STATE PERMITS

RECEIPT

North Dakota Department of Transportation
SFN 4200 (Rev. 2-2010)

Mail remittance to:
WILLISTON DISTRICT OFFICE
ND DEPARTMENT OF TRANSPORTATION
PO BOX 698
WILLISTON ND 58802-0698

Website: www.dot.nd.gov

Prepared By	Cash	Credit Card	Charge	On Account
[illegible]	Check			

Customer	B.J. Kadrmas, Inc.
Address	PO Box 1282
City/State/Zip	Dickinson, ND 58602-1282

Date	June 7, 2012
NO.	R 7 1819

QUAN.	DESCRIPTION	PRICE	AMOUNT
	Utility Permit # 72029		$ 100 00
	Received check # 23463 dated 5-27-12		
	TOTAL		$ 100 00

Ref. Line	Account	Fund	Dept. ID	Projects: Project I.D.	Activity	Resource: Type	Resource: Catg.	Amount
01	474035	200	0001					$ 100 00
02								
03								
04								

White - Customer Yellow - Financial Management Pink - Division/District

UTILITY OCCUPANCY APPLICATION AND PERMIT

North Dakota Department of Transportation, Design Division
SFN 7995 (Rev. 04-2011)

Document Number 72029	(FOR STATE USE ONLY)	Permit Number 7-2-79.1731

APPLICANT INFORMATION

Owner of Facility	City	State	Zip Code
Plains Pipeline, L.P.	Houston	TX	77002
Mailing Address			**Telephone Number**
P. O. Box 4648 Houston, TX 77210			(713) 646-4100
Owner's Agent	**City**	**State / Zip Code**	**Telephone Number**
Ted Hoz	Houston	TX 77002	(713) 993-5233
Owner's Contractor	**City**	**State**	**Telephone Number**

LOCATION NO. 1 (FOR STATE USE ONLY) Begin Ref. Point 79.1731 End Ref. Point _____

Highway No. 2 ☐ Along or ☒ Across Lanes of traffic ☐ 2 ☒ 4

Direction ☐ N ☐ S ☒ E ☐ W Begin 914.21 feet from reference marker 79

Direction ☐ N ☐ S ☐ E ☐ W End _____ feet from reference marker _____

☐ N ☐ S ☐ E ☒ W from city of Ross, ND or _____ miles from junction highway _____

TYPE OF FACILITY (Complete appropriate spaces only.)

Description of Proposed Facility: Crude Oil Pipeline

Size of Facility	Number of Cables	Length of Down Guys
10", 0.344" Wall, X52 line pipe	NA	NA
Pipeline Pressure	**Size of Casing**	**Length of Casing**
1,440 psig	NA/Heavy Wall Pipe	NA
Location of Pole(s)	**Location of Appurtenances**	**Location - Others**
NA	NA	NA

TERMS AND CONDITIONS: Installation and maintenance of said facilities on highway right of way shall be subject to the North Dakota Department of Transportation's (NDDOT's) *"A Policy for Accommodation of Utilities on State Highway Right of Way"*, current edition, and the following terms and conditions, attached hereto and made a part hereof.

(A) Installation/maintenance of said facilities shall be done in a manner satisfactory to the NDDOT district engineer,

(B) Owner shall notify the NDDOT district engineer forty-eight (48) hours prior to installing, maintaining, relocating, or removing said facilities. All disturbed areas shall be restored to their original condition in a manner satisfactory to the NDDOT district engineer.

(C) The owner shall be required to wear an ANSI/ISEA 107-2004 Class II height visibility garment while within the highway right-of-way as per the requirements of 23 CFR 634.

(D) Owner shall repair or replace highway structures and appurtenances, and any existing facilities located on, over, or under highway right of way,which may be damaged as a result of the installation and maintenance of said facilities on highway right of way.

(E) The Risk Management Appendix, attached, is hereby incorporated and made a part of this agreement.

(F) Owner shall promptly remove said facilities from highway right of way, or shall relocate or adjust said facilities, at its sole cost and expense when requested to do so by NDDOT.

(G) NDDOT specifically reserves the right to revoke, or change the terms and conditions of, this Permit with or without cause and upon notice to the Owner.

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Continued page 2

(H) The Owner, for him or herself, his or her personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree that (1) no person, on the grounds of race, color, national origin, sex, age, disability/handicap, or income status**, shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land and the furnishing of services thereon, no person, on the grounds of race, color, national origin, sex, age, disability/handicap, or income status**, shall be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination, (3) that the Owner shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

That in the event of breach of any of the above nondiscrimination covenants, the NDDOT shall have the right to terminate this Permit and to re-enter and repossess said land and the facilities thereon and hold the same as if said Permit had never been made or issued.

**The Act governs race, color, and national origin. Related Nondiscrimination Authorities govern sex, 23 U.S.C. 324; age, 42 U.S.C. 6101; disability/handicap, 29 U.S.C. 790; and low income, E.O. 12898.

(I) The installation shall be completed on or before July 15, 2012

May 8, 2012
DATE

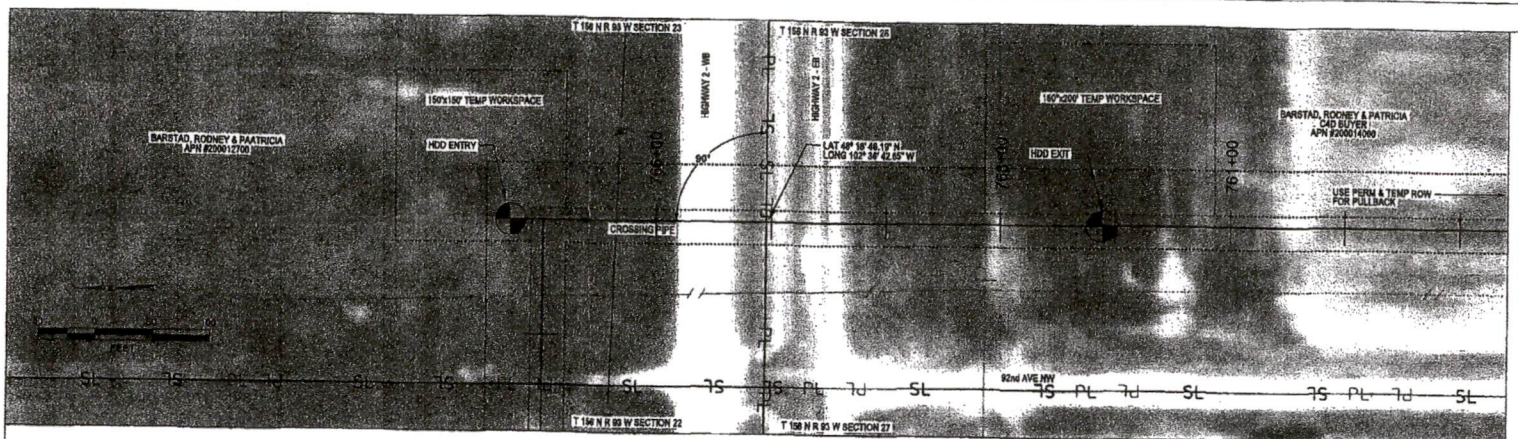
Ted E. Hoz
Supervisor Land & ROW
Plains Pipeline, L.P.
OWNER'S SIGNATURE

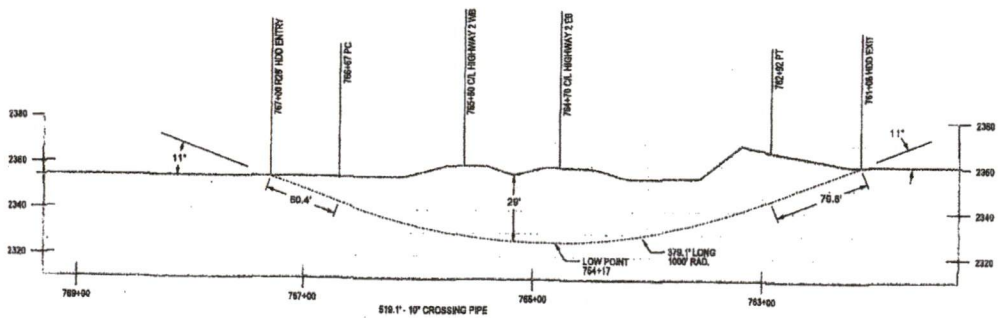
The Owner is hereby granted permission to install and maintain the facilities applied for, as shown on the plans attached hereto and made a part hereof.
Approved by NDDOT this 6 day of JUNE, 2012

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

WALTER A. PETERSON
DISTRICT ENGINEER (TYPE OR PRINT)

SIGNATURE





2X EXPANDED VERTICAL SCALE

* NO GEOTECHNICAL DATA AVAILABLE AT THIS TIME

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   HDD LENGTH: 519.1'
   HDD RADIUS: 1000'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE, 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD)
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 6' IN ROAD ROW.
11. PIPE / AMBIENT TEMPERATURE MUST BE NO LESS THAN 40° F DURING PULLBACK.
12. CONDUCT 4-HOUR PRE-INSTALLATION HYDROTEST OF HDD PIPE STRING TO 1550 PSIG.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING. NDOC UTILITY LOCATES MAY ALSO BE SCHEDULED ON LINE AT WWW.NDONECALL.COM.

LEGEND

VALVE	VALVE PLANT	RIVER XING/ANT		TEST LEAD	
TRACT NUMBER	GROUND MARKER	CASED PIPE		PIG TRAP	
ROTATION	WARNING SIGN	PIPE COATED PART		RECEIVER	
FOREIGN PIPELINE	BURIED CABLE	CENTERLINE		PROPERTY LINE	
FENCE	O.H. PHONE	TOPSOIL/PILING		CASING	
WATERLINE	STATE LINE	RESTRICTED		UGI UTILITY	

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	BLT	4-17-12

PREPARED BY

ROONEY ENGINEERING INC.
12201 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-5911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE

FROM NELSON FACILITY TO ROSS TERMINAL
HIGHWAY 2 DIRECTIONAL DRILL

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	3-23-11	02828	15765-D-1001
CHKD BY:	BLT	3-23-11		
ENGR:	BLT	3-23-11	REVISION	0

RECEIPT

North Dakota Department of Transportation
SFN 4200 (Rev. 2-2010)

Mail remittance to:
WILLISTON DISTRICT OFFICE
ND DEPARTMENT OF TRANSPORTATION
PO BOX 698
WILLISTON ND 58802-0698

Website: www.dot.nd.gov

Prepared By	Cash	Credit Card	Charge	On Account
Lori	Check			

Customer	B. J. Kadrmas, Inc
Address	PO Box 1282
City/State/Zip	Dickinson, ND 58602-1282

Date	June 8, 2012
NO.	R 7 1832

QUAN.	DESCRIPTION	PRICE	AMOUNT
	Utility Permit # 72039 (Phins Pipeline)		$100 00
	Received check # 23464 dated 5-27-12		
	TOTAL		$100 00

				Projects				
Ref. Line	Account	Fund	Dept. ID	Project I.D.	Activity	Resource Type	Resource Catg.	Amount
01	474035	200	0001					$100 00
02								
03								
04								

White - Customer Yellow - Financial Management Pink - Division/District

UTILITY OCCUPANCY APPLICATION AND PERMIT

North Dakota Department of Transportation, Design Division
SFN 7995 (Rev. 04-2011)

Document Number 72039	(FOR STATE USE ONLY)	Permit Number 7-8-154.5581

APPLICANT INFORMATION

Owner of Facility	City	State	Zip Code
Plains Pipeline, L.P.	Houston	TX	77002
Mailing Address			**Telephone Number**
P. O. Box 4648 Houston, TX 77210			(713) 646-4100
Owner's Agent	**City**	**State** / **Zip Code**	**Telephone Number**
Ted Hoz	Houston	TX 77002	(713) 993-5233
Owner's Contractor	**City**	**State**	**Telephone Number**

LOCATION NO. 1 (FOR STATE USE ONLY) Begin Ref. Point 154.5581 End Ref. Point _____

Highway No. 8 ☐ Along or ☒ Across Lanes of traffic ☒ 2 ☐ 4

Direction ☐ N ☒ S ☐ E ☐ W Begin 7412.47 feet from reference marker 155.962

Direction ☐ N ☐ S ☐ E ☐ W End _____ feet from reference marker _____

☐ N ☐ S ☐ E ☐ W from city of Stanley, ND or _____ miles from junction highway _____

TYPE OF FACILITY (Complete appropriate spaces only.)

Description of Proposed Facility
Crude Oil Pipeline

Size of Facility	Number of Cables	Length of Down Guys
10", 0.344" Wall, X52 line pipe	NA	NA
Pipeline Pressure	**Size of Casing**	**Length of Casing**
1,440 psig	NA/Heavy Wall Pipe	NA
Location of Pole(s)	**Location of Appurtenances**	**Location - Others**
NA	NA	NA

TERMS AND CONDITIONS: Installation and maintenance of said facilities on highway right of way shall be subject to the North Dakota Department of Transportation's (NDDOT's) *"A Policy for Accommodation of Utilities on State Highway Right of Way"*, current edition, and the following terms and conditions, attached hereto and made a part hereof.

(A) Installation/maintenance of said facilities shall be done in a manner satisfactory to the NDDOT district engineer,

(B) Owner shall notify the NDDOT district engineer forty-eight (48) hours prior to installing, maintaining, relocating, or removing said facilities. All disturbed areas shall be restored to their original condition in a manner satisfactory to the NDDOT district engineer.

(C) The owner shall be required to wear an ANSI/ISEA 107-2004 Class II height visibility garment while within the highway right-of-way as per the requirements of 23 CFR 634.

(D) Owner shall repair or replace highway structures and appurtenances, and any existing facilities located on, over, or under highway right of way,which may be damaged as a result of the installation and maintenance of said facilities on highway right of way.

(E) The Risk Management Appendix, attached, is hereby incorporated and made a part of this agreement.

(F) Owner shall promptly remove said facilities from highway right of way, or shall relocate or adjust said facilities, at its sole cost and expense when requested to do so by NDDOT.

(G) NDDOT specifically reserves the right to revoke, or change the terms and conditions of, this Permit with or without cause and upon notice to the Owner.

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Continued page 2

(H) The Owner, for him or herself, his or her personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree that (1) no person, on the grounds of race, color, national origin, sex, age, disability/handicap, or income status**, shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land and the furnishing of services thereon, no person, on the grounds of race, color, national origin, sex, age, disability/handicap, or income status**, shall be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination, (3) that the Owner shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

That in the event of breach of any of the above nondiscrimination covenants, the NDDOT shall have the right to terminate this Permit and to re-enter and repossess said land and the facilities thereon and hold the same as if said Permit had never been made or issued.

**The Act governs race, color, and national origin. Related Nondiscrimination Authorities govern sex, 23 U.S.C. 324; age, 42 U.S.C. 6101; disability/handicap, 29 U.S.C. 790; and low income, E.O. 12898.

(I) The installation shall be completed on or before July 15, 2012

May 8, 2012 — DATE

Ted E. Hoz — OWNER'S SIGNATURE

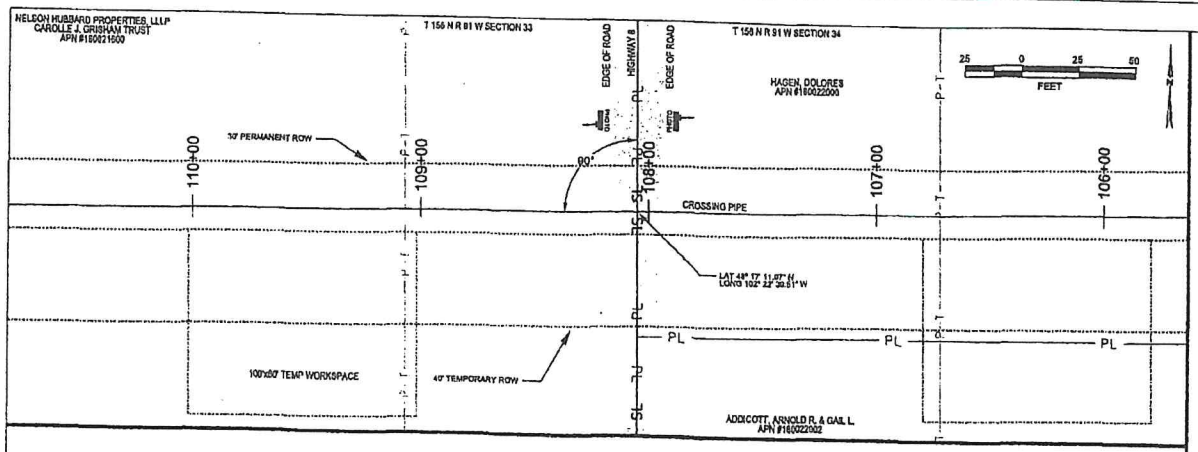
Ted E. Hoz
Supervisor Land & Row
Plains Pipeline

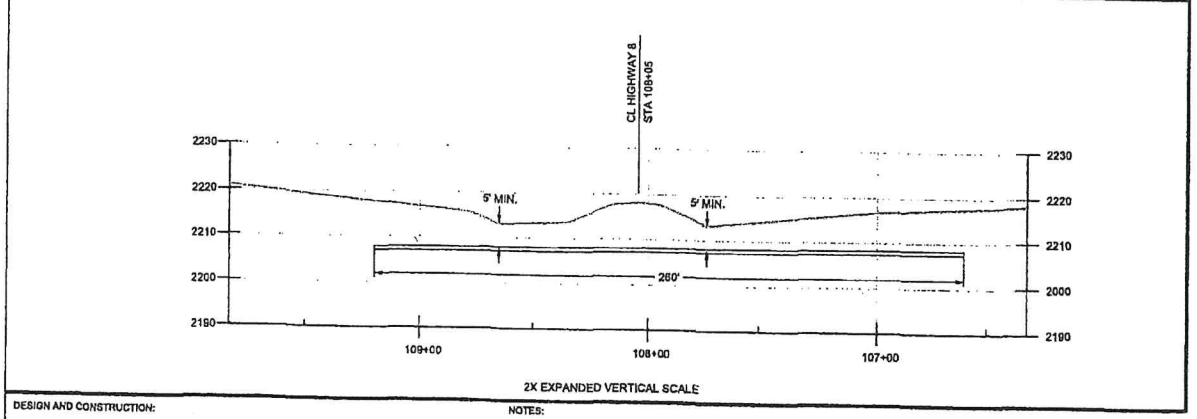
The Owner is hereby granted permission to install and maintain the facilities applied for, as shown on the plans attached hereto and made a part hereof.
Approved by NDDOT this 6 day of JUNE, 20 12

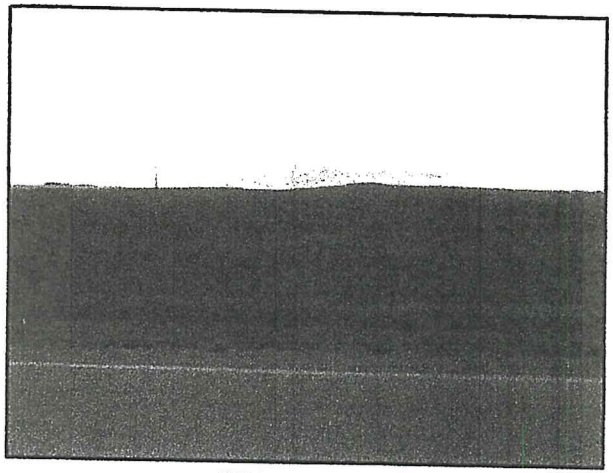
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

WALTER A. PETERSEN
DISTRICT ENGINEER (TYPE OR PRINT)

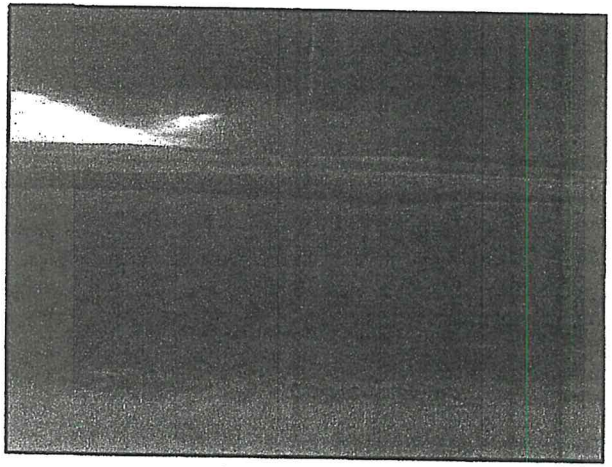
SIGNATURE







LOOKING SOUTH ON WEST SIDE OF ROAD



LOOKING SOUTH ON EAST SIDE OF ROAD

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 260'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

PIPE	MILE POST	RIVER WEIGHT	TEST LEAD		
TRACT NUMBER	ROW MARKER	CASED PIPE	P-I TRAP		
EQUATION	WARNING SIGN	CONC COATED PIPE	RECTIFIER		
FOREIGN PIPELINE	BURIED CABLE	COUNTY/PARISH	PROPERTY LINE		
FENCE	O.H. POWER	RAILROAD/MAINLINE	ROAD		
WATERWAY	STATE LINE	SECTION LINE	LPG STEEL		

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	CG	4-13-11

PREPARED BY

ROONEY ENGINEERING INC.
12201 E. ARAPAHOE RD., EC-10
CENTENNIAL, CO 80112
(303) 792-0911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
HIGHWAY 8 BORE

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	5-24-11	02826	15765-M-1011
CHKD BY:	CG	5-24-11		
ENGR:	CG	5-24-11	REVISION:	0

County Permits

B.J. KADRMAS INC
"COMPLETE LAND SERVICE SINCE 1981."

161 FIRST AVENUE SOUTHEAST • P.O. BOX 1282
DICKINSON, NORTH DAKOTA 58602-1282

May 10, 2012

Mountrail County
Attn: John Sauber
101 North Main Street
Stanley, ND 58784

RE: Plains Pipeline consent for utility company applications

Dear John:

Please find the following enclosed documents to be executed:

1. Fourteen (14) checks in the amount of $150.00 to cover application fees.
2. Fourteen (14) utility occupancy application and permits, one for Highway 8, one for Highway 2, in Mountrail county ND.
3. Fourteen (14) project plats with design and construction notes.
4. Fourteen (14) certificates of Liability Insurance.

If there is anything that was not included with these applications please call the number listed below so that I can get the information to you as soon as possible. When the applications are complete please mail back the permits in the included self addressed stamped envelope.

Sincerely,

Corey Schmitt
Land Agent for B. J. Kadrmas Inc.

bjkadrmas@ndsupernet.com • TOLL FREE: 1-800-730-0361 • BUSINESS: 701-225-0361 • FAX: 701-227-0421

CONSENT FOR UTILITY COMPANY TO
CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. of P. O. Box 4648, Houston, Texas 77210-4648
(Company) (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 93rd Avenue NW in Section(s) 16,15, Township 156 N, Range 93 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 20 12.

TED ETOZ

Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233

Telephone Number

County Auditor: Please return a copy of the signed permit to:

B.J. Kadrmas Inc.

Company or Agent Name

PO Box 1282

Mailing Address

Dickinson ND 58602

City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this 11th day May, 2012.

Joan M. Hollehan

Signature, County Auditor

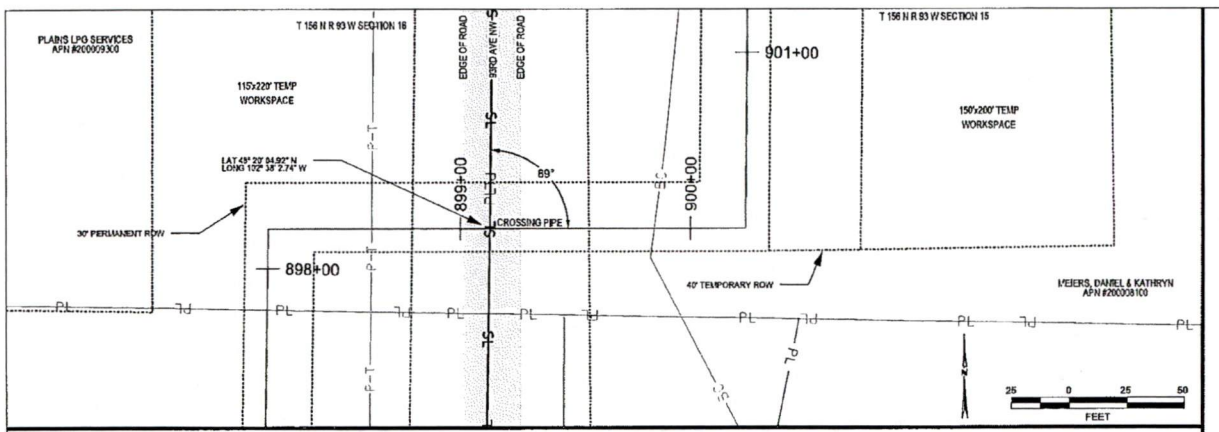
Reviewed by Mountrail County Road Engineer 17 day May, 2012.

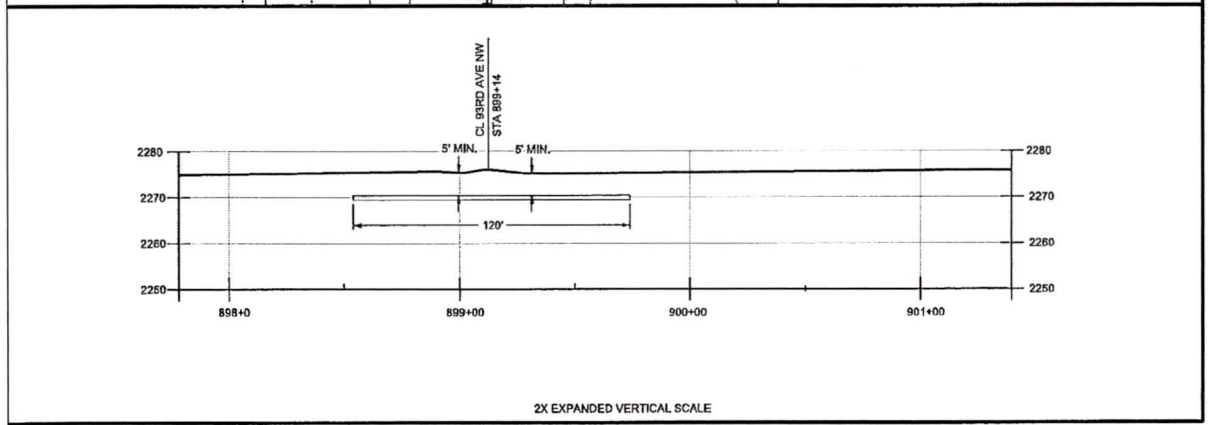
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this 5th day of June 20 12.

Arlo Borud

Chairman of the Board
Mountrail County Board of County Commissioners





2X EXPANDED VERTICAL SCALE

NO PHOTO AVAILABLE

NO PHOTO AVAILABLE

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 120'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE · PIPE POST · FIBER INSERT · TEST LEAD
TRACER WIRE · GROUND MARKER · CASED PIPE · PIG TRAP
EXCAVATION · WARNING SIGN · CONC. COATED PIPE · RECTIFIER
FOREIGN PIPELINE · BURIED CABLE · COUNTY ROADS · PROPERTY LINE
FENCE · OIL PIPELINE · TENNESSEE GAS · CREEK
WATERWAY · STATE LINE · SECTION LINE · UG UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	GB	4-11-12

PREPARED BY

ROONEY ENGINEERING INC.
12201 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-0911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
93RD AVE NW BORE

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	8-23-11	02826	15765-M-1020
CHKD BY:	GB	8-23-11		
ENGR:	GB	8-23-11		REVISION: 0

CONSENT FOR UTILITY COMPANY TO
CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. of P. O. Box 4648, Houston, Texas 77210-4648
(Company) (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 93rd Avenue NW in Section(s) 16,15, Township 156 N, Range 93 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

    (a) County paved roads or County roads treated with road stabilization materials may only be bored.
    (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
    (c) Pipe shall be cased or heavy wall pipe used.
    (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
    (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
    (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
    (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
    (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
    (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 20 12.

Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233
Telephone Number

County Auditor: Please return a copy of the signed permit to:

B.J. Kadrmas Inc.
Company or Agent Name

PO Box 1282
Mailing Address

Dickinson ND 58602
City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this 11th day May, 2012.

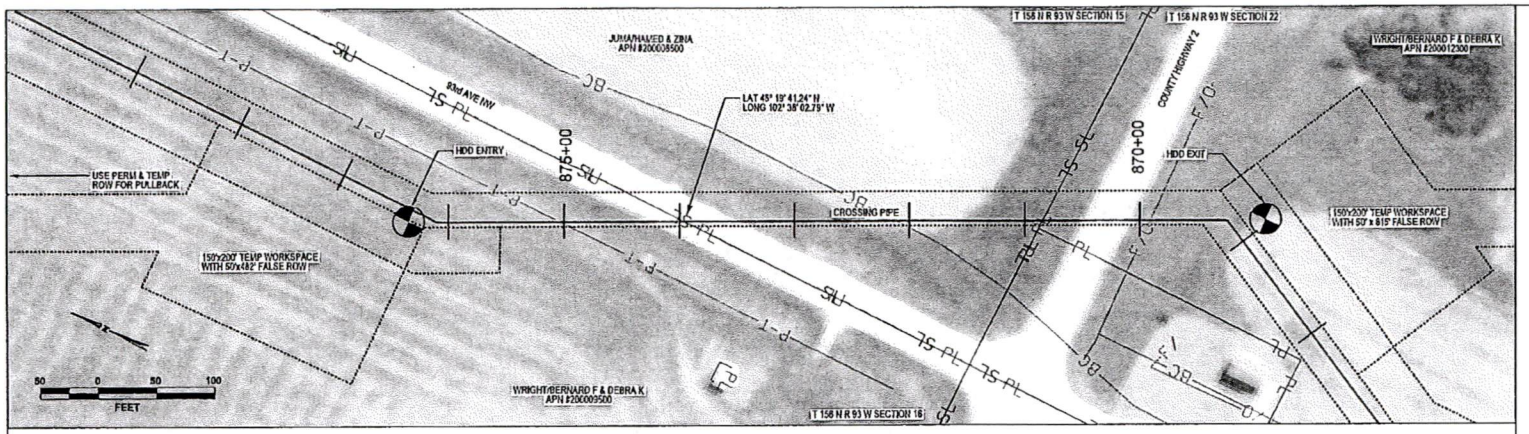
Joan M. Hallehan
Signature, County Auditor

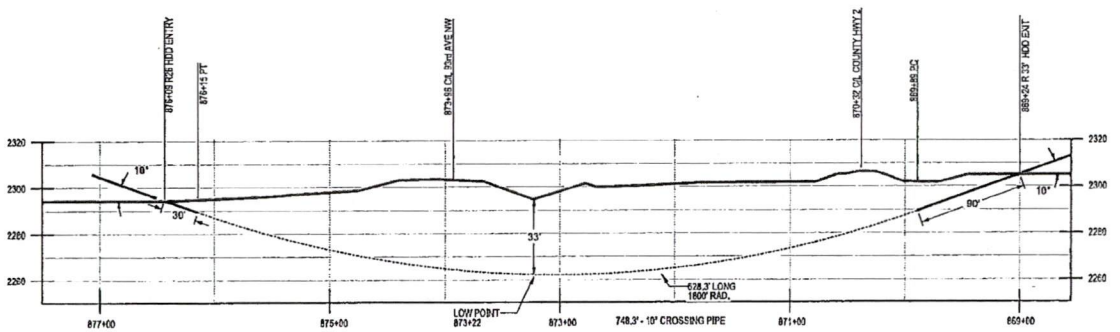
Reviewed by Mountrail County Road Engineer 17 day May, 2012

Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this 5th day of June 20 12.

Chairman of the Board
Mountrail County Board of County Commissioners





2X EXPANDED VERTICAL SCALE

* NO GEOTECHNICAL DATA AVAILABLE AT THIS TIME

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   HDD LENGTH: 748.3'
   HDD RADIUS: 1800'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE, 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD)
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.
11. PIPE / AMBIENT TEMPERATURE MUST BE NO LESS THAN 40° F DURING PULLBACK.
12. CONDUCT 4-HOUR PRE-INSTALLATION HYDROTEST OF HDD PIPE STRING TO 1850 PSIG.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING. NDOC UTILITY LOCATES MAY ALSO BE SCHEDULED ON LINE AT WWW.NDONECALL.COM.

LEGEND

VALVE, MILE POST, RIVER WEIGHT, TEST LEAD, TRACT NUMBER, GROUND MARKER, CASED PIPE, PIG TRAP, BOLATION, WARNING SIGN, COAT. COATED PIPE, PROTECTED, PIPELINE, BURIED CABLE, COUNTY LINE, PROPERTY LINE, FENCE, RAILROAD, TOWNSHIP LINE, CREEK, WATERWAY, STATE LINE, SECTION LINE, UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DRWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	BLT	4-27-12

PREPARED BY

ROONEY ENGINEERING INC.
13291 E. ARAPAHOE RD., #C-19
CENTENNIAL, CO 80112
(303) 792-5911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
HIGHWAY 2 AND 93rd AVE DIRECTIONAL DRILL

	AS DRWN	DATE
SCALE:		
DRWN BY:	TC	8-23-11
CHKD BY:	BLT	8-23-11
ENGR:	BLT	8-23-11

PROJECT NO. 02828

DRAWING NO. 15765-D-1003

REVISION # 0

CONSENT FOR UTILITY COMPANY TO
CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. of P. O. Box 4648, Houston, Texas 77210-4648
(Company) (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 90th Avenue NW in Section(s) 36, Township 156 N, Range 93 W and Section(s) 31, Township 156 N, Range 92 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

    (a) County paved roads or County roads treated with road stabilization materials may only be bored.
    (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
    (c) Pipe shall be cased or heavy wall pipe used.
    (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
    (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
    (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
    (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
    (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
    (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

Ted Hoz

Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233

Telephone Number

County Auditor: Please return a copy of the signed permit to:

B.J. Kadrmas Inc.

Company or Agent Name

PO Box 1282

Mailing Address

Dickinson ND 58602

City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this 11th day May, 2012.

Joan M. Hollehan

Signature, County Auditor

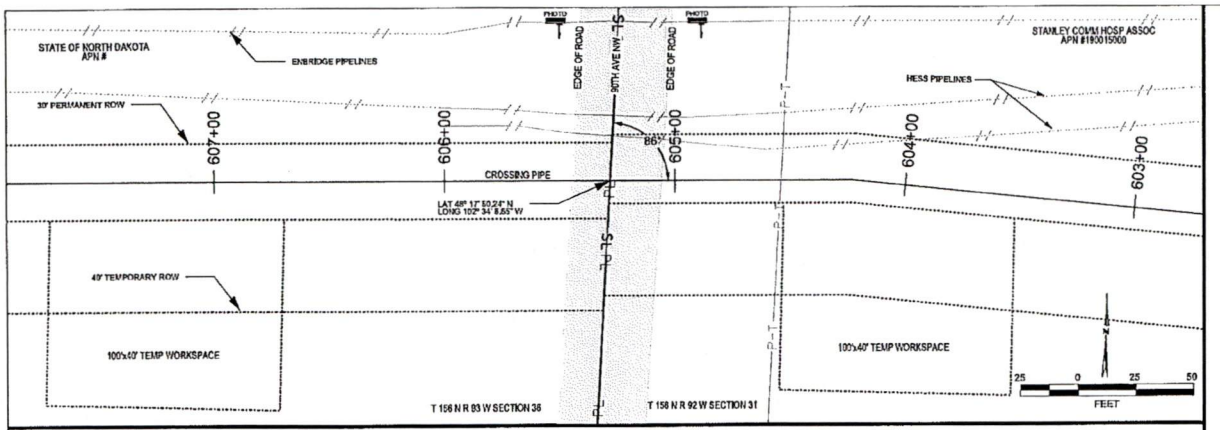
Reviewed by Mountrail County Road Engineer 17 day May, 2012

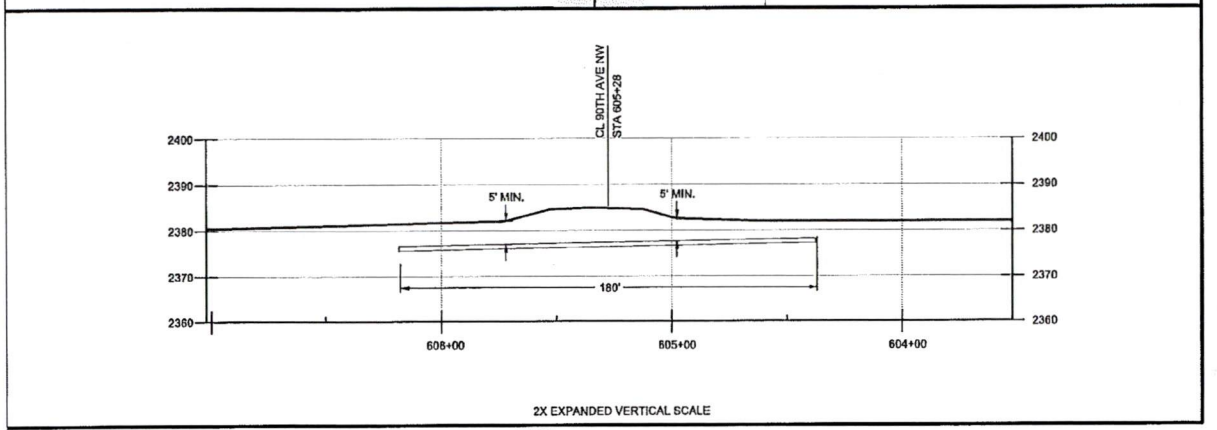
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this 5th day of June 20 12.

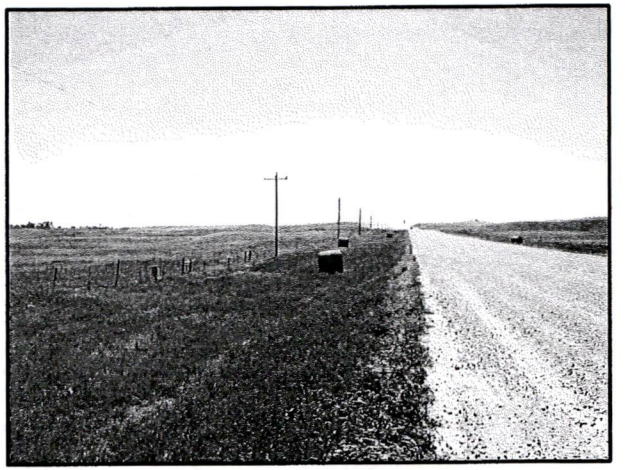
Arlo Board

Chairman of the Board
Mountrail County Board of County Commissioners

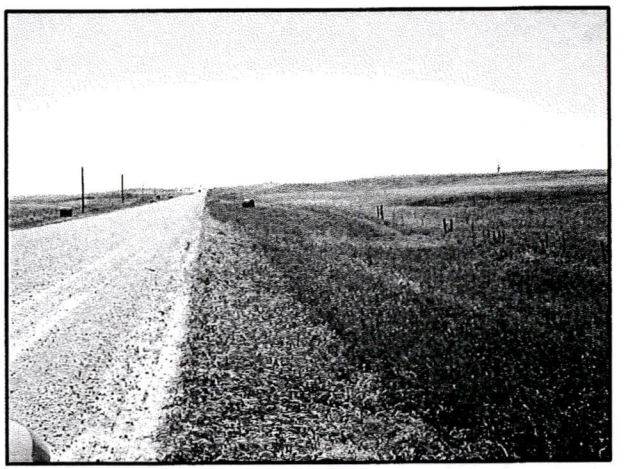




2X EXPANDED VERTICAL SCALE



LOOKING SOUTH ON EAST SIDE OF ROAD



LOOKING SOUTH ON WEST SIDE OF ROAD

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 180'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE · VALVE POST · RIVER XING-T · TEST LEAD
TRACT MARKER · GROUND MARKER · CASED PIPE · PIG TRAP
ROTATION · WARNING SIGN · COAT. COATED PIPE · FIRE PIPE
FOREIGN PIPELINE · E BURIED CABLE · COUNTY PARISH · P PROPERTY LINE
FENCE · T OUT PATROL · TOWNSHIP RANGE · ROAD
RAILROAD · STATE LINE · S SECTION LINE · U/G UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	GS	4-11-12

PREPARED BY
ROONEY ENGINEERING INC.
12301 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-5911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
90TH AVE NW BORE

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	9-24-11	02826	15765-M-1019
CHKD BY:	GS	9-24-11		
ENGR:	GS	9-24-11	REVISION:	0

CONSENT FOR UTILITY COMPANY TO
CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. of P. O. Box 4648, Houston, Texas 77210-4648
(Company) (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route Old Highway 2 in Section(s) 22,15, Township 156 N, Range 93 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

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    (a) County paved roads or County roads treated with road stabilization materials may only be bored.
    (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
    (c) Pipe shall be cased or heavy wall pipe used.
    (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
    (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
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    (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

Ted E. Hoz

Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233

Telephone Number

County Auditor: Please return a copy of the signed permit to:

B.J. Kadrmas Inc.

