



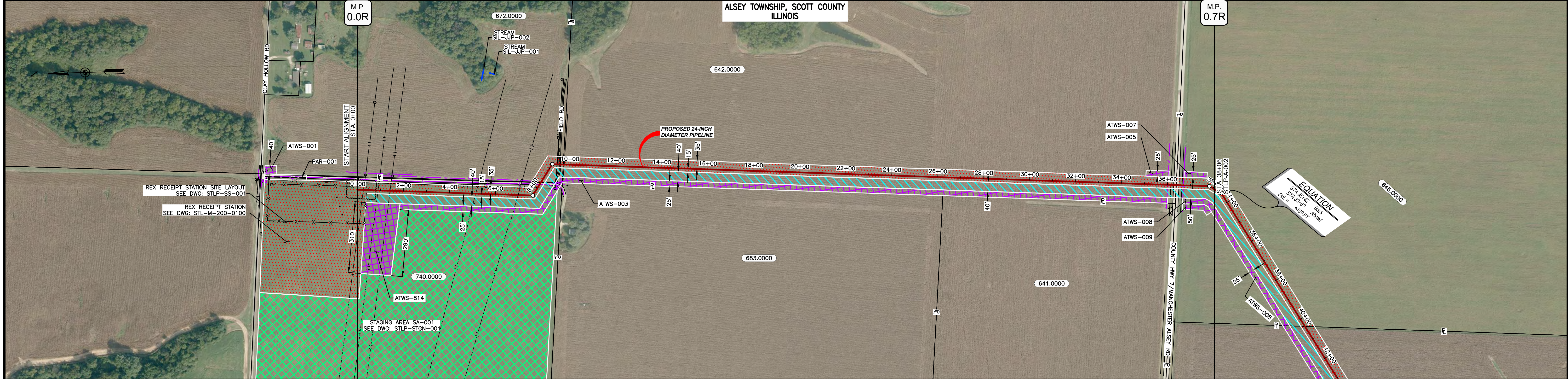
	PROPOSED 24-INCH DIAMETER PIPELINE
	PROPOSED 24-INCH NORTH COUNTY EXTENSION
	PREVIOUSLY FILED APRIL ROUTE
	CENTERLINE OF ROAD
	EDGE OF PAVEMENT
	EXISTING WALL
	FOREIGN GAS PIPELINE
	EXISTING GAS PIPELINE
	OVERHEAD POWER LINE
	EXISTING FIBER OPTIC LINE
	EXISTING TELEPHONE LINE
	EXISTING WATER LINE
	EXISTING FENCE LINE
	MMID
	PROPERTY LINE
	MUNICIPAL LINE
	COUNTY LINE
	STATE LINE
	ε OF STREAM (DESKTOP)
	ε OF STREAM (DELINEATED)
	WETLAND (DESKTOP)
	WETLAND (DELINEATED)
	POND (DELINEATED)
	PROPOSED PERMANENT EASEMENT
	TEMPORARY WORKSPACE
	ADDITIONAL TEMPORARY WORKSPACE (ATWS)
	PROPOSED STAGING AREA
	EXISTING PERMANENT EASEMENT
	UTILITY POLE
	CULVERT
	PIPE MARKER POST
	WATER UTILITY
	TELEPHONE UTILITY
	TELEPHONE (FIBER OPTIC)
	ELECTRIC UTILITY
	VALVE
	LIGHT POLE
	UTILITY TOWER
	STORM DRAIN
	STORM UTILITY
	SEWER MANHOLE

LAND USE TYPES	
AG	AGRICULTURAL
OW	WATER
D	DEVELOPED
F	FOREST
W	WETLAND
OL	OPEN LAND

REVISED AREAS POST APRIL FERC FILING

REFERENCE DRAWINGS		REFERENCE DRAWINGS		REVISIONS				REVISIONS				APPROVALS				PREPARED FOR <b>Spire STL Pipeline</b>	PREPARED BY <b>M MOTT MACDONALD</b>	SPIRE STL PIPELINE PROJECT				
DWG. NO.	TITLE	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	NO.	REVISIONS	DATE	DRAWN	CK	APPR			DRAWN BY	DATE	ENG. APPROVAL	DATE	CLIENT APPROVAL
				1	ISSUE FOR FERC	01/2017											RJP	07/2017	DGG	07/2017		
				2	AMENDMENT TO FERC	04/2017																
				3	FERC SUPPLEMENTAL FILING	07/2017											AKY	07/2017	JEV	07/2017		
																STLP-CS-002	LEGEND SHEET					

OWNERSHIP / FOOTAGE	0+00	740.0000	830'	672.0000	141'	642.0000	2667'	645.0000	166'	38+06	
STATIONING	<p>0+00 BEGIN LINE CHANGE  0+02 CENTERLINE OF TALLGRASS ENERGY PIPELINE  0+08 CENTERLINE OF PANHANDLE EASTERN PIPELINE  1+14 CENTERLINE OF PANHANDLE EASTERN PIPELINE  5+14 CENTERLINE OF PANHANDLE EASTERN PIPELINE  6+49 CENTERLINE OF PANHANDLE EASTERN PIPELINE  7+82 P.L. 672000E.L.  8+07 OVERHEAD LINE  8+18 EDGE OF GRAVEL  8+21 CENTERLINE OF UNKNOWN RD  8+22 CENTERLINE OF UNKNOWN RD  8+28 EDGE OF GRAVEL  8+30 PROPERTY LINE  8+31 WATER LINE  8+32 OVERHEAD LINE  8+33 OVERHEAD LINE  8+48 EDGE OF DIRT ROAD  8+53 CENTERLINE OF FIELD RD  8+58 EDGE OF DIRT ROAD  8+71 PROPERTY LINE</p>										



CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG										
MATERIAL & COATING											
DESIGN FACTOR	0.72, 0.6, 0.72, 0.6, 0.72, 0.6, 0.6, 0.72										
CONSTRUCTION METHOD	OPEN CUT, BORE, OPEN CUT										
PIPELINE COVER	5'										
SOILS	279C3, 279B, 257A, 43A, 50A, 43A										
LAND USE	AG, OL, AG, D, AG, AG, OL, D, OL, AG										

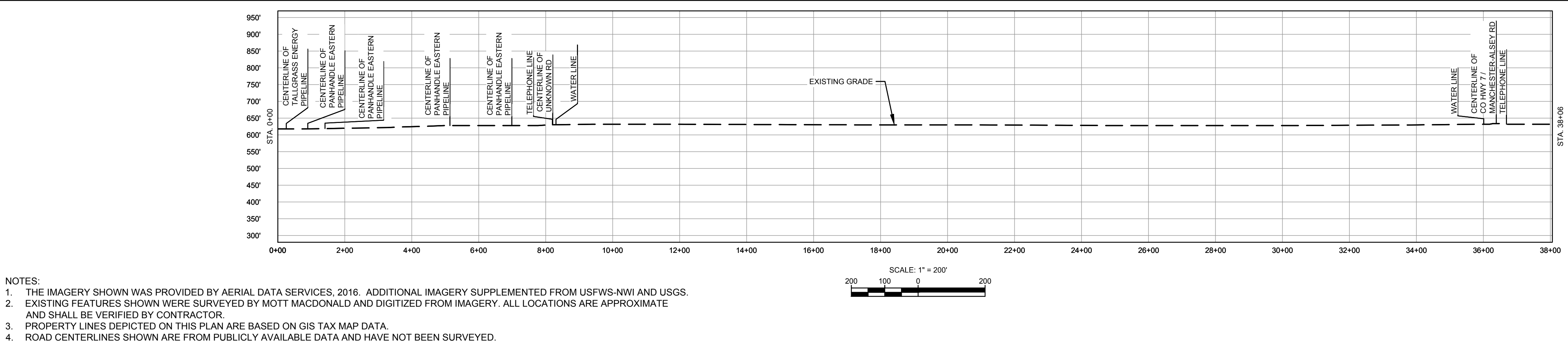
THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

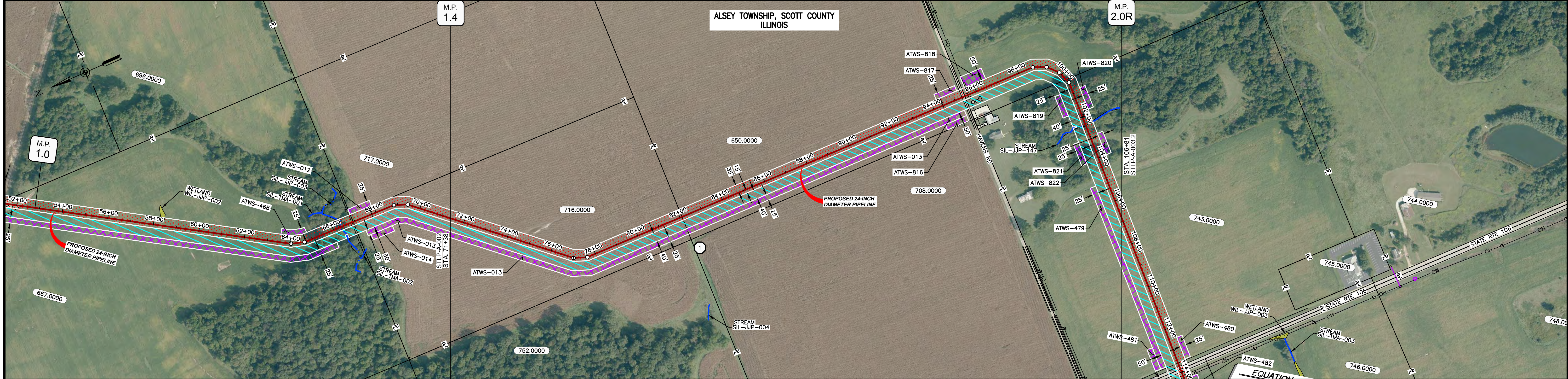
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



NOTES:  
1. THE IMAGERY SHOWN WAS PROVIDED BY AERIAL DATA SERVICES, 2016. ADDITIONAL IMAGERY SUPPLEMENTED FROM USFWS-NWI AND USGS.  
2. EXISTING FEATURES SHOWN WERE SURVEYED BY MOTT MACDONALD AND DIGITIZED FROM IMAGERY. ALL LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR.  
3. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED ON GIS TAX MAP DATA.  
4. ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.

MATERIAL			REFERENCE DRAWINGS		REVISIONS				APPROVALS			PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'	MOTT MACDONALD	ALIGNMENT SHEET PROPOSED 24-INCH DIAMETER PIPELINE SCOTT COUNTY, ILLINOIS STA. 0+00 TO STA. 38+06		
1	3637'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED	STLP-SS-001	REX RECEIPT STATION SITE LAYOUT	1	ISSUE FOR FERC	1/2017	GH	EB	DGG	DP	03/2017	SCALE PROFILE H: 1" = 200'				
2	130'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED	STLP-STGN-001	STAGING AREA SITE PLAN	2	AMENDMENT TO FERC	04/2017	KAM	RJP	DGG	CHECKED BY	DATE	SCALE PROFILE V: 1" = 200'	PREPARED BY			
REF	39'	SEE REFERENCED DETAIL DRAWING	STL-M-200-0100	REX RECEIPT STATION	3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	ENG. APPROVAL	DATE	CLIENT APPROVAL				
											DGG	07/2017	DATE		SCALE	DRAWING NO.	REVISION
											JEV	07/2017			1" = 200'	STLP-A-001	3

OWNERSHIP / FOOTAGE		71+38	716.0000	1071'	82+09	850.0000	1337'	85+46	851.0000	485'	100+31	743.0000	106+81
STATIONING			71+38	716.0000	82+09	850.0000	1337'	85+46	851.0000	485'	100+31	743.0000	106+81



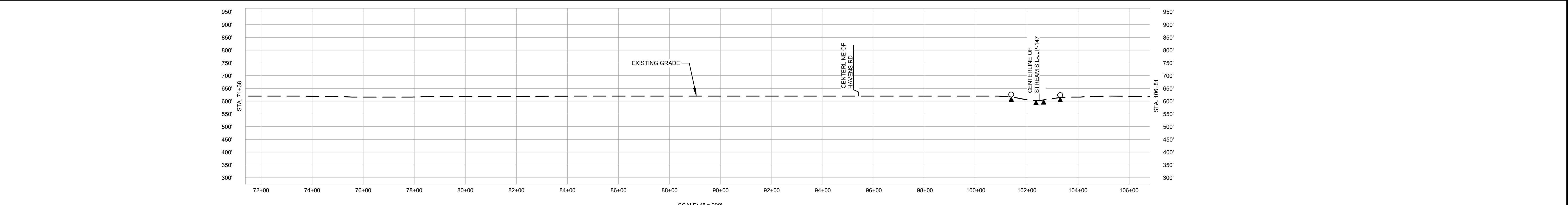
CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG																																																		
MATERIAL & COATING	<table border="1"> <tr> <td>71+38</td> <td colspan="10"></td> <td>106+81</td> </tr> <tr> <td></td> <td colspan="10">2361'</td> <td>80'</td> <td>1102'</td> </tr> <tr> <td></td> <td colspan="10">①</td> <td>②</td> <td>①</td> </tr> </table>													71+38											106+81		2361'										80'	1102'		①										②	①
71+38											106+81																																								
	2361'										80'	1102'																																							
	①										②	①																																							
DESIGN FACTOR	0.72      0.6      0.72																																																		
CONSTRUCTION METHOD	OPEN CUT      BORE      OPEN CUT      OPEN CUT (FLUMED)      OPEN CUT																																																		
PIPELINE COVER	5'																																																		
SOILS	279C3	279B	17A	279B	43A	17A	279B	279C3	279B	17A																																									
LAND USE	AG      D      AG      F      W      D      F      AG																																																		

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

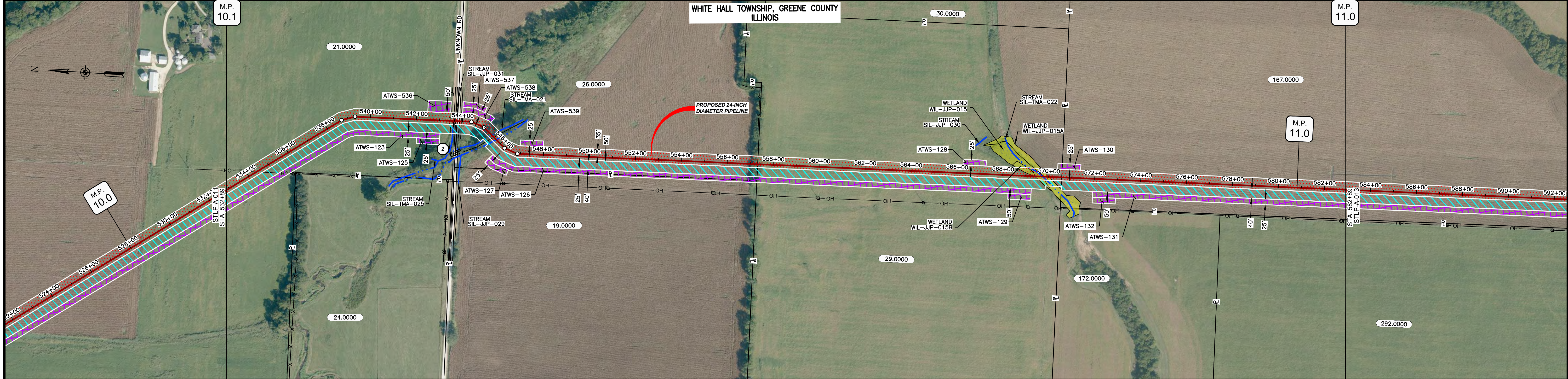
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



- NOTES:
1. THE IMAGERY SHOWN WAS PROVIDED BY AERIAL DATA SERVICES, 2016. ADDITIONAL IMAGERY SUPPLEMENTED FROM USFWS-NWI AND USGS.
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MATERIAL			REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT		
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200' SCALE PROFILE H: 1" = 200' SCALE PROFILE V: 1" = 200'		ALIGNMENT SHEET PROPOSED 24-INCH DIAMETER PIPELINE SCOTT COUNTY, ILLINOIS STA. 71+38 TO STA. 106+81
1	3463'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	1/2017	GH	EB	DGG	DP	07/2017			
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	DP	SG	DGG	CHECKED BY	DATE	PREPARED BY		
					3	FERC SUPPLEMENTAL FILING	07/2017	DP	RJP	DGG	ENG. APPROVAL	DATE			
											D.G.G.	07/2017	DATE		
											P.M. APPROVAL	DATE			
											J.E.W.	07/2017	DATE		

OWNERSHIP / FOOTAGE		21.0000	26.0000	29.0000	187.0000
		1087'	1357'	1323'	1233'
STATIONING		532+89	543+76	557+33	570+56
		532+89	543+76	557+33	570+56



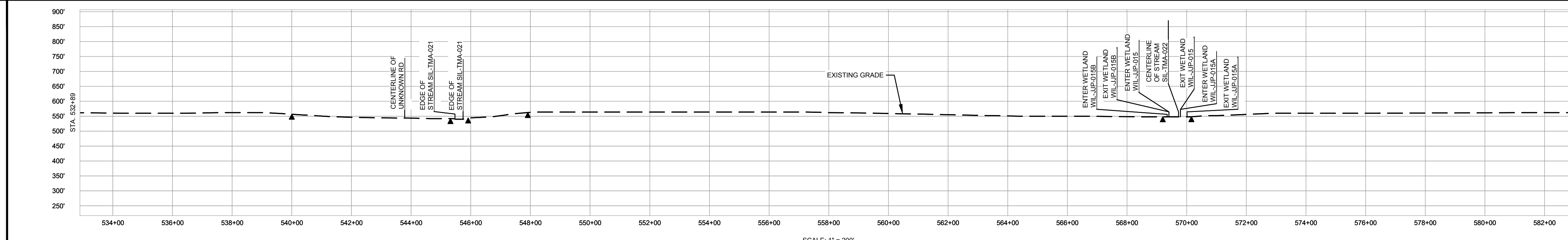
CLASS LOCATION/MAOP		CLASS I / 1440 PSIG													
MATERIAL & COATING		532+89													
DESIGN FACTOR		0.72		0.6		0.72		0.72		0.72					
CONSTRUCTION METHOD		OPEN CUT		OPEN CUT (FLUMED)		OPEN CUT		OPEN CUT (FLUMED)		OPEN CUT					
PIPELINE COVER		5'													
SOILS		675C2		3074A		280C2	675B	61A	51B	86C2	675C2	86C2	51B	51A	51B
LAND USE		AG	D	AG	OL	D	OL	AG	F	OW	F	AG		W	AG

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PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100

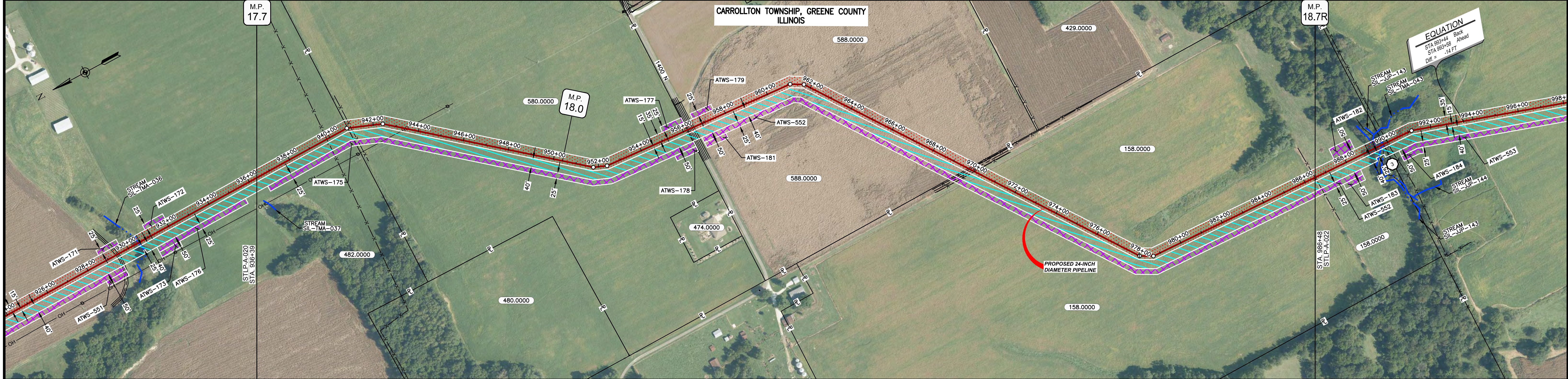


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MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT									
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1"=200'	SCALE PROFILE H: 1"=200'	SCALE PROFILE V: 1"=200'	CLIENT APPROVAL	PREPARED BY	SCALE	DRAWING NO.	REVISION	
1	4920'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	1/2017	GH	EB	DGG	DP	07/2017						STA. 532+89 TO STA. 582+89	1"=200'	STLP-A-012	3
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	KAM	RJP	DGG											
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG											
											PREPARED BY 										
											DATE 07/2017		DATE 07/2017								

