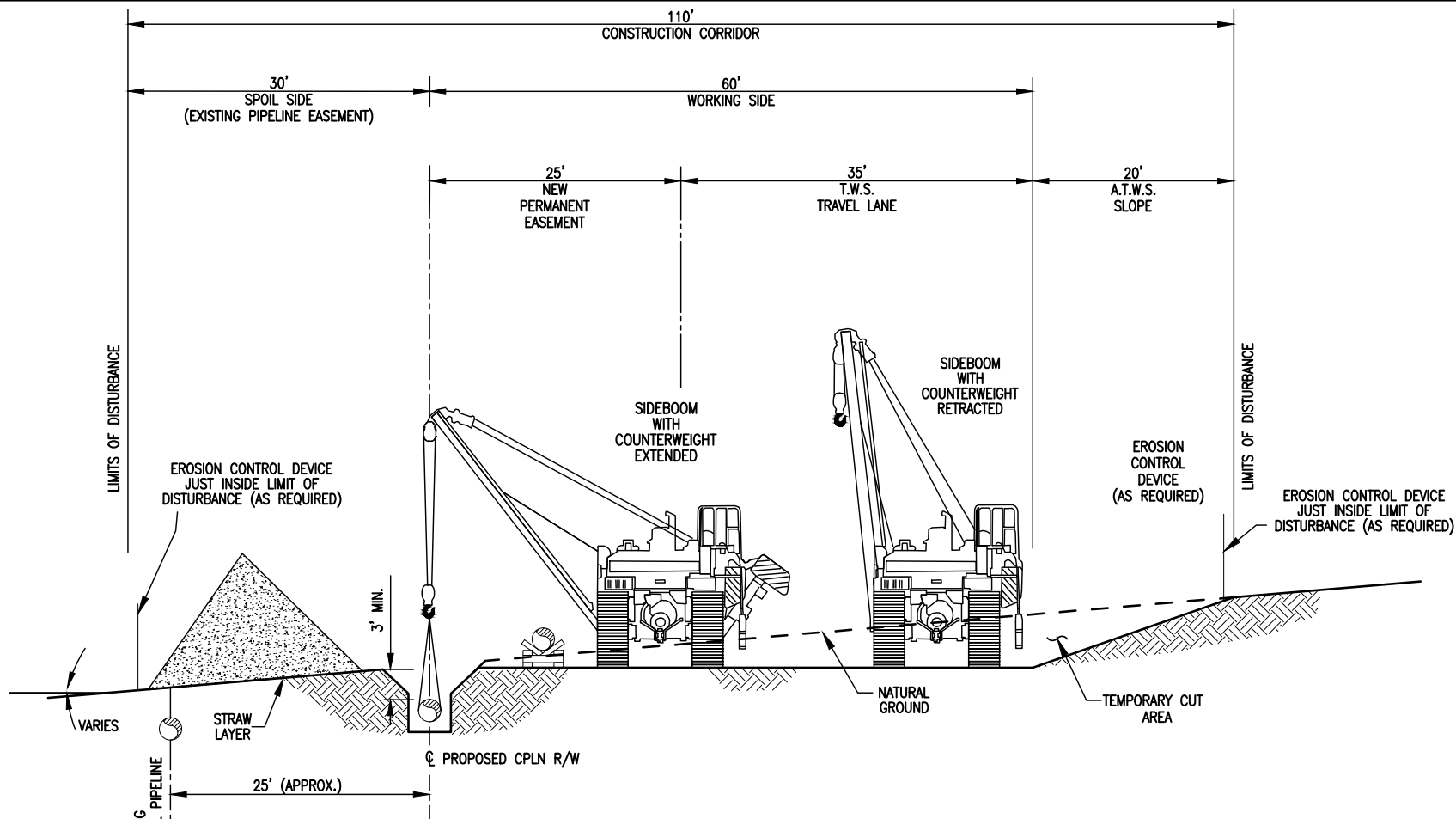
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B-141



**TYPICAL CROSS SECTION FOR 30" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE (CUT)**

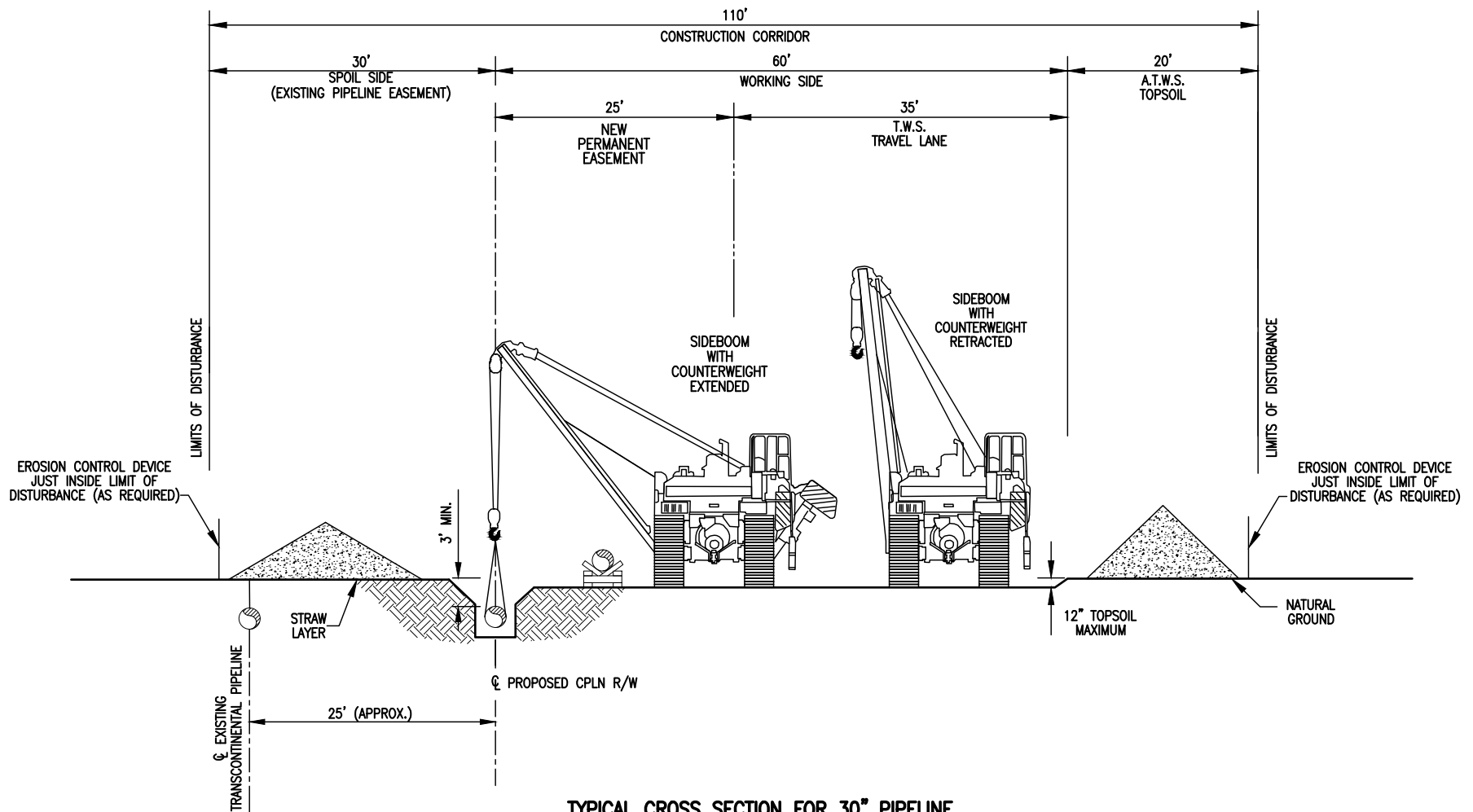
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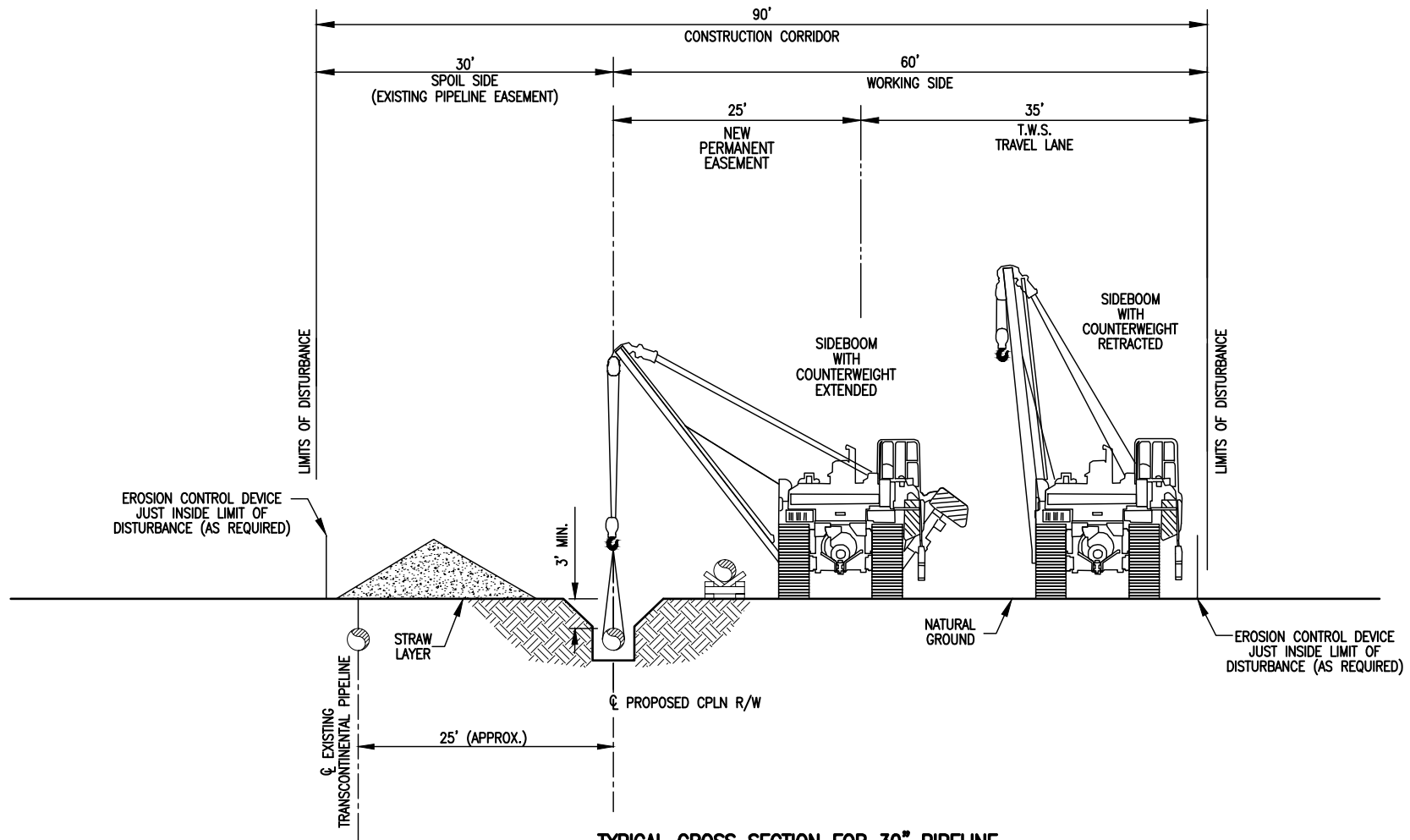
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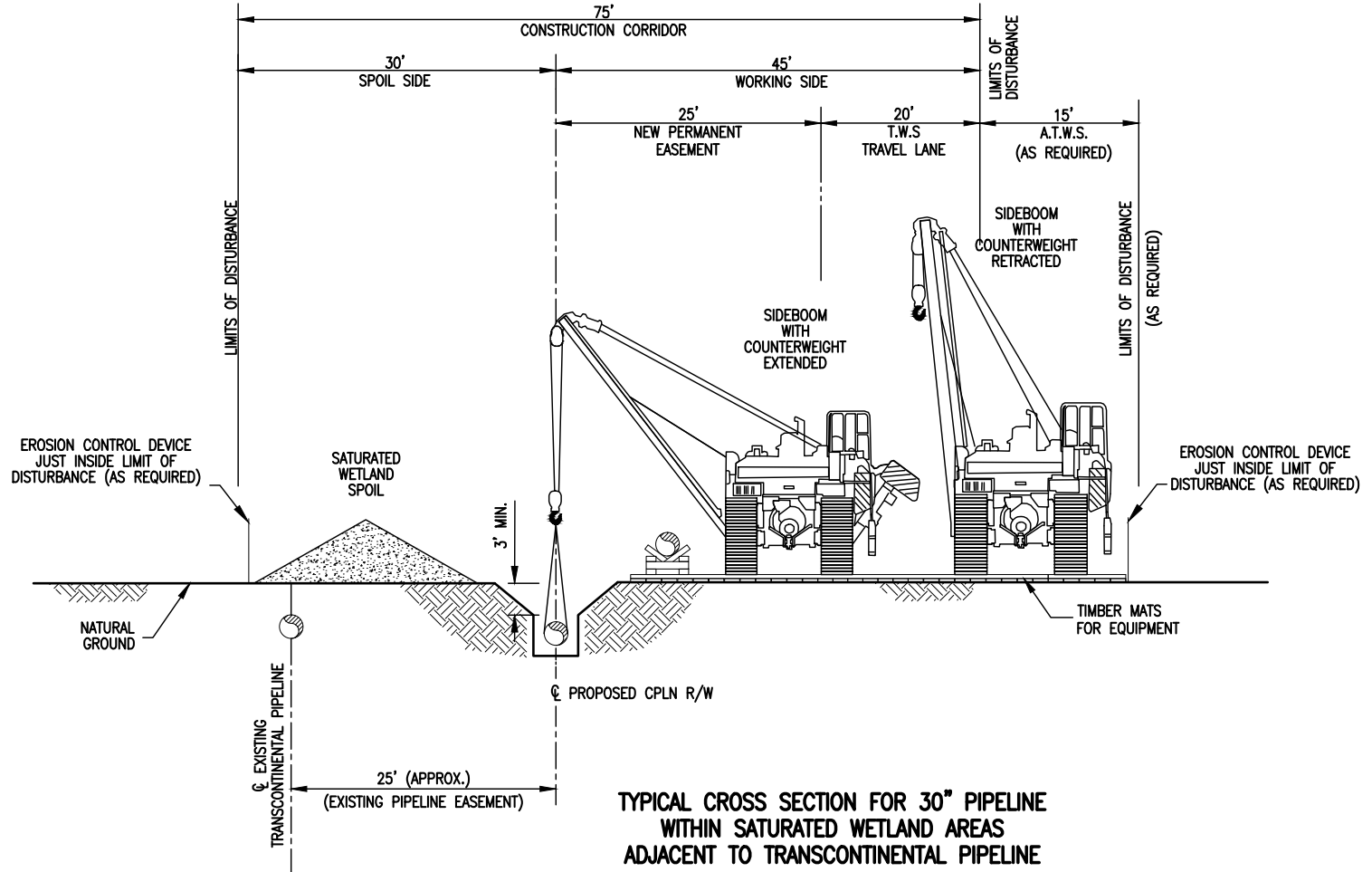
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NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

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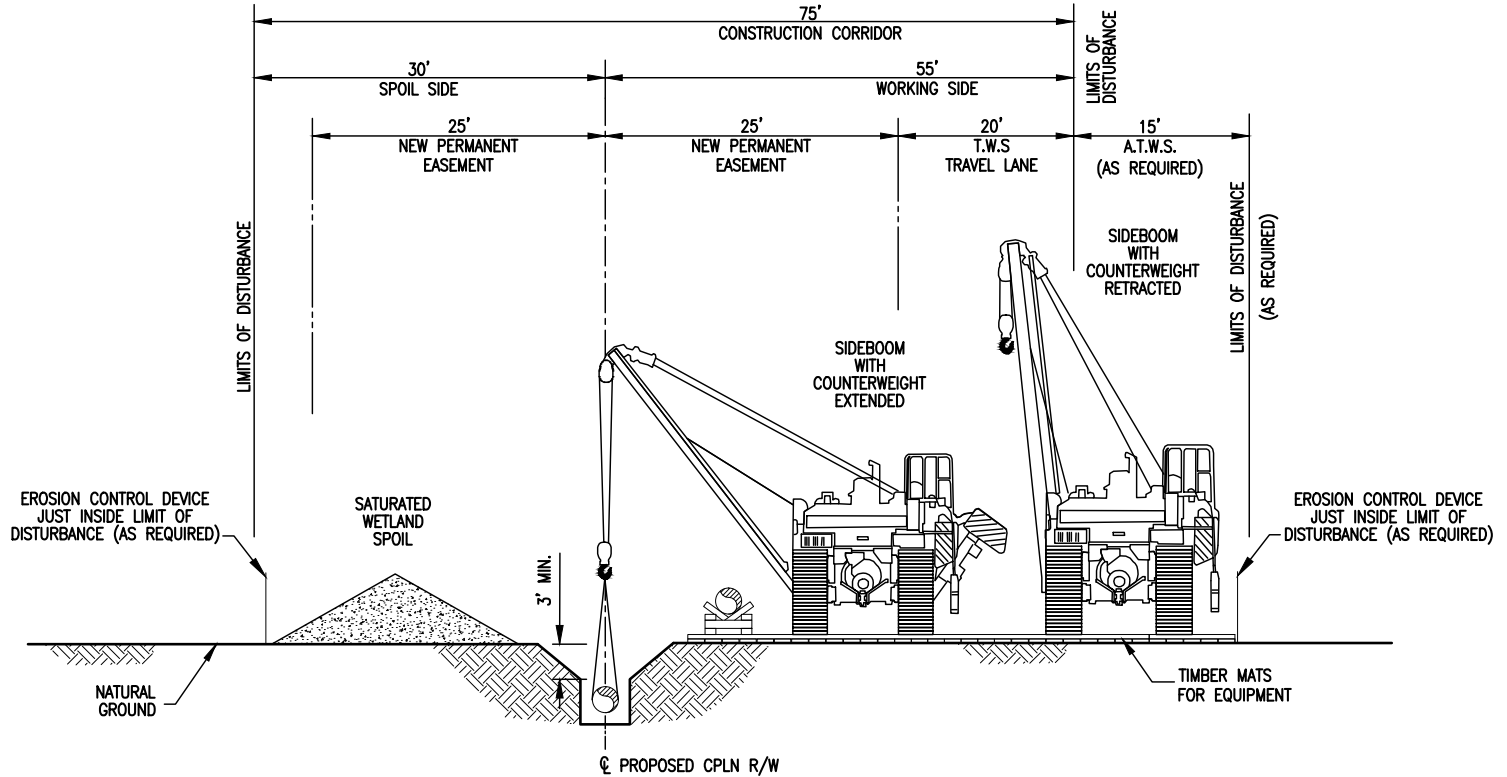


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B-145



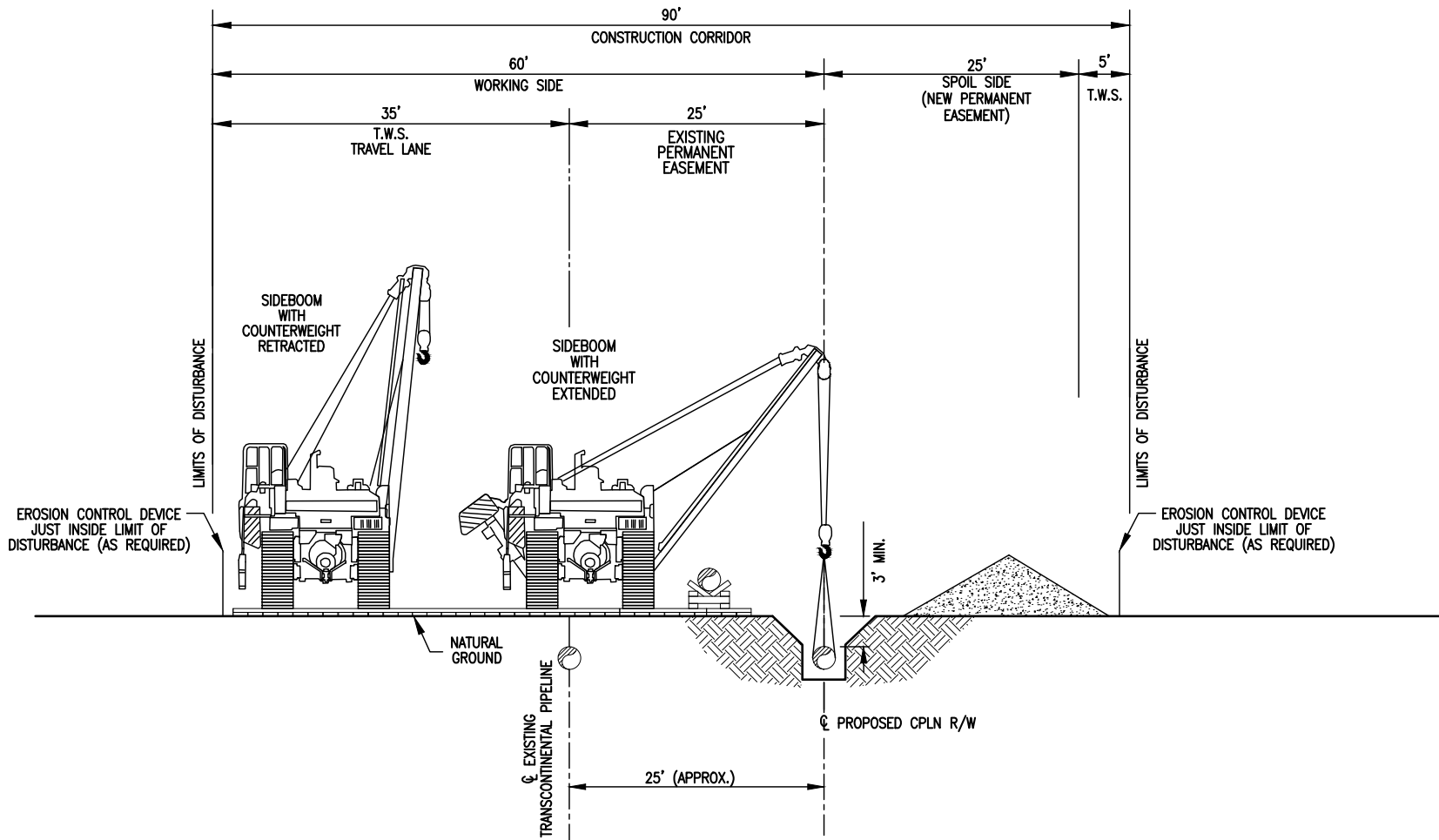
TYPICAL CROSS SECTION FOR 30" PIPELINE
WITHIN SATURATED WETLAND AREAS

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" CENTRAL PENN LINE NORTH PENNSYLVANIA							
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B-146



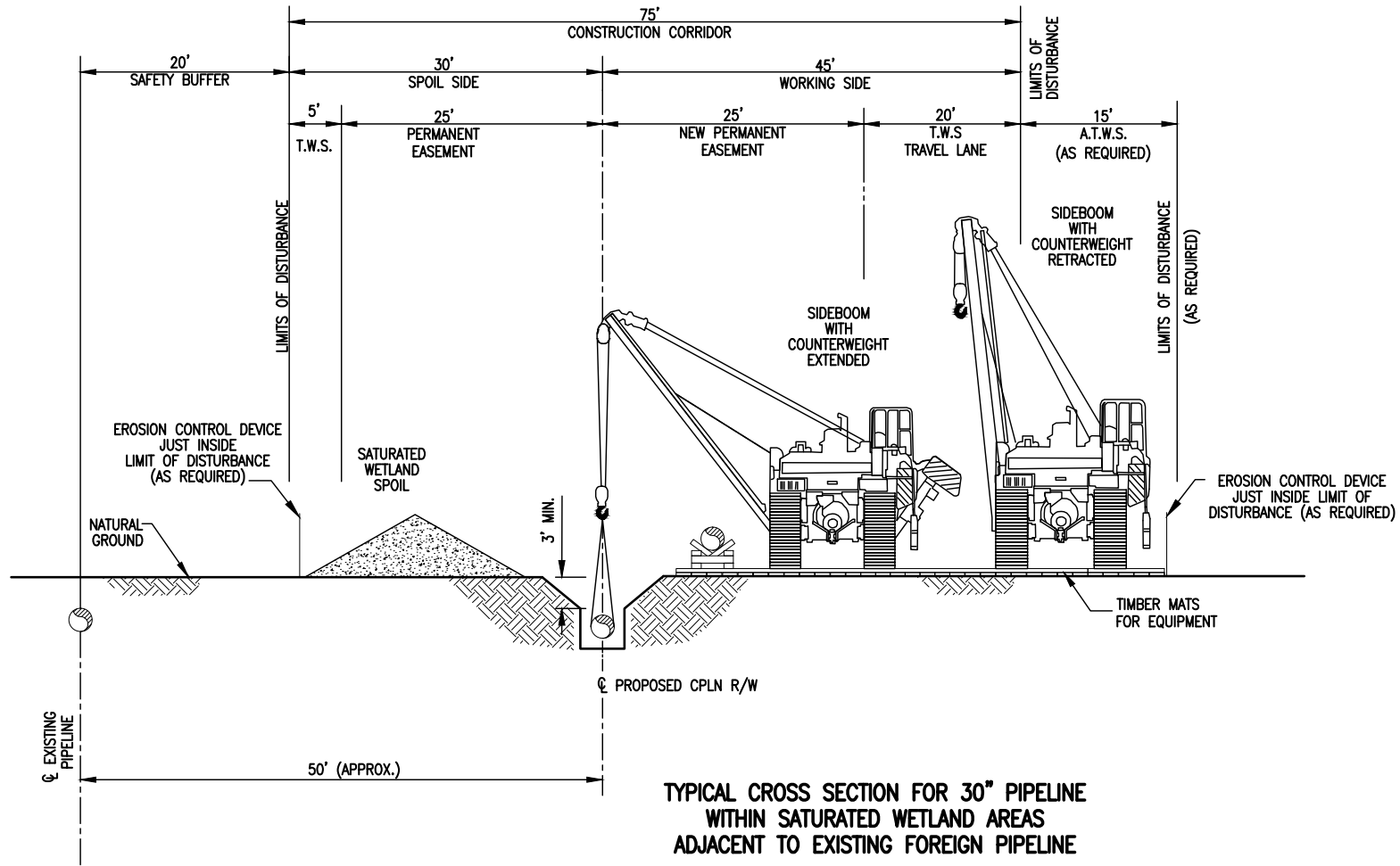
TYPICAL CROSS SECTION FOR 30" PIPELINE
NO TOPSOIL STRIPPING – WORKING OVER EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" CENTRAL PENN LINE NORTH PENNSYLVANIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/26/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161481	DP	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLN-A-01	SHEET 16
							WO: 1161481	3:26pm 3/20/2015	at/traha	OF 21




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B-147



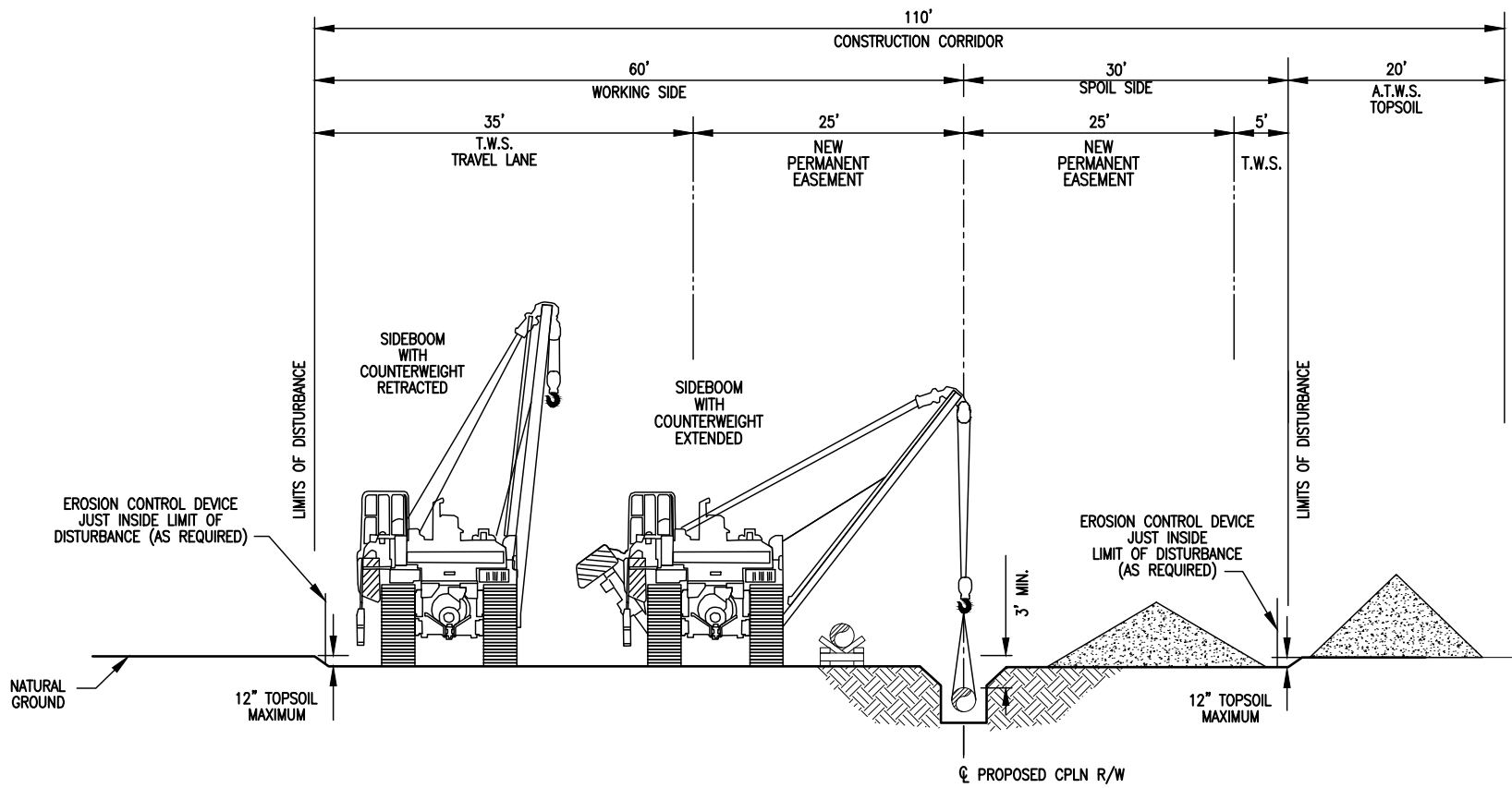
TYPICAL CROSS SECTION FOR 30" PIPELINE
WITHIN SATURATED WETLAND AREAS
ADJACENT TO EXISTING FOREIGN PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" CENTRAL PENN LINE NORTH PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/26/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161481	DP	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
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							WO: 1161481	3:28pm	3/20/2015	altraha	SHEET 17 OF 21



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B-148



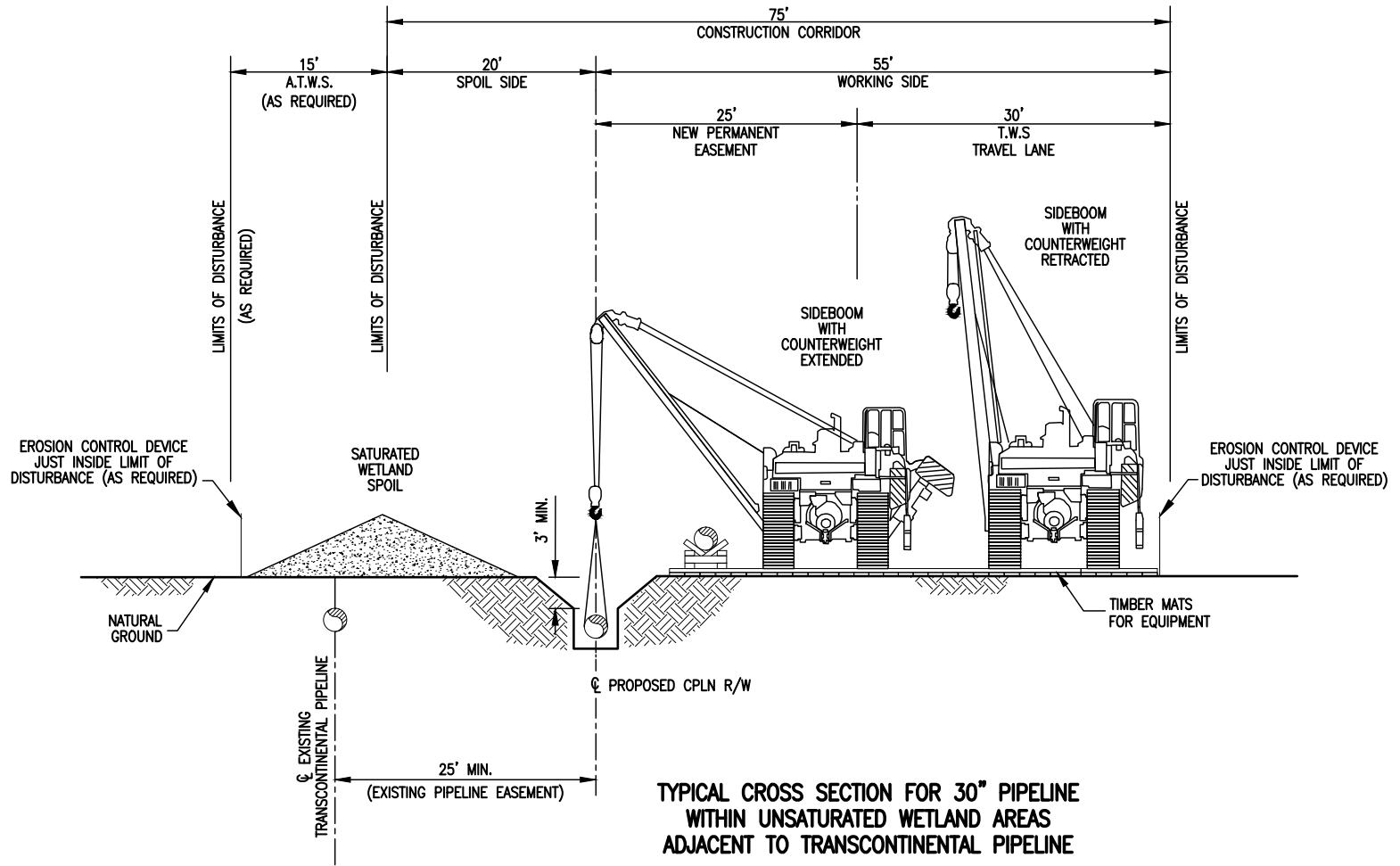
TYPICAL CROSS SECTION FOR 30" PIPELINE
 FULL WIDTH TOPSOIL STRIPPING (SPOIL SIDE) – NOT ADJACENT TO EXISTING PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" CENTRAL PENN LINE NORTH PENNSYLVANIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/26/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161481	DP	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
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							WO: 1161481	3:32pm 3/20/2015	a/traha	OF 21



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B-149

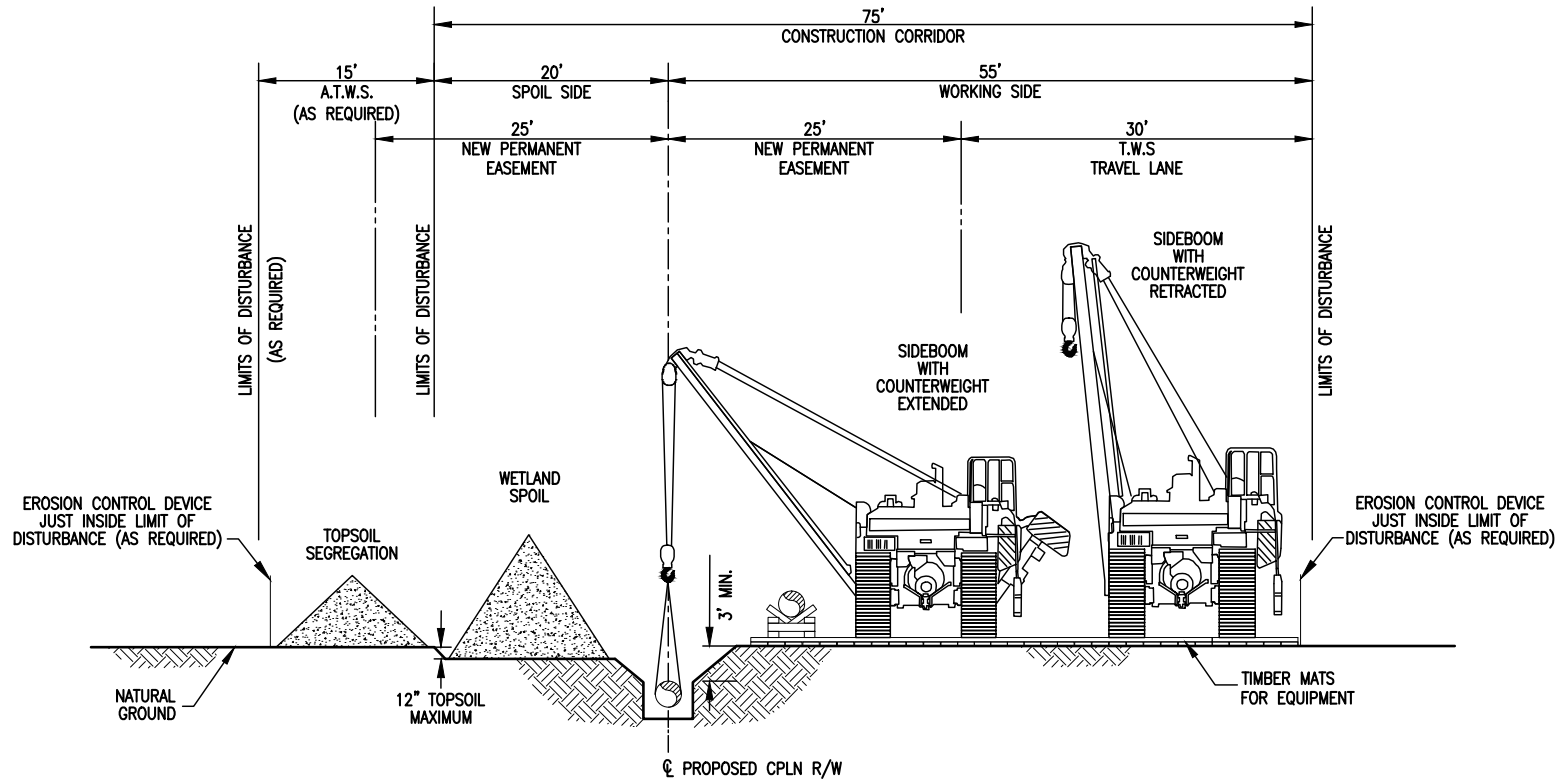


DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" CENTRAL PENN LINE NORTH PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/26/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161481	DP	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
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B-150



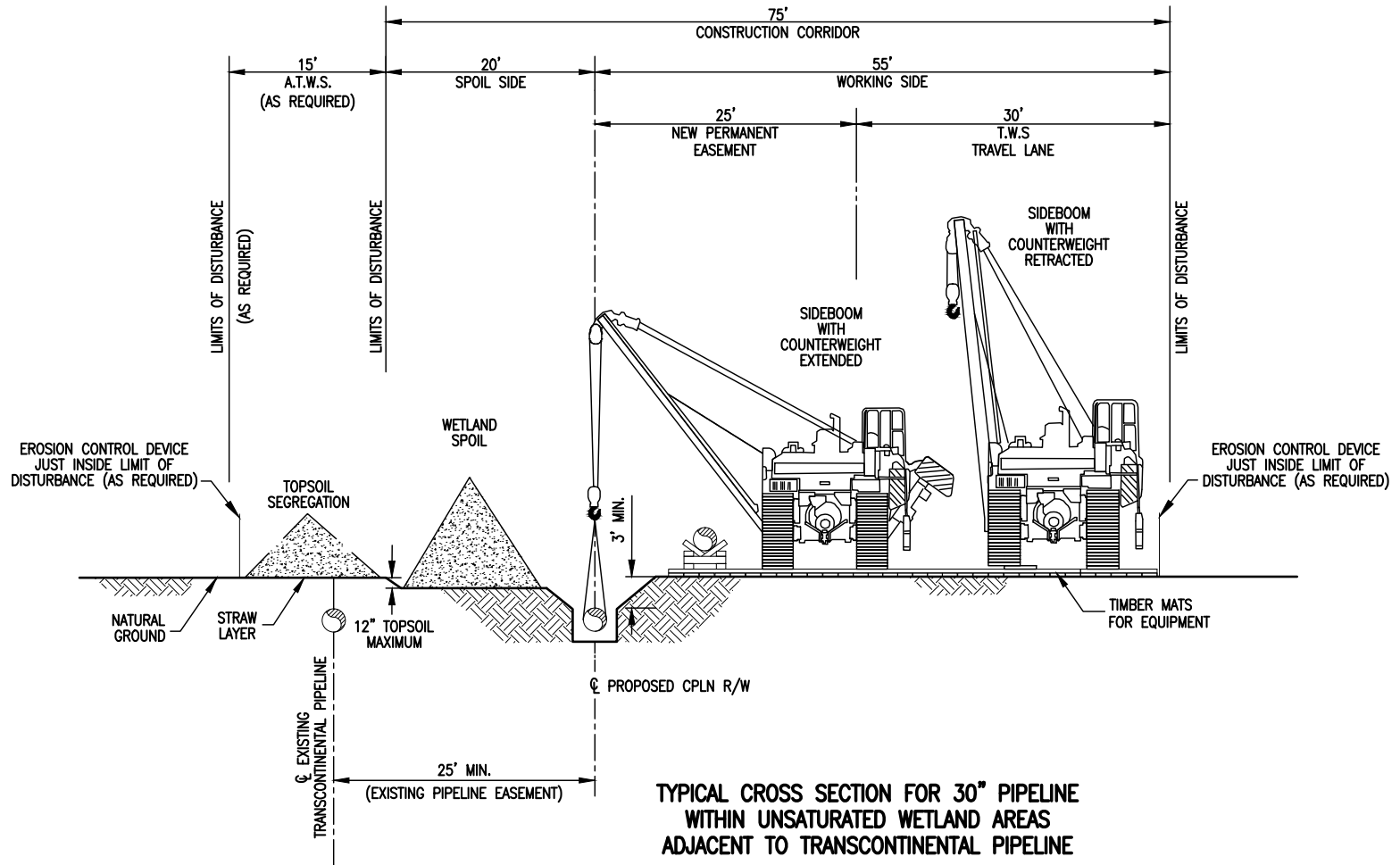
TYPICAL CROSS SECTION FOR 30" PIPELINE
WITHIN UNSATURATED WETLAND AREAS

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" CENTRAL PENN LINE NORTH PENNSYLVANIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/26/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161481	DP	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
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							WO: 1161481	3:36pm 3/20/2015	at/tra	OF 21



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B-151



DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" CENTRAL PENN LINE NORTH PENNSYLVANIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:
0	03/31/15	AT	ISSUED FOR FERC FILING	1161481	DP	MJH	AT	09/26/14		NTS
							EP	10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
							MJH	10/20/14	DRAWING NUMBER: F-XS-CPLN-A-01	SHEET 21
							WO: 1161481	3:38pm 3/20/2015	at/traha	OF 21



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Transcontinental Gas Pipe Line Company LLC

TYPICAL RIGHT-OF-WAY CROSS-SECTIONS
ATLANTIC SUNRISE PROJECT
PROPOSED 42" CENTRAL PENN LINE SOUTH
M.P. 0.00 TO M.P. 125.15
PENNSYLVANIA


F-XS-CPLS-A-01

DATE: 03/31/2015 REV. 0

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B-155

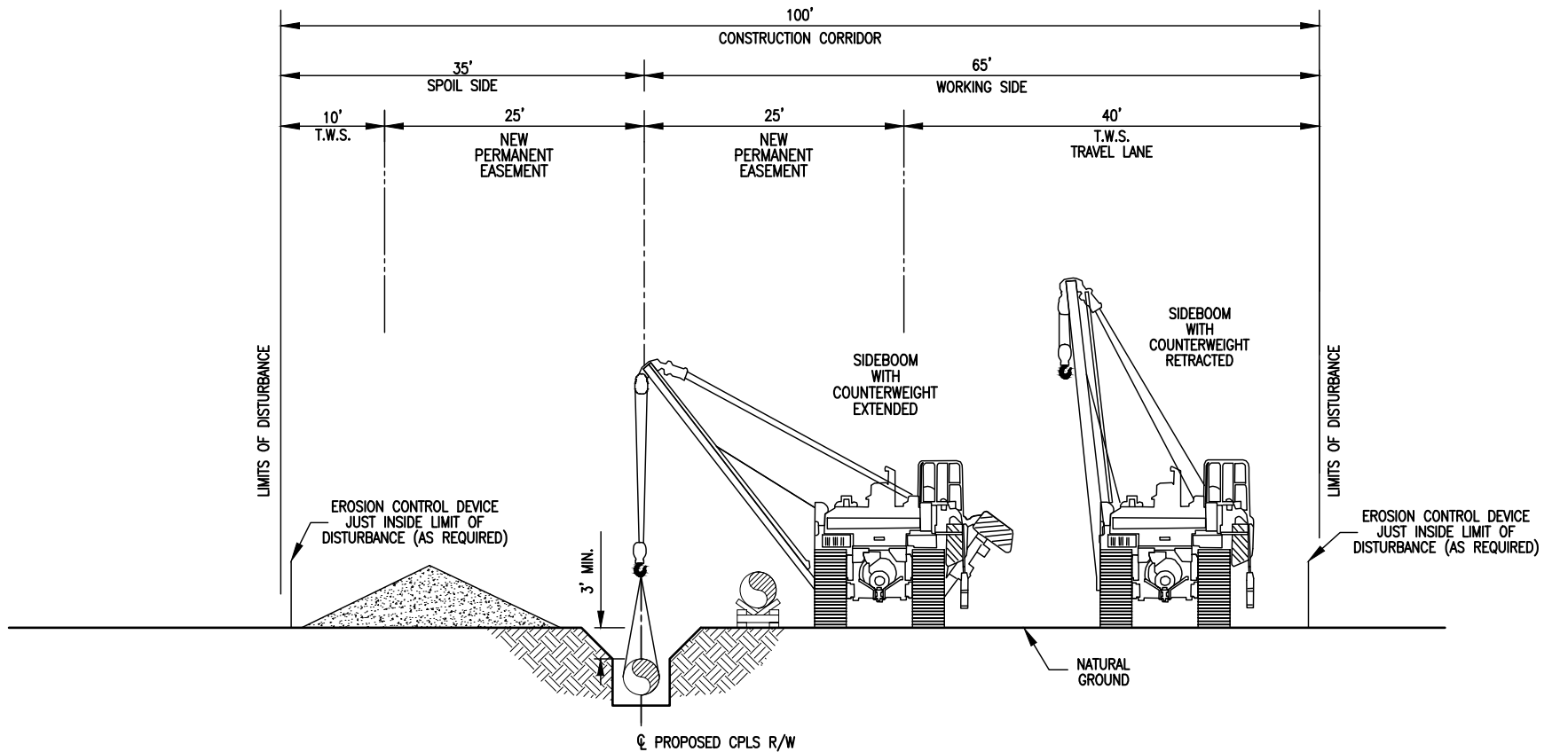
DOCUMENT NAME	SHEET NUMBER	ROW WIDTH (FT)	DESCRIPTION	REVISION	DATE
F-XS-CPLS-A-01	01		COVERSHEET	0	03/31/2015
F-XS-CPLS-A-01	02		TABLE OF CONTENTS	0	03/31/2015
F-XS-CPLS-A-01	03	100	NO TOPSOIL STRIPPING - NOT ADJACENT TO EXISTING PIPELINE	0	03/31/2015
F-XS-CPLS-A-01	04	125	FULL WIDTH TOPSOIL STRIPPING - NOT ADJACENT TO EXISTING PIPELINE	0	03/31/2015
F-XS-CPLS-A-01	05	125	MODERATE SIDESLOPE CONSTRUCTION - ADJACENT TO EXISTING FOREIGN PIPELINE (FILL)	0	03/31/2015
F-XS-CPLS-A-01	06	125	MODERATE SIDESLOPE CONSTRUCTION - ADJACENT TO EXISTING FOREIGN PIPELINE (CUT)	0	03/31/2015
F-XS-CPLS-A-01	07	125	FULL WIDTH TOPSOIL STRIPPING - ADJACENT TO EXISTING FOREIGN PIPELINE	0	03/31/2015
F-XS-CPLS-A-01	08	100	NO TOPSOIL STRIPPING - ADJACENT TO EXISTING FOREIGN PIPELINE	0	03/31/2015
F-XS-CPLS-A-01	09	125	MODERATE SIDESLOPE CONSTRUCTION - NOT ADJACENT TO EXISTING PIPELINE (FILL)	0	03/31/2015
F-XS-CPLS-A-01	10	125	MODERATE SIDESLOPE CONSTRUCTION - NOT ADJACENT TO EXISTING PIPELINE (CUT)	0	03/31/2015
F-XS-CPLS-A-01	11	100	75' FROM CENTERLINE OF TOWERS OR POLES TO TRANSCONTINENTAL PERMANENT EASEMENT	0	03/31/2015
F-XS-CPLS-A-01	12	150	MODERATE SIDESLOPE CONSTRUCTION - WITH TOPSOIL STRIPPING (FILL)	0	03/31/2015
F-XS-CPLS-A-01	13	75	WITHIN SATURATED WETLAND AREAS	0	03/31/2015
F-XS-CPLS-A-01	14	125	FULL WIDTH TOPSOIL STRIPPING (SPOIL SIDE) - NOT ADJACENT TO EXISTING PIPELINE	0	03/31/2015
F-XS-CPLS-A-01	15	150	SEVERE SIDESLOPE CONSTRUCTION (CUT)	0	03/31/2015
F-XS-CPLS-A-01	16	150	SEVERE SIDESLOPE CONSTRUCTION (FILL)	0	03/31/2015
F-XS-CPLS-A-01	17	125	75' FROM CENTERLINE OF TOWERS OR POLES TO TRANSCONTINENTAL PERMANENT EASEMENT - WITH TOPSOIL STRIPPING	0	03/31/2015
F-XS-CPLS-A-01	18	75	WITHIN UNSATURATED WETLAND AREAS	0	03/31/2015
F-XS-CPLS-A-01	19	75	WITHIN UNSATURATED WETLAND AREAS ADJACENT TO EXISTING FOREIGN PIPELINE	0	03/31/2015
F-XS-CPLS-A-01	20	75	WITHIN SATURATED WETLAND AREAS ADJACENT TO EXISTING FOREIGN PIPELINE	0	03/31/2015

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01	
							WO: 1161503	3/20/2015		2:22pm
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									SHEET 02	OF 20




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B-157



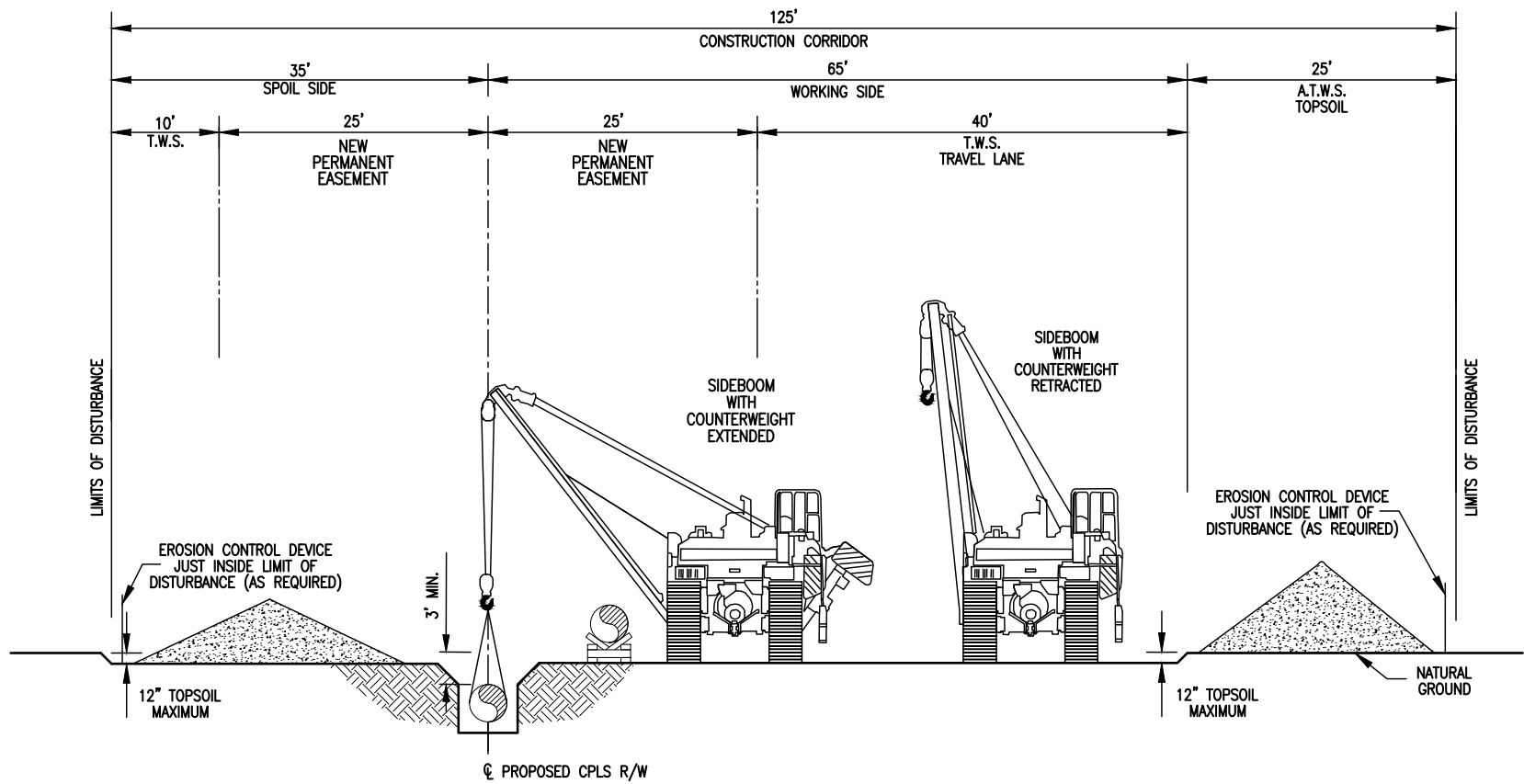
TYPICAL CROSS SECTION FOR 42" PIPELINE
NO TOPSOIL STRIPPING – NOT ADJACENT TO EXISTING PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01		
							WO: 1161503	2:27pm	3/20/2015	altraha	SHEET 03 OF 20




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B-158



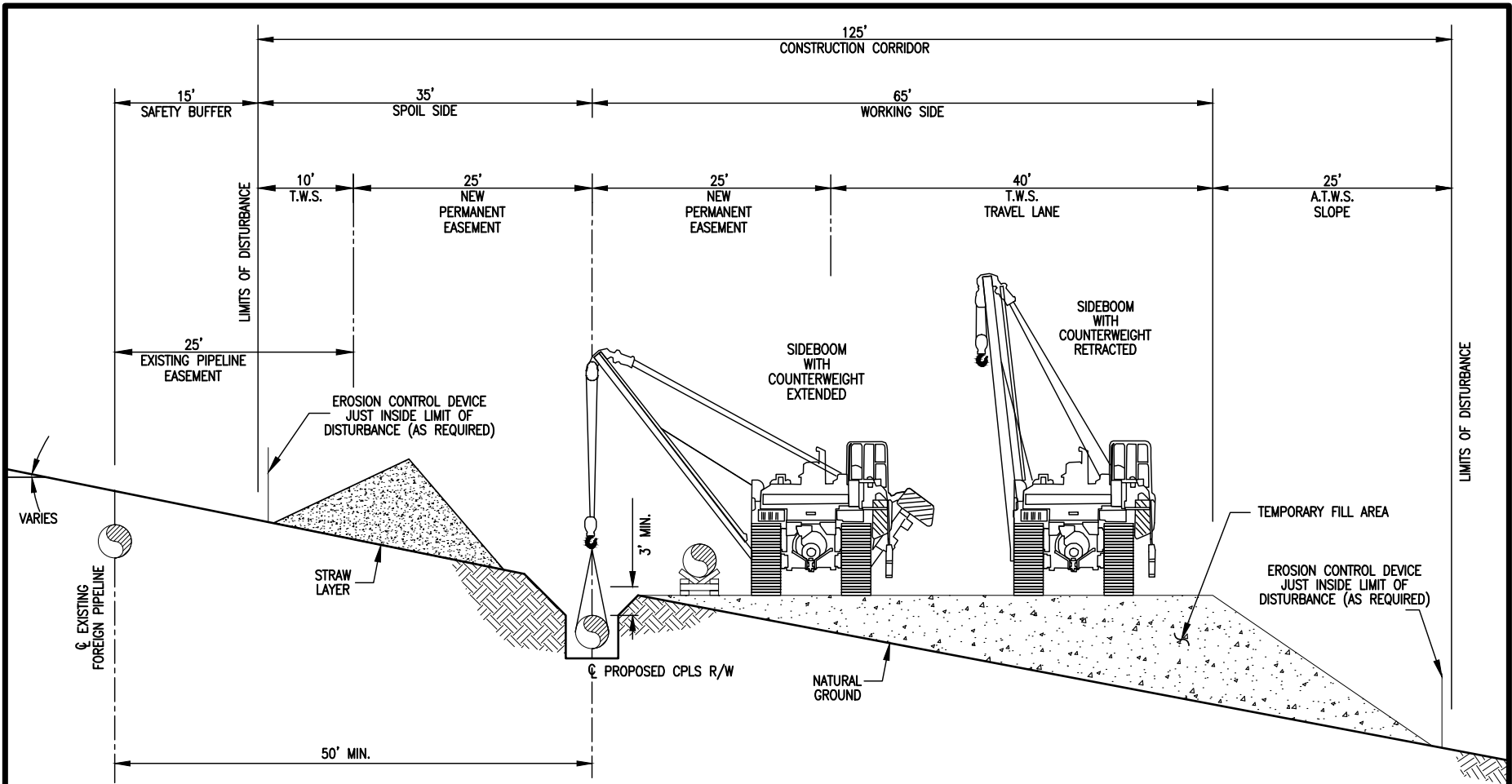
TYPICAL CROSS SECTION FOR 42" PIPELINE
 FULL WIDTH TOPSOIL STRIPPING – NOT ADJACENT TO EXISTING PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01	SHEET 04
							WO: 1161503	2:29pm 3/20/2015	at/raha	OF 20



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B-159



**TYPICAL CROSS SECTION FOR 42" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION – ADJACENT TO EXISTING FOREIGN PIPELINE (FILL)**

NOTES:

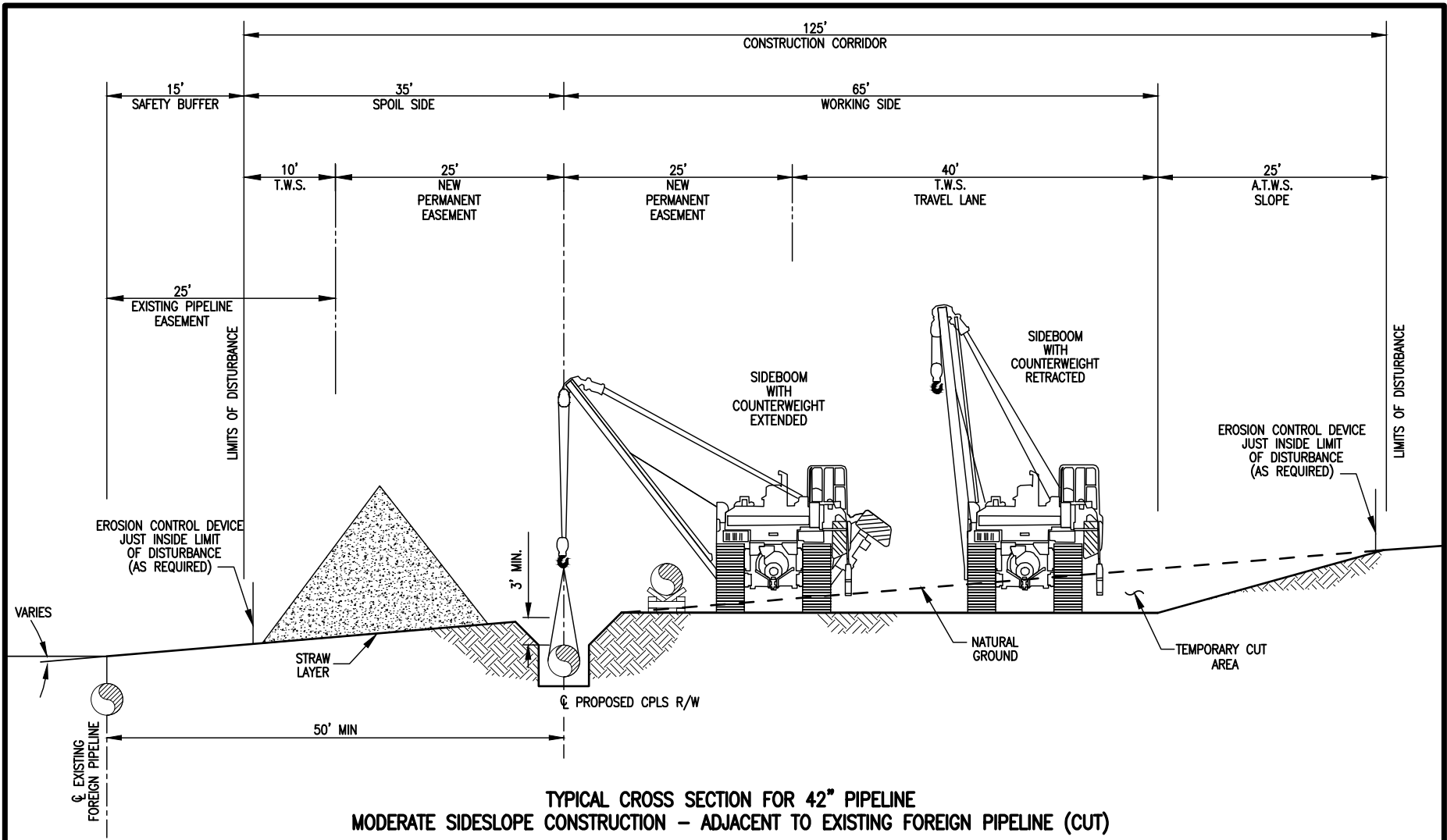
- UPON COMPLETION OF INSTALLATION OF PIPE, ORIGINAL SLOPE TO BE RESTORED.