Company or Agent Name

PO Box 1282

Mailing Address

Dickinson ND 58602

City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this 11th day May, 2012.

Joan M. Hollerum

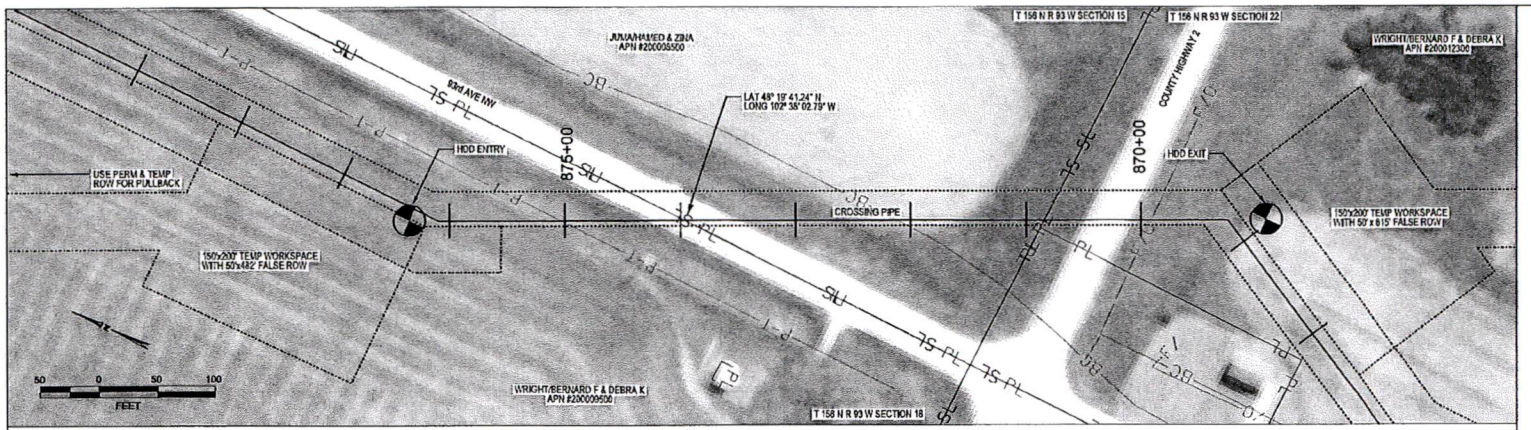
Signature, County Auditor

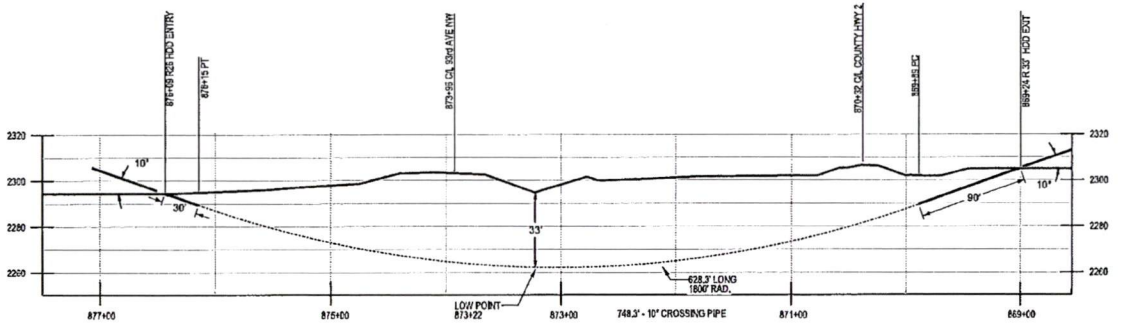
Reviewed by Mountrail County Road Engineer 17 day May, 2012.

Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this 5th day of June 2012.

Chairman of the Board
Mountrail County Board of County Commissioners





2X EXPANDED VERTICAL SCALE

* NO GEOTECHNICAL DATA AVAILABLE AT THIS TIME

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   HDD LENGTH: 748.3'
   HDD RADIUS: 1800'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE, 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD)
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.
11. PIPE / AMBIENT TEMPERATURE MUST BE NO LESS THAN 40° F DURING PULLBACK.
12. CONDUCT 4-HOUR PRE-INSTALLATION HYDROTEST OF HDD PIPE STRING TO 1850 PSIG.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING. NDOC UTILITY LOCATES MAY ALSO BE SCHEDULED ON LINE AT WWW.NDONECALL.COM.

LEGEND

VALVE · MILE POST · RIVER WEIGHT · TEST LEAD
TRACT MARKER · GROUND MARKER · CASED PIPE · PIG TRAP
BOX AT/EN · WARNING SIGN · CONC. COATED PIPE · RECTIFIER
FOREIGN PIPELINE · BURIED CABLE · COUNTY/PARISH · PROPERTY LINE
FENCE · O.H. POWER · TOWNSHIP/RANGE · STATE
GATEWAY · STATE LINE · SECTION LINE · US UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.
→		

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	BLT	6-17-12

PREPARED BY

ROONEY ENGINEERING INC.
12291 E. ARAPAHOE RD., BC-10
CENTENNIAL, CO 80112
(303) 792-0911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
HIGHWAY 2 AND 93rd AVE DIRECTIONAL DRILL

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	9-23-11	02828	15765-D-1003
CHKD BY:	BLT	9-23-11		
ENGR:	BLT	9-23-11	REVISION:	0

ROSS TOWNSHIP

CONSENT FOR UTILITY COMPANY TO CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. (Company) of P. O. Box 4648, Houston, Texas 77210-4648 (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 89th Avenue NW in Section(s) 31,32, Township 156 N, Range 92 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

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Dated this 7th day of May 2012.

TED Etoz

Authorized Agent of Utility Company Ted Hoz Supervisor Plains

713-993-5233

Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas, Inc., Attn: Corey

Company or Agent Name

PO Box 1282

Mailing Address

Dickinson, ND 58602

City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

_____

Signature, County Auditor

Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

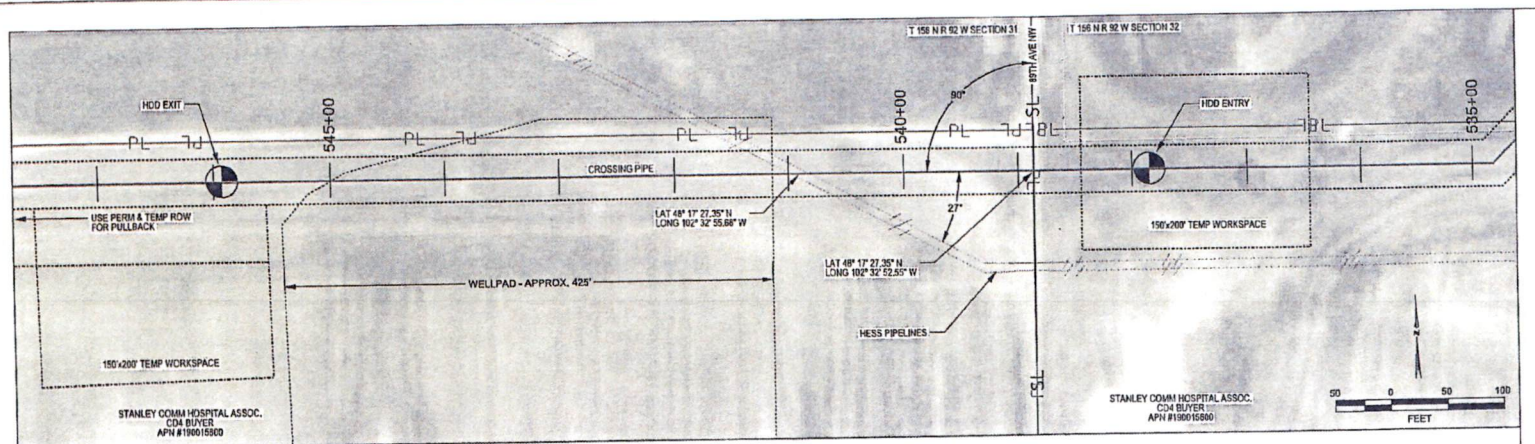
_____

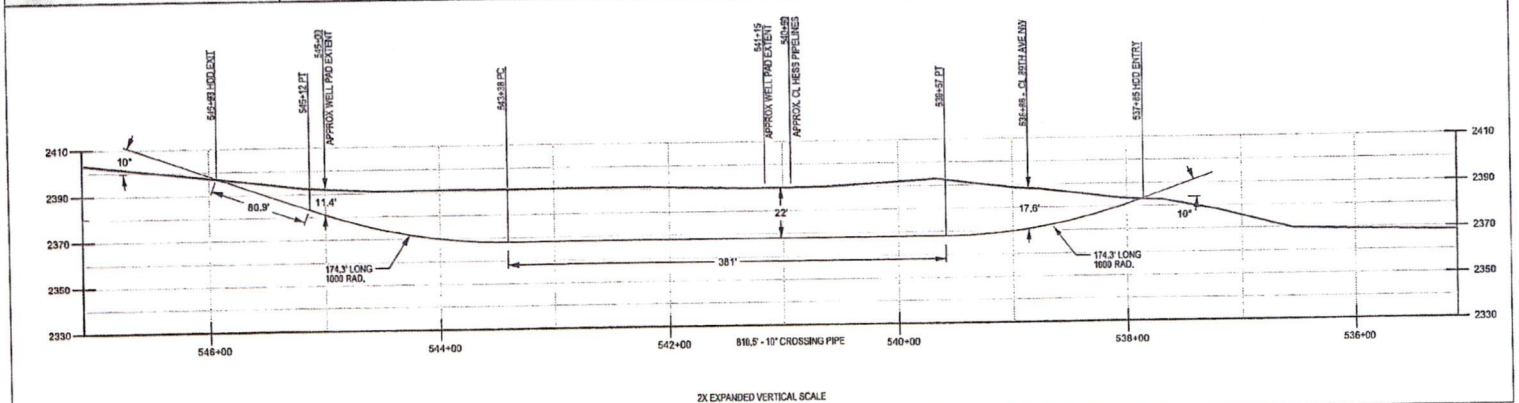
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

_____

Chairman of the Board
Mountrail County Board of County Commissioners





2X EXPANDED VERTICAL SCALE

* NO GEOTECHNICAL DATA AVAILABLE AT THIS TIME

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   HDD LENGTH: 810.5'
   HDD RADIUS: 1000'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE, 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD)
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.
11. PIPE / AMBIENT TEMPERATURE MUST BE NO LESS THAN 40° F DURING PULLBACK.
12. CONDUCT 4-HOUR PRE-INSTALLATION HYDROTEST OF HDD PIPE STRING TO 1850 PSIG.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING. NDOC UTILITY LOCATES MAY ALSO BE SCHEDULED ON LINE AT WWW.NDONECALL.COM.

LEGEND

VALVE, MILE POST, RIVER WEIGHT, TEST LEAD, TRACT MARKER, GROUND MARKER, CASED PIPE, PIG TRAP, EQUATION, WARNING SIGN, CONC. COATED PIPE, REDUCER, FOREIGN PIPELINE, BURIED CABLE, CONIFER/EVERGREEN, PROPERTY LINE, FENCE, GAS PIPELINE, DECIDUOUS/BROADLEAF, CROAD, WATERWAY, STATE LINE, SECTION LINE, UG UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS				
REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	AF	BLT	4-16-12

PREPARED BY

ROONEY ENGINEERING INC.
12261 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-5911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM 8" PIPELINE TIE-IN TO ROSS TERMINAL
89TH AVE/WELL PAD DIRECTIONAL DRILL

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	9-23-11	02828	15785-D-1004
CHKD BY:	BLT	9-25-11		
EADR:	BLT	9-23-11	REVISION:	0

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY): 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER: LOCKTON COMPANIES, LLC 5847 San Felipe, Suite 320 Houston TX 77057	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Aspen Insurance UK Limited	11680
INSURER B : National Union Fire Ins Co Pittsburgh PA	19445
INSURER C : New Hampshire Insurance Company	23841
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
1317577 PLAINS ALL AMERICAN PIPELINE, L.P.
PLAINS MARKETING, L.P.
PLAINS PIPELINE, L.P.
333 CLAY STREET, SUITE 1600
HOUSTON TX 77002

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY X CLAIMS-MADE ☐ OCCUR X S&A Included X $1M SIR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY ☐ PRO-JECT ☐ LOC	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 500,000 $ XXXXXXX $ XXXXXXX $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS ☐ SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS X MCS-90 X CA9948	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX
	☐ UMBRELLA LIAB ☐ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $			NOT APPLICABLE			EACH OCCURRENCE AGGREGATE	$ XXXXXXX $ XXXXXXX
C C C C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	1591426-AOS 1591427-CA 1591428-TX 1591430-WI / 9876344-FL	6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/2012 6/1/2012 6/1/2012 6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 2,000,000 $ 2,000,000 $ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

All Policies include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All Policiies includes a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.

CONSENT FOR UTILITY COMPANY TO CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. (Company) of P. O. Box 4648, Houston, Texas 77210-4648 (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 88th Avenue NW in Section(s) 32,33, Township 156 N, Range 92 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

TED E. HOZ
Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233
Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas, Inc, Attn: Corey
Company or Agent Name

PO Box 1282
Mailing Address

Dickinson, ND 58602
City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

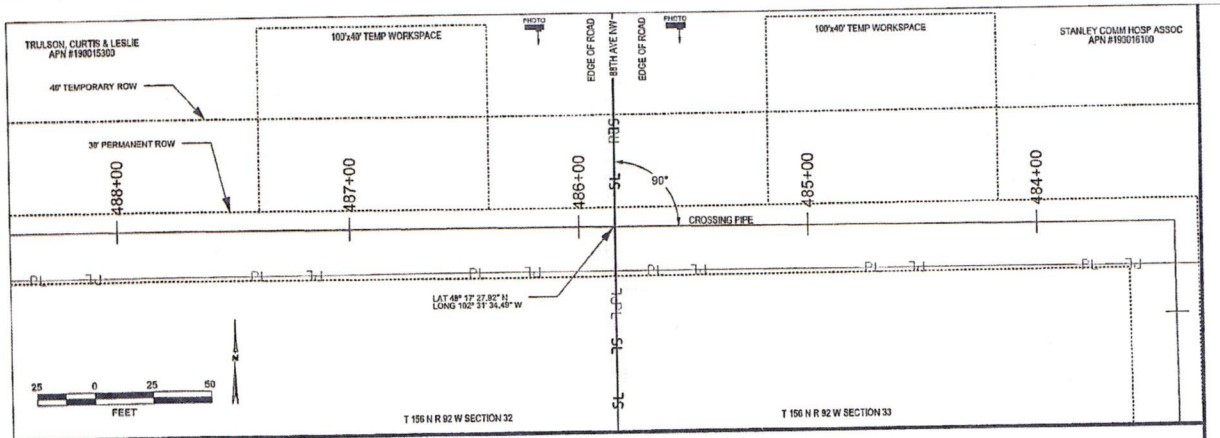
_____
Signature, County Auditor

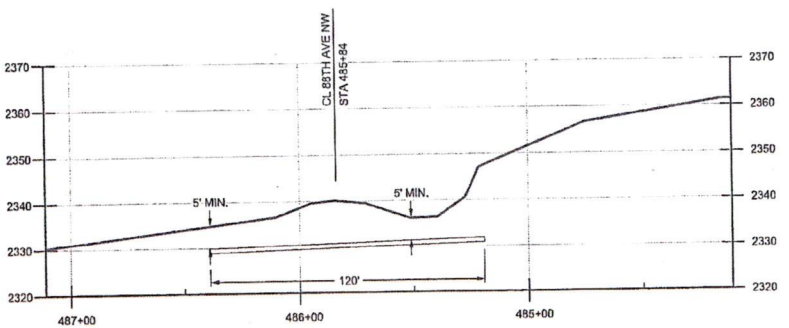
Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

_____
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

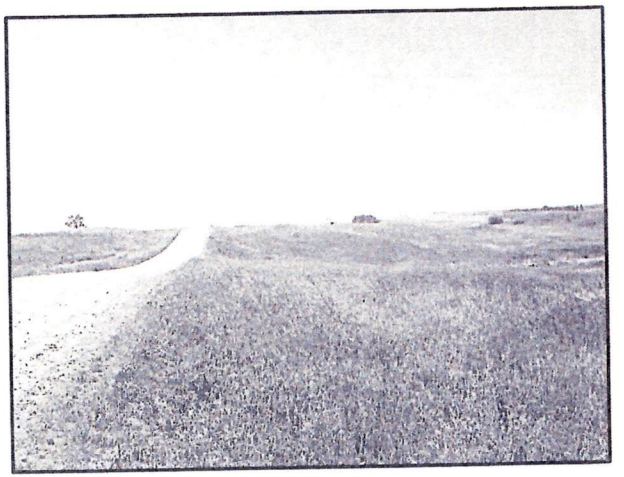
_____
Chairman of the Board
Mountrail County Board of County Commissioners





2X EXPANDED VERTICAL SCALE

LOOKING SOUTH ON EAST SIDE OF ROAD



LOOKING SOUTH ON WEST SIDE OF ROAD

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 120'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE, MILE POST, RIVER WEIGHT, TEST LEAD, TRACT MARKER, GROUND MARKER, CASED PIPE, PIG TRAP, EQUATION, WARNING SIGN, COAT. COATED PIPE, RECTIFIER, FOREIGN PIPELINE, BURIED CABLE, CONIFER/FARM, PROPERTY LINE, FENCE, GAS PIPELINE, TOWNSHIP/RANGE, CROSS, WATERWAY, STATE LINE, SECTION LINE, UG UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	GB	4-17-12

PREPARED BY

ROONEY ENGINEERING INC.
12201 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-5911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
88TH AVE NW BORE

SCALE:	AS SHWN	DATE:	PROJECT NO.	DRAWING NO.	
DSN BY:	TL	5-24-11	02826	15705-M-1617	
CHKD BY:	GB	5-24-11			
ENGR:	GB	5-24-11		REVISION:	0

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY) 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER LOCKTON COMPANIES, LLC 5847 San Felipe, Suite 320 Houston TX 77057	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS:	FAX (A/C, No):
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Aspen Insurance UK Limited	11680
INSURED 1317577 PLAINS ALL AMERICAN PIPELINE, L.P. PLAINS MARKETING, L.P. PLAINS PIPELINE, L.P. 333 CLAY STREET, SUITE 1600 HOUSTON TX 77002	INSURER B : National Union Fire Ins Co Pittsburgh PA	19445
	INSURER C : New Hampshire Insurance Company	23841
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE	$ 2,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 500,000
	X CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$ XXXXXXX
	X S&A Included						PERSONAL & ADV INJURY	$ XXXXXXX
	X $1M SIR						GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
	X POLICY ☐ PRO-JECT ☐ LOC							$
B	AUTOMOBILE LIABILITY	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$ XXXXXXX
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$ XXXXXXX
	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$ XXXXXXX
	X MCS-90 X CA9948							$ XXXXXXX
	☐ UMBRELLA LIAB ☐ OCCUR			NOT APPLICABLE			EACH OCCURRENCE	$ XXXXXXX
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$ XXXXXXX
	☐ DED ☐ RETENTION $							$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N		Y	1591426-AOS	6/1/2011	6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER	
C	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) N	N/A		1591427-CA	6/1/2011	6/1/2012	E.L. EACH ACCIDENT	$ 2,000,000
C	If yes, describe under DESCRIPTION OF OPERATIONS below			1591428-TX	6/1/2011	6/1/2012	E.L. DISEASE - EA EMPLOYEE	$ 2,000,000
C				1591430-WI / 9876344-FL	6/1/2011	6/1/2012	E.L. DISEASE - POLICY LIMIT	$ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

All Policies include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All Policiies includes a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.

CONSENT FOR UTILITY COMPANY TO CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. (Company) of P. O. Box 4648, Houston, Texas 77210-4648 (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 87th Avenue NW in Section(s) 33,34, Township 156 N, Range 92 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

TED E. HOZ

Authorized Agent of Utility Company Supervisor Land

713-993-5233

Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas, Inc., Attn: Corey

Company or Agent Name

PO Box 1282

Mailing Address

Dickinson, ND 58602

City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

_____

Signature, County Auditor

Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

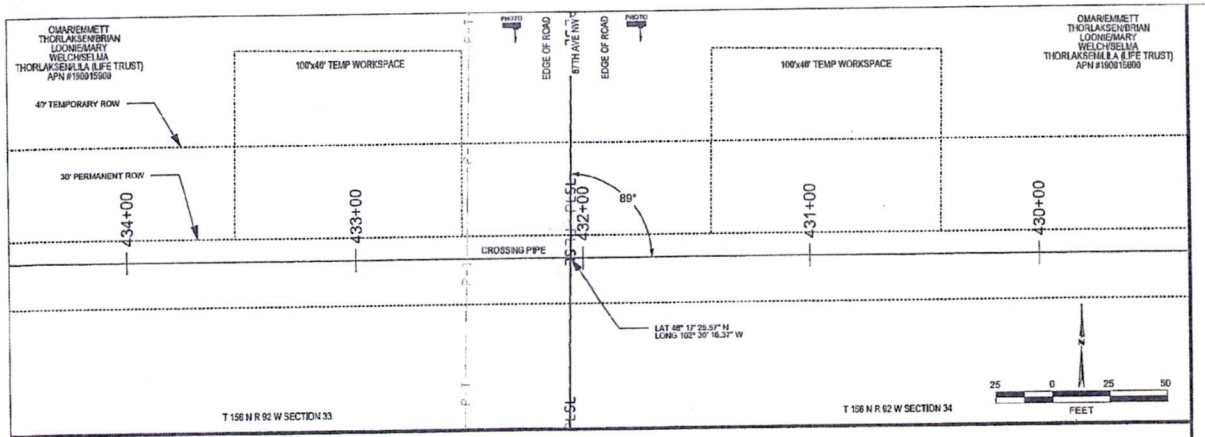
_____

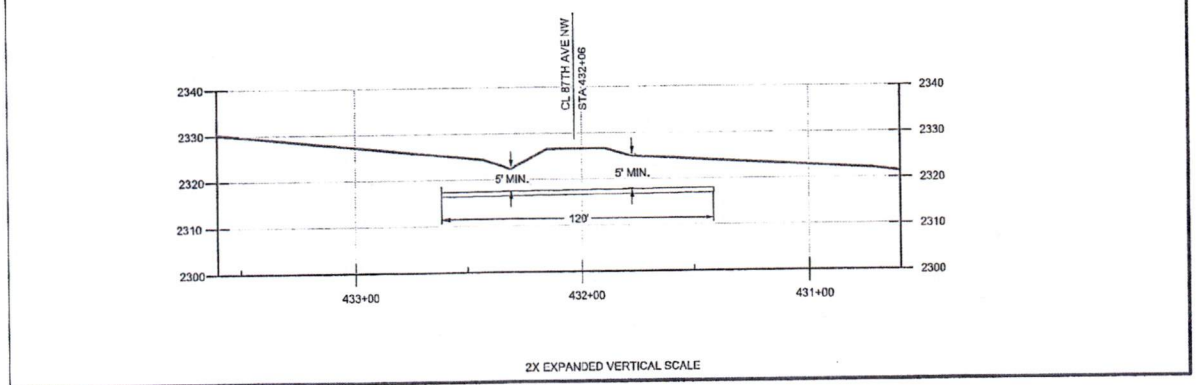
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

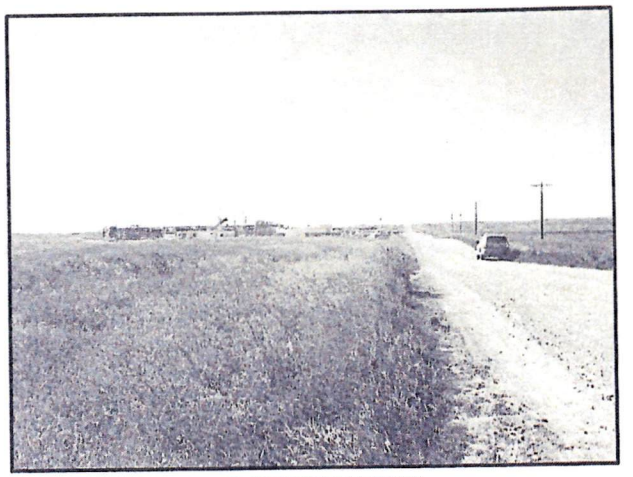
_____

Chairman of the Board
Mountrail County Board of County Commissioners

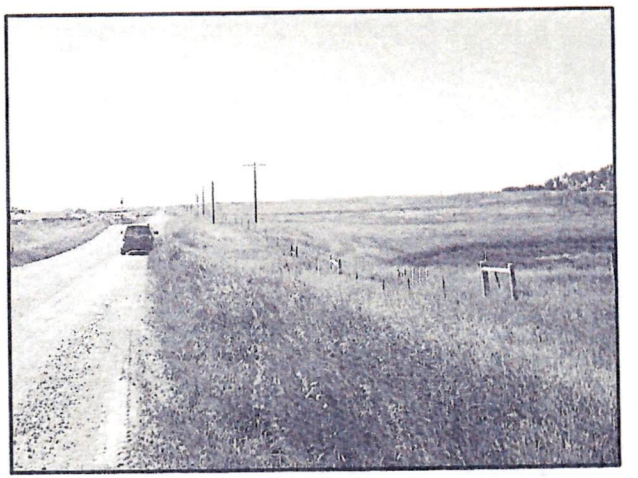




2X EXPANDED VERTICAL SCALE



LOOKING SOUTH ON EAST SIDE OF ROAD



LOOKING SOUTH ON WEST SIDE OF ROAD

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 129'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

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2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
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4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE | MILE POST | PAVER MARKER | TEST LEAD
TRACT MARKER | GROUND MARKER | CASED PIPE | PIG TRAP
DEVIATION | WARNING SIGN | COAX/COATED PIPE | DISCHARGE
FOREIGN PIPELINE | BURIED CABLE | COUNTERPARISH | PROPERTY LINE
FENCE | OIL PIPEWELL | BORING/DRAINAGE | ROAD
WATERWAY | STATE LINE | SECTION LINE | UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DRWN	CHKD	DATE
0	ISSUED FOR REVIEW	JW	GB	6-15-12

PREPARED BY

ROONEY ENGINEERING INC.
13391 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-5911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
87TH AVE NW BORE

SCALE:	AS SHOWN	DATE	PROJECT NO.	DRAWING NO.
DSN. BY:	TL	9-21-11	02826	15765-M-1010
CHK'D BY:	GB	9-24-11		
ENGR:	GB	9-24-11	REVISION:	0

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY) 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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PRODUCER LOCKTON COMPANIES, LLC 5847 San Felipe, Suite 320 Houston TX 77057	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:
INSURED 1317577 PLAINS ALL AMERICAN PIPELINE, L.P. PLAINS MARKETING, L.P. PLAINS PIPELINE, L.P. 333 CLAY STREET, SUITE 1600 HOUSTON TX 77002	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Aspen Insurance UK Limited — 11680 INSURER B : National Union Fire Ins Co Pittsburgh PA — 19445 INSURER C : New Hampshire Insurance Company — 23841 INSURER D : INSURER E : INSURER F :

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY X CLAIMS-MADE ☐ OCCUR X S&A Included X $1M SIR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY ☐ PRO-JECT ☐ LOC	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 500,000 $ XXXXXXX $ XXXXXXX $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS ☐ SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS X MCS-90 X CA9948	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX
	UMBRELLA LIAB ☐ OCCUR EXCESS LIAB ☐ CLAIMS-MADE DED ☐ RETENTION $			NOT APPLICABLE			EACH OCCURRENCE AGGREGATE	$ XXXXXXX $ XXXXXXX
C C C C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	1591426-AOS 1591427-CA 1591428-TX 1591430-WI / 9876344-FL	6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/2012 6/1/2012 6/1/2012 6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 2,000,000 $ 2,000,000 $ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

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AUTHORIZED REPRESENTATIVE

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

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CONSENT FOR UTILITY COMPANY TO CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. (Company) of P. O. Box 4648, Houston, Texas 77210-4648 (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

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(Attach maps and construction plans)
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1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

Ted Hoz

Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233

Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas, Inc., Attn: Corey

Company or Agent Name

PO Box 1282

Mailing Address

Dickinson, ND 58602

City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

_____

Signature, County Auditor

Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

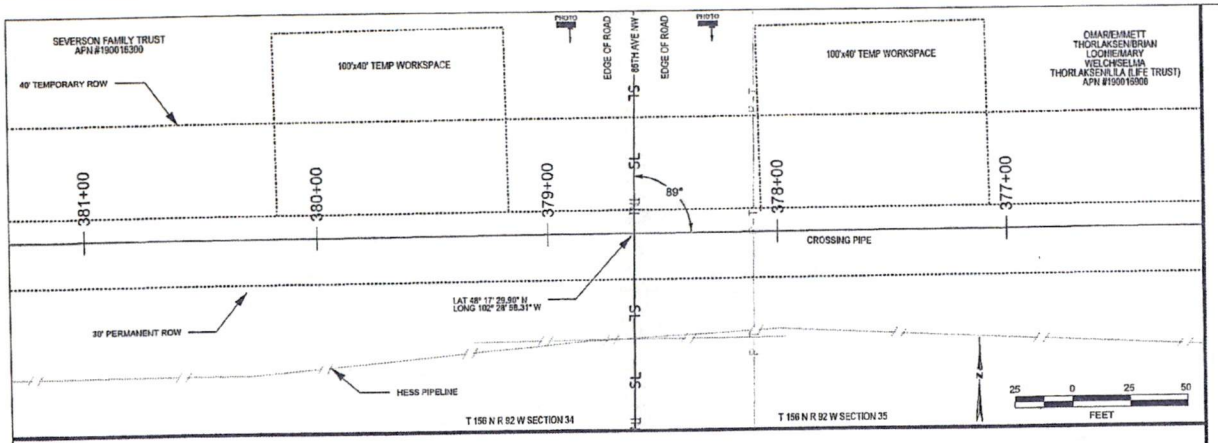
_____

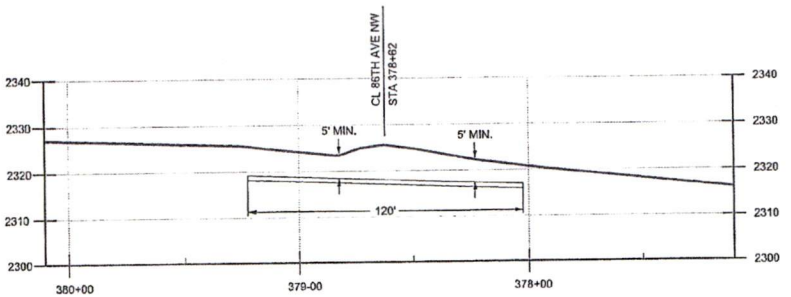
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

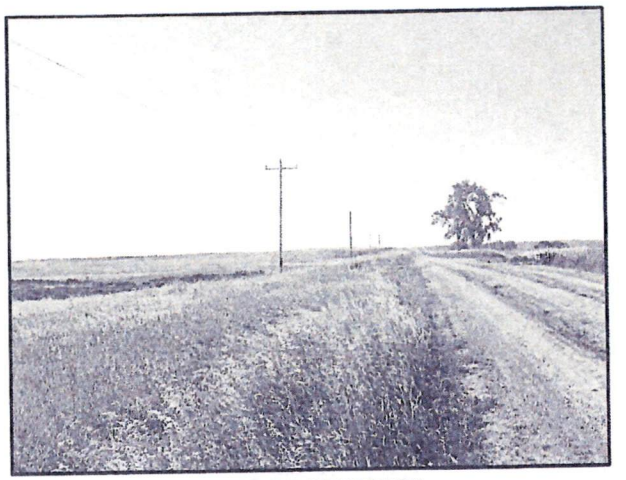
_____

Chairman of the Board
Mountrail County Board of County Commissioners

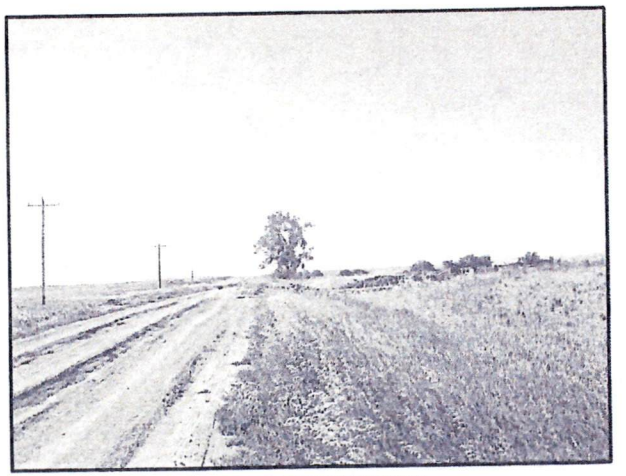




2X EXPANDED VERTICAL SCALE



LOOKING SOUTH ON EAST SIDE OF ROAD



LOOKING SOUTH ON WEST SIDE OF ROAD

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 120'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE · MILE POST · RIVER XING · TEST LEAD
TRACT MARKER · GROUND MARKER · CASED PIPE · PIG TRAP
EQUATION · WARNING SIGN · COAT. COATED PIPE · RISER/PIER
FOREIGN PIPELINE · MARKER CABLE · COUNTY/PARISH · PROPERTY LINE
FENCE · O/U PWR/TEL · TOWNSHIP/RANGE · ROAD
WATERWAY · STATE LINE · SECTION LINE · U/G UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DRWN	CHKD	DATE
0	ISSUED FOR REVIEW	JW	GB	4-13-12

PREPARED BY

ROONEY ENGINEERING INC.
12201 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-9911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT
10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
86TH AVE NW BORE

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	9-24-11	02826	15765-M-1615
CHKD BY:	GB	9-24-11		REVISION 0
ENGR:	GB	9-24-11		

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY): 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
LOCKTON COMPANIES, LLC
5847 San Felipe, Suite 320
Houston TX 77057

CONTACT NAME:
PHONE (A/C, No, Ext):
FAX (A/C, No):
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Aspen Insurance UK Limited	11680
INSURER B : National Union Fire Ins Co Pittsburgh PA	19445
INSURER C : New Hampshire Insurance Company	23841
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
1317577 PLAINS ALL AMERICAN PIPELINE, L.P.
PLAINS MARKETING, L.P.
PLAINS PIPELINE, L.P.
333 CLAY STREET, SUITE 1600
HOUSTON TX 77002

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE	$ 2,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 500,000
	X CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$ XXXXXXX
	X S&A Included						PERSONAL & ADV INJURY	$ XXXXXXX
	X $1M SIR						GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
	X POLICY ☐ PRO-JECT ☐ LOC							$
B	AUTOMOBILE LIABILITY	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$ XXXXXXX
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$ XXXXXXX
	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$ XXXXXXX
	X MCS-90 X CA9948							$ XXXXXXX
	☐ UMBRELLA LIAB ☐ OCCUR			NOT APPLICABLE			EACH OCCURRENCE	$ XXXXXXX
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$ XXXXXXX
	☐ DED ☐ RETENTION $							$
C C C C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N	N/A	Y	1591426-AOS 1591427-CA 1591428-TX 1591430-WI / 9876344-FL	6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/2012 6/1/2012 6/1/2012 6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) N						E.L. EACH ACCIDENT	$ 2,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 2,000,000
							E.L. DISEASE - POLICY LIMIT	$ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

ACORD 25 (2010/05)

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

All Policies include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All Policiies includes a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.

CONSENT FOR UTILITY COMPANY TO CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. (Company) of P. O. Box 4648, Houston, Texas 77210-4648 (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 85th Avenue NW in Section(s) 35,36, Township 156 N, Range 92 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

Ted E. Hoz
Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233
Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas Inc., Attn: Corey
Company or Agent Name

PO Box 1282
Mailing Address

Dickinson, ND 58602
City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

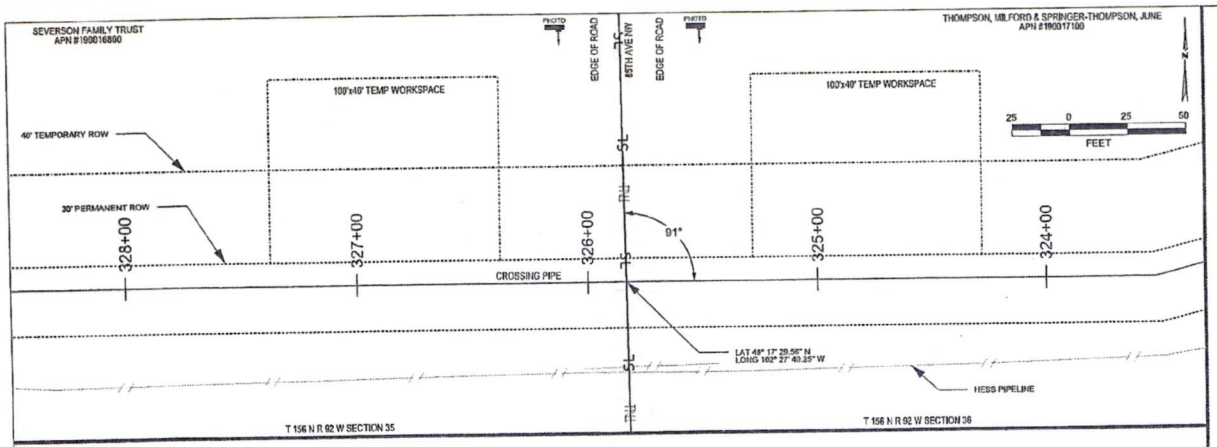
_____
Signature, County Auditor

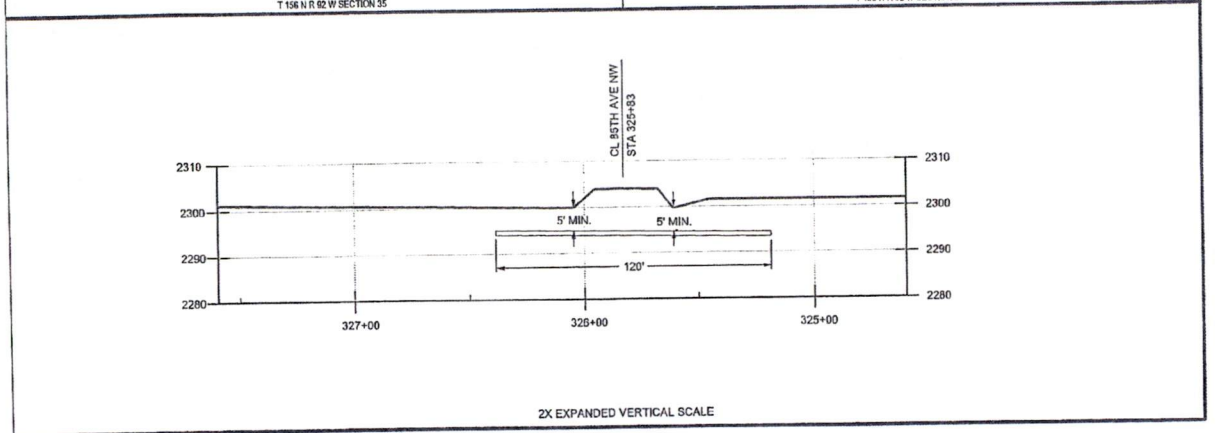
Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

_____
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

_____
Chairman of the Board
Mountrail County Board of County Commissioners





2X EXPANDED VERTICAL SCALE

LOOKING SOUTH ON EAST SIDE OF ROAD

LOOKING SOUTH ON WEST SIDE OF ROAD

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 120'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE, MILE POST, RISER/WEIGHT, TEST LEAD
TRACT MARKER, GROUND MARKER, CASED PIPE, PIG TRAP
EQUATION, WARNING SIGN, CONC. COATED PIPE, RECTIFIER
FOREIGN PIPELINE, BURIED CABLE, COUNTY/PARISH, PROPERTY LINE
FENCE, OIL PIPELINE, TOWNSHIP/RANGE, ROAD
WATERWAY, STATE LINE, SECTION LINE, UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	GS	4-15-10

PREPARED BY

ROONEY ENGINEERING INC.
12281 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-0911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
85TH AVE NW BORE

SCALE:	AS SHOWN	DATE	PROJECT NO.	DRAWING NO.	
DWN BY:	TL	9-24-11	02826	15765-M-1014	
CHKD BY:	GS	9-24-11			
ENGR:	GS	9-24-11		REVISION:	0

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY): 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER: LOCKTON COMPANIES, LLC 5847 San Felipe, Suite 320 Houston TX 77057	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:
INSURED: 1317577 PLAINS ALL AMERICAN PIPELINE, L.P. PLAINS MARKETING, L.P. PLAINS PIPELINE, L.P. 333 CLAY STREET, SUITE 1600 HOUSTON TX 77002	INSURER A: Aspen Insurance UK Limited — NAIC # 11680 INSURER B: National Union Fire Ins Co Pittsburgh PA — 19445 INSURER C: New Hampshire Insurance Company — 23841 INSURER D: INSURER E: INSURER F:

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY X CLAIMS-MADE ☐ OCCUR X S&A Included X $1M SIR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY ☐ PRO-JECT ☐ LOC	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 500,000 $ XXXXXXX $ XXXXXXX $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS ☐ SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS X MCS-90 X CA9948	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX
	UMBRELLA LIAB ☐ OCCUR EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $			NOT APPLICABLE			EACH OCCURRENCE AGGREGATE	$ XXXXXXX $ XXXXXXX
C C C C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	1591426-AOS 1591427-CA 1591428-TX 1591430-WI / 9876344-FL	6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/2012 6/1/2012 6/1/2012 6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 2,000,000 $ 2,000,000 $ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

ACORD 25 (2010/05)

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

All Policies include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All Policiies includes a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.