OWNERSHIP / FOOTAGE	449'	1531'	1352'	1677'
STATIONING	836+39	840+98	856+19	869+71



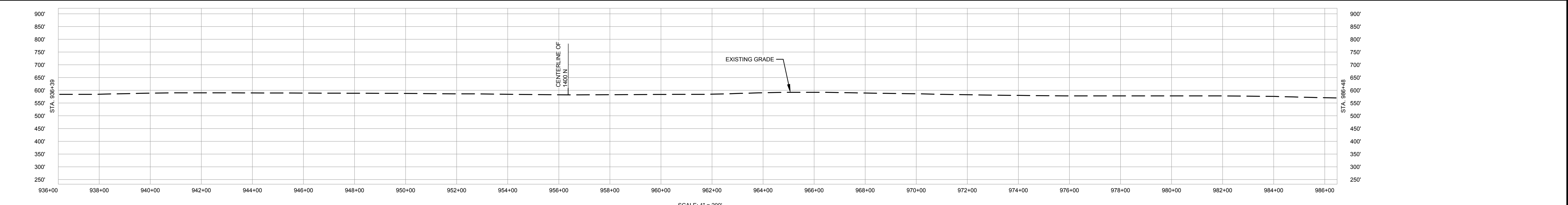
CLASS LOCATION/MAOP	CLASS I / 1440 PSIG														
MATERIAL & COATING	<table border="1"> <tr> <td>936+39</td> <td>1957'</td> <td>80'</td> <td>2972'</td> <td>986+48</td> </tr> </table>										936+39	1957'	80'	2972'	986+48
936+39	1957'	80'	2972'	986+48											
DESIGN FACTOR	0.72, 0.6, 0.72														
CONSTRUCTION METHOD	OPEN CUT, BORE, OPEN CUT														
PIPELINE COVER	5'														
SOILS	280C2, 257B, 61A, 47A, 257B, 280B, 280C2, 280B, 280C2, 280B, 280C2														
LAND USE	AG, D, AG, OL, D, OL, AG														

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PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

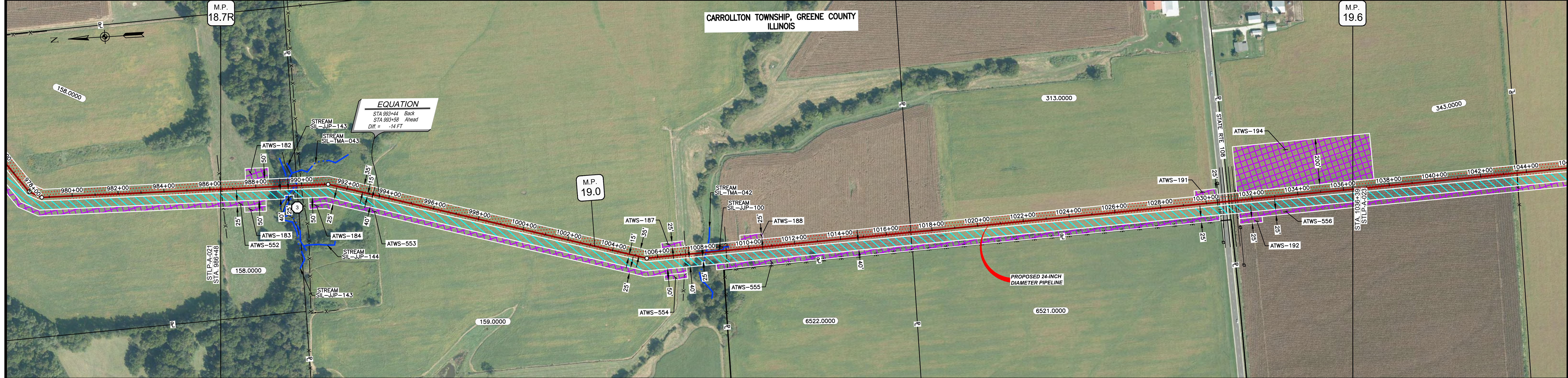
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		SCALE PLAN		PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'	PREPARED BY		ALIGNMENT SHEET	
1	4929'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017	SCALE PROFILE H: 1" = 200'			PROPOSED 24-INCH DIAMETER PIPELINE GREENE COUNTY, ILLINOIS STA. 936+39 TO STA. 986+48	
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	RJP	07/2017	SCALE PROFILE V: 1" = 200'				
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG			CLIENT APPROVAL	DATE		SCALE	
														DATE		DRAWING NO.	
														DATE		REVISION	
														DATE		3	

OWNERSHIP / FOOTAGE	886+48	158.0000	331'	889+79	159.0000	2715'	1017+08	313.0000	1391'	1030+99	343.0000	540'	1036+39
STATIONING	<p>986+48 FENCE</p> <p>986+48 EDGE OF STREAM SIL-JUP-143 986+50 CENTERLINE OF STREAM SIL-TMA-043 986+79 PROPERTY LINE 986+88 FENCE</p> <p>986+88 EROSION CHANGE BACK STA. 989+44 AHEAD STA. 991+88</p> <p>1005+53 PL. 1/8" DIA. 1" LT</p> <p>1007+22 FENCE</p> <p>1008+11 CENTERLINE OF STREAM SIL-TMA-042</p> <p>1009+00 FENCE</p> <p>1017+08 PROPERTY LINE</p> <p>1030+97 OVERHEAD LINE 1030+72 CENTERLINE OF BENCH 1030+68 CENTERLINE OF STATE RTE 108 1030+69 PROPERTY LINE 1031+11 EDGE OF PAVEMENT 1031+27 CENTERLINE OF BENCH 1031+37 OVERHEAD LINE</p>												



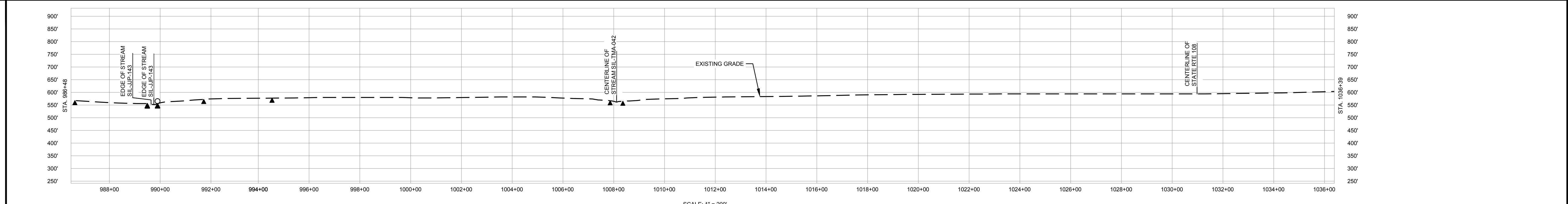
CLASS LOCATION/MAOP	CLASS I / 1440 PSIG												
MATERIAL & COATING	<p>886+48</p> <p>4396'</p> <p>80'</p> <p>501'</p> <p>1030+99</p> <p>1031+38</p> <p>1036+39</p>												
DESIGN FACTOR	0.72												
CONSTRUCTION METHOD	OPEN CUT												
PIPELINE COVER	5'												
SOILS	280C2, 280D, 3451A, 280D, 675B, 61A, 675B, 280C2, 675B, 675C2, 280D, 675C2, 675B, 61A, 51A, 51B												
LAND USE	AG, F, OW, F, AG, F, AG, 61A, D, OL, AG												

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PERMANENT WATERBAR WITH COMPOST FILTER  
SOCK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
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30-35%	50	100
>35%	25	100



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TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN:	SCALE PROFILE H:	SCALE PROFILE V:	SCALE	DRAWING NO.	REVISION	
1	4897'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017	1" = 200'	1" = 200'	1" = 200'	1" = 200'	STL-P-A-022	3	
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG									
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG									

Prepared for: **Spire STL Pipeline**

Prepared by: **M M MOTT MACDONALD**

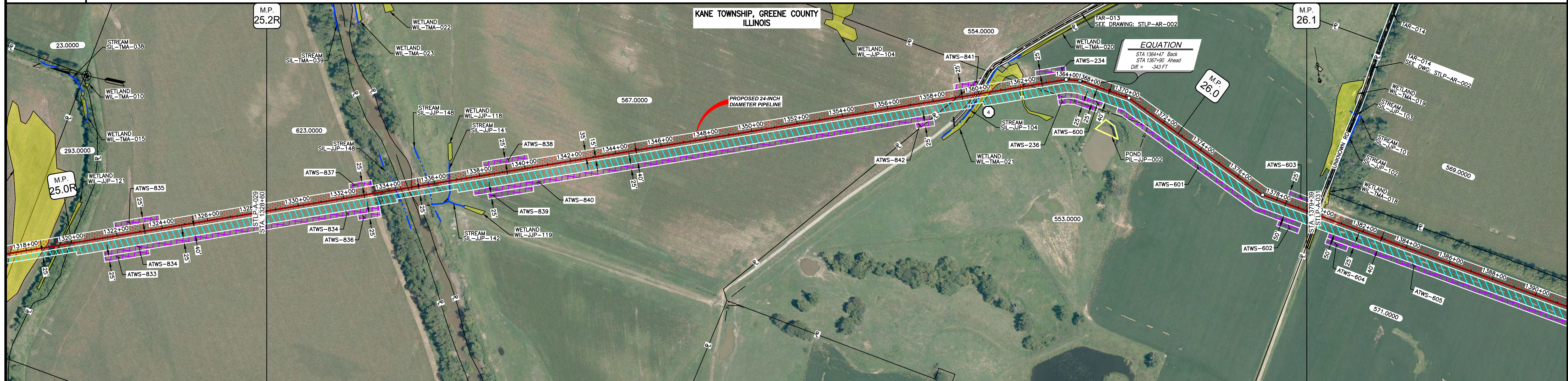
Client Approval: \_\_\_\_\_

Scale: 1" = 200'

Drawing No: STL-P-A-022

Revision: 3

OWNERSHIP / FOOTAGE	1328+00	593'	46'	2407'	1379+39
STATIONING		623.0000	MACOUPIN CREEK	567.0000	553.0000



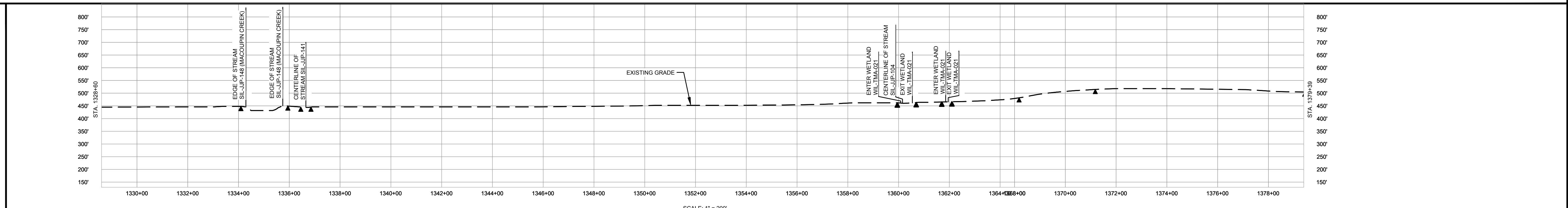
CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG											
MATERIAL & COATING	4736' (1)											
DESIGN FACTOR	0.72											
CONSTRUCTION METHOD	OPEN CUT		OPEN CUT (FLUMED)		OPEN CUT			OPEN CUT (FLUMED)		OPEN CUT		
PIPELINE COVER	5'		7'		5'			5'		5'		
SOILS	3451A		3070A		W		3070A		3451A		7148A	
LAND USE	AG		D		F		OW		OL		AG	

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



- NOTES:
1. THE IMAGERY SHOWN WAS PROVIDED BY AERIAL DATA SERVICES, 2016. ADDITIONAL IMAGERY SUPPLEMENTED FROM USFWS-NWI AND USGS.
  2. EXISTING FEATURES SHOWN WERE SURVEYED BY MOTT MACDONALD AND DIGITIZED FROM IMAGERY. ALL LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR.
  3. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED ON GIS TAX MAP DATA.
  4. ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.

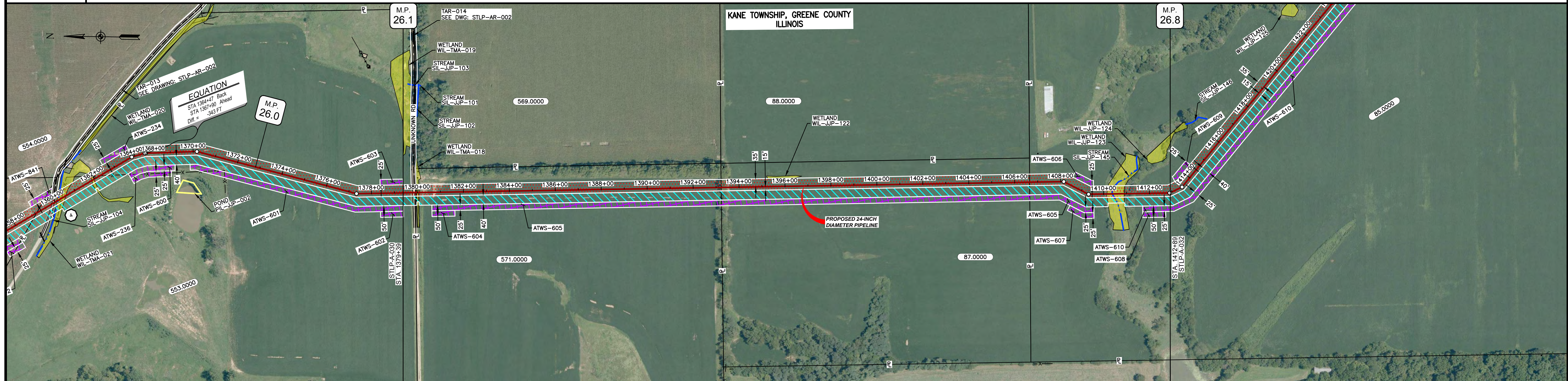
MATERIAL			REFERENCE DRAWINGS		REVISIONS				APPROVALS		SPIRE STL PIPELINE PROJECT	
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE
1	4736'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED	STLP-AR-002	ACCESS ROAD SITE PLAN - TAR-013 & TAR-014	1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017
					2	AMENDMENT TO FERC	04/2017	DP	BH	DGG	CHECKED BY	DATE
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017

APPROVALS		CLIENT APPROVAL	
ENG. APPROVAL	DATE	DATE	DATE
DGG	07/2017		
P.M. APPROVAL	DATE	DATE	DATE
JEV	07/2017		

SCALE PLAN: 1" = 200'	PREPARED FOR		<b>SPIRE STL PIPELINE PROJECT</b> ALIGNMENT SHEET PROPOSED 24-INCH DIAMETER PIPELINE GREENE COUNTY, ILLINOIS STA. 1328+60 TO STA. 1379+39
SCALE PROFILE H: 1" = 200'	SCALE PROFILE V: 1" = 200'		
	PREPARED BY		
	DATE		
			SCALE: 1" = 200'
			DRAWING NO.: STLP-A-030
			REVISION: 3



OWNERSHIP / FOOTAGE	533.0000 571.0000 87.0000 85.0000
STATIONING	1379+39 1379+45 1379+46 1380+25 1412+89



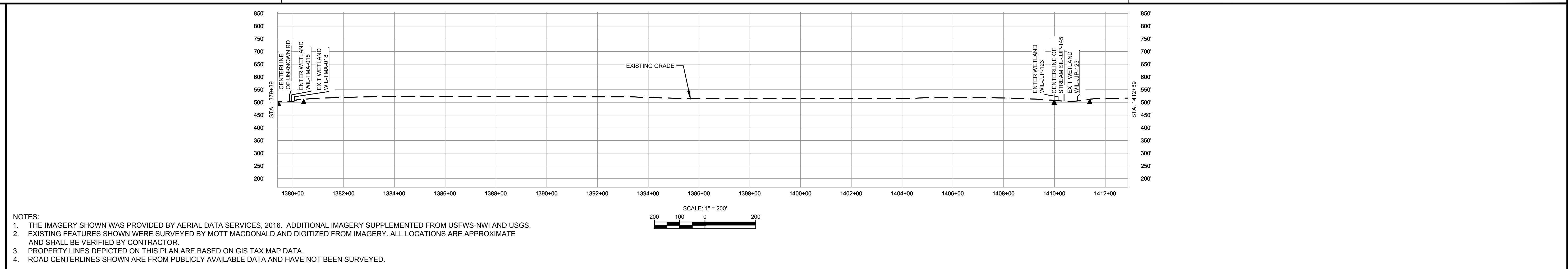
CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG			
MATERIAL & COATING	1379+39	1379+45	1380+25	1412+89
DESIGN FACTOR	0.72	0.6		0.72
CONSTRUCTION METHOD	OPEN CUT		OPEN CUT (FLUMED)	OPEN CUT
PIPELINE COVER	5'			
SOILS	675C2	257B	51A	61A 675B 280D2 675C2 257B
LAND USE	AG	OL W OL	AG	F AG

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



NOTES:

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MATERIAL		REFERENCE DRAWINGS	
TAG	QUANTITY	DWG. NO.	TITLE
1	3270'	STLP-AR-002	ACCESS ROAD SITE PLAN - TAR-013 & TAR-014
2	80'		

REVISIONS				APPROVALS			
NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE
1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017
2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE
3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017

CLIENT APPROVAL		DATE	
ENG. APPROVAL	DGG	07/2017	
P.M. APPROVAL			
JEW		07/2017	

SCALE PLAN: 1" = 200'  
SCALE PROFILE H: 1" = 200'  
SCALE PROFILE V: 1" = 200'

PREPARED FOR: **Spire STL Pipeline**

PREPARED BY: **M M MOTT MACDONALD**

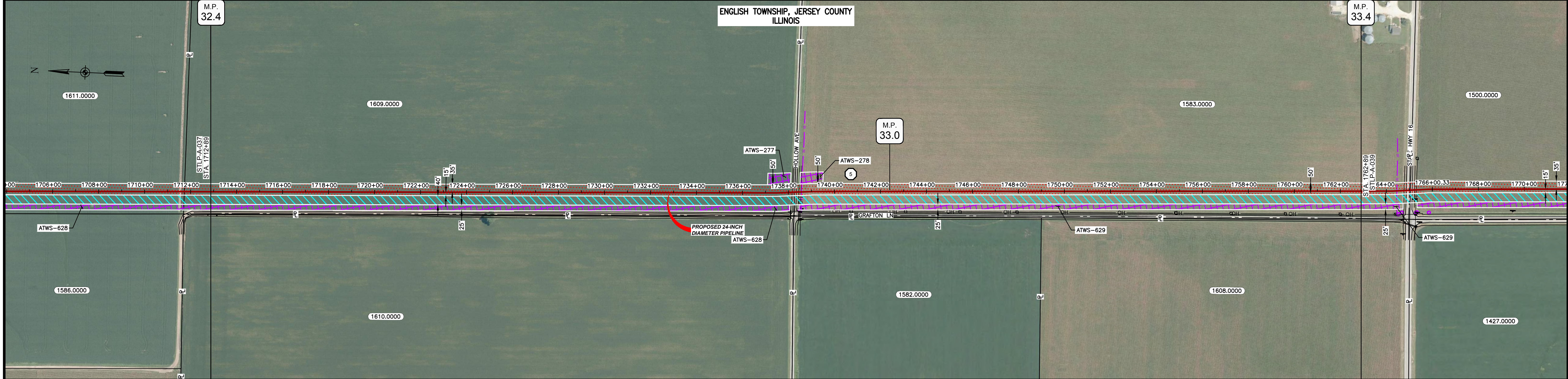
SCALE: 1" = 200'  
DRAWING NO.: STLP-A-031  
REVISION: 3