DRAWING NO.		REFERENCE TITLE		<p align="center">TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA</p> 							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01		
							WO: 1161503	2:31pm 3/20/2015	at/raha	SHEET 05 OF 20	



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B-160



TYPICAL CROSS SECTION FOR 42" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION - ADJACENT TO EXISTING FOREIGN PIPELINE (CUT)

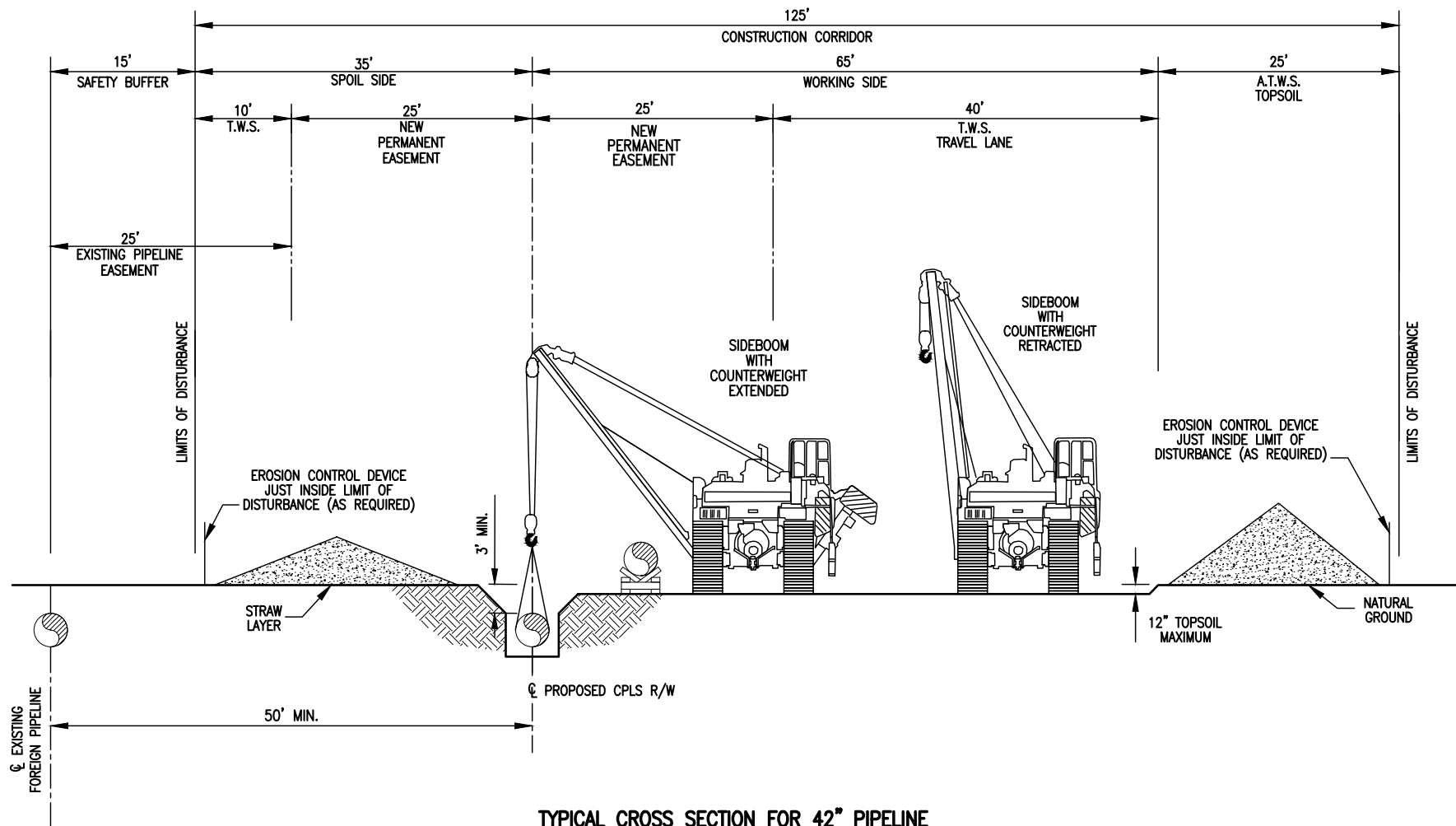
NOTES:
1. UPON COMPLETION OF INSTALLATION OF PIPE,
ORIGINAL SLOPE TO BE RESTORED.

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
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							WO: 1161503	2:33pm 3/20/2015	a1traha OF 20	




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B-161



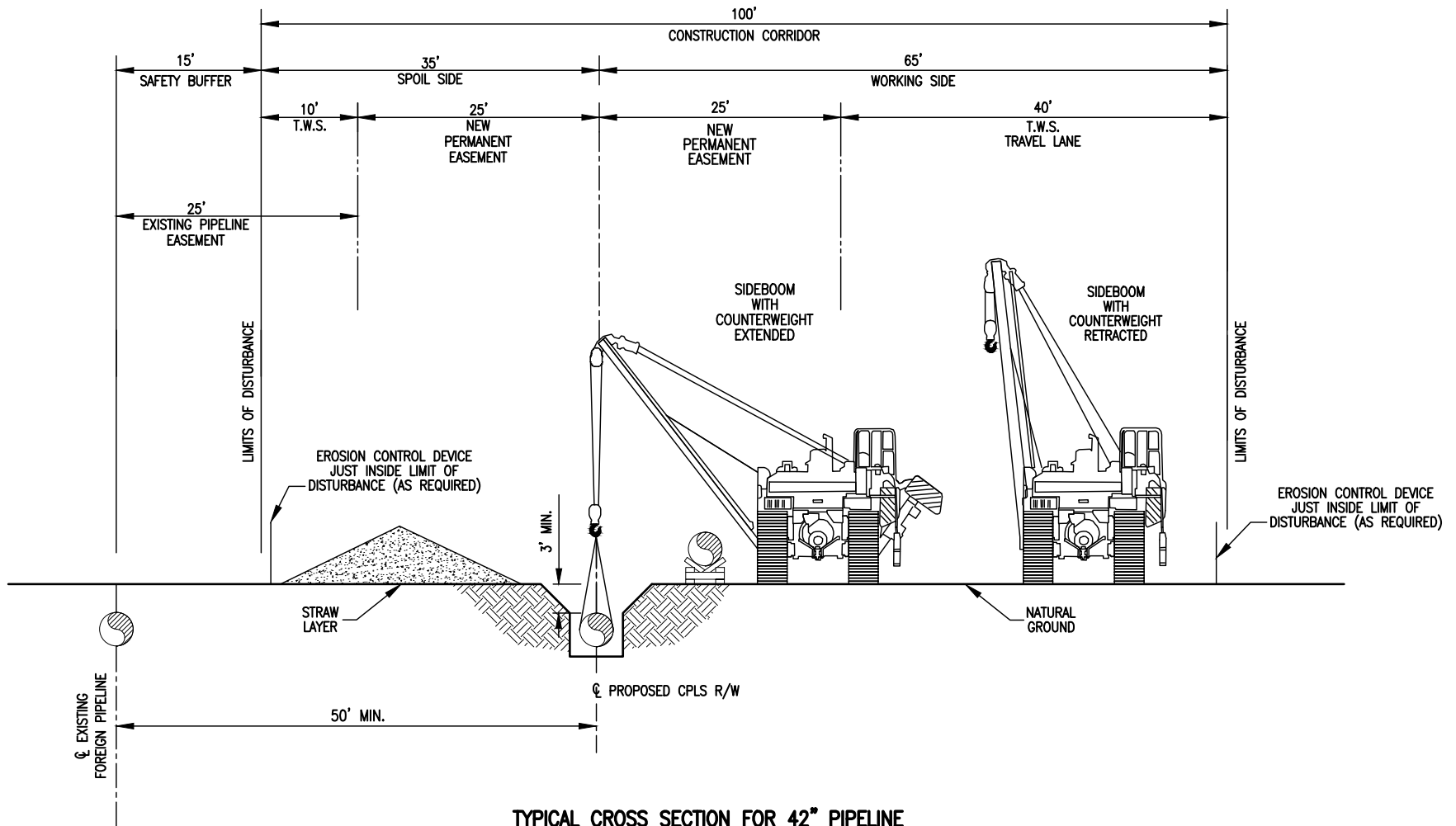
TYPICAL CROSS SECTION FOR 42" PIPELINE
 FULL WIDTH TOPSOIL STRIPPING - ADJACENT TO EXISTING FOREIGN PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
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B-162



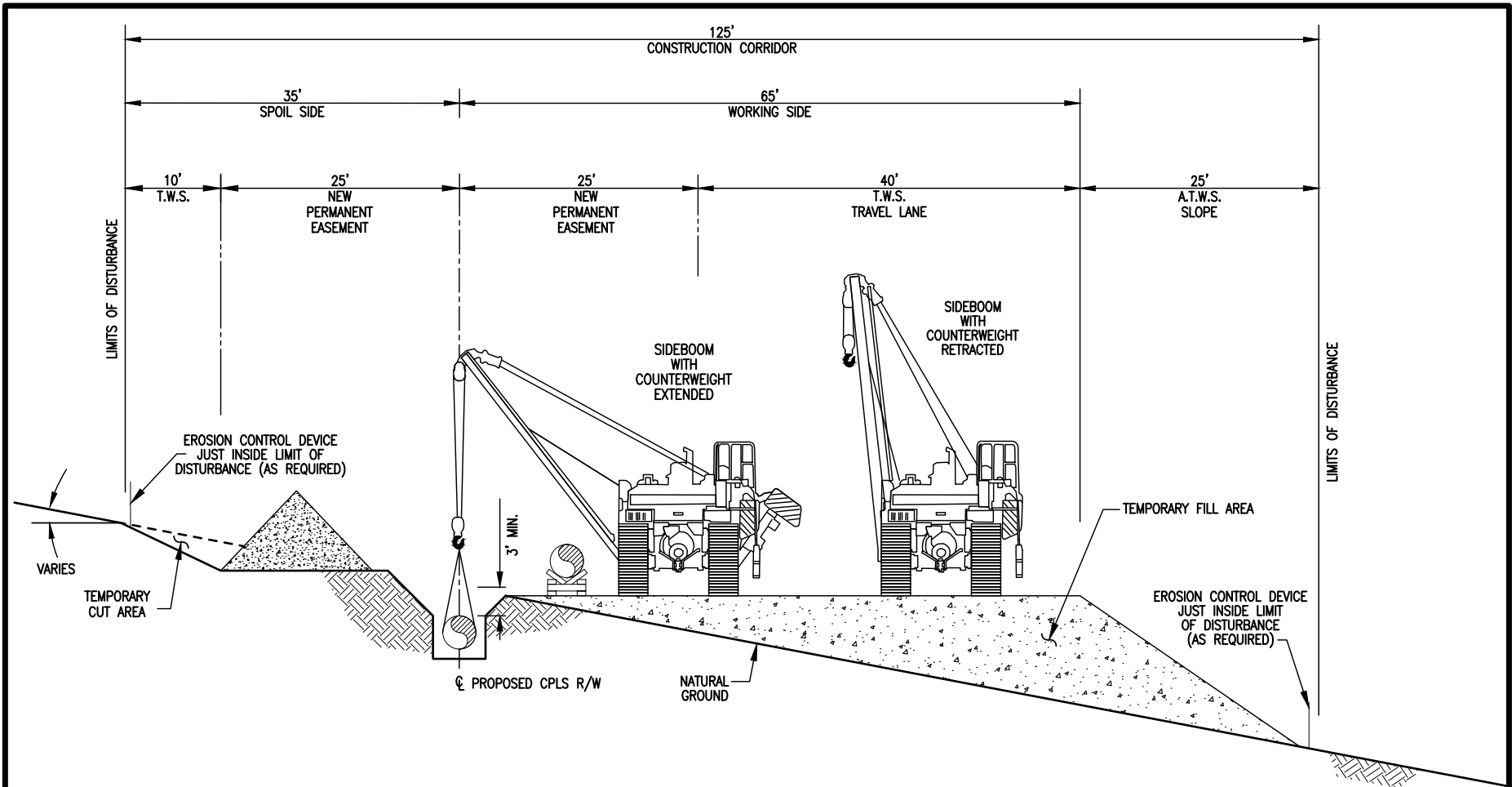
TYPICAL CROSS SECTION FOR 42" PIPELINE
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING FOREIGN PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01		
							WO: 1161503	2:35pm	3/20/2015	a/traha	SHEET 08 OF 20




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B-163



TYPICAL CROSS SECTION FOR 42" PIPELINE
 MODERATE SIDESLOPE CONSTRUCTION—NOT ADJACENT TO EXISTING PIPELINE (FILL)

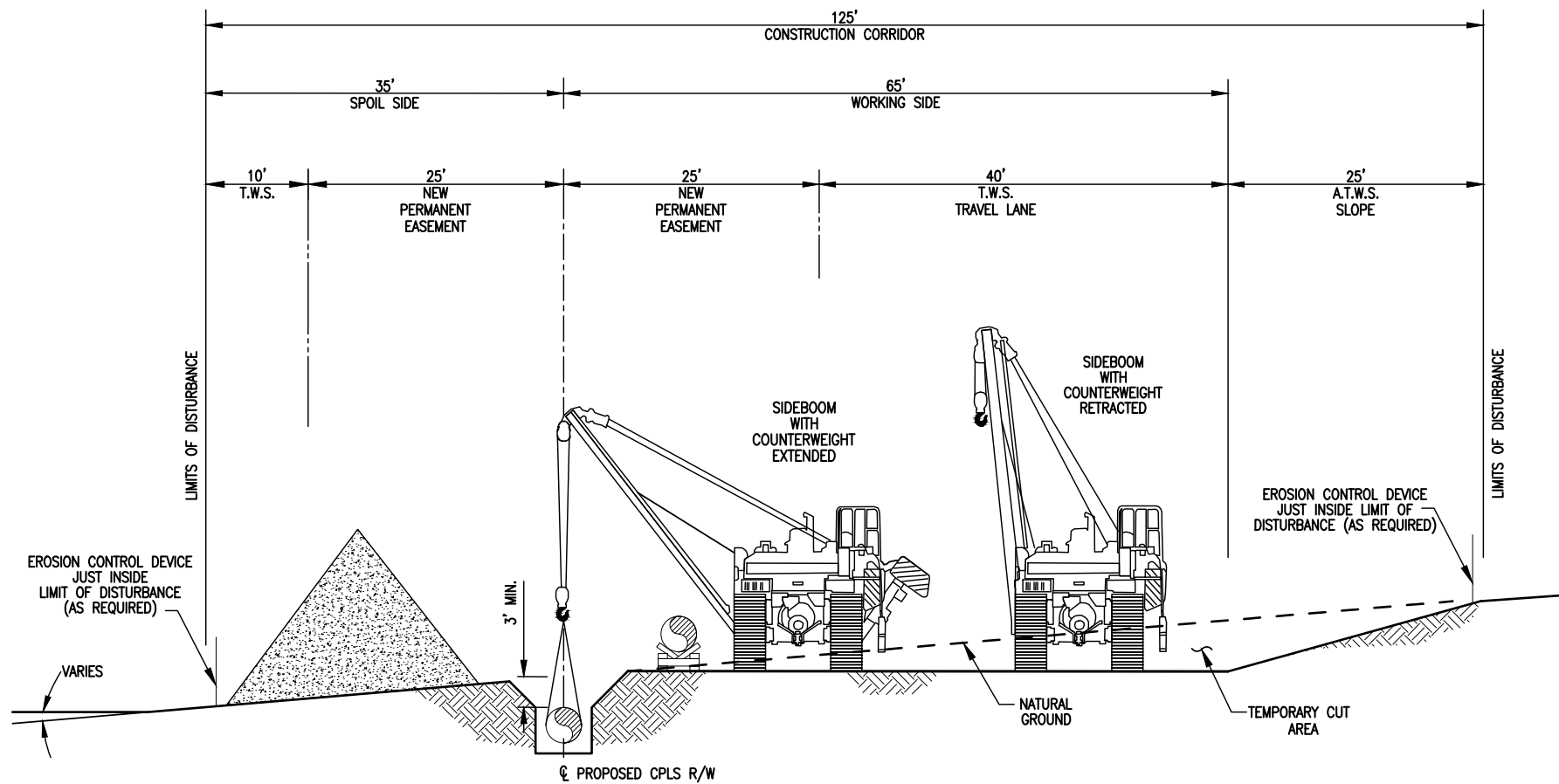
- NOTES:
- UPON COMPLETION OF INSTALLATION OF PIPE, ORIGINAL SLOPE TO BE RESTORED.

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
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							WO: 1161503	2:37pm 3/20/2015	a1traha	OF 20




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B-164



**TYPICAL CROSS SECTION FOR 42" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION- NOT ADJACENT TO EXISTING PIPELINE (CUT)**

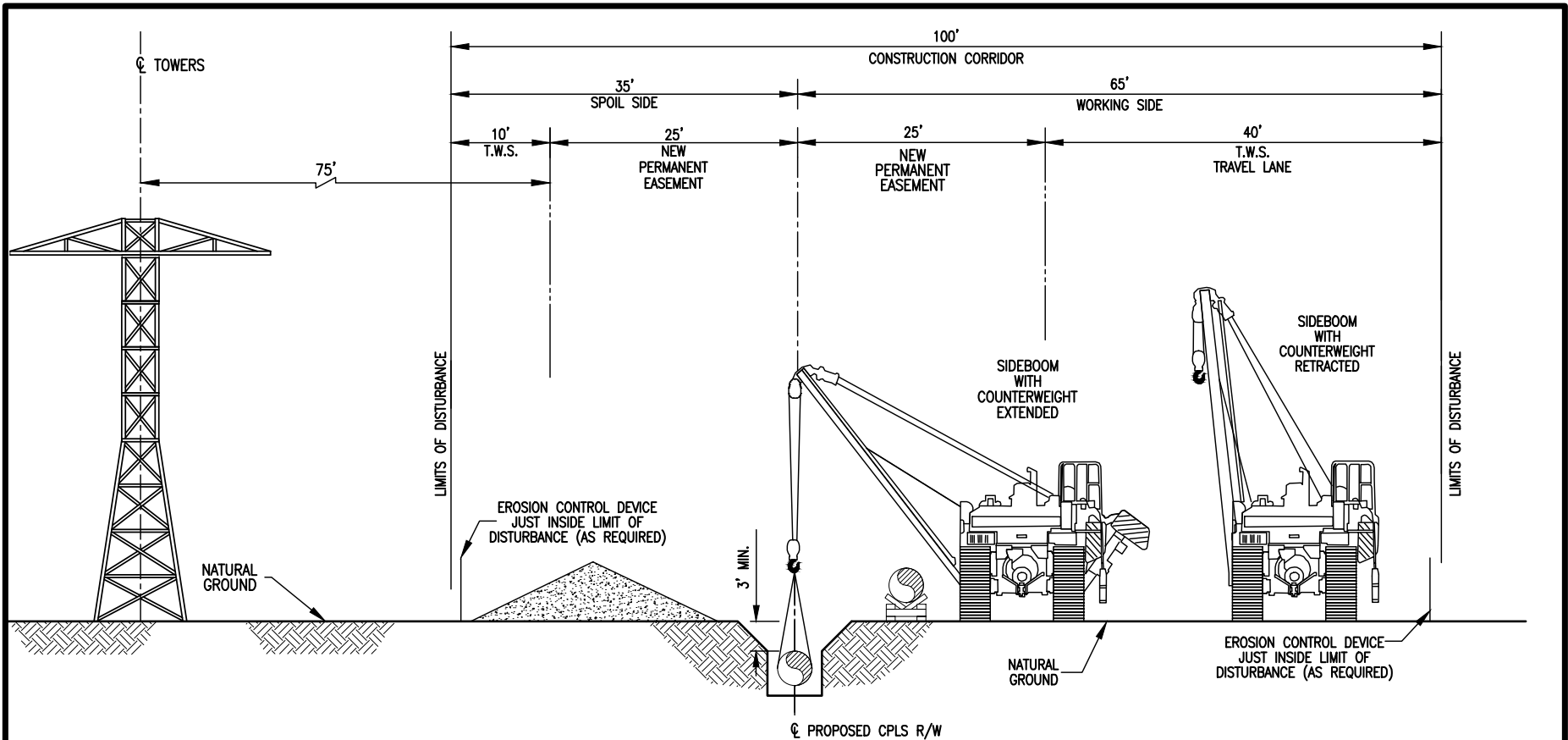
NOTES:
1. UPON COMPLETION OF INSTALLATION OF PIPE, ORIGINAL SLOPE TO BE RESTORED.

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
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B-165



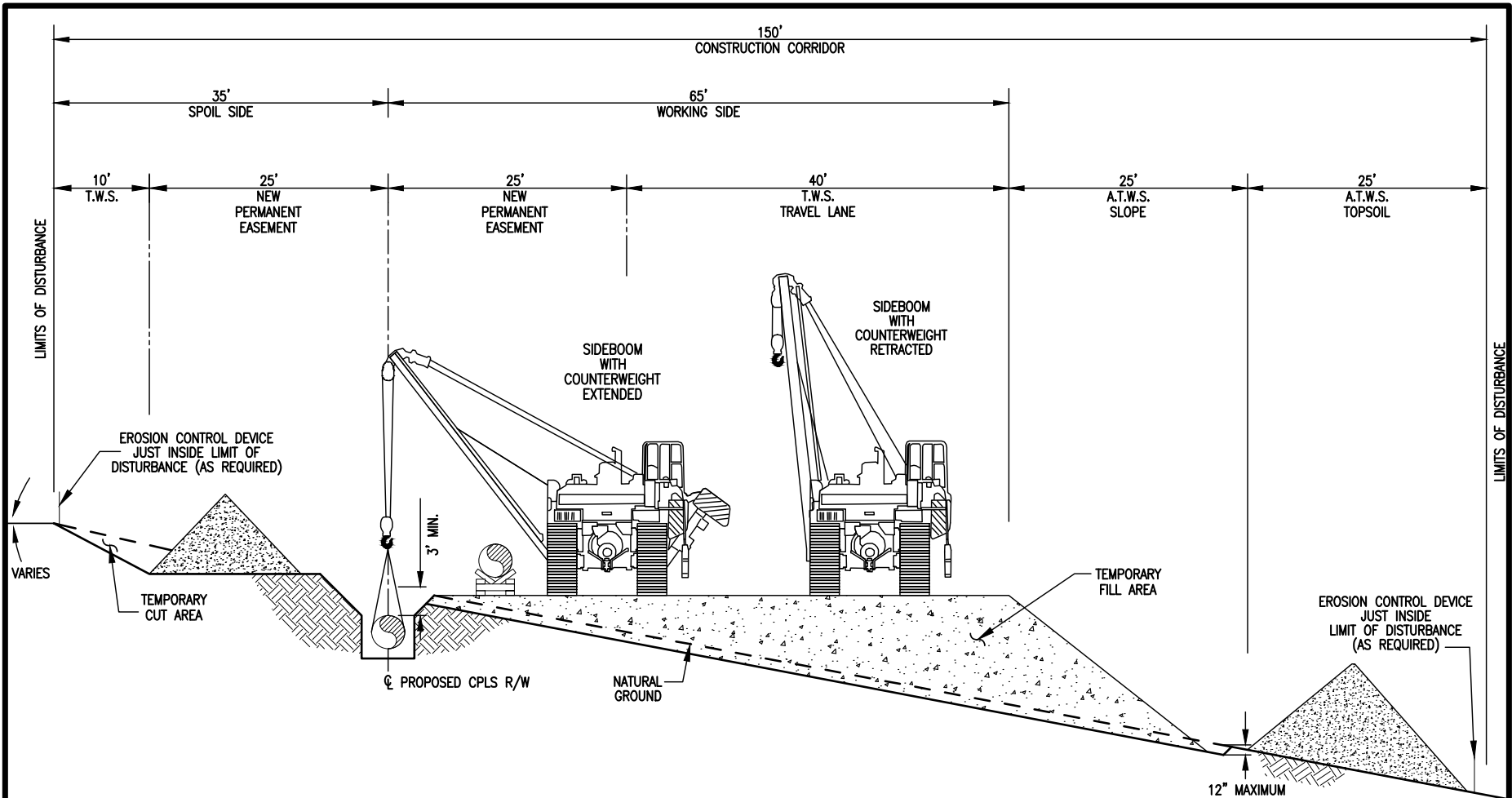
TYPICAL CROSS SECTION FOR 42" PIPELINE
75' FROM CENTERLINE OF TOWERS OR POLES TO TRANSCONTINENTAL PERMANENT EASEMENT

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
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							WO: 1161503	2:42pm	3/20/2015	altraha	OF 20



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B-166



**TYPICAL CROSS SECTION FOR 42" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION – WITH TOPSOIL STRIPPING (FILL)**

NOTES:

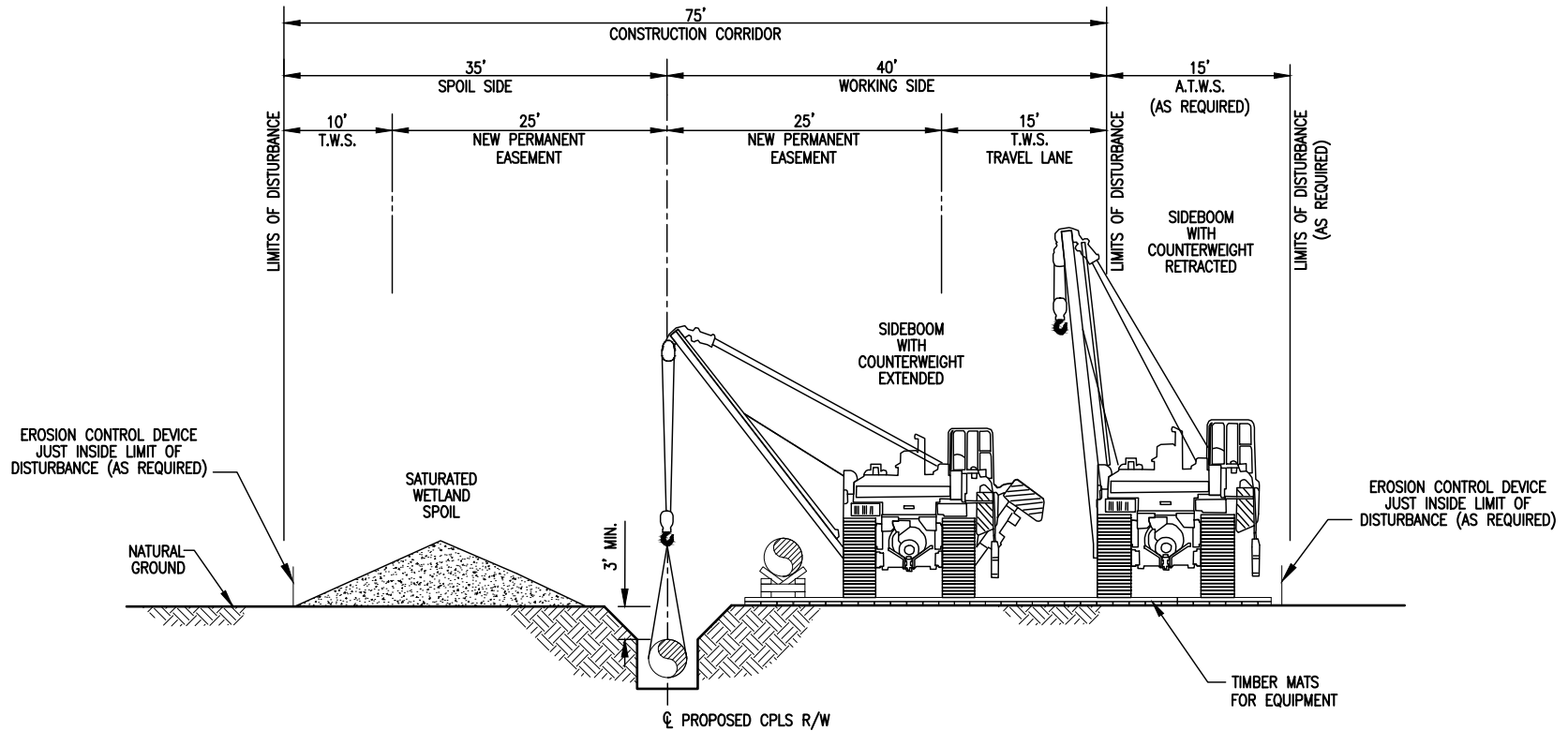
- UPON COMPLETION OF INSTALLATION OF PIPE, ORIGINAL SLOPE TO BE RESTORED.

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
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							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01	SHEET 12
							WO: 1161503	2:43pm 3/20/2015	at/tra	OF 20



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B-167



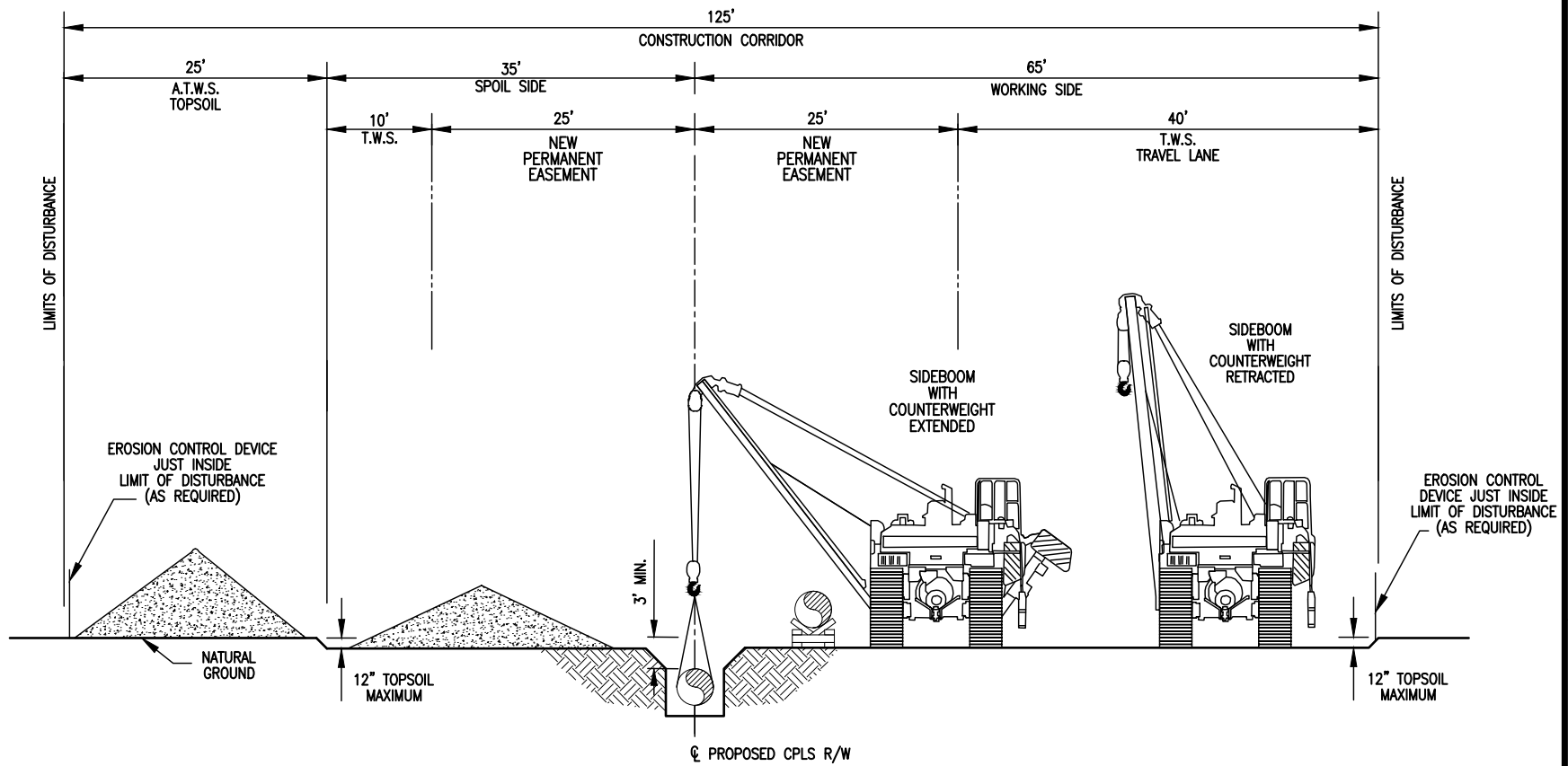
TYPICAL CROSS SECTION FOR 42" PIPELINE
WITHIN SATURATED WETLAND AREAS

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01		
							WO: 1161503	2:45pm	3/20/2015	altraha	SHEET 13 OF 20




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B-168



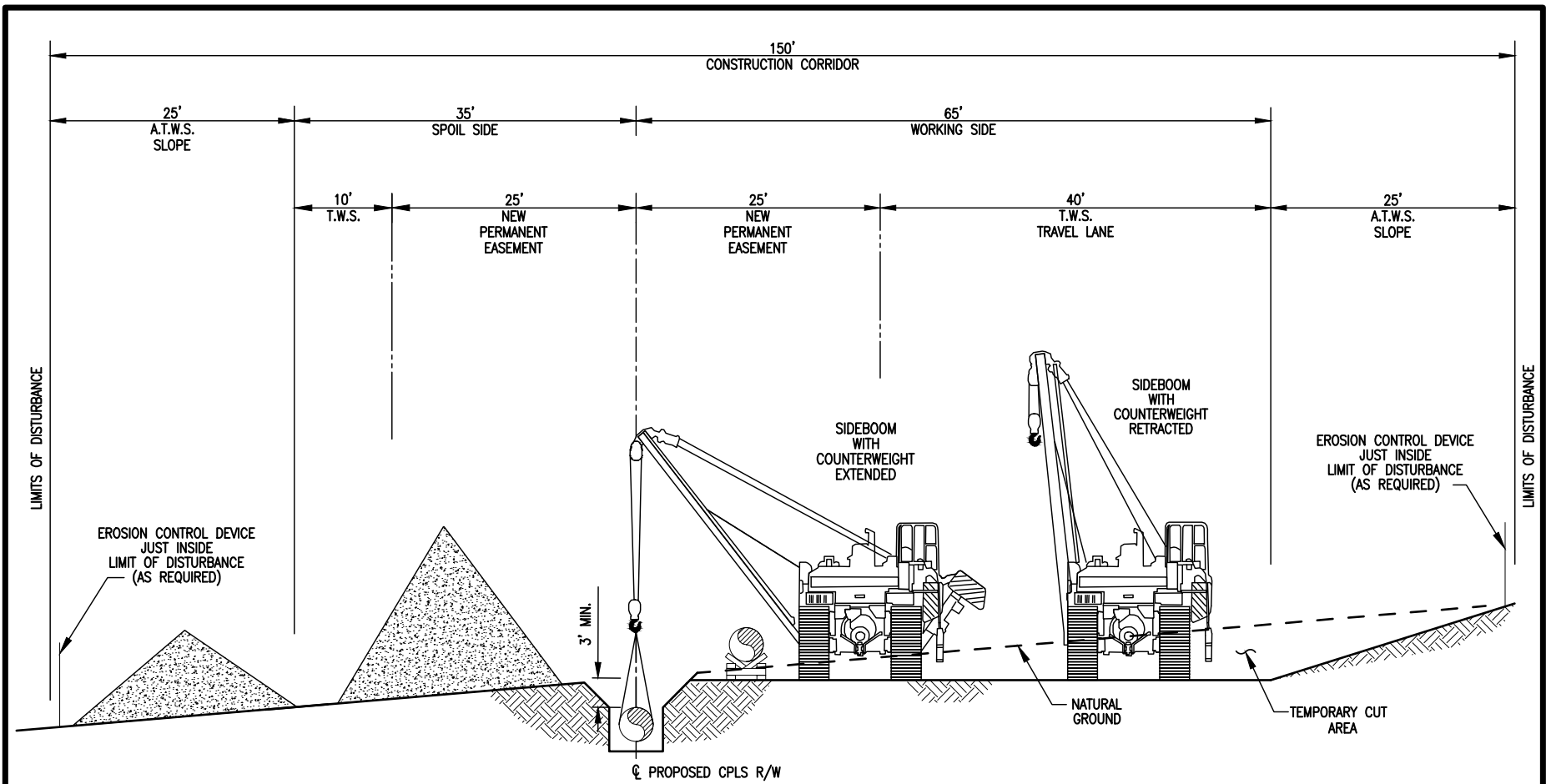
TYPICAL CROSS SECTION FOR 42" PIPELINE
 FULL WIDTH TOPSOIL STRIPPING (SPOIL SIDE) - NOT ADJACENT TO EXISTING PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01	SHEET 14
							WO: 1161503	2:48pm 3/20/2015	a1traha	OF 20



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B-169



TYPICAL CROSS SECTION FOR 42" PIPELINE SEVERE SIDESLOPE CONSTRUCTION (CUT)

NOTES:

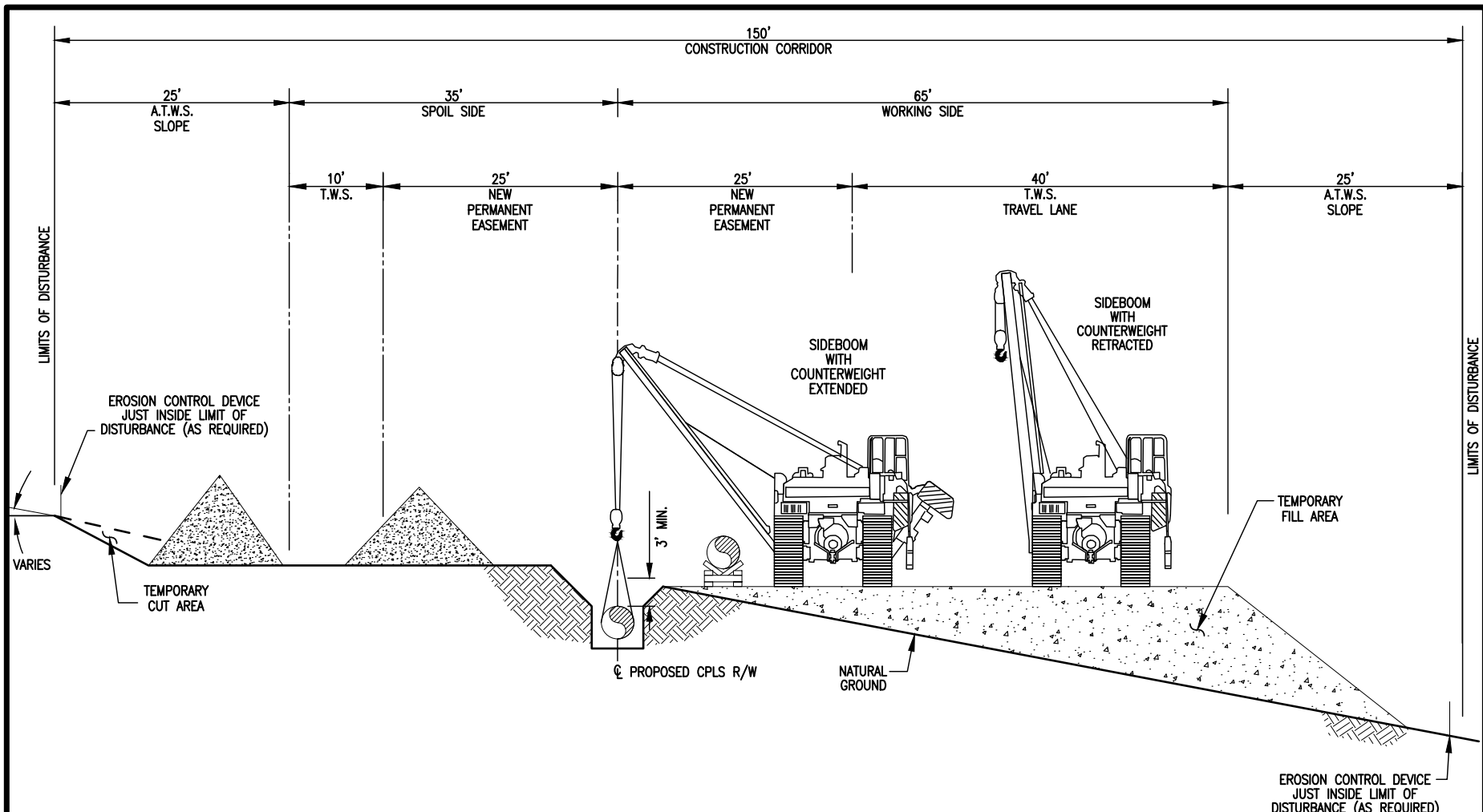
- UPON COMPLETION OF INSTALLATION OF PIPE, ORIGINAL SLOPE TO BE RESTORED.

DRAWING NO.		REFERENCE TITLE		<p align="center"> TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA </p> 							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01		
							WO: 1161503	2:49pm	3/20/2015	altraha	SHEET 15 OF 20




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B-170



TYPICAL CROSS SECTION FOR 42" PIPELINE SEVERE SIDESLOPE CONSTRUCTION (FILL)

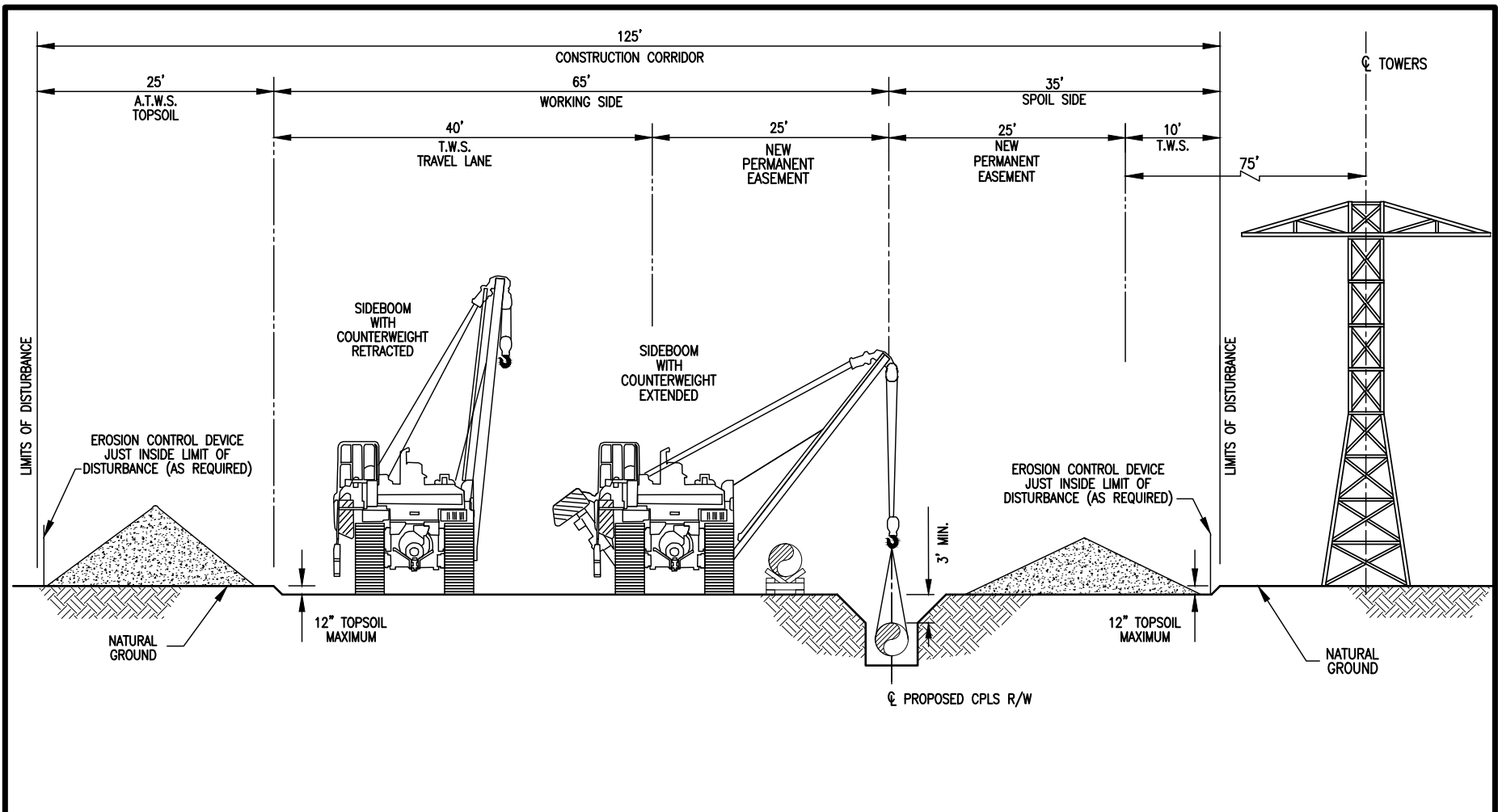
NOTES:
 1. UPON COMPLETION OF INSTALLATION OF PIPE, ORIGINAL SLOPE TO BE RESTORED.

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01	SHEET 16
							WO: 1161503	2:52pm 3/20/2015	a1traha	OF 20




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B-171



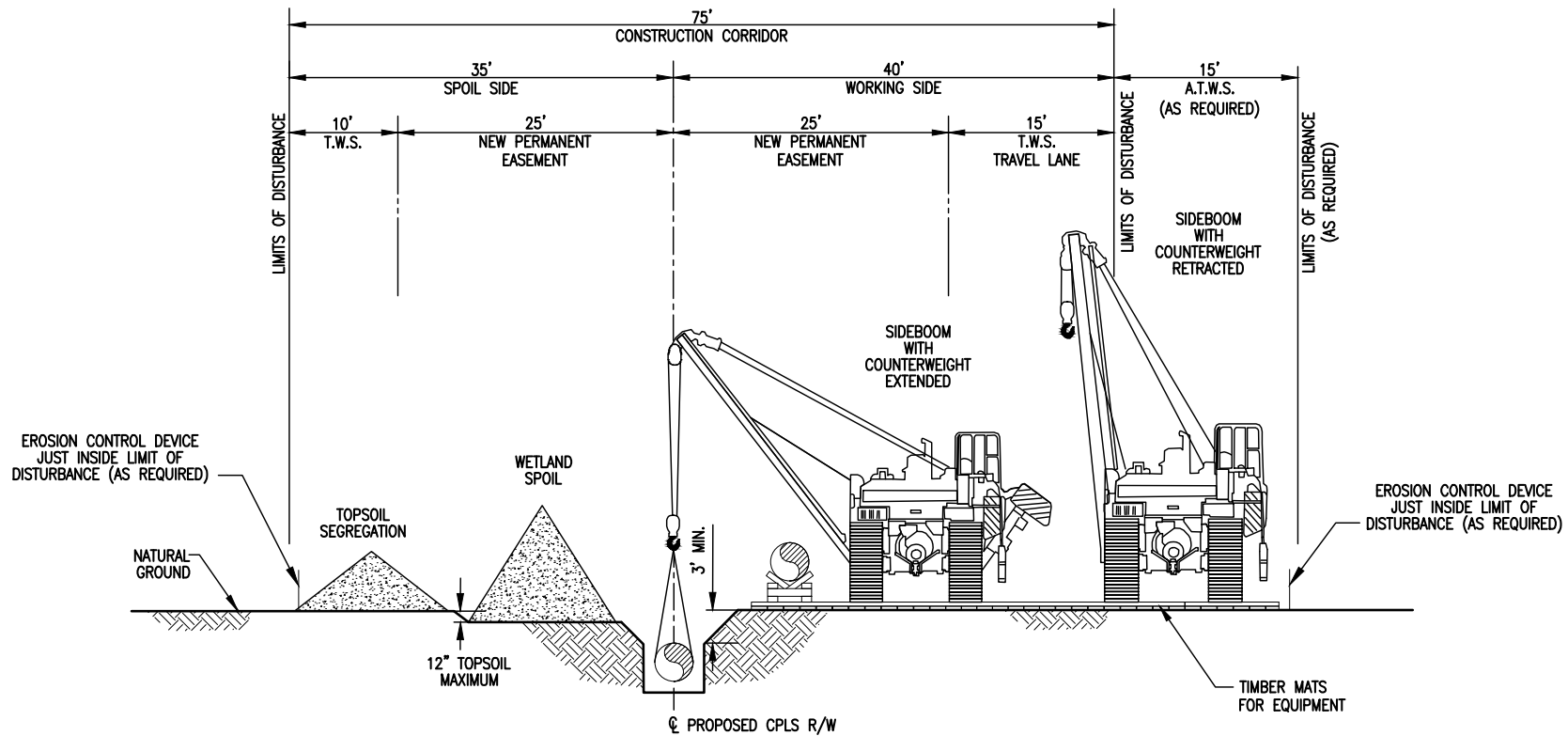
TYPICAL CROSS SECTION FOR 42" PIPELINE
75' FROM CENTERLINE OF TOWERS OR POLES TO TRANSCONTINENTAL PERMANENT EASEMENT – WITH TOPSOIL STRIPPING

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA 						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01	SHEET 17
							WO: 1161503	2:53pm 3/20/2015	a1tra	OF 20



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B-172



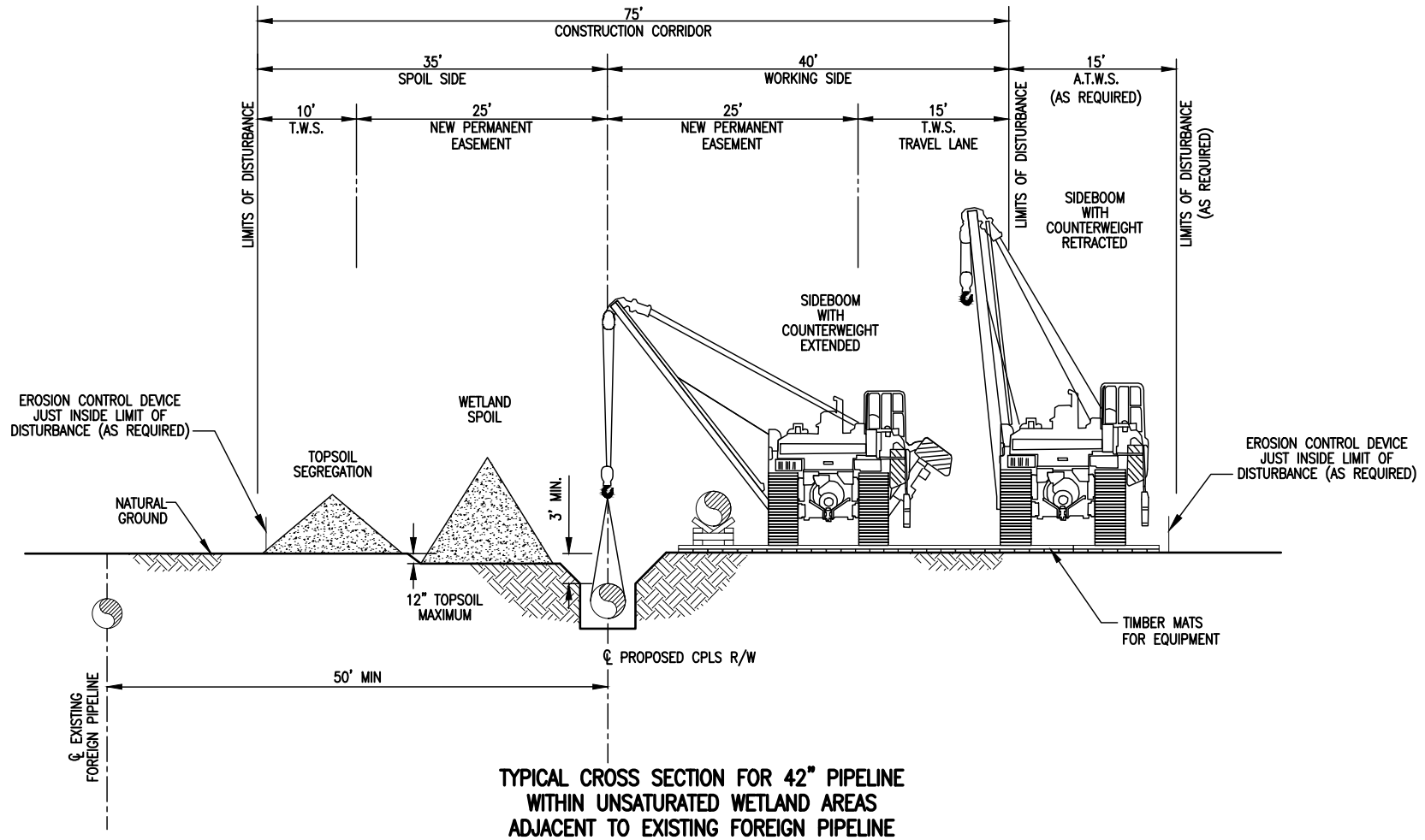
TYPICAL CROSS SECTION FOR 42" PIPELINE
WITHIN UNSATURATED WETLAND AREAS

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01		
							WO: 1161503	2:54pm	3/20/2015	altraha	SHEET 18 OF 20