IDO TOWNSHIP

CONSENT FOR UTILITY COMPANY TO CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. (Company) of P. O. Box 4648, Houston, Texas 77210-4648 (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 84th Avenue NW in Section(s) 31, Township 156 N, Range 91 W and Section(s) 36, Township 156 N, Range 92 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

Ted E. Hoz

Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233

Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas, Inc., Attn: Corey

Company or Agent Name

PO Box 1282

Mailing Address

Dickinson, ND 58602

City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

_____

Signature, County Auditor

Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

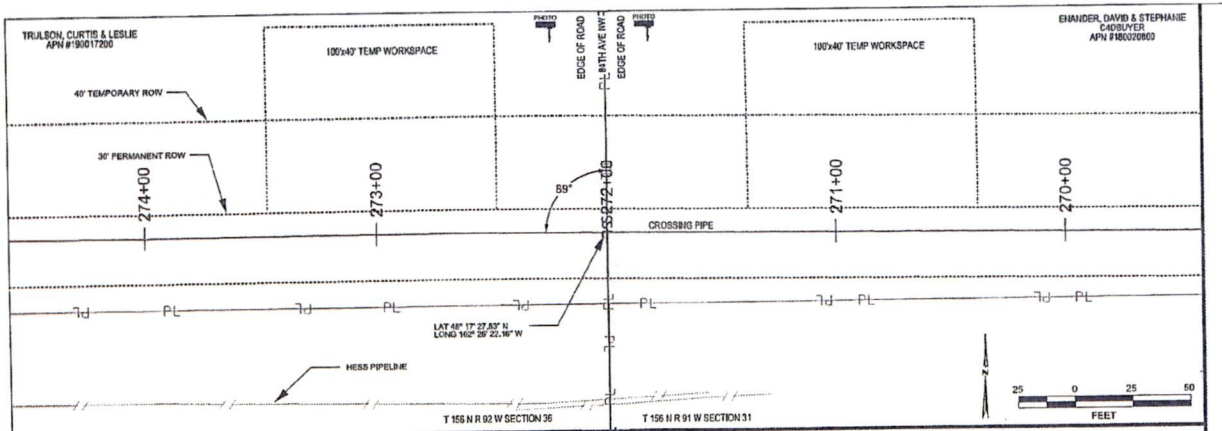
_____

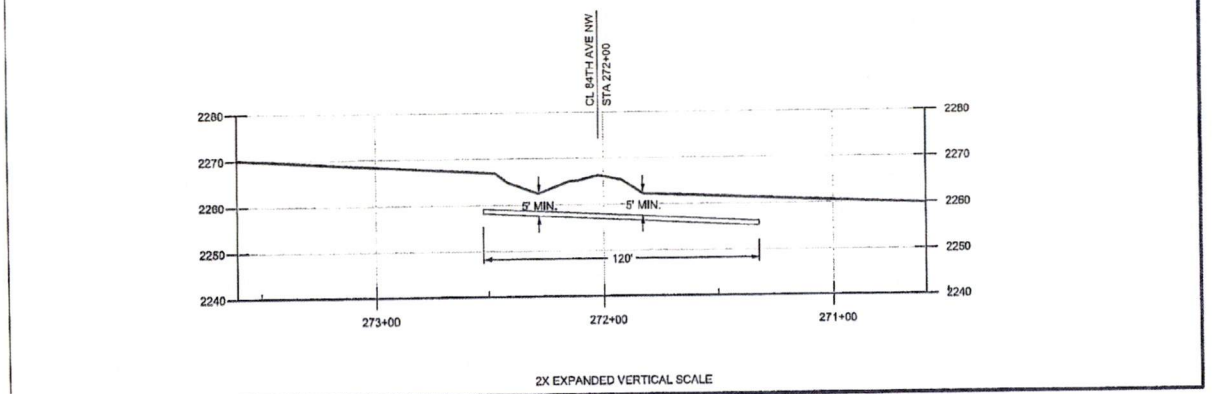
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

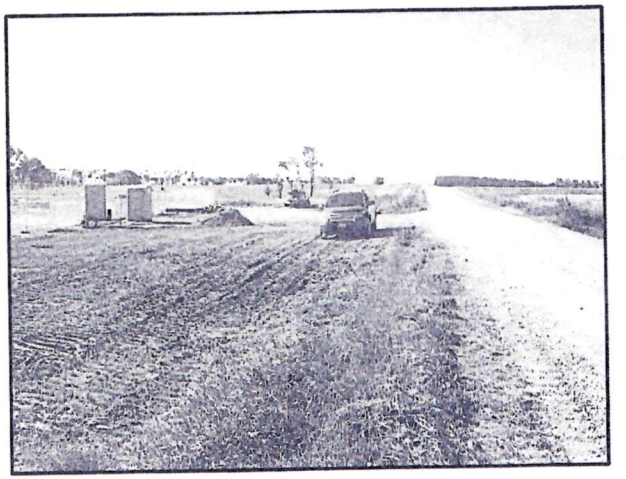
_____

Chairman of the Board
Mountrail County Board of County Commissioners

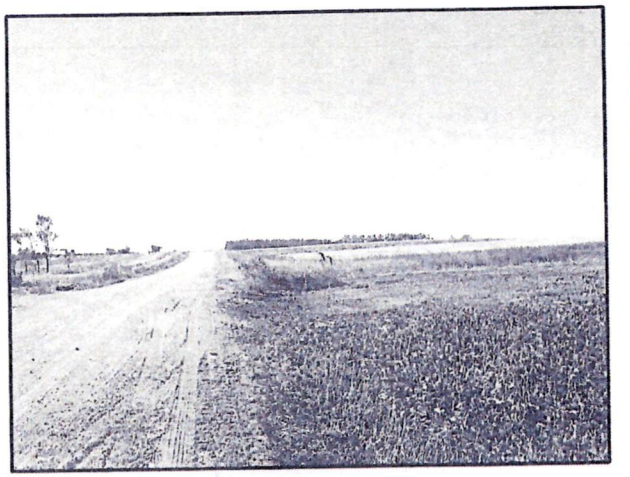




2X EXPANDED VERTICAL SCALE



LOOKING SOUTH ON EAST SIDE OF ROAD



LOOKING SOUTH ON WEST SIDE OF ROAD

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 120'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE, MILE POST, RIVER WEIGHT, TEST LEAD, TRACT MARKER, GROUND MARKER, CASED PIPE, PIG TRAP, EQUATION, WARNING SIGN, CONC. COATED PIPE, RECTIFIER, FOREIGN PIPELINE, BURIED CABLE, COUNTY/PARISH, PROPERTY LINE, FENCE, OIL PIPEWELL, TOWNSHIP/RANGE, ROAD, WATERWAY, STATE LINE, SECTION LINE, UG UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	GB	4-13-12

PREPARED BY

ROONEY ENGINEERING INC.
12201 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-5911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
84TH AVE NW BORE

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DSN BY:	TL	9-24-11	02826	15765-M-1013
CHKD BY:	GB	9-24-11		
ENGR:	GB	9-24-11		REVISION: 0

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY): 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	LOCKTON COMPANIES, LLC 5847 San Felipe, Suite 320 Houston TX 77057	CONTACT NAME:	
		PHONE (A/C, No, Ext):	FAX (A/C, No):
		E-MAIL ADDRESS:	
		INSURER(S) AFFORDING COVERAGE	NAIC #
		INSURER A : Aspen Insurance UK Limited	11680
INSURED 1317577	PLAINS ALL AMERICAN PIPELINE, L.P. PLAINS MARKETING, L.P. PLAINS PIPELINE, L.P. 333 CLAY STREET, SUITE 1600 HOUSTON TX 77002	INSURER B : National Union Fire Ins Co Pittsburgh PA	19445
		INSURER C : New Hampshire Insurance Company	23841
		INSURER D :	
		INSURER E :	
		INSURER F :	

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE	$ 2,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 500,000
	X CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$ XXXXXXX
	X S&A Included						PERSONAL & ADV INJURY	$ XXXXXXX
	X $1M SIR						GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
	X POLICY ☐ PRO-JECT ☐ LOC							$
B	AUTOMOBILE LIABILITY	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$ XXXXXXX
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$ XXXXXXX
	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$ XXXXXXX
	X MCS-90 X CA9948							$ XXXXXXX
	☐ UMBRELLA LIAB ☐ OCCUR			NOT APPLICABLE			EACH OCCURRENCE	$ XXXXXXX
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$ XXXXXXX
	☐ DED ☐ RETENTION $							$
CCCC	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N		Y	1591426-AOS	6/1/2011	6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N	N/A		1591427-CA	6/1/2011	6/1/2012	E.L. EACH ACCIDENT	$ 2,000,000
	(Mandatory in NH)			1591428-TX	6/1/2011	6/1/2012	E.L. DISEASE - EA EMPLOYEE	$ 2,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below			1591430-WI / 9876344-FL	6/1/2011	6/1/2012	E.L. DISEASE - POLICY LIMIT	$ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

All Policies include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All Policiies includes a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.

CONSENT FOR UTILITY COMPANY TO CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. (Company) of P. O. Box 4648, Houston, Texas 77210-4648 (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 83rd Avenue NW in Section(s) 31,32, Township 156 N, Range 91 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

Ted E. Hoz
Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233
Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas Inc., Attn: Corey
Company or Agent Name

PO Box 1282
Mailing Address

Dickinson, ND 58602
City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

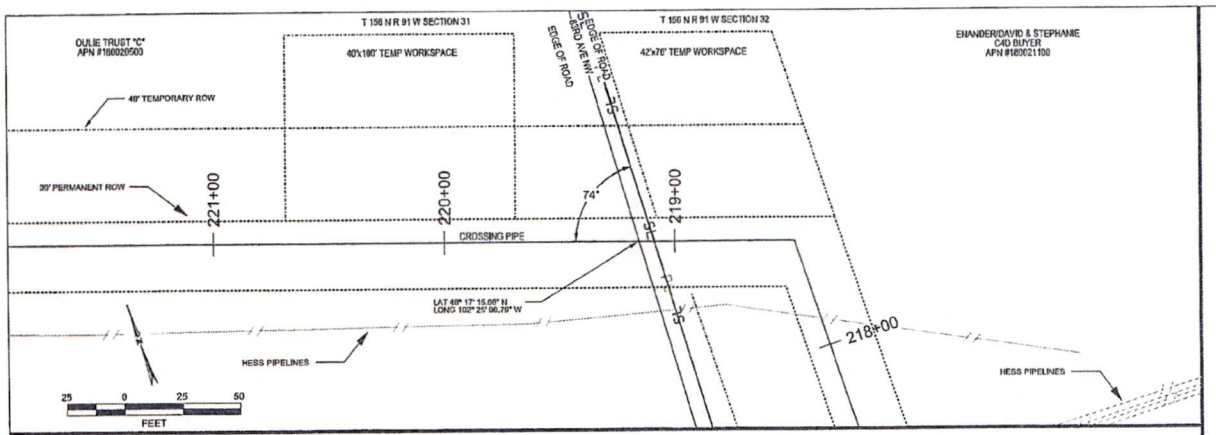
_____
Signature, County Auditor

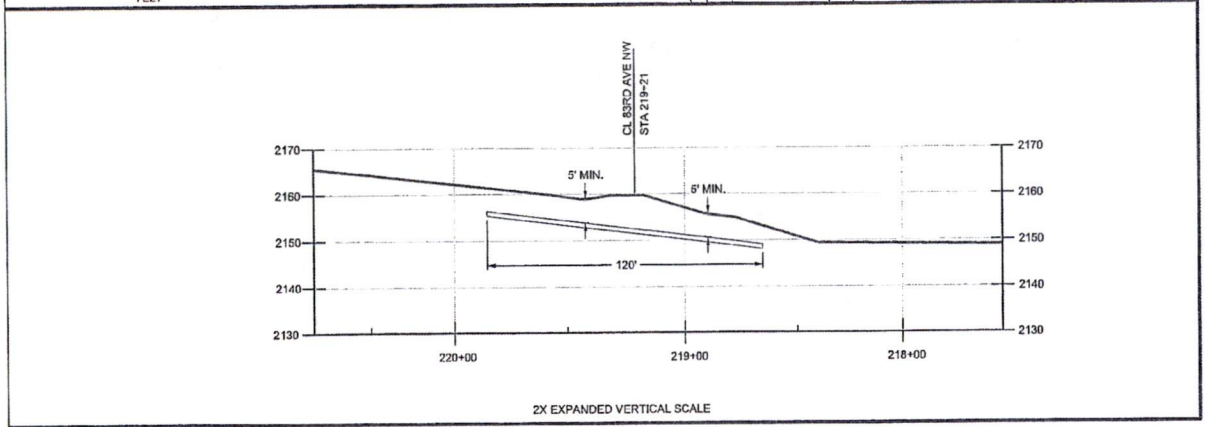
Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

_____
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

_____
Chairman of the Board
Mountrail County Board of County Commissioners





2X EXPANDED VERTICAL SCALE

NO PHOTOS AVAILABLE

NO PHOTOS AVAILABLE

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 120'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE | MILE POST | TAPER WEIGHT | TEST LEAD
TRACT NUMBER | GROUND MARKER | CASED PIPE | PIG TRAP
EQUATION | WARNING SIGN | CONC. COATED PIPE | RECEIVER
FOREIGN PIPELINE | BURIED CABLE | EQUATION/STATION | PROPERTY LINE
FENCE | OIL PIPE/TEL | TOWNSHIP/RANGE | CHEAD
WATERWAY | STATE LINE | SECTION LINE | UG UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	GS	4-15-12

PREPARED BY

ROONEY ENGINEERING INC.
12291 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-5911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT
10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
83RD AVE NW BORE

SCALE:	AS SHOWN	DATE	PROJECT NO.	DRAWING NO.
DRW BY:	TL	5-24-11	02826	15765-M-1012A
CHKD BY:	GS	5-24-11		
ENGR:	GS	5-24-11	REVISION:	0

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY): 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	LOCKTON COMPANIES, LLC 5847 San Felipe, Suite 320 Houston TX 77057	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS:	FAX (A/C, No):
		INSURER(S) AFFORDING COVERAGE	NAIC #
		INSURER A : Aspen Insurance UK Limited	11680
INSURED 1317577	PLAINS ALL AMERICAN PIPELINE, L.P. PLAINS MARKETING, L.P. PLAINS PIPELINE, L.P. 333 CLAY STREET, SUITE 1600 HOUSTON TX 77002	INSURER B : National Union Fire Ins Co Pittsburgh PA	19445
		INSURER C : New Hampshire Insurance Company	23841
		INSURER D :	
		INSURER E :	
		INSURER F :	

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE	$ 2,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 500,000
	X CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$ XXXXXXX
	X S&A Included						PERSONAL & ADV INJURY	$ XXXXXXX
	X $1M SIR						GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
	X POLICY ☐ PRO-JECT ☐ LOC							$
B	AUTOMOBILE LIABILITY	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$ XXXXXXX
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$ XXXXXXX
	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$ XXXXXXX
	X MCS-90 X CA9948							$ XXXXXXX
	☐ UMBRELLA LIAB ☐ OCCUR			NOT APPLICABLE			EACH OCCURRENCE	$ XXXXXXX
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$ XXXXXXX
	☐ DED ☐ RETENTION $							$
C C C C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N	N/A	Y	1591426-AOS 1591427-CA 1591428-TX 1591430-WI / 9876344-FL	6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/2012 6/1/2012 6/1/2012 6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH)						E.L. EACH ACCIDENT	$ 2,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 2,000,000
							E.L. DISEASE - POLICY LIMIT	$ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, If more space is required)

Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

All Policies include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All Policiies includes a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.

CONSENT FOR UTILITY COMPANY TO CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. (Company) of P. O. Box 4648, Houston, Texas 77210-4648 (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 82nd Avenue NW in Section(s) 32,33, Township 156 N, Range 91 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

Ted E Hoz

Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233

Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas, Inc., Attn: Corey

Company or Agent Name

PO Box 1282

Mailing Address

Dickinson, ND 58602

City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

_____

Signature, County Auditor

Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

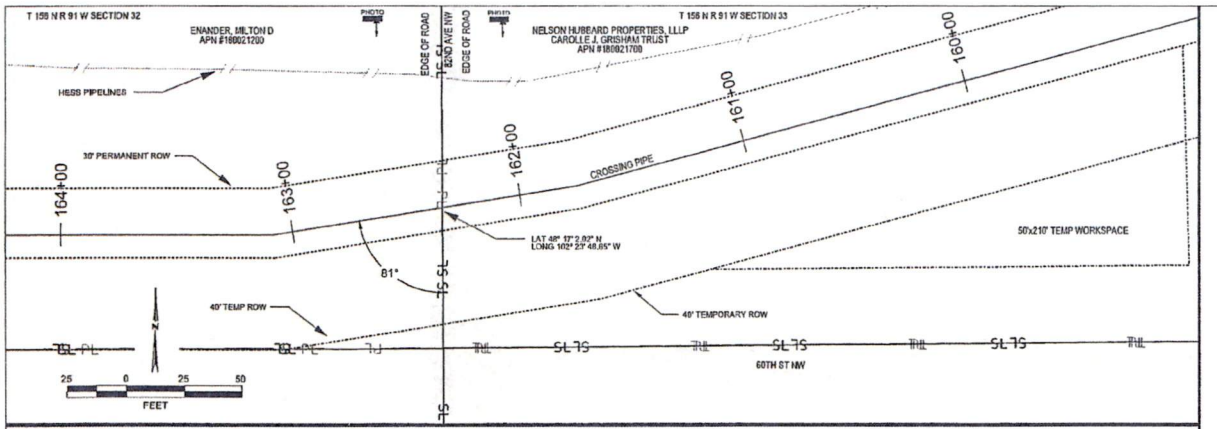
_____

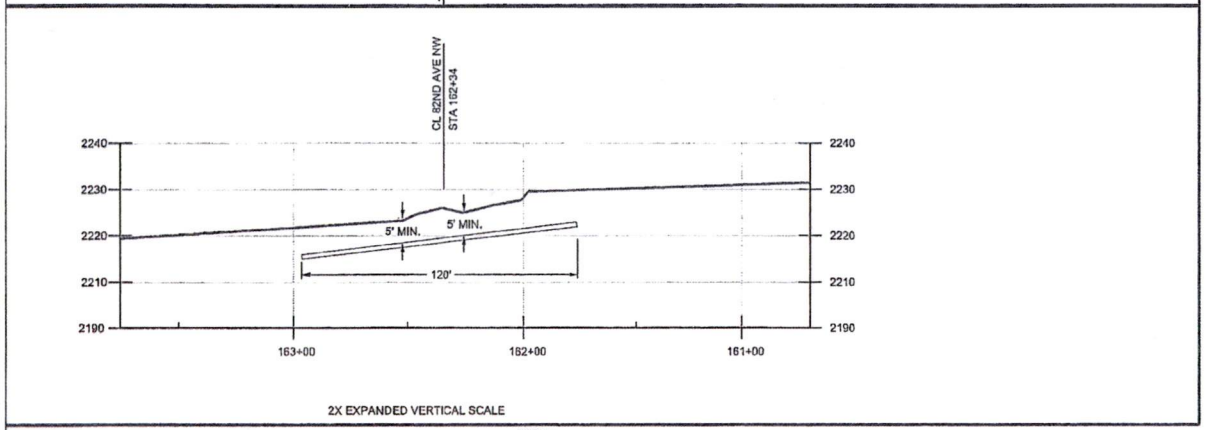
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

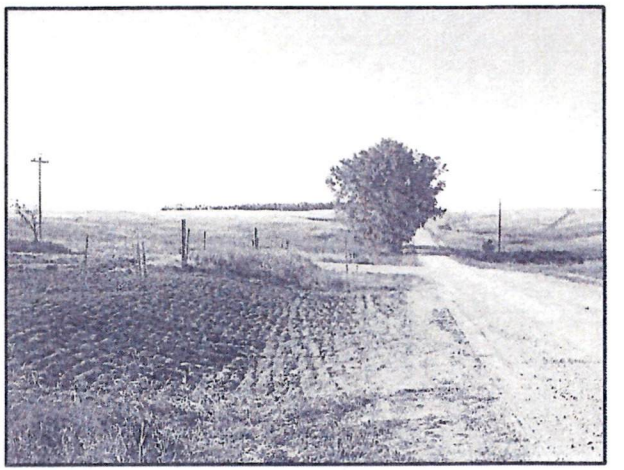
_____

Chairman of the Board
Mountrail County Board of County Commissioners

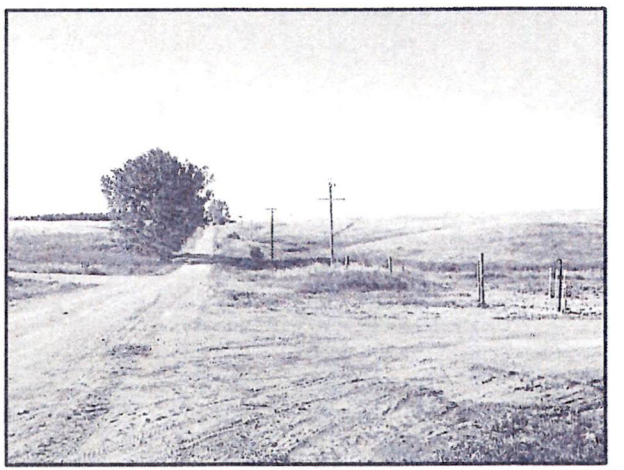




2X EXPANDED VERTICAL SCALE



LOOKING SOUTH ON EAST SIDE OF ROAD



LOOKING SOUTH ON WEST SIDE OF ROAD

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 120'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE · HSE POST · RIVER INCIDENT · TEST LEAD
TRACT NUMBER · GROUND MARKER · CASED PIPE · PIG TRAP
ELEVATION · WARNING SIGN · CONC. COATED PIPE · RECTIFIER
FOREIGN PIPELINE · BURIED CABLE · CONTAMINATION · PROPERTY LINE
RAILS · OIL PIPELINE · TOWNSHIP RANGE · ROAD
WATERWAY · GAS PIPELINE · SECTION LINE · UG UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	GB	4-13-12

PREPARED BY
ROONEY ENGINEERING INC.
12201 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-5911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
82ND AVE NW BORE

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	9-24-11	02826	15705-M-1012
CHKD BY:	GB	9-26-11		
ENGR:	GB	9-24-11	REVISION:	0

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY): 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER: LOCKTON COMPANIES, LLC 5847 San Felipe, Suite 320 Houston TX 77057	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Aspen Insurance UK Limited	11680
INSURER B : National Union Fire Ins Co Pittsburgh PA	19445
INSURER C : New Hampshire Insurance Company	23841
INSURER D :	
INSURER E :	
INSURER F :	

INSURED 1317577
PLAINS ALL AMERICAN PIPELINE, L.P.
PLAINS MARKETING, L.P.
PLAINS PIPELINE, L.P.
333 CLAY STREET, SUITE 1600
HOUSTON TX 77002

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY X CLAIMS-MADE ☐ OCCUR X S&A Included X $1M SIR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY ☐ PRO-JECT ☐ LOC	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$ 2,000,000 $ 500,000 $ XXXXXXX $ XXXXXXX $ 2,000,000 $ 2,000,000 $
B	AUTOMOBILE LIABILITY X ANY AUTO ☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS X MCS-90 X CA9948	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$ 1,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX
	☐ UMBRELLA LIAB ☐ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $			NOT APPLICABLE			EACH OCCURRENCE AGGREGATE $	$ XXXXXXX $ XXXXXXX $
C C C C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	1591426-AOS 1591427-CA 1591428-TX 1591430-WI / 9876344-FL	6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/2012 6/1/2012 6/1/2012 6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 2,000,000 $ 2,000,000 $ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

All Policies include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All Policiies includes a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.

CONSENT FOR UTILITY COMPANY TO
CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. (Company) of P. O. Box 4648, Houston, Texas 77210-4648 (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 61st Street NW in Section(s) 26, 35, Township 156 N, Range 91 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 2012.

Ted E. Hoz
Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233
Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas, Inc., Attn: Corey
Company or Agent Name

PO Box 1282
Mailing Address

Dickinson, ND 58602
City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

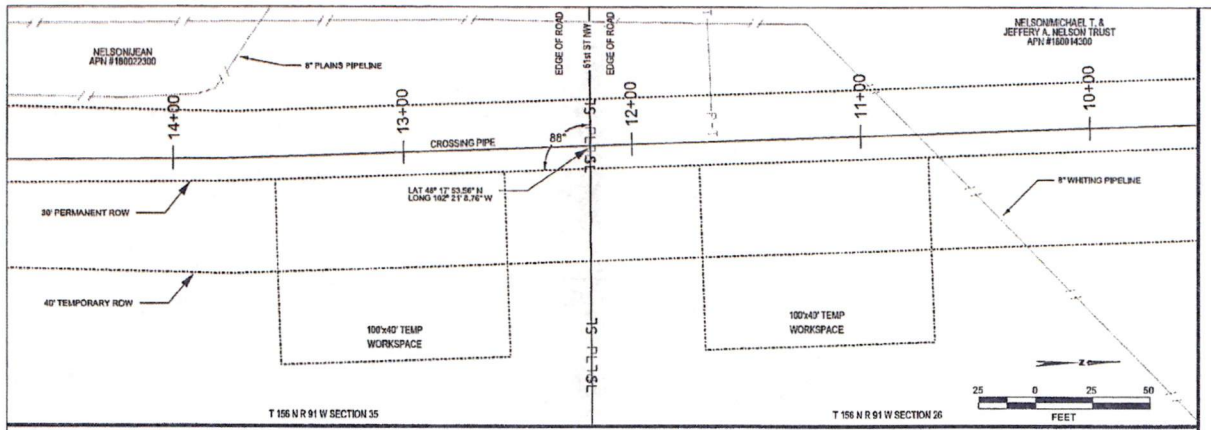
_____
Signature, County Auditor

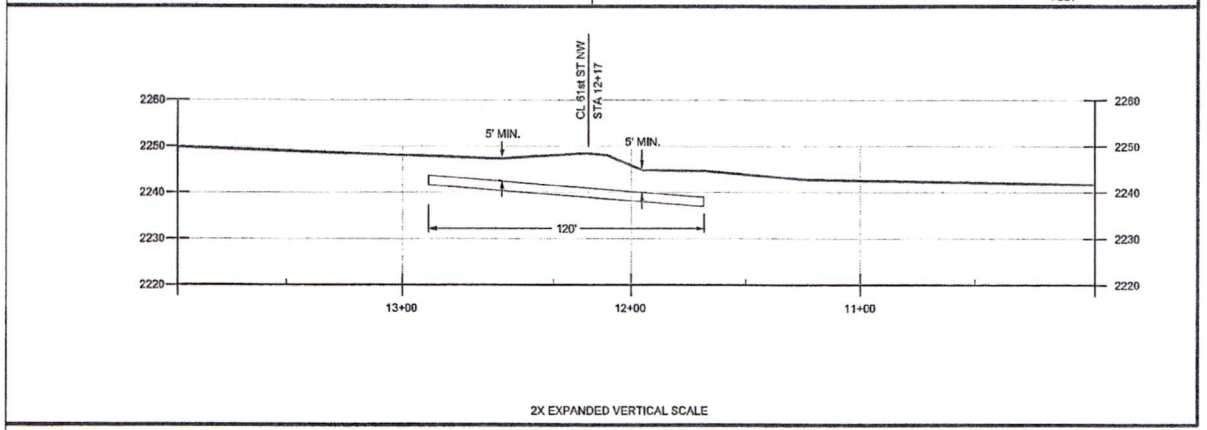
Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

_____
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

_____
Chairman of the Board
Mountrail County Board of County Commissioners





2X EXPANDED VERTICAL SCALE

NO PHOTO AVAILABLE

NO PHOTO AVAILABLE

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   BORE LENGTH: 120'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-16 MIL FBE WITH 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: BORE
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING.

LEGEND

VALVE · MILE POST · RAISED WEIGHT · TEST LEAD
TRACT BORDER · GROUND MARKER · CASED PIPE · PIG TRAP
SOLATION · WARNING SIGN · CONC. COATED PIPE · RECTIFIER
FOREIGN PIPELINE · BURIED CABLE · COUNTY/PARISH · PROPERTY LINE
FENCE · CULVERTED · TRANSMISSION · ROAD
WATERWAY · STATE LINE · SECTION LINE · U/G UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE	FROM	TO	LIN. FT.	TYPE

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	JW	GS	6-13-12

PREPARED BY

ROONEY ENGINEERING INC.
12201 E. ARAPAHOE RD., SC-10
CENTENNIAL, CO 80112
(303) 792-9911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT
10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
61st ST NW BORE

SCALE:	AS SHWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	9-23-11	02828	15765-M-1010
CHKD BY:	GS	9-24-11		
ENGR:	GS	9-24-11	REVISION:	0

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY) 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	LOCKTON COMPANIES, LLC 5847 San Felipe, Suite 320 Houston TX 77057	CONTACT NAME:	
		PHONE (A/C, No, Ext):	FAX (A/C, No):
		E-MAIL ADDRESS:	
		INSURER(S) AFFORDING COVERAGE	NAIC #
		INSURER A : Aspen Insurance UK Limited	11680
INSURED 1317577	PLAINS ALL AMERICAN PIPELINE, L.P. PLAINS MARKETING, L.P. PLAINS PIPELINE, L.P. 333 CLAY STREET, SUITE 1600 HOUSTON TX 77002	INSURER B : National Union Fire Ins Co Pittsburgh PA	19445
		INSURER C : New Hampshire Insurance Company	23841
		INSURER D :	
		INSURER E :	
		INSURER F :	

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE	$ 2,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 500,000
	X CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$ XXXXXXX
	X S&A Included						PERSONAL & ADV INJURY	$ XXXXXXX
	X $1M SIR						GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
	X POLICY ☐ PRO-JECT ☐ LOC							$
B	AUTOMOBILE LIABILITY	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$ XXXXXXX
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$ XXXXXXX
	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$ XXXXXXX
	X MCS-90 X CA9948							$ XXXXXXX
	☐ UMBRELLA LIAB ☐ OCCUR			NOT APPLICABLE			EACH OCCURRENCE	$ XXXXXXX
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$ XXXXXXX
	☐ DED ☐ RETENTION $							$
C C C C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N	N/A	Y	1591426-AOS 1591427-CA 1591428-TX 1591430-WI / 9876344-FL	6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/2012 6/1/2012 6/1/2012 6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH)						E.L. EACH ACCIDENT	$ 2,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 2,000,000
							E.L. DISEASE - POLICY LIMIT	$ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

All Policies include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All Policiies includes a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.

MA[illegible]TOU TOWNSHIP

CONSENT FOR UTILITY COMPANY TO CROSS A PUBLIC ROAD OR SECTION ROAD

Plains Pipeline L. P. of P. O. Box 4648, Houston, Texas 77210-4648
(Company) (Address)

hereinafter referred to as "utility company", having requested permission from Mountrail County, a political subdivision of the State of North Dakota, to cross an existing road or section line with a buried transmission facility designed to carry or conduct oil, gas, water, electricity, telephone, or any other substance or service whatsoever, and Mountrail County having considered the request does grant consent to cross the following described existing road or section line, upon the terms and conditions herein stated:

(Please include 911 Route #)

Route 64th Street NW in Section(s) 16, Township 156 N, Range 93 W

(Attach maps and construction plans)
At a minimum, acceptable plans will include method of crossing existing roads or section lines and size and material used for the buried facility.

Consent to cross such existing road or section line is granted on these terms and conditions:

1. Pay a fee $150.00 per crossing to Mountrail County.

2. Utility company must pay for all damage to the existing road caused by its activities, including but not limited to slumping in of trenches and collapse of pipe.

3. Utility company is responsible for any and all claims of damage, personal injury, or bodily injury that might result from their activities in crossing any existing road or section line in Mountrail County. Furthermore, utility company agrees to indemnify and hold harmless Mountrail County for any and all claims of damage, either personal injury or property or any type of claim for damages of any nature whatsoever, whether valid or invalid, that is made against Mountrail County on account of the activities conducted by the utility company in crossing any existing road or section line.

4. When the utility company crosses an existing road or a section line, the utility company shall be responsible to pay for all costs of moving, relocating, or reconstructing the buried transmission facility should Mountrail County deem it necessary or advisable, in its sole discretion, to repair or reconstruct existing roads or to build new roads on section lines or off section lines as allowed by North Dakota law. Should the utility company fail to take necessary steps to relocate or reconstruct its buried transmission facility, the County may take steps to have the same accomplished, and the utility company agrees to reimburse the County for all expenses incurred by Mountrail County in moving, relocating or reconstructing the buried transmission facility so the existing roads may be repaired or reconstructed, or new roads may be built on the section line or off the section line as allowed by North Dakota law.

5. The buried transmission facility to be installed by the utility company in crossing any existing road shall at a minimum comply with the following engineering standards:

   (a) County paved roads or County roads treated with road stabilization materials may only be bored.
   (b) All crossings of existing roads not trenched as in Section 5 below shall be bored to a depth of five (5) feet below original ground or ditch elevations.
   (c) Pipe shall be cased or heavy wall pipe used.
   (d) All parallel borings must be a minimum of thirty (30) feet from road centerline.
   (e) Vent pipes must be outside existing right-of-way lines or 33 feet from road center, whichever is greater.
   (f) All disturbed ground within right-of-way must be rehabilitated by covering with black dirt and seeding with an approved mix.
   (g) If vent pipes are not used within the (10) feet of both sides of right-of-way, the transmission facility must have markers on the right-of-way line or 33 foot line, whichever is greater, on both sides of the road.
   (h) The Company's plan to bury a transmission facility filed with the County Auditor must show at a minimum, in plain view and cross sectional view, the location of the crossing from a section or quarter line; section, township and range the crossing is located in; the location of vent pipes, if any, in proximity to the crossing; and the angle of crossing.
   (i) The Company's plan must be submitted to the County Auditor for review prior to consideration by the Board of Commissioners. Plans must be available for consideration by the Board at least two (2) weeks prior to the commencement of the project.

6. When permission is specifically granted by the Commission of Mountrail County for a crossing to be trenched or plowed, the trenching or plowing may be no more than eight (8) inches in width. The Company will apply surfacing materials and pack the site, returning it as close as possible to the original compaction. The Company will be responsible for all such crossings for a period of three (3) years, repairing during those three (3) years any damages to the road resulting from their activity. Any crossing which cannot be accomplished with this method must be bored.

7. Utility company must comply with all terms and conditions stated herein, with particular attention to the minimum engineering standards. Failure to comply with this CONDITIONAL CONSENT shall cause the consent to be rescinded and utility company must remove facility from right-of-way immediately or be responsible for the costs incurred by the County in removing the same. The County specifically reserves the right to remove the buried transmission facility from right-of-way for non-compliance and reimbursement will be made to the County by utility company for doing the same.

I, the undersigned, being an authorized agent of the utility company described in the above, do herby agree on behalf of the utility company that all terms and conditions above will be complied with, and any assignment of this buried transmission facility described above shall include an assignment of this liability to comply with the terms and conditions as stated herein.

Dated this 7th day of May 20 12.

TED ETHOZ

Authorized Agent of Utility Company Ted Hoz Supervisor Land

713-993-5233

Telephone Number

County Auditor: Please return a copy of the signed permit to:

BJ Kadrmas, Inc., Attn: Corey

Company or Agent Name

PO Box 1282

Mailing Address

Dickinson, ND 58602

City, State & Zip Code

FOR COUNTY USE:

Received by Mountrail County Auditor this ____ day _____, 2011.

_____

Signature, County Auditor

Reviewed by Mountrail County Road Engineer _____ day _____, 2011.

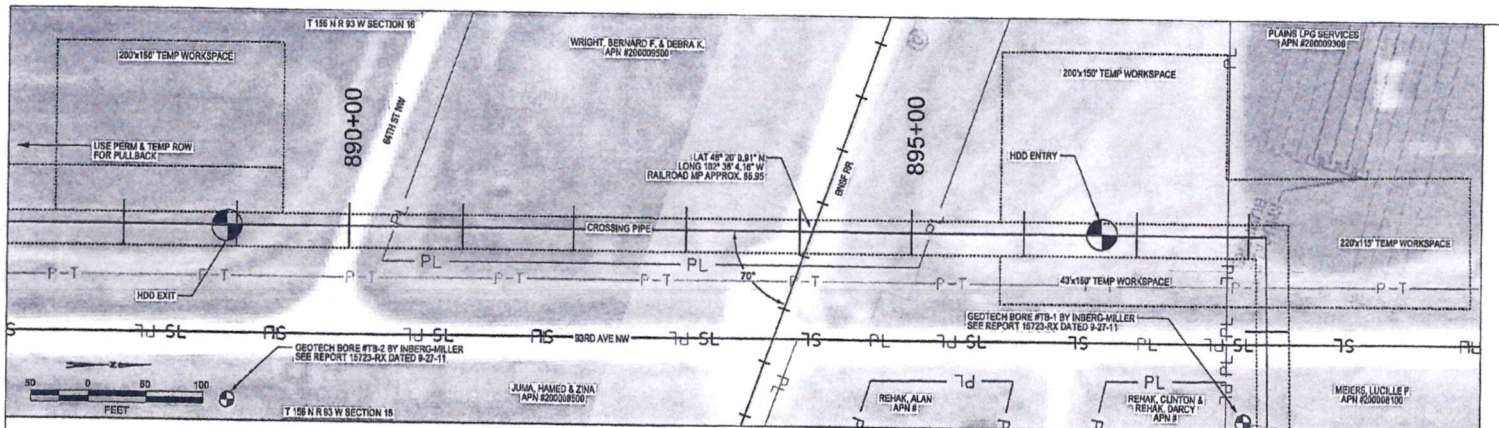
_____

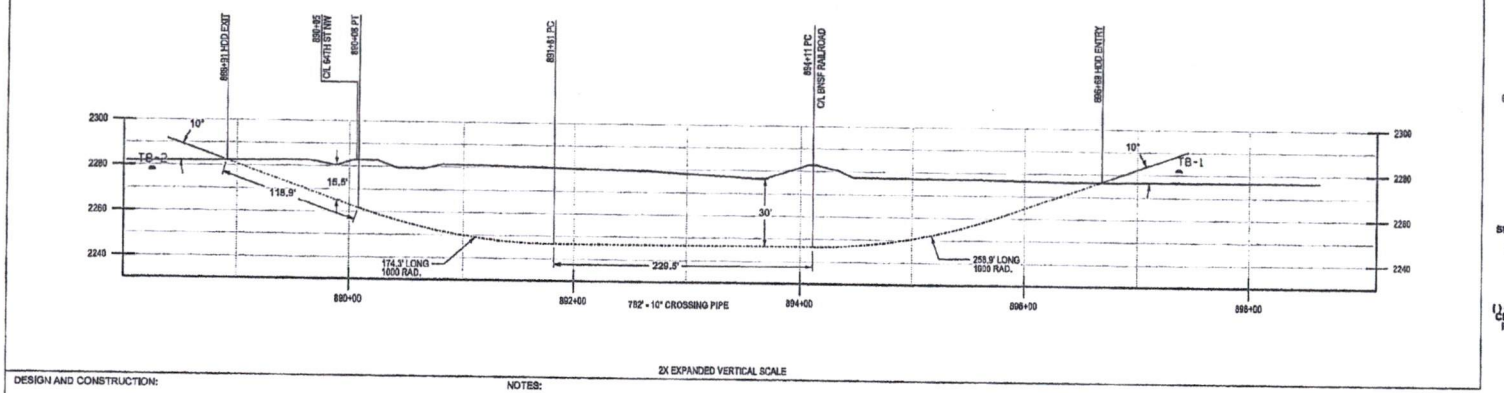
Signature, County Road Engineer

Permission granted by Mountrail County, a political subdivision of the State of North Dakota, for installation of the buried transmission facility proposed above under existing roads and section lines as stated above pursuant to the conditions and limitations stated this _____ day of _____ 20____.

