

**Attachment P-1  
Resource-Specific Avoidance and Minimization Measures  
Lancaster County**

Resource Type (Stream or Wetland)	Resource Name	Resource ID	MP	Chapter 93 Classification, Wetland Classification	Stream Type (Perennial, Intermittent, Ephemeral)	Stream Trout Status (Class A Wild Trout, Wild Trout, Trout Stocked)	Cowardin Classification	Limits of Disturbance (LOD) Adjustments (Supporting Information for Technical Deficiencies #'s 28 and 71)	Field Routing Adjustments within 600-foot Wide Corridor (Supporting Information for Technical Deficiency #15)*	Stream Bank Stabilization BMP
Stream	UNT to Fishing Creek	WW-T10-001A	0.24	HQ-CWF, MF	Perennial	None	R3	The LOD was modified to eliminate impacts to WW-T10-001A.	This feature is no longer impacted based on LOD reductions.	N/A
Stream	UNT to Fishing Creek (WW-T10-001)	WW-T10-001	0.25	HQ-CWF, MF	Perennial	Wild Trout Waters	R3	LOD has been reduced to 90' to minimize impacts to WW-T10-001.	The pipeline was routed in this location to avoid stream WW-T10-001A (with LOD reduction) and wetland W-T10-001, cross stream WW-T10-001 at a perpendicular angle, and minimize clearing of the riparian forest buffer of the stream.	SBR with S125 fabric
Wetland	W-T31-001B	W-T31-001B	M-0147 0.57	EV	N/A	N/A	PSS	The LOD was modified to eliminate impacts to W-T31-001B.	This feature is no longer impacted based on LOD reductions.	N/A
Stream	Muddy Run (WW-T10-003)	WW-T10-003	M-0147 0.59	TSF, MF	Perennial	Approved Trout Waters	R3	LOD has been reduced to 75' to minimize impacts to WW-T10-003.	This wetland and stream system (WW-T10-003, WW-T10-003A, W-T10-003C) is associated with a documented bog turtle population. The crossing of this system was field routed to occur in an area previously disturbed by existing powerline ROWs, thereby reducing habitat fragmentation and construction in previously unimpacted areas. The proposed route also avoids bog turtle core habitat patches, including an occupied habitat patch northeast of the route. Based on approximately two years of radio telemetry tracking within this habitat patch, bog turtles have not moved to within 570 feet of the LOD. Finally, several nearby tributaries and wetland areas are also avoided by utilizing this crossing area. These include- Streams WW-T30-001, WW-T30-001A and wetlands W-T31-001A and W-T31-001B. Complete avoidance of this wetland system was not possible because it extends a significant distance along Muddy Run.	SBR with S125 fabric
Stream	UNT to Muddy Run (WW-T10-003A)	WW-T10-003A	M-0147 0.59	TSF, MF	Ephemeral	Approved Trout Waters	R6	LOD has been reduced to 75' to minimize impacts to WW-T10-003A.	Refer to the notes for WW-T10-003 for a discussion of routing considerations at this location.	SBR with S125 fabric
Wetland	N/A	W-T10-003C	M-0147 0.60	EV	N/A	N/A	PFO	LOD has been reduced to 75' to minimize impacts to W-T10-003C.	Refer to the notes for WW-T10-003 for a discussion of routing considerations at this location.	N/A
Stream	Tucquan Creek (WW-T10-004)	WW-T10-004	M-0184 0.85	HQ-CWF, MF	Perennial	Wild Trout Waters	R3	LOD has been reduced to 75' to minimize impacts to WW-T10-004.	The pipeline was routed in this location to provide a perpendicular crossing of stream WW-T10-004, and to avoid a bridged/culverted area of the stream.	SBR with S125 fabric
Wetland	N/A	W-T62-001A/ W-T62-001C	M-0354 0.00	EV	N/A	N/A	PEM, PFO	LOD has been reduced to 75' to minimize impacts to W-T62-001.	The pipeline was routed in this location to provide a perpendicular crossing of wetland W-T62-001. In addition, a PI was shifted farther north during field routing in order to execute a turn outside of the system.	N/A
Stream	UNT to Trout Run (WW-T62-001)	WW-T62-001	5.34	HQ-CWF, MF	Intermittent	Class A Wild Trout	N/A	LOD has been reduced to 75' to minimize impacts to WW-T62-001.	The pipeline was routed in this location to provide a perpendicular crossing of stream WW-T62-001. In addition, a PI was shifted farther north during field routing in order to execute a turn outside of the system.	SBR with S125 fabric