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B-173

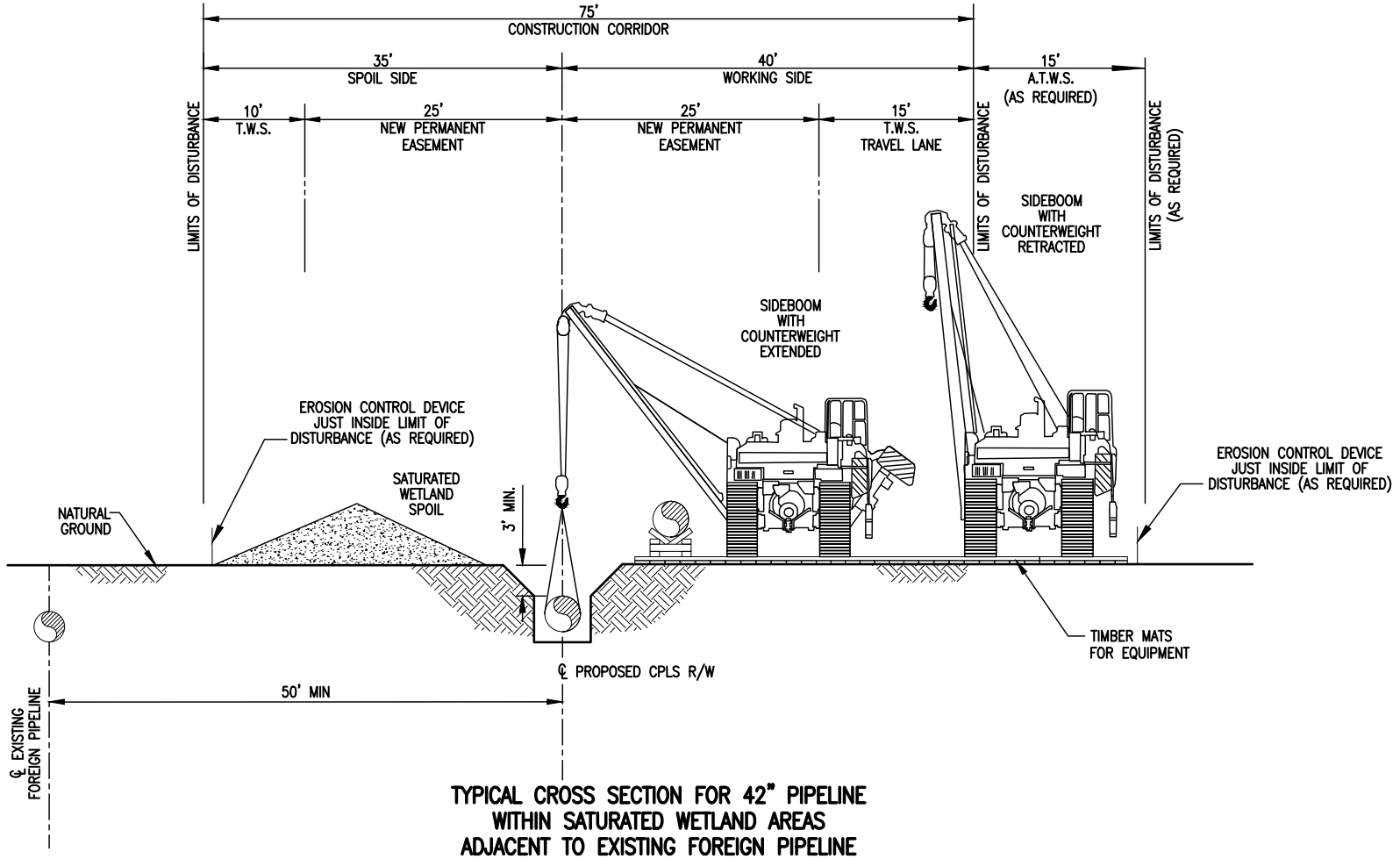


DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0	
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							WO: 1161503		2:57pm 3/20/2015	at/tra	SHEET 19 OF 20



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DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" CENTRAL PENN LINE SOUTH PENNSYLVANIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/19/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/15	AT	ISSUED FOR FERC FILING	1161503	LR	MJH	CHECKED BY: EP	DATE: 10/20/14	ISSUED FOR CONSTRUCTION:	REV: 0
							APPROVED BY: MJH	DATE: 10/20/14	DRAWING NUMBER: F-XS-CPLS-A-01	SHEET 20
							WO: 1161503	3:00pm 3/20/2015	at/tra	OF 20



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Transcontinental Gas Pipe Line Company LLC

TYPICAL RIGHT-OF-WAY CROSS-SECTION
ATLANTIC SUNRISE PROJECT
PROPOSED 36" CHAPMAN LOOP
LL M.P. 185.95 TO LL MP 188.87
CLINTON COUNTY, PENNSYLVANIA


F-XS-LL185.9-D-01

DATE: 03/31/2015 REV. 0

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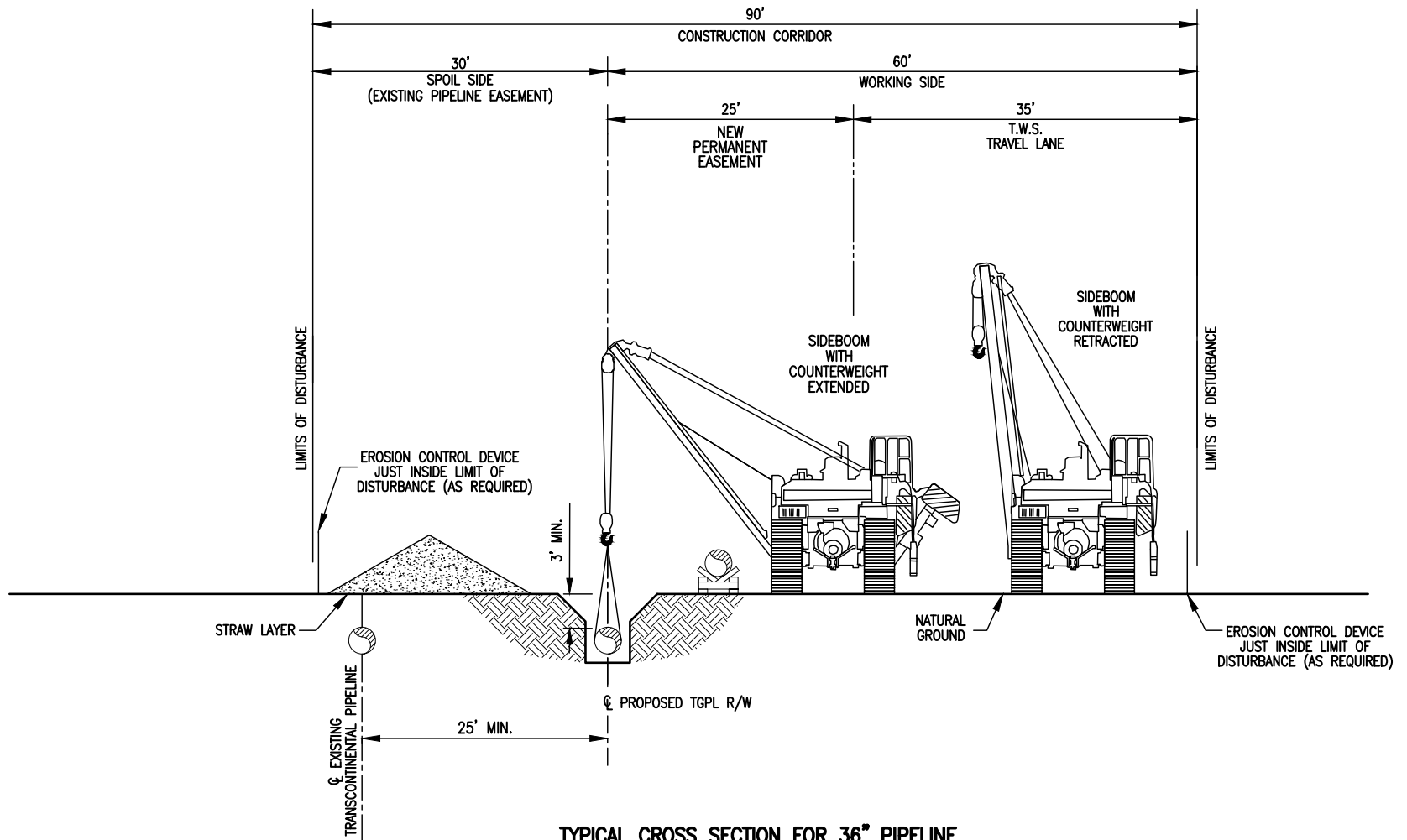
B-177

DOCUMENT NAME	SHEET NUMBER	ROW WIDTH (FT)	DESCRIPTION	REVISION	DATE
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F-XS-LL185.9-D-01	02		TABLE OF CONTENTS	0	03/31/2015
F-XS-LL185.9-D-01	03	90	NO TOPSOIL STRIPPING- ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-LL185.9-D-01	04	110	TOPSOIL STRIPPING- ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-LL185.9-D-01	05	110	MODERATE SIDESLOPE CONSTRUCTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-LL185.9-D-01	06	90	TYPICAL CONSTRUCTION WITHIN SATURATED WETLAND AREAS	0	03/31/2015
F-XS-LL185.9-D-01	07	90	TYPICAL CONSTRUCTION WITHIN UNSATURATED WETLAND AREAS	0	03/31/2015


DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 36" CHAPMAN LOOP LL M.P. 185.95 TO LL M.P. 188.87 CLINTON COUNTY, PENNSYLVANIA					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:	
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							EP	09/12/14	ISSUED FOR CONSTRUCTION:	REV: 0	
							MJH	09/12/14	DRAWING NUMBER: F-XS-LL185.9-D-01	SHEET 2	
							WO: 1161125		8:14am 3/20/2015 a1traha	OF 7	
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B-178



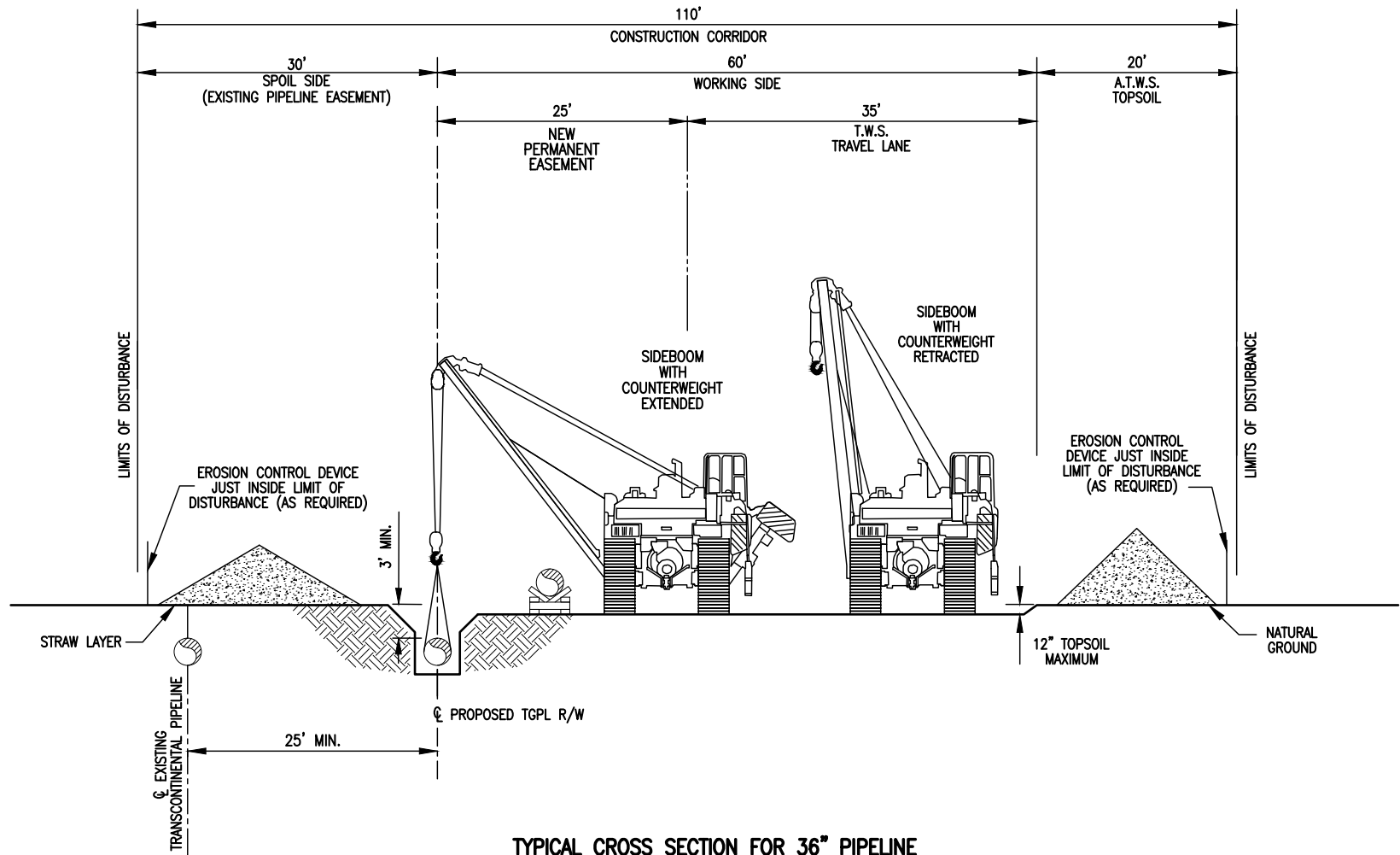
**TYPICAL CROSS SECTION FOR 36" PIPELINE
NO TOPSOIL STRIPPING – ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE**

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 36" CHAPMAN LOOP LL M.P. 185.95 TO LL M.P. 188.87 CLINTON COUNTY, PENNSYLVANIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/12/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/2015	AT	ISSUED FOR FERC FILING	1161125	DP	MJH	CHECKED BY: EP	DATE: 09/12/14	ISSUED FOR CONSTRUCTION:	REV: 0
							APPROVED BY: MJH	DATE: 09/12/14	DRAWING NUMBER: F-XS-LL185.9-D-01	SHEET 3
							WO: 1161125		2:46pm 3/20/2015 j1beast	OF 7




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B-179



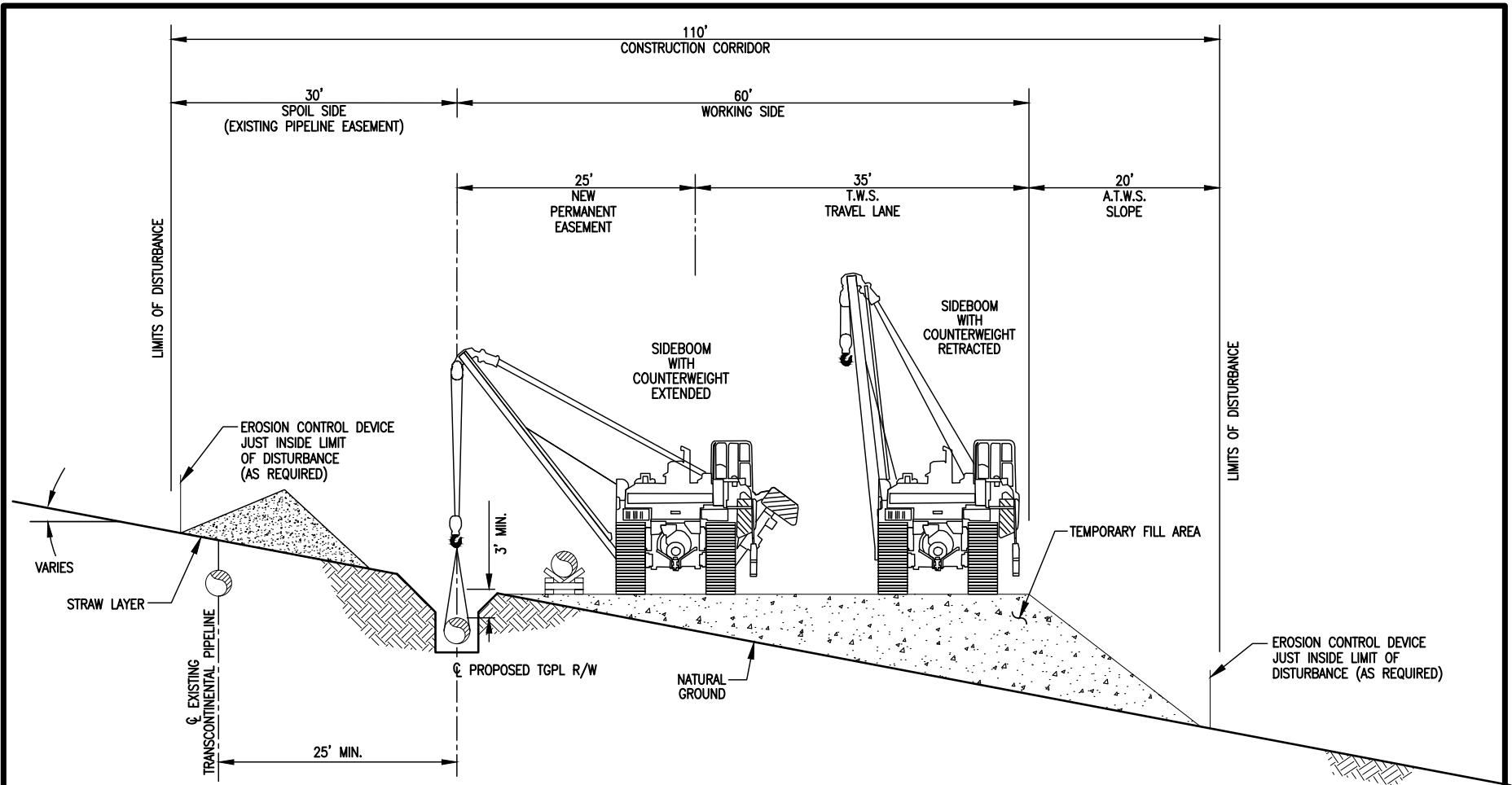
TYPICAL CROSS SECTION FOR 36" PIPELINE
 TOPSOIL STRIPPING – ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 36" CHAPMAN LOOP LL M.P. 185.95 TO LL M.P. 188.87 CLINTON COUNTY, PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/12/14	ISSUED FOR BID:	SCALE: NTS	
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							APPROVED BY: MJH	DATE: 09/12/14	DRAWING NUMBER: F-XS-LL185.9-D-01		
							WO: 1161125	2:46pm	3/20/2015	j1beast	SHEET 4 OF 7



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**TYPICAL CROSS SECTION FOR 36" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE**

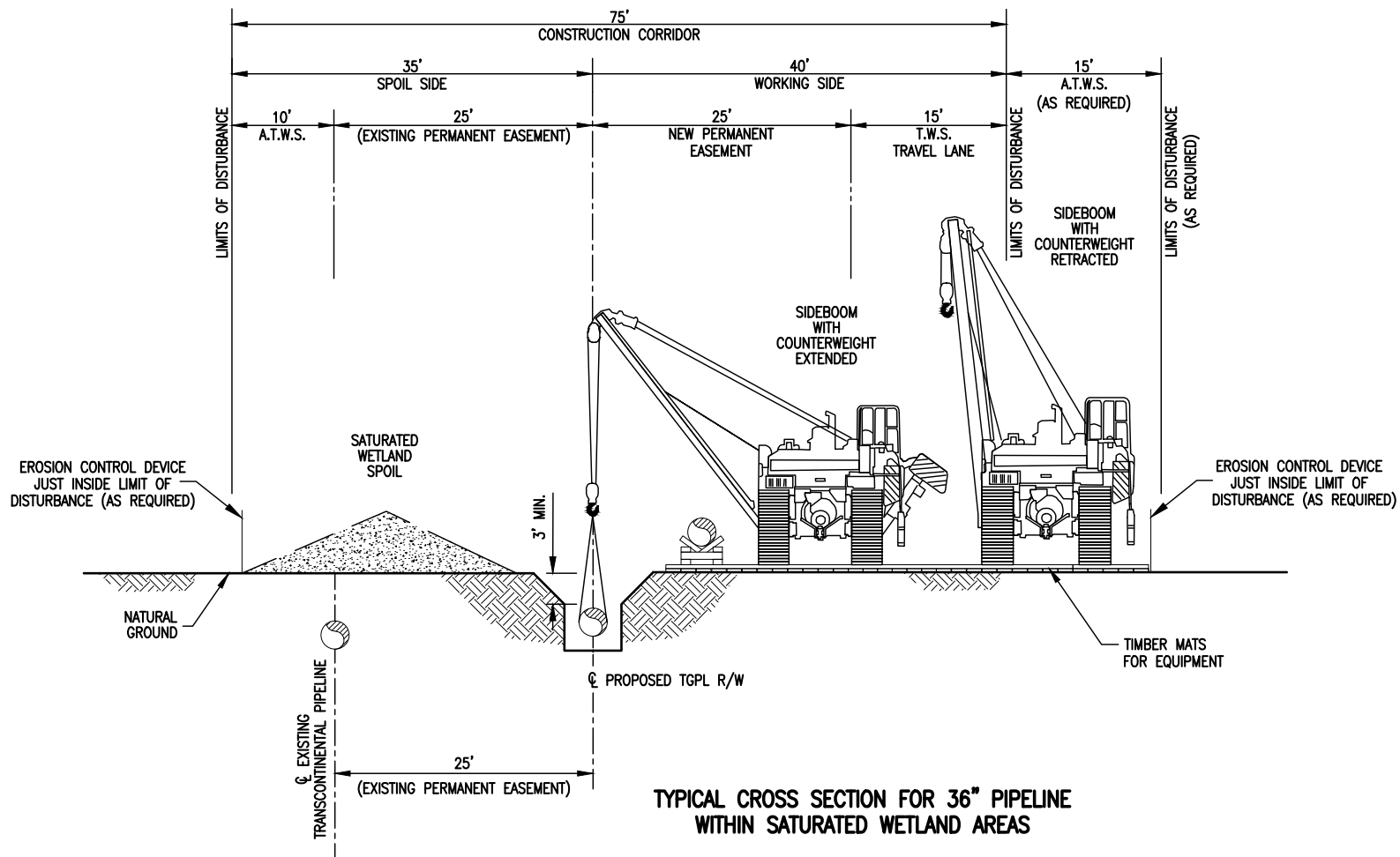
NOTES:

- UPON COMPLETION OF INSTALLATION OF PIPE, ORIGINAL SLOPE TO BE RESTORED.

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 36" CHAPMAN LOOP LL M.P. 185.95 TO LL M.P. 188.87 CLINTON COUNTY, PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/12/14	ISSUED FOR BID:	SCALE: NTS	
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							APPROVED BY: MJH	DATE: 09/12/14	DRAWING NUMBER: F-XS-LL185.9-D-01		
							WO: 1161125	3:49pm	3/20/2015	altraha	SHEET 5 OF 7



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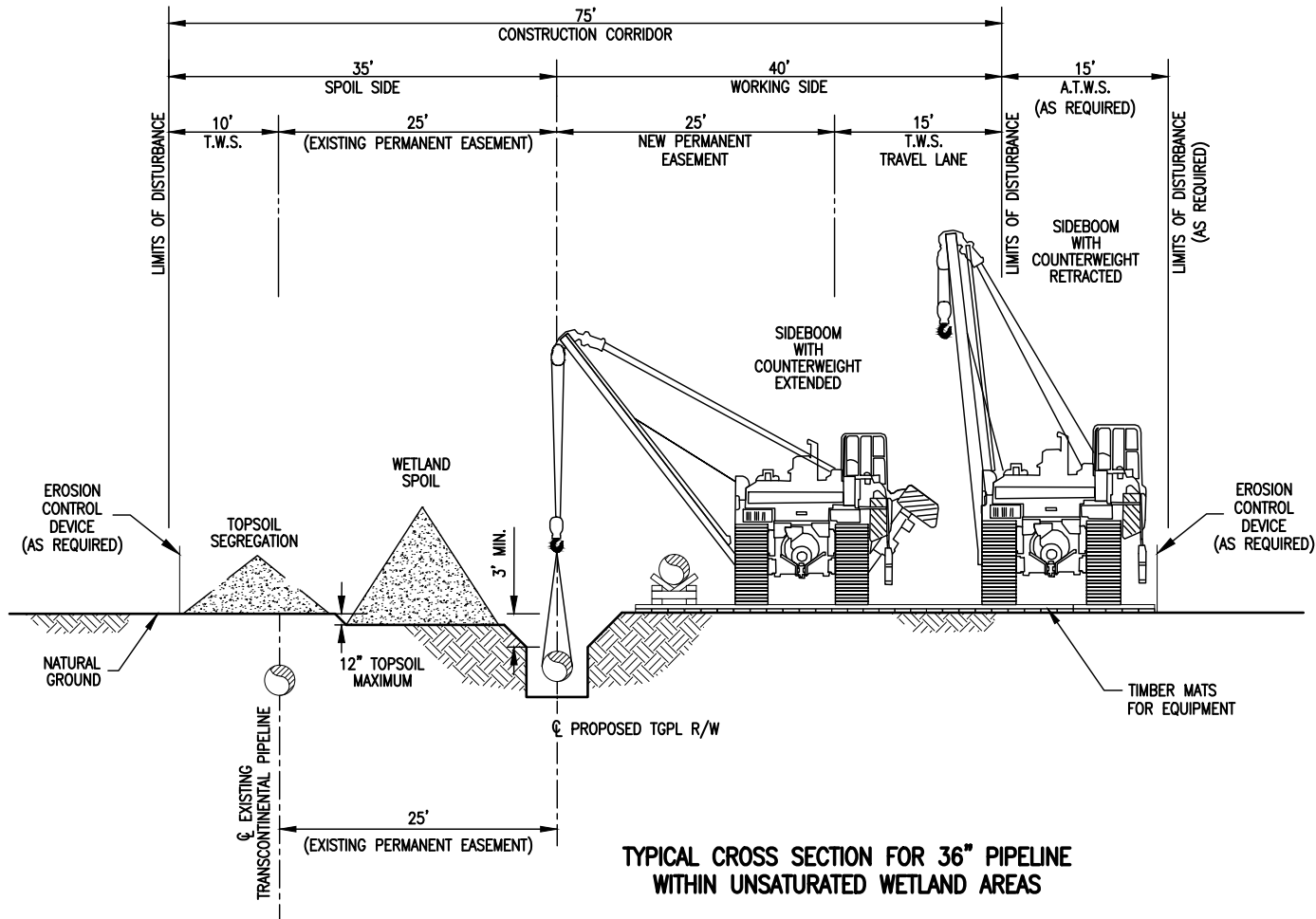
TYPICAL CROSS SECTION FOR 36" PIPELINE
WITHIN SATURATED WETLAND AREAS

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 36" CHAPMAN LOOP LL M.P. 185.95 TO LL M.P. 188.87 CLINTON COUNTY, PENNSYLVANIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/12/14	ISSUED FOR BID:	SCALE: NTS
0	03/31/2015	AT	ISSUED FOR FERC FILING	1161125	DP	MJH	CHECKED BY: EP	DATE: 09/12/14	ISSUED FOR CONSTRUCTION:	REV: 0
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							WO: 1161125	2:45pm 3/20/2015	j1beast	OF 7




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TYPICAL CROSS SECTION FOR 36" PIPELINE WITHIN UNSATURATED WETLAND AREAS

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 36" CHAPMAN LOOP LL M.P. 185.95 TO LL M.P. 188.87 CLINTON COUNTY, PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/12/14	ISSUED FOR BID:	SCALE: NTS	
0	03/31/2015	AT	ISSUED FOR FERC FILING	1161125	DP	MJH	CHECKED BY: EP	DATE: 09/12/14	ISSUED FOR CONSTRUCTION:	REV: 0	
							APPROVED BY: MJH	DATE: 09/12/14	DRAWING NUMBER: F-XS-LL185.9-D-01		
							WO: 1161125	8:11am	3/20/2015	altraha	SHEET 7 OF 7



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Transcontinental Gas Pipe Line Company LLC

TYPICAL RIGHT-OF-WAY CROSS-SECTION
ATLANTIC SUNRISE PROJECT
PROPOSED 42" UNITY LOOP
LL M.P. 120.31 TO LL M.P. 128.87
LYCOMING COUNTY, PENNSYLVANIA


F-XS-LL119.8-D-01

DATE: 03/31/2015 REV. 0

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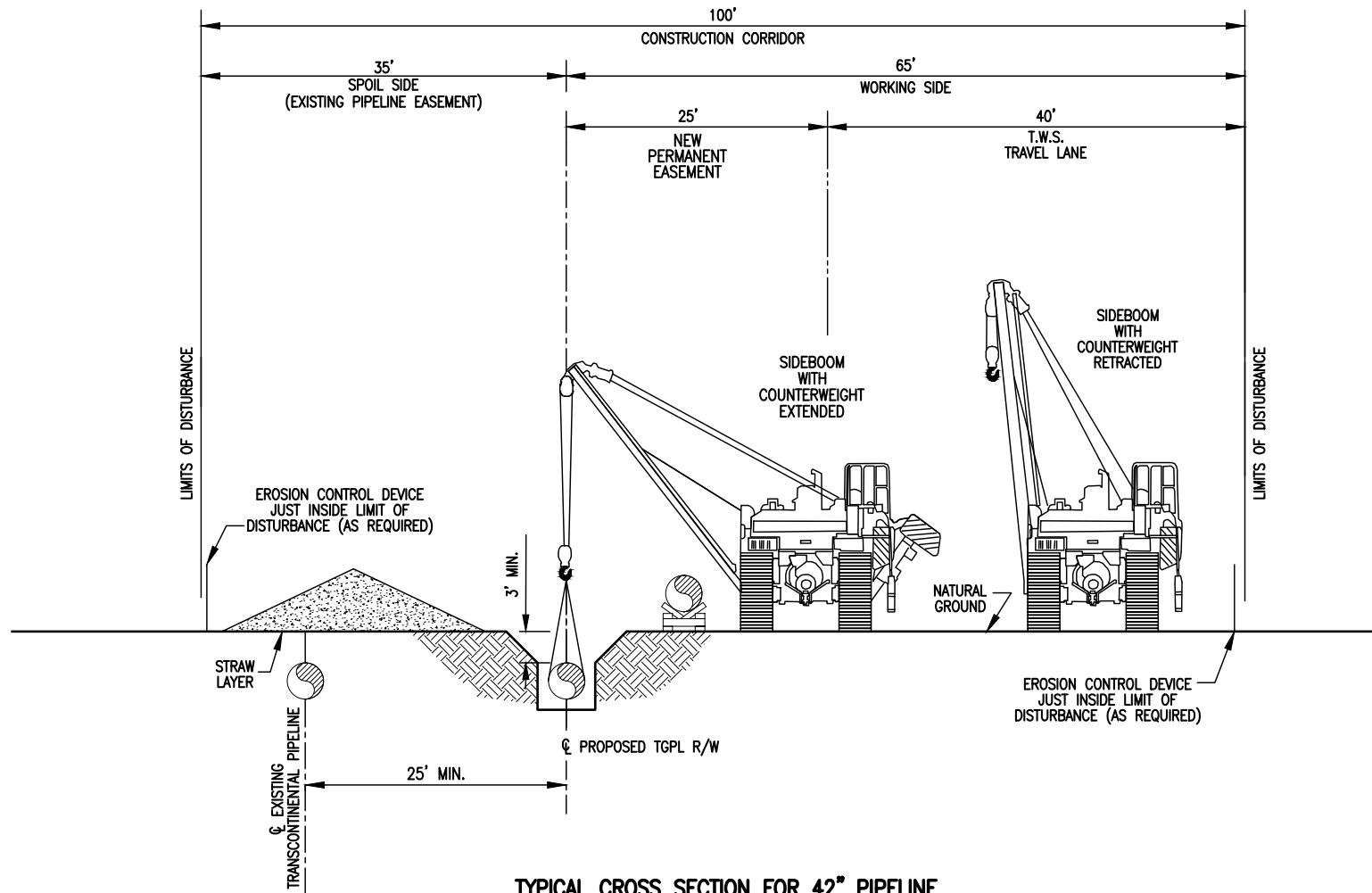
DOCUMENT NAME	SHEET NUMBER	ROW WIDTH (FT)	DESCRIPTION	REVISION	DATE
F-XS-LL119.8-D-01	01		COVERSHEET	0	03/31/2015
F-XS-LL119.8-D-01	02		TABLE OF CONTENTS	0	03/31/2015
F-XS-LL119.8-D-01	03	100	NO TOPSOIL STRIPPING- ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-LL119.8-D-01	04	125	TOPSOIL STRIPPING- ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-LL119.8-D-01	05	125	MODERATE SIDESLOPE CONSTRUCTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE (CUT)	0	03/31/2015
F-XS-LL119.8-D-01	06	125	MODERATE SIDESLOPE CONSTRUCTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE (FILL)	0	03/31/2015
F-XS-LL119.8-D-01	07	90	TYPICAL CONSTRUCTION WITHIN SATURATED WETLAND AREAS ADJACENT TO EXISTING TRANSCO PL	0	03/31/2015
F-XS-LL119.8-D-01	08	100	TYPICAL CONSTRUCTION OVER EXISTING TRANSCONTINENTAL PIPELINES	0	03/31/2015
F-XS-LL119.8-D-01	09	90	TYPICAL CONSTRUCTION WITHIN SATURATED WETLAND AREAS OVER EXISTING LINES	0	03/31/2015
F-XS-LL119.8-D-01	10	125	FULL WIDTH TOPSOIL STRIPPING-NOT ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-LL119.8-D-01	11	100	TYPICAL CONSTRUCTION WITHIN UNSATURATED WETLAND	0	03/31/2015
F-XS-LL119.8-D-01	12	100	TYPICAL CONSTRUCTION WITHIN UNSATURATED WETLAND AREAS OVER EXISTING LINES	0	03/31/2015

DRAWING NO.			REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" UNITY LOOP LYCOMING COUNTY, PENNSYLVANIA				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/12/14	ISSUED FOR BID:	SCALE: NTS	
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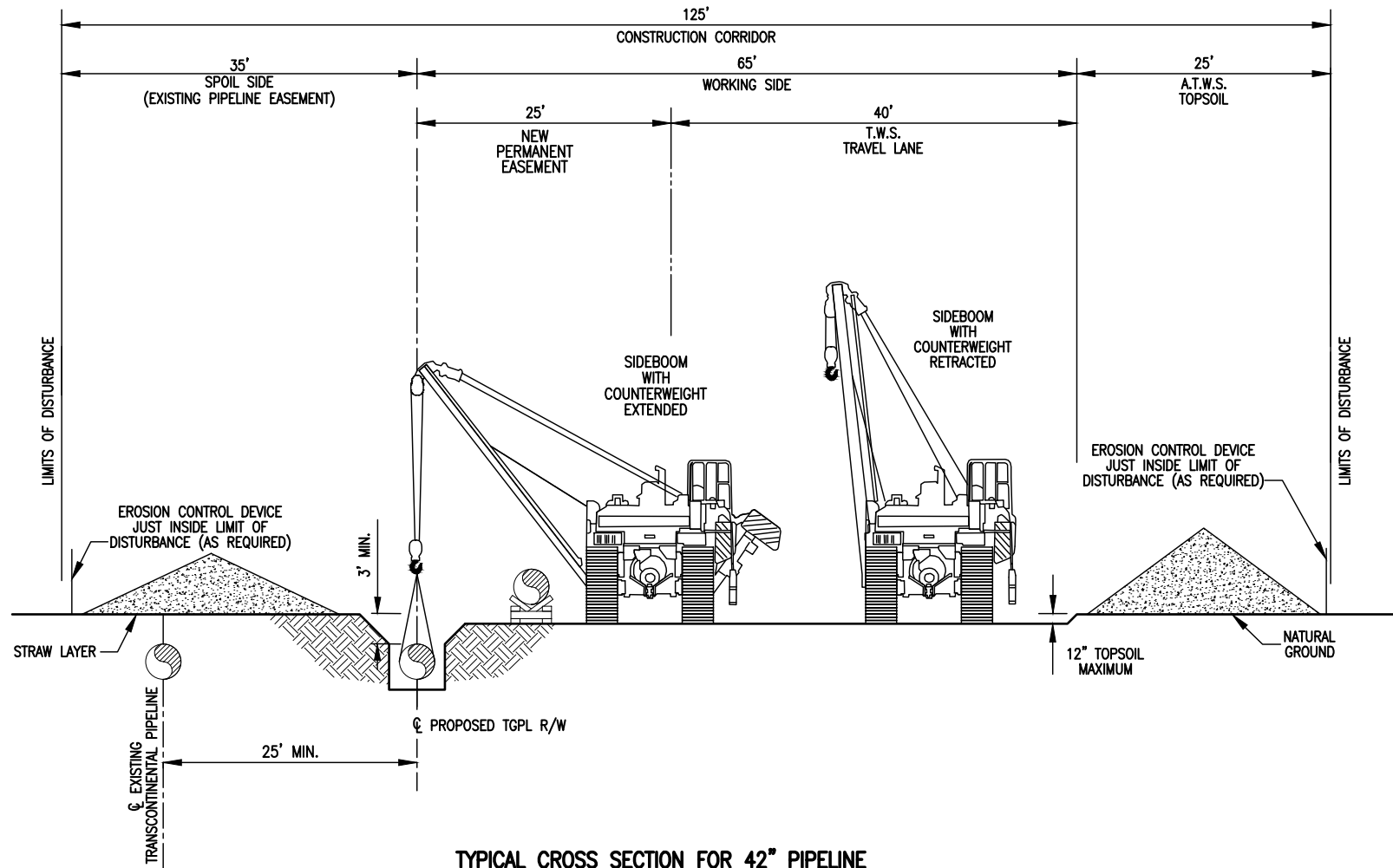


**TYPICAL CROSS SECTION FOR 42" PIPELINE
NO TOPSOIL STRIPPING – ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE**

DRAWING NO.		REFERENCE TITLE		<p align="center"> TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" UNITY LOOP LYCOMING COUNTY, PENNSYLVANIA </p> 							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/12/14	ISSUED FOR BID:	SCALE: NTS	
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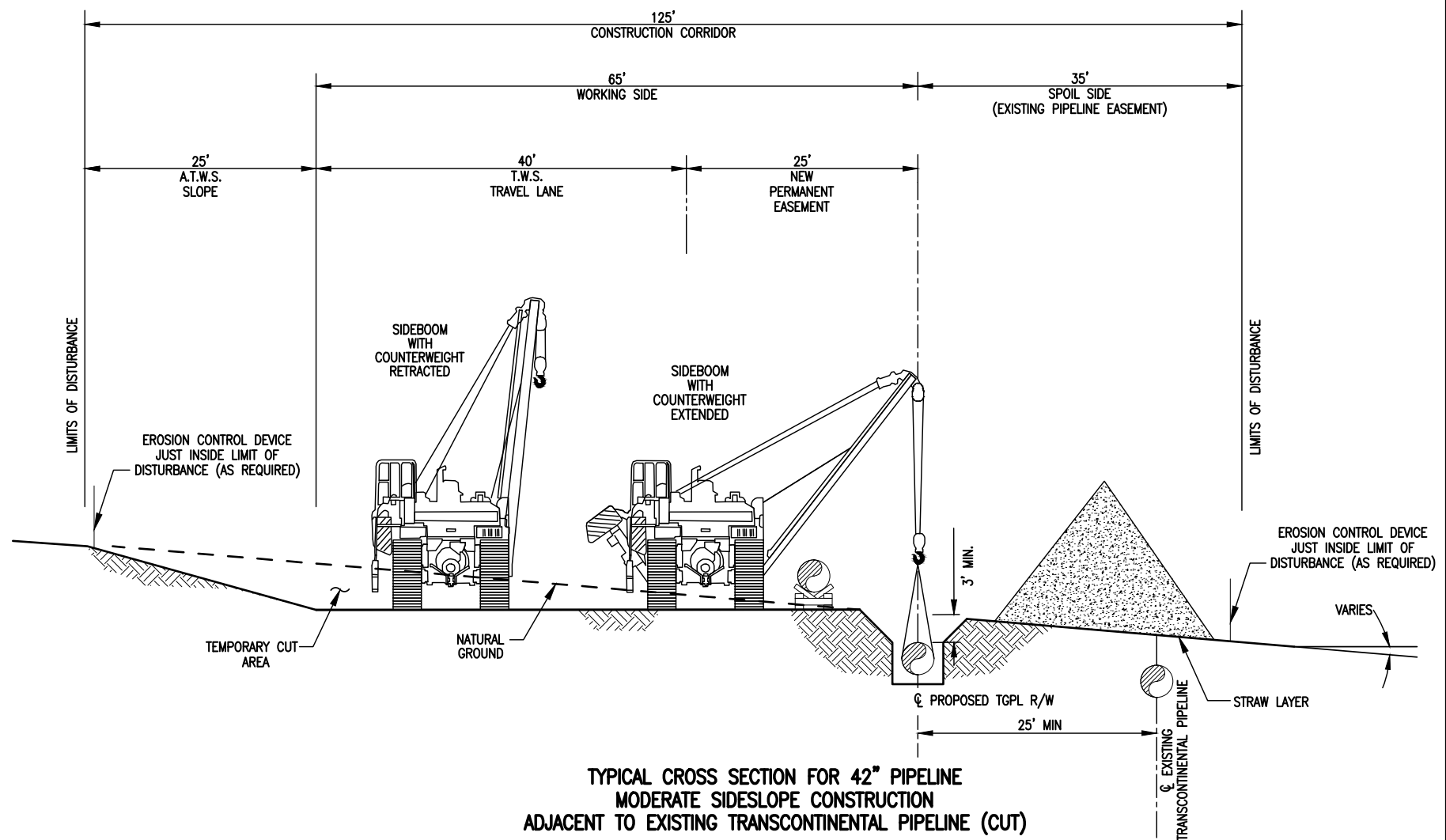


TYPICAL CROSS SECTION FOR 42" PIPELINE
 TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" UNITY LOOP LYCOMING COUNTY, PENNSYLVANIA							
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 09/12/14	ISSUED FOR BID:	SCALE: NTS	
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B-189



**TYPICAL CROSS SECTION FOR 42" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE (CUT)**

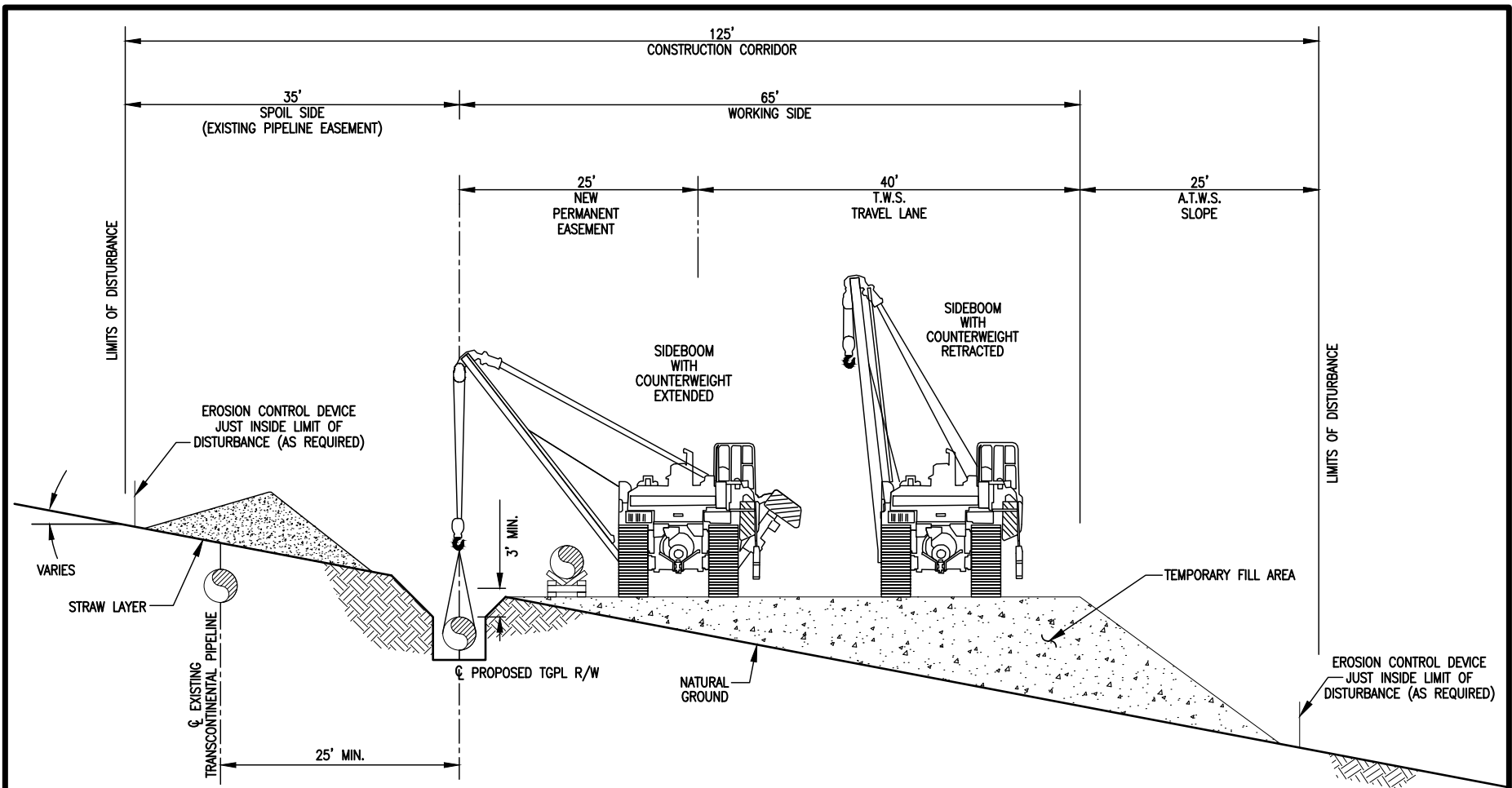
NOTES:

- 1. UPON COMPLETION OF INSTALLATION OF PIPE, ORIGINAL SLOPE TO BE RESTORED.

DRAWING NO.		REFERENCE TITLE		<p align="center"> TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" UNITY LOOP LYCOMING COUNTY, PENNSYLVANIA </p> 						
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B-190



**TYPICAL CROSS SECTION FOR 42" PIPELINE
MODERATE SIDESLOPE CONSTRUCTION
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE (FILL)**

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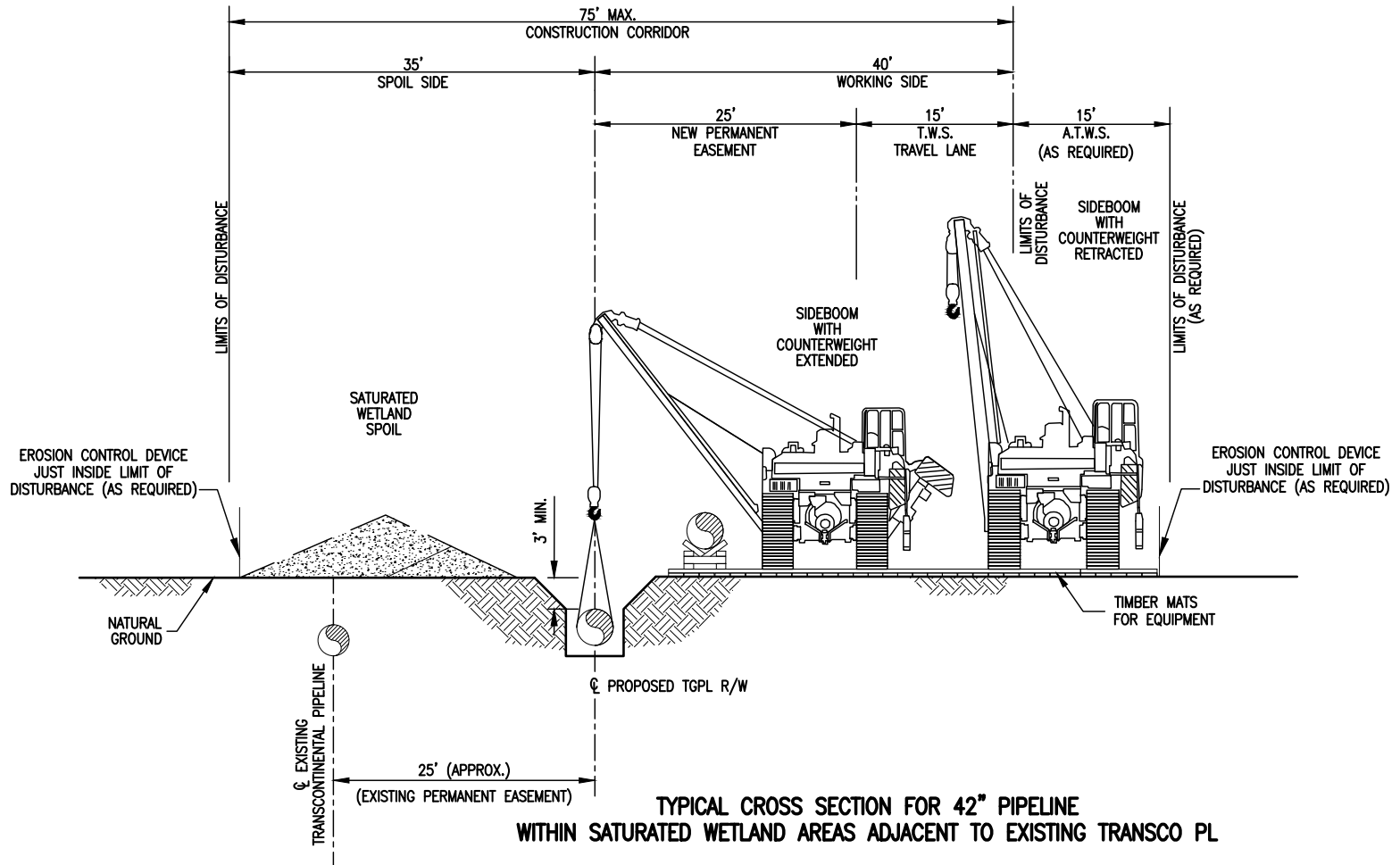
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B-191

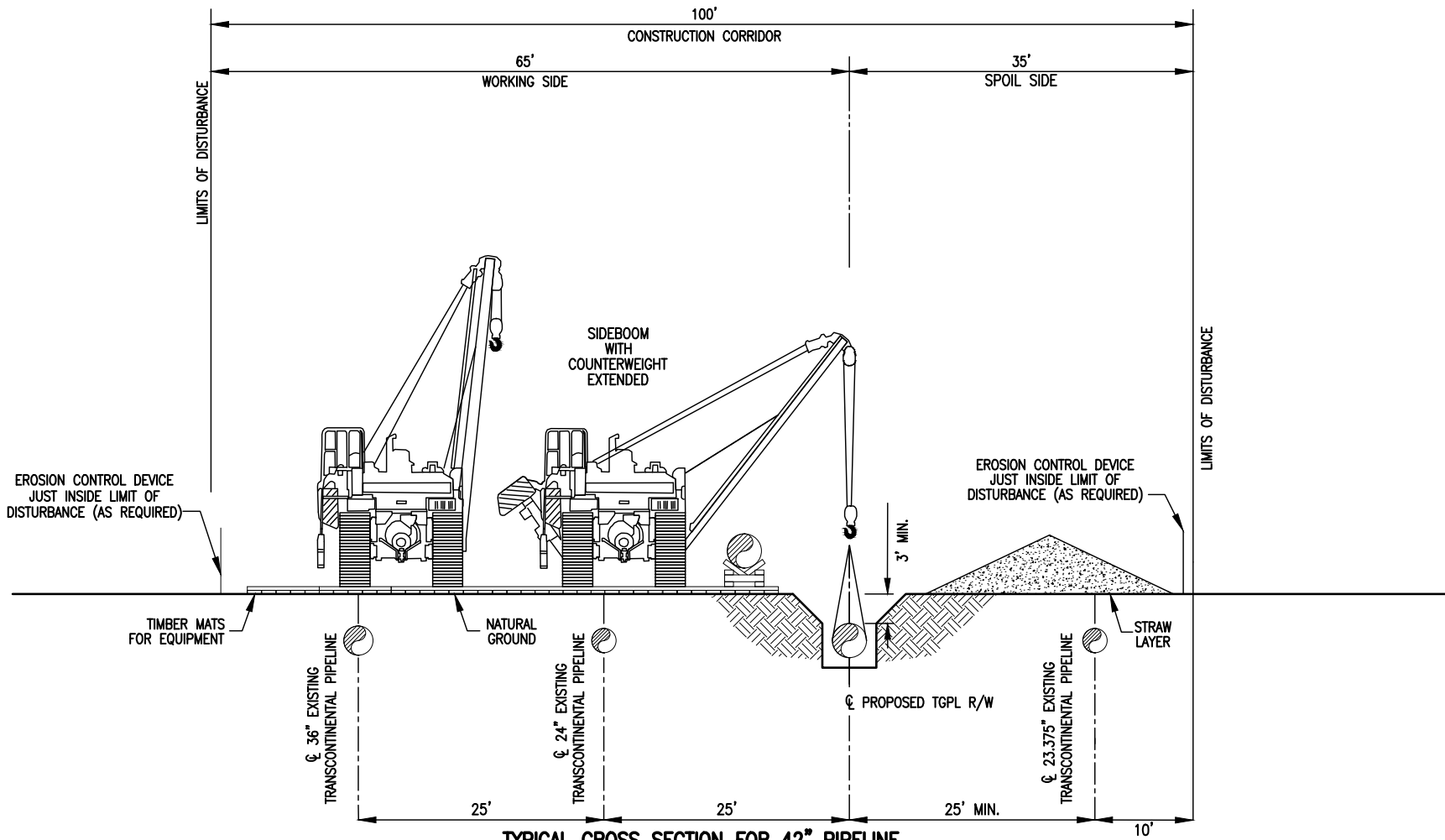


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B-192

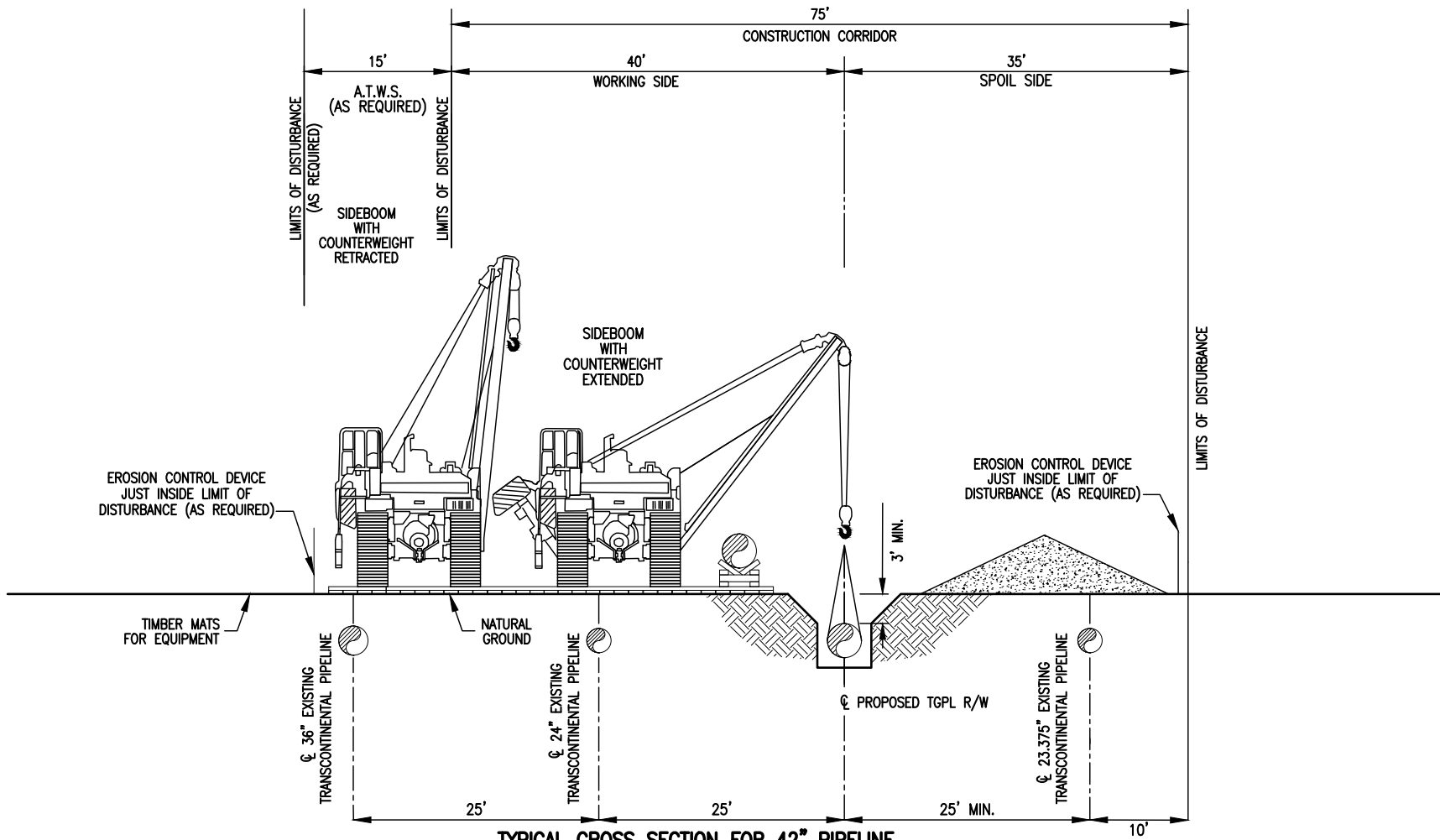


**TYPICAL CROSS SECTION FOR 42" PIPELINE
OVER EXISTING TRANSCONTINENTAL PIPELINES**

DRAWING NO.		REFERENCE TITLE		<p align="center"> TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" UNITY LOOP LYCOMING COUNTY, PENNSYLVANIA </p> 						
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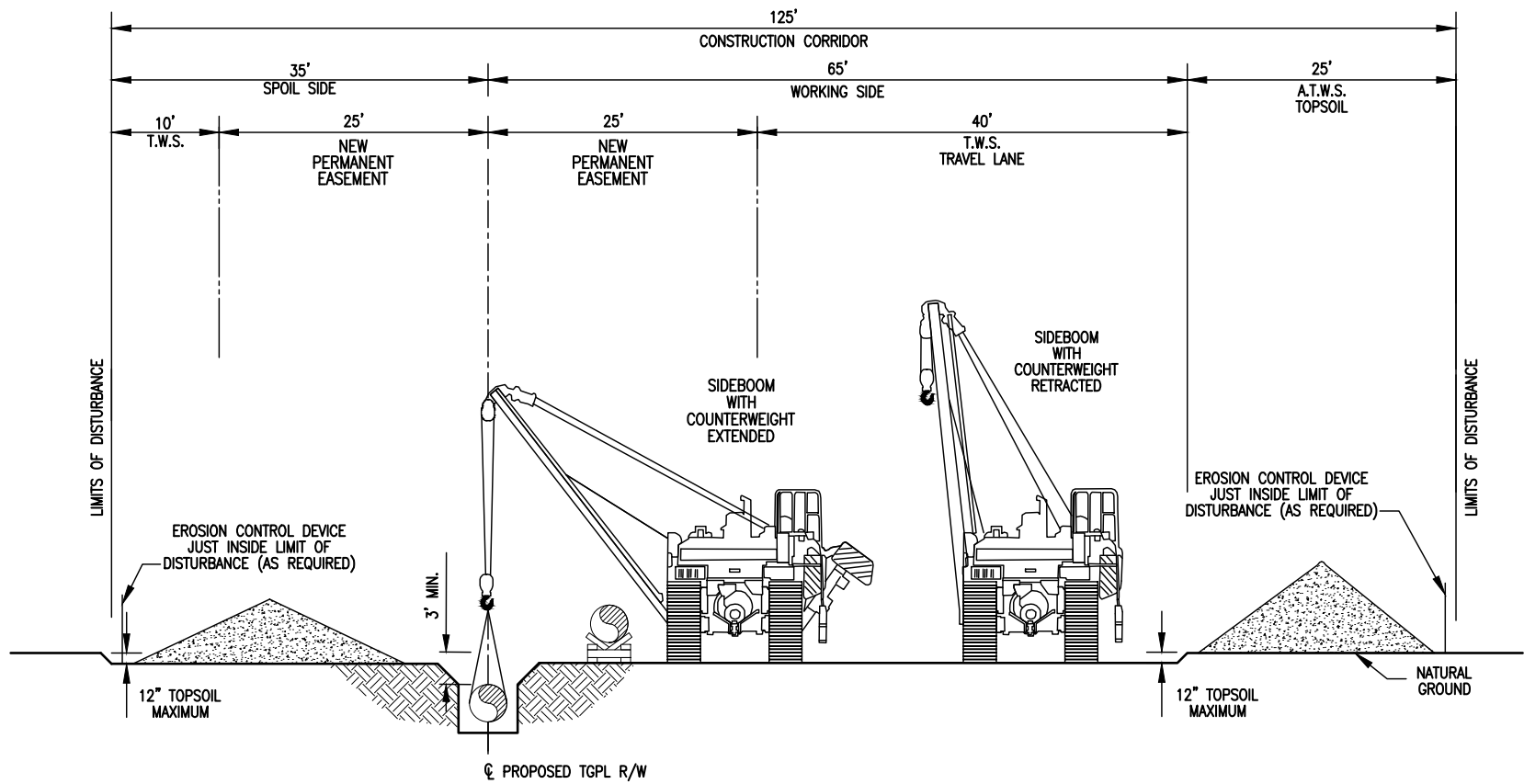