_____

Chairman of the Board
Mountrail County Board of County Commissioners





GEOTECHNICAL LEGEND

UNIFIED SOIL CLASSIFICATION SYSTEM

GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
GM	SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES
GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
SW	WELL-GRADED SANDS, GRAVELLY SANDS WITH LITTLE OR NO FINES
SP	POORLY-GRADED SANDS, GRAVELLY SANDS WITH LITTLE OR NO FINES
SM	SILTY SANDS, SAND-SILT MIXTURES
SC	CLAYEY SANDS, SAND-CLAY MIXTURES
ML	INORGANIC SILTS & VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY
CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY
MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
PT	PEAT AND OTHER HIGHLY ORGANIC SOILS

STANDARD PENETRATION TEST PENETRATION RESISTANCE IN BLOWS PER FOOT FOR A 140# HAMMER FALLING 30"

LOG OF TEST BORE TB-1
BORE BY INBERG-MILLER 2011

SOIL	BLOWS PER FOOT
(CL)	28
15.0	28
	12
	13
CH	15
	11
45.0	13
SW-SC	33
(CL) 58.0	50/6
(SW) 61.0	28
	22
CL	22
76.5	24
	56

( ) - BASED ON VISUAL-MANUAL CLASSIFICATION AND MAY BE PARTLY BASED ON LIMITED TEST DATA.

LOG OF TEST BORE TB-2
BORE BY INBERG-MILLER 2011

SOIL	BLOWS PER FOOT
(CL)	33
20.0	14
SW-SC	18
(CL) 25.0	28
(SW) 30.0	65
	21
	21
(CL)	18
	32
52.0	32
(SW) 55.0	32
	34

( ) - BASED ON VISUAL-MANUAL CLASSIFICATION AND MAY BE PARTLY BASED ON LIMITED TEST DATA.

DESIGN AND CONSTRUCTION:

1. DESIGNED IN ACCORDANCE WITH CFR 49 PART 195 & ASME B31.4
2. CROSSING PIPE SPECIFICATION:
   HDD LENGTH: 782'
   HDD RADIUS: 1000'
   10" x 0.344" W.T., API 5L X-52
   COATED WITH 14-18 MIL FBE, 40 MIL ARO
3. SERVICE: CRUDE OIL (FLAMMABLE CLASS I LIQUID)
4. MAX OPERATING PRESSURE 1480 PSIG
5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.72)
6. HYDROTEST PRESSURE 1850 PSIG
7. INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD)
8. CARRIER PIPE NOT ENCASED
9. PIPELINE WARNING MARKERS TO BE INSTALLED ON BOTH SIDES OF ROADWAY.
10. MINIMUM PIPELINE COVER 5' IN ROAD ROW.
11. PIPE / AMBIENT TEMPERATURE MUST BE NO LESS THAN 40° F DURING PULLBACK.
12. CONDUCT 4-HOUR PRE-INSTALLATION HYDROTEST OF HDD PIPE STRING TO 1850 PSIG.

NOTES:

1. ALL COORDINATES SHOWN ARE IN NORTH DAKOTA NORTH STATE PLANE, NAD83, USFEET. ALL MSL ELEVATIONS ARE NAVD88.
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.
3. ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND PLAINS ALL AMERICAN PIPELINE, L.P., FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
5. CONTACT ONE CALL NORTH DAKOTA AT 1-800-795-0555 OR 811 3 DAYS PRIOR TO DIGGING. NDOC UTILITY LOCATES MAY ALSO BE SCHEDULED ON LINE AT WWW.NDONECALL.COM.

LEGEND

VALVE · MAIL POST · RIVER WEIGHT · TEST LEAD
TRACT MARKER · GROUND MARKER · CASED PIPE · PIG TRAP
EQUATION · WARNING SIGN · WELDED CONC.-COATED PIPE · RECTIFIER
FOREIGN PIPELINE · BURIED CABLE · EQUIPMENT · PROPERTY LINE
FENCE · OIL PIPELINE · TORNADO FUNNEL · ROAD
WATERWAY · STATE LINE · SECTION LINE · UG UTILITY

PIPE SUMMARY

FROM	TO	LIN. FT.	TYPE
880+00	882+00	200	10" CRUDE OIL
882+00	894+00	1200	10" CRUDE OIL
894+00	898+00	400	10" CRUDE OIL
898+00	900+82	282	10" CRUDE OIL

PIPE SPECIFICATIONS

TYPE	DESCRIPTION	LIN. FT.
10" CRUDE OIL	0.344" W.T., API 5L X-52, COATED WITH 14-18 MIL FBE, 40 MIL ARO	1882

REVISIONS

REV. NO.	DESCRIPTION	DWN	CHKD	DATE
0	ISSUED FOR CONSTRUCTION	AP	BLT	4-23-12
1	ADDED DIMENSION & TEXT FOR ROAD CL	AP	BLT	5-4-12

PREPARED BY

ROONEY ENGINEERING INC.
12201 E. ARAPAHOE RD., #C-10
CENTENNIAL, CO 80112
(303) 792-0911

PLAINS ALL AMERICAN PIPELINE, L.P.

NELSON TO ROSS PROJECT

10" CRUDE OIL PIPELINE
FROM NELSON FACILITY TO ROSS TERMINAL
64th ST. NW & BN RAILROAD DIRECTIONAL DRILL

SCALE:	AS SHOWN	DATE	PROJECT NO.	DRAWING NO.
DWN BY:	TL	9-23-11	02828	15785-D-1002
CHKD BY:	BLT	9-23-11		
ENGR:	BLT	9-23-11		REVISION: 1

JONES LANG LASALLE.

Jones Lang LaSalle Americas, Inc.
3017 Lou Menk Drive, Suite 100
Fort Worth, Texas 76131-2800
tel +1 817-230-2600, fax +1 817 306-8265

June 25, 2012

Tracking #12-45230

Plains Pipeline, L.P.
Attention: Mr David Park
Associate Land Representative
333 Clay St., Suite 1600
Houston, TX 77002,

Dear David

Enclosed please find one (1) fully executed Agreement for your file. **A copy of the executed Agreement must be available upon request at the job site allowing authorization to do the work.** Please contact BNSF Roadmaster at phone (701) 837-6759 or cell (701)240-8148, at least ten (10) days in advance of entry and **BEFORE YOU DIG, CALL 1-800-533-2891 OPTIONS 1,2 then 4**.

If you need additional information please contact me at (817) 230-2634.

Sincerely,

Camille Barbosa

Camille Barbosa
Contract Specialist

Enclosures

cc: James Kuhnhenn, Roadmaster – James.Kuhnhenn@bnsf.com

PIPELINE LICENSE

THIS LICENSE ("License"), made as of the 25th day of June, 2012, ("Effective Date") by and between **BNSF RAILWAY COMPANY**, a Delaware corporation ("Licensor") and **PLAINS PIPELINE, L.P.**, a Texas limited partnership ("Licensee").

NOW THEREFORE, in consideration of the mutual covenants contained herein, the parties agree to the following:

GENERAL

1. Licensor hereby grants Licensee a non-exclusive license, subject to all rights, interests, and estates of third parties, including, without limitation, any leases, use rights, easements, liens, or other encumbrances, and upon the terms and conditions set forth below, to construct and maintain, in strict accordance with the drawings and specifications approved by Licensor as part of Licensee's application process (the "Drawings and Specifications"), one (1) carbon steel Pipeline, 10.062 inches in diameter ("PIPELINE"), across or along the rail corridor of Licensor at or near the station of Ross, County of Mountrail, State of North Dakota, Line Segment 0035, Mile Post 65.99, as shown on the attached Drawing No. 1-54765, dated May 2, 2012, attached hereto as Exhibit "A" and made a part hereof ("Premises").

2. Licensee shall not disturb any improvements of Licensor or Licensor's existing lessees, Licensees, easement beneficiaries or lien holders, if any, or interfere with the use of such improvements.

3. Licensee shall use the Premises solely for construction and maintenance of a PIPELINE in accordance with the Drawings and Specifications carrying crude oil. Licensee shall not use the PIPELINE to carry any other commodity or use the Premises for any other purpose.

   Licensee covenants that it will not handle or transport "hazardous waste" or "hazardous substances", as "hazardous waste" and "hazardous substances" may now or in the future be defined by any federal, state, or local governmental agency or body through the PIPELINE on Licensor's property. Licensee agrees periodically to furnish Licensor with proof, satisfactory to Licensor that Licensee is in such compliance. Should Licensee not comply fully with the above-stated obligations of this Section, notwithstanding anything contained in any other provision hereof, Licensor may, at its option, terminate this License by serving five (5) days' notice of termination upon Licensee. Upon termination, Licensee shall remove the PIPELINE and restore Licensor's property as herein elsewhere provided.

4. In case of the eviction of Licensee by anyone owning or claiming title to or any interest in the Premises, or by the abandonment by Licensor of the affected rail corridor, Licensor shall not be liable to refund Licensee any compensation paid hereunder, except for the pro-rata part of any recurring charge paid in advance, or for any damage Licensee sustains in connection therewith.

5. Any contractors or subcontractors performing work on the PIPELINE or entering the Premises on behalf of Licensee shall be deemed servants and agents of Licensee for purposes of this License.

TERM

6. This License shall commence on the Effective Date and shall continue for a period of twenty-five (25) years, subject to prior termination as hereinafter described.

COMPENSATION

7. (a) Licensee shall pay Licensor, prior to the Effective Date, the sum of Four Thousand Two Hundred Fifty Three and No/100 Dollars ($4,253.00) for the first year this License is in effect, and the annual sum of One Thousand Eight Hundred and No/100 Dollars ($1,800) beginning with the second year this License is in effect, payable annually and in advance. Billing or acceptance by Licensor of any licensing fee shall not imply a definite term or otherwise restrict either party from canceling this License as provided herein

(b) Licensee agrees to reimburse Licensor (within thirty (30) days after receipt of bills therefor) for all costs and expenses incurred by Licensor in connection with Licensee's use of the Premises or the presence, construction and maintenance of the PIPELINE, including but not limited to the furnishing of Licensor's Flagman and any vehicle rental costs incurred. The cost of flagger services provided by the Railway, when deemed necessary by the Railway's representative, will be borne by the Licensee. The estimated cost for one (1) flagger is $800.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, transportation, meals, lodging and supervision. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. The flagging rate in effect at the time of performance by the Contractor hereunder will be used to calculate the actual costs of flagging pursuant to this paragraph.

(c) All invoices are due thirty (30) days after the date of invoice. In the event that Licensee shall fail to pay any monies due to Licensor within thirty (30) days after the invoice date, then Licensee shall pay interest on such unpaid sum from thirty (30) days after its invoice date to the date of payment by Licensee at an annual rate equal to (i) the greater of (a) for the period January 1 through June 30, the prime rate last published in *The Wall Street Journal* in the preceding December plus two and one-half percent (2 1/2%), and for the period July 1 through December 31, the prime rate last published in *The Wall Street Journal* in the preceding June plus two and one-half percent (2 1/2%), or (b) twelve percent (12%), or (ii) the maximum rate permitted by law, whichever is less.

COMPLIANCE WITH LAWS

8. (a) Licensee shall observe and comply with any and all laws, statutes, regulations, ordinances, orders, covenants, restrictions, or decisions of any court of competent jurisdiction ("Legal Requirements") relating to the construction, maintenance, and use of the PIPELINE and the use of the Premises.

(b) Prior to entering the Premises, Licensee shall and shall cause its contractor to comply with all Licensor's applicable safety rules and regulations. Prior to commencing any work on the Premises, Licensee shall complete and shall require its contractor to complete the safety-training program at the following Internet Website "http://www.contractororientation.com". This training must be completed no more than one year in advance of Licensee's entry on the Premises.

DEFINITION OF COST AND EXPENSE

9. For the purpose of this License, "cost' or "costs" "expense" or "expenses" includes, but is not limited to, actual labor and material costs including all assignable additives, and material and supply costs at current value where used.

RIGHT OF LICENSOR TO USE

10. Licensor excepts and reserves the right, to be exercised by Licensor and any other parties who may obtain written permission or authority from Licensor:

(a) to maintain, renew, use, operate, change, modify and relocate any existing pipe, power, communication lines and appurtenances and other facilities or structures of like character upon, over, under or across the Premises;

(b) to construct, maintain, renew, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; or

(c) to use the Premises in any manner as the Licensor in its sole discretion deems appropriate, provided Licensor uses all commercially reasonable efforts to avoid material interference with the use of the Premises by Licensee for the purpose specified in Section 3 above.

LICENSEE'S OPERATIONS

11. (a) Licensee shall notify Licensor's Roadmaster, James Kuhnhenn, at at 6400 4th Ave NE, Minot, ND 58702, telephone (701) 837-6759 or cell (701) 240-8148, at least ten (10) business days prior to installation of the PIPELINE and prior to entering the Premises for any subsequent maintenance thereon.

(b) In performing the work described in Section 3, Licensee shall use only public roadways to cross from one side of Licensor's tracks to the other.

12. (a) Under no conditions shall Licensee be permitted to conduct any tests, investigations or any other activity using mechanized equipment and/or machinery, or place or store any mechanized equipment, tools or other materials, within twenty-five (25) feet of the centerline of any railroad track on the Premises unless Licensee has obtained prior written approval from Licensor. Licensee shall, at its sole cost and expense, perform all activities on and about the Premises in such a manner as not at any time to be a source of danger to or interference with the existence or use of present or future tracks, roadbed or property of Licensor, or the safe operation and activities of Licensor. If ordered to cease using the Premises at any time by Licensor's personnel due to any hazardous condition, Licensee shall immediately do so. Notwithstanding the foregoing right of Licensor, the parties agree that Licensor has no duty or obligation to monitor Licensee's use of the Premises to determine the safe nature thereof, it being solely Licensee's responsibility to ensure that Licensee's use of the Premises is safe. Neither the exercise nor the failure by Licensor to exercise any rights granted in this Section will alter the liability allocation provided by this License.

(b) Licensee shall, at its sole cost and expense, construct and maintain the PIPELINE in such a manner and of such material that it will not at any time be a source of danger to or interference with the existence or use of present or future tracks, roadbed or property of Licensor, or the safe operation and activities of Licensor. Licensor may direct one of its field engineers to observe or inspect the construction and/or maintenance of the

PIPELINE at any time for compliance with the Drawings and Specifications. If ordered at any time to halt construction or maintenance of the PIPELINE by Licensor's personnel due to non-compliance with the same or any other hazardous condition, Licensee shall immediately do so. Notwithstanding the foregoing right of Licensor, the parties agree that Licensor has no duty or obligation to observe or inspect, or to halt work on, the PIPELINE, it being solely Licensee's responsibility to ensure that the PIPELINE is constructed in strict accordance with the Drawings and Specifications and in a safe and workmanlike manner in compliance with all terms hereof. Neither the exercise nor the failure by Licensor to exercise any right granted by this Section will alter in any way the liability allocation provided by this License. If at any time Licensee shall, in the sole judgment of Licensor, fail to properly perform its obligations under this Section, Licensor may, at its option and at Licensee's sole expense, arrange for the performance of such work as it deems necessary for the safety of its operations and activities. Licensee shall promptly reimburse Licensor for all costs and expenses of such work, upon receipt of an invoice for the same. Licensor's failure to perform any obligations of Licensee shall not alter the liability allocation hereunder.

13. During the construction and any subsequent maintenance performed on the PIPELINE, Licensee shall perform such work in a manner to preclude damage to the property of Licensor, and preclude interference with the operation of its railroad. The construction of the PIPELINE shall be completed within one (1) year of the Effective Date. Upon completion of the construction of the PIPELINE and after performing any subsequent maintenance thereon, Licensee shall, at Licensee's own cost and expense, restore Licensor's Premises to their former state as of the Effective Date of this License.

14. If at any time during the term of this License, Licensor shall desire the use of its rail corridor in such a manner as would, in Licensor's reasonable opinion, be interfered with by the PIPELINE, Licensee shall, at its sole expense, within thirty (30) days after receiving written notice from Licensor to such effect, make such changes in the PIPELINE as in the sole discretion of Licensor may be necessary to avoid interference with the proposed use of Licensor's rail corridor, including, without limitation, the relocation of the existing or the construction of a new PIPELINE(s).

15. (a) Prior to Licensee conducting any boring work on or about any portion of the Premises, Licensee shall explore the proposed location for such work with hand tools to a depth of at least three (3) feet below the surface of the ground to determine whether pipelines or other structures exist below the surface, provided, however, that in lieu of the foregoing, the Licensee shall have the right to use suitable detection equipment or other generally accepted industry practice (e.g., consulting with the Underground Services Association) to determine the existence or location of pipelines and other subsurface structures prior to drilling or excavating with mechanized equipment. Upon Licensee's written request, which shall be made thirty (30) business days in advance of Licensee's requested construction of the PIPELINE, Licensor will provide Licensee any information that Licensor has in the possession of its Engineering Department concerning the existence and approximate location of Licensor's underground utilities and pipelines at or near the vicinity of the proposed PIPELINE. Prior to conducting any such boring work, the Licensee will review all such material. Licensor does not warrant the accuracy or completeness of information relating to subsurface conditions and Licensee's operations will be subject at all times to the liability provisions herein.

(b) For all bores greater than 26-inch diameter and at a depth less than 10.0 feet below bottom of rail, a soil investigation will need to be performed by the Licensee and reviewed by Licensor prior to construction. This study is to determine if granular material is present, and to prevent subsidence during the installation process. If the

investigation determines in Licensor's reasonable opinion that granular material is present, Licensor may select a new location for Licensee's use, or may require Licensee to furnish for Licensor's review and approval, in its sole discretion a remedial plan to deal with the granular material. Once Licensor has approved any such remedial plan in writing, Licensee shall, at its sole cost and expense, carry out the approved plan in accordance with all terms thereof and hereof.

16. Any open hole, boring or well constructed on the Premises by Licensee shall be safely covered and secured at all times when Licensee is not working in the actual vicinity thereof. Following completion of that portion of the work, all holes or borings constructed on the Premises by Licensee shall be:

(a) filled in to surrounding ground level with compacted bentonite grout; or

(b) otherwise secured or retired in accordance with any applicable Legal Requirement. No excavated materials may remain on Licensor's property for more than ten (10) days, but must be properly disposed of by Licensee in accordance with applicable Legal Requirements.

17. Upon termination of this License, Licensee shall, at its sole cost and expense:

(a) remove the PIPELINE and all appurtenances thereto, or, at the sole discretion of the Licensor, fill and cap or otherwise appropriately decommission the PIPELINE with a method satisfactory to Licensor;

(b) report and restore any damage to the Premises arising from, growing out of, or connected with Licensee's use of the Premises;

(c) remedy any unsafe conditions on the Premises created or aggravated by Licensee; and

(d) leave the Premises in the condition which existed as of the Effective Date of this License.

18. Licensee's on-site supervisions shall retain/maintain a fully executed copy of this License at all times while on the Premises.

LIABILITY

19. (a) **TO THE FULLEST EXTENT PERMITTED BY LAW, LICENSEE SHALL RELEASE, INDEMNIFY, DEFEND AND HOLD HARMLESS LICENSOR AND LICENSOR'S AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS (COLLECTIVELY, "INDEMNITEES") FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS, ATTORNEYS' FEES AND COSTS OF INVESTIGATION, REMOVAL AND REMEDIATION AND GOVERNMENTAL OVERSIGHT COSTS) ENVIRONMENTAL OR OTHERWISE (COLLECTIVELY "LIABILITIES") OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM OR RELATED TO (IN WHOLE OR IN PART):**

(i) THIS LICENSE, INCLUDING, WITHOUT LIMITATION, ITS ENVIRONMENTAL PROVISIONS,

(ii) ANY RIGHTS OR INTERESTS GRANTED PURSUANT TO THIS LICENSE,

(iii) LICENSEE'S OCCUPATION AND USE OF THE PREMISES,

(iv) THE ENVIRONMENTAL CONDITION AND STATUS OF THE PREMISES CAUSED BY OR CONTRIBUTED BY LICENSEE, OR

(v) ANY ACT OR OMISSION OF LICENSEE OR LICENSEE'S OFFICERS, AGENTS, INVITEES, EMPLOYEES, OR CONTRACTORS, OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER,

EVEN IF SUCH LIABILITIES ARISE FROM OR ARE ATTRIBUTED TO, IN WHOLE OR IN PART, ANY NEGLIGENCE OF ANY INDEMNITEE. THE ONLY LIABILITIES WITH RESPECT TO WHICH LICENSEE'S OBLIGATION TO INDEMNIFY THE INDEMNITEES DOES NOT APPLY ARE LIABILITIES TO THE EXTENT PROXIMATELY CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF AN INDEMNITEE.

(b) FURTHER, TO THE FULLEST EXTENT PERMITTED BY LAW, NOTWITHSTANDING THE LIMITATION IN SECTION 19(a), LICENSEE SHALL NOW AND FOREVER WAIVE ANY AND ALL CLAIMS, REGARDLESS WHETHER BASED ON THE STRICT LIABILITY, NEGLIGENCE OR OTHERWISE, THAT RAILROAD IS AN "OWNER", "OPERATOR", "ARRANGER", OR "TRANSPORTER" WITH RESPECT TO THE PIPELINE FOR THE PURPOSES OF CERCLA OR OTHER ENVIRONMENTAL LAWS. LICENSEE WILL INDEMNIFY, DEFEND AND HOLD THE INDEMNITEES HARMLESS FROM ANY AND ALL SUCH CLAIMS REGARDLESS OF THE NEGLIGENCE OF THE INDEMNITEES. LICENSEE FURTHER AGREES THAT THE USE OF THE PREMISES AS CONTEMPLATED BY THIS LICENSE SHALL NOT IN ANY WAY SUBJECT LICENSOR TO CLAIMS THAT LICENSOR IS OTHER THAN A COMMON CARRIER FOR PURPOSES OF ENVIRONMENTAL LAWS AND EXPRESSLY AGREES TO INDEMNIFY, DEFEND, AND HOLD THE INDEMNITEES HARMLESS FOR ANY AND ALL SUCH CLAIMS. IN NO EVENT SHALL LICENSOR BE RESPONSIBLE FOR THE ENVIRONMENTAL CONDITION OF THE PREMISES.

(c) TO THE FULLEST EXTENT PERMITTED BY LAW, LICENSEE FURTHER AGREES, REGARDLESS OF ANY NEGLIGENCE OR ALLEGED NEGLIGENCE OF ANY INDEMNITEE, TO INDEMNIFY, AND HOLD HARMLESS THE INDEMNITEES AGAINST AND ASSUME THE DEFENSE OF ANY LIABILITIES ASSERTED AGAINST OR SUFFERED BY ANY INDEMNITEE UNDER OR RELATED TO THE FEDERAL EMPLOYERS' LIABILITY ACT ("FELA") WHENEVER EMPLOYEES OF LICENSEE OR ANY OF ITS AGENTS, INVITEES, OR CONTRACTORS CLAIM OR ALLEGE THAT THEY ARE EMPLOYEES OF ANY INDEMNITEE OR OTHERWISE. THIS INDEMNITY SHALL ALSO EXTEND, ON THE SAME BASIS, TO FELA CLAIMS BASED ON ACTUAL OR ALLEGED VIOLATIONS OF ANY FEDERAL, STATE OR LOCAL LAWS OR REGULATIONS, INCLUDING BUT NOT LIMITED TO THE SAFETY APPLIANCE ACT, THE BOILER INSPECTION ACT, THE OCCUPATIONAL HEALTH AND SAFETY ACT, THE RESOURCE CONSERVATION AND RECOVERY ACT, AND ANY SIMILAR STATE OR FEDERAL STATUTE.

(d) Upon written notice from Licensor, Licensee agrees to assume the defense of any lawsuit or other proceeding brought against any Indemnitee by any entity, relating to any matter covered by this License for which Licensee has an obligation to assume liability for and/or save and hold harmless any Indemnitee. Licensee shall pay all costs incident to such defense, including, but not limited to, attorneys' fees, investigators' fees, litigation and appeal expenses, settlement payments, and amounts paid in satisfaction of judgments.

PERSONAL PROPERTY WAIVER

20. **ALL PERSONAL PROPERTY, INCLUDING, BUT NOT LIMITED TO, FIXTURES, EQUIPMENT, OR RELATED MATERIALS UPON THE PREMISES WILL BE AT THE RISK OF LICENSEE ONLY, AND NO INDEMNITEE WILL BE LIABLE FOR ANY DAMAGE THERETO OR THEFT THEREOF, WHETHER OR NOT DUE IN WHOLE OR IN PART TO THE NEGLIGENCE OF ANY INDEMNITEE.**

INSURANCE

21. Licensee shall, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. **Commercial General Liability Insurance.** This insurance shall contain broad form contractual liability with a combined single limit of a minimum of $5,000,000 each occurrence and an aggregate limit of at least $10,000,000. Coverage must be purchased on a post 1998 ISO occurrence or equivalent and include coverage for, but not limited to, the following:

- Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- The employee and workers compensation related exclusions in the above policy shall not apply with respect to claims related to railroad employees.
- The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Any exclusions related to the explosion, collapse and underground hazards shall be removed.

No other endorsements limiting coverage may be included on the policy.

B. **Business Automobile Insurance.** This insurance shall contain a combined single limit of at least $1,000,000 per occurrence, and include coverage for, but not limited to the following:

- Bodily injury and property damage
- Any and all vehicles owned, used or hired

C. **Workers Compensation and Employers Liability Insurance.** This insurance shall include coverage for, but not limited to:

- Licensee's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.

- Employers' Liability (Part B) with limits of at least $500,000 each accident, $500,000 by disease policy limit, $500,000 by disease each employee.

D. **Railroad Protective Liability Insurance.** This insurance shall name only the Licensor as the Insured with coverage of at least $5,000,000 per occurrence and $10,000,000 in the aggregate. The coverage obtained under this policy shall only be effective during the initial installation and/or construction of the PIPELINE. **THE CONSTRUCTION OF THE PIPELINE SHALL BE COMPLETED WITHIN ONE (1) YEAR OF THE EFFECTIVE DATE.** If further maintenance of the PIPELINE is needed at a later date, an additional Railroad Protective Liability Insurance Policy shall be required. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:

- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- Endorsed to include the Limited Seepage and Pollution Endorsement.
- Endorsed to include Evacuation Expense Coverage Endorsement.
- No other endorsements restricting coverage may be added.
- The original policy must be provided to the Licensor prior to performing any work or services under this Agreement.

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate in Licensor's Blanket Railroad Protective Liability Insurance Policy available to Licensee or its contractor. The limits of coverage are the same as above. The cost is $1,000.

☒ I elect to participate in Licensor's Blanket Policy;

☐ I elect not to participate in Licensor's Blanket Policy.

E. Contractor's Pollution Legal Liability (CPL) Insurance. This insurance shall be in an amount of at least FIVE MILLION DOLLARS ($5,000,000) per occurrence and TEN MILLION DOLLARS ($10,000,000) in the aggregate including but not limited to coverage for the following:

- bodily injury, sickness, disease, mental anguish, or shock sustained by any person, including death;
- property damage including physical injury to or destruction of tangible property including the resulting loss of use thereof, cleanup costs, and the loss of use of tangible property that has not been physically injured or destroyed;
- defense costs including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages.
- Coverage shall apply to sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water, which results in BODILY INJURY, PROPERTY DAMAGE, or Remediation Expense.
- If coverage is purchased on a "claims made" basis, lessee hereby agrees to maintain coverage in force for a minimum of three years after expiration, cancellation, or termination of this contract. Annually contractor agrees to provide evidence of such coverage as required hereunder.
- Delete any bodily injury exclusions resulting from lead or asbestos.
- Amend the Contractual Liability exclusions and employers liability exclusion to provide coverage for liability assumed under contract.
- Amend the definition of Property Damage to provide coverage for natural resource damage.

Other Requirements:

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages and certificates of insurance shall reflect that no exclusion exists.

Licensee agrees to waive its right of recovery against Licensor for all claims and suits against Licensor. In addition, its insurers, through policy endorsement, waive their right of subrogation against Licensor for all claims and suits. The certificate of insurance must reflect waiver of subrogation endorsement. Licensee further waives its right of recovery, and its insurers also waive their right of subrogation against Licensor for loss of its owned or leased property or property under its care, custody, or control.

Licensee's insurance policies through policy endorsement must include wording which states that the policy shall be primary and non-contributing with respect to any insurance carried by Licensor. The certificate of insurance must reflect that the above wording is included in evidenced policies.

All policy(ies) required above (excluding Workers Compensation, Contractor's Pollution Legal Liability and if applicable, Railroad Protective) shall include a severability of interest endorsement and shall name Licensor and Jones Lang LaSalle Global Services - RR, Inc. as an additional insured with respect to work performed under this agreement. Severability of interest and naming Licensor and Jones Lang LaSalle Global Services - RR, Inc. as additional insureds shall be indicated on the certificate of insurance.

Licensee is not allowed to self-insure without the prior written consent of Licensor. If granted by Licensor, any deductible, self-insured retention or other financial responsibility for claims shall be covered directly by Licensee in lieu of insurance. Any and all Licensor liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by Licensee's insurance will be covered as if Licensee elected not to include a deductible, self-insured retention, or other financial responsibility for claims.

Prior to commencing the Work, Licensee shall furnish to Licensor an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments. The policy(ies) shall contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify Licensor in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision shall be indicated on the certificate of insurance. In the event of a claim or lawsuit involving Railroad arising out of this agreement, Licensee will make available any required policy covering such claim or lawsuit.

Any insurance policy shall be written by a reputable insurance company acceptable to Licensor or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.

Licensee represents that this License has been thoroughly reviewed by Licensee's insurance agent(s)/broker(s), who have been instructed by Licensee to procure the insurance coverage required by this Agreement. Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

Not more frequently than once every five years, Licensor may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by Licensee, Licensee shall require that the subcontractor shall provide and maintain insurance coverages as set forth herein, naming Licensor as an additional insured, and shall require that the subcontractor shall release, defend and indemnify Licensor to the same extent and under the same terms and conditions as Licensee is required to release, defend and indemnify Licensor herein.

Failure to provide evidence as required by this section shall entitle, but not require, Licensor to terminate this License immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of Licensee's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by Licensee shall not be deemed to release or diminish the liability of Licensee including, without limitation, liability under the indemnity provisions of this License. Damages recoverable by Licensor shall not be limited by the amount of the required insurance coverage.

For purposes of this section, Licensor shall mean "Burlington Northern Santa Fe Corporation", "BNSF Railway Company" and the subsidiaries, successors, assigns and affiliates of each.

ENVIRONMENTAL

22. (a) Licensee shall strictly comply with all federal, state and local environmental laws and regulations in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA (collectively referred to as the "Environmental Laws"). Licensee shall not maintain a treatment, storage, transfer or disposal facility, or underground storage tank, as defined by Environmental Laws on the Premises. Licensee shall not release or suffer the release of oil or hazardous substances, as defined by Environmental Laws on or about the Premises.

(b) Licensee shall give Licensor immediate notice to Licensor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Licensee's use of the Premises. Licensee shall use the best efforts to promptly respond to any release on or from the Premises. Licensee also shall give Licensor immediate notice of all measures undertaken on behalf of Licensee to investigate, remediate, respond to or otherwise cure such release or violation.

(c) In the event that Licensor has notice from Licensee or otherwise of a release or violation of Environmental Laws arising in any way with respect to the PIPELINE which occurred or may occur during the term of this License, Licensor may require Licensee, at Licensee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises or Licensor's right-of-way.

(d) Licensee shall promptly report to Licensor in writing any conditions or activities upon the Premises known to Licensee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Licensee's reporting to Licensor shall not relieve Licensee of any obligation whatsoever imposed on it by this License. Licensee shall promptly respond to Licensor's request for information regarding said conditions or activities.

ALTERATIONS

23. Licensee may not make any alterations to the Premises or permanently affix anything to the Premises or any buildings or other structures adjacent to the Premises without Licensor's prior written consent.

NO WARRANTIES

24. **LICENSOR'S DUTIES AND WARRANTIES ARE LIMITED TO THOSE EXPRESSLY STATED IN THIS LICENSE AND SHALL NOT INCLUDE ANY IMPLIED DUTIES OR IMPLIED WARRANTIES, NOW OR IN THE FUTURE. NO REPRESENTATIONS OR WARRANTIES HAVE BEEN MADE BY LICENSOR OTHER THAN THOSE CONTAINED IN THIS LICENSE. LICENSEE HEREBY WAIVES ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE PREMISES OR WHICH MAY EXIST BY OPERATION OF LAW OR IN EQUITY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, HABITABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

QUIET ENJOYMENT

25. **LICENSOR DOES NOT WARRANT ITS TITLE TO THE PROPERTY NOR UNDERTAKE TO DEFEND LICENSEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE.**

DEFAULT

26. If default shall be made in any of the covenants or agreements of Licensee contained in this document, or in case of any assignment or transfer of this License by operation of law, Licensor may, at its option, terminate this License by serving five (5) days' notice in writing upon Licensee. Any waiver by Licensor of any default or defaults shall not constitute a waiver of the right to terminate this License for any subsequent default or defaults, nor shall any such waiver in any way affect Licensor's ability to enforce any Section of this License. The remedy set forth in this Section 26 shall be in addition to, and not in limitation of, any other remedies that Licensor may have at law or in equity.

LIENS AND CHARGES

27. Licensee shall promptly pay and discharge any and all liens arising out of any construction, alterations or repairs done, suffered or permitted to be done by Licensee on Premises. Licensor is hereby authorized to post any notices or take any other action upon or with respect to Premises that is or may be permitted by law to prevent the attachment of any such liens to Premises; provided, however, that failure of Licensor to take any such action shall not relieve Licensee of any obligation or liability under this Section 27 or any other Section of this License. Licensee shall pay when due any taxes, assessments or other charges (collectively, "Taxes") levied or assessed upon the Improvements by any governmental or quasi-governmental body or any Taxes levied or assessed against Licensor or the Premises that are attributable to the Improvements.

TERMINATION

28. This License may be terminated by Licensor, at any time, by serving thirty (30) days' written notice of termination upon Licensee. This License may be terminated by Licensee upon execution of Licensor's Mutual Termination Letter Agreement then in effect. Upon expiration of the time specified in such notice, this License and all rights of Licensee shall absolutely cease.

29. If Licensee fails to surrender to Licensor the Premises, upon any termination of this License, all liabilities and obligations of Licensee hereunder shall continue in effect until the Premises are surrendered. Termination shall not release Licensee from any liability or obligation, whether of indemnity or otherwise, resulting from any events happening prior to the date of termination.

ASSIGNMENT

30. Neither Licensee, nor the heirs, legal representatives, successors, or assigns of Licensee, nor any subsequent assignee, shall assign or transfer this License or any interest herein, without the prior written consent and approval of Licensor, which may be withheld in Licensor's sole discretion.

NOTICES

31. Any notice required or permitted to be given hereunder by one party to the other shall be in writing and the same shall be given and shall be deemed to have been served and given if (i) placed in the United States mail, certified, return receipt requested, or (ii) deposited into the custody of a nationally recognized overnight delivery service, addressed to the party to be notified at the address for such party specified below, or to such other address as the party to be notified may designate by giving the other party no less than thirty (30) days' advance written notice of such change in address.

If to Licensor: Jones Lang LaSalle Global Services - RR, Inc.
4300 Amon Carter Blvd., Suite 100
Fort Worth, Texas 76155-2685
Attn: Licenses/Permits

with a copy to: BNSF Railway Company
2500 Lou Menk Dr. – AOB3
Fort Worth, TX 76131
Attn: Manager – Land Revenue Management

If to Licensee: Plains Pipeline, L.P.
333 Clay, Ste 1600
Houston, TX 77002
Attn: Land Department

SURVIVAL

32. Neither termination nor expiration will release either party from any liability or obligation under this License, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date when the PIPELINE and improvements are removed and the Premises are restored to its condition as of the Effective Date.

RECORDATION

33. It is understood and agreed that this License shall not be placed on public record.

APPLICABLE LAW

34. All questions concerning the interpretation or application of provisions of this License shall be decided according to the substantive laws of the State of Texas without regard to conflicts of law provisions.

SEVERABILITY

35. To the maximum extent possible, each provision of this License shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this License shall be prohibited by, or held to be invalid under, applicable law, such provision shall be ineffective solely to the extent of such prohibition or invalidity, and this shall not invalidate the remainder of such provision or any other provision of this License.

INTEGRATION

36. This License is the full and complete agreement between Licensor and Licensee with respect to all matters relating to Licensee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Licensee's use of the Premises as described herein. However, nothing herein is intended to terminate any surviving obligation of Licensee or Licensee's obligation to defend and hold Licensor harmless in any prior written agreement between the parties.

MISCELLANEOUS

37. In the event that Licensee consists of two or more parties, all the covenants and agreements of Licensee herein contained shall be the joint and several covenants and agreements of such parties.

38. The waiver by Licensor of the breach of any provision herein by Licensee shall in no way impair the right of Licensor to enforce that provision for any subsequent breach thereof.

[Signature page follows]

Jones Lang LaSalle Brokerage, Inc. is acting as representative for BNSF Railway Company.

IN WITNESS WHEREOF, this License has been duly executed, in duplicate, by the parties hereto as of the day and year first above written.

BNSF RAILWAY COMPANY
Jones Lang LaSalle Brokerage, Inc.,
its Representative
4300 Amon Carter Blvd., Suite 100
Fort Worth, Texas 76155-2685

By: _____
Ed Darter
Title: Vice President - National Accounts

PLAINS PIPELINE, L.P.
By Plains Marketing GP, Inc
Its General Partner
333 Clay, Ste 1600
Houston, TX 77002

By: _____
George N Polydoros, Jr
Title: Attorney-in-Fact

TRACKING NO. 12-45230

EXHIBIT "A"

ATTACHED TO CONTRACT BETWEEN

BNSF RAILWAY COMPANY

AND

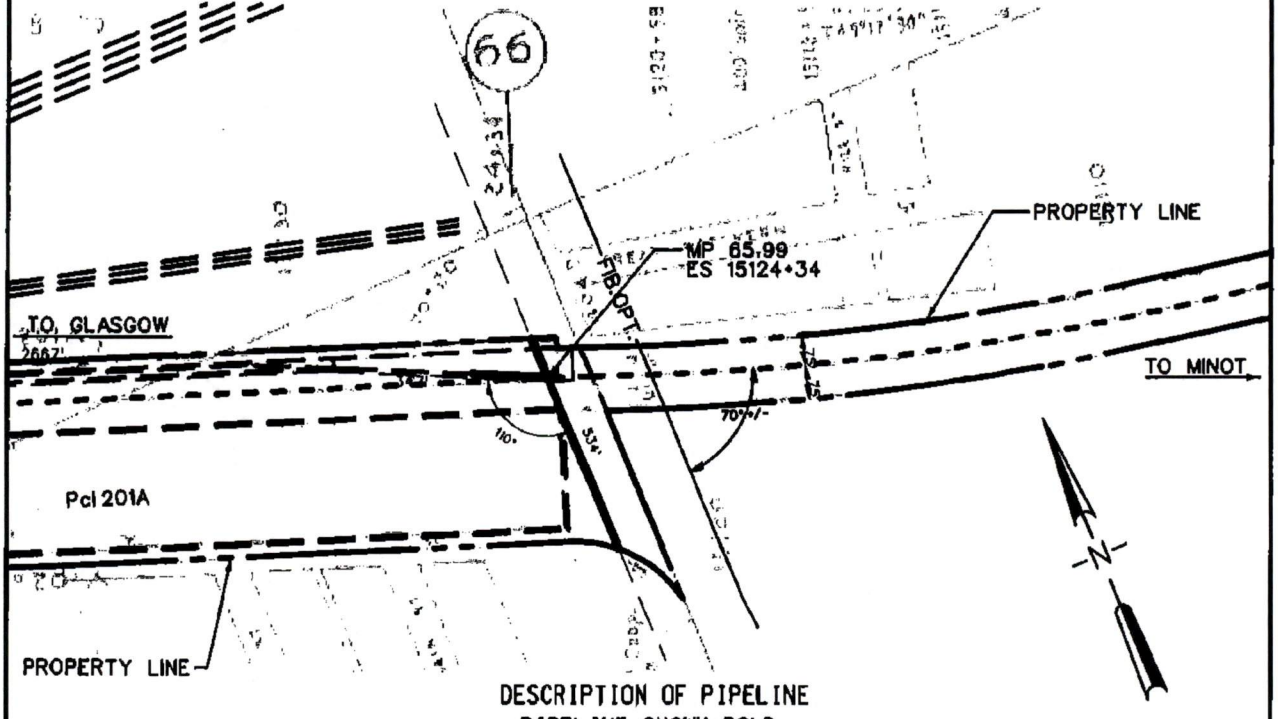
PLAINS PIPELINE, L.P.