Wetland	N/A	W-T10-101A W-T10-101C	7.11	None	N/A	N/A	PEM, PFO	LOD reduced to 90' to minimize impacts to W-T10-101. Further LOD reduction was not possible due to adjacent stream and roadcrossings, and steep topography on both sides of the wetland. The additional workspace will be used for equipment crossing and spoil storage to accommodate a safe and efficient crossing.	The pipeline was routed in this location to collocate with a transmission line ROW, thereby reducing forest clearing and habitat fragmentation. This alignment also allows stream WW-T10-100 to be crossed at a perpendicular angle, wetland W-T10-101 to be crossed along its eastern margin, and W-T10-100 to be avoided entirely. Other route alignments in this area to avoid this wetland are constrained by steep slopes, road and trail crossings, and residential areas to the east and west of the current alignment.	N/A
Stream	UNT to Climbers Run (WW-T10-100)	WW-T10-100	7.15	CWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T10-100.	The pipeline was routed in this location to collocate with a transmission line ROW, thereby reducing forest clearing and habitat fragmentation. This alignment also allows stream WW-T10-100 to be crossed at a perpendicular angle, wetland W-T10-101 to be crossed along its eastern margin, and W-T10-100 to be avoided entirely. Other route alignments in this area to avoid this wetland are constrained by steep slopes, road and trail crossings, and residential areas to the east and west of the current alignment.	SBR with S125 fabric

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Wetland	N/A	W-T10-100	7.15	None	N/A	N/A	PFO	The LOD was modified to eliminate impacts to W-T10-100.	This feature is no longer impacted based on LOD reductions.	N/A
Stream	Climbers Run (WW-T20-002)	WW-T20-002	7.5	CWF, MF	Perennial	None	R3	The LOD was modified to eliminate impacts to WW-T20-002.	The pipeline was routed in this location to follow the edge of an agricultural field and minimize impacts to the riparian forest buffer of this stream, as well as to provide a perpendicular crossing of the stream.	SBR with S125 fabric
Wetland	N/A	W-T20-002	7.5	None	N/A	N/A	PSS	The LOD was modified to eliminate impacts to W-T20-002.	This feature is no longer impacted based on LOD reductions.	N/A
Stream	UNT to Pequea Creek (WW-T31-002A)	WW-T31-002A	8	WWF, MF	Ephemeral	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T31-002A.	The pipeline was routed in this location to avoid paralleling the floodplain and riparian corridor of Pequea creek by remaining east of the floodplain. The crossing location and orientation of streams WW-T31-002A and WW-T31-002 was constrained by the need to avoid side slope construction in a forested area. Nevertheless, both streams are crossed at roughly perpendicular angles and a meandering portion of stream WW-T31-002 in the western portion of the routing corridor is avoided.	SBR with S125 fabric
Stream	UNT to Pequea Creek (WW-T31-002)	WW-T31-002	8	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T31-002.	The pipeline was routed in this location to avoid paralleling the floodplain and riparian corridor of Pequea creek by remaining east of the floodplain. The crossing location and orientation of streams WW-T31-002A and WW-T31-002 was constrained by the need to avoid side slope construction in a forested area. Nevertheless, both streams are crossed at roughly perpendicular angles and a meandering portion of stream WW-T31-002 in the western portion of the routing corridor is avoided.	SBR with S125 fabric
Stream	UNT to Pequea Creek (WW-T65-001)	WW-T65-001	8.11	WWF, MF	Perennial	None	N/A	The full LOD is needed at this crossing due to the adjacent steep slopes and PI's.	The pipeline was routed in this location to cross the the narrowest portion of the riparian forest buffer at a perpendicular angle.	SBR with S125 fabric
Stream	Pequea Creek (WW-T31-003)	WW-T31-003	8.2	WWF, MF	Perennial	None	R3	The full LOD is needed at this crossing due to a steep and rocky slope west of the stream, adjacent open cut road crossing, and the feature being a navigable water requiring Aids To Navigation (ATON).	The pipeline was routed in this location to allow a PI and ATWS for the stream crossing to be located in agricultural fields on either side of the stream, limiting impacts to the riparian forest buffer.	SBR with S125 fabric
Stream	UNT to Pequea Creek (WW-RS-120006)	WW-RS-120006	M-0405 0.57	WWF, MF	Perennial	None	R3	LOD has been reduced to 85' to minimize impacts to WW-RS-120006.	This is a no-access area that has not been field routed to date.	