SPIRE STL PIPELINE PROJECT  
ALIGNMENT SHEET  
PROPOSED 24-INCH DIAMETER PIPELINE  
GREENE COUNTY, ILLINOIS  
STA. 1379+39 TO STA. 1412+89





OWNERSHIP / FOOTAGE	1712+89	1609.0000 2539'	1738+28	1583.0000 2461'	1762+89
STATIONING					



CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG			
MATERIAL & COATING	1712+89	1737+88	1759+48	1762+89
DESIGN FACTOR	0.72	0.6	0.72	
CONSTRUCTION METHOD	OPEN CUT	BORE	OPEN CUT	
PIPELINE COVER	5'			
SOILS	51A	68A	51A	68A
LAND USE	AG		OL D OL	AG

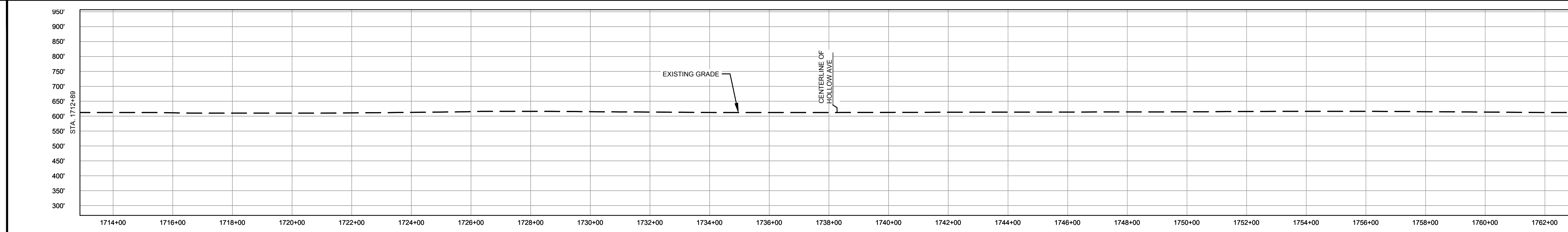
THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

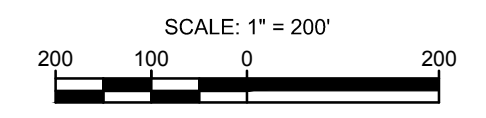
ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



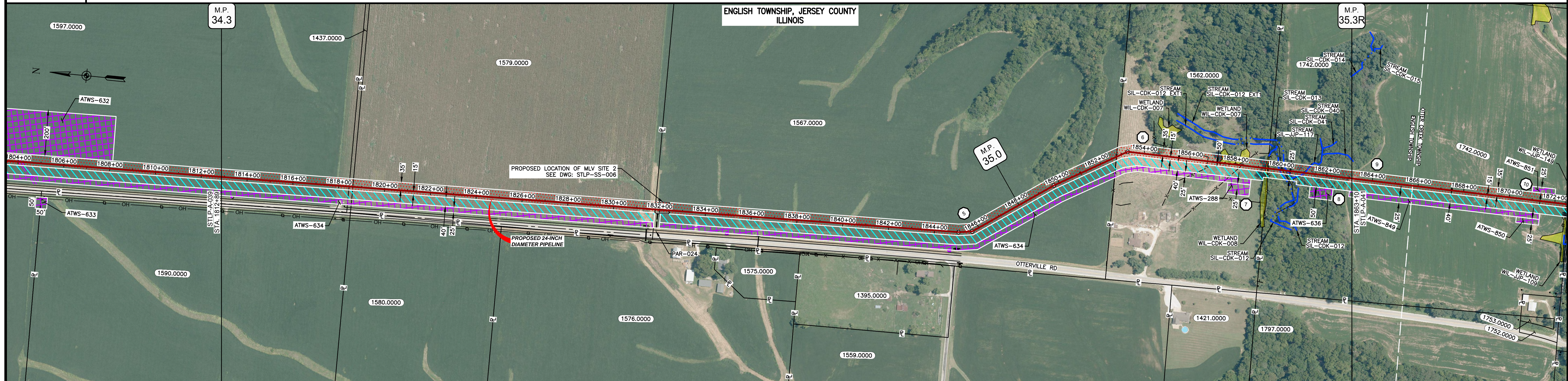
- NOTES:
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  - ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.



MATERIAL		REFERENCE DRAWINGS		REVISIONS					APPROVALS		SCALE PLAN: 1" = 200'	PREPARED FOR	SPIRE STL PIPELINE PROJECT		
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PROFILE H: 1" = 200'	SCALE PROFILE V: 1" = 200'	CLIENT APPROVAL
1	4920'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017			
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE	DATE	REVISION	
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	ENG. APPROVAL	DATE	DATE	3	
											P.M. APPROVAL	DATE	DATE		
											JEW	07/2017	DATE		



OWNERSHIP / FOOTAGE	1812+89	1597.0000	556'	1437.0000	16'	1818+85	1579.0000	1319'	1831+80	1587.0000	2094'	1852+74	1562.0000	668'	1859+42	1742.0000	368'	1863+10
STATIONING	<p>1818+45 PROPERTY LINE 1818+61 PROPERTY LINE</p> <p>1831+80 PROPERTY LINE</p> <p>1852+74 E.L. &lt; 4.930' BIT 1852+74 E.L. &lt; 4.930' BIT 1852+74 E.L. &lt; 4.930' BIT</p> <p>1851+02 BEGIN LINE CHANGE</p> <p>1852+74 FENCE 1852+74 FENCE 1852+74 FENCE</p> <p>1859+12 ENTER WETLAND WIL-CDK-008 1859+40 EXIT WETLAND WIL-CDK-008 1859+45 PROPERTY LINE 1859+45 FENCE 1859+45 FENCE 1859+45 FENCE 1859+45 FENCE</p> <p>1859+12 ENTER WETLAND WIL-CDK-008 1859+40 EXIT WETLAND WIL-CDK-008 1859+45 PROPERTY LINE 1859+45 FENCE 1859+45 FENCE 1859+45 FENCE 1859+45 FENCE</p> <p>1859+12 ENTER WETLAND WIL-CDK-008 1859+40 EXIT WETLAND WIL-CDK-008 1859+45 PROPERTY LINE 1859+45 FENCE 1859+45 FENCE 1859+45 FENCE 1859+45 FENCE</p> <p>1859+12 ENTER WETLAND WIL-CDK-008 1859+40 EXIT WETLAND WIL-CDK-008 1859+45 PROPERTY LINE 1859+45 FENCE 1859+45 FENCE 1859+45 FENCE 1859+45 FENCE</p>																	



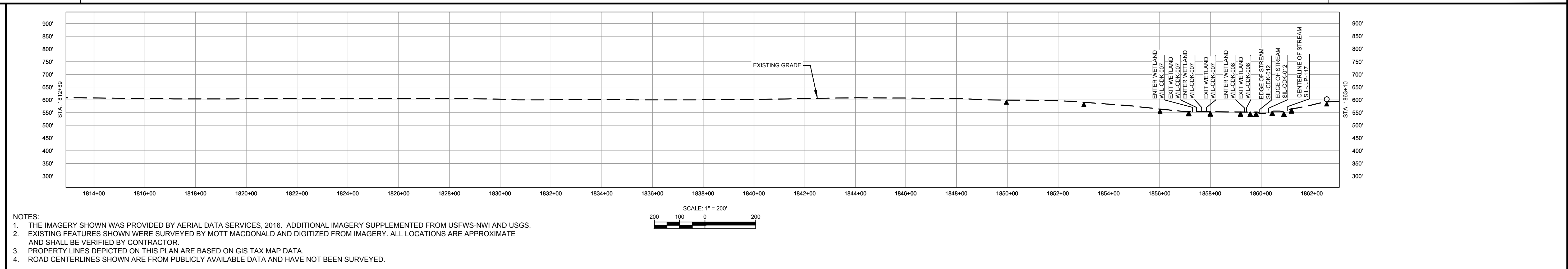
CLASS LOCATION/MAOP	CLASS I / 1440 PSIG																	
MATERIAL & COATING	<p>1812+89</p> <p>1891' (1)</p> <p>1831+80</p> <p>60' (REF)</p> <p>1832+40</p> <p>3070' (1)</p> <p>1863+10</p>																	
DESIGN FACTOR	0.72																	
CONSTRUCTION METHOD	OPEN CUT																	
PIPELINE COVER	5'																	
SOILS	675B	61A	675B	61A	675B	119C2	675B	279B	119C2	279B	119D2	3634A	8D2	119C3				
LAND USE	AG																	

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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MATERIAL	REFERENCE DRAWINGS			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE
1	4961'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED	TAR-015	ACCESS ROAD SITE PLAN - TAR-015
REF	60'	SEE REFERENCED DETAIL DRAWING	STLP-SS-006	24" PIPELINE MLV SITE 2

REVISIONS				APPROVALS			
NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE
1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017
2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE
3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017

APPROVALS		CLIENT APPROVAL	
ENG. APPROVAL	DATE	DATE	DATE
DGG	07/2017		
P.M. APPROVAL	DATE	DATE	DATE
JEV	07/2017		

SCALE PLAN: 1" = 200'  
SCALE PROFILE H: 1" = 200'  
SCALE PROFILE V: 1" = 200'

PREPARED FOR: **Spire STL Pipeline**

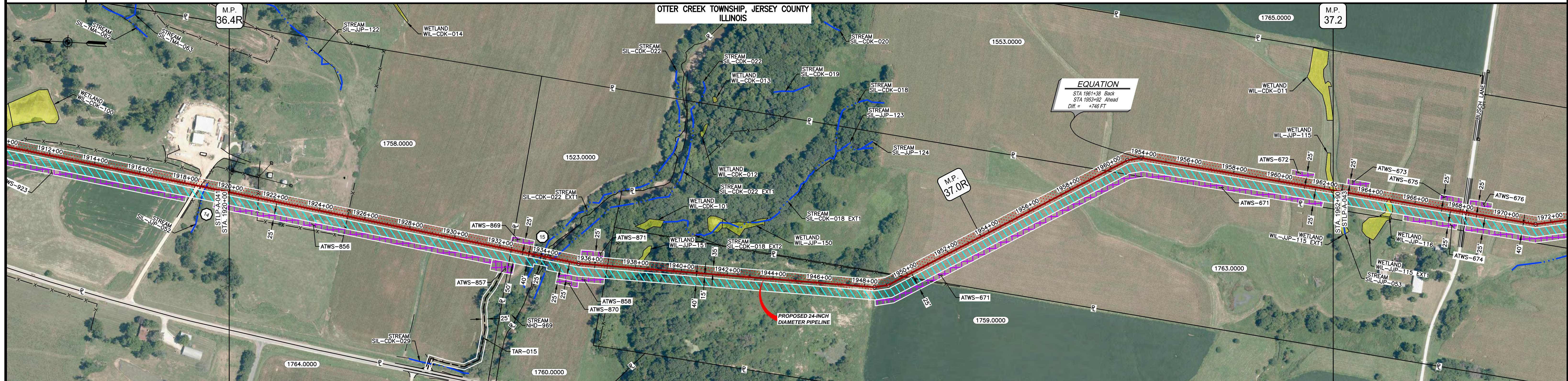
PREPARED BY: **M M MOTT MACDONALD**

SCALE: 1" = 200'  
DRAWING NO.: STLP-A-040  
REVISION: 3

SPIRE STL PIPELINE PROJECT  
ALIGNMENT SHEET  
PROPOSED 24-INCH DIAMETER PIPELINE  
JERSEY COUNTY, ILLINOIS  
STA. 1812+89 TO STA. 1863+10



OWNERSHIP / FOOTAGE	1758.0000 1252'	1523.0000 149'	1760.0000 276'	1759.0000 1308'	1783.0000 992'	1553.0000 1059'
STATIONING	1920+00	1924+00	1934+00	1944+00	1954+00	1962+00



CLASS LOCATION/MAOP	CLASS I / 1440 PSIG															
MATERIAL & COATING	5036' (1)															
DESIGN FACTOR	0.72															
CONSTRUCTION METHOD	OPEN CUT				OPEN CUT (FLUMED)				OPEN CUT							
PIPELINE COVER	5'															
SOILS	279B	119D3	8D3	3634A	3333A	3634A	8G	280B	119D3	279B	515C2	515B2	515C2	515B2	515C2	
LAND USE	AG				F	AG	OL	F	OL	AG	OL	AG	OL	W	OL	AG

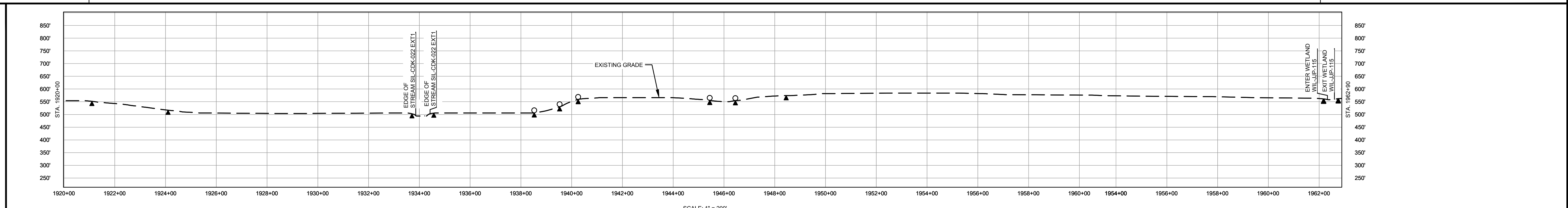
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PERMANENT WATERBAR WITH COMPOST FILTER  
SOCK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	300	300
5-15%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



- NOTES:
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MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'	SCALE PROFILE H: 1" = 200'	SCALE PROFILE V: 1" = 200'
1	5036'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED	STLP-AR-003	ACCESS ROAD SITE PLAN - TAR-015	1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017			
					2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE			
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017			
											ENG. APPROVAL	DATE	CLIENT APPROVAL		
											DGG	07/2017			
											P.M. APPROVAL	DATE			
											JEV	07/2017			

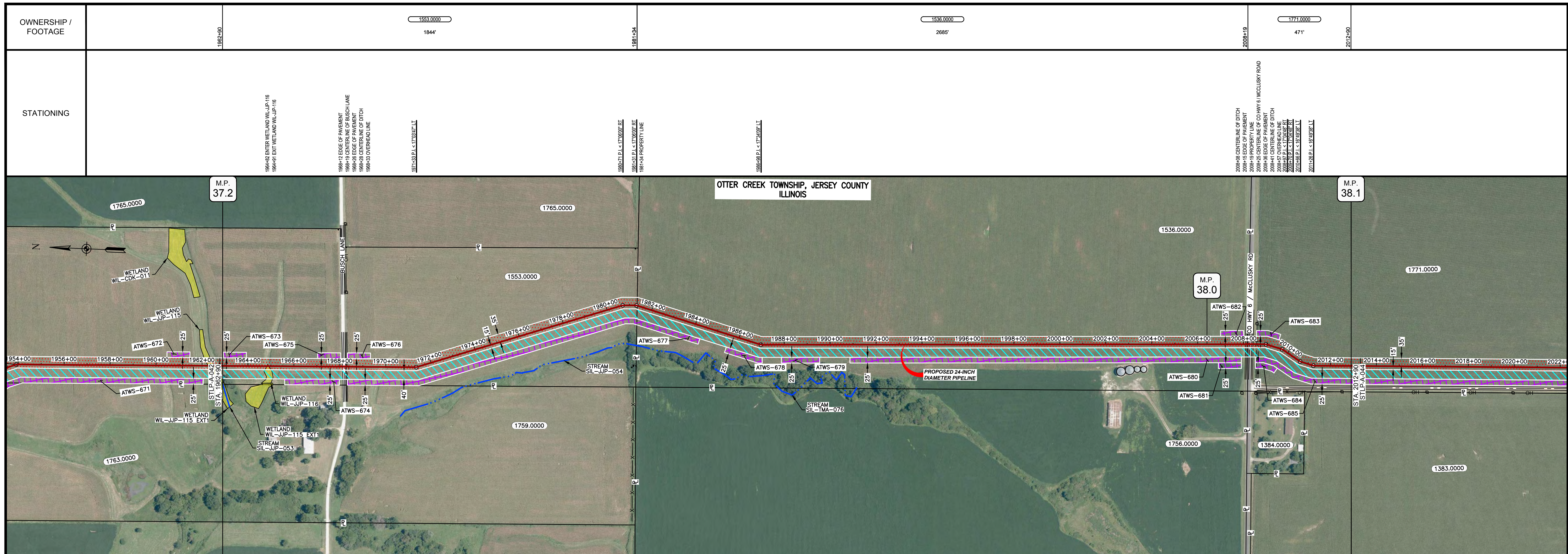
  

PREPARED BY	<b>M M</b> MOTT MACDONALD
DATE	07/2017

SCALE	DRAWING NO.	REVISION
1" = 200'	STLP-A-042	3





CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG												
MATERIAL & COATING	<table border="1"> <tr> <td>1962+90</td> <td>1967+79</td> <td>1968+99</td> <td>2012+90</td> </tr> <tr> <td>480'</td> <td>80'</td> <td>3927'</td> <td>80'</td> </tr> <tr> <td>(1)</td> <td>(2)</td> <td>(1)</td> <td>(2)</td> </tr> </table>	1962+90	1967+79	1968+99	2012+90	480'	80'	3927'	80'	(1)	(2)	(1)	(2)
1962+90	1967+79	1968+99	2012+90										
480'	80'	3927'	80'										
(1)	(2)	(1)	(2)										
DESIGN FACTOR	0.72	0.6	0.72										
CONSTRUCTION METHOD	OPEN CUT	BORE	OPEN CUT										
PIPELINE COVER	5'												
SOILS	515C2 675B 515C2 675B 515C2 675B 515C2	675B	61A										
LAND USE	AG OL W OL AG OL AG D OL AG OL	AG	D OL AG										

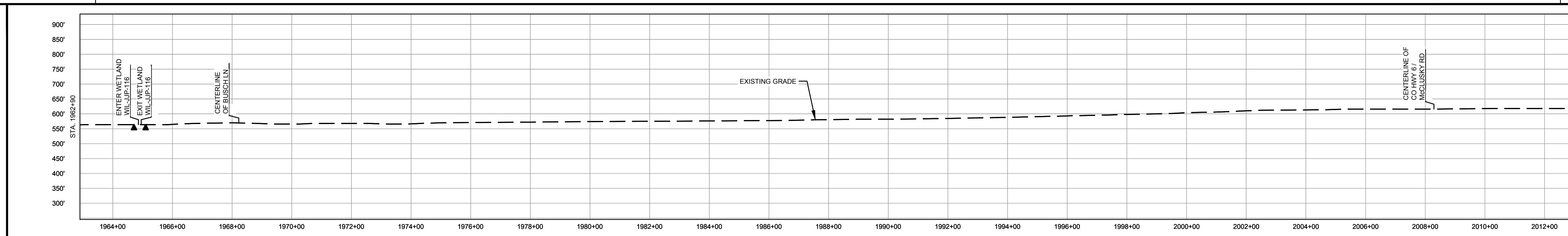
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PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE

PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

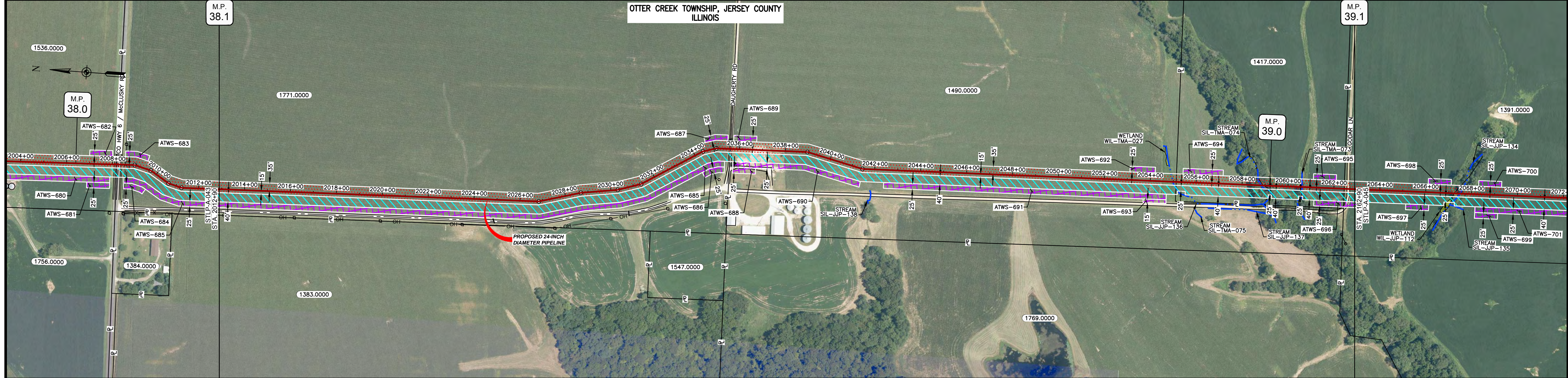
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'		ALIGNMENT SHEET PROPOSED 24-INCH DIAMETER PIPELINE JERSEY COUNTY, ILLINOIS STA. 1962+90 TO STA. 2012+90
1	4840'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017	SCALE PROFILE H: 1" = 200'		
2	160'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE	SCALE PROFILE V: 1" = 200'	PREPARED BY 	SCALE: 1" = 200' DRAWING NO.: STLP-A-043 REVISION: 3
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	ENG. APPROVAL	DATE	CLIENT APPROVAL		
											DGG	07/2017	DATE		
											P.M. APPROVAL	DATE	DATE		
											JEW	07/2017			

OWNERSHIP / FOOTAGE	2012+90	1771.0000 2270'	2035+90	1490.0000 1953'	2065+13	1417.0000 732'	2082+45	1391.0000 45'	2082+90
STATIONING			2032+82 E.L. < 14' 56.56" L.L.	2032+82 E.L. < 14' 56.56" L.L.	2032+82 E.L. < 14' 56.56" L.L.	2032+82 E.L. < 14' 56.56" L.L.	2032+82 E.L. < 14' 56.56" L.L.	2032+82 E.L. < 14' 56.56" L.L.	2032+82 E.L. < 14' 56.56" L.L.