MAP REF. R51631

SCALE: 1 IN. = 400 FT.
MONTANA DIV.
GLASGOW SUBDIV. L.S. 0035
DATE 05/02/2012

SECTION: 15
TOWNSHIP: 156N
RANGE: 93W
MERIDIAN: 5PM

GN RY
ND-18
16



DESCRIPTION OF PIPELINE
PIPELINE SHOWN BOLD

	CARRIER PIPE	CASING PIPE		CARRIER PIPE	CASING PIPE
SIZE:	10.062"	-	LENGTH ON R/W:	534'	-
CONTENTS:	CRUDE OIL		WORKING PRESSURE:	1,480 PSI	
PIPE MATERIAL:	CARBON STEEL	-	BURY: BASE/RAIL TO TOP OF PIPE		30'
SPECIFICATION/GRADE:	5LX-52	-	BURY: NATURAL GROUND		30'
WALL THICKNESS:	0.344"	-	BURY: ROADWAY DITCHES		30'
COATING:	EPOXY	-	CATHODIC PROTECTION		YES

VENTS: NUMBER - SIZE - HEIGHT OF VENT ABOVE GROUND -

NOTE: PIPE TO BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILL METHOD

NEAR ROSS
COUNTY OF MOUNTRAIL STATE OF ND MJW

DRAWING NO. 1-54765

U.S. Army Corps of Engineers
North Dakota Regulatory Office
1513 South 12th Street
Bismarck, North Dakota 58504
Telephone (701) 255-0015 Fax (701) 255-4917

IMPORTANT INSTRUCTIONS FOR OUR PERMIT CUSTOMERS

Notice of the Reissuance of Nationwide Permits was published in the Federal Register [72 FR 11092] on March 12, 2007. The Nationwide Permits went into effect on March 19, 2007. Project compliance certification is required by General Condition 26. The following instructions are provided to clarify the information contained within the nationwide permit authorization letter and attachments. [1]

STEP 1

Review the permit authorization and be sure you understand the terms and conditions for the authorization to remain valid. If you do not understand, or have any questions, please do not hesitate to contact this office at the above address.

STEP 2

Complete your project in accordance with the permit terms and conditions. [Remember that any deviation from the original plans and specifications of your project could require additional authorization from this office.]

STEP 3

Within thirty (30) days of project completion, please complete the permit compliance certification contained within your permit authorization letter. A photocopy of the first page (marked with a colored COPY stamp) has been provided for this purpose. Mark the applicable statements, sign and date where indicated, and forward the COPY to this office at the above address.

---

[1] There is no charge associated with any aspect of this nationwide authorization or the follow-up compliance certification.

2. **Project Location.** Work would occur in Sections 15, 22, 23, 26, 35 and 36, Township 156 North, Range 93 West; Sections 31, 32, 33, 34, 35 and 36, Township 156 North, Range 92 West; and Sections 31, 32, 33, 34, 35 and 26, Township 156 North, Range 91 West, all in Mountrail County, North Dakota.

3. **Project Compliance Certification for Permit No. NWO-2012-0422-BIS.** *In compliance with General Condition 26, you are required to submit the following project compliance certification within thirty (30) days of project completion. [Please check all applicable statements]*

[ ] I certify that I have completed the projects as permitted.
[ ] I certify that I have completed a modified version of the projects.
[ ] I certify that I have completed all required mitigation.

Permittee's Signature:_____ **Date:**_____

4. **Other Authorizations.** This determination is applicable only to the permit program administered by the US Army Corps of Engineers. It does not eliminate the need to obtain other Federal, state, tribal, and local approvals before beginning work.

5. **Responsibility.** You are responsible for all work accomplished in accordance with the terms and conditions of this Nationwide Permit. If a contractor or other authorized representative will be accomplishing the work authorized by the Nationwide Permit on your behalf, it is strongly recommended that they be provided a copy of this letter and the attached conditions so that they are aware of the limitations of the Nationwide Permit. Any activity that fails to comply with all the terms and conditions of the Nationwide Permit will be considered unauthorized and subject to appropriate enforcement action.

6. **Other Special Conditions.**

Endangered Species

That the permittee shall report any threatened or endangered species at the project site. Notification shall be made to the North Dakota Regulatory Office by telephone or fax within 24 hours. Written confirmation shall be provided within 48 hours if deemed necessary by the North Dakota Regulatory Office.

Cultural Resources

That the permittee and/or the permittee's contractor, or any of the employees, subcontractors or other persons working in the performance of a contract or contract(s) to complete the work authorized herein, shall cease work immediately and report the discovery of any previously unknown historic or archeological remains to the North Dakota Regulatory Office. Notification shall be by telephone or fax within 24 hours of the discovery and, in writing, within 48 hours. The North Dakota Regulatory Office will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places. Work shall not resume until notified by the North Dakota Regulatory Office.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
1513 SOUTH 12TH STREET
BISMARCK ND 58504-6640

February 28, 2012

North Dakota Regulatory Office [NWO-2012-0422-BIS]

SWCA Environmental Consultants, Bismarck Office
ATTN: Michael J. Cook, Natural Resources Lead
116 North 4th Street, Suite 200
Bismarck, North Dakota 58501

Dear Mr. Cook:

1. **Project Authorization.** We have reviewed your request on behalf of **Plains All-American Pipeline, LP ["PAA"]** for Department of the Army (DA) authorization to install approximately 16.89 miles of 12-inch crude oil pipeline on private lands in North Dakota, which will impact wetlands and an unnamed stream temporarily by discharge of fill associated with traditional bedding and backfill methods. In addition, the Little Knife River will also be crossed; however, PAA has opted to install this crossing utilizing the HDD method, thus avoiding a discharge of fill and negating the need for a permit for this crossing. We have prepared a preliminary jurisdictional determination (JD) for waters identified within the work corridor which is a written indication that the waterway in the project area may be jurisdictional waters of the United States (US). Such waters have been treated as jurisdictional for purposes of computation of impacts and compensatory mitigation requirements. If you concur with the preliminary JD, please sign it and return it to the letterhead address.

If you believe the preliminary JD is inaccurate, you may request this office complete an approved JD prior to commencement of any work in waters of the US. An approved JD is an official determination regarding the presence or absence of such waters. Completion of an approved JD may require coordination with the US Environmental Protection Agency.

If you do not want the Corps to complete an approved JD, you may proceed your project in accordance with the terms and conditions of Department of the Army Nationwide Permit No. 12, found in the March 12, 2007 Federal Register (72 FR 11092), Reissuance of Nationwide Permits. Enclosed is a fact sheet that fully describes this Nationwide Permit and lists the General and Regional Conditions and the Section 401 Water Quality Certification Requirements, if applicable, that must be complied with. **Please note any deviations from the plans and specifications of your project could require additional authorization from this office.**

This verification is valid until the Nationwide Permit is modified, reissued, or revoked. All of the existing nationwide permits are scheduled to be modified, reissued, or revoked prior to March 18, 2012. It is incumbent upon you to remain informed of changes to the nationwide permits. We will issue a public notice when the nationwide permits are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation to complete the activity under the present terms and conditions.

2. **Project Location.** Work would occur in Sections 15, 22, 23, 26, 35 and 36, Township 156 North, Range 93 West; Sections 31, 32, 33, 34, 35 and 36, Township 156 North, Range 92 West; and Sections 31, 32, 33, 34, 35 and 26, Township 156 North, Range 91 West, all in Mountrail County, North Dakota.

3. **Project Compliance Certification for Permit No. NWO-2012-0422-BIS.** *In compliance with General Condition 26, you are required to submit the following project compliance certification within thirty (30) days of project completion. [Please check all applicable statements]*

[ ] I certify that I have completed the projects as permitted.
[ ] I certify that I have completed a modified version of the projects.
[ ] I certify that I have completed all required mitigation.

Permittee's Signature:_____ **Date:**_____

4. **Other Authorizations.** This determination is applicable only to the permit program administered by the US Army Corps of Engineers. It does not eliminate the need to obtain other Federal, state, tribal, and local approvals before beginning work.

5. **Responsibility.** You are responsible for all work accomplished in accordance with the terms and conditions of this Nationwide Permit. If a contractor or other authorized representative will be accomplishing the work authorized by the Nationwide Permit on your behalf, it is strongly recommended that they be provided a copy of this letter and the attached conditions so that they are aware of the limitations of the Nationwide Permit. Any activity that fails to comply with all the terms and conditions of the Nationwide Permit will be considered unauthorized and subject to appropriate enforcement action.

6. **Other Special Conditions.**

Endangered Species

That the permittee shall report any threatened or endangered species at the project site. Notification shall be made to the North Dakota Regulatory Office by telephone or fax within 24 hours. Written confirmation shall be provided within 48 hours if deemed necessary by the North Dakota Regulatory Office.

Cultural Resources

That the permittee and/or the permittee's contractor, or any of the employees, subcontractors or other persons working in the performance of a contract or contract(s) to complete the work authorized herein, shall cease work immediately and report the discovery of any previously unknown historic or archeological remains to the North Dakota Regulatory Office. Notification shall be by telephone or fax within 24 hours of the discovery and, in writing, within 48 hours. The North Dakota Regulatory Office will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places. Work shall not resume until notified by the North Dakota Regulatory Office.

7. **Additional Information.**

Suitable Material and 1978 Stream Evaluation Map: Permittees are reminded that General Condition No. 6 prohibits the use of unsuitable material. In addition, organic debris, some building waste, and materials excessive in fines are not suitable material. Specific verbiage on prohibited materials and the 1978 Stream Evaluation Map for the State of North Dakota can be accessed on the North Dakota Regulatory Office's website at: http://www.nwo.usace.army.mil/html/od-rnd/ndhome.htm.

8. **Customer Service Survey.** The Omaha District, North Dakota Regulatory Office is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete our Customer Service Survey found on our website at http://per2.nwp.usace.army.mil/survey.html. If you do not have Internet access, you may call and request a paper copy of the survey that you can complete and return to us by mail or fax.

9. **Point-of-Contact.** If you have any questions concerning this determination, please contact **Toni R. Erhardt** of this office by letter or telephone at 701-255-0015 and reference Authorization Number **NWO-2012-0422-BIS**.

Sincerely

Daniel E. Cimarosti
State Program Manager
North Dakota

Enclosures

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): 17 February 2012

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD: Plains All-American Pipeline, LP by SWCA Environmental Consultants, Bismarck Office, ATTN: Michael J. Cook, Natural Resources Lead, 116 North 4th Street, Suite 200, Bismarck, North Dakota 58501

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Omaha District NDRO | Plains All-American Pipeline, LP - Nelson Takeoff to Ross Pipeline Project crossing Various Waters in Mountrail County, North Dakota | NWO-2012-0422-BIS

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: Plains All-American proposes to install 16.89 miles of 12-inch crude oil pipeline on private lands located in North Dakota. Construction of the Nelson Takeoff to Ross Pipeline would temporarily impact thirty-two (32) palustrine emergent wetlands and one (1) unnamed intermittent stream and 1 perennial stream (Little Knife River). The open-cut crossing method is proposed to be utilized for all crossings, except the Little Knife which will be by the HDD method.

Feature ID	Latitude	Longitude	Cowardin Class	Total Wetland Size (acres)	Temporary Impacts Within 70-foot ROW (acres)
NRBWET11	48.285907	-102.353088	PEM	0.748	0.284
NRBWET12	48.313443	-102.621239	PEM	0.463	0.053
NRBWET13	48.313421	-102.619064	PEM	1.056	0.195
NRBWET14	48.313456	-102.613393	PEM	0.368	0.252
NRWET16A	48.291503	-102.475021	PEM	0.132	0.042
NRWET16B	48.291421	-102.471992	PEM	4.023	2.790
NRBWET21	48.296807	-102.591454	PEM	0.438	0.084
NRBWET22	48.295432	-102.560944	PEM	1.055	0.051
NRBWET24	48.290273	-102.431087	PEM	0.578	0.260
NRBWET25	48.289902	-102.424371	PEM	0.109	0.031
NRBWET4	48.287320	-102.354507	PEM	1.080	0.093
NRBWET6	48.291767	-102.455419	PEM	0.389	0.239

NRWET10	48.290452	-102.516997	PEM	0.484	0.091
NRWET11	48.290284	-102.515731	PEM	0.841	0.431
NRWET12	48.290277	-102.508647	PEM	0.459	0.192
NRWET13	48.290392	-102.508463	PEM	0.112	0.112
NRWET14	48.291402	-102.480127	PEM	0.039	0.039
NRWET15	48.291357	-102.479929	PEM	0.487	0.177
NRWET16	48.291431	-102.477376	PEM	0.838	0.560
NRWET17	48.291595	-102.463627	PEM	0.147	0.046
NRWET18	48.291598	-102.457508	PEM	0.361	0.321
NRWET19	48.291490	-102.451149	PEM	0.340	0.216
NRWET20	48.289334	-102.424178	PEM	0.107	0.071
NRWET21	48.290462	-102.519516	PEM	2.075	0.500
NRWET22	48.290971	-102.499913	PEM	1.753	0.662
NRWET3	48.297013	-102.582308	PEM	1.142	0.392
NRWET4	48.297119	-102.575690	PEM	3.612	0.461
NRWET5	48.296893	-102.565489	PEM	3.085	0.980
NRWET6	48.290994	-102.540911	PEM	0.514	0.239
NRWET7	48.291052	-102.539464	PEM	2.315	0.284
NRWET8	48.291019	-102.531402	PEM	0.032	0.032
NRWET9	48.290613	-102.522477	PEM	0.076	0.076

Waterbody ID	**Latitude**	**Longitude**	**Waterbody Name**	**Class**	**Temporary Impacts Within 70-foot ROW (acres)**
NRSTR1	48.298812	-102.620895	Unnamed	Intermittent	0.0320
NRSTR2	48.286541	-102.414874	Little Knife River	Perennial	0

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: N/A

Non-Tidal: N/A

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: 17 February 2012

☒ Field Determination. Date(s): Between September 27 and November 28, 2011 by SWCA

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.
This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:.

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

- ☒ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study:

☒ U.S. Geological Survey Hydrologic Atlas: .

- ☐ USGS NHD data.
- ☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 | Manitou, Ross, Stanley and Stanley SE, ND.

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:.

☒ National wetlands inventory map(s). Cite name: Manitou, Ross, Stanley and Stanley SE, ND.

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): SWCA/ArcGIS/ORM2/GoogleEarthPro.
or ☐ Other (Name & Date):

☐ Previous determination(s). File no. and date of response letter: .

☐ Other information (please specify): .

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Ian Eckhardt 2/17/12

Signature and date of
Regulatory Project Manager
(REQUIRED)

Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining the signature is impracticable)

FACT SHEET
NATIONWIDE PERMIT 12
(2007)

UTILITY LINE ACTIVITIES. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2 acre of waters of the United States.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2 acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the total discharge from a single and complete project does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at http://www.fws.gov/ and http://www.noaa.gov/fisheries.html respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality. *Specifically in North Dakota, the North Dakota Department of Health has denied certification for projects under this Nationwide Permit proposed to cross* ***all classified rivers, tributaries and lakes****; individual certification for project in these waterways must be obtained by the project proponent prior to authorization under this Nationwide Permit. For utility line crossings of all other waters, the Department of Health has issued water quality certification provided the attached Construction and Environmental Disturbance Requirements are followed.*

22. Coastal Zone Management. *Not Applicable.*

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:
"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

General Condition 27. Pre-Construction Notification.

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) Forty five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

Additional Information

Permittees are reminded that General Condition No. 6 prohibits the use of unsuitable material. In addition, organic debris, some building waste, and materials excessive in fines are not suitable material.

Specific verbiage on prohibited materials and the 1978 Stream Evaluation Map for the State of North Dakota can be accessed on the North Dakota Regulatory Office's website at:
https://www.nwo.usace.army.mil/html/od-rnd/ndhome.htm

NORTH DAKOTA
DEPARTMENT *of* HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov

Construction and Environmental Disturbance Requirements

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

Surface Waters

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

Fill Material

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.

INTRODUCTION

The proposed Nelson Take-off to Ross Pipeline Project (NRP or Project) is a new 16.89-mile, 10.75-inch-outside diameter crude oil pipeline that will originate from the Plains Robinson Lake 8" Pipeline System (Robinson System) in Mountrail County, North Dakota, and extend westward to the Ross Rail Terminal (Ross Terminal). From its origination at the Robinson System, the proposed Project will traverse both public and private lands.

Plains is submitting to the North Dakota Public Service Commission (Commission or PSC) a single consolidated application for a Certificate of Corridor Compatibility and Route Permit for the NRP.

The application provides the requisite information as stipulated by:

- North Dakota Century Code, Energy Conversion and Transmission Facility Siting Act, Chapter 49-22-08.1; and,
- PCS Administrative Code, Chapter 69-06-05, Transmission Facility Permit.

The information presented in this application is organized according to the format prescribed in the Commission's Application Guidelines for an Application for a Route Permit, which divides the information into the following categories:

- SECTION 1: Type, Size and Design

SECTION 1: TYPE, SIZE AND DESIGN

1.1 TYPE

The NRP is a transmission pipeline designed to ship crude oil.

1.2 APPROXIMATE LENGTH OF FACILITY

The proposed NRP is approximately 16.89 miles in total length.

1.3 SIZE AND DESIGN OF PIPELINE FACILITY

The NRP is a transmission pipeline. The steel pipeline will meet U.S. Department of Transportation (DOT) regulations, specifically the design, installation, pressure testing, operations and maintenance requirements as outlined in 49 CFR Part 195.

1.3.1 PIPE SIZE

The NRP will be constructed of steel pipe which shall, at a minimum, meet the following standards.

- 10.75-inch outside diameter;
- 0.250-inch wall thickness (standard);
    - 0.344-inch wall thickness (road and railroad crossings); and
- API 5L PSL 2 X52.

1.3.2 MAXIMUM DESIGN OF OPERATING PRESSURE, FLOW RATE AND TEMPERATURE

The Project pipeline has been designed with the maximum design parameters listed below:

- Maximum Operating Pressure (MOP): 1480 pounds per square inch gauge (psig);
- Maximum Flow Rate: 47,000 barrels per day (bpd)
- Maximum Operating Temperature: 120°F;
- Normal Operating Conditions: 90° F at 1100 psig.

1.4 ABOVEGROUND FACILITIES

Two (2) aboveground mainline valves (MLV) are planned to be installed as part of the NRP; these facilities will be installed to meet DOT regulations.

- Mainline Valve - Check: Section 31 of Township 156N, Range 91W; and
- Mainline Valve - Block: Section 33 of Township 156N, Range 92W.

1.4.1 VALVE SPECIFICATIONS

Plains will utilize valves which shall, at a minimum, meet the following standards:

- 10-inch flanged end, through conduit, slab gate, motor operated valve;
- API Standard 6D;
- ANSI 600;
- Maximum Operating Pressure: 1,480 psig;

1.5 WIDTH OF RIGHT-OF-WAY

- Typical Construction Right-of-Way Width:
  - 70-feet wide typical
- Temporary Extra Workspace:
  - U.S. Hwy 2 Crossing Horizontal Directional Drill (HDD)
    - Two-150-feet wide by 100-feet long
  - Little Knife River Crossing HDD
    - Two-150-feet wide by 100-feet long
  - Burlington Northern Railroad Crossing HDD
    - Two-150-feet wide by 100-feet long
  - Standard feature crossings (*e.g.*, railroad, waterbodies, roads)
    - 50-feet wide by 100-feet long
- Permanent ROW Width:
  - 30-feet wide

1.6 LOCATION

The total length of the proposed NRP is approximately 16.89 miles, which are located entirely within Mountrail County, North Dakota.

1.7 PROJECT SCHEDULE

1.7.1 ROUTE PERMIT

Plains is seeking a Route Permit in or before May 2012.

1.7.2 CERTIFICATE OF CORRIDOR COMPATIBILITY

Plains is submitting the application for a Certificate of Corridor Compatibility in February 2012 which has been included with this application for a Route Permit. The two applications have been combined to form this Consolidated Application. Plains is seeking a Certificate of Corridor Compatibility in or before May 2012.

1.7.3 CONSTRUCTION SCHEDULE

Plains has scheduled construction to commence as early as May 1, 2012. Pipeline construction is expected to take approximately three (3) months to complete. Pipeline commissioning will be conducted once construction is complete and shall prepare the pipeline for placement into service. Restoration will begin in 2012 and shall continue as long as seasonal conditions allow, these efforts shall be temporarily suspended as necessary during frozen or saturated conditions, resuming in 2013. Plains will continue restoration efforts until final restoration has been achieved which is anticipated to occur in 2013.

~~CONSTRUCTION CONTRACT~~

ND, PSC

Energy Conversion and Transmission Facility Siting Act

North Dakota Century Code

49-22-20. Revocation or suspension of certificate or permit. A certificate of site compatibility or permit for the construction of a transmission facility may be revoked or suspended for:

1. Any material false statement in the application or in accompanying statements or studies required of the applicant.

2. Failure to comply with the certificate or permit or any terms, conditions, or modifications contained therein.

3. Violation of the provisions of this chapter or rules or regulations issued pursuant to this chapter by the commission.

4. A determination by a district court pursuant to section 49-22-16.1.

49-22-16.1. Unfair tactics in acquiring land or easements for a facility - Court action - Cancellation of easement - Penalty.

1. Any person employed by a public utility to acquire easements for a facility subject to this chapter shall not use any harassment, threat, intimidation, misrepresentation, deception, fraud, or other unfair tactics to induce the owner of the land to be affected by the facility to grant or agree to any easements.

2. If at least five landowners aggrieved by the conduct of a person or persons, acting on behalf of the same utility, acquiring easements for a site or route of a facility allege use of harassment, threat, intimidation, misrepresentation, deception, fraud, or other unfair tactics by the person or persons acquiring or attempting to acquire the easement, an action may be brought in the appropriate district court.

3. Upon a determination by the court that the person or persons employed by the utility used harassment, threat, intimidation, misrepresentation, deception, fraud, or other unfair tactics in acquiring or attempting to acquire an easement from at least five separate landowners, the court shall, by order, declare the easements void and may order any compensation paid therefor returned to the offending utility, or allow the landowner to retain such compensation, or award to the landowner up to three times the amount of the compensation involved as damages, punitive or

compensatory. The court shall award costs and reasonable attorney's fees to the plaintiffs when the court rules in favor of the plaintiffs.

4. Upon a determination by the court that the utility involved did knowingly allow, encourage, or operate in active consort or participation with such person or persons utilizing such unfair tactic, the court shall cause a copy of its memorandum opinion or order to be filed with the commission.

5. Upon receiving a copy of a memorandum opinion or order issued by a district court pursuant to this section, the commission may revoke or suspend the permit issued with respect to the route affecting the aggrieved landowners. If a permit has not been issued with respect to a site or route affecting the aggrieved landowners, the commission may refuse to issue a permit for such portion of the route.

49-22-21. Penalties.

1. Any person required by this chapter to have a certificate or permit who willfully begins construction of an energy conversion facility or transmission facility without previously securing a certificate or permit as prescribed by this chapter, or who willfully constructs, operates, or maintains an energy conversion facility or transmission facility other than in compliance with the certificate or permit and any terms, conditions, and modifications contained therein is guilty of a class A misdemeanor.

2. Any person who willfully violates any regulation issued or approved pursuant to this chapter or who willfully falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this chapter shall be guilty of a class A misdemeanor.

3. Any person who willfully engages in any of the following conduct shall be subject to a civil penalty of not to exceed ten thousand dollars for each such violation for each day that such violations persist, except that the maximum penalty may not exceed two hundred thousand dollars for any related series of violations:

   a. Begins construction of an energy conversion facility or a transmission facility without having been issued a certificate or permit pursuant to this chapter.

b. Constructs, operates, or maintains an energy conversion facility or a transmission facility other than in compliance with the certificate or permit and any terms, conditions, or modifications contained therein.

c. Violates any provision of this chapter or any rule adopted by the commission pursuant to this chapter.

d. Falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained pursuant to a certificate or permit issued pursuant to this chapter.

The civil penalty provided for in this subsection may be compromised by the commission. The amount of the penalty when finally determined or agreed upon in compromise shall be deposited in the general fund and, if not paid, may be recovered in a civil action in the courts of the state.

4. Notwithstanding any other provision of this chapter, the commission may, by injunctive procedures, without bond or other undertaking, proceed against any person who willfully engages in any conduct described in subsection 3. No liability shall accrue to the commission or its authorized representative in proceeding against any person pursuant to this section.

North Dakota Administrative Code

69-06-05-02. Designation of route.

3. Variance from permit conditions. The commission may allow a variance from any special condition upon a request which demonstrates the existence of good cause.

ACORD™ CERTIFICATE OF LIABILITY INSURANCE 6/1/2012

DATE (MM/DD/YYYY): 5/3/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	LOCKTON COMPANIES, LLC 5847 San Felipe, Suite 320 Houston TX 77057	CONTACT NAME:	
		PHONE (A/C, No, Ext):	FAX (A/C, No):
		E-MAIL ADDRESS:	
		INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED 1317577	PLAINS ALL AMERICAN PIPELINE, L.P. PLAINS MARKETING, L.P. PLAINS PIPELINE, L.P. 333 CLAY STREET, SUITE 1600 HOUSTON TX 77002	INSURER A : Aspen Insurance UK Limited	11680
		INSURER B : National Union Fire Ins Co Pittsburgh PA	19445
		INSURER C : New Hampshire Insurance Company	23841
		INSURER D :	
		INSURER E :	
		INSURER F :	

COVERAGES PLAPL02 AP CERTIFICATE NUMBER: 11790214 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	Y	Y	E111459	6/1/2011	6/1/2012	EACH OCCURRENCE	$ 2,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 500,000
	X CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$ XXXXXXX
	X S&A Included						PERSONAL & ADV INJURY	$ XXXXXXX
	X $1M SIR						GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
	X POLICY ☐ PRO-JECT ☐ LOC							$
B	AUTOMOBILE LIABILITY	Y	Y	CA 720-39-28	6/1/2011	6/1/2012	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$ XXXXXXX
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$ XXXXXXX
	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$ XXXXXXX
	X MCS-90 X CA9948							$ XXXXXXX
	☐ UMBRELLA LIAB ☐ OCCUR			NOT APPLICABLE			EACH OCCURRENCE	$ XXXXXXX
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$ XXXXXXX
	☐ DED ☐ RETENTION $							$
C C C C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	1591426-AOS 1591427-CA 1591428-TX 1591430-WI / 9876344-FL	6/1/2011 6/1/2011 6/1/2011 6/1/2011	6/1/2012 6/1/2012 6/1/2012 6/1/2012	X WC STATU-TORY LIMITS ☐ OTH-ER	
							E.L. EACH ACCIDENT	$ 2,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 2,000,000
							E.L. DISEASE - POLICY LIMIT	$ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES /(Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: The crossings listed: 1. 61st Street; 2.80th Avenue; 3. 82nd Avenue; 4. 83rd Avenue; 5. 84th Avenue; 6. 85th Avenue; 7. 86th Avenue; 8. 87th Avenue; 9. 88th Avenue; 10. 89th Avenue; 11. 90th Avenue; 12. 91st Avenue; 13. 93rd Avenue; 14. 93rd Avenue; 15. 93rd Avenue; 16. Old Hwy 2; 17. Old Hwy 8.

CERTIFICATE HOLDER

11790214

Mountrail County, ND
6160 Hwy 8
Stanley ND 58784

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)

All Policies include a blanket automatic additional insured endorsement [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All Policiies includes a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply.

Permit Number - ND2012-14337

State of North Dakota
Temporary Water Permit
SWC Project No. 1400A

In response to an application for a temporary water permit dated May 11, 2012 as received in this office May 17, 2012, authority is hereby granted to:

Pro Pipe Cororation
P.O. Box 307
Frenchtown, MT 59834-0307
Contact Person: Ron Marsh Telephone (406) 239-0996

A Temporary Water Permit as follows:

Source: Un-named pond

Point of Diversion: NW1/4 Sec. 15 Twp. 156 Rng. 093

Nature of Use: Hydrostatic testing

Total Quantity of Water: 9,200.0 Barrels

Maximum Withdrawal Rate: 700.0 gpm

Period of authorized useage: Jul 15, 2012 through Oct 30, 2012

Conditions
This temporary water permit is granted subject to use from the source by senior appropriators. Permission for access to the source must be obtained from all affected landowners. Failure to comply with any order of the State Engineer may result in forfeiture of this permit. The granting of a temporary water permit does not create a water right.

The Total Quantity of Water listed above is equivalent to 1.19 acre-feet.

The State Engineer may impose restrictions pertaining to a minimum level in this un-named pond.

The use of the water authorized by this Temporary Water Permit shall be limited to activities associated with the hydrostatic testing of a new 10-inch diameter pipeline. Any other use is unauthorized and will result in the forfeiture of this temporary water permit.

A weatherproof copy of this Temporary Water Permit must be attached the equipment withdrawing water and must be available for inspection by representatives of the State Engineers Office or the State Water Commission.

Dated: Jun 21, 2012

Todd Sando, P.E.
State Engineer
ND State Water Commission
900 East Boulevard
Bismarck, ND 58505

cc: Mountrail WRD

NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov

May 8, 2012

North Dakota Pollutant Discharge Elimination System (NDPDES)
General Permit for Stormwater Discharges from Construction Activity
NOTICE OF COVERAGE

Permittee(s)

Owner Contact: Tom McCormick
Plains All American Pipeline LP
1575 Hwy 150 South Ste E
Evanston, WY 82930

Operator Contact: Ron Marsh
Pro Pipe Corporation
PO Box 4648
Frenchtown MT 59835

Coverage under the 2009 reissued construction general permit (NDR10-0000) is identified as follows:

Permit ID:	Site Name:
NDR104443	**PAA Nelson Take-Off to Ross Pipeline Project**

Please remember to update the Stormwater Pollution Prevention (SWPP) plan as appropriate for site conditions. The best management practices (BMPs) and temporary structures must be inspected, maintained and adjusted until the site is stabilized following construction activities. Once the site is stabilized as outlined in the general permit, you may end permit coverage by filing a termination notice. Cities or counties may impose additional requirements and/or specific BMPs for construction affecting their storm drainage system. Please check with the local officials to be sure all local stormwater management considerations are addressed.

Additional Information

The permit conditions, forms and related information may be found on our web site at:

www.ndhealth.gov/wq/Storm/Construction/ConstructionHome.htm

Should you have any questions on the permit, please contact a stormwater staff person listed below.

Dallas Grossman
Division of Water Quality
701.328.5242
dgrossma@nd.gov

NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov

June 4, 2012

Ron Marsh
Pro Pipe Corporation
PO Box 307
Frenchtown, MT 59834

Re: NDPDES Permit No. NDG070323

We have received your "Application for Permit to Discharge - NDPDES Industrial-Short Form C" and have granted authority to discharge under the General Permit for Temporary Dewatering/Hydrostatic Testing Permit No. NDG070000. Your facility has been assigned permit no. **NDG070323.** This permit has been issued by the North Dakota Department of Health (NDDoH) with the understanding that all other applicable permits and permissions have been obtained for the start of the following project. The application indicates that the discharge(s) will consist of surface water from the hydrostatic testing of a new 10 inch pipeline:

Discharge Point	Volume (Gallons)	Location	
001H	≈ 40,000 Total	Nelson Ross Project	Twn 156 N, Rng 93 W, Sec 15; Mountrail County

All discharge points shall be inspected daily. On a daily basis record the total volume of discharge and make a visual inspection for Oil and Grease. Analytical parameters for pH and Total Suspended Solids (TSS) shall be waived for this project. The parameter for Chlorine shall be tested only if the water source has been chlorinated. The parameter of Oil and/or Grease is waived unless sheen is observed in the discharge; if observed then collect a sample for Total Petroleum Hydrocarbon (TPH). The department shall be contacted on all findings of Oil and Grease. All discharges made directly to a surface water body or wetland shall be inspected closely so as to minimize any turbidity issues. Best Management Practices (BMPs) must be used to minimize the impact of the discharge.

ADDITIVES: No additives were reviewed for this project.

Enclosed are Discharge Monitoring Report (DMR) forms for your use. If someone else is responsible for the submittal of the DMRs, please forward this letter and the enclosed forms to them. The reports cover three months; the dates and location have been filled out. If no discharge occurs during the reporting period, check "No" in section one. The reports must be post-marked by the last day of the month following the end of each reporting period. All original DMR forms should be sent to NDDoH and a copy should be kept for your files. **EPA no longer requires a copy of the DMR form.**

If any other testing is conducted during this project, copies of the results of any such test should be forwarded to the Department. **Should you wish to no longer be covered under this permit, you must submit a written request to terminate and cite the reasons for termination.** Coverage shall be maintained until a written notification to release has been issued to the permittee by NDDoH. Should you have any questions about your permit or how to complete the DMRs, please contact me at (701) 328-5234.

Sincerely,

Marty Haroldson
Environmental Scientist
Division of Water Quality

Enc.
Cc: EPA

Meeting Minutes
Docket No: PU 12-40
Project: Plains Pipeline, L.P. Nelson to Ross Pipeline-Mountrail County
Date: June 18, 2012
Subject: Preconstruction Work Session with North Dakota Public Service Commission (Commission)
Date Issued: June 19, 2012

Attendees:

Plains Pipeline, L.P.: I. Jim Fleetwood, Mike Walcavich, Terry Wainwright, Joel Marking (ProPipe, Contractor), Herbert Holber, Johnny Ritchie, Seth Woodale, and Jason Setser

ND PSC: Chris Marohl

E3 Environmental, LLC: William McCarthy, Katie Schmidt

Carlson McCain: Todd Hartleben (Commission's 3rd Party Inspector)

The following summarizes the Preconstruction Work Session discussions pertaining to the Plains Pipeline, L.P. (Plains) Nelson to Ross Pipeline-Mountrail County PU-12-40 (Project); all comments and/or details may not be included in their entirety.

The Findings of Fact, Conclusions of Law and Order for Case No. PU-12-40:
Mr. Chris Marohl (Marohl) reviewed select items for those present. Participating parties were provided the opportunity to pose questions and comments. This document was disseminated to the attendees prior to the meeting. The following comments and action items were identified:

The Certification Relating To Order Provisions Transmission Facility Siting for Case No. PU-12-40:
Marohl reviewed items 1 through 36 for those present and participating parties were provided the opportunity to pose questions and comments. This document was disseminated to the attendees prior to the meeting. The following comments and action items were identified:

Regarding Item #5: Todd Hartleben (Hartleben) was identified as the 3rd Party Inspector. The submittal process for the required weekly reports was discussed and is outlined below.

- Submittal Process: Weekly reports are to be emailed to the general ND PSC email address (ndpsc@nd.gov), Marhol and Hartleben are to be copied on this transmittal (camarohl@nd.gov. thartleeben@carlsonmccain.com) The case number should also be included in the subject line of the email transmittal of each report (PU-12-40)
- Weekly Reports should include but are not limited to the following information:

- Project Name and PSC Case Number (PU-12-40);
- Date of report;
- Percent Complete of construction/reclamation activities such as trenching, pipe stringing/laying, backfilling, reclamation and pressure testing;
- Details regarding all construction/reclamation activities occurring since last filed report including but not limited to:

- It was agreed that the start of construction is signified by ground disturbing activities or right of way mowing.
- Plains shall provide the PSC notice of project initiation a minimum of 24-hours prior to the commencement of construction. This notice will be via e-mail and weekly construction reports shall commence seven (7) days after this notice and shall continue through completion or suspension of activities.

Project Personnel:
The table below identifies key contacts for the Project, as well as their role and contact information.

Contact	Company	Role	Phone
I. Jim Fleetwood	Plains Pipeline	Project Engineer	307-472-9911
Mike Walcavich	Plains Pipeline	Western Region Engineering Manager	713-993-5321
Joel Marking	ProPipe	Contractor, Project Manager	406-855-1185
Terry Wainwright	Plains Pipeline	Construction Field Superintendent	501-940-0672
William (Bill) McCarthy	E3 Environmental	Environmental Compliance	651-282-0650

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
3425 Miriam Avenue
Bismarck, North Dakota 58501

MAY 18 2012

COPY

Ms. Katie Schmidt
Project Manager
E3 Environmental, LLC
817 Vandalia Street, Suite 100
St Paul, Minnesota 55114

Re: Plains All-American Pipeline L.P. proposed construction of the Nelson Take-Off to Ross Pipeline in Mountrail County, North Dakota
In reply please reference Tails #2012-CPA-0263

Dear Ms. Schmidt:

This is in response to your letter dated December 30, 2011, concerning a proposal by the Plains All-American Pipeline L.P. (Plains) for the proposed construction of the Nelson Take-Off to Ross Pipeline in Mountrail County, North Dakota. The proposed project is 16.5 miles in length. The specific project location is:

T. 155 N., R. 91 W., Sections 2-6
T. 155 N., R. 92 W., Sections 3 -5
T. 156 N., R. 91 W., Sections 30-35
T. 156 N., R. 92 W., Sections. 25-36
T. 156 N., R. 93 W., Sections 9-10, 15-16, 21-22, 25-28, 33-36

The U.S. Fish and Wildlife Service (Service) offers the following comments under the authority of and in accordance with the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 *et seq.*), the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57), the Endangered Species Act (ESA) (16 U.S.C. 1531 *et seq.*), and the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250).

Below are recommendations to assist in complying with each of these authorities. Your plans should integrate these recommendations to the extent practicable to insure compliance. Recommendations addressing the trust resources under Service authorities are tailored to address protective measures for a variety of species. As such, recommended timing restrictions are not identical and the federal action agency or project proponent should evaluate the trust resources that may be affected by the

proposed project and use the appropriate protective timing restriction accordingly.

Threatened, Endangered and Candidate Species

Because there is no Federal nexus for the proposed project, it is not necessary to make determinations for listed species. Private individuals and companies however, are required to ensure that their actions do not result in "take" of federally listed species. Take is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." If Plains believes that the project may result in take, we recommend the development of a habitat conservation plan (HCP) as described in Section 10(a)(1)(B) of the ESA. A HCP allows non-Federal parties without a Federal nexus to apply for an incidental take permit. The HCP must include a description of the proposed action, a determination of the effects of those actions on federally-listed plant and wildlife species and their habitats (and may include proposed or candidate species), and a definition of the measures to minimize and mitigate adverse effects.

Plains has committed to cease operation of all heavy equipment if a whooping crane (*Grus americana*) is sighted within one-half mile of the proposed project's right-of-way while the project is under construction. However whooping cranes can take up to a mile to take off or land. In consultation with the Service, we recommend that Plains commit to ceasing operation of all heavy equipment if a whooping crane is sighted within one mile of the proposed project while it is under construction and contact the Service immediately.

Your letter states that the proposed project is 14 miles from the Missouri River. However, please note that the nearest designated critical habitat for piping plover (*Charadrius melodus*) is approximately 2.5 miles northeast of the proposed project. Critical habitat can be viewed on the Service website: (http://www.fws.gov/northdakotafieldoffice/endspecies/species/piping_plover.htm). GIS layers of critical habitat can be obtained by contacting our office at the letterhead address.

Sprague's pipit (*Anthus spagueii*) was added to the candidate species list in 2010. According to the Service's data, we expect there to be suitable habitat for the Sprague's pipit along Plains's proposed route. Candidate species such as the Sprague's pipit are not protected under the ESA. However, Sprague's pipit as a migratory bird is still protected under the MBTA.

Sprague's pipits require large patches of grassland habitat for breeding, with preferred grass height between 4 and 12 inches. The species prefers to breed in well-drained, open grasslands and avoids grasslands with excessive shrubs. Individuals can be found in lightly to heavily grazed areas, but are thought to generally avoid intrusive human features on the landscape, so the impact of a development can be much larger than the actual footprint of the feature. If Sprague's pipit habitat is present within your proposed project area, the Service requests that you document any steps taken to avoid and minimize disturbance of this habitat and that you share this information with our office.

Suitable habitat for the Dakota skipper (*Hesperia dacotae*) may also occur along the proposed route. The Dakota skipper is a small to medium-sized hesperiine butterfly associated with high quality prairie ranging from wet-mesic tallgrass prairie to dry-mesic mixed grass prairie. The first type of habitat is relatively flat and moist native bluestem prairie. Three species of wildflowers are usually present: wood lily (*Lilium philadelphicum*), harebell (*Campanula rotundifolia*), and smooth camas (*Zygadenus elegans*). The second habitat type is upland (dry) prairie that is often on ridges and hillsides. Bluestem grasses and needlegrasses dominate these habitats. On this habitat type, three wildflowers are typically present in high quality sites that are suitable for Dakota skipper: pale purple (*Echinacea pallida*) and upright (*E. angustifolia*) coneflowers and blanketflower (*Gaillardia sp.*). Because of the difficulty of surveying for Dakota skippers and a short survey window, we recommend the avoidance of ground disturbing activities on potential Dakota skipper habitat.

For candidate species such as the Sprague's pipit and the Dakota skipper, Federal agencies and non-federal applicants have the option of requesting a conference with the Service to ensure that their actions minimize and mitigate effects to candidate species.