Stream	UNT to Pequea Creek (WW-RS-120005)	WW-RS-120005	M-0405 1.13	WWF, MF	Perennial	None	R3	LOD has been reduced to 85' to minimize impacts to WW-RS-120005.	This is a no-access area that has not been field routed to date.	
Stream	UNT to Pequea Creek (WW-T25-1001)	WW-T25-1001	M-0405 1.45	WWF, MF	Intermittent	None	N/A	LOD has been reduced to 85' to minimize impacts to WW-T25-1001.	The pipeline was routed in this location to cross the the narrowest portion of the riparian forest buffer at a perpendicular angle.	SBR with S125 fabric
Stream	UNT to Pequea Creek (WW-T65-1002)	WW-T65-1002	M-0417 0.06	WWF, MF	Ephemeral	None	N/A	LOD has been reduced to 90' to minimize impacts to WW-T65-1002.	The pipeline was routed in this location to avoid a braided area of the stream and a riparian wetland area (W-T70-1001) containing several seeps in the northern and southern portions of the routing corridor, respectively.	SBR with S125 fabric

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Stream	UNT to Pequea Creek (WW-T10-1003)	WW-T10-1003	10.1	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T10-1003.	The pipeline was routed in this location to cross the narrowest section of the riparian forest buffer and to avoid a braided area of the stream in the northern portion of the routing corridor.	SBR with S125 fabric
Stream	UNT to Conestoga River (WW-T35-1002)	WW-T35-1002	10.88	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T35-1002.	The pipeline was routed in this location to follow the edge of an agricultural field and avoid impacting the riparian forest buffer, as well as to avoid impacting stream WW-T35-1002B in the southern portion of the routing corridor.	SBR with S125 fabric
Stream	UNT to Conestoga River (WW-T35-1002A)	WW-T35-1002A	11	WWF, MF	Perennial	None	R3	LOD has been reduced to 75' to minimize impacts to WW-T35-1002A.	The pipeline was routed in this location to follow the edge of an agricultural field and avoid impacting the riparian forest buffer of this stream.	SBR with S125 fabric
Wetland	N/A	W-T35-1001	11	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-T35-1001.	The pipeline was routed in this location to cross the northern margin of the wetland, while remaining along the edge of the agricultural field.	N/A
Wetland	N/A	W-RS-1001	11.11	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-RS-1001.	This is a no-access area that has not been field routed to date.	
Wetland	N/A	W-RS-1003	11.13	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-RS-1003.	This is a no-access area that has not been field routed to date.	
Stream	N/A	WW-RS-1001	11.13	WWF, MF	Intermittent	None	R4	LOD has been reduced to 75' to minimize impacts to WW-RS-1001.	This is a no-access area that has not been field routed to date.	
Stream	Conestoga River (WW-T20-1001)	WW-T20-1001	12.32	WWF, MF	Perennial	None	R3	The Conestoga River is being crossed via HDD.	The workspace for the Conestoga River HDD was developed to minimize tree clearing as much as possible.	N/A
Stream	UNT to Conestoga River (WW-T36-1001A)	WW-T36-1001A	12.4	WWF, MF	Perennial	None	R3	This unnamed tributary to the Conestoga River is being crossed via HDD.	The workspace for the Conestoga River HDD was developed to minimize tree clearing as much as possible.	N/A
Stream	UNT to Witmer Run (WW-T49-1001)	WW-T49-1001	M-0248 0.16	WWF, MF	Perennial	None	N/A	The full LOD is needed at this crossing due to steep slopes and an adjacent open cut road crossing.	The pipeline was routed in this location to cross the stream at a perpendicular angle, and to avoid additional small tributaries in the northern portion of the routing corridor.	SBR with S125 fabric
Wetland	N/A	W-T36-1002	M-0434 0.05	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-T36-1002.	The pipeline was routed in this location to avoid a much larger wetland (W-T36-1003) approximately 500 feet to the west, and to cross the wetland at its narrowest section near its southwest margin.	N/A
Stream	UNT to Witmers Run	WW-T93-1001	13.62	WWF, MF	Intermittent	None	R4	The LOD was modified to eliminate impacts to WW-T93-1001.	This feature is no longer impacted based on LOD reductions.	SBR with S125 fabric
Stream	UNT to Witmers Run (WW-T92-1002)	WW-T92-1002	M-0434 0.10	WWF, MF	Ephemeral	None	R6	LOD has been reduced to 90' to minimize impacts to WW-T92-1002.	The pipeline was routed in this location to avoid crossing stream WW-T92-1002 with the trenchline, and to keep the stream outside of the permanent ROW.	SBR with S125 fabric
Wetland	N/A	W-T36-1003	13.72	None	N/A	N/A	PEM, PFO	The LOD was modified to eliminate impacts to W-T36-1003.	This feature is no longer impacted based on LOD reductions.	N/A