TYPICAL CROSS SECTION FOR 42" PIPELINE WITHIN SATURATED WETLAND AREAS OVER EXISTING LINES


DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" UNITY LOOP LYCOMING COUNTY, PENNSYLVANIA							
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B-194



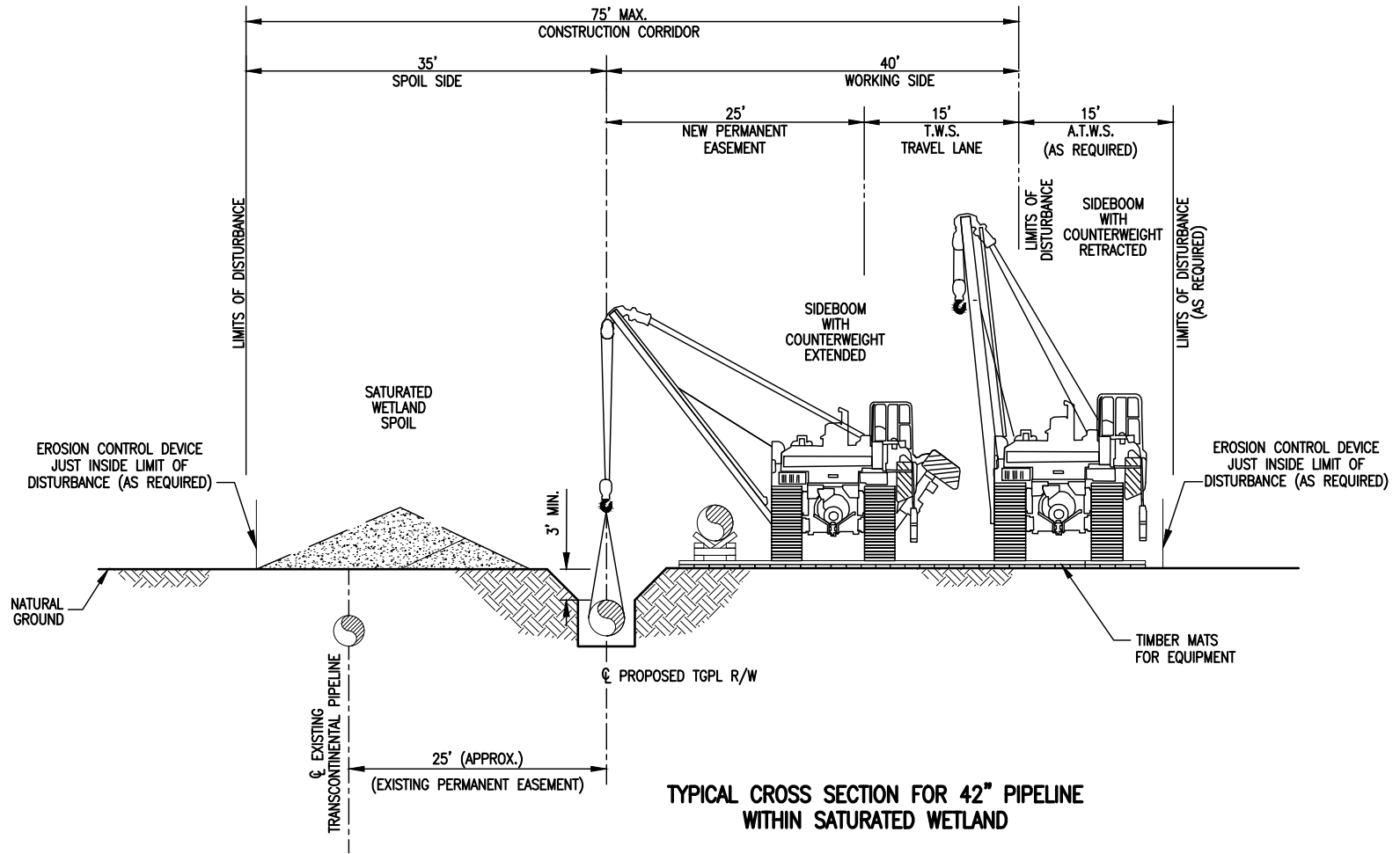
TYPICAL CROSS SECTION FOR 42" PIPELINE
 FULL WIDTH TOPSOIL STRIPPING - NOT ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" UNITY LOOP LYCOMING COUNTY, PENNSYLVANIA							
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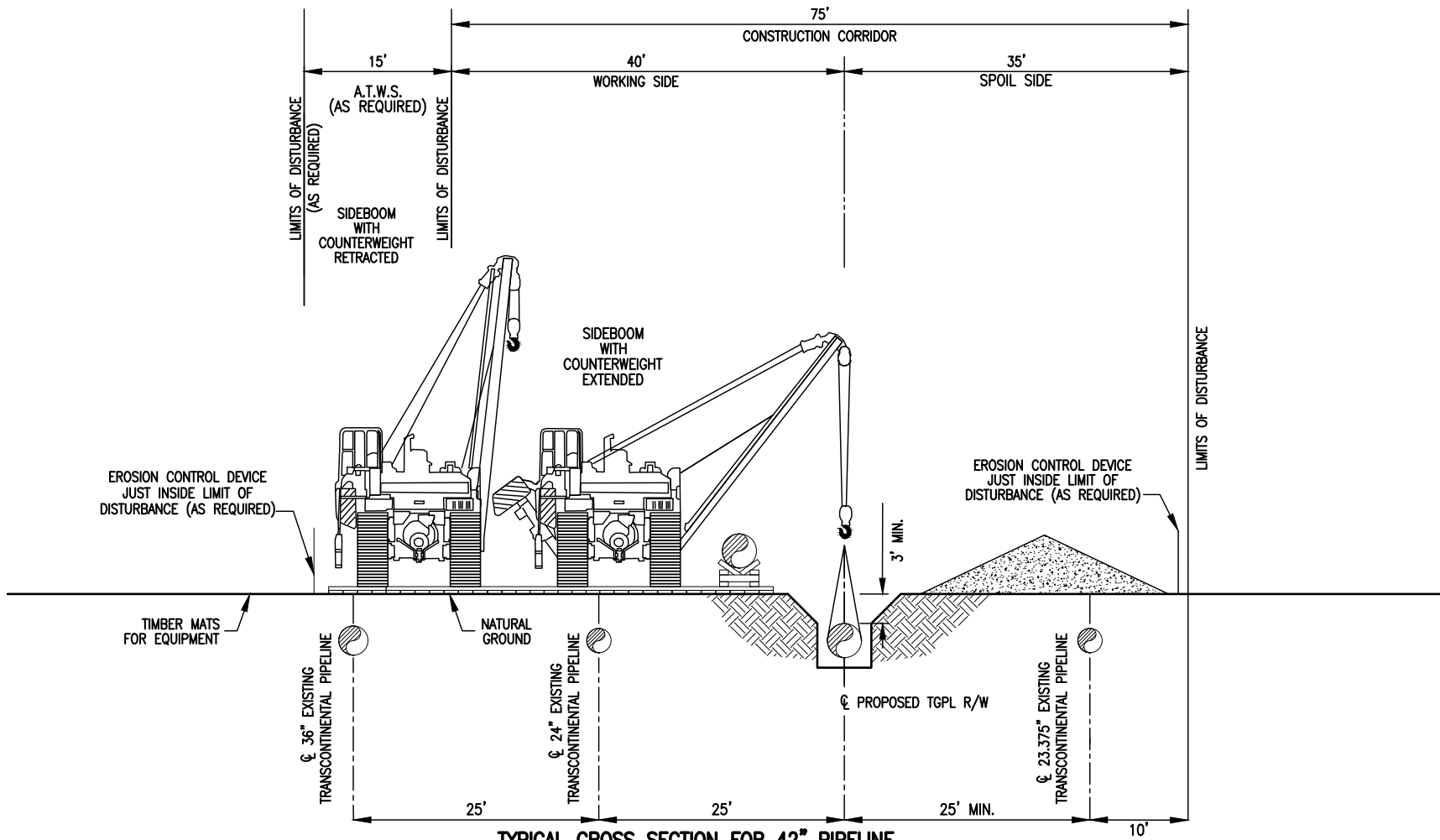
B-195



DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" UNITY LOOP LYCOMING COUNTY, PENNSYLVANIA						
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							WO: 1161145	2:57pm 3/20/2015	c:\ramir	OF 12



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TYPICAL CROSS SECTION FOR 42" PIPELINE
WITHIN SATURATED WETLAND AREAS OVER EXISTING LINES

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 42" UNITY LOOP LYCOMING COUNTY, PENNSYLVANIA							
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							WO: 1161145	2:58pm	3/20/2015	c:\tramir	SHEET 12 OF 12





Transcontinental Gas Pipe Line Company LLC

TYPICAL RIGHT-OF-WAY CROSS-SECTION
ATLANTIC SUNRISE PROJECT
PROPOSED 30" MAINLINE "A" AND "B" VIRGINIA REPLACEMENTS
M.P. 1578.67 TO M.P. 1583.32
PRINCE WILLIAM COUNTY, VIRGINIA


F-XS-1578.7-AB-01

DATE: 03/31/2015 REV. 0

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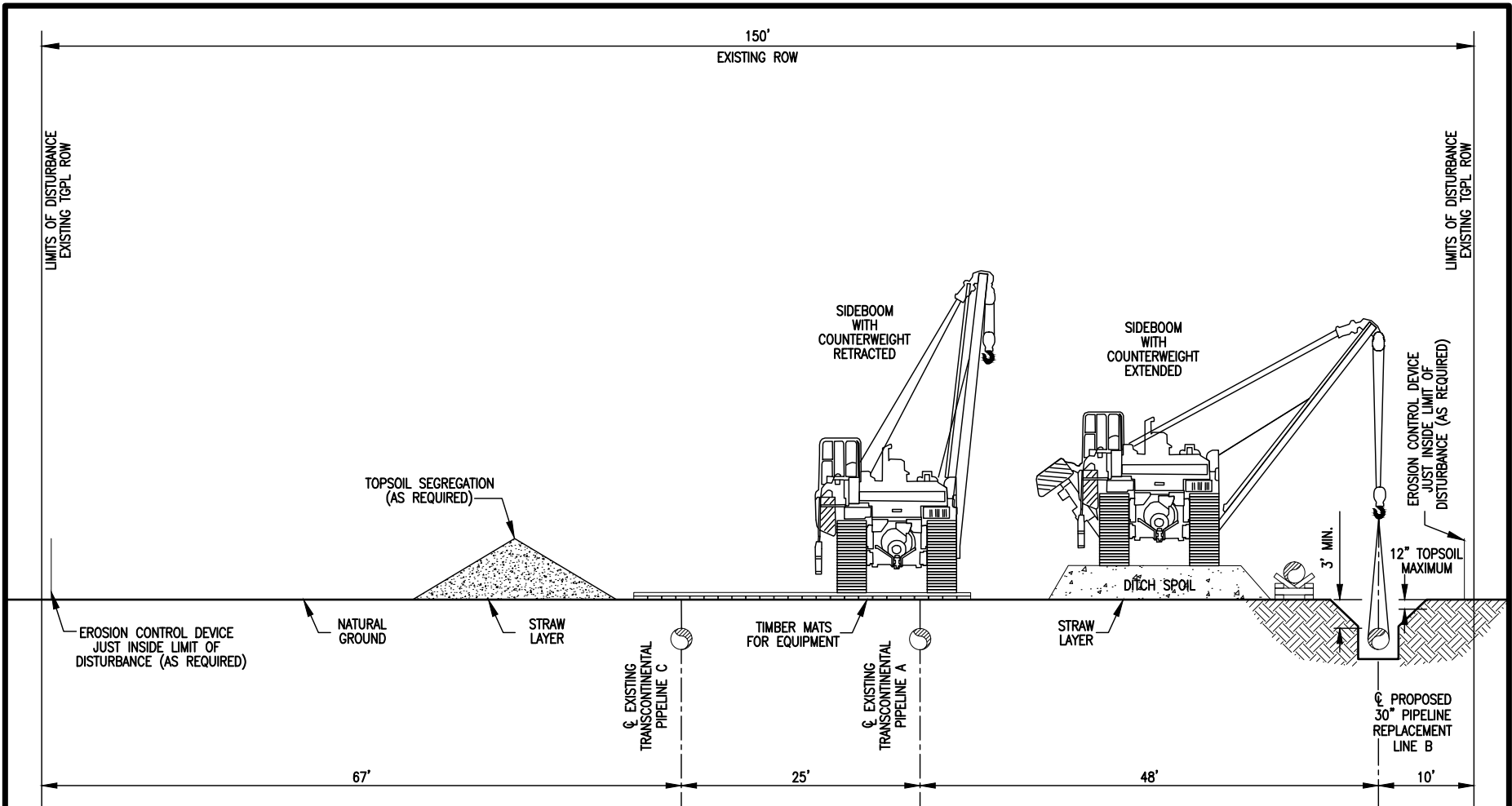
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F-XS-1578.7-AB-01	03	150	TOPSOIL STRIPPING AS REQUIRED - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-1578.7-AB-01	04	150 ~ 165	TOPSOIL STRIPPING AS REQUIRED - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-1578.7-AB-01	05	150 ~ 165	WITHIN SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-1578.7-AB-01	06	150 ~ 165	WITHIN UNSATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-1578.7-AB-01	07	150	TOPSOIL STRIPPING AS REQUIRED - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
F-XS-1578.7-AB-01	08	150 ~ 165	TOPSOIL STRIPPING AS REQUIRED - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015
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F-XS-1578.7-AB-01	10	150 ~ 165	WITHIN UNSATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/31/2015

DRAWING NO.		REFERENCE TITLE			TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" MAINLINE "A" AND "B" VIRGINIA REPLACEMENTS PRINCE WILLIAM COUNTY, VIRGINIA					
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B-201



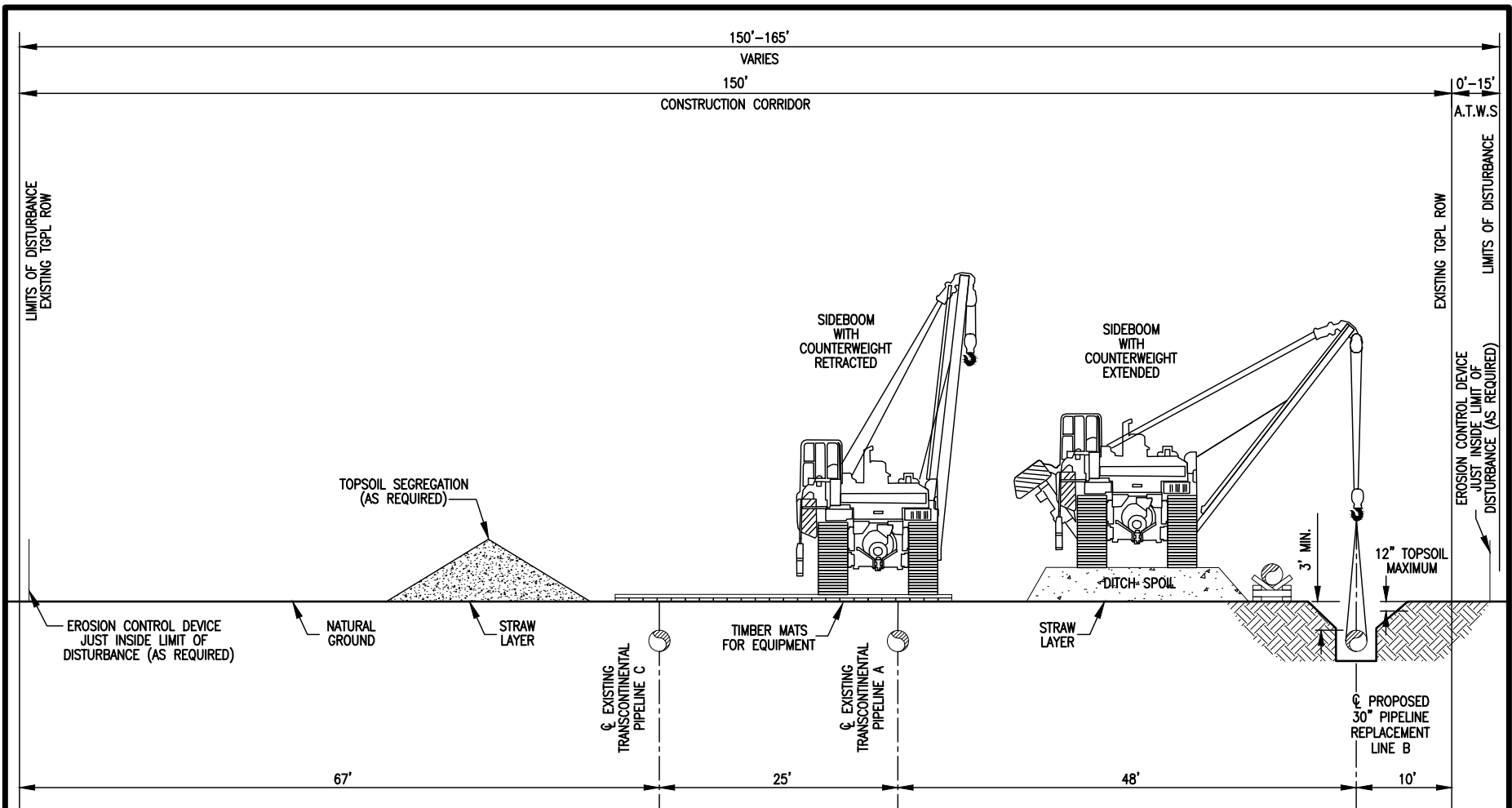
TYPICAL CROSS SECTION FOR 30" PIPELINE REPLACEMENT LINE B
TOPSOIL STRIPPING AS REQUIRED - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" MAINLINE "A" AND "B" VIRGINIA REPLACEMENTS PRINCE WILLIAM COUNTY, VIRGINIA							
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B-202



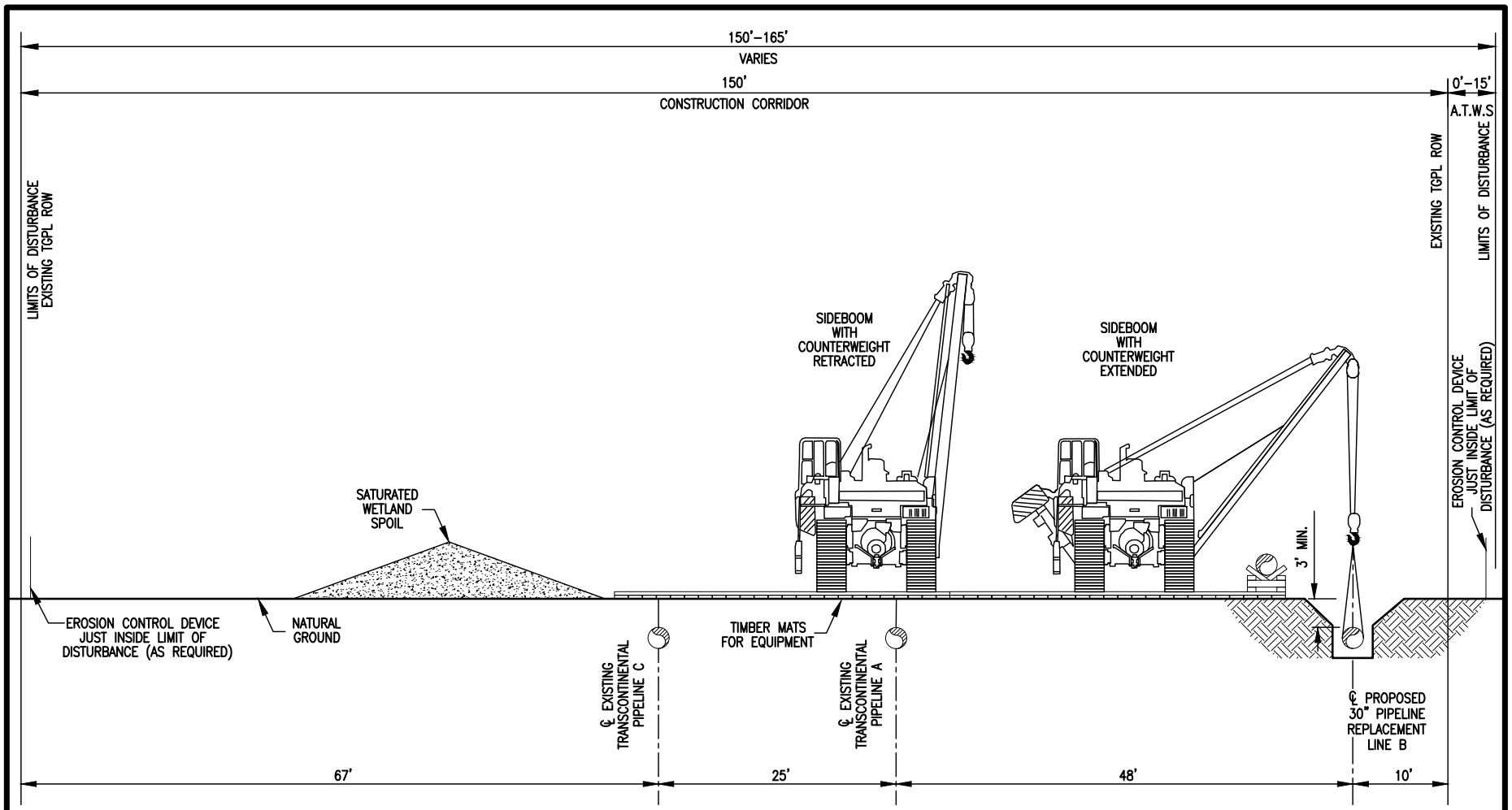
**TYPICAL CROSS SECTION FOR 30" PIPELINE REPLACEMENT LINE B
TOPSOIL STRIPPING AS REQUIRED - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE**

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B-203



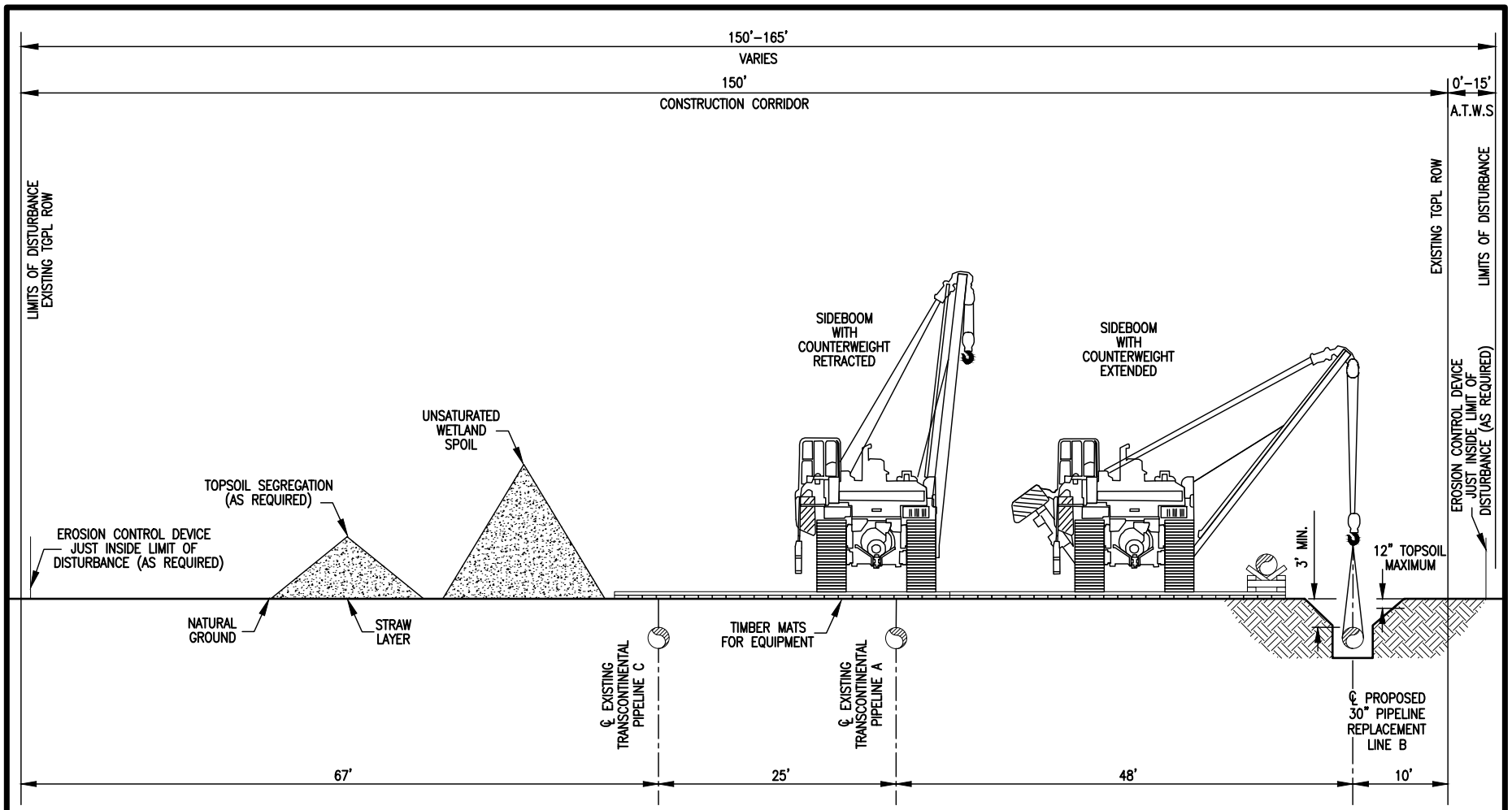
TYPICAL CROSS SECTION FOR 30" PIPELINE REPLACEMENT LINE B
 WITHIN SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" MAINLINE "A" AND "B" VIRGINIA REPLACEMENTS PRINCE WILLIAM COUNTY, VIRGINIA						
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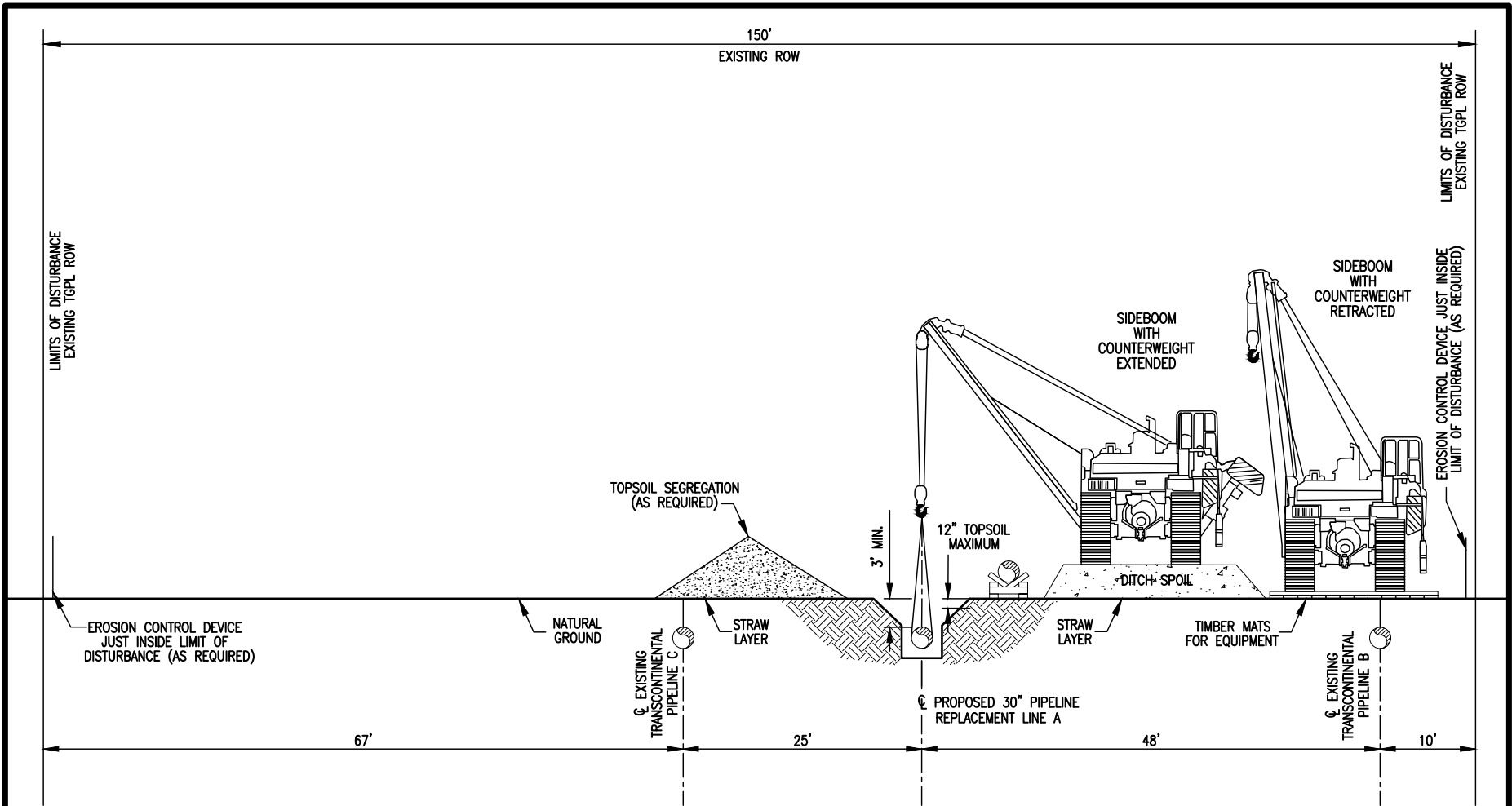
TYPICAL CROSS SECTION FOR 30" PIPELINE REPLACEMENT LINE B
WITHIN UNSATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" MAINLINE "A" AND "B" VIRGINIA REPLACEMENTS PRINCE WILLIAM COUNTY, VIRGINIA							
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B-205



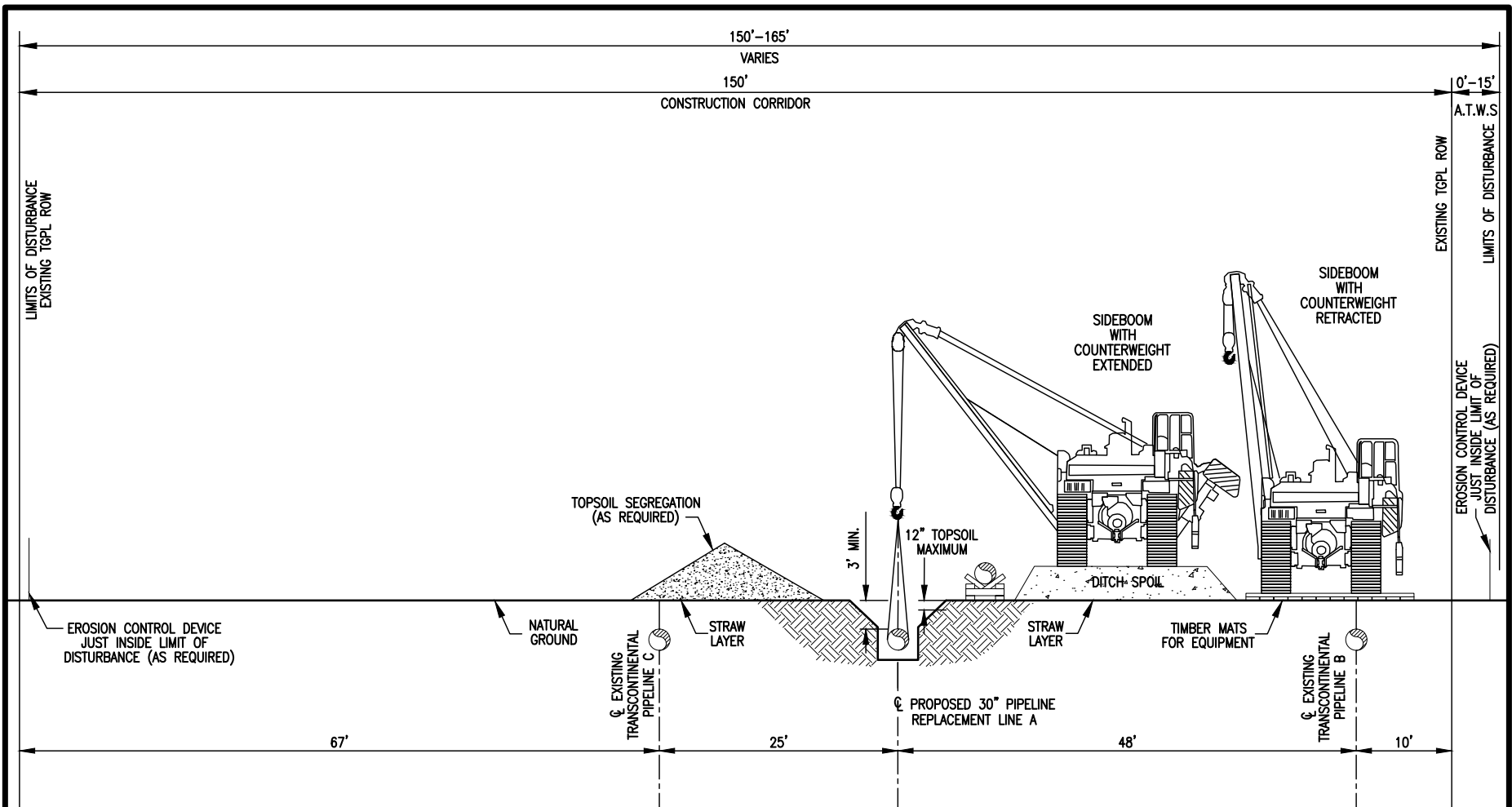
TYPICAL CROSS SECTION FOR 30" PIPELINE REPLACEMENT LINE A
TOPSOIL STRIPPING AS REQUIRED - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" MAINLINE "A" AND "B" VIRGINIA REPLACEMENTS PRINCE WILLIAM COUNTY, VIRGINIA						
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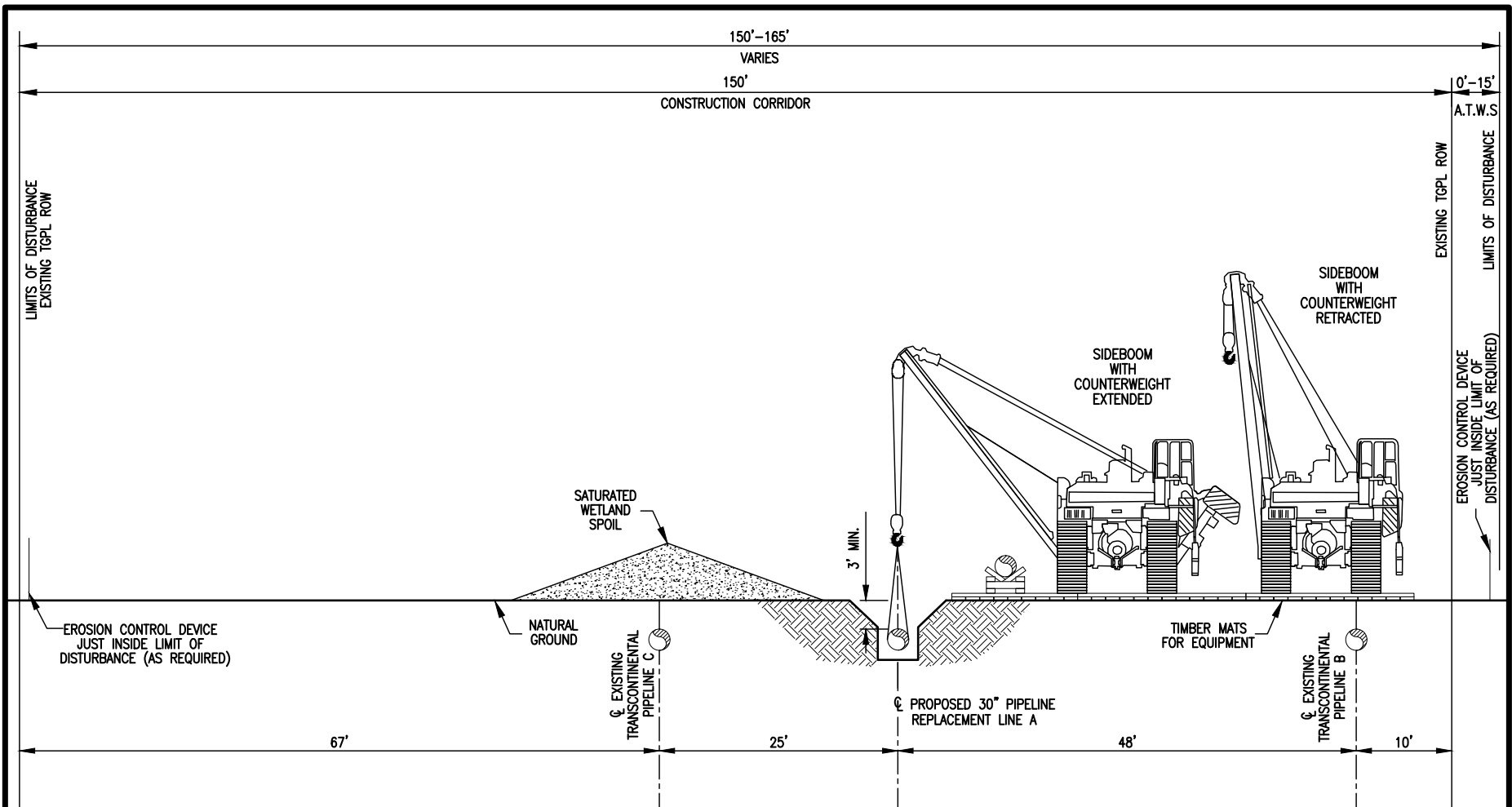
TYPICAL CROSS SECTION FOR 30" PIPELINE REPLACEMENT LINE A
 TOPSOIL STRIPPING AS REQUIRED - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" MAINLINE "A" AND "B" VIRGINIA REPLACEMENTS PRINCE WILLIAM COUNTY, VIRGINIA						
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							WO: 1161536	3/20/2015	j1beasl	OF 10




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TYPICAL CROSS SECTION FOR 30" PIPELINE REPLACEMENT LINE A
 WITHIN SATURATED WETLAND AREAS – ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

DRAWING NO.		REFERENCE TITLE		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION ATLANTIC SUNRISE PROJECT PROPOSED 30" MAINLINE "A" AND "B" VIRGINIA REPLACEMENTS PRINCE WILLIAM COUNTY, VIRGINIA						
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: AT	DATE: 10/06/14	ISSUED FOR BID:	SCALE: NTS
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APPENDIX C

**ADDITIONAL TEMPORARY WORKSPACE ASSOCIATED WITH
CONSTRUCTION OF THE ATLANTIC SUNRISE PROJECT**

APPENDIX C

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres) ^b	Existing Land Use	Justification
CENTRAL PENN LINE NORTH				
Columbia County				
CO-002	0.2	0.1	Upland forest	Road crossing
CO-003	0.2	0.1	Upland forest	Wetland crossing
CO-004	0.6	0.1	Upland forest	Stream crossing
CO-005	0.6	0.1	Upland forest	Stream crossing
CO-006	0.8	0.1	Upland forest	Wetland crossing
CO-007	1.0	0.1	Upland forest	Wetland crossing
CO-008	1.1	0.2	Upland forest	Road crossing
CO-008.1	1.1	0.3	Upland forest	Foreign pipeline crossing
CO-008.2	1.1	<0.1	Upland forest	Foreign pipeline crossing
CO-009	1.1	<0.1	Residential land	Road crossing
CO-010	1.2	<0.1	Residential land	Wetland crossing
CO-012	1.2	0.2	Residential land	Topsoil segregation
CO-013	1.3	0.1	Residential land	Stream crossing
CO-014	1.4	0.3	Upland forest	Stream crossing
CO-015	1.5	0.2	Upland forest	Road crossing
CO-016	1.5	0.2	Agricultural land	Road crossing
CO-017	1.5	0.3	Upland forest; residential land	Road crossing
CO-018	1.6	0.2	Upland forest	Road crossing
CO-019	1.7	0.1	Upland forest	Side slope
CO-020	1.7	0.1	Open land	Side slope
CO-021	1.9	0.1	Upland forest	Stream crossing
CO-022	2.0	0.1	Upland forest	Stream crossing
CO-023	2.1	0.3	Upland forest	Side slope
CO-024	2.1	0.1	Open land	Side slope
CO-025	2.2	0.2	Upland forest	Stream crossing
CO-026	2.5	0.2	Agricultural land	Topsoil segregation
CO-027	2.6	0.1	Open land	Road crossing
CO-028	2.6	0.1	Upland forest	Road crossing
CO-029	2.7	0.1	Upland forest	Road crossing
CO-030	2.7	0.1	Open land	Road crossing
CO-031	2.8	0.1	Upland forest	Road crossing
CO-032	2.8	0.1	Upland forest	Road crossing
CO-033	2.9	0.1	Upland forest	Stream crossing
CO-034	2.8	0.1	Open land	Road crossing
CO-035	3.0	0.1	Upland forest	Stream crossing
CO-036	3.2	0.1	Upland forest	Road crossing
CO-037	3.3	0.1	Upland forest	Road crossing
CO-038	3.3	0.1	Upland forest	Stream crossing
CO-039	3.4	0.1	Upland forest; open land	Stream crossing
CO-040	3.8	0.1	Upland forest	Stream crossing
CO-041	3.8	0.1	Upland forest	Stream crossing
CO-042	3.8	0.1	Upland forest; open land	Stream crossing
CO-043	3.9	0.1	Upland forest	Wetland crossing
CO-044	4.0	0.1	Upland forest	Wetland crossing
CO-045	4.0	0.1	Upland forest; open land	Wetland crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-046	4.1	0.1	Upland forest	Stream crossing
CO-047	4.2	0.1	Upland forest	Stream crossing
CO-048	4.2	0.1	Upland forest; open land	Stream crossing
CO-049	4.2	0.2	Upland forest	Road crossing
CO-050	4.3	0.2	Upland forest; open land	Road crossing
CO-051	4.3	0.1	Open land	Road crossing
CO-052	4.3	0.1	Upland forest; open land	Road crossing
CO-053	4.9	0.1	Upland forest; open land	Point of intersection
CO-054	4.9	0.1	Upland forest; open land	Point of intersection
CO-055	5.0	0.1	Open land	Road crossing
CO-057	5.0	0.1	Upland forest	Road crossing
Luzerne County				
LU-056	5.0	0.1	Open land	Road crossing
LU-058	5.0	0.1	Open land; upland forest	Road crossing
LU-059	5.0	0.1	Upland forest	Stream crossing
LU-060	5.1	<0.1	Upland forest	Wetland crossing
LU-061	5.1	0.1	Upland forest	Stream crossing
LU-062	5.1	0.1	Upland forest	Point of intersection
LU-063	5.3	0.1	Upland forest	Point of intersection
LU-064	5.4	0.1	Upland forest	Point of intersection
LU-065	5.5	0.1	Upland forest	Point of intersection
LU-066	5.5	0.1	Upland forest; open land	Road crossing
LU-067	5.6	0.1	Open land	Road crossing
LU-068	5.5	0.1	Upland forest	Road crossing
LU-069	5.6	0.1	Upland forest	Road crossing
LU-070	5.7	0.1	Agricultural land; upland forest	Topsoil segregation
LU-071	5.7	0.4	Agricultural land; upland forest; open land	Point of intersection
LU-072	5.7	0.2	Agricultural land; upland forest; open land	Topsoil segregation
LU-073	5.8	0.1	Upland forest; open land	Road crossing
LU-074	5.8	0.1	Upland forest	Road crossing
LU-075	5.7	<0.1	Agricultural land	Topsoil segregation
LU-076	5.7	<0.1	Agricultural land	Point of intersection
LU-077	5.8	0.1	Agricultural land	Topsoil segregation
LU-078	5.8	0.1	Agricultural land	Road crossing
LU-079	5.8	0.2	Open land; upland forest	Road crossing
LU-080	6.0	0.2	Upland forest; wetland	Wetland crossing
LU-081	6.1	0.1	Upland forest	Stream crossing
LU-082	6.1	0.1	Open land; upland forest	Wetland crossing
LU-083	6.2	0.1	Upland forest	Point of intersection
LU-084	6.3	0.1	Upland forest	Wetland crossing
LU-085	6.3	0.1	Upland forest	Point of intersection
LU-085.1	6.4	0.2	Wetland	Wetland crossing
LU-086	6.5	0.1	Upland forest	Point of intersection
LU-087	6.5	0.1	Upland forest	Wetland crossing
LU-088	6.6	0.1	Upland forest	Point of intersection
LU-089	6.7	0.1	Upland forest; open land	Valve fabrication

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LU-090	6.7	0.1	Upland forest	Road crossing
LU-091	6.7	0.1	Upland forest	Road crossing
LU-092	6.9	0.1	Upland forest	Wetland crossing
LU-093	7.0	0.1	Upland forest	Wetland crossing
LU-094	7.1	0.1	Upland forest	Wetland crossing
LU-095	7.2	0.2	Upland forest	Wetland crossing
LU-096	7.3	0.1	Upland forest	Road crossing
LU-097	7.3	0.1	Upland forest	Stream crossing
LU-098	7.3	0.1	Upland forest; open land	Stream crossing
LU-099	7.4	0.1	Upland forest	Stream crossing
LU-100	7.4	0.1	Open land	Stream crossing
LU-101	7.4	0.1	Upland forest	Stream crossing
LU-102	7.4	0.1	Open land	Stream crossing
LU-103	7.5	0.1	Upland forest	Stream crossing
LU-104	7.5	0.1	Open land	Stream crossing
LU-105	8.1	0.1	Upland forest	Road crossing
LU-106	8.1	0.1	Open land	Road crossing
LU-107	8.2	0.1	Open land	Road crossing
LU-108	8.2	0.1	Open land	Road crossing
LU-109	M-0056 0.6	0.1	Upland forest	Point of intersection
LU-110	M-0056 0.6	0.2	Upland forest	Point of intersection
LU-111	M-0056 0.7	0.3	Upland forest; open land	Crossover
LU-113	M-0056 0.74	<0.1	Upland forest	Road crossing
LU-114	9.1	0.1	Upland forest	Road crossing
LU-115	9.0	0.1	Upland forest	Road crossing
LU-116	9.1	0.1	Upland forest	Stream crossing
LU-117	9.2	0.1	Upland forest	Stream crossing
LU-118	9.2	0.2	Open land; upland forest	Stream crossing
LU-119	9.3	0.1	Upland forest	Stream crossing
LU-120	9.3	0.1	Open land; upland forest	Stream crossing
LU-121	9.3	0.1	Upland forest	Stream crossing
LU-122	9.6	0.2	Upland forest	Point of intersection
LU-123	9.6	0.4	Agricultural land; upland forest	Crossover
LU-124	9.6	0.1	Agricultural land; upland forest	Topsoil segregation
LU-125	9.7	0.1	Residential	Road crossing
LU-126	9.8	0.1	Agricultural land	Road crossing
LU-127	9.8	0.1	Agricultural land	Point of intersection
LU-128	9.8	0.1	Agricultural land	Road crossing
LU-129	9.8	0.2	Agricultural land	Road crossing
LU-130	9.8	0.2	Agricultural land	Topsoil segregation
LU-131	9.9	0.1	Agricultural land	Road crossing
LU-132	9.9	0.1	Agricultural land	Road crossing
LU-133	9.9	0.1	Agricultural land	Topsoil segregation
LU-134	10.1	0.1	Open land	Stream crossing
LU-135	10.2	0.1	Agricultural land	Stream crossing
LU-136	10.2	0.2	Wetland	Wetland crossing
LU-137	10.3	0.2	Upland forest	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LU-138	10.3	0.1	Open land	Stream crossing
LU-139	10.9	0.1	Upland forest	Road crossing
LU-140	10.9	0.1	Upland forest	Road crossing
LU-141	11.2	0.1	Open land	Stream crossing
LU-142	11.2	0.1	Upland forest	Stream crossing
LU-143	11.2	0.1	Open land; upland forest	Stream crossing
LU-144	11.4	0.1	Open land; upland forest	Road crossing
LU-145	11.4	0.1	Open land	Road crossing
LU-146	11.4	0.1	Upland forest	Road crossing
LU-147	11.4	0.1	Upland forest	Road crossing
LU-148	11.5	0.1	Upland forest	Wetland crossing
LU-149	11.8	0.1	Upland forest	Stream crossing
LU-150	11.9	0.1	Upland forest	Stream crossing
LU-151	12.1	0.1	Upland forest	Stream crossing
LU-152	12.2	0.1	Upland forest	Stream crossing
LU-153	12.3	0.1	Upland forest	Wetland crossing
LU-154	12.5	0.1	Upland forest	Road crossing
LU-155	12.5	0.1	Upland forest	Road crossing
LU-156	12.9	0.1	Upland forest	Stream crossing
LU-157	12.9	0.1	Upland forest; open land	Stream crossing
LU-158	12.9	0.1	Upland forest	Road crossing
LU-159	13.0	0.1	Upland forest	Road crossing
LU-160	13.0	0.1	Upland forest	Stream crossing
LU-161	13.2	0.1	Upland forest	Stream crossing
LU-162	13.3	0.1	Upland forest	Road crossing
LU-163	13.4	0.1	Upland forest; open land	Road crossing
LU-164	13.4	<0.1	Upland forest	Road crossing
LU-165	13.4	0.3	Upland forest; wetland	Road crossing
LU-166	13.8	0.1	Upland forest	Wetland crossing
LU-166.1	13.8	<0.1	Wetland	Wetland crossing
LU-167	13.9	0.1	Upland forest	Road crossing
LU-168	14.0	0.2	Upland forest	Stream crossing
LU-169	14.1	0.1	Upland forest; open land	Road crossing
LU-170	14.2	0.1	Upland forest	Road crossing
LU-171	14.4	0.1	Upland forest	Road crossing
LU-172	14.4	0.1	Upland forest; open land	Road crossing
LU-173	14.4	0.1	Upland forest	Stream crossing
LU-174	14.5	0.1	Upland forest; open land	Stream crossing
LU-175	14.5	0.1	Upland forest	Stream crossing
LU-176	14.9	0.1	Upland forest	Wetland crossing
LU-177	15.0	0.1	Upland forest	Stream crossing
LU-178	15.4	0.1	Upland forest	Road crossing
LU-179	15.5	0.1	Residential	Road crossing
LU-180	15.5	0.1	Residential	Topsoil segregation
LU-181	15.7	0.1	Upland forest	Stream crossing
LU-182	15.7	0.1	Upland forest; open land	Stream crossing
LU-183	15.8	0.1	Upland forest	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LU-184	15.9	0.5	Upland forest; agricultural land	Topsoil segregation
LU-185	16.0	0.2	Agricultural land	Road crossing
LU-186	16.0	0.2	Agricultural land	Road crossing
LU-187	16.1	<0.1	Open land; residential	Road crossing
LU-188	16.1	<0.1	Open land; residential	Road crossing
LU-189	16.2	0.1	Agricultural land	Topsoil segregation
LU-190	16.5	0.2	Upland forest; open land	Point of intersection
LU-191	16.4	0.1	Open land; upland forest	Crossover
LU-192	16.5	0.1	Open land; upland forest	Road crossing
LU-193	16.6	0.2	Upland forest; residential	Road crossing
LU-194	16.6	<0.1	Upland forest	Wetland crossing
LU-195	16.6	<0.1	Wetland	Wetland crossing
LU-196	16.6	0.1	Open land; upland forest	Stream crossing
LU-197	16.6	<0.1	Wetland	Wetland crossing
LU-198	16.7	0.2	Upland forest	Road crossing
LU-199	16.7	0.2	Upland forest	Stream crossing
LU-200	17.0	0.1	Upland forest	Drag section
LU-201	17.1	0.2	Upland forest; open land	Point of intersection
LU-202	17.2	0.1	Upland forest; open land	Road crossing
LU-203	17.1	0.4	Open land; upland forest	Crossover
LU-204	17.2	0.1	Upland forest	Road crossing
LU-205	17.2	0.1	Upland forest; open land	Stream crossing
LU-206	17.5	0.1	Upland forest	Road crossing
LU-207	17.5	0.1	Upland forest; open land	Road crossing
LU-208	17.5	0.1	Open land	Road crossing
LU-208.1	17.5	<0.1	Open land	Road crossing
LU-208.2	17.5	<0.1	Open land	Road crossing
LU-209	17.6	0.1	Upland forest	Stream crossing
LU-209.1	17.6	0.1	Upland forest	Access road
LU-209.2	17.6	0.1	Upland forest	Access road
LU-210	17.6	0.1	Upland forest; open land	Stream crossing
LU-211	17.6	0.1	Upland forest; open land	Stream crossing
LU-212	17.7	0.1	Upland forest	Stream crossing
LU-213	18.0	0.2	Upland forest	Stream crossing
LU-214	18.1	0.1	Wetland	Wetland crossing
LU-215	18.2	0.2	Upland forest	Stream crossing
LU-216	18.2	0.1	Upland forest	Road crossing
LU-217	18.3	0.1	Upland forest	Road crossing
LU-218	18.3	0.3	Upland forest	Road crossing
LU-219	18.8	0.1	Upland forest	Stream crossing
LU-220	18.8	0.1	Upland forest	Stream crossing
LU-221	18.9	0.1	Upland forest; open land	Road crossing
LU-222	18.9	0.1	Agricultural land	Road crossing
LU-223	19.2	0.1	Upland forest	Road crossing
LU-224	19.3	0.1	Upland forest; open land	Road crossing
LU-225	19.4	0.2	Upland forest	Stream crossing
LU-226	19.4	0.1	Agricultural land	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LU-227	19.4	0.1	Agricultural land	Topsoil segregation
LU-228	19.5	0.1	Upland forest; agricultural land	Topsoil segregation
LU-229	19.6	0.2	Upland forest; agricultural land	Topsoil segregation
LU-230	19.6	0.2	Agricultural land	Crossover
LU-231	19.6	0.2	Agricultural land	Crossover
LU-232	19.7	0.2	Agricultural land	Topsoil segregation
LU-233	19.8	0.3	Upland forest	Stream crossing
LU-234	19.8	0.3	Upland forest	Wetland crossing
LU-234.1	19.9	0.1	Wetland	Wetland crossing
LU-235	20.0	0.1	Upland forest	Wetland crossing
LU-235.1	20.0	<0.1	Wetland	Wetland crossing
LU-236	20.0	0.1	Residential; open land; upland forest	Road crossing
LU-237	20.1	0.2	Agricultural land	Road crossing
LU-238	20.1	0.1	Residential; agricultural land	Topsoil segregation
LU-239	20.1	0.1	Residential; agricultural land	Road crossing
LU-240	20.2	0.2	Agricultural land	Topsoil segregation
LU-241	20.2	0.1	Agricultural land	Topsoil segregation
LU-242	20.4	0.3	Upland forest	Side slope
LU-243	20.9	0.2	Upland forest; agricultural land	Topsoil segregation
LU-244	20.9	0.1	Agricultural land	Road crossing
LU-245	20.9	0.2	Agricultural land	Road crossing
LU-246	21.0	0.3	Residential; agricultural land	Topsoil segregation
LU-250	21.3	0.6	Upland forest; open land	Wetland crossing
LU-251	21.3	0.1	Open land	Crossover
LU-251.1	21.4	0.2	Wetland	Wetland crossing
LU-252	21.6	0.4	Open land; agricultural land	Point of intersection
LU-253	21.8	0.1	Agricultural land	Road crossing
LU-254	21.8	0.1	Agricultural land	Road crossing
LU-255	21.8	0.1	Agricultural land	Point of intersection
LU-256	21.8	0.1	Upland forest; agricultural land	Point of intersection
LU-257	21.9	0.1	Upland forest	Point of intersection
LU-258	22.0	0.1	Upland forest	Point of intersection
LU-259	M-0060 0.1	0.1	Upland forest	Stream crossing
LU-260	M-0060 0.2	0.1	Upland forest	Stream crossing
LU-261	M-0060 0.2	0.1	Upland forest open land	Road crossing
LU-262	M-0060 0.3	0.2	Upland forest; open land	Road crossing
LU-263	M-0060 0.3	<0.1	Upland forest; open land	Road crossing
LU-264	M-0060 0.3	0.2	Upland forest; open land	Road crossing
LU-265	M-0060 0.3	<0.1	Upland forest	Road crossing
LU-266	M-0060 0.3	0.1	Upland forest	Road crossing
LU-266.1	M-0060 0.4	<0.1	Upland forest	Road crossing
LU-266.2	M-0060 0.4	0.1	Upland forest	Stream crossing
LU-267	M-0060 0.4	0.1	Upland forest	Stream crossing
LU-267.1	M-0060 0.8	0.1	Upland forest	Stream crossing
LU-268	M-0060 0.8	0.1	Upland forest	Stream crossing
LU-269	M-0060 0.8	0.1	Upland forest	Point of intersection
LU-269.1	M-0060 0.9	0.1	Open land	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LU-270	24.0	0.5	Agricultural land	Topsoil segregation
LU-271	24.1	0.1	Agricultural land; upland forest; open land	Road crossing
LU-272	24.1	0.1	Upland forest; agricultural land; open land	Road crossing
LU-273	24.2	0.1	Open land; agricultural land	Road crossing
LU-274	24.2	0.1	Agricultural land	Topsoil segregation
LU-275	24.2	0.1	Agricultural land; open land	Road crossing
LU-276	24.3	0.1	Agricultural land	Stream avoidance
LU-277	24.3	0.3	Agricultural land	Road crossing
LU-278	24.4	0.1	Upland forest	Road crossing
LU-279	24.4	0.1	Agricultural land; open land	Point of intersection
LU-280	24.5	0.1	Upland forest; open land	Stream crossing
LU-281	24.5	0.1	Upland forest	Stream crossing
LU-282	25.0	0.1	Open land	Point of intersection
LU-283	25.0	0.1	Open land	Foreign pipeline crossing
LU-284	25.3	0.4	Agricultural land; open land	Topsoil segregation
LU-285	25.4	0.1	Agricultural land	Topsoil segregation
LU-286	25.5	0.1	Residential	Road crossing
LU-287	25.5	<0.1	Open land	Road crossing
LU-288	25.5	0.2	Open land	Road crossing
LU-289	25.5	0.1	Open land	Road crossing
LU-290	25.5	0.2	Open land; industrial and commercial land	Road crossing
LU-291	25.6	0.1	Upland forest	Stream crossing
LU-292	25.6	0.1	Upland forest	Point of intersection
LU-293	25.7	0.1	Agricultural land; open land	Point of intersection
LU-294	25.7	0.1	Agricultural land; open land	Road crossing
LU-295	26.0	0.1	Upland forest	Road crossing
LU-296	26.0	0.1	Upland forest	Road crossing
LU-297	26.2	0.1	Upland forest	Spoil storage
LU-297.1	26.5	0.3	Upland forest	Stream crossing
LU-297.2	26.6	0.1	Wetland	Wetland crossing
LU-297.3	26.7	0.1	Upland forest	Stream crossing
LU-298	26.7	<0.1	Upland forest	Road crossing
LU-299	26.8	0.1	Upland forest	Road crossing
LU-300	26.8	0.1	Upland forest	Road crossing
LU-301	26.8	0.1	Upland forest	Road crossing
LU-302	27.0	0.1	Upland forest	Road crossing
LU-302.1	27.1	<0.1	Wetland	Wetland crossing
LU-303	27.1	0.1	Agricultural land; upland forest	Stream crossing
LU-304	27.1	0.2	Agricultural land; upland forest	Stream crossing
Wyoming County				
WY-305	27.2	0.4	Agricultural land	Topsoil segregation
WY-306	27.4	0.2	Agricultural land	Topsoil segregation
WY-306.1	27.5	0.1	Upland forest	Stream crossing
WY-306.2	27.6	0.1	Upland forest	Stream crossing
WY-306.7	28.2	0.1	Upland forest	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
WY-306.8	28.3	0.1	Upland forest	Stream crossing
WY-306.9	28.8	0.1	Upland forest	Stream crossing
WY-306.10	28.9	0.1	Upland forest	Stream crossing
WY-307	29.2	0.1	Upland forest	Point of intersection
WY-308	29.9	0.1	Upland forest	Road crossing
WY-309	29.9	0.1	Agricultural land	Road crossing
WY-310	30.0	0.3	Agricultural land	Topsoil segregation
WY-311	30.0	0.1	Agricultural land	Road crossing
WY-312	30.0	0.1	Agricultural land	Road crossing
WY-313	30.1	0.5	Agricultural land	Topsoil segregation
WY-314	30.3	0.1	Upland forest	Wetland crossing
WY-315	30.3	0.1	Upland forest	Side slope
WY-316	30.6	0.1	Upland forest	Point of intersection
WY-317	30.7	0.2	Upland forest; open land	Foreign pipeline crossing
WY-318	31.0	0.2	Upland forest	Foreign pipeline crossing
WY-319	31.2	0.1	Upland forest	Stream crossing
WY-320	31.3	0.1	Upland forest	Stream crossing
WY-321	31.5	0.1	Open land	Point of intersection
WY-323	31.7	0.1	Upland forest; open land	Road crossing
WY-324	31.8	0.1	Upland forest	Pipeline crossing
WY-325	31.7	0.1	Upland forest; open land	Road crossing
WY-326	32.2	0.1	Upland forest	Point of intersection
WY-327	32.2	0.3	Upland forest	Foreign pipeline crossing
WY-328	32.4	0.2	Upland forest	Side slope
WY-329	32.5	0.1	Upland forest	Stream crossing
WY-330	32.5	0.2	Open land; upland forest	Topsoil segregation
WY-331	32.6	0.1	Upland forest	Stream crossing
WY-332	32.7	0.1	Upland forest	Stream crossing
WY-333	32.7	0.1	Upland forest	Stream crossing
WY-334	32.8	0.1	Agricultural land	Point of intersection
WY-335	32.8	0.1	Agricultural land	Wetland crossing
WY-336	32.9	<0.1	Agricultural land	Wetland crossing
WY-337	33.0	0.4	Agricultural land ; open land	Topsoil segregation
WY-338	33.0	0.1	Open land	Road crossing
WY-339	33.1	0.1	Open land	Road crossing
WY-340	33.1	<0.1	Agricultural land; open land	Road crossing
WY-341	33.2	0.5	Agricultural land	Topsoil segregation
WY-342	33.2	0.1	Agricultural land	Drag section
WY-343	34.3	0.2	Upland forest; open land	Foreign pipeline crossing
WY-344	34.8	0.1	Open land	Horizontal directional drill
WY-345	34.8	0.2	Open land	Horizontal directional drill
WY-346	34.9	1.1	Open land	Horizontal directional drill
WY-347	34.9	1.5	Open land	Horizontal directional drill
WY-348	35.1	0.2	Agricultural land; residential	Horizontal directional drill
WY-349	35.2	0.2	Agricultural land	Topsoil segregation
WY-350	35.2	0.9	Agricultural land	Horizontal directional drill
WY-351	35.3	0.5	Agricultural land	Horizontal directional drill