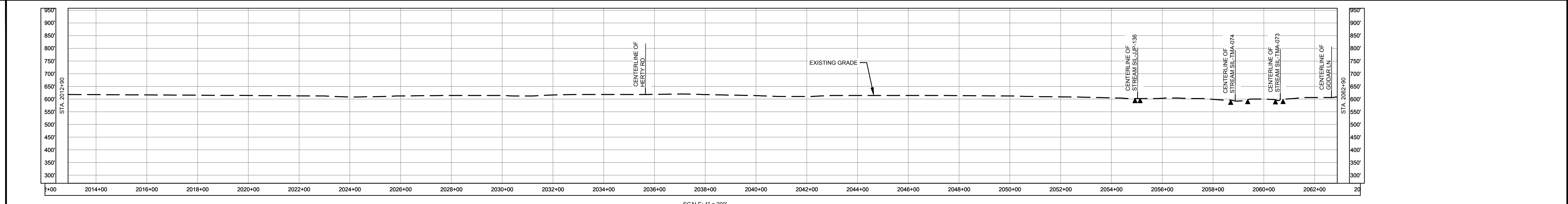
CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG																															
MATERIAL & COATING	<table border="1"> <tr> <td>2012+90</td> <td>2032+82</td> <td>2035+90</td> <td>2038+01</td> <td>2050+00</td> <td>2054+00</td> <td>2059+21</td> <td>2062+90</td> <td>2065+13</td> <td>2068+00</td> <td>2082+90</td> </tr> <tr> <td>1</td> <td>2</td> <td>1</td> <td>2</td> <td>1</td> <td>2</td> <td>1</td> <td>2</td> <td>1</td> <td>2</td> <td>1</td> </tr> </table>										2012+90	2032+82	2035+90	2038+01	2050+00	2054+00	2059+21	2062+90	2065+13	2068+00	2082+90	1	2	1	2	1	2	1	2	1	2	1
2012+90	2032+82	2035+90	2038+01	2050+00	2054+00	2059+21	2062+90	2065+13	2068+00	2082+90																						
1	2	1	2	1	2	1	2	1	2	1																						
DESIGN FACTOR	0.72, 0.6, 0.72, 0.6																															
CONSTRUCTION METHOD	OPEN CUT, BORE, OPEN CUT, OPEN CUT (FLUMED), OPEN CUT, OPEN CUT (FLUMED), OPEN CUT																															
PIPELINE COVER	5'																															
SOILS	61A, 675B, 279C2, 675B, 279C2, 675B, 279C2, 119D3, 279C2, 279B, 279C2, 279B, 279C2, 119D3, 279B																															
LAND USE	AG, OL, AG, F, AG, F, OL, AG																															

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EACH LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

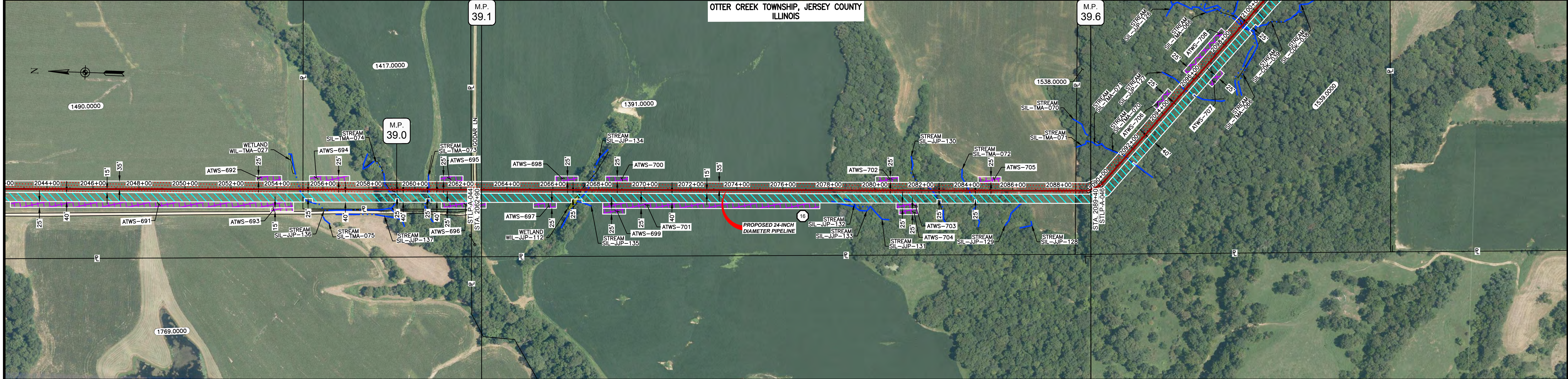
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



- NOTES:
- THE IMAGERY SHOWN WAS PROVIDED BY AERIAL DATA SERVICES, 2016. ADDITIONAL IMAGERY SUPPLEMENTED FROM USFWS-NWI AND USGS.
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  - PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED ON GIS TAX MAP DATA.
  - ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.

MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'		ALIGNMENT SHEET PROPOSED 24-INCH DIAMETER PIPELINE JERSEY COUNTY, ILLINOIS STA. 2012+90 TO STA. 2162+90
1	4920'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	03/2017	SCALE PROFILE H: 1" = 200'		
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE	SCALE PROFILE V: 1" = 200'	PREPARED BY 	REVISION 3
											ENG. APPROVAL	DATE	CLIENT APPROVAL		
											DGG	04/2017	DATE		
											P.M. APPROVAL	DATE			
											JEV	04/2017			

OWNERSHIP / FOOTAGE		1391.0000 2584'	1538.0000 66'
STATIONING		2062+00	2089+40

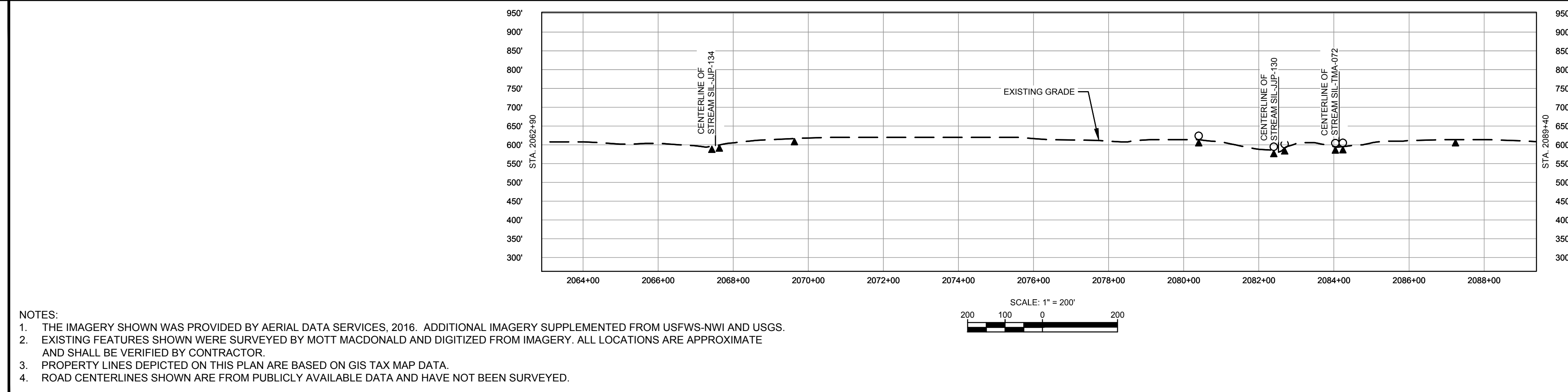


CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG	
MATERIAL & COATING	2650' (1)	
DESIGN FACTOR	0.72	
CONSTRUCTION METHOD	OPEN CUT	OPEN CUT (FLUMED)
PIPELINE COVER	5'	
SOILS	279B 279C3 119D3 279C3 119D3 279B 119D2 279B 119D2 279B 280C	
LAND USE	AG F AG F AG F	

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100

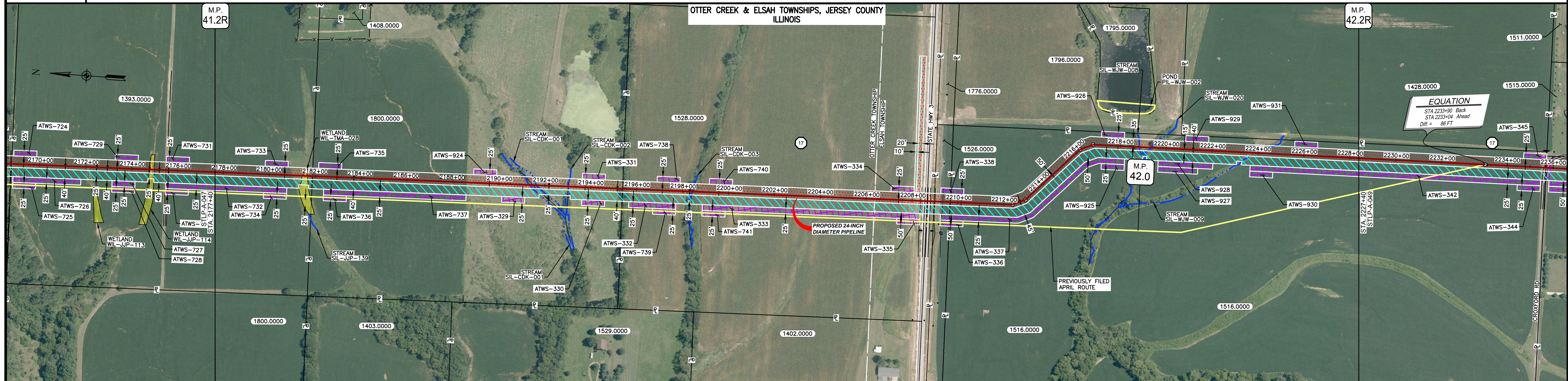


NOTES:  
 1. THE IMAGERY SHOWN WAS PROVIDED BY AERIAL DATA SERVICES, 2016. ADDITIONAL IMAGERY SUPPLEMENTED FROM USFWS-NWI AND USGS.  
 2. EXISTING FEATURES SHOWN WERE SURVEYED BY MOTT MACDONALD AND DIGITIZED FROM IMAGERY. ALL LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR.  
 3. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED ON GIS TAX MAP DATA.  
 4. ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.

MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'		ALIGNMENT SHEET PROPOSED 24-INCH DIAMETER PIPELINE JERSEY COUNTY, ILLINOIS STA. 2062+90 TO STA. 2089+40
1	2650'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017	SCALE PROFILE H: 1" = 200'		
					2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE	SCALE PROFILE V: 1" = 200'		
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017	CLIENT APPROVAL		
											ENG. APPROVAL	DATE	PREPARED BY		
											DGG	07/2017			
											P.M. APPROVAL	DATE			
											JEV	07/2017			
													SCALE		
													DRAWING NO.		
													STLP-A-045		
													REVISION		
													1" = 200'		3



OWNERSHIP / FOOTAGE	2177+40	1393.0000	448'	2181+88	1800.0000	1351'	2185+39	1528.0000	1357'	2208+85	1526.0000	70'	2209+86	1516.0000	1872'	2227+40
STATIONING	<p>2181+45 ENTER WETLAND WIL-TMA-028 2181+45 EXIT WETLAND WIL-TMA-028 2181+88 PROPERTY LINE</p> <p>2181+45 EDGE OF STREAM SIL-CDK-001 2181+45 CENTERLINE OF STREAM SIL-CDK-001 2181+84 EDGE OF STREAM SIL-CDK-001 2181+84 CENTERLINE OF STREAM SIL-CDK-001</p> <p>2181+02 CENTERLINE OF STREAM SIL-CDK-002 2181+02 CENTERLINE OF DITCH</p> <p>2185+39 PROPERTY LINE</p> <p>2188+41 CENTERLINE OF STREAM SIL-CDK-003 2188+45 CENTERLINE OF DITCH</p> <p>2208+37 OTTER CREEK AND ELSAHS MUNICIPALITIES BOUNDARY</p> <p>2208+37 CENTERLINE OF DITCH 2208+45 EDGE OF PAVEMENT 2208+45 CENTERLINE OF STATE HWY 3 2208+45 PROPOSED PAVEMENT 2208+45 PROPOSED PAVEMENT 2208+45 CENTERLINE OF DITCH 2208+45 PROPERTY LINE</p> <p>2212+37 P.L. &lt; 22+30.00' L.I. 2212+87 P.L. &lt; 22+30.00' L.I.</p> <p>2216+21 P.L. &lt; 22+47.25' R.I. 2216+81 P.L. &lt; 22+47.25' R.I.</p> <p>2218+82 CENTERLINE OF STREAM SIL-WJW-008 2219+36 CENTERLINE OF STREAM SIL-WJW-009</p> <p>2223+97 CENTERLINE OF STREAM SIL-WJW-009</p>															



CLASS LOCATION/MAOP	CLASS I / 1440 PSIG															
MATERIAL & COATING	2177+40															
DESIGN FACTOR	0.72															
CONSTRUCTION METHOD	OPEN CUT															
PIPELINE COVER	5'															
SOILS	280C2 279C2 280C2 279C2 280C2 279D3 279B 279C2 279B 279C2 279D3 279C2 279B 279C2 279B 279D2 279C2 279D2 675B 279D2 279C2 278A															
LAND USE	AG W AG AG F AG F AG AG D OL D AG F AG															

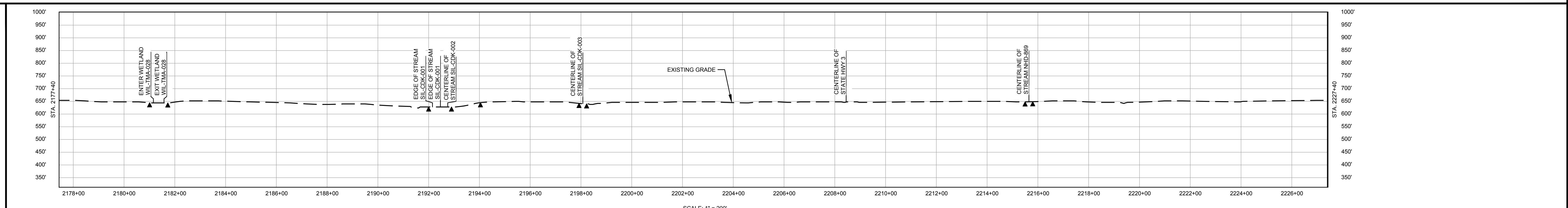
THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	300	300
5-15%	200	200
15-30%	100	100
>30%	50	50

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100

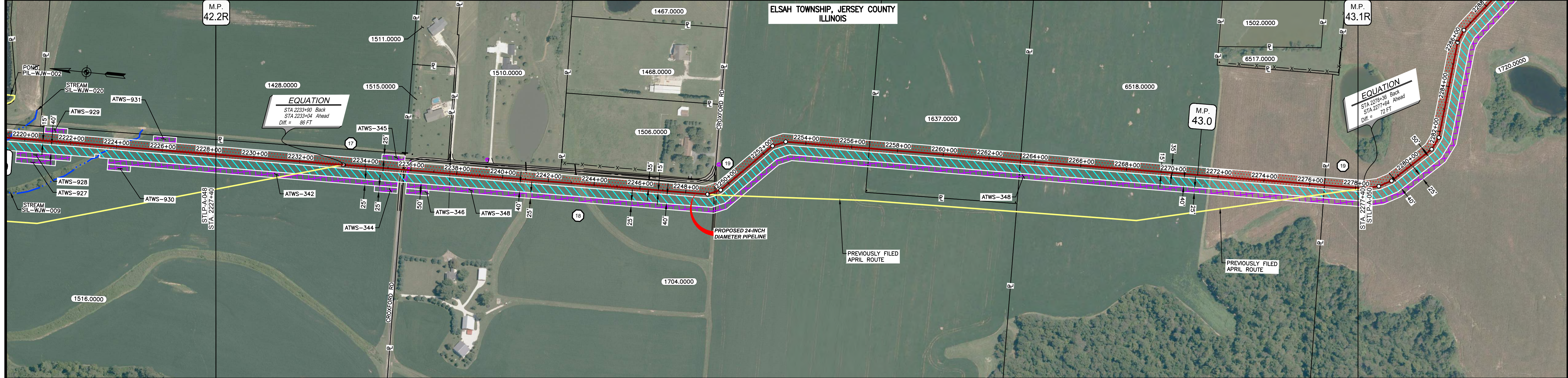


NOTES:

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- ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.

MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT		
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'	
1	4920'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017	SCALE PROFILE H: 1" = 200'	
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE	SCALE PROFILE V: 1" = 200'	
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017		
											CLIENT APPROVAL	PREPARED BY		
											DGG	07/2017		
											P.M. APPROVAL	DATE		
											JEV	07/2017		
												SCALE	DRAWING NO.	REVISION
												1" = 200'	STLP-A-048	3

OWNERSHIP / FOOTAGE	2227+40	1516.0000	830'	2235+70	1704.0000	2672'	2292+42	6518.0000	1348'	2274+90	1720.0000	150'	2277+40
STATIONING				2235+70	2248+05	2249+26	2249+37	2249+55	2252+62	2253+12	2258+77	2263+37	2276+65



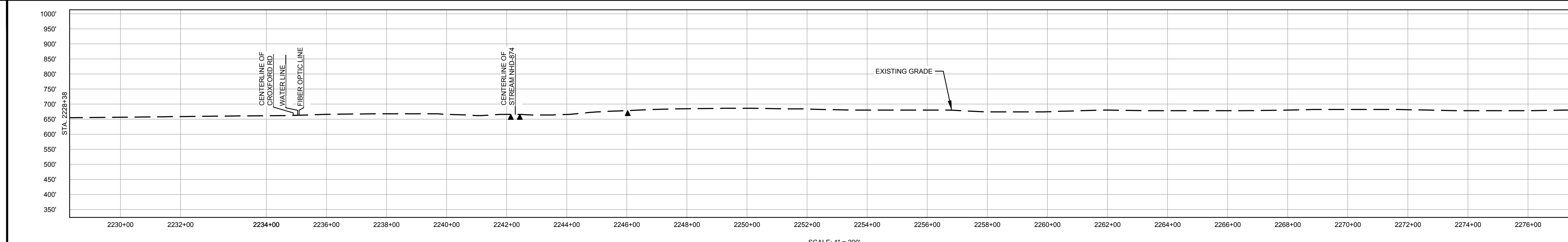
CLASS LOCATION/MAOP	CLASS I / 1440 PSIG																																					
MATERIAL & COATING	<table border="1"> <tr> <td>2227+40</td> <td colspan="2">791'</td> <td>2235+91</td> <td>80'</td> <td>2238+11</td> <td colspan="6">4129'</td> <td>2276+58</td> </tr> <tr> <td></td> <td colspan="2">①</td> <td></td> <td>②</td> <td></td> <td colspan="6">①</td> <td></td> </tr> </table>												2227+40	791'		2235+91	80'	2238+11	4129'						2276+58		①			②		①						
2227+40	791'		2235+91	80'	2238+11	4129'						2276+58																										
	①			②		①																																
DESIGN FACTOR	0.72				0.6				0.72																													
CONSTRUCTION METHOD	OPEN CUT				BORE				OPEN CUT																													
PIPELINE COVER	5'																																					
SOILS	278A	279B	278A	279B	279B	278A	477C2	279B	477C2	279B	278A	477B																										
LAND USE		AG		OL	D	OL	AG	OL	AG	OL	AG	OL																										

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

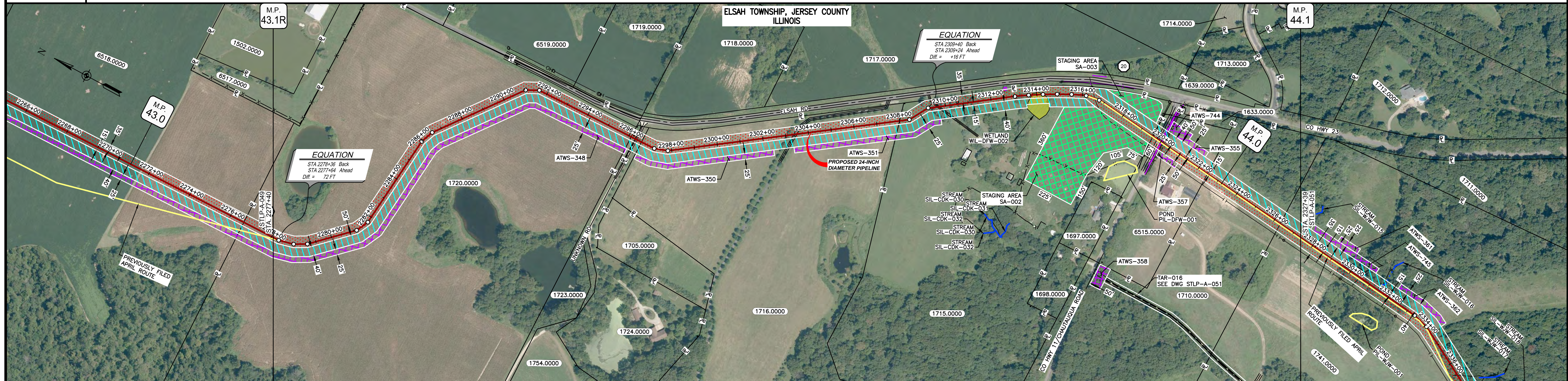
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		SCALE PLAN: 1" = 200'		PREPARED FOR		SPIRE STL PIPELINE PROJECT		
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PROFILE H: 1" = 200'			
1	4920'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017	SCALE PROFILE V: 1" = 200'			
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE	CLIENT APPROVAL			
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017	DATE			
											ENG. APPROVAL	DATE		PREPARED BY <b>M M</b> MOTT MACDONALD		
											DGG	07/2017	DATE			
											P.M. APPROVAL	DATE		SCALE	DRAWING NO.	REVISION
											JEW	07/2017		1" = 200'	STLP-A-049	3

OWNERSHIP / FOOTAGE	2277+40	1871'	2286+11	20'	30'	2298+51	1140'	2308+00	1173'	2318+59	287'	385'	2328+48	109'	2337+39
STATIONING	2277+40	2286+11	2298+51	2308+00	2318+59	2328+48	2337+39								



CLASS LOCATION/MAOP	CLASS I / 1440 PSIG														
MATERIAL & COATING	2277+40	1856'	2286+11	80'	2298+51	2289'	2308+00	80'	2318+59	710'	2328+48	2337+39			
DESIGN FACTOR	0.72					0.6					0.72				
CONSTRUCTION METHOD	OPEN CUT														
PIPELINE COVER	5'														
SOILS	477B					477C2					79C2, 79B, 79C2, 79B, 79C2				
LAND USE	AG					D					AG				

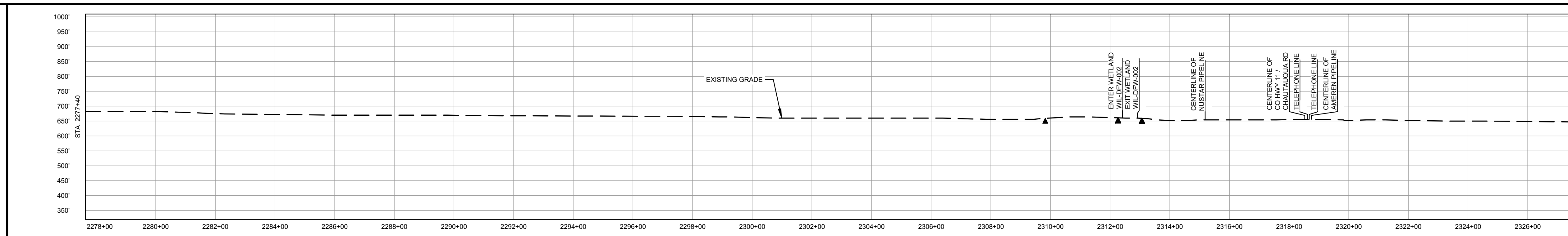
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PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE

PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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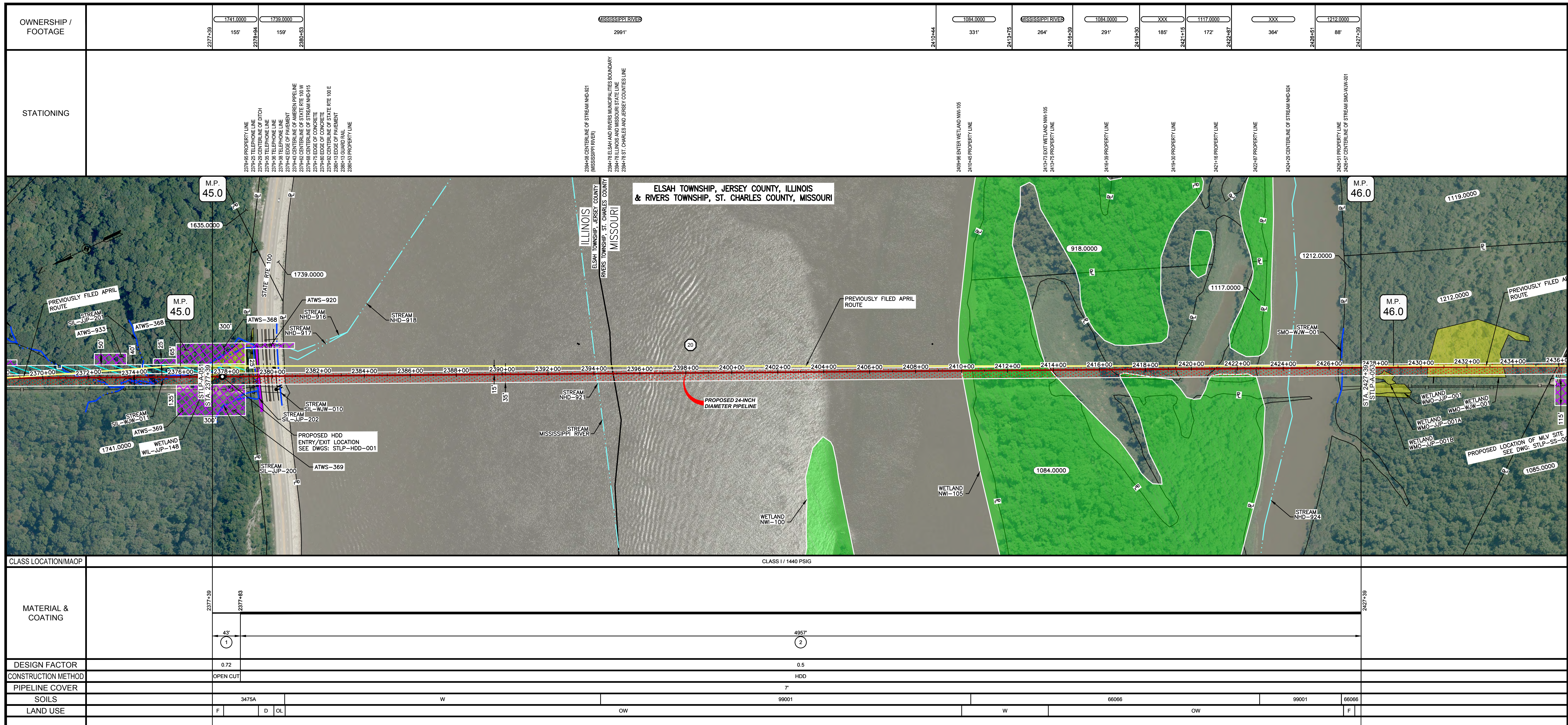
MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'	SCALE PROFILE H: 1" = 200'	SCALE PROFILE V: 1" = 200'
1	4855'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	03/2017			
2	160'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	CHECKED BY	DATE			
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	03/2017			

ENG. APPROVAL	DATE	CLIENT APPROVAL	DATE
DGG	07/2017		
P.M. APPROVAL	DATE		
JEV	07/2017		

PREPARED BY	MOTT MACDONALD
SCALE	1" = 200'
DRAWING NO.	STLP-A-050
REVISION	3





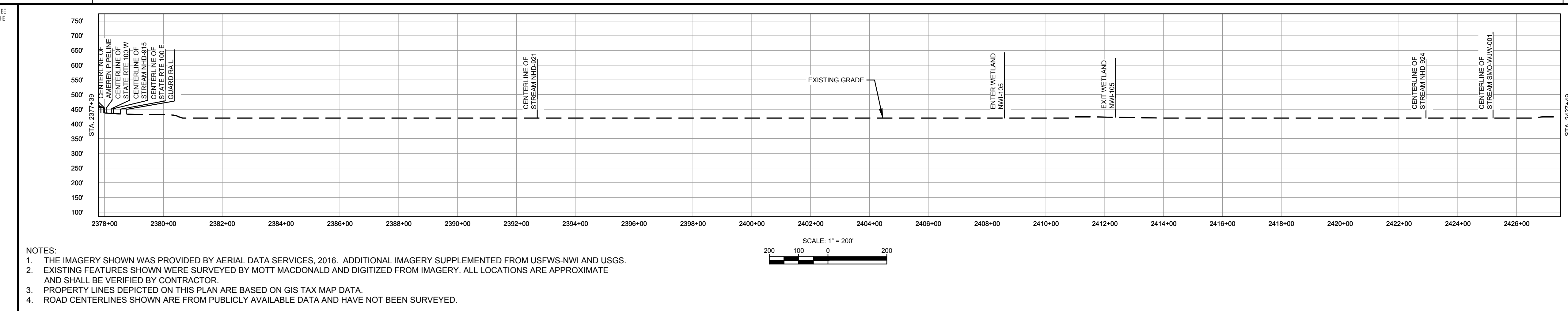


THE LOCATION OF TRENCH PUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.  
PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

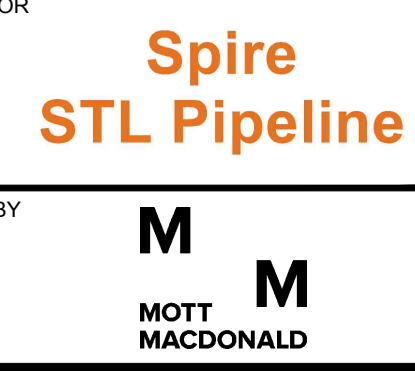
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



NOTES:

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MATERIAL			REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT						
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN:	SCALE PROFILE H:	SCALE PROFILE V:	SCALE	DRAWING NO.	REVISION	
2	5000'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED	STLP-HDD-001	HDD PROFILE OVERVIEW - MISSISSIPPI RIVER MAINLINE	1	ISSUE FOR FERC	01/2017	GH	EB	DGG	GG	07/2017	1" = 200'	1" = 200'	1" = 200'	1" = 200'	STLP-A-052	3	
					2	AMENDMENT TO FERC	04/2017	KAM	RJP	DGG									
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG									

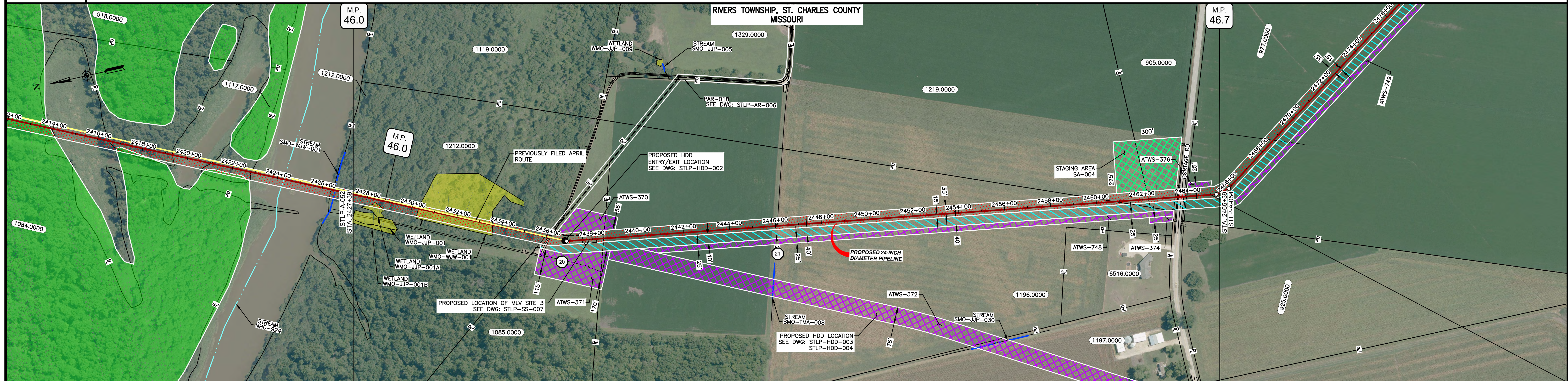


PREPARED BY  
**M M**  
MOTT  
MACDONALD

CLIENT APPROVAL  
DATE

SCALE: 1" = 200'  
DRAWING NO.: STLP-A-052  
REVISION: 3

OWNERSHIP / FOOTAGE	2427+39	1212.0000 85'	1085.0000 256'	1198.0000 223'	1219.0000 147'	905.0000 115'	PORTAGE ROAD 51'	977.0000 145'	2465+39
STATIONING		2430+28 ENTER WETLAND WMO-WJW-001	2433+68 EXIT WETLAND WMO-WJW-001	2435+84 2435+84 PROPERTY LINE 2436+07 EDGE OF GRAVEL 2436+11 CENTERLINE OF UNKNOWN ROAD 2436+15 EDGE OF GRAVEL 2436+20 E.C. CUSKULL	2438+60 2438+60 PROPERTY LINE	2446+08 CENTERLINE OF FITCH	2460+02 PROPERTY LINE	2462+08 2462+08 PROPERTY LINE 2463+43 2463+43 PROPERTY LINE 2463+43 CENTERLINE OF FITCH 2463+56 OVERHEAD LINE 2463+58 EDGE OF PAVEMENT 2463+62 EDGE OF PAVEMENT 2463+68 CENTERLINE OF FITCH 2463+84 2463+84 PROPERTY LINE 2465+24 E.C. CUSKULL	



CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG									
MATERIAL & COATING	2427+39	2439+68	2439+68	2439+68	2465+39	2465+39	2465+39	2465+39	2465+39	2465+39
DESIGN FACTOR		0.5	0.72	0.5	0.72	0.6	0.72	0.6	0.72	
CONSTRUCTION METHOD		HDD			OPEN CUT			BORE	OPEN CUT	
PIPELINE COVER					7'					
SOILS		66066	66100		66066			66100		
LAND USE		F	W	F	AG			D	AG	

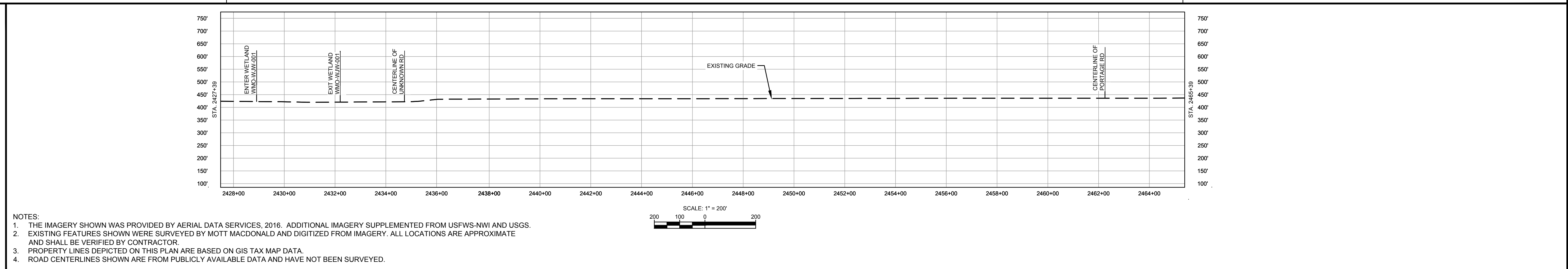
THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE

PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



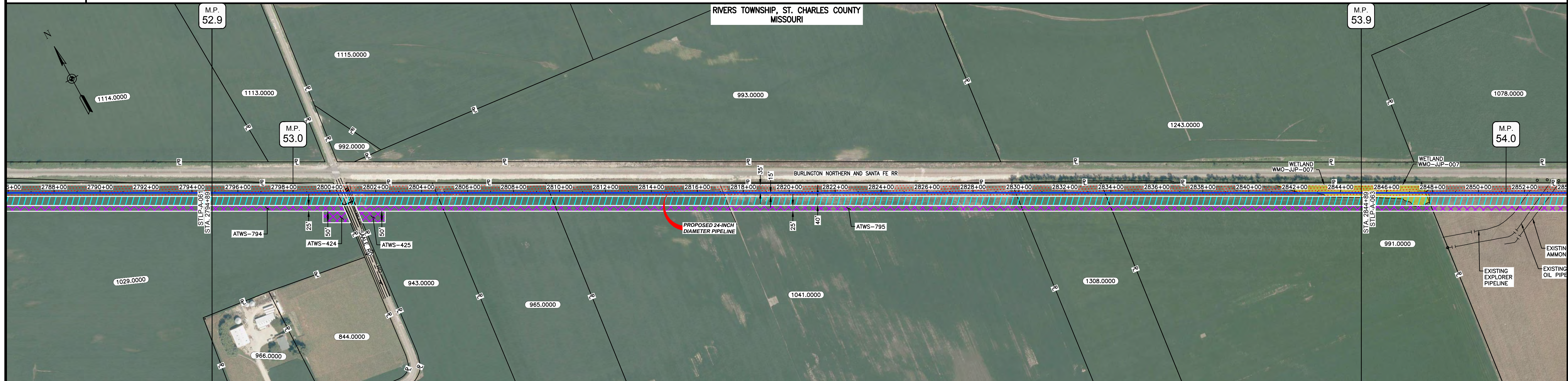
NOTES:

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- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED ON GIS TAX MAP DATA.
- ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.