Fish and Wildlife Service Property

The Service administers Waterfowl Production Areas owned in fee title as well as wetland and grassland easements throughout North Dakota. The letter states that there are no easements along the proposed Right of Way (ROW). However, a review of Service realty records indicates that Service property interests are located in the planning area. The Service has an ongoing easement acquisition program and we recommend that for Mountrail County, you contact Dave Gillund, Project Leader, Lostwood Wetland Management District Complex, 8315 Hwy 8, Kenmare, ND 58746 (701-848-2466 x16), for more specific information relative to Service easements and up to date realty records. Cultural resource compliance requires coordination with the Service's Zone Archeologist early in the planning process. Cultural Resource field investigations on Service easements and fee lands requires a permit issued by the Service's Zone Archeologist. Contact Barry G. Williams, Service Dakotas Zone Archeologist (barry_williams@fws.gov, 701-355-8577).

Bald and Golden Eagles

The BGEPA prohibits anyone without a permit issued by the Secretary of the Interior from taking bald or golden eagles, including their parts, nests, or eggs. The Act provides criminal and civil penalties for persons who take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald or golden eagle, alive or dead, or any part, nest, or egg thereof. The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." "Disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1)

injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagles return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering habits and causes, or is likely to cause, a loss of productivity or nest abandonment.

The Service recommends that bald and golden eagle nest surveys be conducted prior to the initiation of any on-the-ground activities. The Service recommends that an aerial bald and golden eagle nest survey (preferably by helicopter) be conducted within a one-mile-wide evaluation corridor to identify occupied and unoccupied eagle nest sites near the proposed project route and associated facilities. The aerial surveys should include surveys for any proposed new roads. Aerial surveys should be conducted between March 1 and May 15, before leaf-out so that nests are visible.

Aerial surveys should include the following:

1. Due to the ability to hover and facilitate observations of the ground, helicopters are preferred over fixed wing aircraft, although small aircraft may also be used for the eagle nest surveys. The Service requests that Plains also report nests of any other raptors found during the survey. Whenever possible, two observers should be used to conduct the surveys. Even experienced observers only find approximately 50 percent of nests on a flight, so we recommend that two flights be performed prior to any on-the-ground work, including other biological surveys or other work.
2. Observations of any eagles nest sites should be recorded using GPS. The date, location, nest condition, activity status, raptor species, and habitat should be recorded for each sighting.
3. We request that you share the qualifications of the biologist(s) conducting the survey, method of survey, and results of the survey with the Service.

Alternatively, Plains could conduct ground surveys to identify bald or golden eagle nests within a one-mile-wide evaluation corridor of the proposed route prior to winter/early spring before trees have leaves that could screen possible nests. If a bald or golden eagle nest is observed, the Service recommends that the proposed project be relocated to maintain at least a 0.5 mile buffer from the nest. The Service's May 2007, National Bald Eagle Management Guidelines contains detailed information on protecting bald eagles from disturbance due to human activity. The guidelines can be accessed on the Service's website: (http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf).

Migratory Birds

The MBTA prohibits the taking, killing, possession, and transportation, (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted by regulations.

While the MBTA has no provision for allowing unauthorized take, the Service realizes that some birds may be killed during project construction and operation even if all known reasonable and effective measures to protect birds are used. The Service Office of Law Enforcement carries out its mission to protect migratory birds through investigations and enforcement, as well as by fostering relationships with individuals, companies, and agencies that have taken effective steps to avoid take of migratory birds, and by encouraging others to implement measures to avoid take of migratory birds. It is not possible to absolve individuals, companies, or agencies from liability even if they implement bird mortality avoidance or other similar protective measures. However, the Office of Law Enforcement focuses its resources on investigating and prosecuting individuals and companies that take migratory birds without identifying and implementing all reasonable, prudent, and effective measures to avoid that take. Individuals, companies, and agencies are encouraged to work closely with Service biologists to identify available protective measures when developing project plans and/or avian protection plans, and to implement those measures prior to/during construction or similar activities.

To the extent practicable, schedule construction for late summer or fall/early winter so as not to disrupt migratory birds during the breeding season (February 1 to July 15). Your letter indicates that the proposed project will take place during the breeding season, when there may be taking of migratory birds, their eggs, or active nests. Plains has stated that the proposed project ROW would be mowed/cleared in advance of project initiation to remove potential breeding habitat for nesting birds in the project area. However, because the nesting season has already begun, the Service suggests that Plains hire a qualified biologist to conduct a nest survey within 5 days prior to construction. If active nests are identified, Plains should cease construction, maintain a sufficient buffer around active nests to avoid disturbing breeding activities, and contact the Service. The Service recommends that the project proponent implement all practicable measures to avoid all take, such as suspending construction where necessary, and/or maintaining adequate buffers to protect the birds until the young have fledged. The Service further recommends that if you choose to conduct field surveys for nesting birds with the intent of avoiding take, that you maintain any documentation of the presence of migratory birds, eggs, and active nests, along with information regarding the qualifications of the biologist(s) performing the survey(s), and any avoidance measures implemented at the project site. Should surveys or other available information indicate a potential for take of migratory birds, their eggs, or active nests, the Service requests that you contact this office for further coordination on the extent of the impact and the long-term implications of the intended use of the project on migratory bird populations.

Our GIS analysis of the proposed pipeline route shows that it crosses a number of wetlands and native prairie. These habitat types provide important ecological services, including nesting and foraging habitat for migratory birds. Wetlands take at least two to three years for the vegetation to return, and at least this long for full functionality to be recovered. Native prairie can take a decade or more to recover, and even then, the replanted area is not as diverse as the original habitat. Additionally, non-natives which become established when the alignment is disturbed, may spread into the adjacent prairie.

To help ameliorate these impacts, the Service suggests that Plains develop a conservation plan for migratory birds to document and compensate for the impacts associated with the construction, operation, and maintenance of the proposed project. We recommend that the conservation plan include the following: an analysis of the type of habitat impacted, including a table showing how many acres of each type of habitat will be impacted; a discussion of how impacts on native habitat (wetlands, native prairie, woody draws) will be avoided or minimized; a plan to reclaim the native habitat; a monitoring plan to ensure that reclamation is successful and that non-natives do not take over; and a compensation plan for the impacts on native habitat that cannot be avoided. As part of the conservation plan, we recommend that Plains purchase perpetual grassland easements or perform additional habitat mitigation to ensure that the overall amount and quality of native habitat does not decline as a result of this project. In addition to benefitting migratory birds, the actions in the conservation plan would also benefit the candidate species. Prairie conversion was a major factor in the decision to add the Sprague's pipit and Dakota skipper to the list of candidate species, so efforts to compensate for native prairie habitat loss could also be included as part of the conference on candidate species, if applicable.

In replanting native prairie or other grassland habitat, the Service recommends planting a diverse mixture of native cool and warm season grasses and forbs. Recent research has suggested that a more diverse mix, including numerous forb species, is not only ecologically beneficial but is also more weed resistant, allowing for less intensive management and chemical use. In essence, the more species included in a mixture, the higher the probability of providing competition to resist invasion by non-native plants. The seed source should be as local as possible, preferably collected from the nearby native prairie. We recommend obtaining seed stock from nurseries within 250 miles of the project area to ensure the particular cultivars are well adapted to the local climate. The Natural Resources Conservation Service (NRCS) compiles a list of vendors in North Dakota that supply conservation seed and plants (http://www.plant-materials.nrcs.usda.gov/pubs/ndpmcmt8152.pdf). Additional information on native grasses and forbs may be found at the NRCS Bismarck Plant Materials Center (http://www.plant-materials.nrcs.usda.gov/ndpmc/).

High Value Habitat Avoidance

- Make no stream channel alterations or changes in drainage patterns.
- Locate construction to avoid placement of fill in wetlands.
- Replace unavoidable loss of wetland habitat with functionally equivalent wetlands.
- Install and maintain appropriate erosion control measures to reduce sediment transport to adjacent wetlands and stream channels.

Thank you for the opportunity to comment on this project. If additional information is required, please contact April Simnor of my staff at (701) 250-4481 or at the letterhead address.

Sincerely,

Jeffrey K. Towner

Jeffrey K. Towner
Field Supervisor
North Dakota Field Office

cc: Project Leader, Lostwood WMD, Kenmare, ND
Regulatory Office, Army Corps of Engineers, Bismarck, ND
Attn: D. Cimarosti

Storm Water Pollution Prevention Plan (SWPPP): PAA Nelson Take-off to Ross Pipeline, Mountrail County, North Dakota

Prepared for

Plains All-American Pipeline, L.P.

Prepared by

SWCA Environmental Consultants

April 2012

Storm Water Pollution Prevention Plan (SWPPP)

Plains All-American, PAA Nelson Take-off to Ross Pipeline, Mountrail County, North Dakota

Prepared for

Plains All-American Pipeline, L.P.
333 Clay Street
Suite 1600
Houston, Texas 77002

Prepared by

SWCA Environmental Consultants
116 North 4th Street, Suite 200
Bismarck, North Dakota 58501

April 2012

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PLAINS ALL-AMERICAN PIPELINE, L.P.

PAA Nelson Take-off to Ross Pipeline Project

CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN

Plains All-American Pipeline, L.P. (PAA) has prepared this Stormwater Pollution Prevention Plan (SWPPP) for the construction of the PAA Nelson Take-off to Ross Pipeline, an approximately 17.2-mile long crude oil pipeline in Mountrail County, North Dakota. This document outlines Best Management Practices (BMPs) that may be applied under varying circumstances, and supports the Notice of Intent (NOI) form that has been submitted to the North Dakota Department of Health (NDDH) as a requirement of the North Dakota Pollutant Discharge Elimination System General Permit NDR10-0000.

The SWPPP provides information required in NDR10-0000 including:

- specific description of the proposed project;
- specific location of the individual project in question;
- disturbance area estimates;
- SWPPP implementation team member names;
- potentially impacted water bodies;
- planned timeframes for work; and
- project maps.

PROJECT DESCRIPTION

Plains All-American Pipeline Company (PAA) is proposing to construct an approximately 16-mile long crude oil pipeline named the PAA Nelson Take-off to Ross Pipeline (Pipeline) in Mountrail County, North Dakota. The proposed pipeline will be constructed within a 70-foot-wide temporary construction right-of-way (ROW) and a permanent 50-foot-wide ROW will be maintained after construction is complete.

Per the North Dakota Department of Health's (NDDH's) requirement, a notice of intent (NOI) must be submitted to the NDDH at a minimum of seven days prior to the commencement of dirt-moving activities.

OPERATOR INFORMATION

Pro Pipe Corporation
Ron Marsh
PO Box 4648
Frenchtown, MT 59835
Office Phone: (406) 626-5633

PROJECT LOCATION

The PAA Nelson Take-off to Ross Pipeline starts approximately 4.5 miles NW of Ross, North Dakota in the southwest (SW) ¼ northwest (NW) ¼ Section 15, Township (T) 156N, Range (R) 93W of the 5th Prime Meridian, Mountrail County, North Dakota and traverses east-southeast to SW ¼ SW ¼ Section 26, T156N, R91W, Mountrail County, North Dakota. A map depicting the location and spatial extent of the proposed project area is attached to this SWPPP.

DISTURBANCE AREA ESTIMATES

In total, approximately 145.94 acres will be impacted as a result of activities associated with the construction of the Pipeline.

SWPPP IMPLEMENTATION TEAM

The persons listed in the following table will be responsible for ensuring that the SWPPP is effectively implemented. They will ensure that appropriate Best Management Practices (BMPs) are installed correctly and maintained until the site is adequately reclaimed and stabilized. These persons will be responsible for implementing the required maintenance program that is outlined in PAA's SWPPP.

SWPPP Implementation Team	
Name	**Telephone Number**
Thomas McCormick (PAA – Project Manager)	(307) 783-8336
Ron Marsh (Pro Pipe – Construction Supervisor)	(406) 489-8129

The team's duties include the following:

- Supervise implementation of the SWPPP.
- Oversee maintenance of BMPs identified in the SWPPP.
- Conduct or provide for inspection and monitoring activities as required by the permit.
- Identify any deficiencies in the SWPPP and ensure they are addressed through changes or additions to site BMPs.
- Ensure that changes in construction plans or on the construction site are addressed in the SWPPP and that the SWPPP is up-to-date with current construction site conditions.
- Ensure that employees are trained and knowledgeable with the requirements of the construction general permit and this SWPPP.

POTENTIALLY IMPACTED WATER BODIES

No intermittent or perennial water bodies are anticipated to be affected by the construction of the pipeline. Run-off from construction activities would follow topographic breaks moving from higher elevations to lower elevations via overland sheet flow.

The project area lies within the following sub-watersheds. (None of the following watersheds has been assigned a Total Maximum Daily Load regulation).

Sub Watershed	HUC	Watershed	HUC
Bohemian Cemetery	101101011503	Lake Sakakawea	10110101
Town of Ross	101101011501	Lake Sakakawea	10110101
Town of Stanley	101101011702	Lake Sakakawea	10110101

HUC – Hydrologic Unit Code

POTENTIAL POLLUTANTS

Potential pollutants found within the project area during construction activities include:

- sediment as a result of erosion;
- fuel for equipment; and

- hydraulic fluid from various machinery.

PAA should not store sulfates (SO_4^{-2}) or any substance containing sulfates within the project area during permitted construction activities.

PLANNED TIME FRAME FOR WORK

Dirt work related to the construction of the Pipeline is expected to commence on or around 1 April, 2012. However, this date is subject to change depending on various factors. It will take PAA approximately seven months to complete the proposed project.

BEST MANAGEMENT PRACTICES

The primary goal of this SWPPP is to reduce or eliminate the pollutants that reach a water of the state as a result of construction activities. The primary pollutant of concern associated with the PAA Nelson Take-off to Ross Pipeline construction is sediment. Therefore, the main focus of the BMPs discussed here will be to prevent the mobilization of sediment through erosion, and the subsequent deposition of the sediment in waters of the state. However, modern construction activities often present opportunities for pollutants such as fuel for equipment and human waste to reach waters of the state. BMPs presented here would address those issues as well.

A variety of BMPs are presented here with a general description of the scenarios under which each will be applied. Additionally, Appendices 3 through 17 give detailed instructions of how each BMP will be built or applied. The BMPs presented here will either employ physical facilities that actively control hydrologic parameters that contribute to a possible pollutant reaching a water of the state, or passively reduce the possibility that a pollutant can be mobilized by surface runoff.

The primary areas where sediment movement as a result of erosion needs to be controlled are in ditches along roads and on hill slopes below areas of surface disturbance.

VEGETATION PRESERVATION

The first and foremost method for controlling sediment movement is to hold the sediment in place. The best way of doing this is with the roots of vegetation and the canopy cover that they provide. If the project area is vegetated with native range grasses and sagebrush, efforts will be made to minimize disturbance to vegetated areas. Where this is not possible, disturbed areas will be reseeded with grass species as soon as it is practical to do so.

Vegetative Buffer Strips

Vegetative buffer strips are areas of gently sloping vegetative cover that runoff water flows through before entering a stream, storm sewer, or other conveyance. The buffer strip may be an undisturbed strip of natural vegetation or it can be a graded and planted area.

Vegetative buffer strips act as living sediment filters that intercept and detain stormwater runoff. They reduce the flow and velocity of surface runoff, promote infiltration, and reduce pollutant discharge by capturing and holding sediments and other pollutants carried in the runoff water. Vegetative buffer strips function much like vegetated or grassed swales. Buffer strips, however, are fairly level and treat sheet flow across them, whereas grassed swales are indentations that treat concentrated flows running along them. Additional information regarding vegetative buffer strips is provided in Appendix 3.

DITCH, TRAIN TRACK, AND ROAD SEDIMENT CONTROL

Ditches along roads are designed to collect stormwater runoff from road surfaces and funnel it to a drain, detention structure, stream channel, or to a flat field. By the nature of their design, ditches concentrate runoff water, thereby increasing erosion potential and sediment entrainment. Erosion potential tends to increase proportionately with gradient. As gradient steepens, water velocity increases, thereby increasing erosion potential, and the capacity of the water to entrain sediment. BMPs presented here attempt to either reduce erosion potential, which will limit the sediment that can be mobilized, or reduce the velocity of runoff water, which will reduce the capacity of the water to entrain sediment, and causing suspended sediment to fall out.

The primary method of choice for controlling sediment in ditches will be to install ditch check dams (Appendices 4–6), diversion trenches (Appendix 7), ditch relief culverts (Appendix 9), drainage dips (Appendix 8), or low water channel crossings (Appendix 10).

Ditch Check Dams

Ditch check dams can be constructed in a variety of ways. For the purposes of this SWPPP they will be constructed using silt fence, rock, or straw rolls. Their purpose is to create small detention pools on the upstream side of the check dam to reduce the velocity of the runoff water, allowing suspended sediment to fall out or be filtered through the BMP. The type of ditch check dams, and their spacing, is determined by the gradient of the ditch and is described in the appendices for each specific type of ditch check dam.

Silt fence ditch check dams will be installed in ditches along roads. The silt fence dams act to slow the velocity of runoff water, which will allow suspended sediment to fall out. Silt fence ditch check dams will be used on slopes up to 6%. Design, placement, and installation instructions are included in Appendix 4.

Rock ditch check dams will be installed in ditches along roads. The rock dams act to slow the velocity of runoff water, which will allow suspended sediment to fall out. Rock ditch check dams will be used on slopes steeper than 6%. Design, placement, and installation instructions are included in Appendix 5.

Straw roll check dams can be installed in ditches along roads. The straw roll dams act to slow the velocity of runoff water, which will allow suspended sediment to fall out. Straw roll ditch check dams will be used on slopes up to 6%. Design, placement, and installation instructions are included in Appendix 6.

Diversion Trenches

Diversion trenches will be cut along road ditches. The trenches will radiate out to the side of the road. A small berm will be built in the ditch on the downstream side of the trench. The berm will redirect the runoff water flow in the ditch to a non-disturbed, vegetated area to the side of the road. This diversion will reduce the concentration of water that the ditch is carrying, and place it in an area where flow will be obstructed by vegetation, slowing the water and causing suspended sediment to fall out. Design, placement, and installation instructions are included in Appendix 7.

Road Drainage Dips

Road drainage dips are installed to intercept and remove surface water from the travel-way and shoulders before the combination of water volume and velocity begins to erode the surface materials. Design, placement, and installation instructions are included in Appendix 8.

Ditch Relief Culverts

Ditch relief culverts are installed to periodically relieve the ditch line flow by piping water to the opposite side of the road where the flow can be dispersed away from the roadway. The spacing of ditch relief culverts is dependent on the road gradient, soil type, and runoff characteristics.

A culvert with a 12-inch diameter is the minimum for ditch relief to prevent failure from debris blockage.

The depth of culvert burial must be sufficient to ensure that the culvert is not crushed by heavy vehicle traffic and to protect the culvert barrel for its design life. This requires anticipating the amount of material that may be lost due to road use and erosion.

Ditch relief culverts can provide better flow when skewed with an entrance angle of 45 to 60 degrees with the side of the ditch. The culvert gradient should be greater than the approach ditch gradient. This improves the flow hydraulics and reduces silt deposition and debris plugging the culvert inlet. Culverts placed in natural drainages can also be used for ditch relief. Design, placement, and installation instructions are included in Appendix 9.

Low Water Crossings

Low water crossings can be used where roads cross small drainages and intermittent streams where culverts and bridges are unnecessary. Properly constructed low water crossings will minimize sediment movement caused by vehicles driving across stream channels. The crossing can be effectively accomplished by dipping the road down to the bed of the drainage. Site-specific designs and the construction of gravel, rip-rap, or concrete bottoms may be required in some situations. In no case should the drainage be filled so that water will be impounded. Low water crossings that are not surfaced should not be used in wet conditions. Design, placement, and installation instructions are included in Appendix 10.

Erosion-Control Matting

Erosion-control matting can be used to help limit erosion and establish vegetation in ditches where conventional seeding and/or structural methods may be inadequate. By reducing the negative effects of rainfall impact and runoff, erosion-control matting provides ditches with a temporary, stable environment for seed to germinate. Erosion-control matting is constructed of a variety of materials, including straw, wood excelsior, coconut, or some combination thereof. These materials usually are stitched or glued to some type of synthetic or natural fiber netting that is either biodegradable or photodegradable (i.e., broken down by light). Erosion-control matting placed in ditches where significant flows can occur needs to be installed with great care to ensure it is not undermined during such events. Design, placement, and installation instructions are included in Appendix 11.

Seeding and Mulch

In order to armor ditches and ephemeral stream channels from erosion, it is important to establish a healthy vegetative cover as soon as possible. To promote such growth, seeding and mulching the disturbed areas is important.

The intent of seeding disturbed areas is to promote the establishment of permanent, perennial vegetative cover, usually grass. In most areas of rural North Dakota, seeding with native species seed is preferred, as it tends to provide better long-term survivability. In areas that are potentially subjected to high flows, it may be necessary to re-seed if such an event occurs before the vegetation has been established.

Mulching involves the application of straw or other organic materials to form a temporary, protective soil cover. Mulch protects the soil surface from the forces of raindrop impact and overland flow. Organic mulches foster the growth of vegetation, reduce evaporation, insulates the soil, and suppresses weed growth. In areas that are potentially subjected to high flows, it may be necessary to re-mulch if such an event occurs before the vegetation has been established. Alternatively, a carefully installed erosion control blanket could provide the same, or better, protection while being more resistant to damage from flows of runoff. Design, placement, and installation instructions are included in Appendix 12.

Vegetated Channels

Vegetated channels slow the velocity of stormwater runoff as it moves down-channel. Additionally, the roots of the vegetation hold the soil in place and reduce erosion. Because grassed channels are not usually designed to control peak runoff loads by themselves, they are often used with other BMPs.

Where moderately steep slopes require drainage, grassed channels can include excavated depressions or check dams to enhance runoff storage, decrease flow rates, and improve pollutant removal. Peak discharges can be reduced by temporarily holding them in the channel. Pollutants can be removed from stormwater by filtration through vegetation, by deposition, or in some cases by infiltration of soluble nutrients into the soil. The degree of pollutant removal in a channel depends on how long the water stays in the channel and the

amount of contact with vegetation and the soil surface. Local conditions affect the removal efficiency. Design, placement, and installation instructions are included in Appendix 13.

HILL SLOPE SEDIMENT CONTROL

Disturbed areas on hill slopes present a serious challenge in controlling surface runoff and erosion. Areas such as this are frequently encountered on sides of well pads where cut and fill activities are needed to build safe roads or level working areas. If the disturbed areas are not protected, surface impact from raindrops can cause soil particles to become mobilized on the surface and can be carried to surface waters. Additionally, excess water will begin to concentrate and run off. Energy associated with this runoff will cause rilling to begin, which will escalate to a rut, which will continue to escalate, if not corrected.

To minimize these erosive hazards, PAA will disturb as little of the ground surface as possible. Where disturbance is unavoidable, topsoil will be removed and stockpiled. Hill slope barriers will be installed at the downhill side of the disturbed area, or the disturbed area will be covered with mulch or erosion-control mats in order to prevent sediment from leaving the site. Once earthmoving activities have been completed, the stockpiled topsoil will be respread over the disturbed area, which will then be seeded and mulched. Disturbed areas that have over a 4% grade will have waterbars constructed or straw roll barriers on contour to slow runoff velocities and trap mobilized sediment. Areas that are too steep to hold mulch, or will not hold mulch for other reasons, will have erosion matting installed per directions in Appendix 11.

Silt Fence Slope Barriers

Silt fence slope barriers will be installed on hill slopes below surfaces that have been disturbed by construction activities. The barriers intercept and pond runoff water that may be carrying suspended sediment. Ponding the water reduces the velocity of the runoff, and allows much of the sediment to fall out of suspension. Design, placement, and installation instructions are included in Appendix 14.

Water Bar Slope Barriers

Water bar slope barriers are permanent installed berms with channels constructed on the contour of a hill slope. Water bars serve to limit the velocity of accumulated runoff water flowing down a hill slope. The water bars intercept and pond runoff water that may be carrying suspended sediment. Ponding the water reduces the velocity of the runoff, and allows much of the sediment to fall out of suspension. Design, placement, and installation instructions are included in Appendix 15.

Straw Roll Slope Barriers

Straw roll slope barriers function by intercepting and ponding sediment-laden runoff. Ponding the water dissipates the energy of the incoming flow and allows much of the suspended sediment to settle. Water exits the straw roll slope barrier by flowing through the straw rolls. Design, placement, and installation instructions are included in Appendix 16.

Erosion-Control Matting

Erosion-control matting, using erosion-control blankets, is used to help limit erosion and establish vegetation on slopes and in ditches where conventional seeding and/or structural methods would be inadequate. By reducing the negative effects of rainfall impact and runoff, erosion-control blankets provide slopes and ditches with a temporary, stable environment for seed to germinate. Erosion-control blankets are constructed of a variety of materials, including straw, wood excelsior, jute, coconut, or some combination thereof. These materials usually are stitched or glued to some type of synthetic or natural fiber netting that is either biodegradable or photodegradable (i.e., broken down by light). Design, placement, and installation instructions are included in Appendix 11.

Seeding and Mulch

To maintain sheet flow, promote infiltration, and reduce problems associated with runoff or dust from bare soil surfaces after construction, it is important to establish a healthy vegetative cover on hill slopes as soon as possible. To promote such growth, seeding and mulching the disturbed areas is important.

The intent of seeding disturbed areas is to promote the establishment of permanent, perennial vegetative cover, usually grass. In most areas of rural North Dakota, seeding with native species seed is preferred, as it tends to provide better long-term survivability.

Mulching involves the application of straw or other organic materials to form a temporary, protective soil cover. Mulch protects the soil surface from the forces of raindrop impact and overland flow. Organic mulches foster the growth of vegetation, reduce evaporation, insulate the soil, and suppress weed growth. Design, placement, and installation instructions are included in Appendix 12.

Surface Roughening

Surface roughening is a technique that creates horizontal depressions, furrows, or other roughened surfaces on bare ground using tracked or other equipment. Roughened slopes are preferred because they aid the establishment of vegetation, improve water infiltration, decrease runoff velocity, and provide for sediment trapping. Graded areas with smooth, hard surfaces may be initially attractive, but such surfaces increase the potential for erosion. A rough, loose soil surface is more favorable for rain infiltration and moisture retention than hard, smooth surfaces; this aids in seed germination. Design, placement, and installation instructions are included in Appendix 17.

TRASH DISPOSAL AND FUELING OPERATIONS

To prevent petroleum-based pollutants from reaching waters of the state, all equipment subject to on-site fueling will be fueled from truck-mounted tanks away from any stream channel. All fuel trucks will carry spill kits and all drivers will be trained in their use. In the event of a spill, impacted soils and absorbent materials will be handled by specialty contractors hired by PAA. Any equipment found to be leaking will be repaired and the spilled fluid will be immediately cleaned up.

All trash generated on the project area will be stored in covered containers which will be periodically emptied by PAA's contractors.

SANITARY SERVICES

A portable toilet(s) will be kept on the project site throughout the course of construction activities. Location of the facilities will be determined by current needs. Disposal of waste will be handled by the contractor who supplies the toilet.

INSPECTIONS

- A member of the SWPPP implementation team, or other employees who are familiar with this document, will visually inspect disturbed areas, control measures, construction site access points, and the materials source each 14 days and after each 0.5-inch rain or snow melt event.
- The inspection shall determine whether or not the BMPs are adequate and effectively minimizing erosion, sedimentation, and off-site transport of other pollutants such as sediment, petroleum products, trash, and construction debris.
- The inspection shall also determine what maintenance is required for the existing BMPs and where additional or different BMPs are necessary to adequately minimize off-site transport of pollutants.
- The results of the inspection will be documented on a copy of the Inspection and Maintenance form included with the SWPPP.

The person inspecting the site will complete an inspection and maintenance form to document the site condition, maintenance requirements, and necessary changes to the SWPPP. All inspection and maintenance (I&M) forms must be signed by an authorized member of the SWPPP team. All I&M forms will be retained with the SWPPP for at least three years. An inspection form is provided in Appendix 18.

MAINTENANCE

Maintenance practices will include the following:

- Sediment removal: Built-up sediment behind check dams and slope barriers will be removed when it has reached one-half the height of the dam or fence.
- All sediment removed from BMPs will be placed on the construction site where it will not enter a surface water, storm drain, or neighboring property, or re-enter a sediment control BMP.
- All silt fences will be inspected for tears and proper installation. Damaged silt fence will be repaired within 48 hours.
- All check dams will be checked for proper function. Any dams that have been breached, or where additional down-slope stabilization is required, shall be repaired within 48 hours.
- All diversion trenches will be checked for proper function. Any trenches that have been damaged shall be repaired within 48 hours.
- All water bars will be checked for proper function. Any water bars that have been damaged shall be repaired within 48 hours.
- All erosion-control matting will be checked for proper function. Any matting that has been damaged shall be repaired within 48 hours.

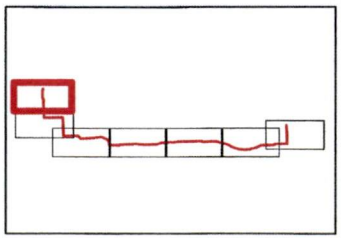
MAPS

Nelson Takeoff to Ross Pipeline
SWPPP BMP Mapbook

Nelson Takeoff to Ross Centerline

Stream

Wetland



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Miles
0 0.2 0.4

Base Map: Bing Aerial Maps
Source: esri ArcGIS service
Quadrangle: Manitou, (1981)
Ross, (1981)
Township/Range: T156N R93W
Mountrail County, North Dakota

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NAD 1983 UTM Zone 13N

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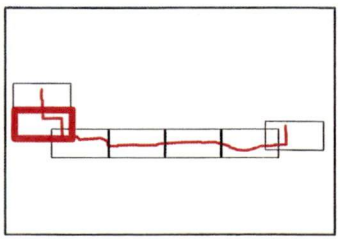

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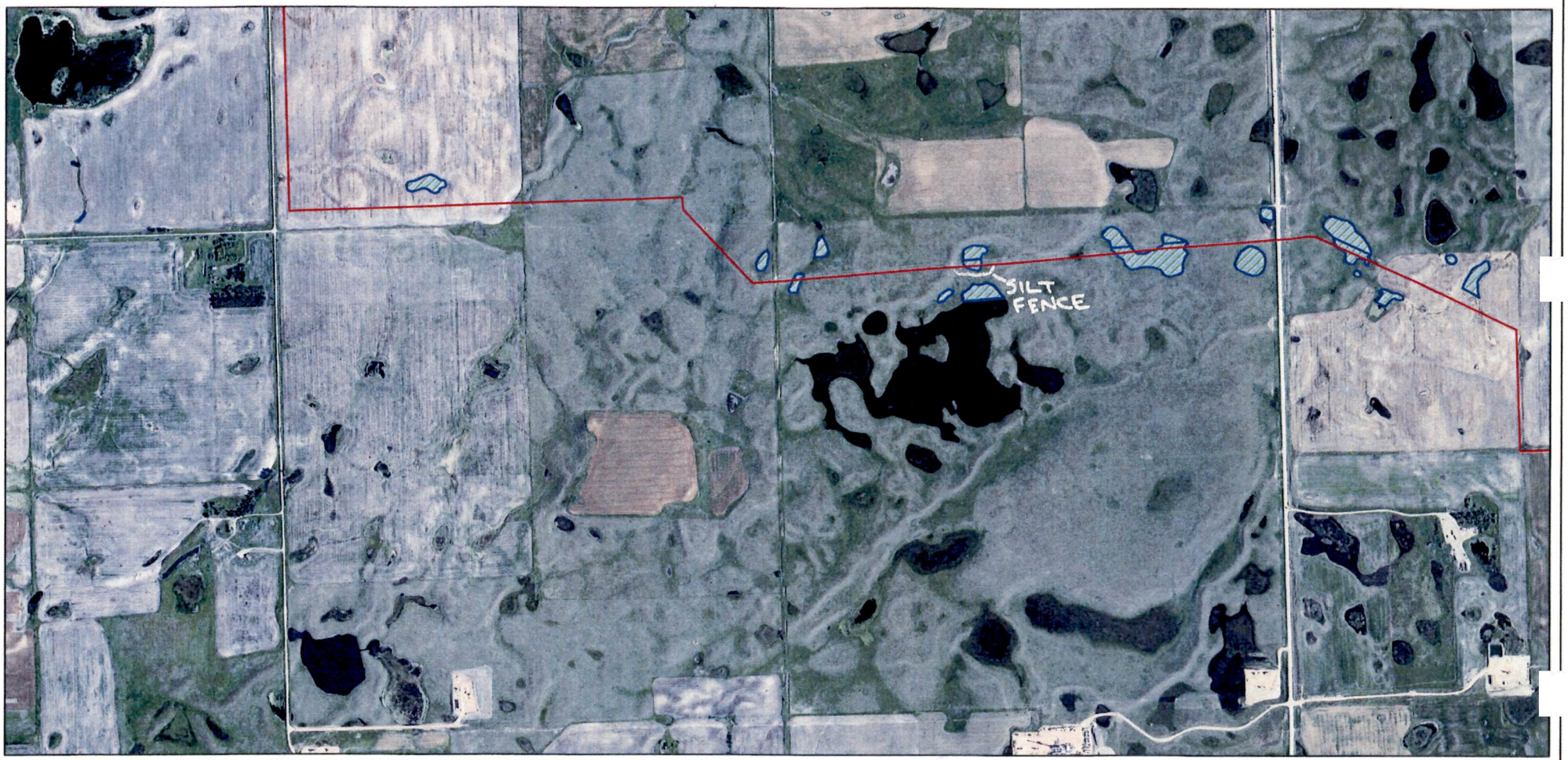

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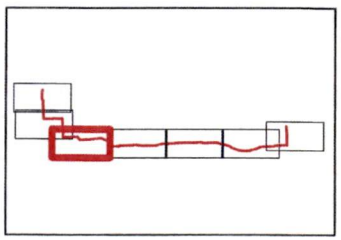

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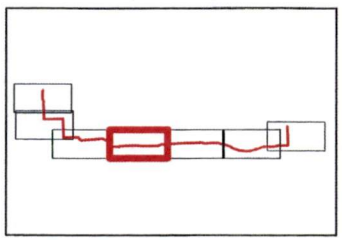

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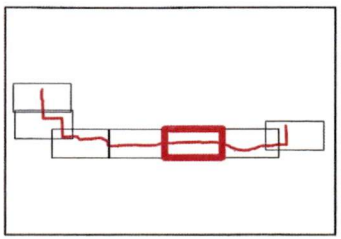

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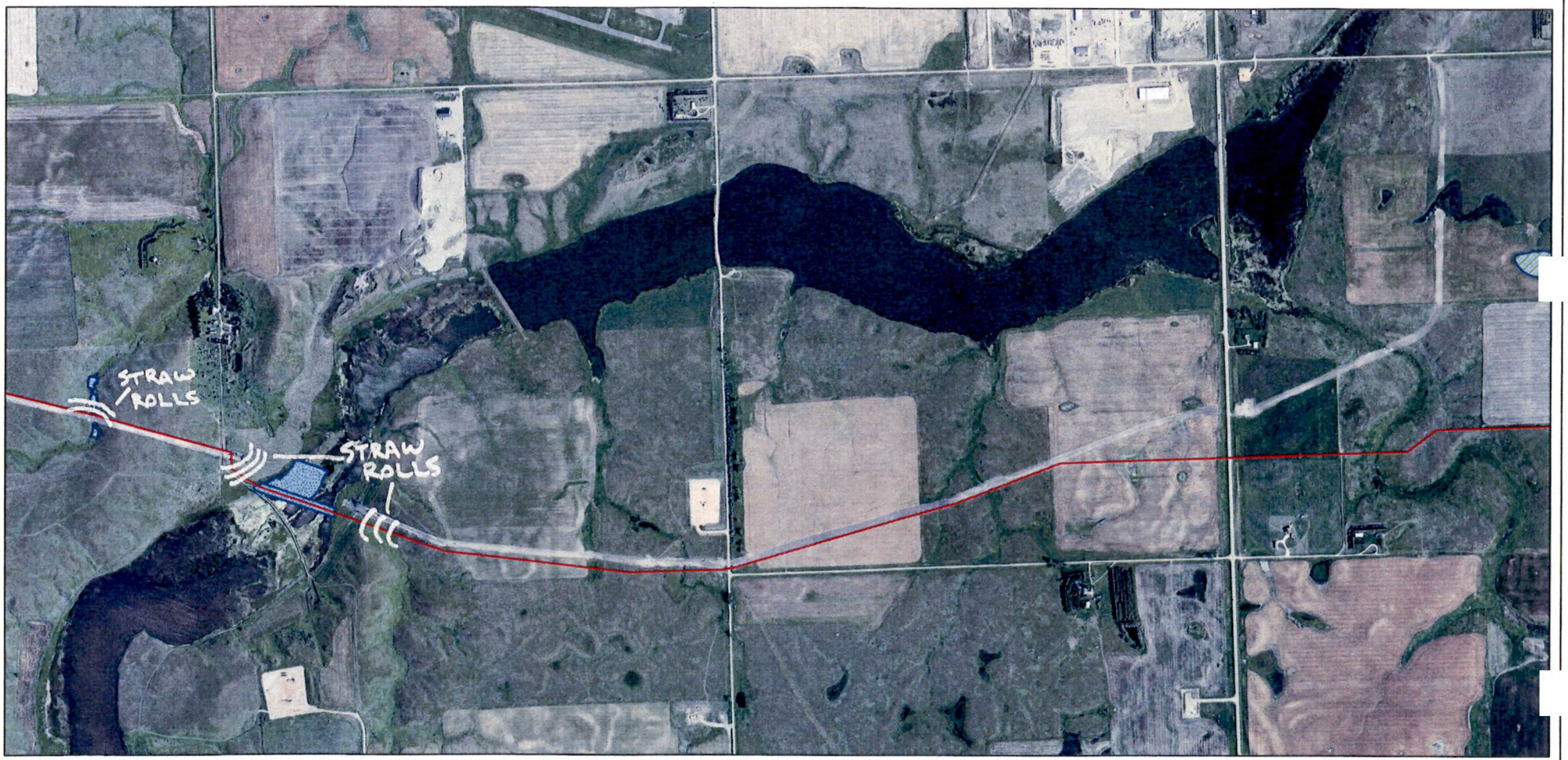

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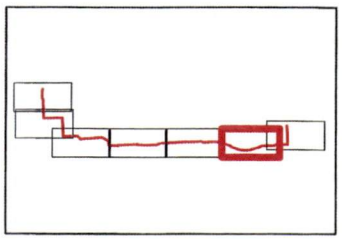

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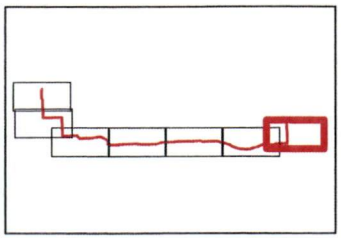

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NAD 1983 UTM Zone 13N

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name of Person Signing	Title

Signature of Applicant	Date	Telephone

Appendix 1 – Submitted Notice of Intent (NOI)

APPLICATION (NOTICE OF INTENT) TO OBTAIN COVERAGE UNDER NDPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (NDR10-0000)

NORTH DAKOTA DEPARTMENT OF HEATLH
DIVISION OF WATER QUALITY
SFN 19145 (01/10)

FOR DEPT. USE ONLY

Application No.
Date Received

GENERAL INFORMATION

Name of Owner of Construction Project	Contact Person Name (Mr / Ms)	Contact Phone No.	
Plains All American Pipeline, L.P.	Mr. Thomas McCormick	307-783-8336	
Mailing Address	**City**	**State/Province**	**Zip Code**
1575 Hwy 150 South, Suite E	Evanston	WY	82930

Name of Operator Working at Site (attach additional, if needed)	Contact Person Name (Mr / Ms)	Contact Phone No.	
Pro Pipe Corporation	Ron Marsh	406-489-8129	
Mailing Address	**City**	**State/Province**	**Zip Code**
PO Box 4648	Frenchtown	MT	59835

PROJECT INFORMATION

Name of Construction Project
PAA Nelson Take-Off to Ross Pipeline Project

Brief Description of Construction Activity
Plains All-American Pipeline Company (PAA) is proposing to construct an approximately 17.2-mile-long crude oil pipeline named the PAA Nelson Take-off to Ross Pipeline (Pipeline) in Mountrail County, North Dakota. The proposed pipeline will be constructed within a 70-foot-wide temporary construction right-of-way (ROW) and a permanent 50-foot-wide ROW will be maintained after construction is complete. Construction activities include ground clearing, trenching, and subsequent backfilling of trenches with heavy construction equipment.

Project Start Date	Estimated Completion Date	Estimated Total Area of Site (acres)	Estimated Area of Disturbance (acres)
30 April 2012	30 November 2012	145.94	145.94

Project Location	Street Address: See Attachment For Legal Description				City		
	OR	Township	Range	Section	¼ ¼ ¼	County	
		Latitude			Longitude		
Receiving Waters	Name of Municipal Storm Sewer System, Including Receiving Water						
	OR	Name or Description of Receiving Water: The project area lies within the Bohemian Cemetery sub-watershed (Hydrologic Unit Code [HUC] 1011010101503), Town of Ross sub-watershed ([HUC] 101101011501), and the Town of Stanley sub-watershed ([HUC] 101101011702), which drain into Lake Sakakawea ([HUC] 10110101).					