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
WY-352	35.4	1.8	Agricultural land	Horizontal directional drill
WY-353	35.4	0.6	Agricultural land	Horizontal directional drill
WY-354	35.6	1.0	Agricultural land	Topsoil segregation
WY-356	35.9	0.1	Upland forest	Stream crossing
WY-357	35.9	0.1	Upland forest	Stream crossing
WY-358	35.9	0.1	Upland forest	Stream crossing
WY-359	35.9	0.1	Upland forest	Stream crossing
WY-360	36.3	0.4	Upland forest	Point of intersection
WY-361	36.3	0.4	Upland forest	Side slope
WY-362	36.8	0.1	Upland forest	Stream crossing
WY-363	36.9	0.1	Agricultural land	Wetland crossing
WY-364	36.9	0.1	Agricultural land	Topsoil segregation
WY-365	37.0	0.2	Agricultural land	Topsoil segregation
WY-366	37.0	0.1	Upland forest	Stream crossing
WY-367	37.1	0.1	Upland forest	Stream crossing
WY-368	37.2	0.1	Upland forest	Topsoil segregation
WY-369	37.2	0.1	Agricultural land	Road crossing
WY-370	37.2	0.1	Agricultural land; upland forest	Road crossing
WY-371	37.2	0.1	Upland forest	Stream crossing
WY-372	37.3	0.1	Agricultural land; upland forest	Stream crossing
WY-373	37.5	0.5	Agricultural land; upland forest	Topsoil segregation
WY-374	37.6	0.1	Agricultural land	Point of intersection
WY-375	37.6	0.1	Upland forest	Wetland crossing
WY-376	37.6	0.2	Wetland	Wetland crossing
WY-377	37.7	0.1	Upland forest	Wetland crossing
WY-378	37.8	0.1	Agricultural land	Topsoil segregation
WY-379	37.8	0.6	Agricultural land	Wetland crossing
WY-380	38.0	0.1	Residential land	Road crossing
WY-381	38.0	0.1	Residential land	Road crossing
WY-382	38.0	<0.1	Residential land	Road crossing
WY-383	38.3	0.1	Upland forest	Side slope
WY-384	38.4	0.1	Upland forest	Road crossing
WY-385	38.4	0.1	Upland forest	Road crossing
WY-386	38.4	0.1	Upland forest	Road crossing
WY-387	38.4	0.1	Upland forest	Road crossing
WY-388	38.5	0.1	Upland forest	Wetland crossing
WY-389	38.5	0.1	Upland forest	Wetland crossing
WY-390	38.6	0.1	Upland forest	Wetland crossing
WY-391	38.6	0.1	Upland forest	Wetland crossing
WY-392	38.8	0.1	Upland forest	Road crossing
WY-393	38.8	0.1	Upland forest	Road crossing
WY-394	39.0	0.7	Agricultural land	Topsoil segregation
WY-395	39.2	0.4	Agricultural land	Topsoil segregation
WY-396	39.3	0.1	Agricultural land	Wetland crossing
WY-396.1	39.4	0.1	Wetland	Wetland crossing
WY-397	39.4	0.1	Agricultural land	Topsoil segregation
WY-398	39.4	0.1	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
WY-399	39.5	0.1	Agricultural land	Road crossing
WY-400	39.6	0.6	Agricultural land	Topsoil segregation
WY-401	39.8	0.4	Agricultural land	Topsoil segregation
WY-402	39.9	<0.1	Agricultural land	Road crossing
WY-403	39.9	0.1	Agricultural land; open land	Road crossing
WY-404	39.9	0.1	Agricultural land; open land	Road crossing
WY-405	40.1	0.1	Agricultural land	Stream crossing
WY-406	40.1	0.1	Agricultural land	Topsoil segregation
WY-407	40.3	0.2	Agricultural land	Topsoil segregation
WY-408	40.5	0.2	Agricultural land	Topsoil segregation
WY-409	40.6	0.1	Agricultural land	Point of intersection
WY-410	40.6	0.1	Agricultural land	Topsoil segregation
WY-411	40.7	0.2	Agricultural land; upland forest	Topsoil segregation
WY-412	40.9	0.1	Upland forest	Road crossing
WY-413	40.9	<0.1	Upland forest	Road crossing
WY-414	41.0	0.1	Upland forest	Wetland crossing
WY-415	41.0	0.1	Upland forest	Point of intersection
WY-416	41.7	0.2	Upland forest	Side slope
WY-416.1	42.0	0.1	Upland forest	Point of intersection
WY-416.2	42.1	0.1	Upland forest	Point of intersection
WY-417	M-0054 0.0	0.3	Upland forest	Road crossing
WY-418	M-0054 0.0	0.2	Upland forest	Road crossing
WY-419	M-0054 0.1	0.1	Upland forest	Road crossing
WY-420	M-0054 0.1	0.1	Wetland	Wetland crossing
WY-421	M-0054 0.1	0.1	Agricultural land; upland forest	Stream crossing
WY-422	M-0054 0.3	0.5	Agricultural land	Topsoil segregation
WY-422.1	M-0054 0.4	<0.1	Upland forest	Point of intersection
WY-423	43.6	0.1	Upland forest	Point of intersection
WY-424	43.7	0.2	Upland forest	Stream crossing
WY-425	43.7	0.1	Upland forest	Stream crossing
WY-426	43.7	0.6	Agricultural land	Stream crossing
WY-427	43.7	0.1	Agricultural land	Topsoil segregation
WY-428	43.8	0.1	Agricultural land	Stream crossing
WY-429	43.8	0.1	Agricultural land	Road crossing
WY-430	43.8	0.2	Agricultural land	Topsoil segregation
WY-431	43.8	0.3	Agricultural land	Road crossing
WY-432	43.9	0.1	Agricultural land	Road crossing
WY-433	43.9	<0.1	Wetland	Wetland crossing
WY-434	43.9	0.4	Upland forest	Road crossing
WY-435	43.9	0.2	Upland forest	Road crossing
WY-436	44.2	0.8	Agricultural land; upland forest	Topsoil segregation
WY-436.1	44.2	0.1	Agricultural land	Foreign pipeline crossing
WY-436.2	44.3	0.1	Agricultural land	Foreign pipeline crossing
WY-436.3	44.3	0.1	Agricultural land; upland forest	Foreign pipeline crossing
WY-437	44.4	0.1	Agricultural land; upland forest	Foreign pipeline crossing
WY-438	44.4	<0.1	Agricultural land	Road crossing
WY-439	44.4	0.4	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
WY-440	44.4	0.1	Agricultural land	Wetland crossing
WY-441	44.5	0.3	Agricultural land	Stream crossing
WY-442	44.5	0.1	Agricultural land	Stream crossing
WY-443	44.6	0.5	Agricultural land	Topsoil segregation
WY-448	45.2	0.1	Agricultural land; wetland	Road crossing
WY-449	45.2	0.1	Agricultural land	Road crossing
WY-450	45.3	0.2	Agricultural land; upland forest	Topsoil segregation
WY-451	45.3	0.1	Agricultural land; upland forest	Stream crossing
WY-452	45.4	0.1	Upland forest	Stream crossing
WY-453	45.8	0.1	Upland forest	Stream crossing
WY-454	45.8	0.1	Agricultural land	Road crossing
WY-455	45.8	0.1	Agricultural land	Topsoil segregation
WY-456	45.8	0.1	Upland forest	Road crossing
WY-457	45.9	0.1	Upland forest	Road crossing
WY-458	45.9	0.1	Agricultural land	Road crossing
WY-459	45.9	0.1	Agricultural land	Topsoil segregation
WY-460	45.9	0.1	Agricultural land	Stream crossing
WY-461	45.9	0.1	Agricultural land	Stream crossing
WY-462	45.9	0.1	Agricultural land	Topsoil segregation
WY-463	46.0	0.3	Agricultural land	Topsoil segregation
WY-464	46.0	0.1	Agricultural land	Stream crossing
WY-465	46.0	0.1	Agricultural land	Stream crossing
WY-466	46.1	0.1	Upland forest	Railroad crossing
WY-467	46.1	0.2	Upland forest	Railroad crossing
WY-467.1	46.1	0.1	Upland forest	Railroad crossing
WY-468	46.2	0.1	Open land	Railroad crossing
WY-470	46.2	0.1	Upland forest	Side slope
WY-470.1	M-0058 0.1	0.3	Upland forest	Side slope
WY-470.2	M-0058 0.1	0.1	Upland forest	Point of intersection
WY-471	M-0058 0.1	0.1	Upland forest	Stream crossing
WY-472	M-0058 0.2	0.1	Upland forest	Stream crossing
WY-473	M-0058 0.2	0.1	Upland forest	Stream crossing
WY-474	M-0058 0.2	0.1	Upland forest	Stream crossing
WY-475	M-0058 0.4	0.1	Upland forest	Point of intersection
WY-476	46.9	0.2	Residential	Road crossing
WY-477	46.9	0.1	Upland forest	Road crossing
WY-478	47.0	0.1	Upland forest	Side slope
WY-479	47.2	0.2	Upland forest	Stream crossing
WY-480	47.3	0.2	Upland forest	Stream crossing
WY-481	47.4	0.1	Agricultural land	Topsoil segregation
WY-482	47.4	0.3	Agricultural land; upland forest	Topsoil segregation
WY-483	47.6	0.7	Agricultural land; upland forest	Topsoil segregation
WY-484	47.9	0.5	Agricultural land	Topsoil segregation
WY-485	48.0	0.1	Agricultural land	Point of intersection
WY-486	48.1	0.3	Agricultural land	Topsoil segregation
WY-487	48.1	0.1	Agricultural land	Road crossing
WY-488	48.2	0.1	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
WY-489	48.2	0.1	Agricultural land	Topsoil segregation
WY-490	48.2	0.1	Agricultural land	Point of intersection
WY-491	48.4	0.1	Agricultural land	Topsoil segregation
WY-492	48.7	0.1	Upland forest	Road crossing
WY-493	48.7	0.2	Agricultural land; upland forest	Road crossing
WY-494	48.8	0.2	Upland forest	Stream crossing
WY-495	48.9	0.3	Upland forest	Side slope
WY-495.1	49.1	0.1	Agricultural land	Point of intersection
WY-496	49.2	0.4	Agricultural land	Topsoil segregation
WY-497	M-0051 0.0	0.2	Agricultural land	Road crossing
WY-498	M-0051 0.07	0.1	Agricultural land	Road crossing
WY-499	M-0051 0.07	0.1	Upland forest	Stream crossing
WY-500	49.3	0.2	Upland forest	Stream crossing
WY-500.1	49.4	<0.1	Wetland	Wetland crossing
WY-500.2	49.4	0.1	Agricultural land	Point of intersection
WY-501	49.4	0.6	Agricultural land	Stream crossing
WY-502	49.4	0.3	Agricultural land	Topsoil segregation
WY-503	49.5	0.2	Agricultural land	Wetland crossing
WY-504	49.6	<0.1	Residential; upland forest	Road crossing
WY-505	49.6	0.1	Residential; upland forest	Road crossing
WY-506	49.6	0.1	Upland forest	Road crossing
WY-507	49.6	0.3	Upland forest	Road crossing
WY-508	49.7	0.1	Upland forest	Side slope
WY-509	49.9	0.1	Upland forest	Point of intersection
WY-510	50.4	0.2	Agricultural land	Topsoil segregation
WY-510.1	50.5	0.2	Agricultural land	Topsoil segregation
Susquehanna County				
SU-511	51.0	0.1	Agricultural land	Topsoil segregation
SU-512	51.2	0.5	Agricultural land	Topsoil segregation
SU-513	51.3	0.1	Upland forest	Stream crossing
SU-514	51.4	0.1	Upland forest	Stream crossing
SU-515	51.5	0.1	Upland forest; agricultural land	Foreign pipeline crossing
SU-516	51.6	0.2	Agricultural land	Stream crossing
SU-517	51.7	0.2	Agricultural land; upland forest	Stream crossing
SU-517.1	51.8	0.1	Agricultural land	Point of intersection
SU-518	51.8	0.3	Agricultural land	Topsoil segregation
SU-519	51.9	0.1	Agricultural land; upland forest	Foreign pipeline crossing
SU-520	52.0	0.1	Agricultural land	Point of intersection
SU-521	52.0	0.1	Upland forest	Foreign pipeline crossing
SU-522	52.2	0.3	Agricultural land; upland forest	Foreign pipeline crossing
SU-523	52.2	0.1	Open land	Foreign pipeline crossing
SU-524	52.2	0.1	Agricultural land; upland forest	Topsoil segregation
SU-525	52.4	0.2	Agricultural land; upland forest	Road crossing
SU-526	52.4	0.1	Agricultural land; open land	Road crossing
SU-527	52.5	0.6	Agricultural land	Topsoil segregation
SU-528	52.6	0.1	Agricultural land	Road crossing
SU-529	52.7	0.1	Agricultural land; open land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
SU-530	52.8	0.6	Agricultural land; open land	Topsoil segregation
SU-530.1	52.9	0.1	Agricultural land	Access road
SU-530.2	52.9	<0.1	Agricultural land	Access road
SU-531	52.9	0.1	Agricultural land	Topsoil segregation
SU-532	53.1	0.3	Agricultural land	Topsoil segregation
SU-533	53.3	0.2	Agricultural land	Topsoil segregation
SU-533.1	53.3	0.1	Agricultural land	Point of intersection
SU-534	53.4	0.1	Agricultural land	Stream crossing
SU-535	53.4	0.1	Upland forest	Stream crossing
SU-536	53.4	0.1	Upland forest	Road crossing
SU-537	53.5	0.1	Agricultural land	Road crossing
SU-538	53.5	0.1	Agricultural land	Road crossing
SU-539	53.5	0.1	Upland forest	Road crossing
SU-540	53.6	0.5	Agricultural land; upland forest	Topsoil segregation
SU-541	53.7	0.3	Agricultural land	Topsoil segregation
SU-542	53.8	0.2	Upland forest	Road crossing
SU-543	53.9	0.2	Upland forest	Road crossing
SU-544	53.9	0.2	Upland forest	Road crossing
SU-545	53.9	0.2	Agricultural land; upland forest	Road crossing
SU-547	54.0	0.4	Agricultural land; upland forest	Topsoil segregation
SU-548	54.1	0.1	Agricultural land	Stream crossing
SU-548.1	54.1	0.1	Upland forest	Stream crossing
SU-549	54.2	0.1	Upland forest	Stream crossing
SU-550	54.2	0.1	Upland forest	Stream crossing
SU-551	54.4	0.2	Upland forest; open land	Foreign pipeline crossing
SU-552	54.6	0.2	Agricultural land	Topsoil segregation
SU-553	54.7	0.2	Agricultural land	Topsoil segregation
SU-554	54.7	0.1	Agricultural land	Road crossing
SU-555	54.8	0.1	Residential	Road crossing
SU-556	54.8	0.3	Residential	Topsoil segregation
SU-557	54.8	0.1	Residential	Road crossing
SU-558	55.0	0.3	Upland forest	Point of intersection
SU-559	55.0	0.1	Upland forest	Point of intersection
SU-560	55.1	0.1	Upland forest	Point of intersection
SU-561	55.3	0.3	Agricultural land; upland forest	Topsoil segregation
SU-561.1	55.4	0.1	Agricultural land	Wetland crossing
SU-561.2	M-0061 0.0	<0.1	Agricultural land	Wetland crossing
SU-562	M-0061 0.01	0.1	Upland forest	Stream crossing
SU-563	M-0061 0.01	0.1	Upland forest	Point of intersection
SU-564	55.7	0.1	Upland forest	Road crossing
SU-565	55.7	0.1	Upland forest	Road crossing
SU-566	M-0062 0.1	0.1	Agricultural land	Topsoil segregation
SU-567	M-0062 0.2	0.1	Upland forest	Point of intersection
SU-568	M-0062 0.2	0.1	Upland forest	Point of intersection
SU-569	56.4	0.1	Upland forest	Point of intersection
SU-570	56.5	0.6	Agricultural land; upland forest	Topsoil segregation
SU-571	56.6	0.1	Agricultural land; upland forest	Foreign pipeline crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
SU-572	56.7	0.3	Agricultural land; upland forest	Topsoil segregation
SU-572.1	56.7	0.1	Agricultural land; upland forest	Stream crossing
SU-573	56.8	0.1	Upland forest	Stream crossing
SU-574	56.9	0.1	Upland forest; residential	Stream crossing
SU-575	56.9	0.3	Residential; upland forest	Foreign pipeline crossing
SU-576	57.0	0.1	Residential	Road crossing
SU-577	57.0	0.2	Residential; open land	Road crossing
SU-578	57.1	0.1	Agricultural land	Road crossing
SU-579	57.1	0.2	Agricultural land	Topsoil segregation
SU-580	57.2	0.1	Agricultural land; upland forest	Foreign pipeline crossing
SU-581	57.2	0.7	Agricultural land	Crossover
SU-582	57.2	0.1	Agricultural land	Crossover
Central Penn Line North Subtotal		90.5		
CENTRAL PENN LINE SOUTH				
Lancaster County				
LA-003	0.2	0.1	Agricultural land	Stream crossing
LA-002	0.2	0.4	Agricultural land	Topsoil segregation
LA-004	0.2	0.1	Upland forest	Stream crossing
LA-005	0.3	0.1	Agricultural land; upland forest	Stream crossing
LA-007	0.3	0.1	Upland forest	Point of intersection
LA-006	0.3	0.1	Agricultural land; upland forest	Topsoil segregation
LA-008	0.4	0.1	Upland forest	Road crossing
LA-009	0.5	0.1	Agricultural land	Road crossing
LA-010	0.7	1.1	Agricultural land	Topsoil segregation
LA-013	0.8	0.1	Agricultural land	Road crossing
LA-011	0.8	0.1	Agricultural land	Road crossing
LA-014	0.9	0.1	Agricultural land	Road crossing
LA-012	0.9	0.1	Agricultural land	Road crossing
LA-015	M-0147 0.1	0.6	Agricultural land	Topsoil segregation
LA-016	M-0147 0.2	0.2	Agricultural land	Point of intersection
LA-017	M-0147 0.2	0.2	Agricultural land	Topsoil segregation
LA-018	M-0147 0.4	0.1	Agricultural land	Point of intersection
LA-020	M-0147 0.5	0.1	Wetland	Wetland crossing
LA-019	M-0147 0.4	0.6	Upland forest	Topsoil segregation
LA-022	M-0147 0.6	0.2	Agricultural land	Stream crossing
LA-021	M-0147 0.6	0.2	Agricultural land	Stream crossing
LA-023	M-0147 0.7	1.3	Agricultural land	Topsoil segregation
LA-024	M-0147 0.9	0.1	Agricultural land	Point of intersection
LA-025	1.9	0.1	Agricultural land	Road crossing
LA-027	1.9	0.1	Agricultural land	Road crossing
LA-028	1.9	0.1	Agricultural land	Road crossing
LA-026	1.9	0.1	Agricultural land	Road crossing
LA-029	2.0	0.1	Residential	Point of intersection
LA-032	2.1	0.1	Upland forest	Point of intersection
LA-030	2.1	0.1	Residential	Road crossing
LA-031	2.1	0.2	Upland forest	Road crossing
LA-033	2.2	0.1	Upland forest	Point of intersection

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-034	2.4	0.1	Upland forest	Point of intersection
LA-034.1	2.6	0.8	Agricultural land	Topsoil segregation
LA-036	2.7	0.1	Agricultural land	Point of intersection
LA-035	2.7	0.3	Agricultural land	Topsoil segregation
LA-038	2.8	0.1	Agricultural land	Road crossing
LA-037	2.8	0.1	Agricultural land	Road crossing
LA-039	M-0184 0.0	1.1	Agricultural land	Topsoil segregation
LA-041	M-0184 0.0	0.1	Upland forest; agricultural land	Point of intersection
LA-040	M-0184 0.0	0.1	Agricultural land	Point of intersection
LA-042	M-0184 0.4	1.0	Agricultural land	Topsoil segregation
LA-043	M-0184 0.4	0.1	Agricultural land	Road crossing
LA-045	M-0184 0.4	0.1	Agricultural land	Road crossing
LA-046	M-0184 0.5	0.1	Open land agricultural land	Road crossing
LA-044	M-0184 0.4	0.1	Agricultural land	Road crossing
LA-047	M-0184 0.5	1.2	Agricultural land	Topsoil segregation
LA-050	M-0184 0.9	0.2	Agricultural land	Stream crossing
LA-051	M-0184 0.9	0.1	Agricultural land	Stream crossing
LA-049	M-0184 0.8	0.1	Agricultural land	Stream crossing
LA-048	M-0184 0.8	0.1	Agricultural land	Stream crossing
LA-054	M-0184 1.0	0.1	Agricultural land	Road crossing
LA-055	M-0184 1.0	0.1	Agricultural land	Road crossing
LA-053	M-0184 0.9	0.1	Agricultural land	Road crossing
LA-052	M-0184 0.9	0.3	Agricultural land	Topsoil segregation
LA-058	M-0184 1.1	0.1	Agricultural land	Point of intersection
LA-056	M-0184 1.0	1.1	Agricultural land	Topsoil segregation
LA-057	M-0184 1.1	0.1	Agricultural land	Point of intersection
LA-059	4.4	0.3	Agricultural land	Topsoil segregation
LA-061	4.5	0.1	Agricultural land; upland forest	Stream crossing
LA-060	4.5	0.1	Agricultural land	Topsoil segregation
LA-062	4.7	0.8	Agricultural land; upland forest	Topsoil segregation
LA-064	4.9	0.1	Upland forest	Point of intersection
LA-063	4.9	0.1	Upland forest	Point of intersection
LA-065	5.0	0.3	Upland forest	Side slope
LA-066	5.1	0.1	Upland forest	Point of intersection
LA-067	5.1	0.1	Upland forest upland forest	Point of intersection
LA-068	5.2	0.1	Upland forest	Point of intersection
LA-070	5.3	0.1	Residential	Topsoil segregation
LA-069	5.3	0.1	Agricultural land	Road crossing
LA-071.1	5.4	0.1	Agricultural land; upland forest	Stream crossing
LA-072	5.4	0.1	Agricultural land; upland forest	Stream crossing
LA-071	5.4	0.1	Agricultural land; upland forest	Road crossing
LA-073	5.5	0.7	Agricultural land; upland forest	Topsoil segregation
LA-074	5.6	0.1	Agricultural land	Point of intersection
LA-075	5.7	0.2	Agricultural land	Topsoil segregation
LA-076	5.9	1.2	Agricultural land	Topsoil segregation
LA-078	6.1	0.1	Agricultural land	Road crossing
LA-077	6.1	0.1	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-080	6.2	0.1	Agricultural land	Road crossing
LA-079	6.2	0.1	Agricultural land	Road crossing
LA-082	6.3	0.1	Agricultural land	Point of intersection
LA-081	6.4	1.5	Agricultural land	Topsoil segregation
LA-084	6.6	0.1	Agricultural land	Road crossing
LA-083	6.6	0.1	Agricultural land	Road crossing
LA-086	6.7	0.6	Agricultural land	Topsoil segregation
LA-085	6.7	0.1	Open land; agricultural land	Road crossing
LA-090	6.9	0.1	Upland forest	Road crossing
LA-088	6.9	0.1	Upland forest; agricultural land	Topsoil segregation
LA-087	6.9	0.1	Agricultural land; residential	Stream crossing
LA-089	6.9	0.2	Upland forest	Road crossing
LA-091	7.0	0.1	Open land	Road crossing
LA-092	7.0	0.2	Open land	Road crossing
LA-094	7.0	0.4	Upland forest	Road crossing
LA-093	7.0	0.4	Upland forest; open land	Road crossing
LA-097	7.1	0.1	Upland forest	Wetland crossing
LA-095	7.1	0.2	Open land	Road crossing
LA-096	7.1	0.2	Open land	Road crossing
LA-098	7.2	0.2	Upland forest	Stream crossing
LA-099	7.3	0.1	Upland forest; agricultural land	Point of intersection
LA-103	7.4	0.1	Open land	Road crossing
LA-102	7.4	0.1	Agricultural land	Topsoil segregation
LA-101	7.4	0.1	Agricultural land	Road crossing
LA-100	7.4	0.2	Agricultural land	Topsoil segregation
LA-104	7.4	0.1	Open land	Road crossing
LA-105	7.5	0.1	Agricultural land	Point of intersection
LA-106	7.6	0.8	Agricultural land	Topsoil segregation
LA-107	7.8	0.1	Agricultural land	Topsoil segregation
LA-109	7.9	0.1	Agricultural land	Topsoil segregation
LA-108	7.9	0.1	Upland forest	Side slope
LA-111	8.0	0.1	Upland forest	Stream crossing
LA-110	8.0	0.1	Upland forest	Stream crossing
LA-112	8.1	0.2	Agricultural land	Topsoil segregation
LA-113	8.1	0.1	Upland forest	Stream crossing
LA-114	8.1	0.5	Agricultural land; upland forest	Stream crossing
LA-117	8.2	0.1	Agricultural land	Road crossing
LA-116	8.2	0.1	Agricultural land	Road crossing
LA-115	8.2	0.2	Agricultural land	Stream crossing
LA-118	8.5	0.1	Agricultural land	Point of intersection
LA-119	8.4	2.9	Agricultural land	Topsoil segregation
LA-122.1	9.2	0.1	Agricultural land	Stream crossing
LA-121	9.2	0.1	Agricultural land; upland forest	Road crossing
LA-120	9.2	0.2	Open land upland forest	Road crossing
LA-122	9.2	0.2	Agricultural land upland forest	Road crossing
LA-123	9.4	0.2	Upland forest	Stream crossing
LA-125	9.5	0.1	Upland forest	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-124	9.5	0.2	Upland forest	Stream crossing
LA-127	9.6	0.1	Residential open land	Topsoil segregation
LA-128	9.6	0.1	Upland forest	Stream crossing
LA-130	9.7	0.1	Agricultural land	Topsoil segregation
LA-129	9.7	0.2	Agricultural land	Topsoil segregation
LA-131	9.8	0.4	Upland forest; agricultural land	Topsoil segregation
LA-132	9.9	0.2	Agricultural land upland forest	Stream crossing
LA-134	10.0	0.3	Upland forest; agricultural land	Topsoil segregation
LA-133	10.0	0.1	Upland forest; agricultural land	Stream crossing
LA-135	10.1	0.1	Agricultural land; upland forest	Stream crossing
LA-135.4	10.2	0.1	Agricultural land	Road crossing
LA-135.3	10.2	0.3	Agricultural land	Topsoil segregation
LA-135.2	10.2	0.1	Agricultural land	Point of intersection
LA-135.1	10.2	0.1	Upland forest; agricultural land	Stream crossing
LA-136	10.2	0.1	Open land; agricultural land	Road crossing
LA-137	10.3	0.3	Open land; agricultural land	Topsoil segregation
LA-139	10.4	0.1	Agricultural land	Point of intersection
LA-138	10.4	0.4	Agricultural land	Topsoil segregation
LA-140	10.5	0.5	Agricultural land	Topsoil segregation
LA-141	10.7	0.1	Agricultural land	Point of intersection
LA-143	10.8	0.1	Agricultural land	Point of intersection
LA-142	10.8	0.6	Agricultural land	Topsoil segregation
LA-146	10.9	0.1	Agricultural land	Point of intersection
LA-145	10.9	0.1	Agricultural land	Stream crossing
LA-144	10.9	0.1	Agricultural land	Stream crossing
LA-147	10.9	0.3	Agricultural land	Topsoil segregation
LA-147.2	11.0	0.1	Agricultural land	Stream crossing
LA-147.1	11.0	0.1	Agricultural land	Stream crossing
LA-148	11.0	0.2	Agricultural land	Topsoil segregation
LA-149	11.2	0.1	Upland forest	Stream crossing
LA-150	11.2	0.1	Upland forest; open land	Point of intersection
LA-153	11.3	0.1	Residential	Topsoil segregation
LA-152	11.3	0.1	Residential	Topsoil segregation
LA-151	11.3	0.3	Agricultural land	Topsoil segregation
LA-156	11.4	0.1	Agricultural land	Road crossing
LA-154	11.4	0.1	Residential	Road crossing
LA-155	11.4	0.1	Residential	Road crossing
LA-157	11.5	0.2	Agricultural land	Road crossing
LA-158	11.5	0.1	Upland forest	Point of intersection
LA-159	11.6	0.5	Agricultural land	Topsoil segregation
LA-160	11.8	0.9	Agricultural land	Topsoil segregation
LA-161	12.0	0.5	Agricultural land	HDD
LA-162	12.1	1.7	Agricultural land	HDD
LA-175	12.7	0.1	Agricultural land	Road crossing
LA-177	12.8	1.1	Agricultural land	HDD
LA-174	12.8	0.1	Agricultural land	Road crossing
LA-176	12.8	1.1	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-179	M-0152 0.0	0.1	Agricultural land	Road crossing
LA-178	M-0152 0.0	0.1	Agricultural land	Road crossing
LA-181.1	M-0152 0.1	0.1	Upland forest	Stream crossing
LA-180	M-0152 0.1	0.1	Upland forest	Road crossing
LA-181	M-0152 0.1	0.1	Upland forest	Road crossing
LA-181.2	M-0152 0.1	<0.1	Wetland	Wetland crossing
LA-181.3	M-0153 0.2	<0.1	Agricultural land	Topsoil segregation
LA-181.4	M-0153 0.2	0.1	Agricultural land	Stream crossing
LA-181.5	M-0153 0.2	0.1	Agricultural land	Point of intersection
LA-181.6	M-0153 0.2	0.1	Agricultural land	Topsoil segregation
LA-181.7	M-0153 0.2	0.1	Agricultural land	Stream crossing
LA-181.8	M-0153 0.3	0.1	Agricultural land	Stream crossing
LA-182	M-0152 0.4	0.3	Agricultural land	Topsoil segregation
LA-183	13.8	0.2	Agricultural land	Topsoil segregation
LA-183.1	13.9	0.1	Agricultural land	Stream crossing
LA-183.2	13.9	0.1	Agricultural land	Stream crossing
LA-184	13.9	0.2	Agricultural land	Topsoil segregation
LA-185	14.1	0.6	Agricultural land	Topsoil segregation
LA-187	14.2	0.1	Agricultural land	Road crossing
LA-186	14.2	0.1	Agricultural land	Road crossing
LA-191	M-0188 0.0	0.2	Agricultural land	Topsoil segregation
LA-192	M-0188 0.0	0.1	Agricultural land	Road crossing
LA-188	M-0188 0.0	0.1	Agricultural land	Point of intersection
LA-190	M-0188 0.0	<0.1	Agricultural land	Topsoil segregation
LA-189	M-0188 0.0	<0.1	Agricultural land	Road crossing
LA-196	M-0188 0.2	0.1	Agricultural land	Road crossing
LA-196.1	M-0188 0.2	0.1	Agricultural land	Topsoil segregation
LA-196.2	M-0188 0.2	0.1	Agricultural land	Point of intersection
LA-195	M-0188 0.1	0.1	Agricultural land	Road crossing
LA-198	M-0188 0.3	0.2	Agricultural land	Topsoil segregation
LA-197	M-0188 0.3	0.1	Agricultural land	Topsoil segregation
LA-199.1	14.6	0.1	Upland forest	Stream crossing
LA-200	14.7	0.1	Agricultural land	Stream crossing
LA-201	14.8	0.7	Agricultural land	Topsoil segregation
LA-202	14.9	0.2	Agricultural land	Road crossing
LA-203	15.2	0.7	Agricultural land	Topsoil segregation
LA-204	15.3	0.2	Agricultural land	Stream crossing
LA-205	15.4	0.1	Upland forest	Stream crossing
LA-206	15.4	0.4	Upland forest	Topsoil segregation
LA-207	15.5	0.1	Upland forest open land	Road crossing
LA-208	15.5	0.1	Upland forest open land	Road crossing
LA-209	15.6	0.1	Agricultural land	Road crossing
LA-210	15.6	0.1	Upland forest	Road crossing
LA-211	15.7	0.7	Agricultural land	Topsoil segregation
LA-212	15.7	0.1	Upland forest	Point of intersection
LA-213	15.9	0.9	Agricultural land	Topsoil segregation
LA-216	16.1	0.1	Upland forest	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-217	16.1	0.1	Agricultural land	Point of intersection
LA-214	16.1	0.1	Agricultural land	Road crossing
LA-215	M-0182 0.0	0.6	Agricultural land	Topsoil segregation
LA-219	M-0185 0.0	0.1	Agricultural land	Road crossing
LA-218	M-0185 0.1	0.1	Agricultural land	Point of intersection
LA-220	M-0185 0.1	0.1	Agricultural land	Road crossing
LA-224	M-0185 0.2	0.1	Agricultural land	Point of intersection
LA-221	M-0185 0.1	0.1	Agricultural land	Road crossing
LA-222	M-0185 0.1	0.1	Agricultural land	Road crossing
LA-223	M-0185 0.15	1.6	Agricultural land	Topsoil segregation
LA-225	16.8	0.4	Upland forest	Topsoil segregation
LA-228	17.0	0.1	Agricultural land	Stream crossing
LA-227	17.0	0.1	Agricultural land	Stream crossing
LA-226	17.0	0.1	Upland forest	Stream crossing
LA-229	17.1	0.7	Agricultural land	Topsoil segregation
LA-230	17.2	0.2	Agricultural land	Road crossing
LA-232	17.3	0.5	Agricultural land	Topsoil segregation
LA-231	17.3	0.2	Upland forest	Road crossing
LA-233	17.4	0.1	Agricultural land	Point of intersection
LA-234	17.5	0.5	Agricultural land	Topsoil segregation
LA-235	17.5	<0.1	Agricultural land	Point of intersection
LA-237	17.6	0.1	Agricultural land	Point of intersection
LA-236	17.6	0.2	Agricultural land	Topsoil segregation
LA-238.1	17.7	0.1	Upland forest	Point of intersection
LA-238	17.7	0.6	Agricultural land	Topsoil segregation
LA-239	17.8	0.1	Agricultural land	Road crossing
LA-241	17.9	0.5	Agricultural land	Topsoil segregation
LA-240	17.9	0.1	Agricultural land	Road crossing
LA-244	18.1	0.2	Agricultural land	Stream crossing
LA-243	18.1	0.1	Agricultural land	Topsoil segregation
LA-242	18.1	0.2	Agricultural land	Stream crossing
LA-245	18.2	0.5	Agricultural land	Topsoil segregation
LA-247	18.3	0.2	Agricultural land	Road crossing
LA-246	18.3	0.2	Agricultural land	Road crossing
LA-248	18.4	0.6	Agricultural land	Topsoil segregation
LA-249	18.7	1.1	Agricultural land	Topsoil segregation
LA-251	18.8	0.1	Agricultural land	Stream crossing
LA-250	18.8	0.1	Agricultural land	Stream crossing
LA-253	18.9	0.1	Agricultural land	Stream crossing
LA-252	18.9	0.1	Agricultural land	Stream crossing
LA-254	19.1	1.3	Agricultural land	Topsoil segregation
LA-256	19.3	0.1	Agricultural land	Road crossing
LA-255	19.3	0.1	Agricultural land	Road crossing
LA-257	19.5	1.1	Agricultural land	Topsoil segregation
LA-258	19.6	0.1	Agricultural land	Point of intersection
LA-259	19.7	0.1	Agricultural land	Foreign pipeline crossing
LA-260	19.8	0.4	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-261	19.8	0.1	Agricultural land	Point of intersection
LA-262	19.9	0.3	Upland forest	Railroad crossing
LA-263	19.9	0.2	Upland forest	Railroad crossing
LA-266	20.0	0.1	Upland forest	Stream crossing
LA-267	20.0	0.1	Upland forest	Stream crossing
LA-264	20.0	0.1	Upland forest	Railroad crossing
LA-265	20.0	0.1	Upland forest	Railroad crossing
LA-268	20.1	0.4	Agricultural land	Topsoil segregation
LA-269	20.2	0.1	Agricultural land	Point of intersection
LA-271	20.2	0.1	Agricultural land	Point of intersection
LA-274	20.3	0.1	Agricultural land	Road crossing
LA-273	20.3	0.1	Agricultural land	Road crossing
LA-272	20.3	0.4	Agricultural land	Topsoil segregation
LA-270	20.3	0.1	Agricultural land	Point of intersection
LA-275	20.5	0.9	Agricultural land	Topsoil segregation
LA-276	20.6	0.1	Agricultural land	Road crossing
LA-277	20.6	0.1	Agricultural land	Road crossing
LA-279	20.7	0.1	Agricultural land	Point of intersection
LA-278	20.7	0.1	Agricultural land	Road crossing
LA-281	20.8	0.1	Agricultural land	Stream crossing
LA-280	20.8	0.1	Agricultural land	Stream crossing
LA-282	21.0	0.1	Agricultural land	Road crossing
LA-283	21.0	0.7	Agricultural land	Road crossing
LA-286.3	21.2	0.4	Agricultural land	Topsoil segregation
LA-284	21.1	0.2	Agricultural land	Road crossing
LA-285	21.1	0.1	Agricultural land	Road crossing
LA-286	21.2	0.1	Agricultural land	Stream crossing
LA-290	21.3	0.2	Agricultural land	Road crossing
LA-287	21.3	0.1	Agricultural land	Point of intersection
LA-288	21.3	0.1	Agricultural land	Point of intersection
LA-289	21.3	<0.1	Agricultural land	Road crossing
LA-291	21.4	0.4	Agricultural land	Road crossing
LA-292	21.4	0.1	Agricultural land	Road crossing
LA-293	21.6	0.7	Agricultural land	Topsoil segregation
LA-293.1	21.7	0.2	Upland forest	Side slope
LA-293.2	21.8	0.1	Upland forest	Side slope
LA-294	22.0	1.0	Agricultural land	Topsoil segregation
LA-295	22.0	0.1	Agricultural land	Point of intersection
LA-298.1	22.2	0.1	Agricultural land	Railroad crossing
LA-298	22.2	0.1	Upland forest	Point of intersection
LA-297	22.2	0.1	Upland forest	Point of intersection
LA-299	22.3	0.2	Agricultural land	Topsoil segregation
LA-298.2	22.3	0.1	Agricultural land	Railroad crossing
LA-301	22.3	0.1	Agricultural land	Road crossing
LA-300	22.3	0.1	Agricultural land	Road crossing
LA-303	22.4	0.2	Agricultural land	Topsoil segregation
LA-302	22.4	0.1	Agricultural land	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-303.1	22.5	0.1	Agricultural land	Side slope
LA-307	M-0192 0.0	0.3	Agricultural land	Topsoil segregation
LA-306	22.6	0.1	Agricultural land	Road crossing
LA-305	22.6	0.1	Agricultural land	Road crossing
LA-308	M-0192 0.0	0.1	Upland forest	Point of intersection
LA-311	22.8	0.1	Agricultural land	Road crossing
LA-310	M-0192 0.1	0.1	Upland forest	Road crossing
LA-309	M-0192 0.1	0.1	Agricultural land	Road crossing
LA-312.1	23.0	0.1	Open land	Stream crossing
LA-313	23.0	0.1	Upland forest	Stream crossing
LA-312	23.0	0.1	Residential	Point of intersection
LA-315	23.1	0.4	Residential	Topsoil segregation
LA-316	23.4	0.3	Agricultural land	Topsoil segregation
LA-317	23.5	0.3	Agricultural land	Topsoil segregation
LA-319	23.6	0.1	Agricultural land	Road crossing
LA-318	23.6	0.1	Agricultural land	Road crossing
LA-318.1	23.6	<0.1	Wetland	Wetland crossing
LA-322.1	23.7	0.1	Agricultural land	Valve fabrication
LA-325.2	23.8	0.1	Agricultural land	Hydro test
LA-325.1	23.8	0.1	Agricultural land	Hydro test
LA-323	23.8	0.5	Agricultural land	Topsoil segregation
LA-324	23.8	0.1	Agricultural land	Point of intersection
LA-325	23.8	0.1	Agricultural land	Point of intersection
LA-328.1	23.9	0.1	Wetland	Wetland crossing
LA-327	23.9	0.1	Agricultural land	Stream crossing
LA-326	23.9	0.1	Agricultural land	Stream crossing
LA-329	24.0	0.1	Agricultural land	Stream crossing
LA-328	24.0	0.1	Agricultural land	Stream crossing
LA-330	24.2	1.5	Agricultural land	Topsoil segregation
LA-334	24.3	0.1	Agricultural land	Foreign pipeline crossing
LA-332	24.3	0.1	Agricultural land	Foreign pipeline crossing
LA-331	24.3	0.1	Agricultural land	Point of intersection
LA-333	24.3	0.1	Agricultural land	Point of intersection
LA-337	24.5	0.1	Agricultural land	Road crossing
LA-338	24.5	0.1	Agricultural land	Road crossing
LA-336	24.5	0.1	Agricultural land	Road crossing
LA-335	24.5	0.1	Agricultural land	Road crossing
LA-340	24.6	0.1	Agricultural land	Point of intersection
LA-339	24.8	1.9	Agricultural land	Topsoil segregation
LA-342	24.8	0.1	Agricultural land	Point of intersection
LA-341	24.8	0.1	Agricultural land	Point of intersection
LA-343	25.1	0.4	Agricultural land	Topsoil segregation
LA-345	25.3	0.1	Residential	Road crossing
LA-344	25.3	0.1	Agricultural land	Road crossing
LA-346	25.4	2.2	Residential agricultural land	Topsoil segregation
LA-347	26.0	0.1	Agricultural land	Road crossing
LA-350	26.1	0.1	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-349	26.1	0.1	Agricultural land	Road crossing
LA-348	26.1	0.1	Agricultural land	Road crossing
LA-351	26.3	1.5	Agricultural land	Topsoil segregation
LA-353	26.5	0.1	Agricultural land	Road crossing
LA-352	26.5	0.1	Agricultural land	Road crossing
LA-355	26.6	0.1	Agricultural land	Road crossing
LA-354	26.6	0.1	Agricultural land	Road crossing
LA-357	26.8	0.1	Agricultural land	Point of intersection
LA-356	27.0	2.6	Agricultural land	Topsoil segregation
LA-359	27.3	0.6	Agricultural land	Railroad crossing
LA-358	27.3	0.4	Agricultural land	Railroad crossing
LA-361	27.4	0.3	Agricultural land	Railroad crossing
LA-360	27.4	0.1	Agricultural land	Railroad crossing
LA-362	27.5	0.4	Agricultural land	Topsoil segregation
LA-365	27.6	0.2	Agricultural land	Road crossing
LA-364	27.6	0.2	Agricultural land	Road crossing
LA-368	27.7	0.1	Agricultural land	Point of intersection
LA-366	27.7	0.4	Agricultural land	Topsoil segregation
LA-367	27.7	0.1	Agricultural land	Point of intersection
LA-371	27.9	0.1	Agricultural land	Point of intersection
LA-369	27.9	0.4	Agricultural land	Topsoil segregation
LA-370	27.9	0.1	Agricultural land	Point of intersection
LA-372	28.0	0.3	Agricultural land	Topsoil segregation
LA-373	M-0162 0.0	0.5	Agricultural land	Road crossing
LA-377	M-0162 0.1	0.1	Agricultural land	Foreign pipeline crossing
LA-374	M-0162 0.0	0.9	Agricultural land	Topsoil segregation
LA-380	M-0162 0.2	0.3	Agricultural land	Road crossing
LA-379	M-0162 0.2	0.3	Agricultural land	Road crossing
LA-382	M-0162 0.3	0.2	Agricultural land	Topsoil segregation
LA-383	M-0162 0.3	0.1	Agricultural land	Road crossing
LA-381	M-0162 0.3	0.6	Agricultural land	Road crossing
LA-385	M-0162 0.4	1.7	Agricultural land	Topsoil segregation
LA-385.1	M-0162 0.7	0.1	Agricultural land	Point of intersection
LA-386	M-0162 1.02	0.1	Agricultural land	Road crossing
LA-386.1	M-0162 1.02	0.1	Agricultural land	Topsoil segregation
LA-387	M-0162 1.02	0.1	Agricultural land	Road crossing
LA-389	29.1	0.1	Agricultural land	Road crossing
LA-388	29.1	0.1	Agricultural land	Road crossing
LA-390	29.3	1.5	Agricultural land	Topsoil segregation
LA-394	29.5	0.1	Agricultural land	Road crossing
LA-391	29.5	0.1	Agricultural land	Road crossing
LA-393	29.5	0.1	Agricultural land	Road crossing
LA-392	29.5	0.1	Agricultural land	Road crossing
LA-395	29.6	0.4	Agricultural land	Topsoil segregation
LA-396	29.7	0.1	Agricultural land	Road crossing
LA-397	29.8	1.0	Agricultural land	Topsoil segregation
LA-398	29.8	0.1	Agricultural land	Point of intersection