TAG	QUANTITY	DESCRIPTION	DWG. NO.	REFERENCE DRAWINGS
1	2716'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED	STLP-AR-006	ACCESS ROAD SITE PLAN - PAR-018
2	1024'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED	STLP-HDD-002	HDD PROFILE OVERVIEW - MISSISSIPPI RIVER MAINLINE
REF	60'	SEE REFERENCED DETAIL DRAWING	STLP-HDD-003	HDD PROFILE OVERVIEW - MISSISSIPPI RIVER MAINLINE
			STLP-HDD-004	HDD PROFILE OVERVIEW - MISSISSIPPI RIVER MAINLINE
			STLP-SS-007	24" PIPELINE MLV SITE 3

MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT	
NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'	SCALE PROFILE H: 1" = 200'	SCALE PROFILE V: 1" = 200'		ALIGNMENT SHEET PROPOSED 24-INCH DIAMETER PIPELINE ST. CHARLES COUNTY, MISSOURI STA. 2427+39 TO STA. 2465+39	
1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017						
2	AMENDMENT TO FERC	04/2017	KAM	RJP	DGG	CHECKED BY	DATE					SCALE: 1" = 200' DRAWING NO.: STLP-A-053 REVISION: 3	
3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017						
				ENG. APPROVAL		DATE		CLIENT APPROVAL					
				DGG		07/2017		DATE					
				P.M. APPROVAL		DATE							
				JEV		07/2017							

OWNERSHIP / FOOTAGE	2794+89	1029.0000	545'	2800+54	SAALE ROAD	943.0000	376'	2804+85	965.0000	493'	2809+85	1041.0000	2028'	2829+86	1308.0000	388'	2833+74	991.0000	1115'	2844+89
STATIONING	<p>2800+54 CENTERLINE OF DITCH 2800+54 EDGE OF PAVEMENT 2800+54 CENTERLINE OF SAALE ROAD 2800+74 EDGE OF PAVEMENT 2800+74 CENTERLINE OF SAALE ROAD 2800+96 OVERHEAD LINE 2800+96 PROPERTY LINE 2800+96 CENTERLINE OF DITCH</p> <p>2804+85 PROPERTY LINE</p> <p>2809+85 PROPERTY LINE</p> <p>2817+13 CENTERLINE OF DITCH</p> <p>2829+86 PROPERTY LINE</p> <p>2833+74 PROPERTY LINE</p> <p>2842+23 ENTER WETLAND WMO-JUP-007</p>																			



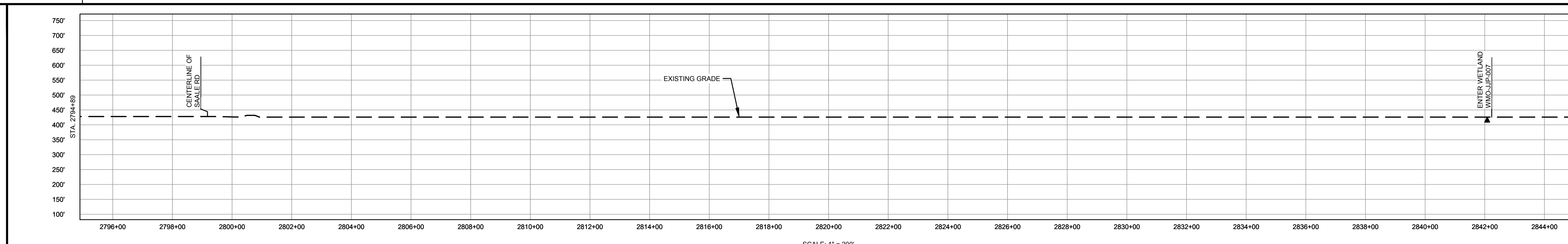
CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG												
MATERIAL & COATING	<table border="1"> <tr> <td>2794+89</td> <td>2800+25</td> <td>2801+05</td> <td>2844+89</td> </tr> <tr> <td>536'</td> <td>80'</td> <td>4384'</td> <td></td> </tr> <tr> <td>1</td> <td>2</td> <td>1</td> <td></td> </tr> </table>	2794+89	2800+25	2801+05	2844+89	536'	80'	4384'		1	2	1	
2794+89	2800+25	2801+05	2844+89										
536'	80'	4384'											
1	2	1											
DESIGN FACTOR	0.72	0.6	0.72										
CONSTRUCTION METHOD	OPEN CUT	BORE	OPEN CUT										
PIPELINE COVER	7'												
SOILS	66110												
LAND USE	AG	OL D OL	AG										

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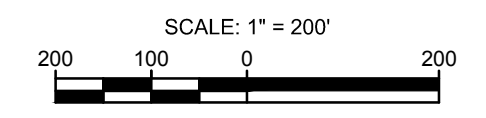
PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100

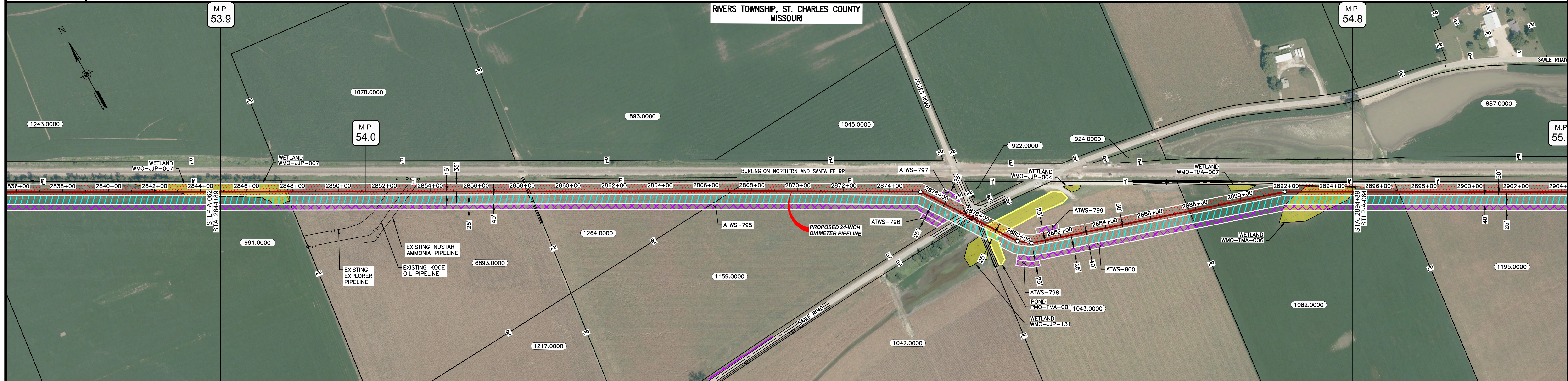


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MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS		SCALE PLAN: 1" = 200'		PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PROFILE H: 1" = 200'			ALIGNMENT SHEET PROPOSED 24-INCH DIAMETER PIPELINE ST. CHARLES COUNTY, MISSOURI STA. 2794+89 TO STA. 2844+89	
1	4920'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017	SCALE PROFILE V: 1" = 200'				
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	DP	WH	DGG	CHECKED BY	DATE	CLIENT APPROVAL	PREPARED BY 		SCALE 1" = 200' DRAWING NO. STLP-A-062 REVISION 3	
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	ENG. APPROVAL	DATE	DATE				
											D.G.G.	07/2017					
											P.M. APPROVAL	DATE					
											J.E.W.	07/2017					

OWNERSHIP / FOOTAGE	2844+89	991.0000 281'	893.0000 1064'	1284.0000 861'	1159.0000 1021'	1043.0000 966'	1082.0000 718'	2894+89
STATIONING	<p>2847+70 PROPERTY LINE 2847+70 WETLAND WMO-JUP-007</p> <p>2852+40 EXISTING EXPLORER PIPELINE 2852+40 CENTERLINE OF KOCE OIL PIPELINE 2853+20 CENTERLINE OF MUSTAR AMMONIA PIPELINE</p> <p>2868+21 CENTERLINE OF DIRT ROAD 2868+27 CENTERLINE OF FIELD ROAD 2868+32 CENTERLINE OF DIRT ROAD 2868+34 PROPERTY LINE</p> <p>2877+15 PROPERTY LINE</p> <p>2877+36 2877+36 PROPERTY LINE 2877+36 PROPERTY LINE 2877+45 CENTERLINE OF SAULE ROAD 2877+45 CENTERLINE OF PAVEMENT 2877+45 CENTERLINE OF PAVEMENT 2877+45 CENTERLINE OF PAVEMENT 2877+45 PROPERTY LINE 2877+45 PROPERTY LINE 2877+45 CENTERLINE OF GRAVEL ROAD 2877+45 CENTERLINE OF GRAVEL ROAD 2877+45 CENTERLINE OF GRAVEL ROAD 2877+45 CENTERLINE OF GRAVEL ROAD 2877+45 CENTERLINE OF GRAVEL ROAD 2877+45 CENTERLINE OF GRAVEL ROAD 2877+45 CENTERLINE OF GRAVEL ROAD 2877+45 CENTERLINE OF GRAVEL ROAD</p> <p>2877+71 PROPERTY LINE</p> <p>2882+58 ENTER WETLAND WMO-TMA-006</p>							

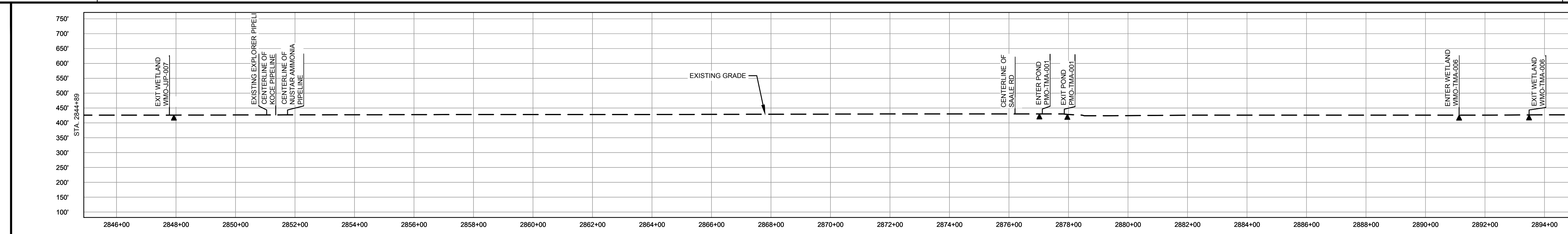


CLASS LOCATION/MAOP	CLASS I / 1440 PSIG							
MATERIAL & COATING	<p>2844+89</p> <p>3239' (1)</p> <p>80' (2)</p> <p>1681' (1)</p> <p>2894+89</p>							
DESIGN FACTOR	0.72							
CONSTRUCTION METHOD	OPEN CUT							
PIPELINE COVER	7'							
SOILS	66110							
LAND USE	W AG OL D AG OW AG W							

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PERMANENT WATERBAR WITH COMPOST FILTER  
SOAK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5-15%	300	300
15 - 30%	200	200
>30%	100	100
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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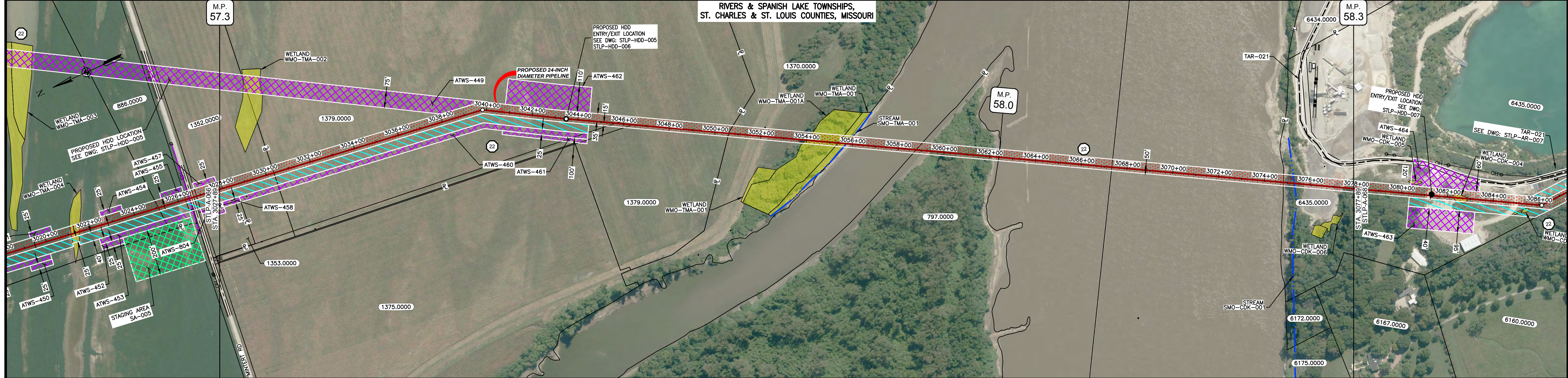
MATERIAL			REFERENCE DRAWINGS			REVISIONS				APPROVALS		PREPARED FOR		SPIRE STL PIPELINE PROJECT		
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'	ALIGNED SHEET		
1	4920'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED			1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017	SCALE PROFILE H: 1" = 200'	PROPOSED 24-INCH DIAMETER PIPELINE		
2	80'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			2	AMENDMENT TO FERC	04/2017	DP	WH	DGG	CHECKED BY	DATE	SCALE PROFILE V: 1" = 200'	ST. CHARLES COUNTY, MISSOURI		
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	ENG. APPROVAL	DATE	CLIENT APPROVAL	STA. 2844+89 TO STA. 2894+89		
											D.G.G.	07/2017	DATE	SCALE	DRAWING NO.	REVISION
											J.E.W.	07/2017	DATE	1" = 200'	STLP-A-063	3

Spire STL Pipeline

PREPARED BY

**M M**  
MOTT MACDONALD

OWNERSHIP / FOOTAGE	1352.0000 245'	1379.0000 2024'	1370.0000 507'	MISSOURI RIVER 308'	797.0000 366'	MISSOURI RIVER 1244'	6435.0000 306'
STATIONING	3027+889 3030+334	3024+889 3024+889	3024+889 3024+889	3024+889 3024+889	3024+889 3024+889	3024+889 3024+889	3024+889 3024+889



CLASS LOCATION/MAOP	CLASS 1 / 1440 PSIG	
MATERIAL & COATING	2045' (1)	2955' (2)
DESIGN FACTOR	0.72	0.5
CONSTRUCTION METHOD	OPEN CUT	HDD
PIPELINE COVER	7'	5'
SOILS	66059, 66019, 66059, 66019, 66059, 66019, 66059, 66012, 99001, 66126, 99001, 99001, 99000	
LAND USE	AG, F, W, OW, F, OW, D	

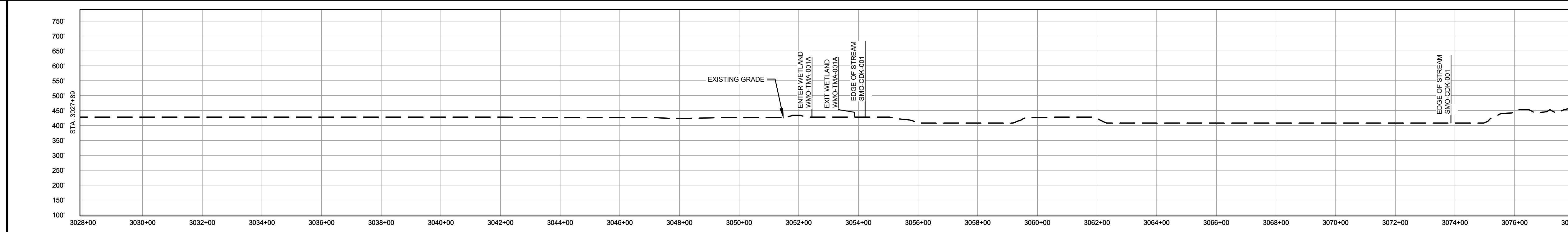
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PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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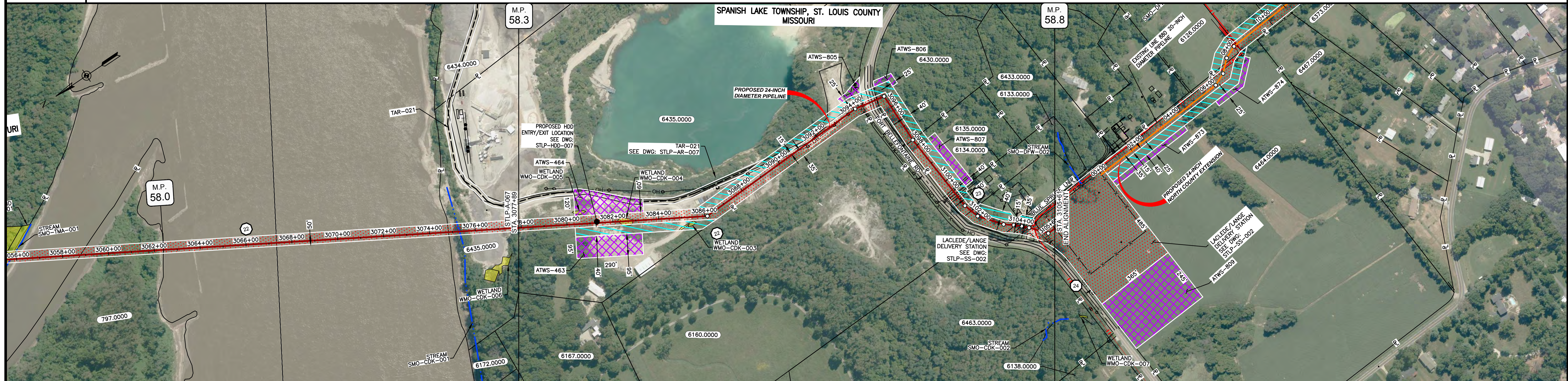
MATERIAL			REFERENCE DRAWINGS		REVISIONS				APPROVALS			PREPARED FOR		SPIRE STL PIPELINE PROJECT				
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN:	SCALE PROFILE H:	SCALE PROFILE V:	SCALE	DRAWING NO.	REVISION
1	2045'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED	STLP-HDD-005	HDD PROFILE OVERVIEW - MISSOURI RIVER MAINLINE	1	ISSUE FOR FERC	01/2017	GH	EB	DGG	DP	07/2017	1" = 200'	1" = 200'	1" = 200'	1" = 200'	STLP-A-067	3
2	2955'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED	STLP-HDD-006	HDD PROFILE OVERVIEW - MISSOURI RIVER MAINLINE	2	AMENDMENT TO FERC	04/2017	DP	AK	DGG								
			STLP-HDD-007	HDD PROFILE OVERVIEW - MISSOURI RIVER MAINLINE	3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG								
			STLP-AR-007	ACCESS ROAD DRAWING														

**M M**  
 MOTT MACDONALD

CLIENT APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

SCALE: 1" = 200'  
 DRAWING NO.: STLP-A-067  
 REVISION: 3

OWNERSHIP / FOOTAGE		3077+88	1654'	3084+43	66'	262'	3097+71	300'	3100+71	101'	3101+72	206'	3103+78	28'	3104+89	155'	3105+81
STATIONING																	



CLASS LOCATION/MAOP	CLASS I / 1440 PSIG																																																																			
MATERIAL & COATING	<table border="1"> <tr> <td>3077+88</td> <td>3081+35</td> <td>3094+41</td> <td>3099+21</td> <td>3103+87</td> <td>3104+87</td> <td>3105+81</td> <td colspan="10"></td> </tr> <tr> <td>346'</td> <td>1306'</td> <td>80'</td> <td>866'</td> <td>80'</td> <td>133'</td> <td></td> <td colspan="10"></td> </tr> <tr> <td>(2)</td> <td>(1)</td> <td>(2)</td> <td>(1)</td> <td>(2)</td> <td>(1)</td> <td></td> <td colspan="10"></td> </tr> </table>																	3077+88	3081+35	3094+41	3099+21	3103+87	3104+87	3105+81											346'	1306'	80'	866'	80'	133'												(2)	(1)	(2)	(1)	(2)	(1)											
3077+88	3081+35	3094+41	3099+21	3103+87	3104+87	3105+81																																																														
346'	1306'	80'	866'	80'	133'																																																															
(2)	(1)	(2)	(1)	(2)	(1)																																																															
DESIGN FACTOR	0.5, 0.72, 0.6, 0.72, 0.6, 0.72																																																																			
CONSTRUCTION METHOD	HDD, OPEN CUT, BORE, OPEN CUT																																																																			
PIPELINE COVER	5'																																																																			
SOILS	99000, 60001																																																																			
LAND USE	D, F, D, W, D, F, D, F, D, F, D, F, OL, D, F, D, F, D, F																																																																			