Stormwater Pollution Prevention Plan (SWPPP) Requirements

Has a SWPPP been developed in accordance with Part II.C of NDR10-0000?	☒ YES ☐ NO	STOP: A SWPPP must be prepared and available for review at the time of application. See Part I.D.2 of NDR10-0000 for submittal information.
SWPPP Contact (NDR10-0000, Part II.C.2.a)	SWPPP Contact Phone No.	SWPPP Location (NDR10-0000, Part III.B)
Thomas McCormick	307-673-8336	On site

Signature Information

RETURN COMPLETED APPLICATION TO:

North Dakota Department of Health
Division of Water Quality, 4th Floor

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possiblity of fine and imprisonment.

Printed Name of Owner(s)	Title

918 East Divide Avenue Bismarck, ND 58501-1947 Telephone: (701) 328-5210 Fax: (701) 328-5200	Signature of Owner(s)	Date
	Printed Name of Operator(s)	Title
	Signature of Operator(s)	Date

(Attach additional pages if needed)

Appendix 2 – North Dakota General Permit for Storm Water Discharges Associated with Construction Activity

Permit No: NDR10-0000
Effective Date: October 12, 2009
Expiration Date: September 30, 2014

AUTHORIZATION TO DISCHARGE UNDER THE

NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33-16-01 of the North Dakota Department of Health rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

Facilities both qualifying for and satisfying the requirements identified in Part I of the permit

are authorized to discharge stormwater associated with **construction activity**

to waters of the state

in accordance with conditions set forth in this permit.

This permit and the authorization to discharge shall expire at midnight,

September 30, 2014.

Signed this 12TH day of October, 2009.

Dennis R. Fewless, Director
Division of Water Quality

BP 2009.02.05

Table of Contents

I. PERMIT COVERAGE AND LIMITATIONS

A. Discharges Covered

1. This permit applies to all areas within the jurisdiction of the state of North Dakota.

2. This permit applies to stormwater discharges associated with construction activity and small construction activity as defined in Title 40 of the Code of Federal Regulations (CFR), Parts 122.26(b)(14)(x) and (b)(15), respectively. The reference to construction activity in this permit includes both large construction activity and small construction activity as described below.

   a. Large construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than five (5) acres and includes the disturbance of less than five (5) acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five (5) acres or more.

   b. Small construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than one (1) acre, and includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater that one and less than five (5) acres.

3. Stormwater discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) may be covered by this permit as part of a related construction site.

4. Certain non-stormwater discharges from facilities covered by this permit and meeting the requirements specified in Part II.A.

B. Discharges Not Covered

1. Stormwater discharges associated with industrial activity from any source other than construction activities described in Part I.A.

2. Post-construction discharges from industrial activity that originate from the site after construction activities have been completed at the site. Industrial and post-construction stormwater discharges may need to be covered by a separate stormwater permit.

3. The placement of fill into waters of the state requiring local, state, or federal authorizations (such as U.S. Army Corps of Engineers Section 404 permits).

4. This permit does not substitute for obligations under the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), or National Historic Preservation Act (NHPA), it is your responsibility to ensure the project and resulting discharges comply with the respective requirements.

5. Discharges to waters for which there is a total maximum daily load (TMDL) allocation for sediment, suspended solids or turbidity are not covered unless you develop a Stormwater Pollution Prevention (SWPP) plan that is consistent with the assumptions, allocations and requirements in the approved TMDL. Information about TMDL allocations may be found at the following website: www.ndhealth.gov/WQ/SW/Z2_TMDL/default.htm.

6. Stormwater discharges that the Department determines will cause, or have the reasonable potential to cause or contribute to violations of water quality standards.

C. Obtaining Coverage and Authorization Effective Date

1. To obtain authorization under this general permit for stormwater discharges you must submit a complete application and develop a Stormwater Pollution Prevention (SWPP) plan in accordance with Part II.C of this permit. A plan must be in place as a condition of the permit and a copy of the plan must be retained by the permittee. A copy of the plan must be submitted with the application for certain facilities as described in Part I.D.

2. Permit coverage will become effective 7 days after you submit a complete application unless otherwise notified by the Department (based on the department receipt date).

3. Upon the effective date of permit coverage you as the permit applicant are authorized to discharge stormwater from eligible activities under the terms and conditions of this permit.

D. Application (Notice of Intent) Process

1. You may use a Notice of Intent (NOI) form for Construction Activity (or a photocopy thereof) to complete your application. The NOI form (or a replacement application form) is available at the following website: www.ndhealth.gov/WQ/Storm/Construction/ConstructionHome.htm.

2. Application Content and Conditions.

   a. The owner or the owner jointly with the operator (usually the general contractor) shall submit a completed application for this permit. The owner is responsible for compliance with all terms and conditions of this permit. The operator has day to day supervision of construction activities and is jointly responsible with the owner for compliance with the permit conditions as they pertain to the construction activities delegated to the operator.

   b. The application (Notice of Intent) shall contain, at a minimum, the following information:

      (1) Owner name, mailing address and phone number;
      (2) Project contact name and phone number;
      (3) Project/site name;
      (4) Project/site location (street address; section, township, range; or latitude and longitude), county;
      (5) A brief description of the construction activity;
      (6) The anticipated start date and the anticipated completion date for the project (if known);
      (7) The estimated total area of the site and the total area of disturbance in acres;
      (8) Name of receiving water(s) or the name of the municipal storm sewer system and receiving water(s);
      (9) The signature of the applicant(s), owner (and operator if co-applicants) signed in accordance with Part IV.A.6 of this permit.

   c. A Stormwater Pollution Prevention (SWPP) plan (Part II.C) for the project must be prepared and available for review by the Department at the time of application. A partially complete plan is acceptable when it clearly identifies the item(s) to be completed, the person(s) responsible for completing the item(s) and the deadline for completing the item(s). The SWPP plan must be completed prior to the start of construction (or the applicable construction phase).

d. You must include a copy of the SWPP plan if the project involves 50 or more acres; or the project will have a discharge point located within 2000 feet of, and flow to, a water body listed as impaired under section 303(d) of the Federal Clean Water Act due to sediment, suspended solids or turbidity. The Department's 303(d) list may be found at the following website in the most recent Integrated Report: www.ndhealth.gov/WQ/SW/Z2_TMDL/Integrated_Reports/B_Integrated_Reports.htm.

3. For residential construction activity occurring within a common plan of development (such as a subdivision) subject to the permit requirements, coverage may be obtained by the following:

   a. The owner of the lot(s) shall submit one application for all of the owner's construction activity within the common plan, or

   b. The operator, such as a homebuilder who may represent one or more lot owners, shall submit one application for all of the operator's construction activity within the common plan.

   In addition, a SWPP plan must be developed and implemented for the permittee's activities within a common plan of development. Additional phases of the common plan may be included under the initial application and permit coverage, provided the SWPP plan is amended to include the additional area or phases.

4. For oil and gas exploration, production, processing, and treatment operations or transmission facilities, coverage under this permit is not required for small construction activity. For oil and gas related large construction activity, permit applications may be submitted for individual project sites or for an area of operations such as well field area.

   To obtain permit coverage for an area of operations, the application must include a map outlining the area or a list of counties encompassing the area. Also include a copy of the SWPP plan or similar BMP document developed for construction related activities within the coverage area. The information for individual project sites and future sites within the coverage area including those meeting the criteria in Part I.D.2.d does not need to be submitted.

5. Completed applications and any reports required by this permit shall be submitted to:

   North Dakota Department of Health
   Division of Water Quality
   918 East Divide Avenue
   Bismarck, ND 58501-1947

6. Local Authority. This permit does not preempt or supersede the authority of local agencies to prohibit, restrict, or control discharges of stormwater to storm sewer systems or other water courses within their jurisdiction.

E. Notice of Termination (NOT)

1. Permittees wishing to terminate coverage under this permit must submit a Notice of Termination (NOT) or other written request identifying the facility, reason why the permit is no longer needed and signed in accordance with Part IV.A.6 of this permit. Compliance with the conditions of this permit is required until a NOT is submitted to and accepted by the Department.

2. Permittees may only submit a NOT after one of the following conditions have been met.

   a. Final stabilization (see Part II.E and definitions) has been achieved on all portions of the site for which the permittee is responsible.

   b. Another operator/permittee has assumed control, in accordance with the transfer provisions (Part I.F), over all areas of the site that have not achieved final stabilization.

   c. For residential construction only, a NOT is not required for each lot that is sold or has achieved final stabilization. Instead the permittee may modify their SWPP plan to indicate that permit coverage is no longer required for that lot. The SWPP plan should indicate the reason coverage is no longer needed and the date it was achieved. In order to terminate coverage, all lots under the control of the owner or operator must:

      (1) Be sold to homeowners for private residential use with temporary erosion protection and down gradient perimeter controls installed. In addition, the permittee must distribute a "homeowner fact sheet" to the homeowner to inform the homeowner of the need for, and benefits of, final stabilization; or

      (2) Achieve final stabilization (See Part II.E and definitions) on all portions of the site for which the permittee is responsible.

F. Transfer of Ownership or Control

1. When the owner or operator of a construction project changes, the new owner or operator must submit a written request for permit transfer/modification within 14 days of assuming control of the site or commencing work on-site, or of the legal transfer, sale or closing on the property; except as provided in Part I.F.2 below. Late submittals will not be rejected; however, the Department reserves the right to take enforcement for any unpermitted discharges or permit noncompliance. For stormwater discharges from construction activities where the owner or operator changes, the new owner or operator can implement the original SWPP plan created for the project or develop and implement their own SWPP plan. Permittee(s) shall ensure either directly or through coordination with other operators that their SWPP plan meets all terms and conditions of this permit and that their activities do not interfere with another party's erosion and sediment control practices.

2. A permit transfer/modification request is not required for the legal transfer, sale or closing on a property between permittees covered by this permit. Examples include the sale of a property parcel from a developer to a builder, or the transfer of an easement from a developer to a local government authority. If the new party is not covered by this permit at the time of transfer or sale, then the new owner/operator must submit a completed application/NOI within 14 days of assuming control of the site.

G. Municipal Separate Storm Sewer System (MS4) Permittees

The submittal of an application (NOI) is not required for small construction activity owned or operated by an entity with general permit coverage for Municipal Separate Storm Sewer System (MS4) discharges. The small construction activity owned or operated by the permitted MS4 is subject to the conditions outlined in this permit except for the Application Process (Part I.D).

II. STORMWATER DISCHARGE REQUIREMENTS

A. Prohibition of Non-Stormwater Discharges

The discharge of wastewater from processing operations or sanitary facilities is not authorized by this permit. The following non-stormwater discharges may be authorized if the non-stormwater sources are identified in the SWPP plan with a description of the pollution prevention measures to be implemented: fire-fighting, fire hydrant flushing, potable water line flushing, infrequent building and equipment wash down without detergents, uncontaminated foundation drains, springs, lawn watering and air conditioning condensate.

B. Releases in Excess of Reportable Quantities

This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302. Any release of a hazardous substance, including a release in a stormwater discharge, must be reported to the agencies identified in Part IV.A.7. The discharge of hazardous substances in stormwater discharges shall be minimized in accordance with the applicable SWPP plan for the facility. Should a reportable quantity release occur, the SWPP plan shall be revised to prevent the recurrence of such a release.

C. Stormwater Pollution Prevention Plans

All permittees shall implement a Stormwater Pollution Prevention (SWPP) plan for any construction project requiring this permit until final stabilization is achieved. The SWPP plan and revisions are subject to review by the Department. The objectives of the plan are to identify potential sources of sediment or other pollution from construction activity and to ensure practices are used to reduce the contribution of pollutants from construction site runoff. Stormwater management documents developed under other regulatory programs can be included in the SWPP plan or incorporated by reference, or used in whole as a SWPP plan if it meets the requirements of this part.

The SWPP plan may identify more than one permittee and may specify the responsibilities of each permittee by task, area, and/or timing. Permittees may coordinate and prepare more than one SWPP plan to accomplish this. However, in the event there is a requirement under the SWPP plan for which responsibility is ambiguous or is not included in the SWPP plan, each permittee shall be responsible for implementation of that requirement. Each permittee is also responsible for assuring that its activities do not render another permittee's controls ineffective.

The SWPP plan must incorporate the guidelines provided in Appendix 1, to the extent practicable, and shall include the following information.

1. **Site Description**. Each plan shall provide a description of the construction site and potential pollutant sources as indicated below:

    a. A description of the overall project and the type of construction activity;

    b. Estimates of the total area of the site and the total area that is expected to be disturbed by excavation, grading, grubbing, or other activities during the life of the project;

    c. A proposed timetable of activities that disturb soils for major portions of the site;

    d. A description of the soil within the disturbed area(s);

    e. The name of the surface water(s) and municipal storm sewer system at or near the disturbed area that may receive discharges from the project site; and

f. A site map indicating:
   1) Drainage patterns including flow direction, dividing lines, and the existing and final grades
   2) Construction site boundaries and areas of soil disturbance;
   3) Location of major structural and nonstructural controls identified in the plan;
   4) Location of areas where stabilization practices are expected to occur;
   5) Surface waters, including an aerial extent of wetland acreage;
   6) Locations where stormwater is discharged to surface waters;
   7) Where included as part of the project, the site maps for off-site concrete/asphalt batch plants, equipment staging areas, borrow sites or excavated fill material disposal sites.

g. Projects that have a discharge point within 2000 feet of, and flow to, a water body listed as impaired under section 303(d) of the Federal Clean Water Act due to sediment, suspended solids or turbidity, must identify the water body and impairment in the plan. The Department's 303(d) list may be found at the following website under Integrated Reports: www.ndhealth.gov/WQ/SW/Z2_TMDL/Integrated_Reports/B_Integrated_Reports.htm.

2. **Operational Controls**. The plan shall describe the Best Management Practices (BMPs) used in day to day operations on the project site that reduce the contribution of pollutants in stormwater runoff.

   a. The plan must identify a person knowledgeable and experienced in the application of erosion and sediment control BMPs who will oversee the implementation of the SWPP plan, and the installation, inspection and maintenance of the erosion and sediment control BMPs before and during construction. The owner shall develop a chain of responsibility with all operators on the site to ensure that the SWPP plan will be implemented and stay in effect until the construction project is complete, the entire site has undergone final stabilization, and a NOT has been submitted to the Department.

   b. Good housekeeping practices to maintain a clean and orderly site. Litter, debris, chemicals and parts must be handled properly to minimize the exposure to stormwater. This includes measures to reduce and remove sediment tracked off-site by vehicles or equipment, and the generation of dust.

   c. Preventative maintenance practices must be provided to ensure the proper operation, inspection and maintenance of stormwater control devices (e.g., oil-water separators, catch basins, and silt fences) and equipment used or stored on site.

   d. Spill prevention and response procedures must be developed where potential spills can occur. Where appropriate, specific handling procedures, storage requirements, spill containment and cleanup procedures must be identified. Bulk storage structures for petroleum products and other chemicals shall have adequate leak and spill protection to prevent any spilled materials from entering waters of the state, storm sewer systems or draining onto adjacent properties.

   e. Employee training informs personnel of their responsibility in implementing the practices and controls included in the plan such as spill response, good housekeeping, and sediment control practices. Employee training must be provided at least annually, as new employees are hired or as necessary to ensure compliance with the plan and the general permit.

   f. Concrete wash water, grindings and slurry, shall not be discharged to waters of the state, storm sewer systems or allowed to drain onto adjacent properties.

   g. Dewatering or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) related to the permitted activity must be managed with the appropriate BMPs, such that the discharge

does not adversely affect the receiving water or downstream landowners. The following conditions and considerations apply to the dewatering activities:

1) The dewatering is limited to stormwater and groundwater that may collect on site and those sources identified in Part II.A. A separate permit must be obtained to discharge water from other sources such as hydrostatic testing or contaminated groundwater or surface water.

2) The permittee(s) must operate the discharge to minimize the release of sediment and provide adequate BMPs where necessary to minimize erosion due to the discharge. Discharges must not lead to the deposition of sediment within stormwater conveyance systems or surface waters. Discharges must not cause or potentially cause a visible plume within a surface water body.

3) In addition to the inspection requirements in Part III, the dewatering activities should be inspected daily. The inspection must include the dewatering site, areas where the BMPs are being implemented and the discharge location. A record should be maintained to document the inspections of the dewatering operation and actions taken to correct any problems that may be identified.

4) Local authorities may require specific BMPs for discharges affecting their storm sewer system.

3. **Erosion and Sediment Controls**. An erosion and sediment control plan shall be developed to identify the appropriate control measures and when they will be implemented during the project for each major phase of site activity (e.g., clearing, grading and building phases). The erosion and sediment control plan must conform to the guidelines provided in Appendix 1. The description and implementation of controls shall address the following minimum components:

   a. Sediment basins, or an appropriate combination of equivalent sediment controls such as smaller sediment basins, and/or sediment traps, silt fences fiber logs, vegetative buffer strips, berms, etc., are required for all down slope boundaries of the disturbance area and for those side slope boundaries as may be appropriate for site conditions.

   b. Temporary erosion protection (such as cover crop planting or mulching) or permanent cover must be provided as outlined in Appendix 1 for the exposed soil areas where activities have been completed or temporarily ceased. These areas include graded slopes, pond embankments, ditches, berms and soil stockpiles.

   c. All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for site situations. The permittee may deviate from the manufacturer's specifications and erosion and sediment control guidelines in Appendix 1 if they provide justification for the deviation and document the rationale for the deviation in the SWPP plan.

   d. If sediment escapes from the site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts. The plan must be modified to prevent further sediment deposition off-site.

   e. The stormwater controls are expected to withstand and function properly during precipitation events of up to the 2 year, 24 hour storm event. Visible erosion and/or off-site sediment deposition from such storm events should be minimal. The 2 year, 24 hour rainfall event in North Dakota ranges from about 1.9 inches in the west to 2.3 inches in the east.

f. For projects that discharge to waters that have a TMDL allocation for sediment, suspended solids or turbidity, the plan must be consistent with the assumptions, allocations and requirements of the approved TMDL. If a TMDL specifies certain BMPs or controls to meet a wasteload allocation (WLA) applicable to the project's discharges, then the BMPs or controls must be incorporated into the plan. Information about TMDL allocations may be found at the following website: www.ndhealth.gov/WQ/SW/Z2_TMDL/default.htm.

4. **Stormwater Management**. The plan must identify permanent practices incorporated into the project to control pollutants in stormwater discharges occurring after construction operations have been completed.

   a. Identify stormwater ponds; flow reduction by use of open vegetated swales and natural depressions; infiltration of runoff on-site; and sequential systems which combine several practices.

   b. Identify velocity / energy dissipation devices placed at discharge locations and appropriate erosion protection for outfall channels and ditches.

   c. Maintenance for on-site stormwater management features is the responsibility of the permittee until the NOT is submitted or the feature is accepted by the party responsible for long term maintenance.

   d. The design, installation and use of stormwater management features must comply with applicable local, state or federal requirements.

5. **Maintenance**. All erosion and sediment control measures and other protective measures identified in the plan must be maintained in effective operating condition. The plan must indicate, as appropriate, the maintenance or clean out interval for sediment controls. If site inspections, required in Part III of this permit, identify BMPs that are not operating effectively, maintenance shall be arranged and accomplished as soon as practicable.

6. **Inspections**. The plan must provide for site inspections as outlined in Part III. The permittee shall ensure that personnel conducting site inspections are familiar with permit conditions and the proper installation and operation of control measures. The erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly and in serviceable condition. Inspections shall also include discharge outlets from areas used for storage of materials, permanent stormwater control measures and vehicle maintenance areas. These areas shall be inspected for evidence of, or the potential for, pollutants entering a drainage system. If necessary, the plan shall be revised based on the observations and deficiencies noted during the inspection.

7. **Plan Review and Revisions**.

   a. The plan shall be signed in accordance with the signatory requirements, Part IV.A.6, and retained on-site for the duration of activity as outlined in Part III.B.

   b. The permittee shall make plans available upon request to the Department, EPA, or, in the case of discharges to a municipal storm sewer system, to the operator of the municipal system.

   c. The permittee shall amend the SWPP plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the state. The plan shall also be amended if the plan is found to be ineffective in controlling pollutants present in stormwater.

D. Local Requirements

All stormwater discharges must comply with the requirements, policies, or guidelines of municipalities and other local agencies as applicable to the construction site. Any discharges to a storm sewer, ditch or other water course under the jurisdiction of a municipality must comply with any specific conditions or BMPs required by the municipality.

E. Final Stabilization

The permittee(s) must ensure final stabilization of the site. The permittee(s) should submit a NOT within 30 days after final stabilization has been achieved, or another owner/operator (permittee) has assumed control according to Part I.F for all areas of the site that have not undergone final stabilization. Final stabilization can be achieved in one of the following ways.

1. All soil disturbing activities at the site have been completed and all soils must be stabilized by a uniform perennial vegetative cover with a density of 70 percent over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions and;

    a. All drainage ditches, constructed to drain water from the site after construction is complete, must be stabilized to preclude erosion;

    b. All temporary synthetic, and structural erosion prevention and sediment control BMPs (such as silt fence) must be removed as part of the site final stabilization; and

    c. The permittee(s) must clean out all sediment from conveyances and from temporary sedimentation basins that will be used as permanent water quality management basins. Sediment must be stabilized to prevent it from being washed back into the basin, conveyances or drainage ways discharging off-site; or to surface waters. The cleanout of permanent basins must be sufficient to return the basin to design capacity.

2. For residential construction only, final stabilization has been achieved when temporary erosion protection and down gradient perimeter control for individual lots has been completed and the residence has been transferred to the homeowner. Additionally, the permittee must distribute a "homeowner fact sheet" to the homeowner to inform the homeowner of the need for, and benefits of, final stabilization. The permittee also must demonstrate that the homeowner received the fact sheet.

III. SELF MONITORING AND REPORTING

A. Inspection and Maintenance Requirements

1. Inspections shall be performed by or under the direction of the permittee at least once every 14 calendar days and within 24 hours after any storm event of greater than 0.50 inches of rain per 24-hour period during active construction. The permittee shall use a rain gauge near the site or utilize the nearest National Weather Service precipitation gauge station. Any gauge used shall be located within 5 miles of the stormwater discharge.

2. All inspections and maintenance conducted during construction must be recorded in writing and these records must be retained in accordance with Part III.B. Records of each inspection and maintenance activity shall include:

a. Date and time of inspections;

b. Name of person(s) conducting inspections;

c. Findings of inspections, including recommendations for corrective actions;

d. Corrective actions taken (including dates, times, and party completing maintenance activities);

e. Date and amount of all rainfall events greater than 1/2 inch (0.50 inches) in 24 hours; and

f. Documentation that the SWPP plan has been amended when substantial changes are made to the erosion and sediment controls or other BMPs in response to inspections.

3. Completed areas that have been stabilized but do not meet the 70% perennial vegetative cover criteria for final stabilization may be inspected once per month. Inspections may be suspended for parts of the construction site that meet final stabilization. Inspections also may be suspended where earthwork has been suspended due to frozen ground conditions. The required inspections and maintenance must resume as soon as runoff occurs or the ground begins to thaw at the site.

4. There may be times when a site inspection may not be practical at the specified time. Adverse climatic conditions, such as flooding, high winds, tornadoes, electrical storms, etc., may prohibit inspections. Should this occur, the permittee must record a description of why the inspection(s) could not be performed at the designated time.

5. The permittee may submit an alternative inspection plan for long, narrow, linear construction projects such as pipeline or utility line inspection, and similar projects in remote areas where vehicle traffic is restricted or could compromise native vegetation or stabilization measures. A copy of the SWPP plan and proposed inspections plan shall be submitted to the Department 30 days prior to implementing an alternative inspection plan. Any alternative plan must provide for the timely recognition and repair of erosion and sediment damage.

6. Some erosion and sediment control measures may require more frequent inspection based on location (e.g., sensitive areas or waters of the state) or as a result of recurring maintenance issues. Erosion or sediment control measures found in need of maintenance between inspections must be repaired or supplemented with appropriate measures as soon as practicable.

B. Records Location

A copy of the completed and signed Notice of Intent, coverage letter from the Department, SWPP plan, site inspection records, and this general permit shall be kept at the site of the construction activity in a field office, trailer, or shed, or in a vehicle that is on-site during normal working hours. If the site does not have a reasonable on-site location, then the documents must be retained at a readily available alternative location; preferable with the individual responsible for overseeing the implementation of the SWPP plan. If the site is inactive, then the documents may be stored at a local office.

IV. STANDARD CONDITIONS

A. COMPLIANCE RESPONSIBILITIES

1. **Duty to Comply**
The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. **Operation and Maintenance**
The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. If necessary to achieve compliance with the conditions of this permit, this shall include the operation and maintenance of backup or auxiliary systems.

3. **Planned Changes**
The Department shall be given advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance. Any anticipated facility expansions, production increase, or process modifications which might result in new, different, or increased discharges of pollutants shall be reported to the Department as soon as possible. Changes which may result in a facility being designated a "new source" as determined in 40 CFR 122.29(b) shall also be reported.

4. **Duty to Provide Information**
The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit. When a permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or any report, it shall promptly submit such facts or information.

5. **Records Retention**
All records and information (including calibration and maintenance) required by this permit shall be kept for at least three years or longer if requested by the Department or EPA.

6. **Signatory Requirements**
All applications, reports or information submitted to the Department shall be signed and certified.

   a. All permit applications shall be signed by a responsible corporate officer, a general partner, or a principal executive officer or ranking elected official.

   b. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

      (1) The authorization is made in writing by a person described above and submitted to the Department; and

      (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

If an authorization under "Compliance Responsibilities-Signatory Requirements" section is no longer accurate for any reason, a new authorization satisfying the above requirements must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted herein. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

7. **Noncompliance Notification**
The permittee shall report any noncompliance which may seriously endanger health or the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the EPA, Region VIII, Emergency Response Branch at 1.800.424.8802 and the State of North Dakota, Division of Homeland Security at 1.800.472.2121. The following occurrences of noncompliance shall be reported by telephone to the Department at 701.328.5210 by the first workday (8:00 a.m.-5:00 p.m. Central time) following the day the permittee became aware of the circumstances:

   a. Any lagoon cell overflow or any unanticipated bypass which exceeds any effluent limitation in the permit (see "Compliance Responsibilities-Bypass of Treatment Facilities" section);

   b. Any upset which exceeds any effluent limitation in the permit (see "Compliance Responsibilities-Upset Conditions" section); or

   c. Violation of any daily maximum effluent or instantaneous discharge limitation for any of the pollutants listed in the permit.

   A written submission shall also be provided within five days of the time that the permittee became aware of the circumstances. The written submission shall contain:

   a. A description of the noncompliance and its cause;

   b. The period of noncompliance, including exact dates and times;

   c. The estimated time noncompliance is expected to continue if it has not been corrected; and

   d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

   Reports shall be submitted to the address in the "Reporting and Recordkeeping Requirements-Reporting" section. The Department may waive the written report on a case by case basis if the oral report has been received within 24 hours by the Department at 701.328.5210 as identified above.

   All other instances of noncompliance shall be reported no later than at the time of the next Discharge Monitoring Report submittal. The report shall include the four items listed in this subsection.

8. **Bypass of Treatment Facilities**
Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to any of the following provisions in this section.

Bypass exceeding limitations-notification requirements.

a. Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of bypass.

b. Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required in the "Compliance Responsibilities-Noncompliance Notification" section.

Prohibition of Bypass. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required in the "Bypass of Treatment Facilities-Anticipated Bypass" section.

The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above.

9. Upset Conditions

An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of the following paragraph are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and the permittee can identify its cause(s);

b. The permitted facility was, at the time being, properly operated;

c. The permittee submitted notice of the upset as required under "Compliance Responsibilities-Noncompliance Notification" section; and

d. The permittee complied with any remedial measures required under "Compliance Responsibilities-Duty to Mitigate" section.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

10. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee, at the Department's request, shall provide accelerated or additional monitoring as necessary to determine the nature and impact of any discharge.

11. Removed Materials
Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the state. The permit issuing authority shall be contacted prior to the disposal of any sewage sludges. At that time, concentration limitations and/or self-monitoring requirements may be established.

12. Duty to Reapply
Any request to have this permit renewed should be made 15 days prior to its expiration date.

B. GENERAL REQUIREMENTS

1. Right of Entry
The permittee shall allow Department and EPA representatives, at reasonable times and upon the presentation of credentials if requested, to enter the permittee's premises to inspect the wastewater treatment facilities and monitoring equipment, to sample any discharges, and to have access to and copy any records required to be kept by this permit.

2. Availability of Reports
Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department and EPA. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

3. Transfers
This permit is not transferable except upon the filing of a Statement of Acceptance by the new party and subsequent Department approval. The current permit holder should inform the new controller, operator, or owner of the existence of this permit and also notify the Department of the possible change.

4. New Limitations or Prohibitions
The permittee shall comply with any effluent standards or prohibitions established under Section 306(a), Section 307(a), or Section 405 of the Act for any pollutant (toxic or conventional) present in the discharge or removed substances within the time identified in the regulations even if the permit has not yet been modified to incorporate the requirements.

5. Permit Actions
This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Water Quality Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, changes in sewage sludge practices, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. Need to Halt or Reduce
It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

7. State Laws
Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation preserved under Section 510 of the Act.

8. Oil and Hazardous Substance Liability
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

9. Property Rights
The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

10. Severability
The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

11. General Permits
Coverage under this permit may be modified, revoked and reissued, or terminated for cause. The Department may require any operator covered by this permit to apply for and obtain an individual or alternative general permit if:

a. The discharge is not in compliance with the conditions of the general permit

b. Conditions or standards have changed so that the discharge no longer qualifies for a general permit

c. Information becomes available which indicates that the permitee's discharge has a reasonable potential to contribute to an exceedance of a water quality standard

When an individual NDPDES permit is issued to an operator otherwise subject to this permit or the operator is approved for coverage under an alternative NDPDES general permit, the applicability of this permit to the operator is automatically inactivated upon the effective date of the individual permit or coverage under the alternative general permit.

V. DEFINITIONS

"303d List" or "Section 303d List" means a list of North Dakota's water quality-limited waters needing total maximum daily loads or TMDLs developed to comply with section 303d of the Clean Water Act. A copy of the latest integrated report is available on the state's web site at: www.ndhealth.gov/WQ/SW/Z2_TMDL/Integrated_Reports/B_Integrated_Reports.htm.

"Act" means the Clean Water Act.

"BMP" or "Best Management Practices" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

"Common Plan of Development or Sale" means a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

"Construction Activity" means construction activity as defined in 40 CFR part 122.26(b)(14)(x) and small construction activity as defined in 40 CFR part 122.26(b)(15). This includes a disturbance to the land that results in a change in topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into surface waters or drainage systems. Examples of construction activity may include clearing, grading, filling and excavating. Construction activity includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb on (1) acre or more. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

"Department" means the North Dakota Department of Health, Division of Water Quality.

"Energy Dissipation" means methods employed at pipe outlets to prevent erosion. Examples include, but are not limited to: concrete aprons, riprap, splash pads, and gabions that are designed to prevent erosion.

"Final Stabilization" means that:

1. All soil disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of 70 percent of the native cover for unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) has been achieved.

2. For areas with an average annual rainfall of less than 20 inches only, all soil disturbing activities at the site have been completed and temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years and achieve 70 percent vegetative coverage within three years without active maintenance.

3. For soil disturbing activities on land used for agricultural purposes, final stabilization may be accomplished by returning the disturbed land to its pre-disturbance agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to waters of the state, and areas which are not being returned to their pre-disturbance agricultural use must meet the final stabilization criteria in (1) or (2) above.

"Large Construction Activity" means land disturbance of equal to or greater than 5 acres. Large construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater that five acres.

"Normal Wetted Perimeter" means the area of a conveyance, such as a ditch, channel, or pipe that is in contact with water during flow events that are expected to occur once every year.

"Non-Stormwater Discharges" means discharges other than stormwater. The term includes both process and non-process sources. Process wastewater sources that require a separate NDPDES permit include, but are not limited to industrial processes, domestic facilities and cooling water. Non-stormwater sources that may be addressed in this permit include, but are not limited to: fire-fighting, fire hydrant flushing, potable water line flushing, infrequent building and equipment wash down without detergents, uncontaminated foundation drains, springs, lawn watering and air conditioning condensate.

"Operator" means the person (usually the general contractor) designated by the owner who has day to day operational control and/or the ability to modify project plans and specifications related to the SWPP plan. The person must be knowledgeable in those areas of the permit for which the operator is responsible and must perform those responsibilities in a workmanlike manner.

"Owner" means the person or party possessing the title of the land on which the construction activities will occur; or if the construction activity is for a lease holder, the party or individual identified as the lease holder; or the contracting government agency responsible for the construction activity.

"Permanent Cover" means final stabilization. Examples include grass, gravel, asphalt, and concrete.

"Severe Property Damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Significant Materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

"Significant Spills" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (see 40 CFR 302.4).

"Small Construction Activity" means land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater than one and less than five acres

"Stabilized" means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, wood fiber blanket, or other material that prevents erosion from occurring. Grass seeding alone is not stabilization.

"Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

“Stormwater Associated with Industrial Activity” means stormwater runoff, snow melt runoff, or surface runoff and drainage from industrial activities as defined in 40 CFR 122.26(b)(14).

“Stormwater Associated with Small Construction Activity” means the discharge of stormwater from:

(i) Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than once acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

(ii) Any other construction activity designated by EPA or the Department, based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the state.

"Temporary Erosion Protection" means methods employed to prevent erosion. Examples of temporary cover include; straw, wood fiber blanket, wood chips, and erosion netting.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

“Waters of the State” means any and all surface waters that are contained in or flow in or through the state of North Dakota as defined in NDCC 61-28-02. This definition includes all water courses, even if they are usually dry.

“You” means the owner, operator or permittee as appropriate.

Appendix 1 – Erosion and Sediment Control Guidelines

Guidelines for designing, implementing and maintaining erosion and sediment controls.

A. Erosion and Sediment Control Practices

1. Temporary (or permanent) sediment basins, or equivalent control, must be provided where ten (10) or more acres of disturbed area drain to a common location prior to the runoff leaving the site or entering surface waters. The permittee is encouraged, but not required, to install temporary sediment basins where appropriate in areas with steep slopes or highly erodible soils even if less than ten (10) acres drains to one area. The basins must provide at least the following:

   The basins shall be sized to provide 3,600 cubic feet of storage below the outlet pipe per acre drained to the basin. Alterative designs may be used which provide storage below the outlet for a calculated volume of runoff from a 2 year, 24 hour storm and provides not less than 1800 cubic feet of storage below the outlet pipe from each acre drained to the basin.

   Basin outlets must be designed to avoid short-circuiting and the discharge of floating debris. The basin must be designed with the ability to allow complete basin drawdown (e.g., perforated riser pipe wrapped with filter fabric and covered with crushed gravel, pumps or other means) for maintenance activities. The drawdown should be designed to release the storage volume in a 24 hour or longer period. The basin must have a stabilized emergency overflow to prevent failure of pond integrity. Energy dissipation must be provided for the basin outlet.

2. Where the temporary sediment basin is not practical due to site limitations or nature of disturbance (such as developing a roadway, pipeline, or diversion) a combination of measures must be used to provide equivalent sediment control for all down slope boundaries of the construction area and for side slope boundaries as deemed appropriate by individual site conditions. Equivalent sediment controls include such things as smaller sediment basins and/or sediment traps, silt fences, and vegetative buffer strips. In determining whether installing a sediment basin is attainable, the permittee must consider public safety and may consider factors such as site soils, slope and available area on site.

3. Provide temporary erosion protection or permanent cover for the exposed soil areas where activities have been completed or temporarily ceased. For those areas with a continuous positive slope within 200 lineal feet of a surface water, temporary erosion protection or permanent cover must be applied within 21 days of completing or ceasing earth moving activities. These areas include pond embankments, ditches, berms and soil stockpiles. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) are exempt from this requirement.

4. Temporary soil stockpiles must have effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches.

5. The normal wetted perimeter of any temporary or permanent drainage ditch that drains water from a construction site, or diverts water around a site, must be stabilized at least 200 lineal feet from the property edge, or from the point of discharge to any surface water. Stabilization should be completed within 24 hours of connecting to a surface water.

6. Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours of connection to a surface water. Splash pads and/or downspout extensions must be provided for roof drains to prevent erosion from roof runoff.

7. In order to maintain sheet flow and minimize rills and/or gullies, there should be no unbroken slope length of greater than 75 feet for slopes with a grade of 3:1 or steeper.

8. Temporary or permanent drainage ditches and sediment basins that are designed as part of a treatment system (e.g., ditches with rock check dams) require sediment control practices only as appropriate for site conditions.

9. All storm drain inlets in the immediate vicinity of the construction site must be protected by the appropriate BMPs during construction until all sources with the potential for discharging to the inlet have been stabilized. This includes storm drain inlets which may be affected by sediment tracked onto paved surfaces by vehicles or equipment.

   Inlet protection devices are a last line of control – sediment and erosion control practices must be used on site. Inlet protection devices must conform to local ordinances or regulations. In general inlet protection devices need to provide for drainage adequate to prevent excessive roadway flooding. Inlet protection may be removed for a particular inlet if a specific concern (i.e., street flooding/freezing, snow removal) has been identified and documented in the SWPP plan. In this situation, additional erosion and sediment control practices must be used to supplement for the loss of the inlet protection device to prevent sediment from entering a storm sewer system.

   Maintenance and cleaning of inlet protection devices, including on-site sediment and erosion controls, must be performed in a timely manner.

10. Vegetated buffers must have a minimum width of 25 feet for every 125 feet of disturbed area which drains to the buffer. For each additional 5 feet of disturbance, an additional 1 foot of width must be added. The width of the buffer shall have a slope of 5% or less and the area draining to the buffer shall have a slope of 6% or less. Concentrated flows should be minimized throughout the buffer.

    Buffers shall consist of dense grassy vegetation, 3 to 12 inches tall with uniform coverage over 90% of the buffer. Woody vegetation shall not be counted for the 90% coverage. No more than 10 % of the overall buffer may be comprised of woody vegetation.

B. Maintenance Considerations for Erosion and Sediment Controls

1. All erosion prevention and sediment control BMPs must be inspected to ensure integrity and effectiveness. All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs. The Permittee(s) must investigate and comply with the following inspection and maintenance requirements:

   All control devices similar to silt fence or fiber rolls must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the height of the device. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access.

   Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches 1/2 the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access.

2. Surface waters, including drainage ditches and conveyance systems, must be inspected for evidence of sediment being deposited by erosion. The permittee(s) must remove all deltas and sediment deposited in surface waters, including drainage ways, catch basins, and other drainage systems, and restabilize the areas where sediment removal results in exposed soil. The removal and stabilization must take place immediately, but no more than, seven (7) days after the discovery unless precluded by legal, regulatory, or physical access constraints. The permittee shall use all reasonable efforts to obtain access. If precluded, removal and stabilization shall take place immediately, but no more than, seven (7) calendar days after obtaining access. The permittee is responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work.

3. Construction site egress locations must be inspected for evidence of sediment being tracked off-site by vehicles or equipment onto paved surfaces. Accumulations of tracked and deposited sediment must be removed from all off-site paved surfaces within 24 hours or, if applicable, within a shorter time specified by local authorities or the Department.

   Vehicle tracking of sediment from the site must be minimized by BMPs. This may include having a designated egress with aggregate surfacing from the site, or by designating off-site parking. The permittee(s) is responsible for (or making the arrangements for) street sweeping and/or scraping if BMPs are not adequate to prevent sediment from being tracked onto the street from the site.

4. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).

5. Vegetative buffers must be inspected for proper distribution of flows, sediment accumulation and signs of rill formation. If a buffer becomes silt covered, contains rills, or is otherwise rendered ineffective, other control measures shall be implemented. Eroded areas shall be repaired and stabilized.

C. Housekeeping and Standard Operating Procedures

1. Properly handle construction debris and waste materials.

   Provide appropriate container(s) on site (or centrally located at several sites) for storing debris and other wastes until disposal. Litter and debris shall be picked-up regularly to reduce the chance for materials to be carried off the site by wind or water. Collected material shall be taken to the appropriate facility for disposal or recycling.

   Liquid or soluble materials including oil, fuel, paint and any other hazardous substances must be properly stored, to prevent spills, leaks or other discharges. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with applicable regulations.

2. Concrete wash water shall not be discharged to any waters of the state, storm sewer systems or allowed to drain onto adjacent properties. Wash water disposal must be limited to a defined area of the site or to an area designated for cement washout. The area(s) must be sufficient to contain the wash water and residual cement.