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-399	29.9	0.1	Agricultural land	Point of intersection
LA-400	30.0	0.2	Agricultural land	Topsoil segregation
LA-404	30.1	0.1	Agricultural land	Stream crossing
LA-402	30.1	0.1	Agricultural land	Topsoil segregation
LA-403	30.1	0.1	Residential	Stream crossing
LA-401	30.1	0.1	Agricultural land	Point of intersection
LA-407	30.2	0.6	Agricultural land	Topsoil segregation
LA-405	30.2	0.2	Agricultural land	Road crossing
LA-406	30.2	0.2	Agricultural land	Road crossing
LA-409.1	30.4	<0.1	Wetland	Wetland crossing
LA-410	30.4	0.1	Agricultural land	Stream crossing
LA-411	30.4	0.1	Agricultural land	Stream crossing
LA-408	30.4	0.1	Upland forest	Road crossing
LA-409	30.4	0.1	Upland forest	Road crossing
LA-414	30.5	0.6	Agricultural land	Topsoil segregation
LA-413	30.5	0.1	Agricultural land	Point of intersection
LA-412	30.5	0.1	Agricultural land	Point of intersection
LA-416	30.6	0.1	Agricultural land	Stream crossing
LA-415	30.6	0.1	Agricultural land	Stream crossing
LA-417	30.7	0.1	Upland forest	Stream crossing
LA-418	30.7	0.1	Upland forest	Stream crossing
LA-419	30.9	1.5	Agricultural land	Topsoil segregation
LA-422	31.1	0.1	Upland forest	Stream crossing
LA-421	31.1	0.1	Agricultural land	Point of intersection
LA-420	31.1	0.1	Agricultural land	Point of intersection
LA-425	31.2	0.1	Agricultural land	Point of intersection
LA-426	31.2	0.1	Agricultural land	Stream crossing
LA-424	31.2	0.1	Upland forest	Stream crossing
LA-423	31.2	0.1	Upland forest	Stream crossing
LA-427	31.4	0.9	Agricultural land	Topsoil segregation
LA-429	31.5	0.1	Agricultural land	Stream crossing
LA-428	31.5	0.1	Agricultural land	Point of intersection
LA-430	31.5	0.1	Agricultural land	Point of intersection
LA-432	31.6	0.1	Agricultural land	Stream crossing
LA-433	31.6	0.1	Agricultural land	Stream crossing
LA-431	31.6	0.1	Agricultural land	Stream crossing
LA-434	31.8	1.4	Agricultural land	Topsoil segregation
LA-436	31.8	0.1	Agricultural land	Point of intersection
LA-435	31.8	0.1	Agricultural land	Point of intersection
LA-439	32.0	0.1	Agricultural land	Road crossing
LA-440	32.0	0.1	Agricultural land	Road crossing
LA-438	32.0	0.1	Agricultural land	Road crossing
LA-437	32.0	0.1	Agricultural land	Road crossing
LA-441	32.1	0.6	Agricultural land	Topsoil segregation
LA-442	32.1	0.1	Agricultural land	Point of intersection
LA-443	32.1	0.1	Agricultural land	Point of intersection
LA-445	32.2	0.1	Agricultural land	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-444	32.2	0.1	Agricultural land	Stream crossing
LA-447	32.3	0.1	Agricultural land	Stream crossing
LA-446	32.3	0.1	Agricultural land	Stream crossing
LA-448	32.6	2.1	Agricultural land	Topsoil segregation
LA-449	32.7	0.1	Agricultural land	Point of intersection
LA-450	32.7	0.1	Agricultural land	Point of intersection
LA-452	33.0	0.2	Agricultural land	Stream crossing
LA-451	33.0	0.2	Agricultural land	Stream crossing
LA-457	33.1	0.1	Agricultural land	Road crossing
LA-456	33.1	0.1	Agricultural land	Road crossing
LA-453	33.1	0.3	Agricultural land	Topsoil segregation
LA-455	33.1	0.1	Agricultural land	Road crossing
LA-454	33.1	0.1	Agricultural land	Road crossing
LA-458	33.3	1.0	Agricultural land	Topsoil segregation
LA-459	33.3	0.1	Agricultural land	Point of intersection
LA-461	33.4	0.1	Agricultural land	Point of intersection
LA-462	33.4	0.1	Agricultural land	Road crossing
LA-460	33.4	0.1	Agricultural land	Road crossing
LA-464	33.4	0.1	Agricultural land	Road crossing
LA-465	33.5	0.4	Agricultural land	Topsoil segregation
LA-466	33.5	0.1	Agricultural land	Stream crossing
LA-463	33.5	0.1	Agricultural land	Road crossing
LA-467.1	33.6	0.1	Wetland	Wetland crossing
LA-467	33.6	0.1	Agricultural land	Stream crossing
LA-468	33.7	0.1	Agricultural land	Stream crossing
LA-469	33.8	0.7	Agricultural land	Topsoil segregation
LA-474	33.9	0.3	Agricultural land	Topsoil segregation
LA-473	33.9	0.1	Agricultural land	Road crossing
LA-472	33.9	0.1	Agricultural land	Road crossing
LA-471	33.9	0.1	Agricultural land	Road crossing
LA-470	33.9	0.1	Agricultural land	Road crossing
LA-475	M-0164 0.0	0.2	Agricultural land	Stream crossing
LA-476	M-0164 0.0	0.3	Agricultural land	Topsoil segregation
LA-476.1	M-0164 0.1	0.1	Agricultural land	Point of intersection
LA-477	M-0164 0.36	1.0	Agricultural land	Topsoil segregation
LA-478	M-0164 0.36	0.2	Agricultural land	Stream crossing
LA-479	34.5	0.5	Agricultural land	Topsoil segregation
LA-480	34.6	0.1	Agricultural land	Road crossing
LA-483	34.7	0.1	Agricultural land	Road crossing
LA-482	34.7	0.1	Agricultural land	Road crossing
LA-481	34.7	0.1	Agricultural land	Road crossing
LA-485	35.1	0.1	Agricultural land	Point of intersection
LA-484	35.2	3.1	Agricultural land	Topsoil segregation
LA-486	35.7	0.1	Agricultural land	Point of intersection
LA-487	35.9	0.4	Agricultural land	Point of intersection
LA-488	35.9	0.9	Agricultural land	Topsoil segregation
LA-490	36.0	0.2	Agricultural land	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LA-489	36.0	0.1	Agricultural land	Stream crossing
LA-492	36.1	0.2	Agricultural land	Road crossing
LA-491	36.1	0.2	Agricultural land	Road crossing
LA-494	36.2	0.1	Agricultural land	Point of intersection
LA-493	36.2	0.8	Agricultural land	Topsoil segregation
LA-495	36.4	0.1	Agricultural land	Topsoil segregation
LA-496	36.4	0.5	Agricultural land	Topsoil segregation
Lebanon County				
LE-497	36.6	0.1	Agricultural land	Point of intersection
LE-498	36.7	0.1	Upland forest	Point of intersection
LE-500	36.9	0.4	Upland forest	Road crossing
LE-499	36.9	0.4	Upland forest	Road crossing
LE-501	37.0	0.1	Upland forest	Road crossing
LE-502	37.0	0.3	Upland forest	Road crossing
LE-504	37.2	0.1	Upland forest	Stream crossing
LE-503	37.2	0.1	Upland forest	Point of intersection
LE-505	37.3	0.1	Agricultural land	Stream crossing
LE-506	37.3	0.2	Agricultural land	Topsoil segregation
LE-509	37.5	0.1	Agricultural land	Topsoil segregation
LE-508	37.5	0.1	Agricultural land	Railroad crossing
LE-507	37.5	0.1	Agricultural land	Road crossing
LE-511	37.6	0.2	Agricultural land	Stream crossing
LE-510	37.6	0.2	Agricultural land	Stream crossing
LE-512	37.7	0.8	Agricultural land	Topsoil segregation
LE-513	37.8	0.1	Agricultural land	Point of intersection
LE-514	38.1	1.4	Agricultural land	Topsoil segregation
LE-515	38.1	0.1	Agricultural land	Point of intersection
LE-516	38.1	0.1	Agricultural land	Point of intersection
LE-517	38.3	0.1	Agricultural land	Road crossing
LE-518	38.3	0.2	Agricultural land	Road crossing
LE-519	38.4	0.1	Agricultural land	Road crossing
LE-520	38.8	2.7	Agricultural land	Topsoil segregation
LE-521	39.2	0.1	Agricultural land	Point of intersection
LE-524	39.4	0.1	Agricultural land	Road crossing
LE-523	39.4	0.1	Agricultural land	Road crossing
LE-521.2	39.4	0.6	Agricultural land	Topsoil segregation
LE-525	39.4	0.1	Agricultural land	Road crossing
LE-522	39.4	0.1	Agricultural land	Road crossing
LE-526	39.5	0.2	Agricultural land	Topsoil segregation
LE-527	39.5	0.1	Agricultural land	Wetland crossing
LE-530	39.6	0.1	Agricultural land	Point of intersection
LE-531	39.6	0.1	Agricultural land	Point of intersection
LE-528	39.6	0.2	Agricultural land	Wetland crossing
LE-529	39.8	1.4	Agricultural land	Topsoil segregation
LE-532	40.0	0.1	Agricultural land	Point of intersection
LE-534	40.0	0.1	Agricultural land	Road crossing
LE-533	40.0	0.1	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LE-538	40.1	0.1	Agricultural land	Point of intersection
LE-537	40.1	0.1	Agricultural land	Point of intersection
LE-536	40.1	0.1	Agricultural land	Road crossing
LE-535	40.1	0.1	Agricultural land	Road crossing
LE-539	40.3	1.4	Agricultural land	Topsoil segregation
LE-540	40.3	0.1	Agricultural land	Point of intersection
LE-541	40.5	0.1	Agricultural land	Wetland crossing
LE-542	40.6	0.1	Upland forest	Wetland crossing
LE-543	41.0	0.1	Upland forest	Stream crossing
LE-545	41.1	0.1	Upland forest	Point of intersection
LE-544	41.1	0.1	Upland forest	Stream crossing
LE-546.1	41.2	0.1	Upland forest	Foreign pipeline crossing
LE-548	41.2	0.1	Upland forest	Foreign pipeline crossing
LE-549	41.2	0.1	Upland forest	Point of intersection
LE-546	41.2	0.1	Upland forest	Stream crossing
LE-547	41.2	<0.1	Upland forest	Foreign pipeline crossing
LE-550	41.3	0.1	Upland forest	Stream crossing
LE-551	41.3	0.1	Upland forest	Stream crossing
LE-553	41.3	0.1	Upland forest	Stream crossing
LE-552	41.3	0.1	Upland forest	Stream crossing
LE-555	41.7	0.3	Upland forest	Foreign pipeline crossing
LE-554	41.7	0.2	Upland forest	Foreign pipeline crossing
LE-558	41.9	0.1	Upland forest	Stream crossing
LE-560	42.0	0.1	Upland forest	Point of intersection
LE-559	42.0	0.1	Upland forest	Stream crossing
LE-562	42.1	0.1	Agricultural land	Point of intersection
LE-561	42.3	1.5	Agricultural land	Topsoil segregation
LE-563	42.5	0.1	Agricultural land	Stream crossing
LE-568	42.6	0.1	Agricultural land	Road crossing
LE-565	42.6	0.1	Agricultural land	Road crossing
LE-566	42.6	0.1	Agricultural land	Road crossing
LE-564	42.6	0.1	Agricultural land	Stream crossing
LE-567	42.7	0.1	Agricultural land	Road crossing
LE-569	42.9	1.8	Agricultural land	Topsoil segregation
LE-570	43.0	0.1	Agricultural land	Point of intersection
LE-571	43.2	0.1	Agricultural land	Road crossing
LE-572	43.2	0.1	Agricultural land	Road crossing
LE-573	43.4	1.3	Agricultural land	Topsoil segregation
LE-574	43.4	0.1	Agricultural land	Point of intersection
LE-575	43.4	0.1	Agricultural land	Point of intersection
LE-578	43.9	1.9	Agricultural land	Topsoil segregation
LE-579	44.2	0.1	Agricultural land	Road crossing
LE-580	44.3	0.1	Agricultural land	Road crossing
LE-581	44.5	1.7	Agricultural land	Topsoil segregation
LE-582	44.8	0.1	Agricultural land	Road crossing
LE-585	44.8	0.1	Agricultural land	Road crossing
LE-584	44.8	0.1	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LE-583	44.8	0.1	Agricultural land	Road crossing
LE-586	45.0	1.0	Agricultural land	Topsoil segregation
LE-587	45.1	0.1	Agricultural land	Road crossing
LE-588	45.1	0.1	Agricultural land	Road crossing
LE-589	45.2	0.6	Agricultural land	Topsoil segregation
LE-590	M-0183 0.0	1.5	Agricultural land	Topsoil segregation
LE-591	M-0183 0.4	0.1	Agricultural land	Point of intersection
LE-592	M-0183 0.4	0.1	Upland forest	Point of intersection
LE-593	M-0183 0.4	0.9	Agricultural land	Topsoil segregation
LE-594	M-0183 0.7	0.2	Agricultural land	Road crossing
LE-596	M-0183 0.7	0.1	Open land	Topsoil segregation
LE-595	M-0183 0.7	0.1	Open land	Stream crossing
LE-599	M-0183 1.1	0.4	Open land	Railroad crossing
LE-597	M-0183 0.7	0.2	Open land	Road crossing
LE-602	M-0183 1.2	0.1	Agricultural land	Stream crossing
LE-600	M-0183 1.2	0.1	Upland forest	Point of intersection
LE-601	M-0183 1.2	0.1	Upland forest	Point of intersection
LE-603	M-0183 1.2	0.1	Open land; agricultural land	Stream crossing
LE-603.1	M-0183 1.3	0.1	Agricultural land	Wetland crossing
LE-604	M-0183 1.4	0.1	Open land; agricultural land	Stream crossing
LE-604.1	M-0183 1.4	0.1	Agricultural land	Stream crossing
LE-605	M-0183 1.4	0.5	Agricultural land	Topsoil segregation
LE-606	M-0183 1.5	0.1	Agricultural land	Point of intersection
LE-609	M-0183 1.7	0.4	Agricultural land	Topsoil segregation
LE-607	M-0183 1.5	0.1	Agricultural land	Stream crossing
LE-607.1	M-0183 1.5	0.1	Agricultural land	Stream crossing
LE-608	M-0183 1.7	0.1	Agricultural land	Point of intersection
LE-610	M-0183 2.0	0.4	Agricultural land	Topsoil segregation
LE-611	M-0183 2.0	0.1	Agricultural land	Topsoil segregation
LE-612	M-0183 2.0	0.2	Agricultural land	Road crossing
LE-613	47.0	0.2	Agricultural land	Road crossing
LE-614	47.0	0.2	Agricultural land	Topsoil segregation
LE-616	47.1	0.1	Agricultural land	Point of intersection
LE-615	47.1	0.1	Residential; agricultural land	Point of intersection
LE-618	47.2	0.8	Agricultural land	Topsoil segregation
LE-617	47.2	0.1	Agricultural land	Point of intersection
LE-621	47.4	0.4	Agricultural land	Topsoil segregation
LE-620	47.4	0.1	Agricultural land	Road crossing
LE-619	47.4	0.1	Agricultural land	Road crossing
LE-623	47.6	0.1	Agricultural land	Topsoil segregation
LE-622	47.6	0.2	Agricultural land	Topsoil segregation
LE-624	47.7	0.2	Agricultural land	Topsoil segregation
LE-626	47.8	0.1	Agricultural land	Road crossing
LE-625	47.8	0.4	Agricultural land	Topsoil segregation
LE-627	47.9	0.1	Agricultural land	Road crossing
LE-628	47.9	0.1	Open land; residential	Road crossing
LE-629	47.9	0.1	Upland forest; agricultural land	Side slope

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LE-630	48.0	0.1	Agricultural land	Topsoil segregation
LE-632	48.0	0.3	Agricultural land	Topsoil segregation
LE-631	48.0	0.1	Agricultural land	Point of intersection
LE-633	48.1	0.1	Agricultural land	Point of intersection
LE-636	48.2	0.1	Agricultural land	Topsoil segregation
LE-635	48.2	0.1	Agricultural land	Stream crossing
LE-634	48.2	0.1	Agricultural land	Point of intersection
LE-637	48.3	0.2	Agricultural land	Topsoil segregation
LE-638	48.3	0.1	Agricultural land	Point of intersection
LE-639	48.4	0.5	Agricultural land	Topsoil segregation
LE-640	48.5	0.1	Upland forest; agricultural land	Stream crossing
LE-641	48.5	0.1	Upland forest	Stream crossing
LE-641.1	48.6	<0.1	Upland forest	Wetland crossing
LE-645	48.6	0.1	Agricultural land	Road crossing
LE-644	48.6	0.1	Agricultural land	Road crossing
LE-642	48.6	0.1	Upland forest	Road crossing
LE-643	48.6	0.1	Upland forest	Road crossing
LE-646	48.7	0.4	Agricultural land	Topsoil segregation
LE-648	48.7	0.1	Agricultural land	Stream crossing
LE-647	48.7	0.1	Agricultural land	Stream crossing
LE-650	48.8	0.1	Upland forest; agricultural land	Stream crossing
LE-649	48.8	0.1	Upland forest; agricultural land	Stream crossing
LE-651	48.9	0.4	Agricultural land	Topsoil segregation
LE-652	49.0	0.2	Upland forest; agricultural land	Topsoil segregation
LE-653.1	49.1	0.3	Agricultural land	Topsoil segregation
LE-653	49.1	0.1	Agricultural land	Point of intersection
LE-655	49.2	0.2	Agricultural land	Stream crossing
LE-654	49.2	0.3	Agricultural land	Stream crossing
LE-656	49.2	0.2	Agricultural land	Topsoil segregation
LE-657	49.5	0.5	Agricultural land	Topsoil segregation
LE-658	49.5	0.1	Agricultural land	Point of intersection
LE-660	49.6	0.4	Agricultural land	Topsoil segregation
LE-659	49.6	0.1	Agricultural land	Point of intersection
LE-661	49.8	0.9	Agricultural land	Topsoil segregation
LE-664	50.0	0.2	Agricultural land	Topsoil segregation
LE-665	50.0	0.1	Agricultural land; upland forest	Stream crossing
LE-662	50.0	0.1	Agricultural land	Point of intersection
LE-663	50.0	0.1	Agricultural land	Point of intersection
LE-666	50.0	0.1	Agricultural land	Stream crossing
LE-665.1	50.1	<0.1	Upland forest	Wetland crossing
LE-670	50.1	0.1	Agricultural land	Topsoil segregation
LE-669	50.1	0.1	Agricultural land	Stream crossing
LE-668	50.1	0.1	Agricultural land	Road crossing
LE-667	50.1	0.1	Agricultural land	Road crossing
LE-671	50.1	0.1	Agricultural land	Road crossing
LE-672	50.1	0.1	Agricultural land	Road crossing
LE-674	50.2	0.3	Agricultural land	Foreign pipeline crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LE-673	50.2	0.3	Agricultural land	Topsoil segregation
LE-675	50.2	0.2	Agricultural land	Foreign pipeline crossing
LE-677	50.4	0.7	Agricultural land	Topsoil segregation
LE-678	50.5	0.1	Open land	Stream crossing
LE-681	50.6	0.1	Agricultural land	Point of intersection
LE-682	50.6	0.1	Agricultural land	Point of intersection
LE-680	50.6	0.1	Agricultural land	Point of intersection
LE-679	50.6	<0.1	Agricultural land	Stream crossing
LE-683	50.7	0.6	Agricultural land	Topsoil segregation
LE-683.1	50.7	0.1	Agricultural land	Foreign pipeline crossing
LE-685	50.8	0.1	Agricultural land	Road crossing
LE-684	50.8	0.1	Agricultural land	Point of intersection
LE-687	50.9	0.1	Agricultural land	Point of intersection
LE-688	50.9	0.1	Agricultural land	Point of intersection
LE-686	50.9	0.9	Agricultural land	Topsoil segregation
LE-691	51.1	0.1	Residential	Topsoil segregation
LE-689	51.1	0.1	Agricultural land	Road crossing
LE-690	51.1	0.1	Agricultural land	Road crossing
LE-692	51.1	0.1	Upland forest	Road crossing
LE-693	51.2	0.1	Residential	Stream crossing
LE-694	51.2	0.1	Agricultural land	Stream crossing
LE-695	51.3	0.5	Agricultural land	Topsoil segregation
LE-696	51.4	0.1	Agricultural land	Point of intersection
LE-698	M-0165 0.0	0.1	Agricultural land	Point of intersection
LE-697	M-0165 0.0	1.8	Agricultural land	Topsoil segregation
LE-699	M-0165 0.3	0.2	Agricultural land	Point of intersection
LE-701	52.0	0.1	Agricultural land	Stream crossing
LE-700	M-0165 0.4	0.1	Agricultural land	Stream crossing
LE-702	52.1	0.2	Agricultural land	Topsoil segregation
LE-705	52.1	0.1	Agricultural land	Road crossing
LE-704	52.1	0.1	Agricultural land	Road crossing
LE-706	52.1	0.1	Agricultural land	Road crossing
LE-703	52.1	0.1	Agricultural land	Road crossing
LE-707	52.2	0.9	Agricultural land	Topsoil segregation
LE-708	52.4	0.3	Agricultural land	Topsoil segregation
LE-709	52.4	0.2	Agricultural land	Road crossing
LE-711	52.4	0.1	Agricultural land	Road crossing
LE-710	52.4	0.1	Agricultural land	Road crossing
LE-712	52.5	0.3	Agricultural land	Topsoil segregation
LE-713	52.5	0.1	Agricultural land	Road crossing
LE-717	52.6	0.1	Agricultural land	Topsoil segregation
LE-716	52.6	0.2	Agricultural land	Road crossing
LE-715	52.6	0.1	Agricultural land	Topsoil segregation
LE-714	52.6	0.1	Agricultural land	Road crossing
LE-720	52.7	0.2	Agricultural land	Topsoil segregation
LE-722	52.7	0.1	Agricultural land	Stream crossing
LE-721	52.7	0.1	Agricultural land	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LE-718	52.7	0.1	Residential	Stream crossing
LE-719	52.7	0.1	Agricultural land	Stream crossing
LE-725	52.8	0.2	Agricultural land	Topsoil segregation
LE-724	52.8	0.2	Agricultural land	Road crossing
LE-723	52.8	0.1	Agricultural land	Point of intersection
LE-727	52.9	0.1	Agricultural land	Road crossing
LE-726	52.9	0.1	Agricultural land	Road crossing
LE-730	53.0	0.1	Agricultural land	Stream crossing
LE-729	53.0	0.1	Agricultural land	Stream crossing
LE-728	53.0	0.4	Agricultural land	Topsoil segregation
LE-732	53.1	0.1	Agricultural land	Stream crossing
LE-733	53.1	0.3	Agricultural land	Topsoil segregation
LE-731	53.1	0.1	Agricultural land	Stream crossing
LE-734	53.3	0.2	Agricultural land	Topsoil segregation
LE-736	53.3	0.3	Agricultural land	Topsoil segregation
LE-737	53.3	0.1	Agricultural land	Road crossing
LE-738	53.4	0.1	Agricultural land	Road crossing
LE-740	53.4	0.1	Open land; residential	Road crossing
LE-741	53.4	0.2	Agricultural land	Topsoil segregation
LE-742	53.5	0.1	Agricultural land	Wetland crossing
LE-745	53.6	0.1	Agricultural land	Stream crossing
LE-746	53.6	0.1	Agricultural land	Road crossing
LE-743	53.6	0.1	Agricultural land	Road crossing
LE-742.1	53.6	0.1	Open land	Road crossing
LE-744	53.6	0.1	Agricultural land	Topsoil segregation
LE-747	53.7	0.1	Agricultural land	Point of intersection
LE-748	53.7	0.2	Agricultural land	Topsoil segregation
LE-749	53.8	0.1	Upland forest; residential	Wetland crossing
LE-750	M-0199 0.0	0.2	Agricultural land	Topsoil segregation
LE-751	M-0199 0.0	0.4	Agricultural land	Road crossing
LE-753	M-0199 0.1	0.1	Open land	Road crossing
LE-754	M-0199 0.1	1.0	Agricultural land	Road crossing
LE-757	M-0199 0.2	0.2	Agricultural land	Topsoil segregation
LE-756	M-0199 0.2	0.2	Agricultural land	Road crossing
LE-755	M-0199 0.2	0.1	Agricultural land	Road crossing
LE-759	M-0199 0.3	0.1	Agricultural land	Point of intersection
LE-760	M-0199 0.3	0.2	Agricultural land	Topsoil segregation
LE-758	M-0199 0.3	0.1	Upland forest	Point of intersection
LE-761	54.2	0.2	Upland forest	Wetland crossing
LE-762	54.3	0.1	Wetland	Wetland crossing
LE-762.1	54.3	1.0	Agricultural land	Topsoil segregation
LE-764	54.7	0.1	Agricultural land	Point of intersection
LE-763	54.7	0.1	Agricultural land	Point of intersection
LE-765	54.8	0.5	Agricultural land	Topsoil segregation
LE-766	54.9	0.2	Agricultural land	Road crossing
LE-768	55.0	0.1	Agricultural land	Stream crossing
LE-767	55.0	0.2	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LE-768.1	55.2	0.8	Agricultural land	Topsoil segregation
LE-769	55.3	0.1	Agricultural land	Stream crossing
LE-769.1	M-0168 0.09	0.1	Agricultural land	Point of intersection
LE-769.2	55.4	0.1	Agricultural land	Point of intersection
LE-773	55.4	0.1	Agricultural land	Road crossing
LE-770	M-0168 0.09	0.1	Agricultural land	Stream crossing
LE-772	55.4	0.1	Agricultural land	Road crossing
LE-771	M-0168 0.09	0.2	Agricultural land	Topsoil segregation
LE-775	55.5	0.1	Agricultural land	Point of intersection
LE-774	55.5	0.2	Agricultural land; residential	Stream crossing
LE-777	55.6	0.1	Agricultural land	Stream crossing
LE-776	55.6	0.4	Agricultural land	Topsoil segregation
LE-779	55.7	0.1	Agricultural land	Stream crossing
LE-778	55.7	0.1	Agricultural land	Point of intersection
LE-780	55.8	0.7	Agricultural land	Topsoil segregation
LE-784	M-0180 0.1	0.1	Agricultural land	Point of intersection
LE-782	M-0180 0.1	0.1	Agricultural land	Road crossing
LE-781	M-0180 0.0	0.1	Open land	Road crossing
LE-781.1	M-0180 0.0	0.1	Agricultural land	Topsoil segregation
LE-783	M-0180 0.1	0.9	Agricultural land	Topsoil segregation
LE-787	56.3	0.1	Agricultural land	Topsoil segregation
LE-786	56.3	0.1	Agricultural land	Stream crossing
LE-785	56.3	0.1	Agricultural land	Stream crossing
LE-788	56.3	0.1	Agricultural land	Road crossing
LE-790	56.5	0.1	Agricultural land	Point of intersection
LE-789	56.5	0.8	Agricultural land	Topsoil segregation
LE-789.1	56.5	0.3	Agricultural land	Hydro test
LE-789.2	56.5	0.1	Agricultural land	Hydro test
LE-791	56.5	0.1	Agricultural land	Point of intersection
LE-796	56.6	0.4	Agricultural land	Topsoil segregation
LE-795	56.6	0.1	Agricultural land	Road crossing
LE-794	56.6	0.1	Agricultural land	Road crossing
LE-792	56.6	0.1	Agricultural land	Road crossing
LE-793	56.6	0.1	Agricultural land	Road crossing
LE-797	56.7	0.2	Agricultural land	Foreign pipeline crossing
LE-798	56.7	0.2	Agricultural land; upland forest	Foreign pipeline crossing
LE-801	56.8	0.1	Agricultural land	Road crossing
LE-803	56.8	0.1	Residential	Road crossing
LE-799	56.8	0.2	Agricultural land	Topsoil segregation
LE-802	56.8	0.1	Agricultural land	Road crossing
LE-804	56.9	0.1	Upland forest	Stream crossing
LE-805	56.9	0.1	Upland forest	Stream crossing
LE-805.1	57.0	0.1	Upland forest	Stream crossing
LE-806	57.3	0.1	Upland forest	Point of intersection
LE-808	57.4	0.3	Upland forest	Side slope
LE-807	57.4	0.1	Upland forest	Point of intersection
LE-809.1	57.5	0.2	Upland forest	Steep slope

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LE-810	57.5	0.1	Upland forest	Point of intersection
LE-809	57.5	0.1	Upland forest	Point of intersection
LE-810.1	57.6	0.5	Upland forest	Steep slope
LE-811	57.7	0.2	Upland forest	Steep slope
LE-810.2	57.7	0.4	Upland forest	Steep slope
LE-810.3	57.7	0.3	Upland forest	Steep slope
LE-812	58.1	0.3	Upland forest	Foreign pipeline crossing
LE-814	58.2	0.1	Upland forest	Point of intersection
LE-815	58.5	0.1	Upland forest	Steep slope
LE-816	58.6	0.1	Upland forest	Side slope
LE-817	58.7	0.2	Upland forest	Road crossing
LE-819	58.7	0.1	Upland forest	Stream crossing
LE-818	58.7	0.1	Upland forest	Road crossing
LE-820	58.7	0.1	Upland forest	Foreign pipeline crossing
LE-821	58.8	0.1	Wetland	Wetland crossing
LE-824	58.9	0.1	Upland forest	Point of intersection
LE-823	58.9	0.1	Upland forest	Wetland crossing
LE-822	58.9	0.1	Open land	Wetland crossing
LE-825	58.9	0.1	Upland forest	Point of intersection
LE-827	59.0	0.1	Agricultural land	Point of intersection
LE-826	59.0	0.5	Agricultural land	Topsoil segregation
LE-828	59.1	0.1	Agricultural land	Stream crossing
LE-831	59.2	0.1	Open land	Road crossing
LE-830	59.2	0.1	Agricultural land	Road crossing
LE-829	59.2	0.1	Agricultural land	Topsoil segregation
LE-832	59.3	0.2	Upland forest	Spoil storage
LE-833	M-0176 0.0	0.1	Upland forest	Stream crossing
LE-834	M-0176 0.0	0.2	Upland forest	Stream crossing
LE-836	M-0176 0.0	0.2	Agricultural land	Topsoil segregation
LE-839	M-0176 0.1	0.3	Agricultural land	Stream crossing
LE-840	M-0176 0.1	0.1	Upland forest	Stream crossing
LE-841	M-0176 0.1	0.2	Agricultural land	Stream crossing
LE-842.4	M-0176 0.2	0.2	Agricultural land	Point of intersection
LE-842.5	M-0176 0.2	0.2	Agricultural land	Point of intersection
LE-842	M-0176 0.1	0.2	Agricultural land	Topsoil segregation
LE-843.4	M-0200 0.0	0.2	Upland forest	Trail crossing
LE-842.3	M-0176 0.2	0.5	Upland forest	Topsoil segregation
LE-843.5	M-0200 0.0	0.2	Upland forest	Trail crossing
LE-845	M-0200 0.3	0.1	Upland forest	Stream crossing
LE-844	M-0200 0.3	0.2	Agricultural land	Stream crossing
LE-846	M-0200 0.4	0.4	Agricultural land	Topsoil segregation
LE-847	M-0200 0.5	0.5	Agricultural land	Topsoil segregation
LE-848	M-0200 0.7	0.1	Upland forest	Stream crossing
LE-849	M-0200 0.7	0.1	Upland forest	Stream crossing
LE-851	60.7	0.1	Open land upland forest	Road crossing
LE-850	60.7	0.1	Open land upland forest	Road crossing
LE-852	60.9	1.2	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LE-854	61.1	0.1	Agricultural land	Stream crossing
LE-853	61.1	0.2	Agricultural land	Stream crossing
LE-855	61.3	0.3	Agricultural land	Side slope
LE-856	61.3	0.3	Agricultural land	Topsoil segregation
LE-857	61.3	0.4	Agricultural land	Spoil storage
LE-857.3	61.4	0.1	Upland forest	Steep slope
LE-857.4	61.4	0.1	Residential; upland forest	Steep slope
LE-857.2	61.4	0.1	Agricultural land; upland forest	Steep slope
LE-857.1	61.4	0.1	Agricultural land; upland forest	Stream crossing
LE-860	61.5	0.1	Agricultural land	Road crossing
LE-859	61.5	0.1	Agricultural land	Point of intersection
LE-858	61.5	0.3	Agricultural land; upland forest	Road crossing
LE-861	61.6	0.8	Agricultural land; upland forest	Topsoil segregation
LE-862	61.9	0.3	Agricultural land	Topsoil segregation
LE-864	62.0	0.2	Agricultural land	Topsoil segregation
LE-865	62.3	1.1	Agricultural land	Topsoil segregation
LE-867	62.4	0.1	Agricultural land	Point of intersection
LE-866	62.4	0.1	Agricultural land	Point of intersection
LE-868	62.5	0.1	Upland forest	Point of intersection
LE-869	62.5	0.1	Upland forest	Stream crossing
LE-870	62.6	0.3	Upland forest	Stream crossing
LE-871	63.3	0.1	Upland forest	Point of intersection
LE-872	63.3	0.1	Upland forest	Point of intersection
LE-873	63.5	0.7	Upland forest; agricultural land	Topsoil segregation
LE-874	63.6	0.1	Agricultural land	Point of intersection
LE-877	63.7	0.1	Agricultural land	Stream crossing
LE-875	63.7	0.1	Agricultural land	Road crossing
LE-878	63.8	0.5	Agricultural land	Topsoil segregation
LE-876	63.8	0.1	Agricultural land	Stream crossing
LE-879	63.9	0.1	Agricultural land; upland forest	Stream crossing
LE-880	64.0	0.1	Upland forest	Stream crossing
LE-882	64.0	0.1	Upland forest	Stream crossing
LE-881	64.0	0.1	Upland forest	Point of intersection
LE-883	64.0	0.1	Upland forest	Point of intersection
LE-884	64.1	0.1	Upland forest	Stream crossing
LE-885	64.1	0.1	Upland forest	Point of intersection
LE-886	64.2	0.3	Agricultural land	Foreign pipeline crossing
LE-887	64.3	0.9	Agricultural land	Topsoil segregation
Schuylkill County				
SC-889	64.4	0.1	Agricultural land	Road crossing
SC-890	64.5	0.1	Agricultural land	Road crossing
SC-891	64.7	1.2	Agricultural land	Topsoil segregation
SC-892	64.9	0.4	Agricultural land	Topsoil segregation
SC-893	65.0	0.1	Agricultural land	Point of intersection
SC-894	65.0	0.1	Agricultural land; upland forest	Point of intersection
SC-899.1	65.2	0.1	Open land	Steep slope
SC-898	65.2	0.1	Residential	Point of intersection

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
SC-899	65.2	0.1	Open land	Point of intersection
SC-897	65.2	0.1	Agricultural land	Point of intersection
SC-901.1	65.3	0.1	Open land	Stream crossing
SC-901	65.3	0.1	Open land	Road crossing
SC-900	65.3	0.1	Open land	Road crossing
SC-903	65.4	0.1	Agricultural land	Stream crossing
SC-902	65.4	0.1	Upland forest	Stream crossing
SC-907	65.5	0.1	Agricultural land	Stream crossing
SC-905	65.5	0.3	Agricultural land	Topsoil segregation
SC-906	65.5	0.1	Agricultural land	Stream crossing
SC-904	65.5	0.1	Agricultural land	Stream crossing
SC-909	65.6	<0.1	Agricultural land	Stream crossing
SC-908	65.6	0.1	Agricultural land	Stream crossing
SC-911	65.7	0.3	Agricultural land	Topsoil segregation
SC-912	65.8	0.1	Agricultural land	Topsoil segregation
SC-913	M-0177 0.0	0.4	Agricultural land	Topsoil segregation
SC-914	M-0177 0.0	0.1	Agricultural land	Point of intersection
SC-915	M-0177 0.1	0.4	Agricultural land	Topsoil segregation
SC-917	M-0177 0.3	0.1	Upland forest	Stream crossing
SC-916	M-0177 0.3	0.1	Upland forest	Stream crossing
SC-919	M-0177 0.4	0.2	Upland forest	Road crossing
SC-919.1	M-0177 0.5	1.1	Open land	Topsoil segregation
SC-918	M-0177 0.4	0.1	Upland forest	Road crossing
SC-920	M-0177 0.6	0.1	Upland forest	Point of intersection
SC-921	66.6	0.1	Agricultural land	Point of intersection
SC-923	66.7	0.1	Agricultural land	Road crossing
SC-925	66.8	0.1	Agricultural land	Road crossing
SC-924	66.8	0.1	Agricultural land	Road crossing
SC-922	66.8	0.1	Agricultural land	Road crossing
SC-926	M-0196 0.0	0.7	Agricultural land	Topsoil segregation
SC-929	M-0196 0.0	0.1	Agricultural land	Road crossing
SC-927	M-0196 0.0	0.1	Agricultural land	Road crossing
SC-927.1	M-0196 0.0	0.1	Agricultural land	Point of intersection
SC-928	M-0196 0.0	0.1	Agricultural land	Road crossing
SC-930	M-0196 0.0	1.0	Agricultural land	Topsoil segregation
SC-930.1	M-0196 0.2	0.1	Agricultural land	Point of intersection
SC-930.2	M-0196 0.2	0.1	Agricultural land	Point of intersection
SC-930.3	M-0196 0.2	0.1	Agricultural land	Point of intersection
SC-931	67.4	0.8	Agricultural land	Topsoil segregation
SC-933	67.6	0.1	Agricultural land	Stream crossing
SC-932	67.6	0.1	Agricultural land	Stream crossing
SC-934	67.7	0.4	Agricultural land	Topsoil segregation
SC-935	67.8	0.1	Agricultural land	Valve fabrication
SC-936	67.8	0.2	Agricultural land	Topsoil segregation
SC-938	68.0	0.2	Upland forest	Point of intersection
SC-937	68.0	0.2	Upland forest; open land	Point of intersection
SC-939	68.1	0.2	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
SC-940	68.2	0.2	Agricultural land	Topsoil segregation
SC-941	68.2	0.1	Agricultural land	Point of intersection
SC-943	68.3	0.1	Agricultural land	Stream crossing
SC-942	68.3	0.2	Agricultural land	Topsoil segregation
SC-944	68.4	0.1	Upland forest; agricultural land	Stream crossing
SC-945	68.4	0.1	Agricultural land	Stream crossing
SC-946	68.5	0.3	Agricultural land	Topsoil segregation
SC-948	68.6	0.5	Agricultural land	Topsoil segregation
SC-947	68.6	0.1	Agricultural land	Point of intersection
SC-950	68.7	0.1	Upland forest	Point of intersection
SC-949	68.7	0.2	Upland forest	Point of intersection
SC-952	68.8	0.1	Upland forest	Road crossing
SC-951	68.8	0.1	Upland forest	Road crossing
SC-954	68.8	0.1	Upland forest	Road crossing
SC-953	68.8	0.1	Upland forest	Road crossing
SC-956	68.9	0.3	Upland forest	Side slope
SC-955	68.9	0.3	Upland forest	Side slope
SC-957	69.1	0.1	Upland forest	Point of intersection
SC-958	69.1	0.1	Upland forest	Stream crossing
SC-960	69.2	0.1	Upland forest	Point of intersection
SC-959	69.2	0.1	Upland forest	Point of intersection
SC-963	69.6	0.1	Upland forest	Point of intersection
SC-964	69.6	0.1	Upland forest	Point of intersection
SC-961	69.7	2.7	Upland forest	Side slope
SC-962	69.7	2.7	Upland forest	Side slope
SC-965	70.1	0.1	Upland forest	Point of intersection
SC-966	70.2	0.1	Upland forest	Point of intersection
SC-968	70.6	0.1	Upland forest	Steep slope
SC-967	70.6	0.1	Upland forest	Steep slope
SC-969	70.7	0.1	Upland forest	Point of intersection
SC-970	70.7	0.1	Upland forest	Point of intersection
SC-971	M-0181 0.0	0.4	Upland forest	Side slope
SC-973	M-0181 0.0	0.1	Upland forest	Point of intersection
SC-972	M-0181 0.0	0.1	Upland forest	Point of intersection
SC-973.1	M-0181 0.0	0.1	Upland forest	Steep slope
SC-974	M-0181 0.1	<0.1	Upland forest	Road crossing
SC-976	M-0181 0.2	0.1	Upland forest	Stream crossing
SC-975	M-0181 0.1	0.1	Residential	Road crossing
SC-976.1	M-0181 0.2	0.1	Upland forest	Stream crossing
SC-977	71.1	0.1	Upland forest	Point of intersection
SC-978	71.3	0.1	Upland forest	Point of intersection
SC-979	71.6	0.1	Upland forest	Point of intersection
SC-983	72.6	0.1	Upland forest	Road crossing
SC-982	72.6	0.1	Upland forest	Road crossing
SC-984	72.7	0.1	Upland forest	Stream crossing
SC-985	72.7	0.1	Upland forest	Stream crossing
SC-987	73.2	0.1	Upland forest	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
SC-986	73.2	0.1	Upland forest	Road crossing
SC-989	73.3	0.1	Upland forest	Point of intersection
SC-988	73.3	0.1	Upland forest	Point of intersection
SC-994	73.4	0.2	Upland forest	Road crossing
SC-993	73.4	0.1	Upland forest	Road crossing
SC-992	73.4	0.1	Upland forest	Road crossing
SC-991	73.4	0.1	Upland forest	Point of intersection
SC-990	73.4	0.1	Upland forest	Point of intersection
SC-996	73.5	0.1	Upland forest	Stream crossing
SC-997	73.5	0.2	Upland forest	Stream crossing
SC-998	73.6	0.1	Open land	Wetland crossing
SC-999	73.6	0.1	Upland forest	Wetland crossing
SC-1000	73.9	0.1	Upland forest	Point of intersection
SC-1001	74.0	0.1	Upland forest	Wetland crossing
SC-1002	74.0	0.1	Upland forest	Wetland crossing
SC-1006	74.1	0.1	Upland forest	Railroad crossing
SC-1002.1	74.1	<0.1	Upland forest	Wetland crossing
SC-1005	74.1	0.1	Upland forest	Railroad crossing
SC-1004	74.1	0.1	Upland forest	Wetland crossing
SC-1003	74.1	0.1	Upland forest	Wetland crossing
SC-1007	M-0201 0.0	0.2	Upland forest	Railroad crossing
SC-1008	M-0201 0.4	0.8	Wetland	Wetland crossing
SC-1009	M-0201 0.48	0.4	Wetland	Wetland crossing
SC-1018	74.9	0.1	Upland forest	Road crossing
SC-1019	74.9	0.1	Upland forest	Road crossing
SC-1020	75.0	0.3	Agricultural land	Topsoil segregation
SC-1022	75.1	0.2	Agricultural land	Topsoil segregation
SC-1021	75.1	0.1	Agricultural land	Topsoil segregation
SC-1023	75.4	0.1	Agricultural land	Topsoil segregation
SC-1023.2	75.6	0.7	Upland forest	Steep slope
SC-1023.1	75.7	0.8	Upland forest	Steep slope
SC-1024	75.9	0.7	Upland forest	Steep slope
SC-1025	75.9	0.8	Upland forest	Steep slope
SC-1027	76.0	0.1	Upland forest	Stream crossing
SC-1026	76.0	0.1	Upland forest	Stream crossing
SC-1026.1	76.1	0.1	Wetland	Wetland crossing
SC-1029	76.2	0.2	Agricultural land	Road crossing
SC-1028	76.2	0.1	Agricultural land	Road crossing
SC-1030	76.3	1.1	Agricultural land	Topsoil segregation
SC-1032	76.5	0.1	Agricultural land	Stream crossing
SC-1031	76.5	0.1	Agricultural land	Stream crossing
SC-1035	76.6	0.2	Agricultural land	Topsoil segregation
SC-1034	76.6	0.1	Upland forest; agricultural land	Stream crossing
SC-1033	76.6	0.1	Agricultural land	Stream crossing
SC-1037	76.7	0.1	Agricultural land	Road crossing
SC-1036	76.7	0.2	Agricultural land	Road crossing
SC-1038	76.8	0.7	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
SC-1039	76.9	0.1	Agricultural land	Stream crossing
SC-1042	M-0170 0.0	0.1	Residential	Stream crossing
SC-1041	M-0170 0.0	0.1	Residential	Stream crossing
SC-1041.1	M-0170 0.1	0.1	Residential	Point of intersection
SC-1040	M-0170 0.0	0.1	Agricultural land	Stream crossing
SC-1045	M-0170 0.1	0.1	Agricultural land	Road crossing
SC-1046	M-0170 0.1	0.1	Agricultural land	Stream crossing
SC-1044	M-0170 0.1	0.1	Residential	Road crossing
SC-1043	M-0170 0.0	0.2	Residential	Topsoil segregation
SC-1047	M-0170 0.1	0.8	Agricultural land	Topsoil segregation
SC-1047.1	77.5	0.2	Upland forest	Steep slope
SC-1048	77.7	0.1	Agricultural land	Topsoil segregation
SC-1049	77.7	0.1	Agricultural land	Road crossing
SC-1057	78.0	0.1	Upland forest	Stream crossing
SC-1056	78.0	0.1	Agricultural land	Stream crossing
SC-1058	78.2	1.3	Agricultural land	Topsoil segregation
SC-1060	78.5	0.1	Upland forest	Road crossing
SC-1059	78.5	<0.1	Open land; upland forest	Road crossing
SC-1060.3	79.3	0.3	Upland forest	Side slope
SC-1061	79.8	0.5	Agricultural land	Topsoil segregation
SC-1062	80.0	0.4	Agricultural land	Topsoil segregation
SC-1063	80.2	0.1	Upland forest	Stream crossing
SC-1064	80.2	0.1	Open land	Stream crossing
SC-1066	80.3	0.1	Open land	Road crossing
SC-1065	80.3	0.1	Upland forest	Road crossing
SC-1067.1	80.4	0.1	Agricultural land	Foreign pipeline crossing
SC-1067	80.4	0.3	Agricultural land	Topsoil segregation
SC-1069	80.4	0.1	Agricultural land	Road crossing
SC-1070	80.5	0.1	Agricultural land	Road crossing
SC-1071	80.5	0.1	Agricultural land	Road crossing
SC-1068	80.5	0.1	Agricultural land	Road crossing
SC-1072	80.7	1.2	Agricultural land	Topsoil segregation
SC-1072.1	80.8	0.1	Agricultural land	Foreign pipeline crossing
SC-1076	80.9	0.1	Agricultural land	Road crossing
SC-1075	80.9	0.1	Agricultural land	Road crossing
SC-1074	80.9	0.1	Agricultural land	Road crossing
SC-1073	80.9	0.1	Agricultural land	Road crossing
SC-1077	81.0	0.8	Agricultural land	Topsoil segregation
SC-1078	81.1	0.1	Agricultural land	Stream crossing
SC-1079	81.1	0.1	Agricultural land	Stream crossing
SC-1082	81.2	0.2	Agricultural land	Topsoil segregation
SC-1081	81.2	0.1	Agricultural land	Stream crossing
SC-1080	81.2	0.1	Agricultural land	Stream crossing
SC-1083	81.4	0.1	Agricultural land	Point of intersection
SC-1084	81.5	0.9	Agricultural land	Topsoil segregation
SC-1085	M-0194 0.1	0.1	Agricultural land	Road crossing
SC-1086	M-0194 0.1	0.1	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
SC-1089	M-0194 0.1	0.1	Agricultural land	Topsoil segregation
SC-1087	M-0194 0.1	0.1	Agricultural land	Road crossing
SC-1088	M-0194 0.1	0.1	Agricultural land	Road crossing
SC-1092	M-0194 0.2	1.0	Agricultural land	Topsoil segregation
SC-1092.1	M-0194 0.2	0.1	Agricultural land	Point of intersection
SC-1092.2	M-0194 0.2	0.1	Agricultural land	Point of intersection
SC-1091	M-0194 0.2	0.1	Agricultural land	Stream crossing
SC-1090	M-0194 0.2	0.1	Agricultural land	Road crossing
SC-1093	M-0194 0.4	0.1	Agricultural land	Point of intersection
SC-1093.1	M-0194 0.4	0.1	Agricultural land	Point of intersection
SC-1094	M-0194 0.5	0.1	Agricultural land	Road crossing
SC-1095	M-0194 0.5	<0.1	Open land	Road crossing
SC-1096	M-0194 0.5	0.8	Open land	Topsoil segregation
Northumberland County				
NO-1101	82.8	0.6	Open land	Topsoil segregation
NO-1102	M-0194 1.2	0.5	Upland forest	Side slope
NO-1103	83.3	0.2	Upland forest	Point of intersection
NO-1104	83.4	0.1	Upland forest	Stream crossing
NO-1106	83.4	0.2	Upland forest	Stream crossing
NO-1105	83.4	0.2	Upland forest	Stream crossing
NO-1107	83.7	0.1	Upland forest	Road crossing
NO-1108	83.7	0.1	Upland forest	Road crossing
NO-1109	83.7	0.1	Upland forest	Road crossing
NO-1110	83.8	0.1	Upland forest	Point of intersection
NO-1111	83.8	0.1	Upland forest	Point of intersection
NO-1113	83.9	0.1	Upland forest	Point of intersection
NO-1112	83.9	0.1	Upland forest	Point of intersection
NO-1114	85	0.1	Upland forest	Topsoil segregation
NO-1115	85.1	0.1	Upland forest	Topsoil segregation
NO-1116	85.2	0.2	Upland forest	Topsoil segregation
NO-1116.3	85.4	0.1	Upland forest	Hydro testing
NO-1116.4	85.4	0.1	Upland forest	Hydro testing
NO-1117	85.4	0.1	Upland forest	Stream crossing
NO-1118	85.4	0.1	Upland forest	Stream crossing
NO-1119	85.5	0.1	Upland forest	Stream crossing
NO-1120	85.5	0.1	Upland forest	Stream crossing
NO-1120.1	85.8	0.1	Upland forest	Point of intersection
NO-1120.2	85.8	0.2	Upland forest	Steep slope
NO-1121	85.9	0.1	Upland forest	Road crossing
NO-1122	85.9	0.1	Upland forest	Road crossing
NO-1124	85.9	<0.1	Upland forest	Stream crossing
NO-1123	85.9	0.1	Upland forest	Stream crossing
NO-1126	86.0	0.1	Upland forest	Stream crossing
NO-1125	86.0	0.1	Upland forest	Stream crossing
NO-1126.1	86.1	0.2	Upland forest	Steep slope
NO-1126.2	86.1	0.1	Upland forest	Point of intersection
NO-1127	86.6	0.1	Upland forest, open land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
NO-1128	86.6	0.1	Upland forest	Road crossing
NO-1130	86.6	0.1	Upland forest	Stream crossing
NO-1129	86.6	0.1	Upland forest	Stream crossing
NO-1131	86.8	0.1	Upland forest	Point of intersection
NO-1132	86.8	0.1	Upland forest	Point of intersection
NO-1133	86.8	0.1	Upland forest	Road crossing
NO-1134	86.9	0.1	Upland forest	Road crossing
NO-1135	86.9	0.1	Upland forest	Road crossing
NO-1136	86.9	0.1	Open land	Road crossing
NO-1136.1	87.0	0.1	Upland forest	Waterbody crossing
NO-1137	87.7	0.1	Upland forest	Road crossing
NO-1138	87.7	0.1	Upland forest	Road crossing
NO-1139	87.7	0.1	Upland forest	Road crossing
NO-1140	87.7	0.1	Upland forest	Road crossing
NO-1139.1	88.6	0.5	Upland forest	Steep slope
NO-1141	89.1	0.1	Upland forest	Road crossing
NO-1142	89.1	0.1	Upland forest	Road crossing
NO-1143	89.1	0.1	Upland forest	Road crossing
NO-1144	89.2	0.1	Upland forest	Road crossing
NO-1144.3	89.2	0.1	Upland forest	Point of intersection
NO-1145	89.2	0.1	Upland forest	Point of intersection
NO-1146	89.4	0.1	Upland forest	Point of intersection
NO-1146.1	89.7	1.4	Upland forest	Steep slope
NO-1148	90	0.1	Upland forest	Road crossing
NO-1147	90	0.1	Upland forest	Road crossing
NO-1149	90	0.1	Upland forest	Road crossing
NO-1150	90	0.1	Upland forest	Road crossing
NO-1151	90.1	0.1	Upland forest	Point of intersection
NO-1152	90.3	0.1	Upland forest	Road crossing
NO-1154	90.3	0.1	Upland forest	Road crossing
NO-1153	90.3	0.1	Agricultural land	Road crossing
NO-1155	M-0167 0.1	1.0	Agricultural land	Topsoil segregation
NO-1156	M-0167 0.2	0.1	Agricultural land	Road crossing
NO-1157	M-0167 0.3	0.1	Agricultural land	Road crossing
NO-1159	M-0167 0.3	0.1	Agricultural land	Road crossing
NO-1158	M-0167 0.3	0.1	Agricultural land	Road crossing
NO-1160	M-0167 0.3	0.9	Agricultural land	Topsoil segregation
NO-1161	91.0	0.1	Upland forest	Wetland crossing
NO-1162	91.0	0.1	Upland forest	Wetland crossing
Columbia County				
CO-1163	91.1	0.1	Agricultural land	Road crossing
CO-1164	91.1	0.2	Agricultural land	Road crossing
CO-1165	91.1	0.3	Agricultural land	Topsoil segregation
CO-1166	91.1	0.2	Agricultural land	Point of intersection
CO-1167	91.2	0.1	Agricultural land	Point of intersection
CO-1168	91.3	0.8	Agricultural land	Topsoil segregation
CO-1169	91.5	0.1	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1170	91.5	0.1	Agricultural land	Road crossing
CO-1172	91.5	0.1	Agricultural land	Road crossing
CO-1171	91.5	0.1	Agricultural land	Road crossing
CO-1173	91.6	0.5	Agricultural land	Topsoil segregation
CO-1174	91.7	0.1	Agricultural land	Topsoil segregation
CO-1175	91.7	0.1	Agricultural land	Road crossing
CO-1176	91.7	0.1	Agricultural land	Road crossing
CO-1177	91.7	0.1	Agricultural land	Point of intersection
Northumberland County				
NO-1179	91.8	0.1	Upland forest	Stream crossing
NO-1178	91.8	0.1	Upland forest	Stream crossing
NO-1180	91.9	0.8	Residential	Topsoil segregation
NO-1182	92.0	0.1	Residential	Point of intersection
NO-1181	92.0	0.1	Residential	Point of intersection
NO-1182.1	92.2	0.3	Upland forest	Steep slope
NO-1183	92.2	0.1	Upland forest	Stream crossing
Columbia County				
CO-1183.1	92.3	<0.1	Wetland	Wetland crossing
CO-1185	92.3	0.1	Upland forest	Road crossing
CO-1184	92.3	0.1	Upland forest	Road crossing
CO-1185.1	92.3	0.1	Upland forest	Steep slope
CO-1184.1	92.3	0.1	Upland forest	Steep slope
CO-1186	92.4	0.2	Upland forest	Side slope
CO-1187	92.5	0.4	Agricultural land	Topsoil segregation
CO-1188	92.7	0.5	Agricultural land	Topsoil segregation
CO-1189	92.9	0.2	Agricultural land	Topsoil segregation
CO-1190	93	0.1	Upland forest	Road crossing
CO-1191	93	0.1	Agricultural land	Road crossing
CO-1192	93.1	0.1	Agricultural land	Road crossing
CO-1193	93.1	0.1	Agricultural land	Road crossing
CO-1194	93.1	0.1	Agricultural land	Topsoil segregation
CO-1195	93.2	0.1	Agricultural land	Topsoil segregation
CO-1196	93.2	0.1	Agricultural land	Road crossing
CO-1197	93.2	0.1	Agricultural land	Road crossing
CO-1198	93.2	0.1	Agricultural land	Road crossing
CO-1199	93.3	0.6	Agricultural land	Topsoil segregation
CO-1200	93.5	0.3	Agricultural land	Topsoil segregation
CO-1202	93.8	0.1	Agricultural land	Point of intersection
CO-1201	93.9	0.1	Upland forest	Point of intersection
CO-1203	93.9	0.7	Agricultural land	Topsoil segregation
CO-1204	94	0.1	Agricultural land	Point of intersection
CO-1205	94	0.1	Agricultural land	Point of intersection
CO-1205.1	94.1	0.1	Upland forest	Steep slope
CO-1205.2	94.2	0.2	Agricultural land	Steep slope
CO-1206	94.4	0.1	Upland forest; agricultural land	Topsoil segregation
CO-1208	94.4	0.1	Upland forest; open land	Stream crossing
CO-1207	94.4	0.1	Upland forest; open land	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1209	94.5	0.4	Upland forest	Road crossing
CO-1210	94.5	0.1	Upland forest	Road crossing
CO-1211	94.7	0.7	Agricultural land	Topsoil segregation
CO-1212	94.8	0.3	Agricultural land	Topsoil segregation
CO-1213	94.9	0.1	Agricultural land	Point of intersection
CO-1214	94.9	0.1	Agricultural land	Stream crossing
CO-1220	95.1	0.1	Upland forest	Road crossing
CO-1219	95.1	0.1	Agricultural land	Road crossing
CO-1221	95.2	0.6	Agricultural land	Topsoil segregation
CO-1222	95.2	0.1	Agricultural land	Point of intersection
CO-1222.1	95.3	0.1	Agricultural land	Stream crossing
CO-1222.2	95.3	0.1	Agricultural land	Stream crossing
CO-1223	95.4	0.1	Agricultural land	Topsoil segregation
CO-1224	95.4	0.1	Agricultural land	Road crossing
CO-1225	95.4	<0.1	Agricultural land	Road crossing
CO-1226	95.5	0.1	Agricultural land	Stream crossing
CO-1227	95.5	0.1	Agricultural land	Stream crossing
CO-1228	95.6	0.6	Agricultural land	Topsoil segregation
CO-1228.3	95.7	0.8	Upland forest	Steep slope
CO-1229	95.8	0.1	Upland forest	Stream crossing
CO-1230	95.9	0.1	Open land	Stream crossing
CO-1231	96	0.6	Agricultural land	Topsoil segregation
CO-1232	96.1	0.1	Agricultural land	Road crossing
CO-1233	96.1	0.1	Open land	Road crossing
CO-1234	96.2	0.1	Open land	Road crossing
CO-1235	96.2	0.1	Agricultural land	Topsoil segregation
CO-1237	M-0197 0.0	0.1	Agricultural land	Point of intersection
CO-1236	M-0197 0.0	2.2	Agricultural land	Topsoil segregation
CO-1238	M-0197 0.5	0.1	Agricultural land	Point of intersection
CO-1239	96.9	0.1	Agricultural land	Road crossing
CO-1240	97	0.1	Agricultural land	Road crossing
CO-1241	97	0.4	Agricultural land	Topsoil segregation
CO-1242	97.1	0.1	Agricultural land	Road crossing
CO-1243	97.1	0.1	Agricultural land	Road crossing
CO-1244	97.1	0.1	Agricultural land	Road crossing
CO-1245	97.2	0.4	Agricultural land	Topsoil segregation
CO-1246	97.2	0.1	Agricultural land	Road crossing
CO-1247	97.4	0.9	Agricultural land	Topsoil segregation
CO-1248	97.6	0.6	Agricultural land; residential	Topsoil segregation
CO-1250	97.8	0.2	Upland forest	Point of intersection
CO-1249	97.9	0.1	Upland forest	Point of intersection
CO-1251	97.9	0.1	Upland forest	Road crossing
CO-1253	97.9	0.2	Agricultural land	Point of intersection
CO-1252	97.9	0.1	Agricultural land	Point of intersection
CO-1254	98	0.4	Agricultural land	Topsoil segregation
CO-1255	98	0.1	Agricultural land	Road crossing
CO-1256	98	0.1	Agricultural land	Road crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1258	98.1	0.1	Agricultural land	Road crossing
CO-1258.1	M-0174 0.0	0.1	Agricultural land	Point of intersection
CO-1257	98.1	0.1	Agricultural land	Road crossing
CO-1259	M-0174 0.0	1.2	Agricultural land	Topsoil segregation
CO-1259.1	M-0174 0.3	0.1	Agricultural land	Point of intersection
CO-1260	M-0174 0.4	1.2	Agricultural land	Topsoil segregation
CO-1260.1	M-0174 0.4	0.1	Agricultural land	Point of intersection
CO-1261	98.8	0.1	Agricultural land	Road crossing
CO-1262	98.8	0.1	Agricultural land	Road crossing
CO-1264	98.8	0.1	Agricultural land	Road crossing
CO-1263	98.8	0.1	Agricultural land	Road crossing
CO-1266	99.2	0.7	Agricultural land	Topsoil segregation
CO-1265	99.0	0.9	Agricultural land	Topsoil segregation
CO-1266.1	99.3	0.1	Agricultural land	HDD
CO-1266.2	99.3	0.5	Agricultural land	HDD
CO-1270	100.0	0.1	Agricultural land	Road crossing
CO-1270.1	100.0	0.1	Agricultural land	HDD
CO-1271	100.0	0.1	Agricultural land	Road crossing
CO-1272.1	100.0	0.5	Agricultural land	HDD
CO-1270.1	100.0	0.1	Agricultural land	HDD
CO-1272	100.1	0.6	Upland forest	Topsoil segregation
CO-1283	100.2	0.1	Upland forest	Steep slope
CO-1274	100.3	0.5	Open land	Steep slope
CO-1275	100.6	0.5	Agricultural land	Topsoil segregation
CO-1276	100.9	0.6	Agricultural land	Topsoil segregation
CO-1278	101.0	0.1	Agricultural land	Road crossing
CO-1277	101.0	0.1	Agricultural land	Road crossing
CO-1279	101.0	0.1	Agricultural land	Road crossing
CO-1280	101.1	0.1	Agricultural land	Road crossing
CO-1281	M-0179 0.0	0.9	Agricultural land	Topsoil segregation
CO-1283	M-0179 0.1	0.1	Open land; upland forest	Point of intersection
CO-1282	M-0179 0.0	0.1	Upland forest	Point of intersection
CO-1284	M-0179 0.3	0.1	Upland forest	Point of intersection
CO-1286	101.5	0.2	Wetland	Wetland crossing
CO-1287	101.6	<0.1	Upland forest	Stream crossing
CO-1288	101.7	<0.1	Upland forest	Stream crossing
CO-1290	101.7	0.1	Open land	Road crossing
CO-1291	101.7	0.1	Upland forest	Stream crossing
CO-1289	101.7	0.1	Open land	Road crossing
CO-1295	101.8	0.1	Open land	Road crossing
CO-1294	101.9	0.4	Open land	Road crossing
CO-1296	101.9	0.1	Open land	Point of intersection
CO-1297	102	0.1	Open land	Stream crossing
CO-1298	102	0.1	Upland forest	Stream crossing
CO-1300	102.1	0.1	Agricultural land	Stream crossing
CO-1299	102.1	0.1	Agricultural land	Stream crossing
CO-1301	102.1	0.3	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1303	102.2	0.2	Agricultural land	Topsoil segregation
CO-1302	102.3	0.2	Agricultural land	Topsoil segregation
CO-1304	102.5	0.7	Agricultural land	Topsoil segregation
CO-1305	102.6	0.1	Agricultural land	Road crossing
CO-1306	102.6	0.1	Agricultural land	Road crossing
CO-1307	102.6	0.1	Upland forest	Road crossing
CO-1307.1	102.6	0.1	Upland forest	Steep slope
CO-1307.2	102.8	0.1	Open land	Stream crossing
CO-1307.3	102.9	0.1	Upland forest	Stream crossing
CO-1307.4	102.9	0.3	Upland forest	Topsoil segregation
CO-1308	103.0	0.1	Agricultural land	Point of intersection
CO-1309	103.7	0.1	Upland forest	Stream crossing
CO-1310	103.8	0.1	Agricultural land	Stream crossing
CO-1311	103.8	0.3	Agricultural land	Topsoil segregation
CO-1312	103.9	0.1	Agricultural land	Stream crossing
CO-1313	104.0	0.1	Open land	Road crossing
CO-1314	104.0	0.1	Open land	Road crossing
CO-1319	104.2	0.1	Wetland	Wetland crossing
CO-1321	104.2	0.1	Wetland	Wetland crossing
CO-1322	104.3	0.2	Wetland	Wetland crossing
CO-1323	104.4	<0.1	Agricultural land	Road crossing
CO-1324	104.4	0.1	Agricultural land	Road crossing
CO-1325	104.4	0.1	Agricultural land	Road crossing
CO-1326	104.4	0.3	Agricultural land	Topsoil segregation
CO-1326.1	104.5	0.2	Agricultural land	Topsoil segregation
CO-1327	104.6	0.1	Residential	Road crossing
CO-1328	104.6	0.1	Residential	Road crossing
CO-1329	104.7	0.1	Agricultural land	Road crossing
CO-1330	104.7	0.3	Agricultural land	Topsoil segregation
CO-1331	104.8	0.1	Upland forest	Road crossing
CO-1332	104.8	0.1	Upland forest	Topsoil segregation
CO-1333	104.8	0.1	Agricultural land	Stream crossing
CO-1334	104.8	0.1	Agricultural land	Stream crossing
CO-1335	104.9	0.3	Agricultural land,; upland forest	Topsoil segregation
CO-1336	104.9	0.1	Agricultural land	Stream crossing
CO-1337	105	0.1	Agricultural land	Stream crossing
CO-1338	105	0.1	Agricultural land	Topsoil segregation
CO-1338.1	105.0	0.1	Agricultural land	Topsoil segregation
CO-1339	105.1	<0.1	Agricultural land	Topsoil segregation
CO-1339.1	M-0156 0.0	0.2	Agricultural land	Topsoil segregation
CO-1340	M-0156 0.0	0.1	Open land	Road crossing
CO-1341	M-0156 0.0	0.1	Open land	Road crossing
CO-1342	M-0156 0.1	0.1	Agricultural land	Road crossing
CO-1344	M-0156 0.1	0.1	Agricultural land	Road crossing
CO-1343	M-0156 0.1	0.3	Agricultural land	Topsoil segregation
CO-1345	105.5	0.1	Agricultural land	Point of intersection
CO-1346	105.8	0.8	Agricultural land	Topsoil segregation