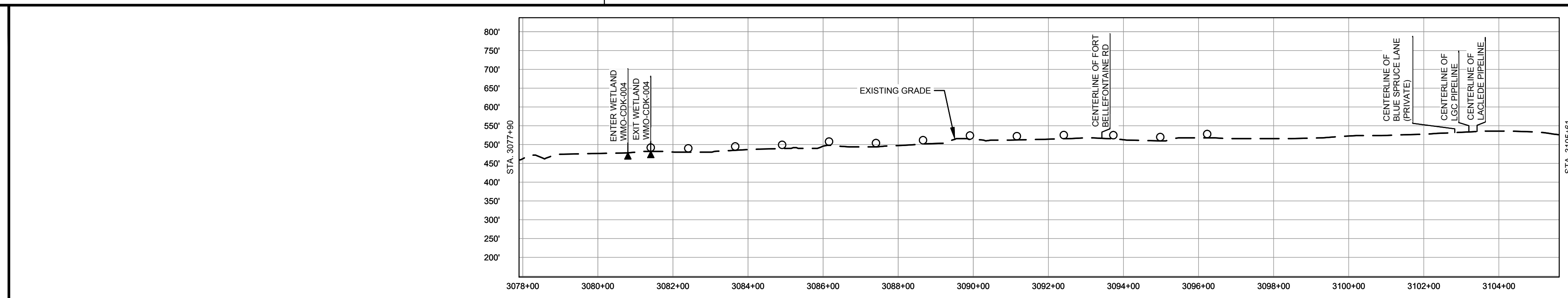
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PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

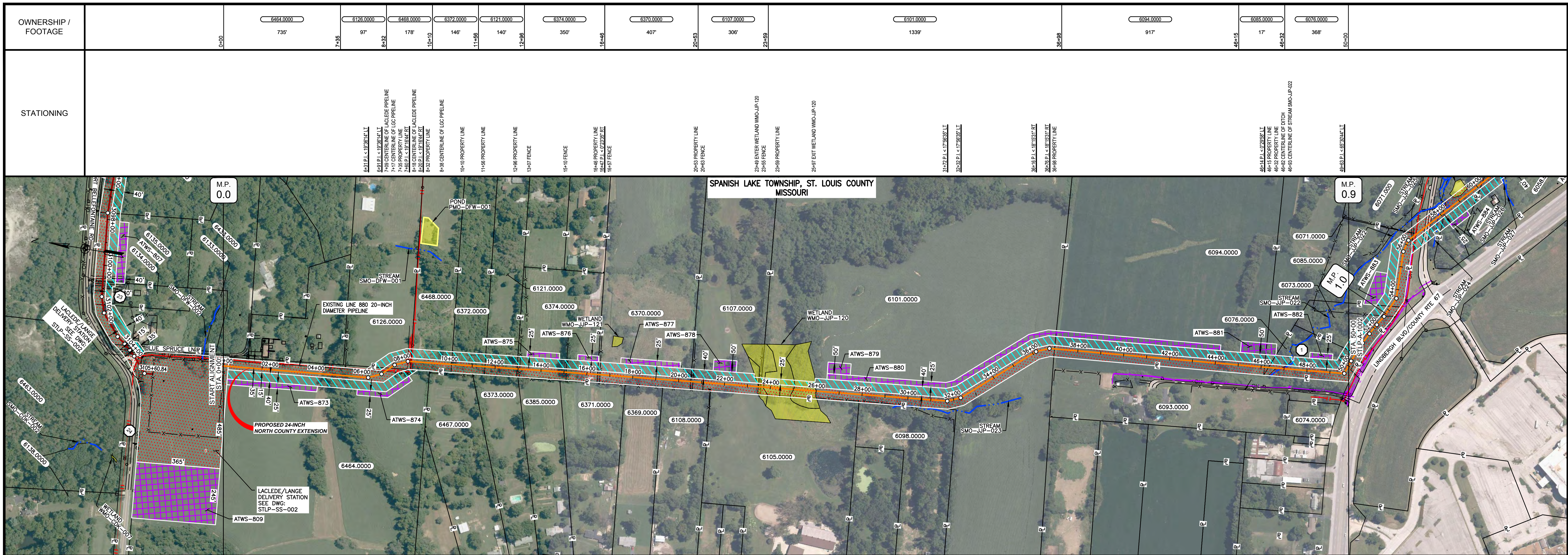
  

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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MATERIAL			REFERENCE DRAWINGS			REVISIONS			APPROVALS			PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200' SCALE PROFILE H: 1" = 200' SCALE PROFILE V: 1" = 200'		ALIGNMENT SHEET PROPOSED 24-INCH DIAMETER PIPELINE ST. LOUIS COUNTY, MISSOURI STA. 3077+89 TO STA. 3105+61		
1	2266'	PIPE, 24.000" OD X 0.375" WT, API-5L, X70, DSAW, FBE COATED	STLP-HDD-007	HDD PROFILE OVERVIEW - MISSOURI RIVER MAINLINE	1	ISSUED FOR FERC	01/2017	GH	EB	DGG	DP	07/2017					
2	506'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED	STLP-AR-007	ACCESS ROAD SITE PLAN - TAR-021	2	AMENDMENT TO FERC	04/2017	DP	AK	DGG	CHECKED BY	DATE	D.G.G. 07/2017	DATE	REVISION		
			STLP-SS-002	LACLEDE/LANGE DELIVERY STATION - SITE LAYOUT	3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017					
			STLP-M-200-0200	LACLEDE/LANGE DELIVERY STATION LAYOUT							ENG. APPROVAL	DATE					
											P.M. APPROVAL	DATE					
											J.E.W.	07/2017					



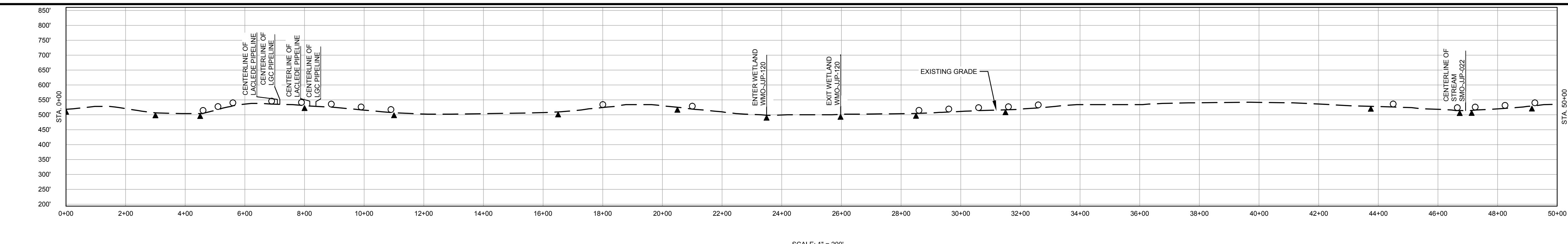
CLASS LOCATION/MAOP	CLASS II / 1440 PSIG														
MATERIAL & COATING	5000'														
DESIGN FACTOR	0.5														
CONSTRUCTION METHOD	OPEN CUT														
PIPELINE COVER	5'														
SOILS	60171	60001	60003	60001	60003	66024	60003	60001	60003	66024	60003	60165	60001	60003	60165
LAND USE	AG	F	AG	OL	F	OL	F	AG	F	AG	F	AG	F	AG	F

**PROFILE**

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.  
PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



**NOTES:**

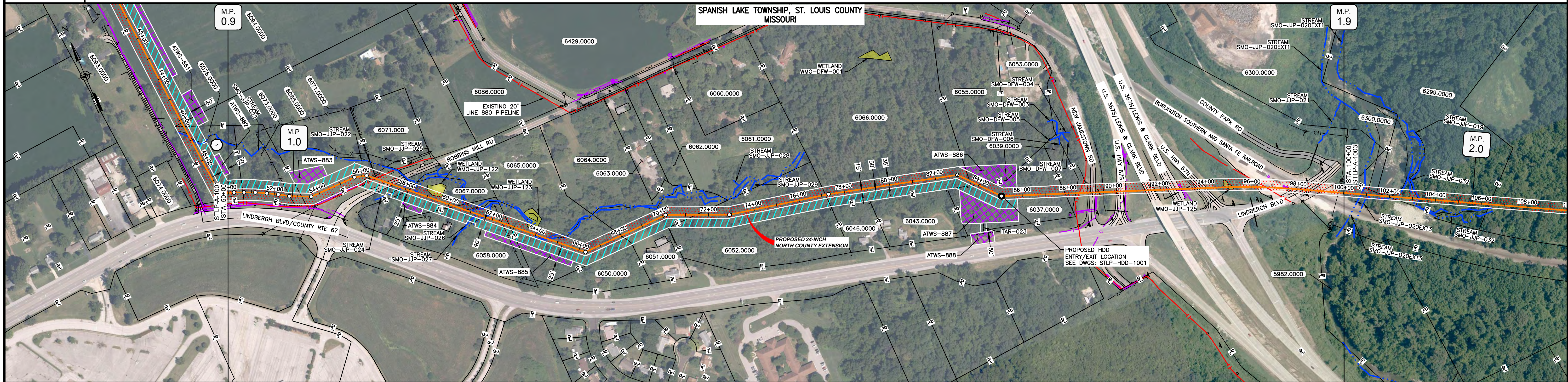
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- EXISTING FEATURES SHOWN WERE SURVEYED BY MOTT MACDONALD AND DIGITIZED FROM IMAGERY. ALL LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED ON GIS TAX MAP DATA.
- ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.

MATERIAL			REFERENCE DRAWINGS		REVISIONS				APPROVALS			PREPARED FOR		SPIRE STL PIPELINE PROJECT	
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN:	SCALE PROFILE H:	SCALE PROFILE V:
3	5000'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE COATED	STLP-A-068	ALIGNMENT SHEET	2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	KAM	07/2017	1" = 200'	1" = 200'	1" = 200'
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	WH	07/2017			

APPROVALS		CLIENT APPROVAL	
DRAWN BY	DATE	DATE	DATE
KAM	07/2017		
WH	07/2017		
DGG	07/2017		
JEV	07/2017		

PREPARED BY		
SCALE	DRAWING NO.	REVISION
1" = 200'	STLP-A-1001	3

OWNERSHIP / FOOTAGE	STATIONING
50+00	6076.0000
63'	6073.0000
60+63	6085.0000
257'	ROBBINS MILL RD
63+20	6087.0000
319'	6085.0000
65+39	6095.0000
173'	6084.0000
68+12	6092.0000
216'	6095.0000
60+28	6092.0000
251'	6095.0000
62+79	6092.0000
522'	6095.0000
68+01	6092.0000
345'	6095.0000
71+46	6092.0000
572'	6095.0000
77+18	6092.0000
638'	6095.0000
83+66	6092.0000
39'	6095.0000
83+95	6092.0000
392'	6095.0000
87+87	6092.0000
46'	6095.0000
88+33	6092.0000
1167'	U.S. HWY 67
100+00	



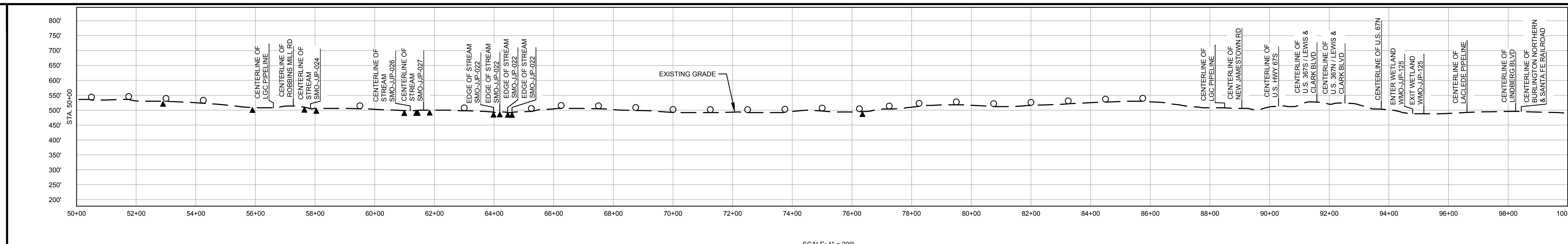
CLASS LOCATION/MAOP	MATERIAL & COATING	DESIGN FACTOR	CONSTRUCTION METHOD	PIPELINE COVER	SOILS	LAND USE
CLASS II / 1440 PSIG	3	0.5	OPEN CUT	5'	60165 60003 60166	F
CLASS III / 1440 PSIG	4		BORE		60003	OL
			OPEN CUT			D
			OPEN CUT (FLUMED)			OL
			OPEN CUT (FLUMED)			D
			HDD		60004	OL
					60025	D
					60223	OL
					60005	D
						F

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

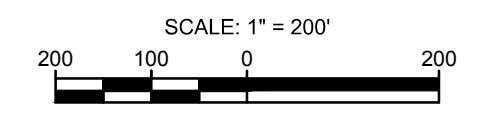
PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



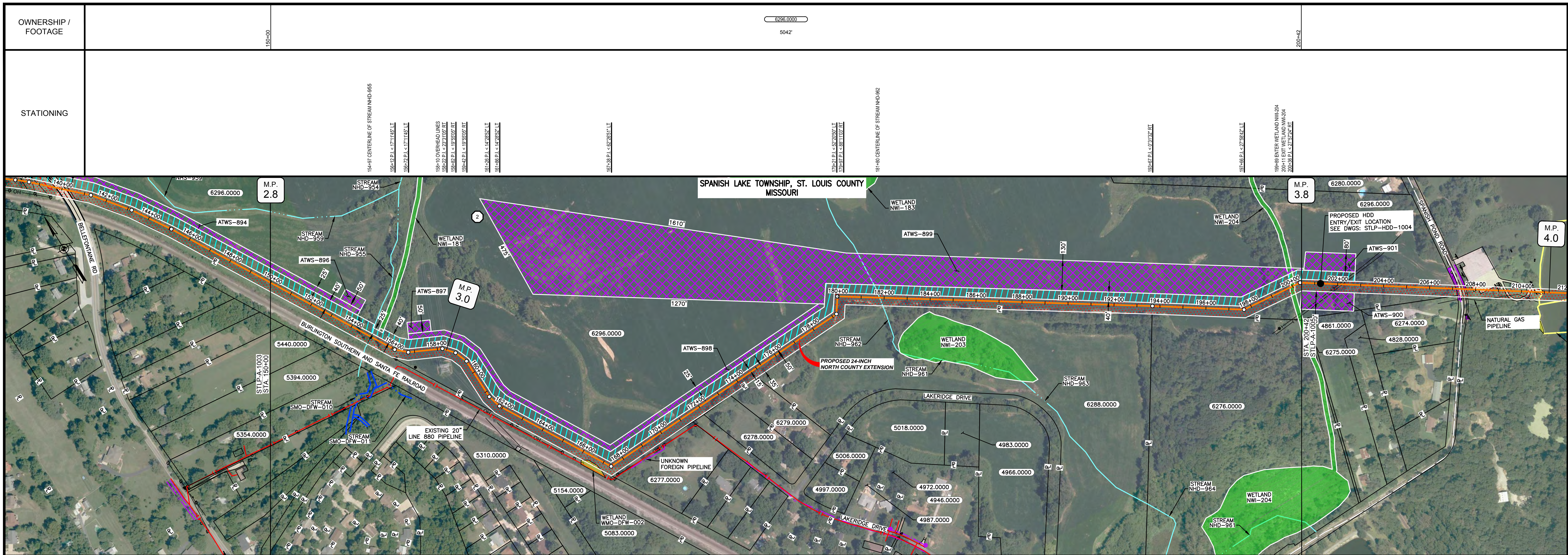
- NOTES:
1. THE IMAGERY SHOWN WAS PROVIDED BY AERIAL DATA SERVICES, 2016. ADDITIONAL IMAGERY SUPPLEMENTED FROM USFWS-NWI AND USGS.
  2. EXISTING FEATURES SHOWN WERE SURVEYED BY MOTT MACDONALD AND DIGITIZED FROM IMAGERY. ALL LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR.
  3. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED ON GIS TAX MAP DATA.
  4. ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.



MATERIAL			REFERENCE DRAWINGS		REVISIONS				APPROVALS			PREPARED FOR		SPIRE STL PIPELINE PROJECT			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'	Spire STL Pipeline	ALIGNMENT SHEET PROPOSED 24-INCH NORTH COUNTY EXTENSION ST. LOUIS COUNTY, MISSOURI STA. 50+00 TO STA. 100+00		
3	3330'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE COATED	STLP-HDD-1001	HDD PROFILE OVERVIEW	2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	DP	07/2017	SCALE PROFILE H: 1" = 200'				
4	1670'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG			SCALE PROFILE V: 1" = 200'	PREPARED BY	MOTT MACDONALD		
													CLIENT APPROVAL	DATE			
															SCALE	DRAWING NO.	REVISION
															1" = 200'	STLP-A-1002	3







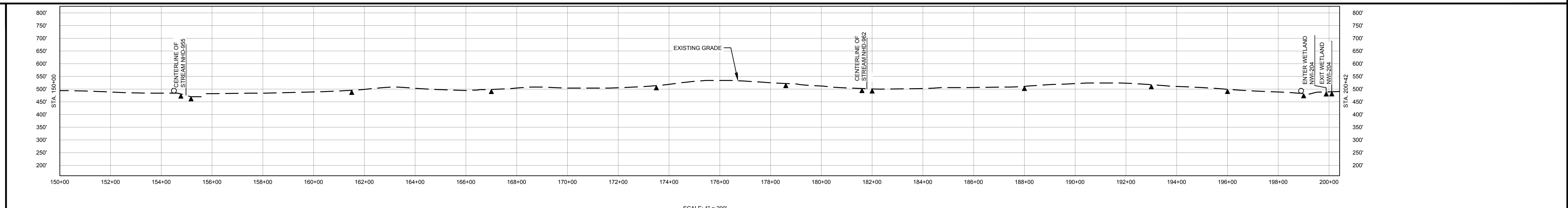
CLASS LOCATION/MAOP	CLASS III / 1440 PSIG		CLASS II / 1440 PSIG	
MATERIAL & COATING	5042'			
DESIGN FACTOR	0.5			
CONSTRUCTION METHOD	OPEN CUT	OPEN CUT (FLUMED)	OPEN CUT (FLUMED)	OPEN CUT
PIPELINE COVER	5'			
SOILS	60001	66024	60003	60025, 60003, 66024, 60003, 60001, 66024
LAND USE	AG	F	AG, D	AG, F, W, AG

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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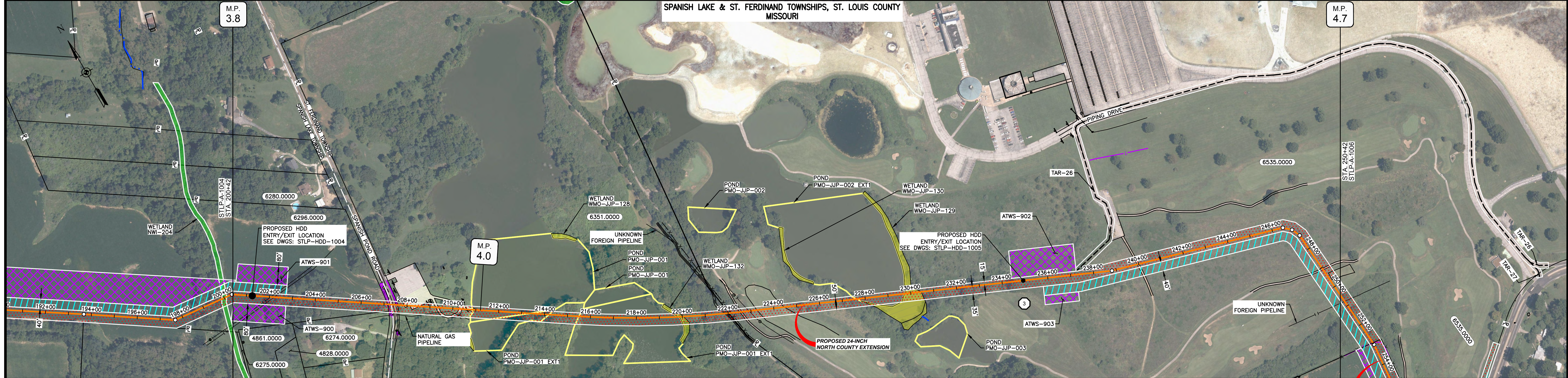
MATERIAL			REFERENCE DRAWINGS		REVISIONS				APPROVALS			PREPARED FOR		SPIRE STL PIPELINE PROJECT					
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN:	SCALE PROFILE H:	SCALE PROFILE V:	SCALE	DRAWING NO.	REVISION	
3	5042'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE COATED	STPL-HDD-1003	HDD PROFILE OVERVIEW	2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	DP	07/2017	1" = 200'	1" = 200'	1" = 200'	1" = 200'	STL-P-A-1004	3	
					3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	RJP	07/2017							