Stream	UNT to Witmers Run (WW-T36-1004)	WW-T36-1004	M-0434 0.16	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T36-1004.	The pipeline was routed in this location to avoid wetland W-T36-1003 immediately to the south, and to avoid crossing braided portions of this stream in the northern and southern portions of the routing corridor.	SBR with S125 fabric
Stream	UNT to Witmer Run (WW-T92-1003)	WW-T92-1003	13.88	WWF, MF	Ephemeral	None	N/A	LOD has been reduced to 90' to minimize impacts to WW-T92-1003.	The pipeline was routed in this location to provide a perpendicular crossing of stream WW-T92-1003.	SBR with S125 fabric
Stream	UNT to Witmers Run (WW-T36-1006)	WW-T36-1006	13.88	WWF, MF	Intermittent	None	R4	LOD has been reduced to 90' to minimize impacts to WW-T36-1006.	The pipeline was routed in this location to avoid the riparian forest buffer, and to provide a perpendicular crossing of the stream.	SBR with S125 fabric

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Wetland	N/A	W-T36-1004	M-0206 0.05	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-T36-1004.	The pipeline was routed in this location to cross this manmade ditch at a roughly perpendicular angle with the road crossing.	N/A
Wetland	N/A	W-T36-1004-1/ W-T36-1004-2	M-0206 0.05	None	N/A	N/A	PEM	This wetland encroaches within the northern portion of the LOD only, and this portion of the LOD was reduced by 10' to minimize impacts to W-T36-1004-1 and 2.	The pipeline was routed in this location to cross the southern margin of the wetland only. Residential areas and roads south of the current alignment prevent further relocation to the south and complete avoidance of this wetland.	N/A
Wetland	N/A	W-T36-1005	M-0188 0.22	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-T36-1005.	The pipeline was routed in this location to cross the western margin of the wetland only. Residences to the west of the current alignment prevent further relocation to the west and complete avoidance of this wetland.	N/A
Stream	Indian Run (WW-T36-1007)	WW-T36-1007	14.64	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T36-1007.	The pipeline was routed in this location to avoid meandering sections of the stream in the eastern and western portions of the routing corridor.	SBR with S125 fabric
Stream	UNT to Indian Run (WW-T20-1005)	WW-T20-1005	15.33	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T20-1005.	The pipeline was routed in this location to avoid meandering sections of the stream in the eastern and western portions of the routing corridor, and to avoid impacting streams WW-T20-1005B and WW-T53-1001A in the eastern portion of the routing corridor.	SBR with S125 fabric
Stream	Witmers Run (WW-T24-1001)	WW-T24-1001	17.01	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T24-1001.	The pipeline was routed in this location to parallel an existing electric transmission line ROW and to cross the stream at a perpendicular angle.	SBR with S125 fabric
Stream	Stamans Run (WW-T11-2001)	WW-T11-2001	18.1	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T11-2001.	The pipeline was routed in this location to provide a perpendicular crossing of the stream.	SBR with S125 fabric
Stream	UNT to Stamans Run (WW-T11-2002)	WW-T11-2002	18.85	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T11-2002.	The pipeline was routed in this location to parallel an existing electric transmission line ROW and to cross the stream at an approximate perpendicular angle.	SBR with S125 fabric
Wetland	W-T32-2004	W-T32-2004	M-0389 0.11	None	N/A	N/A	PFO	This wetland encroaches within the western portion of the LOD only, and this portion of the LOD was reduced by 10' to minimize impacts to W-T32-2004.	The pipeline was routed in this location to avoid a much larger wetland (W-T10-2002) approximately 400' west of the current alignment. The proposed alignment also provides an improved crossing of the adjacent railroad and allows for a perpendicular crossing of Stickler Run (WW-T24-2001).	N/A
Stream	Strickler Run (WW-T24-2001)	WW-T24-2001	M-0389 0.14	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T24-2001.	The pipeline was routed in this location to avoid a much larger wetland (W-T10-2002) approximately 400' west of the current alignment, and to cross this stream at a perpendicular angle.	SBR with S125 fabric
Stream	UNT to Strickler Run (WW-T10-2005)	WW-T10-2005	20.81	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T10-2005.	The pipeline was routed in this location to provide a perpendicular crossing of the stream.	SBR with S125 fabric
Stream	UNT to Strickler Run (WW-RS-2008)	WW-RS-2008	M-0396 0.17	WWF, MF	Intermittent	None	R4	LOD has been reduced to 75' to minimize impacts to WW-RS-2008.	This is a no-access area that has not been field routed to date.	N/A
Wetland	N/A	W-RS-2007	M-0396 0.17	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-RS-2007.	This is a no-access area that has not been field routed to date.	