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Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1347	106.0	0.1	Agricultural land	Point of intersection
CO-1348	M-0171 0.0	0.8	Agricultural land	Topsoil segregation
CO-1349	M-0171 0.0	0.1	Agricultural land	Point of intersection
CO-1350	M-0171 0.0	0.1	Agricultural land	Point of intersection
CO-1351	M-0171 0.0	0.1	Agricultural land	Topsoil segregation
CO-1352	M-0171 0.2	0.1	Agricultural land; upland forest	Road crossing
CO-1353	M-0171 0.2	0.1	Upland forest	Point of intersection
CO-1354	M-0171 0.2	0.9	Upland forest	Topsoil segregation
CO-1354.1	M-0171 0.3	0.1	Upland forest	Road crossing
CO-1354.2	M-0171 0.5	0.1	Upland forest	Point of intersection
CO-1354.3	M-0171 0.6	0.5	Upland forest	Steep slope
CO-1354.4	M-0171 0.6	0.3	Upland forest	Steep slope
CO-1355	106.9	0.2	Upland forest	Road crossing
CO-1356	106.9	0.1	Agricultural land	Road crossing
CO-1358	106.9	0.2	Agricultural land	Topsoil segregation
CO-1357	106.9	0.2	Agricultural land	Road crossing
CO-1359	107.0	0.1	Agricultural land	Point of intersection
CO-1360	107.0	<0.1	Residential	Road crossing
CO-1361	107.1	0.1	Upland forest	Stream crossing
CO-1362	107.1	0.1	Upland forest	Stream crossing
CO-1361.1	107.1	<0.1	Open land	Wetland crossing
CO-1362.1	107.1	<0.1	Open land	Topsoil segregation
CO-1363	107.3	0.7	Open land; upland forest	Topsoil segregation
CO-1364	107.3	0.1	Open land	Point of intersection
CO-1365	107.3	0.2	Open land; upland forest	Point of intersection
CO-1366	107.4	0.1	Residential	Road crossing
CO-1367	107.4	0.1	Residential	Road crossing
CO-1368	107.4	0.3	Agricultural	Topsoil segregation
CO-1369	M-0195 0.0	0.1	Upland forest	Point of intersection
CO-1370	M-0195 0.0	0.3	Upland forest	Steep slope
CO-1371	M-0195 0.0	0.3	Upland forest	Steep slope
CO-1371.1	M-0195 0.1	0.1	Upland forest	Road crossing
CO-1371.2	M-0195 0.1	0.1	Upland forest	Road crossing
CO-1372	M-0195 0.1	0.2	Upland forest	Steep slope
CO-1372.1	M-0195 0.1	0.1	Upland forest	Stream crossing
CO-1372.2	M-0195 0.1	0.1	Upland forest	Stream crossing
CO-1373	M-0195 0.1	0.1	Upland forest	Steep slope
CO-1374	M-0195 0.2	0.1	Upland forest	Point of intersection
CO-1375	M-0195 0.2	0.1	Upland forest	Point of intersection
CO-1376	M-0195 0.5	0.6	Upland forest	Topsoil segregation
CO-1377	M-0195 0.7	0.6	Upland forest	Topsoil segregation
CO-1378	M-0195 0.7	0.1	Upland forest	Point of intersection
CO-1382	M-0195 0.9	0.1	Upland forest	Point of intersection
CO-1382.1	108.5	0.1	Agricultural land	Point of intersection
CO-1383	108.5	0.2	Agricultural land	Topsoil segregation
CO-1384	108.6	0.1	Upland forest	Stream crossing
CO-1385	108.7	0.1	Upland forest	Stream crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1386	108.7	0.1	Upland forest, open land	Stream crossing
CO-1387	108.7	0.1	Upland forest, open land	Stream crossing
CO-1388	108.7	0.1	Upland forest, open land	Road crossing
CO-1389	108.8	0.1	Agricultural land	Stream crossing
CO-1390	108.8	0.1	Upland forest	Stream crossing
CO-1391	108.8	0.1	Agricultural land	Point of intersection
CO-1392	108.8	0.1	Agricultural land	Point of intersection
CO-1393	108.9	1.0	Agricultural land	Topsoil segregation
CO-1394	109.1	0.1	Agricultural land	Stream crossing
CO-1395	109.2	0.1	Agricultural land	Stream crossing
CO-1396	109.3	0.7	Agricultural land	Topsoil segregation
CO-1398	109.4	0.1	Agricultural land	Road crossing
CO-1397	109.4	0.1	Agricultural land	Road crossing
CO-1399.1	109.5	0.1	Agricultural land	Road crossing
CO-1399	109.5	0.6	Agricultural land	Topsoil segregation
CO-1400	109.6	<0.1	Agricultural land	Point of intersection
CO-1401	109.6	0.1	Agricultural land	Road crossing
CO-1403	109.6	0.1	Agricultural land	Road crossing
CO-1402	109.6	0.1	Agricultural land	Road crossing
CO-1404	109.8	0.9	Agricultural land	Topsoil segregation
CO-1406	109.9	0.1	Agricultural land	Stream crossing
CO-1407	109.9	0.1	Open land	Stream crossing
CO-1408	109.9	0.1	Agricultural land	Stream crossing
CO-1409	110.0	0.1	Open land	Road crossing
CO-1410	110.0	0.1	Agricultural land	Road crossing
CO-1412	110.0	0.1	Agricultural land	Point of intersection
CO-1411	110.1	0.6	Agricultural land	Topsoil segregation
CO-1413	110.2	0.1	Agricultural land	Stream crossing
CO-1414	110.2	0.1	Upland forest	Stream crossing
CO-1415	110.2	<0.1	Wetland	Wetland crossing
CO-1417	110.2	0.2	Upland forest	Road crossing
CO-1416	110.2	0.1	Agricultural land, upland forest	Road crossing
CO-1418	110.4	0.7	Agricultural land	Topsoil segregation
CO-1419	110.6	0.4	Agricultural land	Topsoil segregation
CO-1420	110.7	0.1	Agricultural land	Road crossing
CO-1421	110.7	0.1	Agricultural land	Road crossing
CO-1422	110.8	0.6	Agricultural land	Topsoil segregation
CO-1423	111.0	0.6	Agricultural land	Topsoil segregation
CO-1425	111.1	0.1	Agricultural land,	Road crossing
CO-1424	111.1	0.1	Agricultural land	Road crossing
CO-1426	111.2	0.1	Agricultural land	Road crossing
CO-1429	111.2	0.1	Agricultural land	Stream crossing
CO-1430	111.3	0.1	Open land upland forest	Stream crossing
CO-1431	111.3	0.1	Open land	Stream crossing
CO-1433	111.4	0.1	Agricultural land	Point of intersection
CO-1434	111.4	0.1	Agricultural land	Point of intersection
CO-1432	111.4	0.8	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1435	111.5	0.1	Agricultural land	Road crossing
CO-1437	111.7	0.1	Agricultural land	Stream crossing
CO-1436	111.7	0.1	Agricultural land	Stream crossing
CO-1438	111.8	1.3	Agricultural land	Topsoil segregation
CO-1439	112.0	0.1	Agricultural land	Point of intersection
CO-1441	112.0	0.1	Agricultural land	Point of intersection
CO-1442	112.1	0.1	Agricultural land	Road crossing
CO-1440	112.1	0.1	Agricultural land	Road crossing
CO-1443	112.1	0.1	Agricultural land	Point of intersection
CO-1444	112.1	0.1	Agricultural land	Point of intersection
CO-1444.1	112.2	0.1	Agricultural land	Road crossing
CO-1444.2	112.3	0.1	Agricultural land	Road crossing
CO-1445	112.4	0.1	Agricultural land	Topsoil segregation
CO-1445.1	112.7	0.6	Agricultural land	Topsoil segregation
CO-1445.2	112.8	0.1	Agricultural land	Road crossing
CO-1445.3	112.8	0.1	Agricultural land	Road crossing
CO-1445.4	112.9	0.3	Agricultural land	Topsoil segregation
CO-1446	113	0.4	Upland forest	Steep slope
CO-1448	113.1	0.1	Upland forest	Road crossing
CO-1447	113.1	0.1	Upland forest	Road crossing
CO-1450	113.1	0.1	Agricultural land	Road crossing
CO-1449	113.1	0.1	Agricultural land	Road crossing
CO-1451	113.2	0.7	Agricultural land	Topsoil segregation
CO-1452	113.3	0.1	Agricultural land	Road crossing
CO-1453	113.4	0.1	Agricultural land	Road crossing
CO-1456	113.4	0.1	Agricultural land	Topsoil segregation
CO-1455	113.4	0.1	Agricultural land	Wetland crossing
CO-1454	113.4	0.1	Agricultural land	Stream crossing
CO-1457	113.5	0.1	Agricultural land	Stream crossing
CO-1459	113.5	0.1	Agricultural land	Stream crossing
CO-1458	113.5	0.1	Agricultural land	Road crossing
CO-1460	113.5	0.1	Agricultural land	Topsoil segregation
CO-1461	113.5	0.1	Agricultural land	Road crossing
CO-1462	113.5	0.1	Agricultural land	Stream crossing
CO-1464	113.5	<0.1	Agricultural land	Road crossing
CO-1463	113.5	0.1	Agricultural land	Topsoil segregation
CO-1465	113.6	0.1	Agricultural land	Stream crossing
CO-1466	113.7	0.7	Agricultural land	Topsoil segregation
CO-1467	113.8	0.1	Agricultural land	Road crossing
CO-1468	113.8	0.1	Agricultural land	Road crossing
CO-1470	113.8	0.1	Agricultural land	Road crossing
CO-1469	113.8	0.1	Agricultural land	Road crossing
CO-1471	114.2	2.0	Agricultural land	Topsoil segregation
CO-1472	114.3	0.1	Agricultural land	Point of intersection
CO-1473	114.4	0.1	Agricultural land	Point of intersection
CO-1475	114.5	0.1	Agricultural land	Road crossing
CO-1476	114.6	0.5	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1477	114.7	0.1	Agricultural land	Road crossing
CO-1478	114.7	0.1	Agricultural land	Road crossing
CO-1479	114.7	0.1	Agricultural land	Road crossing
CO-1480	115.1	2.1	Agricultural land	Topsoil segregation
CO-1480.1	115.2	0.1	Agricultural land	Steep slope
CO-1481.1	115.4	0.1	Open land	Steep slope
CO-1481.2	115.4	0.1	Open land	Steep slope
CO-1482	115.4	0.1	Upland forest	Stream crossing
CO-1481	115.4	0.1	Upland forest	Stream crossing
CO-1483	115.5	0.1	Agricultural land	Wetland crossing
CO-1485	115.5	0.1	Agricultural land	Wetland crossing
CO-1484	115.5	0.1	Agricultural land	Road crossing
CO-1486	115.5	0.1	Agricultural land	Road crossing
CO-1487	115.6	0.1	Agricultural land	Road crossing
CO-1488	115.6	0.1	Agricultural land	Road crossing
CO-1489	115.7	1.0	Agricultural land	Topsoil segregation
CO-1491	115.8	0.1	Agricultural land	Road crossing
CO-1490	115.9	0.1	Agricultural land	Road crossing
CO-1493	115.9	0.1	Agricultural land	Road crossing
CO-1494	115.9	0.1	Agricultural land	Road crossing
CO-1492	115.9	0.4	Agricultural land	Topsoil segregation
CO-1495	116.1	0.3	Agricultural land	Topsoil segregation
CO-1496	116.1	0.1	Agricultural land	Road crossing
CO-1498	116.2	0.1	Agricultural land	Topsoil segregation
CO-1497	116.2	0.1	Agricultural land	Road crossing
CO-1499	116.2	0.1	Agricultural land	Road crossing
CO-1500	116.3	0.8	Agricultural land	Topsoil segregation
CO-1501	117	0.4	Agricultural land	Topsoil segregation
CO-1501.1	117.4	0.1	Upland forest	Point of intersection
CO-1502	117.5	0.3	Agricultural land	Topsoil segregation
CO-1504	117.5	0.1	Agricultural land	Road crossing
CO-1505	117.6	0.1	Agricultural land	Road crossing
CO-1506	117.6	0.6	Agricultural land	Topsoil segregation
CO-1507	118.0	0.5	Agricultural land	Topsoil segregation
CO-1507.1	118.0	0.1	Agricultural land	Point of intersection
CO-1509	118.0	0.1	Agricultural land	Road crossing
CO-1508	118.0	0.1	Agricultural land	Road crossing
CO-1510	118.1	0.1	Upland forest	Stream crossing
CO-1510.1	118.1	0.1	Upland forest	Stream crossing
CO-1511	118.3	0.3	Upland forest; open land	Topsoil segregation
CO-1512	118.3	0.1	Agricultural land; upland forest	Road crossing
CO-1513	118.3	0.1	Upland forest	Road crossing
CO-1514	118.5	0.8	Agricultural land	Topsoil segregation
CO-1515	118.6	0.1	Agricultural land	Road crossing
CO-1516	118.7	0.1	Agricultural land	Road crossing
CO-1517	118.8	0.7	Agricultural land	Topsoil segregation
CO-1518	119.0	0.3	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1520	119.2	0.1	Upland forest	Stream crossing
CO-1519	119.2	0.1	Upland forest	Stream crossing
CO-1521	119.3	0.1	Agricultural land	Road crossing
CO-1523	119.3	0.1	Agricultural land	Topsoil segregation
CO-1522	119.3	0.1	Agricultural land	Road crossing
CO-1523.1	M-0159 0.0	0.1	Agricultural land	Point of intersection
CO-1524	M-0159 0.0	0.6	Agricultural land	Topsoil segregation
CO-1524.1	M-0159 0.0	0.1	Upland forest	Point of intersection
CO-1525	M-0159 0.3	0.2	Agricultural land	Topsoil segregation
CO-1525.1	M-0159 0.3	0.1	Agricultural land	Point of intersection
CO-1526	119.8	0.1	Agricultural land	Topsoil segregation
CO-1527	119.9	0.1	Upland forest	Stream crossing
CO-1528	119.9	0.1	Upland forest	Stream crossing
CO-1530	119.9	0.1	Upland forest	Stream crossing
CO-1529	119.9	0.1	Upland forest	Stream crossing
CO-1532	120.0	0.1	Upland forest	Point of intersection
CO-1531	120.0	0.1	Agricultural land	Road crossing
CO-1533	120.0	0.1	Agricultural land	Road crossing
CO-1535	120.0	0.1	Agricultural land	Road crossing
CO-1534	120.0	0.1	Agricultural land	Road crossing
CO-1536	120.1	0.3	Agricultural land	Topsoil segregation
CO-1537	120.1	0.1	Agricultural land	Stream crossing
CO-1538	120.1	0.1	Agricultural land	Stream crossing
CO-1540	120.1	<0.1	Upland forest	Stream crossing
CO-1539	120.1	<0.1	Upland forest	Stream crossing
CO-1541	120.3	0.6	Agricultural land	Topsoil segregation
CO-1542	120.6	0.3	Agricultural land	Topsoil segregation
CO-1543	120.8	0.6	Agricultural land	Topsoil segregation
CO-1543.1	121.1	0.1	Upland forest	Point of intersection
CO-1544.1	121.2	0.2	Agricultural land	Point of intersection
CO-1545	121.2	0.3	Agricultural land	Topsoil segregation
CO-1546	121.2	0.1	Agricultural land	Stream crossing
CO-1547	121.3	0.1	Agricultural land	Stream crossing
CO-1548	121.3	0.1	Open land	Road crossing
CO-1550	121.3	0.1	Agricultural land	Point of intersection
CO-1549	121.4	0.1	Agricultural land	Point of intersection
CO-1551	121.4	0.8	Agricultural land	Topsoil segregation
CO-1551.1	121.6	0.3	Agricultural land	Topsoil segregation
CO-1552	121.9	1.0	Agricultural land	Topsoil segregation
CO-1554	122.0	0.1	Agricultural land	Road crossing
CO-1553	122.0	0.1	Agricultural land	Road crossing
CO-1555	122.0	0.1	Agricultural land	Road crossing
CO-1556	122.0	0.1	Agricultural land	Road crossing
CO-1557	122.1	0.2	Agricultural land	Topsoil segregation
CO-1558	122.2	<0.1	Agricultural land	Road crossing
CO-1560	122.2	0.1	Agricultural land	Road crossing
CO-1557.1	122.2	0.1	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CO-1561	122.2	0.1	Agricultural land	Road crossing
CO-1562	122.4	0.9	Agricultural land	Topsoil segregation
CO-1563	122.6	0.1	Upland forest	Point of intersection
CO-1564	122.6	0.1	Upland forest	Road crossing
CO-1565	122.6	0.1	Upland forest	Stream crossing
CO-1566	122.7	0.1	Upland forest	Stream crossing
CO-1567	122.9	0.9	Agricultural land	Topsoil segregation
CO-1568	123.1	0.1	Agricultural land	Point of intersection
CO-1569	123.2	0.2	Agricultural land	Topsoil segregation
CO-1571	123.2	0.1	Agricultural land	Road crossing
CO-1570	123.2	0.1	Open land	Road crossing
CO-1573	123.2	0.1	Agricultural land	Topsoil segregation
CO-1572	123.2	0.2	Open land	Stream crossing
CO-1572.1	123.4	0.1	Upland forest	Point of intersection
CO-1572.2	123.4	0.1	Upland forest	Wetland crossing
CO-1574	123.6	0.5	Agricultural land	Topsoil segregation
CO-1575	123.6	0.1	Agricultural land	Road crossing
CO-1576	123.7	0.1	Agricultural land	Road crossing
CO-1577	123.8	0.6	Agricultural land	Topsoil segregation
CO-1578	124.0	0.1	Upland forest	Point of intersection
CO-1579	124.1	0.1	Upland forest	Road crossing
CO-1580	124.1	0.1	Upland forest	Road crossing
CO-1582	124.1	0.1	Upland forest	Road crossing
CO-1581	124.1	0.1	Upland forest	Road crossing
CO-1584	124.6	0.1	Upland forest	Stream crossing
CO-1583	124.6	0.1	Upland forest	Stream crossing
CO-1585	124.6	0.1	Upland forest	Stream crossing
CO-1586	124.6	0.1	Upland forest	Stream crossing
CO-1587	124.7	0.1	Upland forest	Stream crossing
CO-1588	124.7	0.1	Upland forest	Stream crossing
CO-1588.2	124.9	0.1	Upland forest	Point of intersection
CO-1588.1	124.9	0.1	Upland forest	Point of intersection
CO-1589	124.9	0.1	Agricultural land	Topsoil segregation
CO-1591	125.1	0.2	Open land	Crossover
Total Central Penn Line South Subtotal		378.6		
CHAPMAN LOOP				
Clinton County				
CL-001	L186.3	<0.1	Upland forest	Stream crossing
CL-002	L186.3	<0.1	Upland forest	Stream crossing
CL-003	L186.6	0.1	Open land	Road crossing
CL-004	L186.6	0.1	Open land	Road crossing
CL-005	L186.6	0.2	Open land	Road crossing
CL-006	L186.8	0.1	Upland forest	Side slope
CL-007	L186.9	0.2	Open land	Topsoil segregation
CL-008	L187.1	0.1	Upland forest	Side slope
CL-009	L187.1	0.1	Open land	Stream crossing
CL-010	L187.2	0.1	Upland forest	Side slope

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
CL-010.1	L187.4	0.1	Upland forest	Stream crossing
CL-011	L187.2	0.1	Upland forest	Stream crossing
CL-011.1	L187.6	0.1	Upland forest	Wetland crossing
CL-011.2	L187.6	0.1	Upland forest	Wetland crossing
CL-012	L188.3	0.1	Upland forest	Road crossing
CL-013	L188.3	0.1	Upland forest	Road crossing
CL-014	L188.9	0.2	Open land	Hydro testing area
CL-015	L189.0	0.1	Open land	Truck turnaround
Chapman Loop Subtotal		1.7		
UNITY LOOP				
Lycoming County				
LY-001	L120.4	0.3	Agricultural land	Topsoil segregation
LY-002	L120.5	0.2	Upland forest	Stream crossing
LY-003	L120.6	0.1	Open land	Stream crossing
LY-004	L120.6	0.1	Wetland	Wetland crossing
LY-005	L120.7	0.2	Open land	Road crossing
LY-006	L120.7	0.1	Open land	Road crossing
LY-007	L120.9	0.2	Agricultural land	Topsoil segregation
LY-008	L120.9	0.2	Agricultural land	Topsoil segregation
LY-010	L121.2	0.1	Agricultural land	Topsoil segregation
LY-011	L121.3	0.1	Upland forest	Stream crossing
LY-012	L121.4	0.1	Open land	Stream crossing
LY-013	L121.4	<0.1	Wetland	Wetland crossing
LY-014	L121.5	0.1	Open land, agricultural land	Road crossing
LY-015	L121.5	0.1	Open land, agricultural land	Road crossing
LY-016	L121.6	0.7	Agricultural land	Topsoil segregation
LY-017	L121.5	0.1	Agricultural land	Point of intersection
LY-018	L121.6	0.1	Agricultural land	Point of intersection
LY-019	L121.8	0.5	Agricultural land	Topsoil segregation
LY-020	L122.1	0.1	Upland forest	Stream crossing
LY-021	L122.2	0.1	Upland forest	Stream crossing
LY-022	L122.3	0.1	Upland forest	Road crossing
LY-025	L122.5	0.1	Upland forest	Stream crossing
LY-026	L122.6	<0.1	Wetland	Wetland crossing
LY-027	L122.6	0.1	Agricultural land	Road crossing
LY-028	L122.7	0.1	Agricultural land	Road crossing
LY-029	L122.7	0.1	Agricultural land	Road crossing
LY-030	L122.7	0.3	Agricultural land	Topsoil segregation
LY-031	L123.1	0.2	Agricultural land	Road crossing
LY-032	L123.1	0.1	Agricultural land	Topsoil segregation
LY-033	L123.1	0.1	Open land	Road crossing
LY-034	L123.2	0.1	Open land	Road crossing
LY-035	L123.2	0.1	Open land	Stream crossing
LY-036	L123.3	0.1	Open land	Stream crossing
LY-037	L123.5	0.2	Agricultural land	Road crossing
LY-038	L123.5	0.2	Agricultural land	Topsoil segregation
LY-039	L123.5	0.4	Upland forest, agricultural land	Foreign pipeline crossing

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LY-040	L123.7	0.1	Open land	Stream crossing
LY-041	L123.8	<0.1	Wetland	Wetland crossing
LY-042	L123.8	0.1	Open land	Road crossing
LY-043	L123.8	0.1	Open land	Road crossing
LY-043.1	L124.1	0.1	Upland forest	Side slope
LY-044	L124.3	0.1	Open land	Stream crossing
LY-045	L124.3	0.1	Upland forest	Stream crossing
LY-046	L124.4	<0.1	Upland forest	Wetland crossing
LY-047	L124.4	0.1	Upland forest	Stream crossing
LY-048	L124.4	0.1	Open land	Road crossing
LY-049	L124.5	0.1	Open land, upland forest	Road crossing
LY-050	L124.8	0.1	Upland forest, open land	Foreign pipeline crossing
LY-051	L124.9	0.2	Agricultural land	Topsoil segregation
LY-052	L125.0	0.1	Open land	Road crossing
LY-053	L125.1	0.1	Open land	Road crossing
LY-053.1	L125.1	0.1	Open land	Wetland crossing
LY-053.2	L125.1	<0.1	Open land	Wetland crossing
LY-054	L125.1	0.1	Open land, upland forest	Crossover
LY-055	L125.2	0.2	Open land	Stream crossing
LY-056	L125.3	0.1	Upland forest	Stream crossing
LY-056.1	L125.3	0.1	Open land	Wetland crossing
LY-059	L125.4	0.1	M-003 0.0	Road crossing
LY-060	L125.4	0.1	Open land	Road crossing
LY-060.1	M-003 0.1	<0.1	Upland forest	Road crossing
LY-060.2	M-003 0.1	<0.1	Open land	Point of intersection
LY-061	L125.8	0.3	Agricultural land	Topsoil segregation
LY-062	L125.8	0.1	Agricultural land	Foreign pipeline crossing
LY-063	L125.9	0.3	Agricultural land	Topsoil segregation
LY-064	L126.0	0.1	Agricultural land	Road crossing
LY-065	L126.2	1.0	Agricultural land	Topsoil segregation
LY-066	L126.2	0.1	Agricultural land	Foreign pipeline crossing
LY-067	L126.3	0.1	Upland forest, agricultural land	Stream crossing
LY-068	L126.5	0.7	Upland forest, agricultural land	Topsoil segregation
LY-069	L126.7	0.2	Upland forest, open land	Topsoil segregation
LY-070	L126.8	0.3	Open land	Crossover
LY-071	L126.8	0.1	Upland forest, open land	Crossover
LY-072	L126.8	0.2	Agricultural land	Point of intersection
LY-072.1	L126.8	0.2	Agricultural land	Topsoil segregation
LY-072.2	L127.0	0.2	Agricultural land	Topsoil segregation
LY-073	L126.8	0.1	Open land	Point of intersection
LY-074	L127.1	0.1	Upland forest, open land	Road crossing
LY-076	L127.2	0.2	Upland forest, agricultural land	Topsoil segregation
LY-076.1	L127.3	0.1	Agricultural land, upland forest	Road crossing
LY-076.2	L127.3	0.1	Upland forest	Stream crossing
LY-076.3	L127.3	0.1	Open land	Road crossing
LY-077	L127.4	0.1	Agricultural land	Stream crossing
LY-078	L127.6	1.3	Agricultural land	Topsoil segregation

APPENDIX C (cont'd)

Additional Temporary Workspace Associated with Construction of the Atlantic Sunrise Project

County/Additional Temporary Workspace ID	Milepost ^a	Area (acres)	Existing Land Use	Justification
LY-079	L127.8	0.1	Agricultural land	Road crossing
LY-080	L127.9	0.1	Agricultural land	Road crossing
LY-081	L127.9	0.5	Agricultural land	Topsoil segregation
LY-082	L128.8	0.3	Upland forest	Side slope
LY-083	L128.8	0.2	Upland forest	Road crossing
LY-084	L128.9	0.1	Open land	Hydro test withdrawal/ discharge
Unity Loop Subtotal		15.1		
MAINLINE A AND B REPLACEMENTS				
Prince William				
PW-001	1578.7	0.1	Upland forest	Hydrostatic test area
PW-002	1578.8	0.3	Residential	Spoil storage
PW-003	1578.9	0.1	Residential	Stream crossing
PW-004	1579.0	0.2	Residential	Spoil storage
PW-005	1579.2	0.3	Residential open land	Spoil storage
PW-006	1579.3	0.2	Residential open land	Spoil storage
PW-007	1579.5	0.3	Residential open land	Spoil storage
PW-008	1579.6	0.1	Residential open land	Stream crossing
PW-009	1579.7	0.2	Residential open land	Stream crossing
PW-010	1579.8	0.1	Upland forest open land	Stream crossing
PW-011	1580.0	0.1	Upland forest open land	Valve fabrication
PW-012	1580.8	0.1	Upland forest open land	Spoil storage
PW-013	1580.9	0.2	Open land	Spoil storage
Mainline A & B Replacements Subtotal		2.0		
PROJECT TOTAL				
^a Where route modifications have been incorporated into the proposed route, new mileposts have been developed. The new mileposts are identified by inclusion of the associated route modification number (M-####) preceding the milepost value.				
^b All values rounded to the nearest tenth; total(s) may not match sum of addends due to rounding.				

APPENDIX D
PRIVATE ACCESS ROADS ASSOCIATED WITH
THE ATLANTIC SUNRISE PROJECT

APPENDIX D

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
PENNSYLVANIA											
Central Penn Line North											
Columbia County											
AR-CO-005	4.2	Gravel	Trim trees and add aggregate	Temp.	Open land; upland forest	10	311	20	0.2	0.0	Required for access to right- of-way near road crossing
Luzerne County											
AR-LU-006	5.7	Gravel	None	Temp.	Open land	20	1,115	20	1.1	0.0	Required for access to right- of-way near pipeline crossover location
AR-LU-006.1	5.8	None	Build new permanent access road	Perm.	Open land	0	166	20	0.1	0.1	Required for access to existing "A" Line tap
AR-LU-007.1	6.7	Vegetation	New	Perm.	Open land; upland forest	0	206	20	<0.1	<0.1	Required for valve site access
AR-LU-008	7.3	Gravel	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	10	3,574	20	4.0	0.0	Required for access to right- of-way near stream crossing
AR-LU-009	M-0056 0.74	Gravel	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	10	344	20	0.2	0.0	Required for access to right- of-way near pipeline crossover location
AR-LU-009.1	13.4	Gravel	None	Perm.	Transportation	18	593	20	0.6	0.2	Required for access to right- of-way near road crossing
AR-LU-010	16.6	Gravel	Add aggregate	Temp.	Open land	16	245	20	0.2	0.0	Required for access to right- of-way near road crossing
AR-LU-011	17.2	Gravel	Trim trees and add aggregate	Temp.	Open land; upland forest	12	619	20	0.4	0.0	Required for access to right- of-way near pipeline crossover location
AR-LU-012	17.5	Gravel/dirt/ vegetation	Trim trees and add aggregate	Temp.	Open land; upland forest	10	1,078	20	0.5	0.0	Required for access to right- of-way near stream crossing
AR-LU-013.1	21.2	Gravel/dirt/ vegetation	Trim trees and add aggregate	Perm.	Transportation; open land; upland forest	10	1,300	20	1.3	0.4	Required for valve and regulator site access
AR-LU-014	21.5	Gravel	None	Temp.	Open land	15	176	20	0.7	0.0	Required for access to right- of-way near wetland crossing

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-LU-015	24.2	Gravel	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	15	352	20	0.3	0.0	Required for access to right- of-way
AR-LU-017	24.4	Vegetation	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	10	266	20	0.3	0.0	Required for access to right- of-way near stream crossing
AR-LU-019	25.4	Gravel	Add aggregate	Temp.	Transportation; open land; upland forest	15	620	20	0.6	0.0	Required for access to right- of-way near road crossing
AR-LU-020	25.7	Gravel	Add aggregate	Temp.	Transportation; open land	12	683	20	0.7	0.0	Required for access to right- of-way near road and stream crossing
Wyoming County AR-WY-021	28.1	Gravel/ vegetation	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	10	2,680	20	3.0	0.0	Required for access to right- of-way
AR-WY-023	30.6	Gravel/dirt/ vegetation	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	10	771	20	0.8	0.0	Required for access to right- of-way near pipeline crossover location
AR-WY-024	31.7	Gravel	None	Perm.	Transportation; open land	20	973	20	1.1	0.4	Required for access ASR Springville Station
AR-WY-025	32.8	Gravel/dirt/ vegetation	Add aggregate	Temp.	Transportation; open land	18	909	20	1.0	0.0	Required for access to right- of-way near wetland crossings
AR-WY-026	33.1	Gravel	None	Temp.	Transportation; open land	12	1,281	20	1.9	0.0	Required for access to right- of-way near residences and road crossing
AR-WY-027	34.8	Vegetation	New	Temp.	Open land	0	146	20	0.1	0.0	Required for access to right- of-way near road crossing
AR-WY-027.1	34.8	Gravel	None	Temp.	Transportation; open land	10	100	20	<0.1	0.0	Required for access to HDD entry box
AR-WY-028	35.8	Dirt/ vegetation	Trim trees and add aggregate	Perm.	Transportation; open land; agricultural land	10	533	20	0.7	0.2	Required for valve site access
AR-WY-029	35.3	Gravel/dirt/ vegetation	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	12	2,144	20	2.5	0.0	Required for access to right- of-way

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-WY-030	37.0	Gravel/dirt/ vegetation	Add aggregate	Temp.	Transportation; open land	15	1,172	20	1.2	0.0	Required for access to right-of-way near wetland and stream crossings
AR-WY-031	40.6	Gravel/dirt	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	16	1,079	20	1.2	0.0	Required for access to right-of-way near wetland crossings
AR-WY-032	43.4	Vegetation	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	10	407	20	2.3	0.0	Required for access to right-of-way near wetland and stream crossings
AR-WY-035.3	44.6	Vegetation	New	Perm.	Agricultural land	0	2,945	20	<0.1	<0.1	Required for station access
AR-WY-035.4	44.6	Vegetation	New	Temp.	Agricultural land	0	819	20	0.4	0.0	Required for access to right-of-way near stream and road crossings, and access to CSA
AR-WY-036	45.7	Gravel/ vegetation	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	11	316	20	0.6	0.0	Required for access to right-of-way near wetland crossing
AR-WY-036.1	46.1	Gravel/dirt	Add aggregate	Temp.	Transportation; open land	10	2,182	20	2.2	0.0	Required for access to right-of-way
AR-WY-039	49.5	Gravel/ vegetation	Trim trees and add aggregate	Temp.	Transportation; open land upland forest	8	1,200	20	1.0	0.0	Required for access to right-of-way near road, stream and wetland crossings
AR-WY-040	49.5	Gravel	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	12	660	20	2.6	0.0	Required for access to right-of-way near road crossing
AR-WY-040.1	49.2	Gravel	Trim trees and add aggregate	Temp.	Transportation; open land; upland forest	12	797	20	0.8	0.0	Required for access to right-of-way near road crossing
Susquehanna County AR-SU-041	50.8	Gravel	Trim trees and add aggregate	Perm.	Transportation; open land	13	1,895	20	2.1	0.9	Required for access to right-of-way near wetland crossings
AR-SU-044	52.0	Gravel	None	Temp.	Transportation; open land	20	2,312	20	2.5	0.0	Required for access to right-of-way near pipeline crossover location and stream crossing
AR-SU-045	52.9	Gravel/ vegetation	Add aggregate	Temp.	Transportation; open land	15	229	20	0.2	0.0	Required for access to right-of-way

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-SU-046	56.3	Gravel/ vegetation	New	Perm.	Open land	20	793	20	0.9	0.3	Required for access to right-of-way near stream and wetland crossings
AR-SU-046.1	57.0	Vegetation	New	Temp.	Agricultural land	0	31	20	0.0	0.0	Required for contractor staging area access
AR-SU-046.4	57.0	Vegetation	New	Temp.	Agricultural land	0	22	20	0.0	0.0	Required for contractor staging area access
AR-SU-047	56.9	Gravel	None	Perm.	Transportation; open land	20	808	20	0.8	0.5	Required for access to right-of-way, proposed MLV site and existing compressor station
AR-SU-047.1	57.3	Vegetation	New	Perm.	Agricultural land	0	176	20	0.1	0.1	Required for access to right-of-way, proposed MLV site and existing compressor station
Central Penn Line North Subtotal									41.7	1.7	
Central Penn Line South											
Lancaster County											
AR-LA-001.1	0.1	Vegetation	New	Perm.	Agricultural land	0	2,765	20	2.6	0.6	New permanent access road needed for access to MLV site at MP 0.0
AR-LA-002	M-0147 MP 0..1	Dirt	Add gravel	Temp.	Agricultural land	12	316	20	0.3	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LA-004	M-0184 MP 0.2	Gravel	Replace 3 culverts and add gravel	Temp.	Agricultural land	15	52	20	0.5	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LA-006.1	4.9	Dirt	New	Temp.	Agricultural land; upland forest	0	586	20	0.6	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LA-009.1	8.1	Field road	Construct Road through AG field and add gravel	Temp.	Agricultural land	10	170	20	0.1	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LA-010.2	8.2	Vegetation	New	Perm.	Agricultural land	0	82	20	0.1	0.1	Permanent Access Road to access proposed valve site

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-LA-011	9.1	Dirt	Widen road, add gravel	Temp.	Agricultural land	15	608	20	0.7	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LA-012.1	12.1	Gravel, dirt	Widen road, add gravel	Temp.	Agricultural land	14	446	20	0.4	0.0	Temporary access road needed for improved access to HDD entry point during construction
AR-LA-012.2	12.8	Gravel, dirt	Add gravel	Temp.	Agricultural land	0	215	20	<0.1	0.0	Temporary access road needed for improved access to HDD exit point during construction
AR-LA-016	15.6	Gravel	Add gravel	Temp.	Agricultural land	10	181	20	0.1	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LA-018	16.8	Asphalt	None	Temp.	Agricultural land	14	868	20	0.9	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LA-018.3	M-0185 MP 0.1	New	Construct road through field and add gravel	Perm.	Agricultural land	0	41	20	<0.1	<0.1	Permanent Access Road to access proposed valve site
AR-LA-020	19.9	Forested/ gravel/ paved	Clear timber, widen, add gravel, construct 400 ft. of new road	Perm.	Upland forest	12	1,240	20	1.5	0.4	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete
AR-LA-021	20.0	Paved/dirt/ gravel	Construct new road thru field, add gravel, trim trees	Perm.	Residential; agricultural land	12	2,515	20	2.9	0.8	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete
AR-LA-023.1	21.2	Gravel	Add gravel	Temp.	Agricultural land	18	734	20	0.7	0.0	Temporary access road needed for improved access to right-of-way during construction

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-LA-026.3	23.7	Vegetation	New	Perm.	Agricultural land	0	517	20	0.6	0.2	Permanent Access Road to access proposed valve site
AR-LA-027	27.3	Paved	None required	Temp.	Agricultural land; industrial and commercial land	30	1,989	20	2.2	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LA-027.05	27.6	Vegetation	New	Temp.	Agricultural land	0	1	20	0.0	0.0	Temporary access road needed for improved access to right-of-way during construction and access the CSA
AR-LA-027.1	M-0162 MP 0.3	Field road	Construct road ; add gravel	Temp.	Agricultural land	0	2,413	20	2.5	0.0	Gain access to the North side of HWY 283 boring site
AR-LA-028.1	30.6	Field road	Construct road ; add gravel	Temp.	Agricultural land	12	1,247	20	1.3	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LA-029.2	29.7	Vegetation	New	Perm.	Agricultural land	0	64	20	<0.1	<0.1	Permanent Access Road to access proposed valve site
AR-LA-030	35.4	Gravel and dirt	Add gravel and widen	Temp.	Agricultural land	12	1,050	20	1.2	0.0	Temporary access road needed for improved access to right-of-way during construction
Lebanon County											
AR-LE-033	36.6	Forest/ gravel/dirt	Trim trees, add gravel. Mats probably required thru 500 to 600 ft. of wetlands	Perm.	Upland forest	10	1,960	20	5.0	2.0	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete
AR-LE-033.1	36.6	Gravel	Widen; add gravel	Temp.	Residential; agricultural land	20	2,754	20	2.9	0.0	Gain access to South side of I-76 boring site
AR-LE-033.2	37.4		New	Temp.	Agricultural land	0	17	20	<0.1	0.0	Temporary access road needed for improved access to right-of-way during construction and access the CSA

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-LE-035	41.7	Forest/dirt/ gravel	Trim trees, add gravel	Perm.	Residential; upland forest	12	2,322	20	2.6	0.7	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete
AR-LE-037.1	43.3	Vegetation	New	Perm.	Agricultural land	0	183	20	0.2	0.1	Permanent Access Road to access proposed valve site
AR-LE-038	45.1	Gravel	Add gravel and trim trees	Temp.	Agricultural land	10	619	20	0.6	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-039.1	M-0183 MP 1.0	Paved and dirt	Construct road from end of pavement, add gravel	Temp.	Residential	15	102	20	0.1	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-040	M-0183 MP 1.1	Forest/ gravel	Trim trees, add gravel	Temp.	Upland forest; industrial land	15	3,193	20	3.5	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-041	M-0183 MP 1.1	Paved/dirt	Add small amount of gravel, construct new road from end of gravel to centerline	Temp.	Agricultural land and access to college sports fields	15	2,263	20	2.6	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-042	47.4	Gravel/ paved	Add gravel	Temp.	Residential; agricultural land	12	1,104	20	1.2	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-044	50.8	Gravel	Add gravel, trim trees, add ESCs	Temp.	Agricultural land	10	1,172	20	1.2	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-047	M-0199 MP 0.7	Gravel	Widen, add gravel, increase turn radius	Temp.	Agricultural land	10	254	20	0.2	0.0	Temporary access road needed for improved access to right-of-way during construction

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-LE-049	M-0199 MP 0.1	Gravel	Add gravel	Temp.	Transportation	8	827	20	0.5	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-050	54.1	Dirt and gravel	Add gravel, trim trees, clear timber	Temp.	Upland forest	8	812	20	0.9	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-050.1.1	56.8	Vegetation	New	Perm.	Agricultural land	0	40	20	<0.1	<0.1	Permanent Access Road to access proposed valve site
AR-LE-050.3	57.1	Gravel	Add gravel, trim trees	Temp.	Residential; upland forest	12	3,028	20	3.2	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-052	58.3	Forest and gravel	Clear timber, trim trees, add gravel	Perm.	Forest	12	3,454	20	4.0	1.1	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete
AR-LE-052.1	59.3	Dirt and gravel	Add gravel, trim trees	Temp.	Residential	8	830	20	0.8	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-054	60.3	Gravel and dirt	Add gravel, trim trees	Perm.	Agricultural land	6	1,302	20	0.8	0.2	Temporary access road needed for improved access to right-of-way during construction
AR-LE-055	M-0200 MP 0.4	Gravel	Add gravel	Temp.	Agricultural land	15	1,304	20	1.4	0.0	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete.
AR-LE-056	60.8	Dirt/gravel	Add gravel and water bars along road to break runoff velocity	Temp.	Agricultural land	8	1,021	20	1.1	0.0	Temporary access road needed for improved access to right-of-way during construction

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-LE-057	61.2	Dirt	Add gravel	Temp.	Agricultural land	8	914	20	0.9	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-059	61.7	Dirt	Add gravel to existing portion, trim trees, construct new road through ag field, re- locate entrance	Perm.	Agricultural land	8	637	20	0.8	0.3	Temporary access road needed for improved access to right-of-way during construction
AR-LE-059.1	62.3	Existing	Widen; add gravel ; trim trees	Temp.	Agricultural land	6	177	20	0.1	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-LE-060	63.5	Gravel	Add gravel, trim trees	Temp.	Agricultural land	10	1,120	20	1.2	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-SC-060.1.1	65.2	Vegetation	New	Temp.	Residential	20	117	20	0.2	0.1	Temporary access road needed for improved access to right-of-way during construction
AR-SC-060.2	65.2	Asphalt	Add gravel, trim trees	Temp.	Residential	20	190	20	0.1	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-SC-060.3	65.0	Vegetation	Build new Temporary access road across ag land, add gravel	Temp.	Agricultural land	0	59	20	<0.1	0.0	Prefer access to staging area
AR-SC-060.4	65.2	Vegetation	Build new Temporary access road across ag land, add gravel	Temp.	Agricultural land	0	495	20	0.5	0.0	To bypass pond

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-SC-061.1	65.9	Dirt	Add gravel, trim trees	Temp.	Residential; agricultural land; upland forest	8	1,316	20	1.4	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-SC-063	67.6	Gravel	Trim trees, re- work drain ditch, add gravel	Perm.	Residential agricultural land	10	921	20	1.0	0.4	Permanent Access Road to access proposed valve site & Temporary access road needed for improved access to right-of-way during construction
AR-SC-064	69.4	Forest	Clear 5 or 6 trees, widen entrance, add gravel	Temp.	Upland forest	10	2,059	20	2.2	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-SC-064.1	70.7	Dirt/gravel	Widen; add gravel	Perm.	Residential; upland forest	12	431	20	0.2	0.2	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete
AR-SC-065	71.0	Asphalt/ forest	Trim trees, add gravel	Temp.	Residential, upland forest	12	1,031	20	0.9	0.0	Temporary access road needed for access near road crossing
AR-SC-066	72.5	Gravel/dirt	Trim trees, add gravel	Temp.	Industrial and commercial land	16	4,102	20	4.4	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-SC-068	74.5	Gravel	Last 300 ft. is new road-add 300 ft. gravel	Temp.	Industrial and commercial land	20	10,670	20	12.1	0.0	Temporary access road needed for access near railroad crossing
AR-SC-069	74.9	Gravel	Add gravel	Temp.	Industrial and commercial land	10	1,058	20	1.1	0.0	Temporary access road needed for access near road crossing
AR-SC-070	75.6	Gravel	No modifications or improvements needed	Perm.	Upland forest	16	5,344	20	6.2	1.8	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-SC-071	77.9	Gravel	Widen entrance, widen turn, add gravel	Temp.	Agricultural land	12	2,600	20	3.0	0.0	Temporary access road needed for access to potential water source and to creek crossing
AR-SC-072	79.0	Forest	Clear trees, grade, add gravel	Temp.	Upland forest	10	11,440	20	13.1	0.0	Temporary access road needed for improved access to right-of-way in forested area
AR-SC-073	79.8	Gravel/dirt	Install 2 culverts, add gravel, divert drainage	Temp.	Agricultural land	12	2,344	20	2.6	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-SC-073.4	80.5	Vegetation	New	Perm.	Agricultural land	0	40	20	0.1	0.1	Permanent access road to proposed valve site
AR-SC-074	81.2	Dirt	Build new Temporary access road across ag land, add gravel	Temp.	Agricultural land	10	1,410	20	1.6	0.0	Temporary access road needed for improved access to right-of-way during construction
Northumberland County											
AR-NO-075	83.1	Forest	Improve entrance from south, erosion control needed at stream	Perm.	Upland forest	16	13,099	20	15.0	0.0	Permanent access road needed for access near creek crossing and potential test water source
AR-NO-076	85.2	Gravel/forest	Slight blade work	Perm.	Upland forest	20	10,474	20	11.9	3.4	Permanent access road needed for improved access in long forested area.
AR-NO-077	85.8	Asphalt	Trim trees to access bore pit north of Hwy. 901.	Temp.	Residential	20	1,038	20	1.2	0.0	Temporary access road needed to get to location of bore pit on north side of Hwy. 901
AR-NO-078	86.0	Paved/dirt	Trim trees, grade, add gravel	Temp.	Residential; mining	20	4,081	20	3.4	0.0	Temporary access road needed for access to creek crossing and test water source

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-NO-079	86.4	Dirt/gravel	Grade out gravel stockpile	Perm.	Upland forest	12	444	20	0.4	0.1	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete
AR-NO-081	86.9	Gravel/ forest	Trim trees, grade	Temp.	Upland forest	0	1,255	20	1.5	0.0	Temporary access road needed to load/unload equipment North of Hwy. 61
AR-NO-082	87.4	Forest/dirt	Clear trees, grade, add gravel	Temp.	Upland forest	10	4,428	20	5.0	0.0	Temporary access road needed for improved access in long forested area
AR-NO-083	88.6	Mining/dirt	Trim trees, grade, add gravel	Temp.	Upland forest	10	4,311	20	4.9	0.0	Temporary access road needed for improved access in long forested area
AR-NO-084	89.0	Mining/dirt	Replace culvert, entrance from North only	Perm.	Upland forest	11	2,018	20	2.2	0.6	Temporary access road needed for improved access to right-of-way during construction and to be kept by Operations after construction complete
AR-CO-085.1.3	90.3	Vegetation	New	Perm.	Agricultural land	0	310	20	0.1	0.1	Permanent Access Road to access proposed valve site
AR-CO-091	95.5	Paved/dirt	Add gravel	Temp.	Residential; agricultural land	10	2,383	20	2.7	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-CO-093	99.0	Gravel/dirt	Add gravel	Temp.	Agricultural land	12	1,895	20	2.1	0.0	Temporary access to geo- technical bore holes and to potential hydrotest water source
AR-CO-094.1	102.8	Gravel/dirt	Add gravel	Temp.	Residential; agricultural land	12	2,083	20	0.9	0.0	Temporary access road to right-of-way during construction
AR-CO-094.1.1	100.0	Field road	Widen ; Add gravel	Temp.	Agricultural land	1	799	20	4.1	0.0	Gain access to HDD exit location
AR-CO-095	100.4	Gravel/dirt	Add gravel	Temp.	Agricultural land	10	3,586	20	4.0	0.0	Temporary access road needed for access to end of HDD pipe string

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-CO-095.1	101.3	Power line corridor/ dirt	Install stream crossing, build road, add gravel/mats	Temp.	Upland forest; open land	10	2,078	20	2.3	0.0	Temporary access road to right-of-way during construction
AR-CO- 095.1.1.1	102.4	Vegetation	New	Perm.	Agricultural land	0	350	20	0.1	0.1	Permanent Access Road to access proposed valve site
AR-CO-096	104.7	Paved/dirt	Add gravel	Temp.	Residential; agricultural land	12	514	20	0.5	0.0	Temporary access road needed for improved access to right-of-way near stream crossing
AR-CO-099	106.7	Gravel/dirt	Trim trees, add gravel	Temp.	Residential; upland forest	10	405	20	0.4	0.0	Temporary access road needed for improved access to right-of-way near road crossing
AR-CO-100	108.4	Paved/dirt	Add gravel	Temp.	Residential; agricultural land	10	2,324	20	2.7	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-CO-101	108.8	Gravel/dirt	Widen entrance, move mailboxes, increase turn radius, add gravel	Temp.	Residential; agricultural land	12	796	20	0.9	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-CO-102	109.6	Gravel	Add gravel	Temp.	Residential; agricultural land	12	425	20	0.4	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-CO-102.1	90.2	Vegetation	New	Perm.	Agricultural land	0	6	20	0.0	0.0	Required for station access
AR-CO-103	116.0	Gravel/dirt	Trim few overhanging trees, add gravel	Temp.	Agricultural land	13	2,013	20	2.3	0.0	Temporary access road needed for improved access to right-of-way during construction
AR-CO-106	120.3	Dirt	Move power pole, trim trees, add gravel	Temp.	Timber; agricultural land	10	1,113	20	1.2	0.0	Temporary access road needed for improved access to right-of-way during construction

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
AR-CO-108	125.0	Vegetation	Grade and add gravel	Temp.	Agricultural land	0	29	20	0.1	0.0	Temporary access road needed for improved access to right-of-way during construction and access the CSA
AR-CO-109	125.0	Vegetation	Grade and add gravel	Temp.	Agricultural land	0	31	20	<0.1	0.0	Temporary access road needed for improved access to right-of-way during construction and access the CSA
AR-CO-106.1	125.1	None	Add gravel	Perm.	Open land	0	736	20	0.6	0.3	Permanent access road needed for valve site
AR-CO-107.1	125.2	Forest/dirt	Clear timber, grade and add gravel	Temp.	Upland forest	0	733	20	0.8	0.0	Temporary access road needed for improved access to right-of-way during construction
Central Penn Line South Subtotal									169.4	11.3	
Chapman Loop											
Clinton County											
AR-CL-001	L185.9	Gravel/dirt	Add aggregate	Perm.	open land	12	8,808	20	10.0	2.8	Required for access to right- of-way and proposed valve site
AR-CL-001.1	L185.9	Dirt	Add gravel and board	Temp.	open land	12	1,477	20	1.3	0.0	Required for equipment and materials access to Receiver site
AR-CL-002	L187.6	Gravel/dirt	Trim trees and add aggregate	Temp.	open land; upland forest	15	715	20	0.8	0.0	Required for access to right- of-way
AR-CL-003	L188.9	Vegetation	New	Temp.	open land	0	2,896	20	1.9	0.0	Required for access to right- of-way and proposed valve site
AR-CL-004	L188.9	Vegetation	New	Perm.	open land	0	2,813	20	0.9	0.9	Permanent access road for valve/launcher site
Chapman Loop Subtotal									14.8	3.7	

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
Unity Loop											
Lycoming County											
AR-LY-002	120.3	Vegetation /dirt	Add aggregate	Perm.	Open land	8	466	20	0.4	0.2	Required for access to right-of-way and proposed valve site
AR-LY-003	120.7	Vegetation	New	Temp.	Residential; open land	0	258	20	0.2	0.0	Required for access to right-of-way West of road crossing - steep road banks
AR-LY-004	120.9	Vegetation /dirt	Trim trees and add aggregate	Temp.	Residential; agricultural land; upland forest	12	973	20	1.1	0.0	Required for access to right-of-way
AR-LY-006	122.7	Vegetation /dirt	Trim trees and add aggregate	Temp.	Open land; upland forest	12	72	20	0.1	0.0	Required for access to right-of-way West of road crossing
AR-LY-007	123.5	Gravel	None	Temp.	Road; open land; forested	20	2,788	20	2.8	0.0	Required for access to right-of-way East of steep slope and valve site
AR-LY-008	124.4	Vegetation /dirt	Trim trees and add aggregate	Temp.	Open land; upland forest	12	441	20	0.3	0.0	Required for access to right-of-way East of steep banks at road crossing
AR-LY-009	125.0	Vegetation /dirt	Trim trees and add aggregate	Temp.	Open land	12	141	20	0.8	0.0	Required for access to right-of-way
AR-LY-010	126.4	Vegetation /dirt	Add aggregate	Temp.	Open land; upland forest	12	733	20	0.8	0.0	Required for access to right-of-way
AR-LY-011	126.9	Gravel/ vegetation/ dirt	Add aggregate	Temp.	Open land; agricultural land	12	1,233	20	1.3	0.0	Required for access to right-of-way near pipeline crossover location
AR-LY-013	127.1	Dirt/ vegetation	Trim trees and add aggregate	Temp.	Open land; upland forest	14	251	20	0.2	0.0	Required for access to right-of-way West of road and stream crossing; steep slope to West of stream
AR-LY-014	127.8	Dirt/ vegetation	Add aggregate	Temp.	Open land; agricultural land	0	176	20	0.1	0.0	Required for access to right-of-way West of road crossing - steep road banks
Unity Loop Subtotal									8.1	0.2	

APPENDIX D (cont'd)

Private Access Roads Associated with the Atlantic Sunrise Project

Facility/State/County/ Access Road ID	Milepost ^a	Existing Road Type	Modification Required/New	Use (Perm. or Temp.)	Existing Land Use	Existing Width (feet)	Length (feet)	Constr. Width (feet)	Land Affected During Constr. (acres) ^b	Land Affected During Oper. (acres) ^c	Justification
VIRGINIA											
Virginia Line A and B Replacement											
Prince Williams County											
AR-PW-003	1579.9	Vegetation	Add aggregate	Temp.	Open land	0	622	20	0.2	0.0	Required for access from the public road to the workspace
AR-PW-001	1580.0	Vegetation	Add aggregate	Perm.	Open land	0	489	20	0.4	0.4	Required for access from the public road to the workspace
AR-PW-002	1580.76	Vegetation	Add aggregate	Temp.	Open land	0	978	20	0.9	0.0	Required for access from the public road to the workspace
Virginia Line A and B Replacement Subtotal									1.5	0.4	
PROJECT TOTAL									235.5	17.3	

^a Where route modifications have been incorporated into the proposed route, new mileposts have been developed. The new mileposts are identified by inclusion of the associated route modification number (M-####) preceding the milepost value.

^b Land affected during construction includes the entire width of permanent and temporary access roads and any additional temporary workspace needed along access roads.

^c Land affected during operation includes permanent access roads needed to access the project during operation.

APPENDIX E

**TRANSCONTINENTAL GAS PIPELINE COMPANY LLC'S
UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN AND
WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES**



Transcontinental Gas Pipe Line Company, LLC

Attachment 17

**Transco Project-Specific Upland Erosion Control,
Revegetation, and Maintenance Plan**

Atlantic Sunrise Project

March 2015

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I. APPLICABILITY

- A. The intent of this Plan is to identify baseline mitigation measures for minimizing erosion and enhancing revegetation for the Transcontinental Gas Pipe Line Company, LLC (Transco) Atlantic Sunrise Project (Project). Transco will specify in its application for a new FERC authorization and in prior notice and advance notice filings, any individual measures in this Plan it considers unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Transco will also explain how those alternative measures would achieve a comparable level of mitigation. Deviations from the FERC Plan proposed by Transco to reflect site-specific conditions are **bolded** in the text.

Once the Project is authorized, Transco will request further changes as variances to the measures in the Transco Plan. The Director of the Office of Energy Projects (Director) will consider approval of variances upon Transco's written request, if the Director agrees that a variance:

1. provides equal or better environmental protection;
2. is necessary because a portion of this Plan 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 jurisdiction.

Project-related impacts on wetland and waterbody systems are addressed in the Transco Project-specific Wetland and Waterbody Construction and Mitigation Procedures (Transco Procedures).

II. SUPERVISION AND INSPECTION

A. ENVIRONMENTAL INSPECTION

1. At least one Environmental Inspector is required for each construction spread during construction and restoration (as defined by section V). 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.
2. Environmental Inspectors shall have peer status with all other activity inspectors.
3. Environmental Inspectors shall have the authority to stop activities that violate the environmental conditions of the FERC's Orders, stipulations of other environmental permits or approvals, or landowner easement agreements; and to order appropriate corrective action.

B. RESPONSIBILITIES OF ENVIRONMENTAL INSPECTORS

At a minimum, the Environmental Inspector(s) shall be responsible for:

1. Inspecting construction activities for compliance with the requirements of the Transco Plan, Transco Procedures, the environmental conditions of the FERC's Orders, the mitigation measures (as approved and/or modified by the Order), other environmental permits and approvals, and environmental requirements in landowner easement agreements.
2. Identifying, documenting, and overseeing corrective actions, as necessary to bring an activity back into compliance;
3. Verifying that the limits of authorized construction work areas and locations of access roads are visibly marked before clearing, and maintained throughout construction;
4. Verifying the location of signs and highly visible flagging marking the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements along the construction work area;
5. Identifying erosion/sediment control and soil stabilization needs in all areas;
6. Ensuring that the design of slope breakers will not cause erosion or direct water into sensitive environmental resource areas, including cultural resource sites, wetlands, waterbodies, and sensitive species habitats;
7. Verifying that dewatering activities are properly monitored and do not result in the deposition of sand, silt, and/or sediment into sensitive environmental resource areas, including wetlands, waterbodies, cultural resource sites, and sensitive species habitats; stopping dewatering activities if such deposition is occurring and ensuring the design of the discharge is changed to prevent reoccurrence; and verifying that dewatering structures are removed after completion of dewatering activities;
8. Ensuring that subsoil and topsoil are tested in agricultural and residential areas to measure compaction and determine the need for corrective action;
9. Advising the Chief Construction Inspector when environmental conditions (such as wet weather or frozen soils) make it advisable to restrict or delay construction activities to avoid topsoil mixing or excessive compaction;
10. Ensuring restoration of contours and topsoil;
11. Verifying that the soils imported for agricultural or residential use are certified as free of noxious weeds and soil pests, unless otherwise approved by the landowner;
12. Ensuring that erosion control devices are properly installed to prevent sediment flow into sensitive environmental resource areas (e.g., wetlands, waterbodies,

- cultural resource sites, and sensitive species habitats) and onto roads, and determining the need for additional erosion control devices;
13. Inspecting and ensuring the maintenance of temporary erosion control measures at least:
 - a. on a daily basis in areas of active construction or equipment operation;
 - b. a minimum of once a week in areas with no construction or equipment operation; and
 - c. within 24 hours of each 0.5 inch of rainfall.
 14. Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification, or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts;
 15. Keeping records of compliance with the environmental conditions of the FERC's Orders, and the mitigation measures in the Transco application submitted to the FERC, and other federal or state environmental permits during active construction and restoration;
 16. Identifying areas that should be given special attention to ensure stabilization and restoration after the construction phase; and
 17. Verifying that locations for any disposal of excess construction materials for beneficial reuse comply with section III.E.