**M M**  
 MOTT MACDONALD

CLIENT APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

SCALE: 1" = 200'  
 DRAWING NO.: STL-P-A-1004  
 REVISION: 3

OWNERSHIP / FOOTAGE	207+42	672'	207+14	44'	207+58	1444'	222+02	2840'	250+42
STATIONING	MILEPOST 3.8 BUCKEYE PARTNERS, LP (NOT SURVEYED) MILEPOST 3.8 ST. LOUIS PIPELINE (NOT SURVEYED) MILEPOST 3.8 LACLEDE PIPELINE (NOT SURVEYED) 207+14 PROPERTY LINE 207+14 CENTERLINE 207+14 EDGE OF PAVEMENT 207+14 ST. FERDINAND AND SPANISH LAKE MUNICIPALITIES BOUNDARY 207+14 CENTERLINE OF SPANISH LAKE 207+14 PROPERTY LINE 207+14 EDGE OF PAVEMENT 207+14 EDGE OF PAVEMENT 207+14 EDGE OF PAVEMENT 207+14 EDGE OF PAVEMENT 207+14 EDGE OF PAVEMENT 207+14 EDGE OF PAVEMENT 207+14 EDGE OF PAVEMENT 207+14 ENTER WETLAND NW/188 (SPANISH LAKE) 210+42 ENTER WETLAND NW/188 (SPANISH LAKE) 214+50 P.L. < 2000' LT 215+46 ENTER WETLAND NW/188 (SPANISH LAKE) 216+45 P.L. < 2000' LT 218+12 P.L. < 2000' LT 219+48 P.L. < 2000' LT 219+48 ENTER WETLAND NW/188 (SPANISH LAKE) 221+56 P.L. < 2000' LT 222+02 PROPERTY LINE 222+02 P.L. < 2000' LT MILEPOST 4.2 BUCKEYE PARTNERS, LP (NOT SURVEYED) 229+48 ENTER WETLAND NW/188 (POND) 230+48 ENTER WETLAND NW/188 (POND) 236+41 P.L. < 2000' LT 246+48 P.L. < 2000' LT 246+48 P.L. < 2000' LT 247+48 P.L. < 2000' LT 249+44 EDGE OF PAVEMENT 249+44 EDGE OF PAVEMENT								

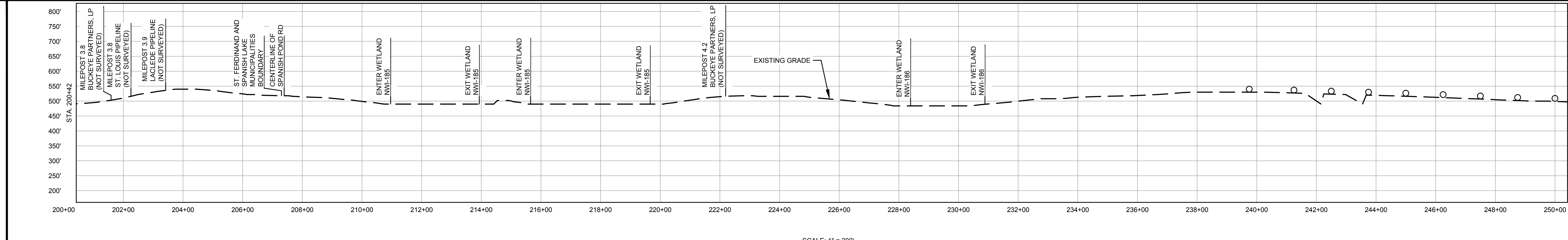


CLASS LOCATION/MAOP	CLASS II / 1440 PSIG		CLASS III / 1440 PSIG	
MATERIAL & COATING	83" (3)		1349" (3)	
DESIGN FACTOR	0.5			
CONSTRUCTION METHOD	OPEN CUT		HDD	
PIPELINE COVER	5'			
SOILS	66024	60004	60001	60004
LAND USE	AG	F	AG	OL

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.  
 PERMANENT WATERBAR WITH COMPOST FILTER  
 SOCK AT WATERBAR DISCHARGE  
 PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

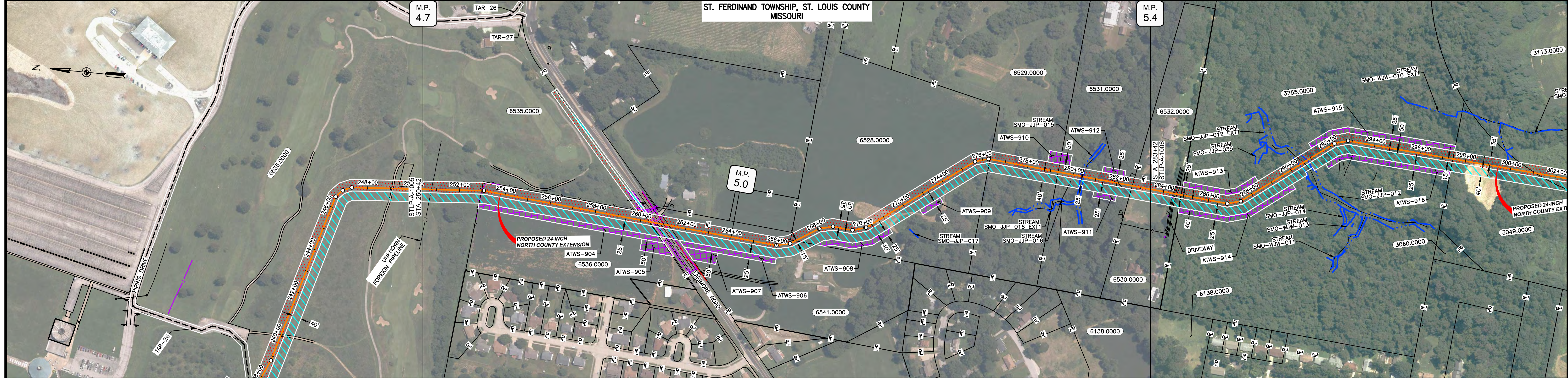
MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



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MATERIAL			REFERENCE DRAWINGS		REVISIONS				APPROVALS			PREPARED FOR		SPIRE STL PIPELINE PROJECT				
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN	1" = 200'	SCALE PROFILE H	1" = 200'	SCALE PROFILE V	1" = 200'
3	1432'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE COATED	STLP-HDD-1004	HDD PROFILE OVERVIEW	2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	DP	07/2017	CLIENT APPROVAL	PREPARED BY	SPIRE STL PIPELINE PROJECT			
4	3568'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/AR COATED	STLP-HDD-1005	HDD PROFILE OVERVIEW	3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG	CHECKED BY	DATE	DATE	DATE	ALIGNMENT SHEET			
												DATE	DATE	PROPOSED 24-INCH NORTH COUNTY EXTENSION				
												DATE	DATE	ST. LOUIS COUNTY, MISSOURI				
												DATE	DATE	STA. 200+42 TO STA. 250+42				
												DATE	DATE	SCALE	DRAWING NO.	REVISION		
												DATE	DATE	1" = 200'	STLP-A-1005	3		

OWNERSHIP / FOOTAGE	250+42	6535.0000	254'	250+98	6536.0000	744'	260+40	LARIMORE ROAD	6541.0000	562'	268+87	6528.0000	945'	276+32	6529.0000	302'	279+34	6531.0000	328'	282+62	6530.0000	80'	283+42
STATIONING	<p>250+70 CENTERLINE OF BUCKEYE PARTNERS, LP PIPELINE</p> <p>252+48 PROPERTY LINE</p> <p>252+48 FENCE</p> <p>253+65 P.L. &amp; E.T. 17' LT</p> <p>259+40 P.L. &amp; E.T. 15' LT</p> <p>260+40 PROPERTY LINE</p> <p>260+40 TELEPHONE LINE</p> <p>260+40 GUY WIRE</p> <p>260+40 WATER LINE</p> <p>260+42 EDGE OF PAVEMENT</p> <p>261+00 EDGE OF PAVEMENT</p> <p>261+00 TELEPHONE LINE</p> <p>261+00 PROPERTY LINE</p> <p>268+87 P.L. &amp; E.T. 15' LT</p> <p>268+87 PROPERTY LINE</p> <p>268+87 P.L. &amp; E.T. 15' LT</p> <p>268+87 P.L. &amp; E.T. 15' LT</p> <p>270+10 P.L. &amp; E.T. 15' LT</p> <p>270+10 P.L. &amp; E.T. 15' LT</p> <p>276+32 P.L. &amp; E.T. 15' LT</p> <p>276+32 PROPERTY LINE</p> <p>279+34 P.L. &amp; E.T. 15' LT</p> <p>279+34 PROPERTY LINE</p> <p>282+62 PROPERTY LINE</p> <p>280+48 EDGE OF STREAM SMO-JP-015</p> <p>280+48 CENTERLINE OF DITCH</p> <p>280+48 EDGE OF STREAM SMO-JP-015</p> <p>281+48 CENTERLINE OF DITCH</p> <p>282+42 PROPERTY LINE</p>																						



CLASS LOCATION/MAOP	CLASS III / 1440 PSIG																																
MATERIAL & COATING	<table border="1"> <tr> <td>250+42</td> <td>996'</td> <td>(3)</td> <td>260+38</td> <td>90'</td> <td>(4)</td> <td>261+28</td> <td>2214'</td> <td>(3)</td> <td>283+42</td> </tr> </table>																							250+42	996'	(3)	260+38	90'	(4)	261+28	2214'	(3)	283+42
250+42	996'	(3)	260+38	90'	(4)	261+28	2214'	(3)	283+42																								
DESIGN FACTOR	0.5																																
CONSTRUCTION METHOD	OPEN CUT																																
PIPELINE COVER	5'																																
SOILS	60001, 60165, 60003, 60005, 60165, 60005, 60003																																
LAND USE	OL, AG, D, AG, OL, F, OW, F, AG																																

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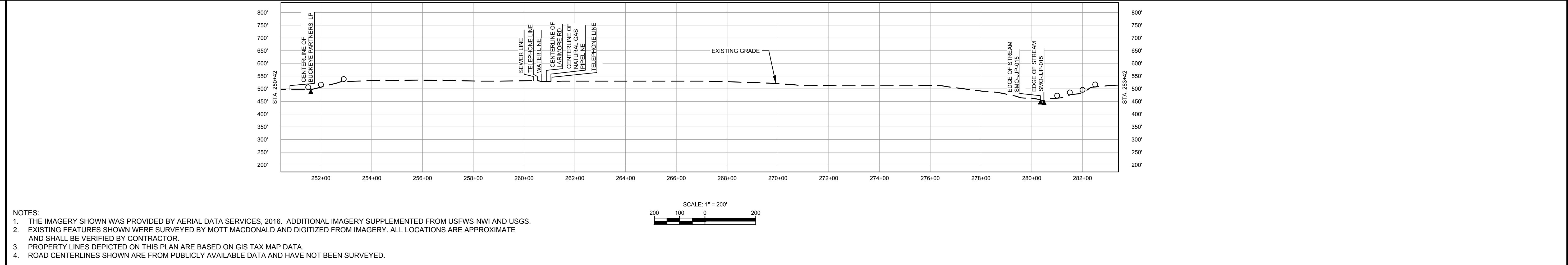
PERMANENT WATERBAR WITH COMPOST FILTER

SOCK AT WATERBAR DISCHARGE

PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15 - 30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10 - 15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



NOTES:

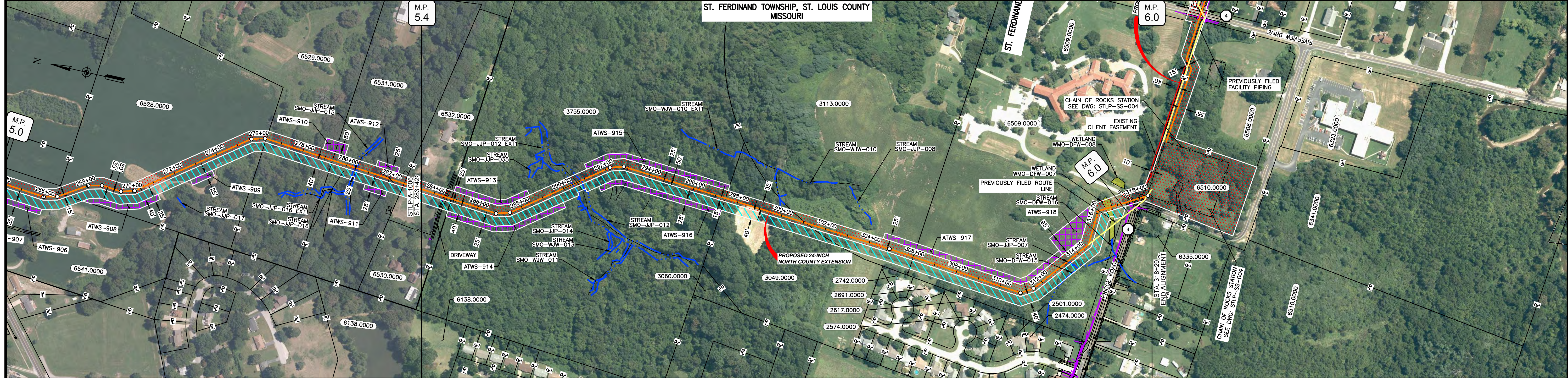
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MATERIAL			REFERENCE DRAWINGS			REVISIONS				APPROVALS			
TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	DATE
3	3210'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE COATED			2	AMENDMENT TO FERC	04/2017	KAM	WH	DGG	DP	07/2017	
4	90'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED			3	FERC SUPPLEMENTAL FILING	07/2017	KAM	RJP	DGG			

APPROVALS		CLIENT APPROVAL	
DRAWN BY	DATE	DATE	DATE
DP	07/2017		
CHECKED BY	DATE		
RJP	07/2017		
ENG. APPROVAL	DATE		
DGG	07/2017		
P.M. APPROVAL	DATE		
JEV	07/2017		

SPiRE STL Pipeline PROJECT		
ALIGNMENT SHEET		
PROPOSED 24-INCH NORTH COUNTY EXTENSION		
ST. LOUIS COUNTY, MISSOURI		
STA. 250+42 TO STA. 283+42		
SCALE	DRAWING NO.	REVISION
1" = 200'	STL/A-1006	3

OWNERSHIP / FOOTAGE	6530.0000 138' 283+42 284+80	3755.0000 1265' 287+45	3049.0000 365' 297+45	3113.0000 492' 301+10	6509.0000 1143' 306+02	PRIDGE RD 71' 317+45	6510.0000 22' 318+16	6510.0000 318+38
STATIONING	284+44 FENCE 284+45 EDGE OF PAVEMENT 284+46 CENTERLINE OF PAVEMENT 284+80 PROPERTY LINE	288+83 P.L. < 21+0731' LT 287+45 P.L. < 21+0731' LT	290+42 EDGE OF STREAM SMO-JUP-012 290+83 EDGE OF STREAM SMO-JUP-012	292+21 P.L. < 20+4237' RT 292+81 P.L. < 20+4237' RT	297+45 PROPERTY LINE 301+10 PROPERTY LINE	304+81 P.L. < 11+2411' RT 306+02 PROPERTY LINE	310+83 P.L. < 31+7859' LT 311+53 P.L. < 19+4119' LT	314+58 P.L. < 35+261' RT 316+12 ENTER WETLAND WMO-DFW-007 316+45 ENTER WETLAND WMO-DFW-007 317+45 PROPERTY LINE 317+42 EDGE OF PAVEMENT (PRIDGE RD) 317+76 CENTERLINE OF LOG PIPELINE 318+08 CENTERLINE OF LOG PIPELINE 318+16 PROPERTY LINE



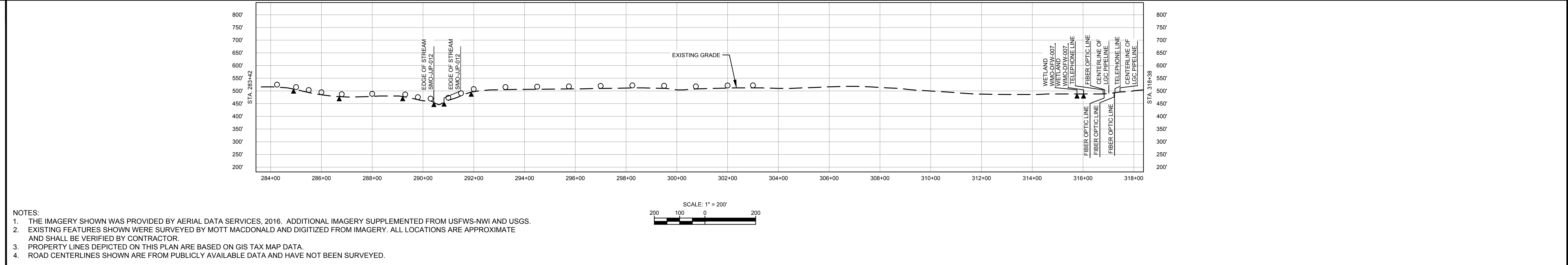
CLASS LOCATION/MAOP	CLASS III / 1440 PSIG	
MATERIAL & COATING	283+42	318+29
DESIGN FACTOR	0.5	
CONSTRUCTION METHOD	OPEN CUT	OPEN CUT (FLUMED) OPEN CUT BORE OPEN CUT
PIPELINE COVER	5'	
SOILS	60003	60005 60165 60003 60165
LAND USE	AG F D	F OW F OL F OL F DL AG W AG OL D F

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

PERMANENT WATERBAR WITH COMPOST FILTER  
SOOK AT WATERBAR DISCHARGE  
PERMANENT TRENCH PLUG

ILLINOIS		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
5-15%	300	300
15-30%	200	200
>30%	100	100

MISSOURI		
SLOPE	SLOPE BREAKER SPACING (FT)	TRENCH PLUG SPACING (FT)
<5%	125	---
5-10%	100	300
10-15%	75	300
15-20%	75	200
20-30%	50	200
30-35%	50	100
>35%	25	100



NOTES:

- THE IMAGERY SHOWN WAS PROVIDED BY AERIAL DATA SERVICES, 2016. ADDITIONAL IMAGERY SUPPLEMENTED FROM USFWS-NWI AND USGS.
- EXISTING FEATURES SHOWN WERE SURVEYED BY MOTT MACDONALD AND DIGITIZED FROM IMAGERY. ALL LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED ON GIS TAX MAP DATA.
- ROAD CENTERLINES SHOWN ARE FROM PUBLICLY AVAILABLE DATA AND HAVE NOT BEEN SURVEYED.

TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE
3	3323'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE COATED	STLP-SS-004	ENABLE MRT CHAIN OF ROCKS STATION SITE PLAN
4	130'	PIPE, 24.000" OD X 0.500" WT, API-5L, X70, DSAW, FBE/ARO COATED	STL-M-200-0300	CHAIN OF ROCKS STATION SITE PLAN
REF	34'	SEE REFERENCED DETAIL DRAWING	STL-M-200-0301	CHAIN OF ROCKS STATION (WEST) ENLARGED PLAN "A"
			STL-M-200-0302	CHAIN OF ROCKS CONNECTOR ENLARGED PLANS "B" & "C"
			STL-M-200-0303	ENABLE MRT CHAIN OF ROCKS STATION (EAST) ENLARGED PLAN "D"

MATERIAL		REFERENCE DRAWINGS		REVISIONS				APPROVALS			SCALE PLAN		PREPARED FOR		SPIRE STL PIPELINE PROJECT		
NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	SCALE PLAN: 1" = 200'	PREPARED FOR					ALIGNMENT SHEET PROPOSED 24-INCH NORTH COUNTY EXTENSION ST. LOUIS COUNTY, MISSOURI STA. 283+42 TO STA. 318+29			
3	AMENDMENT TO FERC FERC SUPPLEMENTAL FILING	04/2017 07/2017	KAM	WH	DGG	DP	07/2017	SCALE PROFILE H: 1" = 200'	PREPARED BY								
						CHECKED BY	DATE	SCALE PROFILE V: 1" = 200'	CLIENT APPROVAL		SCALE: 1" = 200' DRAWING NO.: STLP-A-1007 REVISION: 3						
						RJP	07/2017		DATE								
						ENG. APPROVAL	DATE		DATE								
						DGG	07/2017		DATE								
						P.M. APPROVAL	DATE		DATE								
						JEW	07/2017		DATE								