Stream	UNT to Shawnee Run (WW-RS-2002)	WW-RS-2002	21.76	WWF, MF	Intermittent	None	R4	LOD has been reduced to 75' to minimize impacts to WW-RS-2008.	This is a no-access area that has not been field routed to date.	
Wetland	N/A	W-T32-2001	21.1 M-0396-0.1	None	N/A	N/A	PEM	LOD reduction will be implemented if possible following field survey.	This is a no-access area that has not been field routed to date.	N/A
Stream	Shawnee Run (WW-T10-2004)	WW-T10-2004	22.36	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T10-2004.	The pipeline was routed in this location to parallel an existing electric transmission line ROW and to cross the stream at a perpendicular angle.	SBR with S125 fabric
Stream	UNT to Chiques Creek (WW-T10-2002)	WW-T10-2002	23.02	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T10-2002.	The pipeline was routed in this location to avoid wetland W-T10-2001, pond WB-T42-2001 and seeps WB-T42-2002 and 2003.	SBR with S125 fabric
Stream	UNT to Chiques Creek (WW-T49-2001)	WW-T49-2001	M-0209 0.30	WWF, MF	Ephemeral	None	N/A	LOD has been reduced to 90' to minimize impacts to WW-T49-2001.	The pipeline was routed in this location to provide a perpendicular crossing of the stream.	SBR with S125 fabric

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Stream	Chiques Creek (WW-T42-2003)	WW-T42-2003	23.89	WWF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T42-2003.	The pipeline was routed in this location to minimize clearing of riparian forest buffer as much as possible by staying with cleared agricultural fields. Additionally, this crossing location was selected to avoid clearing a 6' DBH and a 4' DBH sycamore tree within the riparian buffer.	SBR with S125 fabric
Stream	UNT to Back Run (WW-T31-3003)	WW-T31-3003	30.13	TSF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T31-3003.	The pipeline was routed in this location to cross the stream at the margin of a field where the riparian corridor has been partially cleared and impacted by a road.	SBR with S125 fabric
Stream	Back Run (WW-T31-3004)	WW-T31-3004	M-0308 0.06	TSF, MF	Perennial	None	R3	LOD has been reduced to 80' to minimize impacts to WW-T31-3004.	The pipeline was routed in this location to follow the edge of an agricultural field and cross the stream at a perpendicular angle.	SBR with S125 fabric
Wetland	N/A	W-T31-3003	M-0308 0.07	None	N/A	N/A	PEM	LOD has been reduced to 80' to minimize impacts to W-T31-3003.	The pipeline was routed in this location to follow the edge of an agricultural field and cross the wetland at a perpendicular angle.	N/A
Stream	UNT to Back Run (WW-T31-3009)	WW-T31-3009	30.63	TSF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T31-3009.	The pipeline was routed in this location to cross the stream at a perpendicular angle.	SBR with S125 fabric
Stream	UNT to Back Run (WW-T31-3008)	WW-T31-3008	31.18	TSF, MF	Perennial	None	R3	LOD has been reduced to 75' to minimize impacts to WW-T31-3008.	The pipeline was routed in this location to avoid a meandering section of the stream in northern portion of the routing corridor.	SBR with S125 fabric
Wetland	N/A	W-T31-3006	31.18	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-T31-3006.	The pipeline was routed in this location to cross the wetland at a perpendicular angle. Avoidance of this stream was not possible as it extends beyond the northern and southern limits of the routing corridor.	N/A
Stream	UNT to Back Run (WW-T31-3007)	WW-T31-3007	31.58	TSF, MF	Perennial	None	R3	LOD has been reduced to 75' to minimize impacts to WW-T31-3007.	The pipeline was routed in this location to cross the stream at a perpendicular angle and avoid steep slopes in the eastern portion of the routing corridor.	N/A
Stream	UNT to Brubaker Run (WW-T31-3006)	WW-T31-3006	32.27	WWF, MF	Perennial	None	R3	LOD has been reduced to 75' to minimize impacts to WW-T31-3006.	The pipeline was routed in this location to avoid a meandering section of the stream in the eastern portion of the routing corridor, and to cross the narrowest section of the riparian forest buffer.	SBR with S125 fabric