III. PRECONSTRUCTION PLANNING

Transco will do the following before construction:

A. CONSTRUCTION WORK AREAS

1. Identify all construction work areas (e.g., construction right-of-way, extra work space areas, additional temporary workspaces (ATWS) areas, pipe storage and contractor yards, borrow and disposal areas, access roads) that would be needed for safe construction. Transco will ensure that appropriate cultural resources and biological surveys are conducted, as determined necessary by the appropriate federal and state agencies.
2. Transco will expand any required cultural resources and endangered species surveys in anticipation of the need for activities outside of authorized work areas.
3. Plan construction sequencing to limit the amount and duration of open trench sections, as necessary, to prevent excessive erosion or sediment flow into sensitive environmental resource areas.

B. DRAIN TILE AND IRRIGATION SYSTEMS

1. Attempt to locate existing drain tiles and irrigation systems.
2. Contact landowners and local soil conservation authorities to determine the locations of future drain tiles that are likely to be installed within 3 years of the authorized construction.
3. Develop procedures for constructing through drain-tiled areas, maintaining irrigation systems during construction, and repairing drain tiles and irrigation systems after construction.
4. Engage qualified drain tile specialists, as needed to conduct or monitor repairs to drain tile systems affected by construction. Use drain tile specialists from the Project area, if available.

C. GRAZING DEFERMENT

Develop grazing deferment plans with willing landowners, grazing permittees, and land management agencies to minimize grazing disturbance of revegetation efforts.

D. ROAD CROSSINGS AND ACCESS POINTS

Plan for safe and accessible conditions at all roadway crossings and access points during construction and restoration.

E. DISPOSAL PLANNING

Determine methods and locations for the regular collection, containment, and disposal of excess construction materials and debris (e.g., timber, slash, mats, garbage, drill cuttings and fluids, excess rock) throughout the construction process. Disposal of materials for beneficial reuse must not result in adverse environmental impact and is subject to compliance with all applicable survey, landowner or land management agency approval, and permit requirements.

F. AGENCY COORDINATION

Transco will coordinate with the appropriate local, state, and federal agencies as outlined in this Plan and/or required by the FERC's Orders.

1. Obtain written recommendations from the local soil conservation authorities or land management agencies regarding permanent erosion control and revegetation specifications.
2. Develop specific procedures in coordination with the appropriate agencies to prevent the introduction or spread of invasive species, noxious weeds, and soil pests resulting from construction and restoration activities. Refer to the Transco Project-specific Noxious and Invasive Plant Management Plan.

3. Develop specific procedures in coordination with the appropriate agencies and landowners, as necessary, to allow for livestock and wildlife movement and protection during construction.
4. Develop specific blasting procedures in coordination with the appropriate agencies that address pre- and post-blast inspections; advanced public notification; and mitigation measures for building foundations, groundwater wells, and springs. Use appropriate methods (e.g., blasting mats) to prevent damage to nearby structures and to prevent debris from entering sensitive environmental resource areas. Refer to the Transco Project-specific Blasting Plan.

G. SPILL PREVENTION AND RESPONSE PROCEDURES

Transco will develop project-specific Spill Prevention and Response Procedures, as specified in section IV of the staff's Procedures. A copy will be filed with the Secretary of the FERC (Secretary) prior to construction and made available in the field on each construction spread. Refer to the Transco Project-specific Spill Plan for Oil and Hazardous Materials.

H. RESIDENTIAL CONSTRUCTION

For all properties with residences located within 50 feet of construction work areas, Transco will avoid removal of mature trees and landscaping within the construction work area unless necessary for safe operation of construction equipment, or as specified in landowner agreements; fence the edge of the construction work area for a distance of 100 feet on either side of the residence; and restore all lawn areas and landscaping immediately following clean-up operations, or as specified in landowner agreements. If seasonal or other weather conditions prevent compliance with these time frames, maintain and monitor temporary erosion controls (sediment barriers and mulch) until conditions allow completion of restoration.

I. WINTER CONSTRUCTION PLANS

Transco has filed a Project-specific Winter Construction Plan with the FERC application.

The plan addresses:

1. winter construction procedures (e.g., snow handling and removal, access road construction and maintenance, soil handling under saturated or frozen conditions, topsoil stripping);
2. stabilization and monitoring procedures if ground conditions will delay restoration until the following spring (e.g., mulching and erosion controls, inspection and reporting, stormwater control during spring thaw conditions); and
3. final restoration procedures (e.g., subsidence and compaction repair, topsoil replacement, seeding).

IV. INSTALLATION

A. APPROVED AREAS OF DISTURBANCE

1. Project-related ground disturbance will be limited to the construction right-of-way, extra work space areas, ATWS areas, pipe storage yards, borrow and disposal areas, access roads, and other areas approved in the FERC's Orders. Any Project-related ground disturbing activities outside these areas will require prior Director approval. This requirement does not apply to activities needed to comply with the Plan and Procedures (i.e., slope breakers, energy-dissipating devices, dewatering structures, drain tile system repairs) or minor field realignments and workspace shifts per landowner needs and requirements that do not affect other landowners or sensitive environmental resource areas. All construction or restoration activities outside of authorized areas are subject to all applicable survey and permit requirements, and landowner easement agreements.
2. **The Transco construction rights-of-way widths in upland locations for this Project will include:**
 - a. **90 feet for the Central Penn Line (CPL) North and Chapman Loop;**
 - b. **100 feet for the CPL South and Unity Loop; and**
 - c. **150 feet for the Mainline A & B Replacements.**

Transco will provide extra work spaces and ATWS areas outside of the construction rights-of-way for full construction right-of-way topsoil segregation and to ensure safe construction where required by topographic conditions (e.g., side-slopes) or soil limitations. Extra work space and ATWS areas may also be used in limited, non-wetland or non-forested areas for truck turn-arounds where no reasonable alternative access exists.

Project use of extra work space and ATWS areas outside of authorized work areas is subject to landowner or land management agency approval and compliance with all applicable survey and permit requirements. **Transco will request variances (per section I.A) for these additional areas and will report the requested and approved variances in its weekly construction reports to FERC.** The following materials will be included in the reports:

- a. the location of each additional area by milepost and reference to previously filed alignment sheets showing the additional areas;
- b. identification of the filing at FERC containing evidence that the additional areas were previously surveyed; and
- c. a statement that landowner approval has been obtained and is available in project files.

B. TOPSOIL SEGREGATION

1. Unless the landowner or land management agency specifically approves

otherwise, Transco will prevent the mixing of topsoil with subsoil by stripping topsoil from either the full work area or from the trench and subsoil storage area (ditch plus spoil side method) in:

- a. cultivated or rotated croplands, and managed pastures;
 - b. residential areas;
 - c. hayfields; and
 - d. other areas at the landowner's or land managing agency's request.
2. In residential areas, importation of topsoil is an acceptable alternative to topsoil segregation.
 3. Where topsoil segregation is required:
 - a. segregate at least 12 inches of topsoil in deep soils (more than 12 inches of topsoil); and
 - b. make every effort to segregate the entire topsoil layer in soils with less than 12 inches of topsoil.
 4. Maintain separation of salvaged topsoil and subsoil throughout all construction activities.
 5. Segregated topsoil may not be used for padding the pipe, constructing temporary slope breakers or trench plugs, improving or maintaining roads, or as a fill material.
 6. Stabilize topsoil piles and minimize loss due to wind and water erosion with use of sediment barriers, mulch, temporary seeding, tackifiers, or functional equivalents, where necessary.

C. DRAIN TILES

1. Mark locations of drain tiles damaged during construction.
2. Probe all drainage tile systems within the area of disturbance to check for damage.
3. Repair damaged drain tiles to their original or better condition. Do not use filter-covered drain tiles unless the local soil conservation authorities and the landowner agree. Use qualified specialists for testing and repairs.
4. For new pipelines in areas where drain tiles exist or are planned, ensure that the depth of cover over the pipeline is sufficient to avoid interference with drain tile systems. For adjacent pipeline loops in agricultural areas, install the new pipeline with at least the same depth of cover as the existing pipeline(s).

D. IRRIGATION

Maintain water flow in crop irrigation systems, unless shutoff is coordinated with affected parties.

E. ROAD CROSSINGS AND ACCESS POINTS

1. Maintain safe and accessible conditions at all road crossings and access points during construction. Refer to the Transco Project-specific Traffic and Transportation Management Plan.
2. If crushed stone access pads are used in residential or agricultural areas, place the stone on synthetic fabric to facilitate removal.
3. Minimize the use of tracked equipment on public roadways. Remove any soil or gravel spilled or tracked onto roadways daily or more frequent as necessary to maintain safe road conditions. Repair any damages to roadway surfaces, shoulders, and bar ditches.

F. TEMPORARY EROSION CONTROL

Install temporary erosion controls immediately after initial disturbance of the soil. Temporary erosion controls must be properly maintained throughout construction (on a daily basis) and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration is complete.

1. Temporary Slope Breakers
 - a. Temporary slope breakers are intended to reduce runoff velocity and divert water off the construction right-of-way. Temporary slope breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, or sand bags.
 - b. Install temporary slope breakers on all disturbed areas, as necessary to avoid excessive erosion. Temporary slope breakers must be installed on slopes greater than 5 percent where the base of the slope is less than 50 feet from waterbody, wetland, and road crossings at the following spacing in Pennsylvania (closer spacing shall be used if necessary):

<u>Slope (%)</u>	<u>Spacing (feet)</u>
5 - 15	300
>15 - 30	200
>30	100

- c. Direct the outfall of each temporary slope breaker to a stable, well vegetated area or construct an energy-dissipating device at the end of the slope breaker and off the construction right-of-way.
- d. Position the outfall of each temporary slope breaker to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental

resource areas.

2. Temporary Trench Plugs

Temporary trench plugs are intended to segment a continuous open trench prior to backfill.

- a. Temporary trench plugs may consist of unexcavated portions of the trench, compacted subsoil, sandbags, or some functional equivalent.
- b. Position temporary trench plugs, as necessary, to reduce trenchline erosion and minimize the volume and velocity of trench water flow at the base of slopes.

3. Sediment Barriers

Sediment barriers are intended to stop the flow of sediments and to prevent the deposition of sediments beyond approved workspaces or into sensitive resources.

- a. Sediment barriers may be constructed of materials such as silt fence, staked hay or straw bales, compacted earth (e.g., driveable berms across travelways), sand bags, or other appropriate materials.
- b. At a minimum, install and maintain temporary sediment barriers across the entire 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 a waterbody, wetland, or road crossing until revegetation is successful as defined in this Plan. Leave adequate room between the base of the slope and the sediment barrier to accommodate ponding of water and sediment deposition.
- c. Where wetlands or waterbodies are adjacent to and downslope of construction work areas, install sediment barriers along the edge of these areas, as necessary to prevent sediment flow into the wetland or waterbody.

4. Mulch

- a. Apply mulch on all slopes (except in cultivated cropland) concurrent with or immediately after seeding, where necessary to stabilize the soil surface and to reduce wind and water erosion. Spread mulch uniformly over the area to cover at least 75 percent of the ground surface at a rate of 2 tons/acre of straw or its equivalent, unless the local soil conservation authority, landowner, or land managing agency approves otherwise in writing.
- b. Mulch can consist of weed-free straw or hay, wood fiber hydromulch, erosion control fabric, or some functional equivalent.

- c. Mulch all disturbed upland areas (except cultivated cropland) before seeding if:
 - (1) final grading and installation of permanent erosion control measures will not be completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas), as required in section V.A.1; or
 - (2) construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.
- d. If mulching before seeding, increase mulch application on all slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.
- e. If wood chips are used as mulch, do not use more than 1 ton/acre and add the equivalent of 11 lbs/acre available nitrogen (at least 50 percent of which is slow release).
- f. Ensure that mulch is adequately anchored to minimize loss due to wind and water.
- g. When anchoring with liquid mulch binders, use rates recommended by the manufacturer. Do not use liquid mulch binders within 100 feet of wetlands or waterbodies, except where the product is certified environmentally non-toxic by the appropriate state or federal agency or independent standards-setting organization.
- h. 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.

V. RESTORATION

A. CLEANUP

1. Commence cleanup operations immediately following backfill operations. Complete final grading, topsoil replacement, and installation of permanent erosion control structures within 20 days after backfilling the trench (10 days in residential areas). If seasonal or other weather conditions prevent compliance with these time frames, maintain temporary erosion controls (i.e., temporary slope breakers, sediment barriers, and mulch) until conditions allow completion of cleanup.

Transco will file with the Secretary for the review and written approval of the Director, a Winter Construction Plan (as specified in section III.I). Refer to the Transco Project-specific Winter Construction Plan.

2. A travel lane may be left open temporarily to allow access by construction traffic if the temporary erosion control structures are installed as specified in section IV.F. and inspected and maintained as specified in sections II.B.12 through 14. When access is no longer required the travel lane must be removed and the right-of-way restored.
3. Rock excavated from the trench may be used to backfill the trench only to the top of the existing bedrock profile. Rock that is not returned to the trench shall be considered construction debris, unless approved for use as mulch or for some other use on the construction work areas by the landowner or land managing agency.
4. Remove excess rock **in excess of 4 inches** from at least the top 12 inches of soil in all cultivated or rotated cropland, managed pastures, hayfields, and residential areas, as well as other areas at the landowner's request. The size, density, and distribution of rock on the construction work area shall be similar to adjacent areas not disturbed by construction. The landowner or land management agency may approve other provisions in writing.
5. Grade the construction right-of-way to restore pre-construction contours and leave the soil in the proper condition for planting.
6. Remove construction debris from all construction work areas unless the landowner or land managing agency approves leaving materials onsite for beneficial reuse, stabilization, or habitat restoration.
7. Remove temporary sediment barriers when replaced by permanent erosion control measures or when revegetation is successful.

B. PERMANENT EROSION CONTROL DEVICES

1. Trench Breakers
 - a. Trench breakers are intended to slow the flow of subsurface water along the trench. Trench breakers may be constructed of materials such as sand bags or polyurethane foam. Do not use topsoil in trench breakers.
 - b. An engineer or similarly qualified professional shall determine the need for and spacing of trench breakers. Otherwise, trench breakers shall be installed at the same spacing as and upslope of permanent slope breakers.
 - c. In agricultural fields and residential areas where slope breakers are not typically required, install trench breakers at the same spacing as if permanent slope breakers were required.
 - d. At a minimum, install a trench breaker at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody or wetland and where needed to avoid draining a waterbody or

wetland. Install trench breakers at wetland boundaries, as specified in the Transco Procedures.

- e. Trench breakers will be installed in wetlands to prevent water from traveling along the trench and altering micro-watersheds within the wetlands.

2. Permanent Slope Breakers

- a. Permanent slope breakers are intended to reduce runoff velocity, divert water off the construction right-of-way, and prevent sediment deposition into sensitive resources. Permanent slope breakers may be constructed of materials such as soil, stone, or some functional equivalent.
- b. Construct and maintain permanent slope breakers in all areas, except cultivated areas and lawns, unless requested by the landowner, using spacing recommendations obtained from the local soil conservation authority or land managing agency.

In the absence of written recommendations, use the following spacing unless closer spacing is necessary to avoid excessive erosion on the construction right-of-way:

<u>Slope (%)</u>	<u>Spacing (feet)</u>
5 - 15	300
>15 - 30	200
>30	100

- c. Construct slope breakers to divert surface flow to a stable area without causing water to pool or erode behind the breaker. In the absence of a stable area, construct appropriate energy-dissipating devices at the end of the breaker.
- d. **Unless restricted by state permitting**, slope breakers may extend slightly (about 4 feet) beyond the edge of the construction right-of-way to effectively drain water off the disturbed area. Where slope breakers extend beyond the edge of the construction right-of-way, they are subject to compliance with all applicable survey requirements.

C. SOIL COMPACTION MITIGATION

- 1. Test topsoil and subsoil for compaction at regular intervals in agricultural and residential areas disturbed by construction activities. Conduct tests on the same soil type under similar moisture conditions in undisturbed areas to approximate preconstruction conditions. Use penetrometers or other appropriate devices to conduct tests.

2. Plow severely compacted agricultural areas with a paraplow or other deep tillage implement. In areas where topsoil has been segregated, plow the subsoil before replacing the segregated topsoil. If subsequent construction and cleanup activities result in further compaction, conduct additional tilling. Refer to the Transco Project-specific Agricultural Construction and Monitoring Plan.
3. Perform appropriate soil compaction mitigation in severely compacted residential areas.

D. REVEGETATION

1. General

- a. Transco will ensure successful revegetation of soils disturbed by Project-related activities, except as noted in section V.D.1.b.
- b. Restore all turf, ornamental shrubs, and specialized landscaping in accordance with the landowner's request, or compensate the landowner. Restoration work must be performed by personnel familiar with local horticultural and turf establishment practices.

2. Soil Additives

Fertilize and add soil pH modifiers in accordance with written recommendations obtained from the local soil conservation authority, land management agencies, or landowner. Incorporate recommended soil pH modifier and fertilizer into the top 2 inches of soil as soon as practicable after application.

3. Seeding Requirements

- a. Prepare a seedbed in disturbed areas to a depth of 3 to 4 inches using appropriate equipment to provide a firm seedbed. When hydroseeding, scarify the seedbed to facilitate lodging and germination of seed.
- b. Seed disturbed areas in accordance with written recommendations for seed mixes, rates, and dates obtained from the local soil conservation authority or the request of the landowner or land management agency. Seeding is not required in cultivated croplands unless requested by the landowner.
- c. Perform seeding of permanent vegetation within the recommended seeding dates. If seeding cannot be done within those dates, use appropriate temporary erosion control measures discussed in section IV.F and perform seeding of permanent vegetation at the beginning of the next recommended seeding season. Dormant seeding or temporary seeding of annual species may also be used, if necessary, to establish cover, as approved by the Environmental Inspector. Lawns may be seeded on a schedule established with the landowner.

- d. In the absence of written recommendations from the local soil conservation authorities, seed all disturbed soils within 6 working days of final grading, weather and soil conditions permitting, subject to the specifications in section V.D.3.a through V.D.3.c.
- e. Base seeding rates on Pure Live Seed. Use seed within 12 months of seed testing.
- f. Treat legume seed with an inoculant specific to the species using the manufacturer's recommended rate of inoculant appropriate for the seeding method (broadcast, drill, or hydro).
- g. In the absence of written recommendations from the local soil conservation authorities, landowner, or land managing agency to the contrary, a seed drill equipped with a cultipacker is preferred for seed application.

Broadcast or hydroseeding can be used in lieu of drilling at double the recommended seeding rates. Where seed is broadcast, firm the seedbed with a cultipacker or roller after seeding. In rocky soils or where site conditions may limit the effectiveness of this equipment, other alternatives may be appropriate (e.g., use of a chain drag) to lightly cover seed after application, as approved by the Environmental Inspector.

VI. OFF-ROAD VEHICLE CONTROL

To each owner or manager of forested lands, offer to install and maintain measures to control unauthorized vehicle access to the right-of-way. These measures may include:

- a. signs;
- b. fences with locking gates;
- c. slash and timber barriers, pipe barriers, or a line of boulders across the right-of-way; and
- d. conifers or other appropriate trees or shrubs across the right-of-way.

VII. POST-CONSTRUCTION ACTIVITIES AND REPORTING

A. MONITORING AND MAINTENANCE

- 1. Conduct follow-up inspections of all disturbed areas, as necessary, to determine the success of revegetation and address landowner concerns. At a minimum, conduct inspections after the first and second growing seasons.

2. Revegetation in non-agricultural areas shall be considered successful if upon visual survey the density and cover of non-nuisance vegetation are similar in density and cover to adjacent undisturbed lands. In agricultural areas, revegetation shall be considered successful when upon visual survey, crop growth and vigor are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise.

Continue revegetation efforts until revegetation is successful.

3. Monitor and correct problems with drainage and irrigation systems resulting from pipeline construction in agricultural areas until restoration is successful.
4. Restoration will be considered successful when the right-of-way surface condition is similar to adjacent undisturbed lands, construction debris is removed (unless otherwise approved by the landowner or land managing agency per section V.A.6), revegetation is successful, and proper drainage has been restored.
5. Routine vegetation mowing or clearing over the full width of the permanent right-of-way in uplands will not be done more frequently than every 3 years. However, to facilitate periodic corrosion/leak surveys, a corridor not exceeding 10 feet in width centered on the pipeline may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In no case will routine vegetation mowing or clearing occur during the migratory bird nesting season between April 15 and August 1 of any year unless specifically approved in writing by the responsible land management agency or the U.S. Fish and Wildlife Service.
6. Efforts to control unauthorized off-road vehicle use, in cooperation with the landowner, shall continue throughout the life of the project. Maintain signs, gates, and permanent access roads as necessary.

B. REPORTING

1. Transco will maintain records that identify by milepost:
 - a. method of application, application rate, and type of fertilizer, pH modifying agent, seed, and mulch used;
 - b. acreage treated;
 - c. dates of backfilling and seeding;
 - d. names of landowners requesting special seeding treatment and a description of the follow-up actions;
 - e. the location of any subsurface drainage repairs or improvements made during restoration; and
 - f. any problem areas and how they were addressed.

2. Transco will file with the Secretary quarterly activity reports documenting the results of follow-up inspections required by section VII.A.1; any problem areas, including those identified by the landowner; and corrective actions taken for at least 2 years following construction.



Transcontinental Gas Pipe Line Company, LLC

Attachment 18

**Transco Project-Specific Wetland and Waterbody Construction
and Mitigation Procedures**

Atlantic Sunrise Project

March 2015

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I. APPLICABILITY

- A. The intent of these Procedures is to identify baseline mitigation measures for minimizing the extent and duration of the Transcontinental Gas Pipe Line Company, LLC (Transco) Atlantic Sunrise Project (Project) related disturbance on wetlands and waterbodies. Transco will specify in its applications for a new FERC authorization, and in prior notice and advance notice filings, any individual measures in these Procedures it considers unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Transco will also explain how those alternative measures will achieve a comparable level of mitigation. Deviations from the FERC Procedures proposed by Transco to reflect site-specific conditions are **bolded** in the text.

Once the Project is authorized, Transco may request further changes as variances to the measures in the Transco Procedures. The Director of the Office of Energy Projects (Director) will consider approval of variances upon Transco's written request, if the Director agrees that a variance:

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 jurisdiction.

Project-related impacts on non-wetland areas are addressed in the Transco Project-specific Upland Erosion Control, Revegetation, and Maintenance Plan (Transco 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 as ponds and lakes:
 - 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 methodology for identifying and delineating wetlands.

II. PRECONSTRUCTION FILING

- A. The following information will be filed with the Secretary of the FERC (Secretary) prior to the beginning of construction, for the review and written approval by the Director:
1. site-specific justifications for additional temporary workspace (ATWS) 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 will be filed with the Secretary prior to the beginning of construction:
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. Transco 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, and
 6. 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 Transco Plan.

IV. PRECONSTRUCTION PLANNING

- A. Transco will develop a project-specific Spill Prevention and Response Procedures that meet applicable requirements of state and federal agencies. A copy will be filed with the Secretary prior to construction and made available in the field on each construction spread. Refer to the Transco Project-specific Spill Plan for Oil and Hazardous Materials.

1. Transco and its contractors will 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. Transco and its contractors must, at a minimum, ensure that:
 - 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 basis;
 - 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;
 - 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; and
 - h. bulk storage of hazardous materials, including chemicals, fuels, and lubricating oils have appropriate secondary containment systems to prevent spills.

2. Transco and its contractors will 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, Transco and its contractors will:
 - 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 cleanup.

B. AGENCY COORDINATION

Transco will 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 (USACE), 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 authority.
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

1. Time Window for Construction

As permitted by state agencies, instream work, except that required to install or remove equipment bridges, will occur during the following time windows:

- a. PA Coldwater fisheries – Year-round;
- b. PA Trout Stocked Waters – June 16 through February 28;
- c. PA Wild Trout Waters – January 1 through September 30;
- d. PA Class A Wild Trout Waters – April 2 through September 30;

- e. PA Warmwater fisheries – Year-round (except when sensitive species are present); and
- f. VA waterbody crossings (fishery classifications TBD) – TBD

Transco may request at specific identified locations to perform in-stream work outside of specific state agency windows at individual waterbodies, as approved by state agencies prior to construction.

2. Extra Work Areas

- a. Locate all extra work areas (such as staging areas) and ATWS areas (such as spoil storage areas and full right-of-way topsoil) at least 50 feet away from water's edge, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

In select areas, Transco will need to locate ATWS within 50 feet of a stream in areas that are not active agricultural land due to adjacent land use or topographic limitations. Transco has filed with the Secretary for review and written approval by the Director, site-specific justification for each ATWS 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. Refer to Resource Report 2, Appendix 2E of the Transco application. The justifications specify the conditions that will not permit a 50-foot setback and measures to ensure the waterbody is adequately protected.

- b. Limit the size of ATWS areas to the minimum needed to construct the waterbody crossing.

3. General Crossing Procedures

- a. Comply with the USACE, or its delegated agency, permit terms and conditions.
- 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.

In select areas, Transco has identified where the pipeline will be installed such that a 15-foot vegetated buffer between the waterbody and the construction right-of-way cannot be maintained. Transco has filed with the Secretary for review and written approval by the Director, site-specific justification where pipelines parallel a waterbody and the 15-foot vegetated buffer between the waterbody and the construction right-of-way cannot be maintained. Refer to

Table 2.3-8 in Resource Report 2 of the Transco application. The justifications specify the conditions that will not permit a 15-foot vegetated buffer and measures to ensure the waterbody is adequately protected.

- 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 Project-specific 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 ATWS 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.
 - 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 USACE, or the appropriate state agency for permanent bridges.
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 steps:

- (1) install flume pipe after blasting (if necessary), but before any trenching;
- (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, pipe laying, or backfilling activities, or initial streambed restoration efforts.; and
- (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 bank is complete.

d. Horizontal Directional Drill

For each waterbody or wetland that would be crossed using the HDD method, Transco will file with the Secretary for the review and written approval by the Director, a plan that includes:

- (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.

7. Crossings of Minor Waterbodies

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.
- b. streambanks and unconsolidated streambeds may require additional restoration after this period;
- c. limit use of equipment operating in the waterbody to that needed to construct the crossing; and
- d. 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, Transco will cross intermediate waterbodies 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.

9. Crossings of Major Waterbodies

Before construction, Transco will 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. This plan will be developed in consultation with the appropriate state and federal agencies and shall include extra work areas, ATWS areas, spoil storage areas, sediment control structures, etc., as well as mitigation for navigational issues.

The Environmental Inspector may adjust the final placement of the erosion and sediment control structures in the field to maximize effectiveness.

10. Temporary Erosion and Sediment Control

Install sediment barriers (as defined in Section IV.F.3.a of the Transco Plan) immediately after initial disturbance of the waterbody or adjacent upland.

Sediment barriers will 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 Transco Plan; however, Transco will implement the following specific measures at stream crossings:

- 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 drivable 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 re-contouring. 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 USACE, 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 lands.
8. Unless more stringent guidelines are established, Transco will 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, Transco will install sediment barriers as outlined in the Transco Plan.
9. In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the waterbody.
10. 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 Transco Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of riparian areas.

VI. WETLAND CROSSINGS

A. GENERAL

1. Transco will conduct wetland delineations using the current federal methodology and will file wetland delineation reports with the Secretary before construction.

This report will identify:

- a. by milepost all wetlands that would be affected;
- b. the National Wetlands Inventory (NWI) classification for each wetland;
- 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 Transco will 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.

Transco is proposing to use an additional 15 feet of workspace in some wetlands. Transco has filed with the Secretary for review and written approval by the Director, site-specific justification for additional workspace within wetlands. Refer to Resource Report 2, Appendix 2G of the Transco application. The justifications specify the conditions that will not permit a 75-foot wide corridor reduction.

4. Wetland boundaries and buffers will be clearly marked in the field with 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, Transco will file with the Secretary a site-specific crossing plan for review and written approval by the Director before construction. This crossing plan will 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 and ATWS 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 ATWS (such as 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. Transco will file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area and ATWS 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 will specify the site-specific conditions that will not permit a 50-foot setback and measures to ensure the wetland is adequately protected.

In select areas, Transco will need to locate ATWS within 50 feet of a wetland in areas that are not active agricultural land due to adjacent land use or topographic limitations. Transco has filed with the Secretary for review and written approval by the Director, site-specific justification for additional workspace within 50 feet of wetlands. Refer to Resource Report 2, Appendix 2G of the Transco application. The justifications specify the 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).

- d. In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing shall 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.
 - e. 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 USACE, 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.
 - g. Transco may burn woody debris in wetlands, if approved by the USACE and in accordance with state and local regulations, ensuring that all remaining woody debris is removed for disposal.
 - h. 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.
 - i. Segregate the top 1 foot of topsoil from the area disturbed by trenching, except in areas where standing water is present or soils are saturated. Immediately after backfilling is complete, restore the segregated topsoil to its original location.

- j. Do not use rock, soil imported from outside the wetland, tree stumps, or brush riprap to support equipment on the construction right-of-way.
- k. 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.
- l. 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 Transco 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 the wetland.
- 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

- 1. 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 wetland hydrology.

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 Project Specific 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. Transco will consult with the appropriate federal or state agencies to develop a Project- specific wetland restoration plan. The restoration plan will 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 revegetation and weed control efforts. Refer to the Project-specific Noxious and Invasive Plant Management Plan.
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).
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 Transco 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 Transco 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 construction;
 - 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, Transco will 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.

For any wetland where revegetation is not successful at the end of 3 years after construction, Transco will 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 revegetation is successful.

VII. HYDROSTATIC TESTING

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 the refueling of these pumps in the project-specific Spill Prevention and Response Procedures. Refer to the Transco Project-specific Spill Plan for Oil and Hazardous Materials.

3. Transco will file with the Secretary before construction a list identifying the location of all waterbodies proposed for use as a hydrostatic test water source or discharge location.

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.
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

APPENDIX F
ROADWAYS AND RAILROADS CROSSED BY
THE ATLANTIC SUNRISE PROJECT

APPENDIX F

TABLE F-1						
Roadways Crossed by the Atlantic Sunrise Project						
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method		
PENNSYLVANIA						
Central Penn Line North						
Columbia County						
Sugarloaf Township	0.1	West Creek Road T700	Public	Open cut		
	1.1	Camp Lavigne Road – State Route (SR) 4049	Public	Bore		
	1.5	School House Road T714	Public	Open cut or bore		
	1.5	Fritz Hill Road T825	Public	Open cut		
	2.7	Comstock Road T812	Public	Open cut		
	2.8	Caselot Road T822	Public	Open cut		
	3.3	Laubach Road T816	Public	Open cut		
Luzerne County						
Fairmount Township	4.3	Red Rock Road – SR 487	Public	Bore		
	5.0	County Line Road	Public	Open cut		
	5.5	SR 4011 (Old Tioga Turnpike)	Public	Open cut or bore		
	5.8	SR 4013 (Mossville Road)	Public	Open cut or bore		
	6.7	Tripp Road	Public	Open cut		
	8.2	SR 4015 (Bethel Hill Road)	Public	Open cut or bore		
	9.0	Goss Road	Public	Open cut		
	9.8	Bridge Out Road	Public	Open cut		
	9.9	Maransky Road	Public	Open cut		
	Ross Township	10.9	Kyttle Pike Road	Public	Open cut	
		11.4	Patla Road	Public	Open cut	
		12.5	SR 4024 (Grassy Pond Road)	Public	Open cut or bore	
		13.4	Creekside Lane	Public	Open cut	
		13.9	State Highway 118	Public	Bore	
		14.1	Old State Road	Public	Open cut	
		14.4	Green Valley Road	Public	Open cut	
		Lake Township	15.5	Bronson Road	Public	Open cut
			16.0	Gordon Road	Public	Open cut
			16.6	State Highway 29	Public	Bore
17.2	SR 1034 (Pine Tree Road)		Public	Open cut or bore		
17.5	Loyalville Road		Public	Open cut		
Lehman Township	18.3	SR 1051 (Meeker Road)	Public	Open cut or bore		
	18.9	Zosh Road	Public	Open cut		
	19.3	Hoover Road	Public	Open cut		
	20.1	SR 1049 (Outlet Road)	Public	Open cut or bore		
	20.9	Peaceful Valley Road T585	Public	Open cut		
	21.8	Huntsville Idetown Road	Public	Open cut		
	21.5	Private Road	Private	Open cut		
Dallas Township	M-0060 0.2	State Highway 415	Public	Bore		
	M-0060 0.3	West 42 nd Street	Public	Open cut or bore		
	M-0060 0.3	Brier Crest Road T870	Public	Open cut		
	24.1	SR 1047 (Lake Street)	Public	Open cut or bore		
	24.3	Stredney Road	Public	Open cut		
	25.5	Old Tunkhannock Road	Public	Open cut		
	25.5	State Highway 309 (Tunkhannock Highway)	Public	Bore		
	26.8	Lake Catalpa Road	Public	Open cut or bore		
	27.1	Unknown Road	Public	Open cut or bore		

APPENDIX F (cont'd)

TABLE F-1 (cont'd)				
Roadways Crossed by the Atlantic Sunrise Project				
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method
Wyoming County				
Northmoreland Township	29.9	Levitt Hill Road	Public	Open cut
	30.0	SR 292	Public	Bore
	31.7	SR 2002 (Schoolhouse Road)	Public	Open cut or bore
Eaton Township	33.1	Thurston Hollow Road T370	Public	Bore
	34.8	SR 2007 (Keelersburg Road)	Public	Open cut or bore
Falls Township	35.1	State Highway 92	Public	Horizontal directional drill
	37.0	Private Road	Private	Open cut
	37.2	SR 2006 (Post Hill Road)	Public	Open cut or bore
Overfield Township	38.0	SR 2004 (Whites Ferry Road)	Public	Open cut or bore
	38.4	State Highway 307 (Roosevelt Highway)	Public	Bore
	38.8	Township Road 389 (Timber Lane)	Public	Open cut
	39.4	SR 2035 (Jermyn Hill Road)	Public	Open cut or bore
	39.9	Lithia Valley Road (T431)	Public	Open cut
	40.9	Lithia Valley Road (T431)	Public	Open cut
Clinton Township	M-0054 0.1	SR 2012 Lithia Valley Road	Public	Open cut or bore
	43.8	Creek Road	Public	Open cut
	43.9	US 6	Public	Bore
	44.4	US 11 (Lackawanna Trail)	Public	Bore
	45.2	Savage Road	Public	Open cut
	45.8	SR 1017 (College Ave)	Public	Open cut or bore
Nicholson Township	46.9	SR 1014	Public	Open cut or bore
	48.2	Matulevich Road	Public	Open cut
Nicholson Township	48.7	SR 1031 (Farnham Road)	Public	Open cut or bore
	M-0052 0.1	Vic Lane	Public	Open cut
	49.6	State Highway 92	Public	Bore
Susquehanna County				
Lenox Township	52.4	Township Road 501 (Pratt Hollow Road)	Public	Open cut
	52.7	Township Road 510 (Wickwire Hill Road)	Public	Open cut
	53.5	Township Road 383 (Rod & Gun Club Road)	Public	Open cut or bore
	53.9	SR 2041 (Glenwood Road)	Public	Bore
	54.8	T503 (Swamp Road)	Public	Open cut
	55.7	Bennet Road T503	Public	Open cut
	57.0	SR 2020	Public	Open cut or bore
Central Penn Line South				
Lancaster County				
Drumore Township	0.4	Silver Spring Road (T 412)	Public	Open cut
	0.8	Penny Road (T 452)	Public	Open cut
Martic Township	1.9	Susquehannock Drive (SR 3009)	Public	Open cut or bore
	2.1	Holtwood Road – SR 372	Public	Bore
	2.8	Private Road	Private	Open cut
	M-0184 0.3	Private Road	Private	Open cut
	M-0184 0.4	Drytown Road	Public	Bore
	M-0184 1.0	Martic Heights RD (SR 3018)	Public	Open cut or bore

APPENDIX F (cont'd)

TABLE F-1 (cont'd)					
Roadways Crossed by the Atlantic Sunrise Project					
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method	
Conestoga Township	5.3	Clearview Road/ TWP RD 401	Public	Open cut	
	5.7	Private Road	Private	Open cut	
	6.1	Stump Road (T403)	Public	Open cut	
	6.3	Private Road	Private	Open cut	
	6.4	Private Road	Private	Open cut	
	6.6	Red Hill Road (SR 3019)	Public	Open cut or bore	
	6.9	Red Hill Road (SR 3019)	Public	Open cut or bore	
	7.0	Lakewood Drive (T 510)	Public	Open cut	
	7.1	Enola Low Grade Trail	Public	Open cut	
	7.1	Pennsy Road	Public	Open cut	
	7.4	Marticville Road (SR 324)	Public	Bore	
	7.8	Private Road	Private	Open cut	
	8.2	Pequea Creek Road/ Conestoga Trail T 410	Public	Open cut	
	9.2	Sickmans Mill Road	Public	Open cut	
	9.5	Meadow Ln T413	Public	Open cut	
	9.7	Private Road	Private	Open cut	
	Manor Township	10.2	River Corner Road (T 420)	Public	Open cut
11.4		Main St	Public	Bore	
12.2		Conestoga Boulevard	Public	Open cut or bore	
12.7		Witmer Road	Public	Open cut or bore	
M-0152 0.0		Safe Harbor Road	Public	Bore	
14.3		Indian Marker Road (T 579)	Public	Open cut	
M-0188 0.1		Highville Road (T 392)	Public	Open cut	
14.9		Breneman Road (T 581)	Public	Open cut	
15.6		Letort Road	Public	Open cut or bore	
15.6		Private Road	Private	Open cut	
16.1		Private Road	Private	Open cut	
M-0185 0.1		Anchor Road	Public	Open cut	
16.8		Private Road	Private	Open cut	
17.3		Blue Rock Road (T 589)	Public	Open cut	
17.8		Penn Street – RT 999	Public	Bore	
West Hempfield Township		18.3	Charlestown Road (T 589)	Public	Open cut
		18.4	Private Road	Private	Open cut
	19.3	Franklin Road	Public	Open cut or bore	
	20.3	Locust Grove Road (T 601)	Public	Open cut	
	20.6	Columbia Ave (SR 462)	Public	Bore	
	21.0	Private Road	Private	Open cut	
	21.1	Meadow Road	Public	Open cut	
	21.4	Interstate 30 (SR 30) EB	Public	Bore	
	22.3	Ironville Pike	Public	Open cut	
	22.6	Norwood Road (T362)	Public	Open cut	
	22.8	Fairview Road (T 665)	Public	Open cut	
	22.9	Private Road	Public	Open cut	
	23.6	Marietta Ave (SR 23)	Public	Bore	
	Rapho Township	24.5	Bridge Valley Road (T 365)	Public	Open cut
		25.3	Pinkerton Road	Public	Open cut
		26.1	Garfield Road	Public	Open cut

APPENDIX F (cont'd)

TABLE F-1 (cont'd)				
Roadways Crossed by the Atlantic Sunrise Project				
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method
	26.6	Newcomer Road	Public	Open cut
	27.6	E Main Street (SR 230)	Public	Bore
	28.1	Strickler Road	Public	Open cut
	M-0162 0.3	PA Route 283	Public	Bore
	29.0	Mount Joy Road (SR 772)	Public	Bore
	29.5	Breneman Road	Public	Open cut
	29.7	Zink Road	Public	Open cut
	30.2	Spangler Road	Public	Open cut
	30.4	Back Run Road	Public	Open cut or bore
	32.0	Hossler Road	Public	Open cut or bore
	33.1	Meadow View Road	Public	Open cut or bore
	33.4	Sunnyside Road	Public	Open cut
	33.9	Sunnyside Road	Public	Open cut
Mount Joy Township	34.7	E. Town Road (SR 4008)	Public	Open cut or bore
	35.4	Private Road	Private	Open cut
	35.7	Private Road	Private	Open cut
	36.1	Harvest Road	Public	Open cut
Lebanon County				
South Londonderry Township	37.0	Pennsylvania Turnpike Interstate 76	Public	Bore
	37.5	Elizabethtown Road (SR 241)	Public	Bore
	38.3	Lawn Road	Public	Open cut or bore
	39.4	Colebrook Road (SR 341)	Public	Bore
	40.0	S Forge Road	Public	Bore
	41.3	Private Road	Public	Open cut
South Annville Township	41.8	Private Road	Private	Open cut
	42.0	Private Road	Private	Open cut
	42.0	Private Road	Private	Open cut
	42.6	Horseshoe Pike/ US Route 322	Public	Bore
	43.2	Wagner Ln	Public	Open cut
	43.6	Private Road	Private	Open cut
	44.8	Louser Road (T 348)	Public	Open cut
	M-0183 0.4	Private Road	Private	Open cut
	M-0183 0.7	West Main Street / SR 422	Public	Bore
North Annville Township	M-0183 1.1	Private Road	Private	Open cut
	47.0	Shanamahantown Road	Public	Open cut
	47.4	Private Road	Private	Open cut
	47.9	PA Hwy 934	Public	Bore
	48.6	Harrison Road	Public	Open cut or bore
	48.9	Private Road	Private	Open cut
	49.1	Private Road	Private	Open cut
East Hanover Township	49.3	Swatara Drive	Public	Open cut
	49.7	Private Road	Private	Open cut
	50.1	Swatara Drive	Public	Open cut
	50.8	Private Road	Private	Open cut
	51.1	McGillstown Road	Public	Open cut
	51.4	Private Road	Private	Open cut

APPENDIX F (cont'd)

TABLE F-1 (cont'd)				
Roadways Crossed by the Atlantic Sunrise Project				
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method
	M-0165 0.4	Private Road	Private	Open cut
	M-0165 0.4	Private Road	Private	Open cut
	52.1	Ono Road (SR 4007)	Public	Open cut or bore
	52.4	Private Road	Private	Open cut
	52.4	Jonestown Road	Public	Open cut
	52.6	Allentown Boulevard (SR 22)	Public	Bore
Union Township	52.9	Racehorse Road	Public	Open cut
	53.4	Awol Road	Public	Open cut
	53.6	Private Road	Private	Open cut
	53.7	Hoover Drive	Public	Open cut
	53.8	Private Road	Private	Open cut
	M-0199 0.1	Interstate 81 (EB)	Public	Bore
	M-0199 0.1	Interstate 81 (WB)	Public	Bore
Union Township	M-0199 0.2	Cavalry Road	Public	Open cut
	54.9	Cavalry Road	Public	Open cut
	55.5	Fisher Avenue	Public	Open cut or bore
	55.8	Private Road	Private	Open cut
	M-0180 0.1	N. Bordnersville Road	Public	Open cut
	56.3	Private Road	Private	Open cut
	56.6	Fort Swatara Road	Public	Open cut
	56.8	Fort Swatara Road	Public	Open cut
	57.0	Private Road	Private	Open cut
	57.0	Private Road	Private	Open cut
	57.1	Acorn Road	Private	Open cut
	58.7	Moonshine Road (SR 443)	Public	Bore
	59.2	Smokey Lane	Private	Open cut
	59.3	Smokey Lane	Private	Open cut
	M-0176 0.2	Private Road	Private	Open cut
	M-0176 0.3	Private Road	Private	Open cut
	M-0200 0.5	Private Road	Private	Open cut
	60.7	Rudy Ln	Private	Open cut
	61.2	Private Road	Private	Open cut
	61.4	Goldmine Road	Public	Bore
	62.1	Private Road	Private	Open cut
Cold Spring Township	62.5	Private Road	Private	Open cut
Union Township	63.7	Private Road	Private	Open cut
Schuylkill County				
Pine Grove Township	64.5	Oak Grove Road T886	Public	Open cut
	65.2	Old Forge Road T392	Public	Open cut
	65.6	Private Road	Private	Open cut
	65.8	Private Road	Private	Open cut
	65.8	Private Road	Private	Open cut
	M-0177 0.0	Private Road	Private	Open cut
	M-0177 0.2	Private Road	Private	Open cut
	M-0177 0.4	Dark Woods Road	Public	Open cut
	66.8	Oak Grove Road T886	Public	Open cut
	M-0196 0.0	Klick Drive T880	Public	Open cut
	67.7	Beuchler Lane	Private	Open cut

APPENDIX F (cont'd)

TABLE F-1 (cont'd)				
Roadways Crossed by the Atlantic Sunrise Project				
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method
	68.1	Private Road	Private	Open cut
	68.8	Private Road	Private	Open cut
	69.1	Private Road	Private	Open cut
	69.2	Private Road	Private	Open cut
Tremont Township	M-0181 0.1	Molleystown Road T634	Public	Open cut
	72.7	Private Road	Private	Open cut
Frailey Township	73.2	Private Road	Private	Open cut
	73.4	SR 209	Public	Bore
Porter Township	74.9	Highway 125	Public	Bore
	75.0	Private Road	Private	Open cut
Hegins Township	75.1	Private Road	Private	Open cut
	75.4	Private Road	Private	Open cut
	75.5	Private Road	Private	Open cut
	75.8	Private Road	Private	Open cut
	76.2	Pine Drive T520	Public	Open cut
	76.7	E Main Street / Highway 25	Public	Bore
	M-0170 0.1	E Mountain Road T879	Public	Open cut
	77.7	Valley Road T377	Public	Open cut
	78.0	Private Road	Private	Open cut
	78.4	Private Road	Private	Open cut
	78.5	Deep Creek Road – SR 4020	Public	Open cut or bore
Eldred Township	79.1	Private Road	Private	Open cut
	79.3	Private Road	Private	Open cut
	79.9	Private Road	Private	Open cut
	80.3	Creek Drive T504	Public	Open cut
	80.5	Mill Hill Road T494	Public	Open cut
	80.9	Ranch Road T399	Public	Open cut
	M-0194 0.1	Zion Church Road T506	Public	Open cut or bore
	M-0194 0.5	Helfenstein Road – SR 4022	Public	Bore
Northumberland County				
East Cameron Township	83.2	Private Road	Private	Open cut
	83.7	Upper Road SR 2044	Public	Open cut or bore
	84.4	Private Road	Private	Open cut
	85.1	Private Road	Private	Open cut
Coal Township	85.3	Private Road	Private	Open cut
	85.9	SR 901	Public	Bore
	86.6	Industrial Park Road	Private	Open cut
	86.7	Private Road	Private	Open cut
	86.9	SR 61	Public	Bore
	87.5	Private Road	Public	Open cut or bore
	87.7	Main Street / SR 2026	Public	Open cut or bore
	88.1	Private Road	Private	Open cut
	88.3	Private Road	Private	Open cut
	88.4	Private Road	Private	Open cut
	88.5	Private Road	Private	Open cut
	88.7	Private Road	Private	Open cut
	89.1	Private Road	Private	Open cut

APPENDIX F (cont'd)

TABLE F-1 (cont'd)				
Roadways Crossed by the Atlantic Sunrise Project				
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method
	89.1	Private Road	Private	Open cut
Ralpho Township	90.0	Longacre Road	Private	Open cut
	90.2	Private Road	Private	Open cut
Ralpho Township	90.3	Reading Turnpike SR 2016	Public	Open cut or bore
	M-0167 0.3	State Hwy 54	Public	Bore
Columbia County				
Cleveland Township	91.4	Happy Valley Road T302	Public	Open cut
	91.5	Wynn School Road T311	Public	Open cut
	91.7	Happy Valley Road T302	Public	Open cut
	92.3	Happy Valley Road T302	Public	Open cut
	93.0	Cleveland Road T326	Public	Open cut
	93.2	Taft Road T317	Public	Open cut
	93.4	Private Road	Private	Open cut
	93.5	Private Road	Private	Open cut
	94.3	Private Road	Private	Open cut
	94.5	Pine Swamp Road T337	Public	Open cut
	94.9	Private Road	Private	Open cut
	95.1	Bethel Drive T320	Public	Open cut
	95.4	Campbell Road T353	Public	Open cut
Franklin Township	96.1	Southern Drive SR 487	Public	Bore
	97.0	Hamlock Drive T322	Public	Open cut
	97.1	Orchard Drive SR 3003	Public	Open cut or bore
	97.2	Private Road	Private	Open cut
	97.9	Lawrence Drive T338	Public	Open cut
	98.0	Longwoods Road T395	Public	Open cut
	98.8	Mt Zion Road – SR 3012	Public	Open cut or bore
	99.1	Private Road	Private	Open cut
	99.2	Private Road	Private	Open cut
	99.3	Private Road	Private	Open cut
Montour Township	100.0	Legion Road – SR 4002	Public	Horizontal directional drill
	101.0	Grovania Road – SR 4002	Public	Open cut or bore
	101.4	Private Road	Public	Open cut
	101.7	Montour Boulevard – Hwy 11	Public	Bore
	101.8	Valley Road SR 184	Public	Bore
	102.6	Ridge Road SR 4004	Public	Open cut or bore
Hemlock Township	103.6	Private Road	Private	Open cut
	104.0	Frosty Valley Road – SR 4006	Public	Open cut or bore
	104.1	Interstate 80 Eastbound	Public	Bore
	104.1	Interstate 80 Westbound	Public	Bore
	104.1	Service Lane T437	Public	Open cut
	104.4	Schoolhouse Road T475	Public	Open cut
	104.6	Private Road	Private	Open cut
	104.7	Schoolhouse Road T475	Public	Open cut
	M-0156 0.1	Dahl Road T828	Public	Open cut
	M-0156 0.1	Buckhorn Road – SR 44	Public	Bore
Hemlock Township	M-0171 0.3	Ivey Drive T489	Public	Open cut
	106.9	Millville Road – Hwy 42	Public	Bore

APPENDIX F (cont'd)

TABLE F-1 (cont'd)					
Roadways Crossed by the Atlantic Sunrise Project					
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method	
Mount Pleasant Township	107.0	Covered Bridge Drive T493	Public	Open cut	
	107.3	Coleman Hollow Road T426	Public	Open cut	
	M-0195 0.1	Coleman Hollow Road T426	Public	Open cut	
	M-0195 0.9	Private Road	Private	Open cut	
	108.5	Private Road	Private	Open cut	
	108.7	Mellick Hollow Road T518	Public	Open cut	
	109.4	Millertown Road – SR 4011	Public	Open cut or bore	
	109.6	Private Road	Private	Open cut	
	109.7	Private Road	Private	Open cut	
	110.0	Shaner Road T540	Public	Open cut	
	110.2	Mount Pleasant Road – SR 4020)	Public	Open cut or bore	
	110.7	Lamoreaux Road T551	Public	Open cut	
	111.1	Lick Run Road T506	Public	Open cut	
	111.6	Huckleberry Hill Road T520	Public	Open cut	
Orange Township	112.1	Welliversville Road T559	Public	Open cut	
	112.2	Bartholomew Road T518	Public	Open cut	
	112.8	Black Road T575	Public	Open cut	
	Greenwood Township	113.1	Pats Upper Road T593	Public	Open cut
113.3		Pats Lower Road T585	Public	Open cut	
113.5		Bowman's Mill Road – SR 4037	Public	Open cut or bore	
113.8		Utt Road T456	Public	Open cut	
114.5		Private Road	Private	Open cut	
114.7		Rohrsburg Road – SR 254	Public	Bore	
114.9		Private Road	Private	Open cut	
115.5		Austin Trail – SR 4039	Public	Open cut or bore	
115.9		Winters Road T459	Public	Open cut	
116.1		Private Road	Private	Open cut	
116.2		Private Road	Private	Open cut	
117.5		Laubach Hill Road T457	Public	Open cut	
Jackson Township		118.1	Campbell Road T586	Public	Open cut
		118.3	McHenry Road T659	Public	Open cut
	118.7	Derr's Road – SR 4030	Public	Open cut or bore	
	119.3	Knouse Road T691	Public	Open cut	
	119.6	Private Road	Private	Open cut	
	119.6	Private Road	Private	Open cut	
	120.0	Green Creek Road T715	Public	Open cut	
	120.3	Private Road	Private	Open cut	
	120.4	Private Road	Private	Open cut	
	120.4	Private Road	Private	Open cut	
	120.4	Private Road	Private	Open cut	
	120.4	Private Road	Private	Open cut	
	120.5	Private Road	Private	Open cut	
	120.5	Private Road	Private	Open cut	
120.5	Private Road	Private	Open cut		
120.5	Private Road	Private	Open cut		
120.5	Private Road	Private	Open cut		
120.5	Private Road	Private	Open cut		
120.6	Private Road	Private	Open cut		
120.6	Private Road	Private	Open cut		
120.6	Private Road	Private	Open cut		

APPENDIX F (cont'd)

TABLE F-1 (cont'd)				
Roadways Crossed by the Atlantic Sunrise Project				
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method
	120.6	Private Road	Private	Open cut
	120.7	Private Road	Private	Open cut
	120.8	Private Road	Private	Open cut
	120.9	Private Road	Private	Open cut
	120.9	Private Road	Private	Open cut
	120.9	Private Road	Private	Open cut
	121.3	Green Creek Road T715	Public	Open cut
	121.6	Private Road	Private	Open cut
	122.0	Mendenhall Hill Road T725	Public	Open cut
	122.2	Waller Divide Road T700	Public	Open cut
	122.6	Smith Hill Road T790	Public	Open cut
	122.8	Private Road	Private	Open cut
	122.9	Private Road	Private	Open cut
Jackson Township	123.2	SR 239	Public	Bore
	123.7	Shultz Hollow Road T692	Public	Open cut
	124.1	Will Kyle Road T698	Public	Open cut
	124.1	Private Road	Private	Open cut
Chapman loop				
Clinton County				
Chapman Township	L186.2	Private Road	Private	Open cut
	L186.5	Sunflower Lane	Private	Open cut
	L186.6	Dogwood Lane	Private	Open cut
	L186.8	Private Road	Private	Open cut
	L187.5	Private Road	Private	Open cut
	L188.3	Summerson Mountain Road T313	Public	Open cut
Unity loop				
Lycoming County				
Jordan Township	L120.6	SR42	Public	Bore
	L120.9	Private Road	Private	Open cut
Franklin Township	L121.4	Cleman Hollow Road T720	Public	Open cut
	L121.6	Private Road	Private	Open cut
	L122.3	Miller Road T728	Public	Open cut
	L122.5	Buck Road (Private Road)	Private	Open cut
	L122.7	Fairview Road T710	Public	Open cut
	L122.7	Private Road	Private	Open cut
	L123.2	Harriman Road T708	Public	Open cut
	L123.3	Private Road	Private	Open cut
	L123.5	Private Road	Private	Open cut
Penn Township	L123.8	Beaver Run Road SR 2077	Public	Open cut or bore
	L124.4	Private Road	Private	Open cut
	L124.4	Private Road	Private	Open cut
	L124.5	Loop Hill Road T692	Public	Open cut
	L124.6	Private Road	Private	Open cut
	L124.7	Private Road	Private	Open cut
	L124.7	Private Road	Private	Open cut
	L124.8	Private Road	Private	Open cut
	L125.1	Crawley Hill Road T694	Public	Open cut
	L125.3	Private Road	Private	Open cut

APPENDIX F (cont'd)

TABLE F-1 (cont'd)				
Roadways Crossed by the Atlantic Sunrise Project				
Facility/County/Township	Milepost ^a	Road Name	Public or Private	Crossing Method
Penn Township	L125.3	Private Road	Private	Open cut
	M-0003 0.0	Dark Hollow Road T800	Public	Open cut
	L125.8	Private Road	Private	Open cut
	L126.0	Dr. Poust Road T674	Public	Open cut
	L126.2	Private Road	Private	Open cut
	L126.4	Private Road	Private	Open cut
	L126.8	Private Road	Private	Open cut
	L126.8	Private Road	Private	Open cut
	L126.9	Private Road	Private	Open cut
	L127.1	Green Valley Road SR 2061	Public	Open cut or bore
	L127.2	Private Road	Private	Open cut
	L127.3	S. Frymire Hollow Road T671	Public	Open cut
	L127.6	Private Road	Private	Open cut
	L127.8	Beaver Lake Road SR 2073	Public	Open cut or bore
	L128.8	Barto Hollow Road T650	Public	Open cut
	L128.9	Private Road	Private	Open cut
	Virginia			
Mainline a and b replacements				
Prince William County				
Brentsville District Township	1579.6	University Boulevard	Public	Bore
	1579.0	Tygart Lake Drive	Public	Bore
^a Where route modifications have been incorporated into the proposed route, new mileposts have been developed. The new mileposts are identified by inclusions of the associated route modification number (M-####) preceding the milepost value.				

APPENDIX F (cont'd)

TABLE F-2				
Railroads Crossed by the Project Facilities for the Atlantic Sunrise Project				
Facility/County, State/ Township	Milepost	Railroad	Status	Crossing Method
CPL North				
Wyoming County, PA				
Falls Township	35.1	Reading Blue Mountain and Northern Railroad	Active	Horizontal directional drill (HDD) ^a
Nicholson Township	46.2	Canadian Pacific Railroad	Active	Bore
CPL South				
Lancaster County, PA				
West Hempfield Township	20.0	Norfolk Southern Railroad	Active	Bore
West Hempfield Township	22.2	Pennsylvania Lines LLC, c/o Norfolk Southern	Abandoned	Bore
Rapho Township	27.4	Amtrak	Active	Bore
Lebanon County, PA				
North Annville Township	M-0183 1.1	Northern Southern Railroad	Active	Bore
Schuylkill County, PA				
Frailey Township	74.2	Reading Blue Mountain and Northern Railroad	Active	Bore
Northumberland County, PA				
Coal Township	85.9	Shamokin Valley	Active	Bore
Columbia County, PA				
Franklin Township	99.6	Canadian Pacific Railway	Active	HDD
Montour Township	99.9	SEDA-COG Joint Rail Authority	Active	HDD ^a
Mainline A & B Replacements				
Prince William County, VA				
Brentsville and Gainesville Townships	1580.8	Norfolk Southern Railroad	Active	Bore

^a The HDD crossings of these railroads are associated with the HDD crossings of the Susquehanna River.