Wetland	N/A	W-T31-3004	32.27	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-T31-3004.	The pipeline was routed in this location to cross the narrowest section of the wetland at its western margin. Shifting the route west to avoid impacting the wetland was not implemented because this would result in additional clearing of riparian forest buffer along stream WW-T31-3006.	N/A
Stream	Brubaker Run (WW-T31-3005)	WW-T31-3005	32.99	TSF, MF	Perennial	None	R3	LOD has been reduced to 90' to minimize impacts to WW-T31-3005.	The pipeline was routed in this location to cross a narrow section of the riparian forest buffer.	SBR with S125 fabric
Stream	UNT to Little Chiques Creek (WW-T31-3002A)	WW-T31-3002A/ WW-T31-3002	33.57	TSF, MF	Intermittent	None	R4	LOD has been reduced to 90' to minimize impacts to WW-T31-3002.	The pipeline was routed in this location to cross the narrowest portion of the riparian forest buffer.	SBR with S125 fabric
Wetland	W-T31-3002 / W-T31-3002-1	W-T31-3002 / W-T31-3002-1	33.63	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-T31-3002.	The pipeline was routed in this location to cross a portion of the utilized as pasture and highly disturbed by cattle. W-T31-3002-1 is also crossed at its narrowest location through its western margin.	N/A
Stream	UNT to Little Chiques Creek (WW-T31-3001)	WW-T31-3001	34	TSF, MF	Ephemeral	None	R6	LOD has been reduced to 75' to minimize impacts to WW-T31-3001.	The pipeline was routed in this location to cross the narrowest portion of the riparian forest buffer.	SBR with S125 fabric
Wetland	N/A	W-T31-3001	34	None	N/A	N/A	PEM	W-T31-3001 does not extend across the full width of the LOD. Since the wetland width within the LOD is less than 75', the FERC Procedures do not require LOD reduction. In addition, an LOD reduction at this location would only be possible in the adjacent upland area and would not result in minimization of wetland impacts.	The pipeline route was not shifted to avoid this small agricultural wetland, per landowner request.	N/A
Stream	UNT to Little Chiques Creek (WW-T24-3001A)	WW-T24-3001A	34.4	TSF, MF	Perennial	Approved Trout Waters, Trout Stocked Stream	R3	LOD has been reduced to 90' to minimize impacts to WW-T24-3001A.	The pipeline was routed in this location to minimize clearing of the riparian forest buffer.	SBR with S125 fabric
Stream	Little Chiques Creek (WW-T24-3001)	WW-T24-3001	34.47	TSF, MF	Perennial	Approved Trout Waters, Trout Stocked Stream	R3	LOD has been reduced to 90' to minimize impacts to WW-T24-3001.	The pipeline was routed in this location to cross the narrowest portion of the riparian forest buffer.	SBR with S125 fabric

**Attachment P-1  
Resource-Specific Avoidance and Minimization Measures  
Lancaster County**

Resource Type (Stream or Wetland)	Resource Name	Resource ID	MP	Chapter 93 Classification, Wetland Classification	Stream Type (Perennial, Intermittent, Ephemeral)	Stream Trout Status (Class A Wild Trout, Wild Trout, Trout Stocked)	Cowardin Classification	Limits of Disturbance (LOD) Adjustments (Supporting Information for Technical Deficiencies #'s 28 and 71)	Field Routing Adjustments within 600-foot Wide Corridor (Supporting Information for Technical Deficiency #15)*	Stream Bank Stabilization BMP
Stream	Shells Run (WW-T30-4001)	WW-T30-4001	36.04	TSF, MF	Perennial	None	R3	LOD has been reduced to 75' to minimize impacts to WW-T30-4001.	The pipeline was routed in this location to avoid a braided portion of the stream in the northern portion of the routing corridor.	SBR with S125 fabric
Wetland	N/A	W-T30-4001	36.05	None	N/A	N/A	PEM	LOD has been reduced to 75' to minimize impacts to W-T30-4001.	The pipeline was routed in this location to cross the narrowest portion of the wetland where it is used as pasture and significantly disturbed by cattle.	N/A

\*The FERC Alignment Sheets provided in Attachment H-1 show field delineated streams and wetlands within the 300-foot wide environmental survey corridor, and surrounding land use features on an aerial base map.