Appendix 3 – Vegetative Buffer Strips

Purpose and Operation

Vegetative buffer strips are areas of gently sloping vegetative cover that runoff water flows through before entering a stream, storm sewer, or other conveyance. They act as living sediment filters that intercept and detain stormwater runoff. They reduce the flow and velocity of surface runoff, promote infiltration, and reduce pollutant discharge by capturing and holding sediments and other pollutants carried in the runoff water. Vegetative buffer strips function much like vegetated or grassed swales. Buffer strips, however, are fairly level and treat sheet flow across them, whereas grassed swales are indentations that treat concentrated flows running along them.

Material Specifications

- Vegetative buffer strips may be of undisturbed natural vegetation or it can be graded and planted areas.

Placement

- May be placed at many locations between the source of sediment (road surface, side slopes) and a natural or constructed waterway. They are inexpensive and easily constructed, and can be put into place at any time if climatic conditions allow for planting.
- May be used at almost any site that can support vegetation, but is best suited for areas where the soils are well drained or moderately well drained and where the bedrock and the water table are well below the surface.

Proper Installation Method

- A buffer strip should be at least 20 feet wide to function well. Along live streams or above wetlands, the minimum width should be 100 feet. The length of the strip should be approximately 50 to 82 feet. Where slopes become steeper, increase the length of the strip.
- Tall, dense stands of grass form good sediment traps, as do willows and alder. The willows and alder can be native or planted. A combination of grasses with willows or alder is also effective. Any planted species should be deep rooted and able to adjust to low oxygen levels. Vegetative cover should be at least 75% to assure adequate removal of sediments. Forested strips are always preferred to vegetated strips, and existing vegetation is preferred to planted vegetation. In planning for vegetated strips, consider climatic conditions, since vegetation may not take hold in especially dry and/or cold regions.

List of Common Placement/Installation Mistakes to Avoid

- In many cases, a vegetative buffer strip will not effectively control runoff and retain sediments unless employed in conjunction with other control measures. Where heavy runoff or large volumes of sediment are expected, provide diversion measures or other filtering measures above or below the buffer strip.
- Not effective for filtering high velocity flows from large paved areas, steep slopes, or hilly areas. Consider other measures if slopes exceed 15%.
- Do not use planted or seeded ground as a buffer strip for sediment trapping until the vegetation is well established.

Inspection and Maintenance

Inspect the buffer strip at regular intervals to ensure proper functioning. Check for damage by equipment and vehicles. In newly planted areas, check the progress of germination and plant growth, and arrange for fertilizing, if needed, to enhance growth and establishment. (Planted ground should not be used for a sediment trap until the vegetation is well established.) Make sure that water flowing through the buffer strip is not causing additional erosion nearby and not forming ponds due to erosion within the buffer strip.

Buffer strips in natural vegetation do not generally require maintenance; however, on some sites it may be necessary to remove sediments and replant on a regular basis. Promptly repair any damage from equipment, vehicles, or erosion.

Appendix 4 – Silt Fence Check Dams

Purpose and Operation

Silt fence ditch checks operate by intercepting, ponding, and filtering sediment-laden runoff. Ponding the water reduces the velocity of the incoming flow and allows most of the suspended sediment to settle. As the ponded water percolates through the silt fence fabric, much of the remaining suspended sediment is filtered out. Silt fence ditch checks work well in ditches with low flows and moderate slopes.

Material Specifications

- Silt fence fabric should conform to the AASHTO M288 96 silt fence specification.
- The posts used to support the silt fence fabric should be a hardwood material with the following minimum dimensions: 2 inches square, 4 feet long.

  NOTE: For structural stability, metal posts should be used in areas that will pond water.
- Silt fence fabric should be attached to the wooden posts with staples, wire, zip ties, or nails.

Placement

- Place silt fence in ditches where it is unlikely to be overtopped. Water should flow through a silt fence ditch check, not over it. Silt fence ditch checks often fail when overtopped.
- Silt fence ditch checks should be placed perpendicular to the flowline of the ditch.
- The silt fence should extend far enough so that the ground level at the ends of the fence is higher than the top of the low point of the fence. This prevents water from flowing around the check.
- Silt fence checks should not be placed in ditches where high flows are expected. Rock checks should be used instead.
- Silt fence should be placed in ditches with slopes of 6% or less. For slopes steeper than 6%, rock checks should be used.

The following table provides check spacing for a given ditch grade:

Ditch Check Dam Spacing	
Ditch Grade (percent)	Check Spacing (feet)
1	200
2	98
3	66
4	49
5	39
6	10
>6	*

* Use other methodology

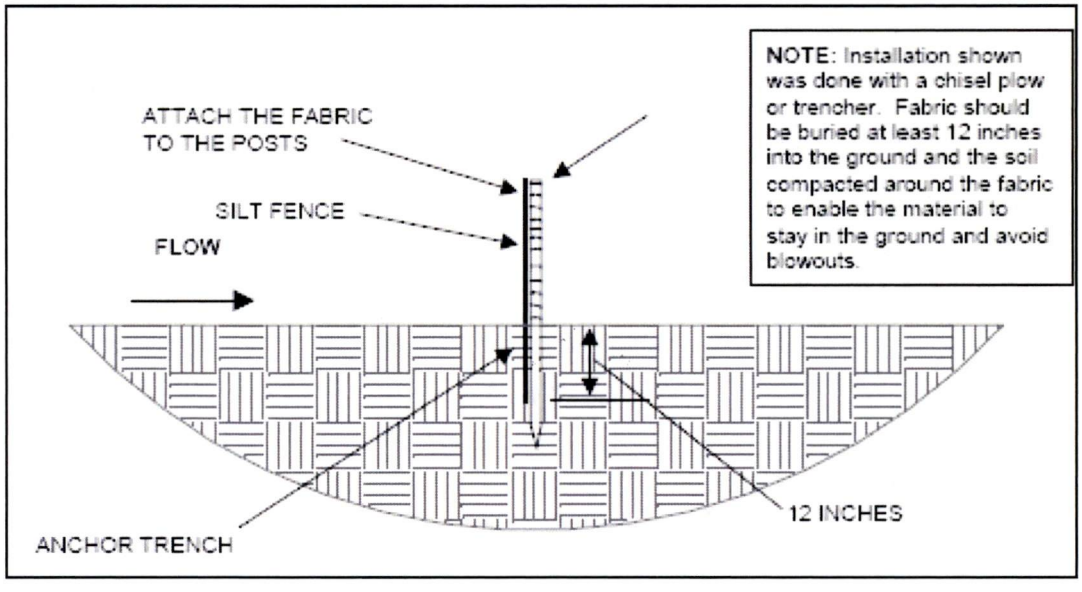


Figure A4-1. Side View - Silt Fence Ditch Check.

Proper Installation Method

- Perpendicular to the ditch flowline, excavate a trench that is at least 6 inches deep by 4 inches wide. Extend the trench in a straight line along the entire length of the proposed ditch check. Place the soil on the upstream side of the trench for later use. **Note:** Another common and less labor-intensive installation method uses a trencher or chisel plow to install the silt fence. The silt fence will last longer and is less likely to blowout underneath.
- Roll out a continuous length of silt fence fabric on the downstream side of the trench. Place the edge of the fabric in the trench starting at the top upstream edge of the trench. Line all three sides of the trench with the fabric. Backfill over the fabric in the

trench with the excavated soil, and compact. After filling the trench, approximately 24 to 36 inches of silt fence fabric should remain exposed.

- Lay the exposed silt fence on the upstream side of the trench to clear an area for driving in the posts. Just downstream of the trench, drive posts into the ground to a depth of at least 24 inches. Place posts no more than 4 feet apart.
- Attach the silt fence to the anchored post with staples, wire, zip ties, or nails.

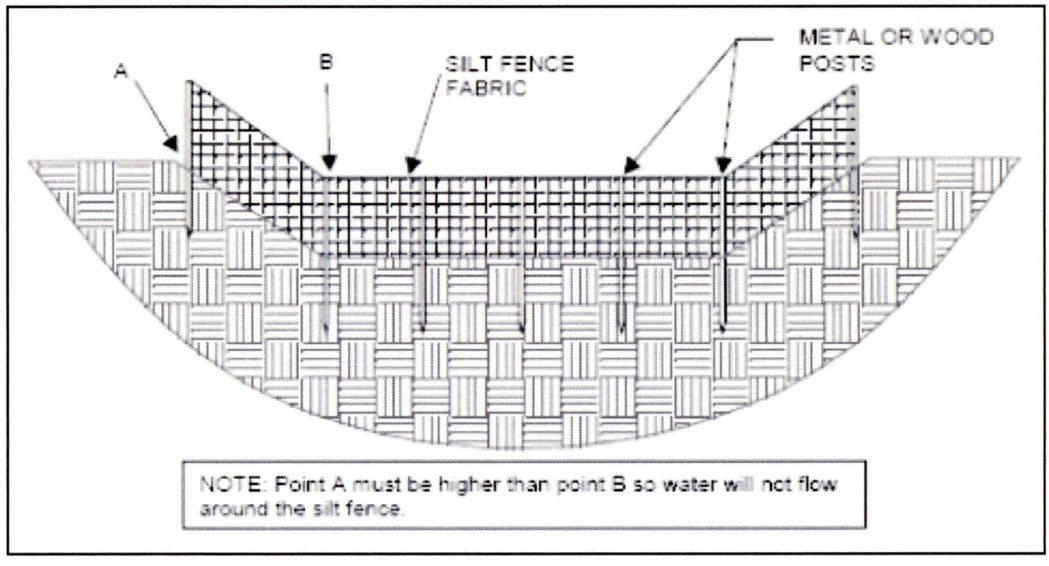


Figure A4-2. Elevation View - Silt Fence Ditch Check.

List of Common Placement/Installation Mistakes to Avoid

- Water should flow through a silt fence ditch check, not over it. Place silt fence in ditches where it is unlikely to be overtopped. Silt fence installations quickly deteriorate when water overtops them.
- Do not place silt fence posts on the upstream side of the silt fence fabric. In this configuration, the force of the water is not restricted by the posts, but only by the staples (wire, zip ties, nails, etc.). The silt fence will rip and fail.
- Do not place a silt fence ditch check directly in front of a culvert outlet. It will not stand up to the concentrated flow.
- Do not place silt fence ditch checks in ditches that likely will experience high flows. They will not stand up to concentrated flow.
- Follow prescribed ditch-check spacing guidelines. If spacing guidelines are exceeded, erosion will occur between the ditch checks.
- Do not allow water to flow around the ditch check. Make sure that the ditch check is long enough so that the ground level at the ends of the fence is higher than the low point on the top of the fence.

- Do not place silt fence ditch checks in channels with shallow soils underlain by rock. If the check is not anchored sufficiently, it will wash out.

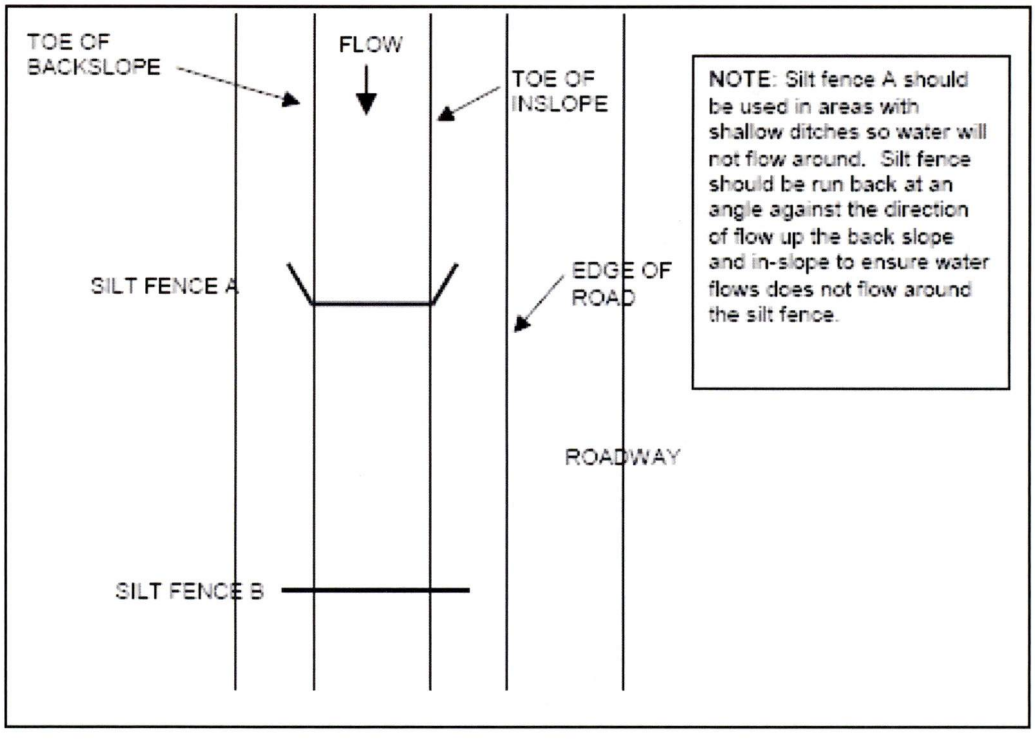


Figure A4-3. Placement of silt fence.

Inspection and Maintenance

Silt fence ditch checks should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following questions should be addressed during each inspection.

- **Does water flow around the ditch check?**

  Water flowing around the ditch check usually is caused by insufficient ditch check length. If this occurs, lengthen the check so that the ground level at the ends of the fence is higher than the low point on the top of the center of the fence.

- **Does water flow under the ditch check?**

  Water flowing under the ditch check can be caused by posts that are too far apart, a trench that is too shallow, or an improper burial procedure. Posts should be no more than 4 feet apart. The trench should be at least 4 inches wide by 6 inches deep. The bottom edge of the silt fence should be anchored securely by backfilling over the fabric in the trench with the excavated soil and then compacting. If these guidelines have not been met, the silt fence ditch check should be reinstalled or the deficiencies remedied.

- **Does the silt fence sag excessively?**

  Sagging silt fence is caused by excessive post spacing and/or overtopping of the silt fence. Silt fence posts should be no more than 4 feet apart. If the post spacing exceeds 4 feet, additional posts should be added to decrease spacing between posts. Water should flow through a silt fence ditch check, not over it. Silt fence installations deteriorate quickly when the water overtops them.

  If a silt fence ditch check is regularly overtopped, it probably has been placed in a location that receives flows beyond its intended capacity. In this case, discontinue the use of silt fence in this area and try something different (e.g., rock ditch checks).

- **Has the silt fence torn or become detached from the posts?**

  Silt fence can be torn by the force of ponded water or by winds that rip the silt fence fabric away from the posts. If a silt fence develops tears for any reason, it should be replaced.

- **Does sediment need to be removed from behind the ditch check?**

  Sediment accumulated behind the ditch check should be removed when it reaches one-half of the original exposed height of the silt fence. Allowing too much sediment to accumulate behind a ditch check drastically reduces its effectiveness. Because one high-intensity rainfall can dislodge enough sediment from surrounding slopes to completely fill the space behind the ditch check, it is extremely important to inspect ditch checks within 24 hours of a heavy rainfall.

  Note: When removing sediment from behind a silt fence ditch check with a bulldozer or backhoe, take care not to undermine the entrenched silt fence.

Appendix 5 – Rock Ditch Check Dams

Purpose and Operation

Rock ditch checks operate by intercepting and ponding sediment-laden runoff. Ponding the water dissipates the energy of any incoming flow and allows a large portion of the suspended sediment to settle. Water exits the ditch check by flowing over its crest. Rock ditch checks are ideal for ditches that eventually will have a riprap lining. Upon completion of the project, rock ditch checks can be spread out to form a riprap lined channel.

Material Specifications

Rock ditch checks should be constructed of stone that is between 4 and 8 inches in size. Field or quarry stone is acceptable; however, sand stone is not.

Placement

- Rock ditch checks should be perpendicular to the flowline of the ditch.
- Rock ditch checks must be designed so that water can flow over them, not around them. The ditch check should extend far enough so that the ground level at the ends of the check is higher than the low point on the crest of the check.
- Rock ditch checks are best located in ditches that eventually will be lined with riprap, so that the rock will not have to be removed at the completion of construction. The following table provides check spacing for a given ditch grade:

Ditch Check Dam Spacing	
Ditch Grade (percent	Check Spacing (feet)
5	59
6	49
7	43
8	36
9	33
10	30

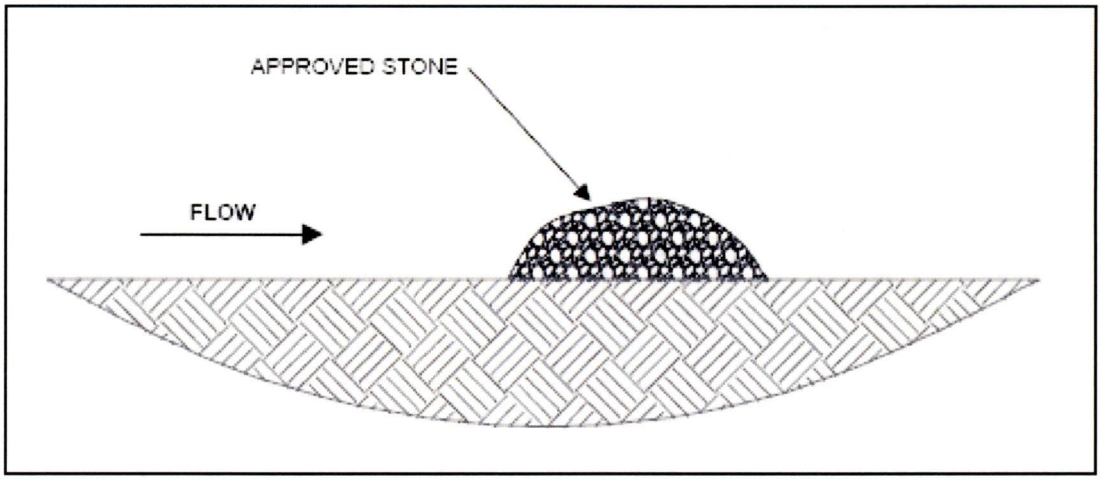


Figure A5-1. Side View - Rock Ditch Check.

Proper Installation Method

- Using approved stone, construct a rock ditch check perpendicular to the ditch flowline. The ditch check should be 18 to 24 inches high and have side slopes no steeper than 1:1. The rock ditch check must be constructed so that water can flow over the top, not around the ends (i.e., the ground level at the ends of the check must be higher than the low point on the crest of the check).

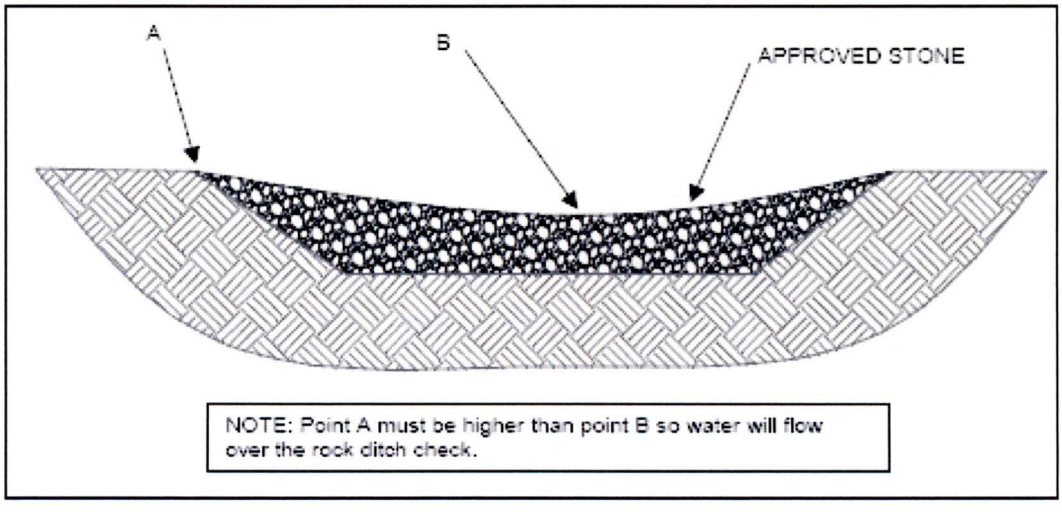


Figure A5-2. Elevation View - Rock Ditch Check.

List of Common Placement/Installation Mistakes to Avoid

- Follow prescribed ditch check spacing guidelines. If spacing guidelines are exceeded, erosion will occur between the ditch checks.

- Do not allow water to flow around the ditch check. Make sure that the ditch check is long enough so that the ground level at the ends of the check is higher than the low point on the crest of the check.

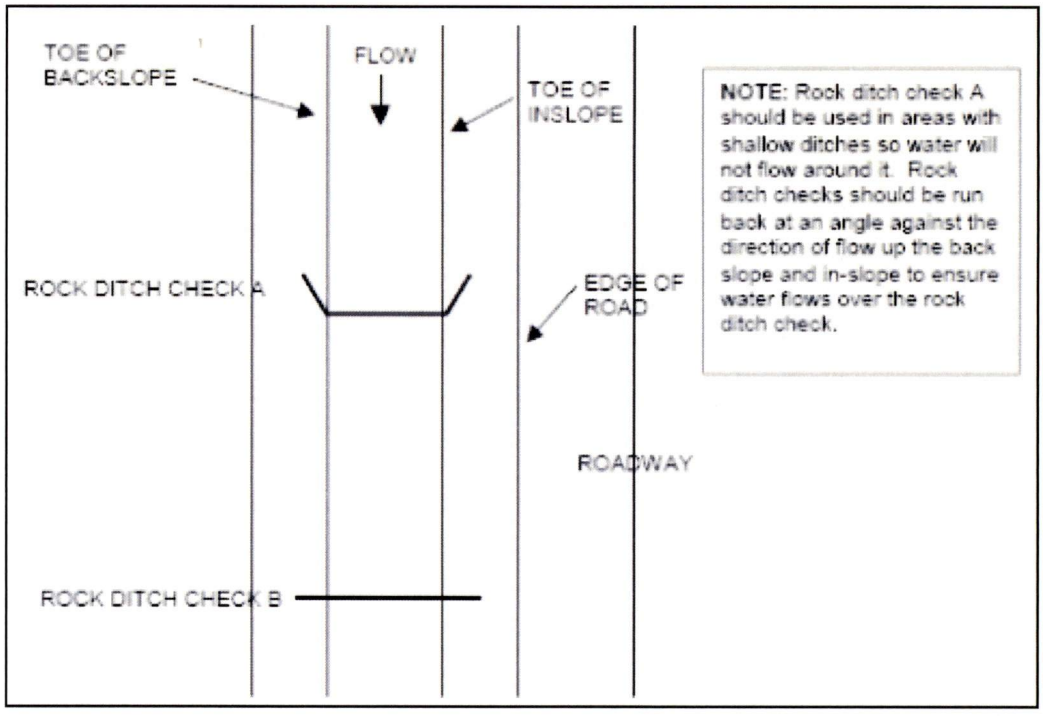


Figure A5-3. Placement of Rock Ditch Check.

Inspection and Maintenance

Rock ditch checks should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following questions should be addressed during each inspection.

- **Does water flow around the ditch check?**

  Water flowing around the ditch check usually is caused by insufficient ditch check length. If this occurs, extend the check a sufficient length so that the ground level at the ends of the check is higher than the low point on the crest of the check.

- **Have high-velocity flows displaced any stones from the check?**

  Sometimes high-velocity flows can carry away portions of a rock ditch check. After a heavy rainstorm, inspect the rock ditch check for any displaced stones. If a large portion of a rock ditch check has washed away, fill in the void with new stone immediately.

- **Does sediment need to be removed from behind the ditch check?**

  Sediment accumulated behind the ditch check should be removed when it reaches one-half of the original exposed height of the rock ditch check. Allowing too much sediment to accumulate behind a ditch check drastically reduces its effectiveness. Because one high-intensity rainfall can dislodge enough sediment from surrounding

slopes to completely fill the space behind the ditch check, it is extremely important to inspect ditch checks within 24 hours of a heavy rainfall.

Note: The easiest way to remove sediment from behind a rock ditch check is with a bulldozer or backhoe.

Appendix 6 – Straw Roll Ditch Check Dams

Purpose and Operation

Straw roll ditch checks operate by intercepting, ponding, and filtering sediment-laden runoff. Ponding the water reduces the velocity of the incoming flow and allows most of the suspended sediment to settle. As the ponded water percolates through the straw roll, much of the remaining suspended sediment is filtered out. Straw roll ditch checks work well in ditches with low flows and moderate slopes.

Material Specifications

- Straw rolls are made from straw that is wrapped in tubular mesh netting. They are usually about 8 inches in diameter and 20 to 25 feet long.
- Biodegradable or photodegradable mesh netting may be preferential in order to reduce the need to remove the straw rolls after revegetation has been completed.
- Wooden stakes should be approximately 3/4 by 3/4 by 24 inches. Willow cuttings or 3/8-inch rebar can also be used for stakes.

Placement

- Place straw rolls in ditches where it is unlikely to be overtopped. Water should flow through a straw roll ditch check, not over it. However, if properly installed, they can handle minor overtopping.
- Straw roll ditch checks should be placed perpendicular to the flowline of the ditch.
- The straw rolls should extend far enough so that the ground level at the ends of the straw roll is higher than the top of the low point of the straw roll. This prevents water from flowing around the check.
- Straw roll checks should not be placed in ditches where high flows are expected; rock checks should be used instead.
- Straw rolls should be placed in ditches with slopes of 6% or less. For slopes steeper than 6%, rock checks should be used.

The following table provides check spacing for a given ditch grade.

Ditch Check Dam Spacing	
Ditch Grade (percent)	Check Spacing (feet)
1	200
2	98
3	66
4	49
5	39
6	10
>6	*

* Use other methodology

Proper Installation Method

- It is critical that straw rolls are installed perpendicular to the flow direction and parallel to the slope contour.
- Narrow trenches should be dug across the channel to a depth of 3 to 5 inches on clay soils and soils with gradual slopes. On loose soils, steep slopes, and areas with high rainfall, the trenches should be dug to a depth of 5 to 7 inches, or one-half to two-thirds of the thickness of the straw roll.
- Start building trenches and installing straw rolls across the channel, making sure that the ends are higher than the top of the straw roll at its lowest point.
- If possible, avoid butting straw rolls in a channel.
- Install stakes at each end of the straw roll, and at 4-foot centers along entire length of straw roll.
- If required, install pilot holes for the stakes using a straight bar to drive holes through the straw roll and into the soil.
- At a minimum, wooden stakes should be approximately 3/4 by 3/4 by 24 inches. Willow cuttings or 3/8-inch rebar can also be used for stakes.
- Stakes should be driven through the middle of the straw roll, leaving 2 to 3 inches of the stake protruding above the straw roll.

List of Common Placement/Installation Mistakes to Avoid

- Do not place a straw roll ditch check directly in front of, or below a culvert outlet. It will not stand up to the concentrated flow.
- Do not place straw roll ditch checks in ditches that likely will experience high flows. They will not stand up to concentrated flow.
- Follow prescribed ditch-check spacing guidelines. If spacing guidelines are exceeded, erosion will occur between the ditch checks.
- Do not allow water to flow around the ditch check. Make sure that the ditch check is long enough so that the ground level at the ends of the fence is higher than the low point on the top of the fence.
- Do not place straw roll ditch checks in channels with shallow soils underlain by rock. If the check is not anchored sufficiently, it will wash out.

Inspection and Maintenance

Straw roll ditch checks should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following questions should be addressed during each inspection.

- **Does water flow around the ditch check?**

  Water flowing around the ditch check usually is caused by insufficient ditch check length. If this occurs, lengthen the check so that the ground level at the ends of the straw roll is higher than the low point on the top of the center of the straw roll.

- **Does water flow under the ditch check?**

  Water flowing under the ditch check can be caused by inadequate staking of the straw rolls, or improper trenching. Ensure that the straw roll is making good contact with the ground, and is trenched in with any extra fill placed on the upstream side of the straw roll.

- **Does sediment need to be removed from behind the ditch check?**

  Sediment accumulated behind the ditch check should be removed when it reaches one-half of the original exposed height of the silt fence. Allowing too much sediment to accumulate behind a ditch check drastically reduces its effectiveness. Because one high-intensity rainfall can dislodge enough sediment from surrounding slopes to completely fill the space behind the ditch check, it is extremely important to inspect ditch checks within 24 hours of a heavy rainfall.

  Note: When removing sediment from behind a straw roll ditch check with a bulldozer or backhoe, take care not to undermine the entrenched straw roll.

Appendix 7 – Diversion Trenches

Purpose and Operation

Diversion trenches collect and direct road surface and roadside ditch runoff from one or both sides of the road away from the roadway and into undisturbed areas adjacent to the road.

Material Specifications

- Diversion trenches are generally constructed out of existing soil on the site.

Placement

- Diversion trenches should be used where surface runoff on roads can accumulate to a point where it can cause erosion.
- A ditch check dam immediately downstream of the trench entrance will divert water into the diversion trench.
- Spacing of the diversion trenches decreases as the hill slope steepens. The following table provides recommended spacing:

Diversion Trench Spacing	
Slope (%)	Spacing (feet)
<5	125
5 to 10	100
10 to 20	75
20 to 35	50
>35	25

Proper Installation Method

- The diversion trench should intersect the ditch line at the same depth as the ditch line and have a low-gradient outslope.
- On sloping roads, the diversion trench should leave the road ditch line at a 30- to 45-degree angle to the roadbed and be designed to follow the natural slope contour.
- Runoff water should be spread out of the end of the trench on an area that is not susceptible to erosion.

List of Common Placement/Installation Mistakes to Avoid

- Do not direct runoff from a diversion trench to flow directly into an adjacent drainage, gully, or channel.

Inspection and Maintenance

Diversion trenches should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following questions should be addressed during each inspection.

- **Are there any points along the diversion trench that water is collecting?**

  If water is collecting along the diversion trench it may need to be changed to have a slight downhill gradient that allows water to flow to the outlet of the trench.

- **Has the diversion trench been eroded or downcut?**

  If erosion has occurred on the trench it will need to be repaired. The site should be evaluated to determine if additional runoff control methodology should be employed.

- **Has sediment collected in the trench?**

  If sediment has collected in the trench, it may need to be removed.

  Note: When removing sediment from a diversion trench with a bulldozer or backhoe, take care not to undermine the diversion trench.

Appendix 8 – Road Drainage Dips

Purpose and Operation

The primary purpose of a drainage dip is to intercept and remove surface water from the travel-way and shoulders before the combination of water volume and velocity begins to erode the surface materials. Drainage dips should not be confused with water bars, which are normally used for drainage and erosion protection of closed or blocked roads. See Figure A8-1 for illustration and construction specifications. Spacing of drainage dips depends upon local conditions such as soil material, grade, and topography.

Material Specifications

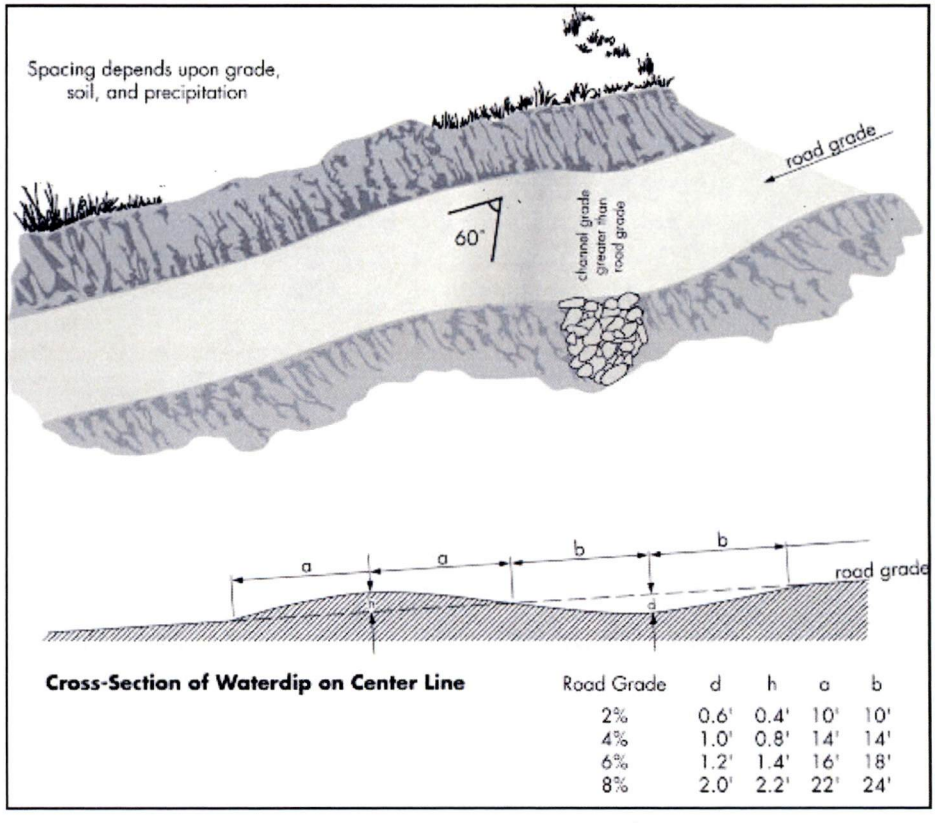
Drainage dips will be constructed out of the same material as the road base.

Placement and Installation

See Figure A8-1.

Inspection and Maintenance

Road drainage dips should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The inspector should check for erosion of the drainage dip.



Road Grade	d	h	a	b
2%	0.6'	0.4'	10'	10'
4%	1.0'	0.8'	14'	14'
6%	1.2'	1.4'	16'	18'
8%	2.0'	2.2'	22'	24'

Figure A8-1. Plan and Cross-Section Views - Road Drainage Dip.

Appendix 9 – Ditch Relief Culverts

Purpose and Operation

Ditch relief culverts are installed to periodically relieve the ditch line flow by piping water to the opposite side of the road where the flow can be dispersed away from the roadway.

Material Specifications

Culverts should have a minimum diameter of 12 inches. The diameter should be determined by the anticipated amount of water that would flow through the culvert. Factors to be considered include the geographic area being drained, soils and slopes in the drainage area, annual precipitation, and likely storm events.

The outlet of all culverts should extend at least 1 foot beyond the toe of any slope. It may be necessary to install rip-rap or other energy dissipation devices at the outlet end of the culvert to prevent soil erosion or trap sediment.

All culverts used in construction of access roads should be concrete, corrugated metal pipe made of steel, or properly bedded and backfilled corrugated plastic pipe. Only undamaged culverts are to be used, and any culvert should be inspected for damage prior to installation. All spots on the pipes where the zinc coating has been injured should be painted with two coats of zinc-rich paint.

Placement

Ditch relief culverts can provide better flow when skewed with an entrance angle of 45 to 60 degrees with the side of the ditch. The culvert gradient should be greater than the approach ditch gradient. This improves the flow hydraulics and reduces siltation and debris plugging the culvert inlet. Culverts placed in natural drainages can also be used for ditch relief.

Maximum Recommended Relief Culvert Spacing (feet)			
Soil Type	**Road Grade**		
	2–4%	**5–8%**	**9–12%**
Highly Erosive Granitic or Sandy	240	180	140
Intermediate Erosive Clay or Loam	310	260	200
Low Erosive Shale or Gravel	400	325	250

Proper Installation

The depth of culvert burial must be sufficient to ensure protection of the culvert barrel for the design life of the culvert. This requires anticipating the amount of material that may be lost due to road use and erosion.

Inspection and Maintenance

Relief culverts should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The inspector should check for erosion around both ends of the culvert, or for blockage by debris.

Appendix 10 – Low Water Crossings

Purpose and Operation

Roads may cross small drainages and intermittent streams where culverts and bridges are unnecessary. Properly constructed low water crossings will minimize sediment movement caused by vehicles driving across stream channels. The crossing can be effectively accomplished by dipping the road down to the bed of the drainage. Site-specific designs and the construction of gravel, rip-rap, or concrete bottoms may be required in some situations. In no case should the drainage be filled so that water will be impounded. Low water crossings that are not surfaced should not be used in wet conditions.

Material Specifications

Use river rock with a D^{50} of 6 inches. Areas susceptible to severe erosion may require underlayment of geotextile.

Placement

Rock will be placed across the stream channel beyond the bankfull width. Steep side slopes should be avoided.

Proper Installation

Minor excavation of the channel bottom may need to be done such that rock can be installed in a manner that will not allow water to pool on the upstream side of the crossing.

Inspection and Maintenance

Low water crossings should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The inspector should check for erosion at the crossing, debris around the crossing, and that rock has not been transported downstream.

Appendix 11 – Erosion Control Matting

Purpose and Operation

Erosion-control blankets are used to help limit erosion and establish vegetation on slopes and in ditches where conventional seeding and/or structural methods would be inadequate. By reducing the negative effects of rainfall impact and runoff, erosion-control blankets provide slopes and ditches with a temporary, stable environment for seed to germinate. Erosion-control blankets are constructed of a variety of materials, including straw, wood excelsior, coconut, or some combination thereof. These materials usually are stitched or glued to some type of synthetic or natural fiber netting that is either biodegradable or photodegradable (i.e., broken down by light).

Material Specifications

- Selection of erosion-control blankets will depend on the actual soil and hydraulic conditions. Longevity and stress level characteristics are dependent on material composition.

Geotextiles:

- **Jute Mesh:** Made of plant fibers, which are separated and woven into the jute mesh product. This product is totally biodegradable, and the product generally lasts up to one year. Jute is very useful in low rainfall areas because it absorbs more moisture. This product is very useful for wind erosion in many arid and semi-arid locations where wind erosion can cause considerable erosion.
- **Coir Blankets:** Manufactured from coir, the husk of coconut. (Biodegradable netting configurations.) Coir blankets are designed to last up to two to three years. This option is useful in areas where vegetation will take longer to establish (e.g., oor soil conditions, sloped areas, etc.). This product is very useful for wind erosion in many arid and semi-arid locations were wind erosion can cause considerable erosion.
- **Excelsior Blankets:** This product is available in single or double net configurations. (Biodegradable netting configurations.) Single net excelsior blankets will be used on slope less than 2:1 or in channel flows of less than 5.5 feet per second. The double net product will be installed on slopes up to 1:1 and a channel flow velocity of 7.0 feet per second.
- **Geotextiles, also called Geosynthetics,** are generally associated with high-standard all-season roads, but can be used in low-standard access roads.

  Geotextiles extend the service life of roads, increase their load-carrying capacity, and reduce the incidence of ruts and erosive conditions. These benefits are accomplished by separating aggregate structural layers from subgrade soil while allowing the passage of water.

In both the filtration and separation functions, water is permitted to pass through the geotextile. Occasionally, some confusion arises between the separation and filtration functions in this regard. A distinction may be drawn between the two with respect to the quantity of water involved and the degree to which it influences geotextile selection.

In the filtration function, the volume of water moving through the fabric is a key design element specifically addressed in the design and selection of the geotextile. It must be able to convey a certain quantity of water across the plane of the fabric throughout its design life to prevent the buildup of water pressure.

This is typically not the case with a geotextile used for separation. While water may pass in either direction across the plane of the geotextile, it is not typically an element of design as the quantities of water are relatively small, even in those cases of high groundwater and saturated subgrades.

Placement

- The erosion-control blankets should be used in areas of high flow and/or steep slopes where erosion will occur before grass growth.
- The blankets also should be placed in areas where poor soil quality hinders normal grass growth.

Proper Installation

- Prepare the soil and apply the seed before installing blankets.
- Anchor the blankets into a 6- by 6-inch trench. Backfill and compact the trench after stapling the blanket in accordance with the manufacture's recommendations.
- Roll out the blanket in the direction of flow.
- Overlap the ends of the blanket if additional rolls are needed. Place the upstream blanket on top of the new roll and staple. Use a double row of staples staggered 4 inches apart. A minimum overlap of 1 foot is required.
- Continue to place blankets in the above fashion, remembering to overlap all edges.
- The terminal end of the blankets must be anchored as stated above.
- Refer to the manufacture's recommendations for the number of staples to be placed per square yard based on slope and flow characteristics.

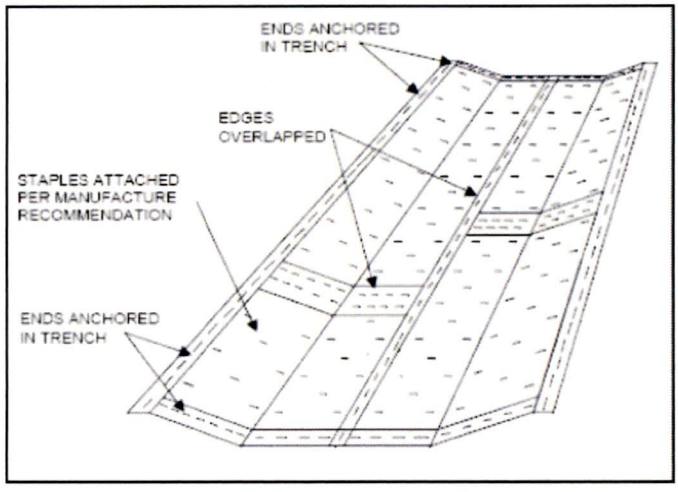


Figure A11-1. Plan View - Temporary Erosion-Control Blanket.

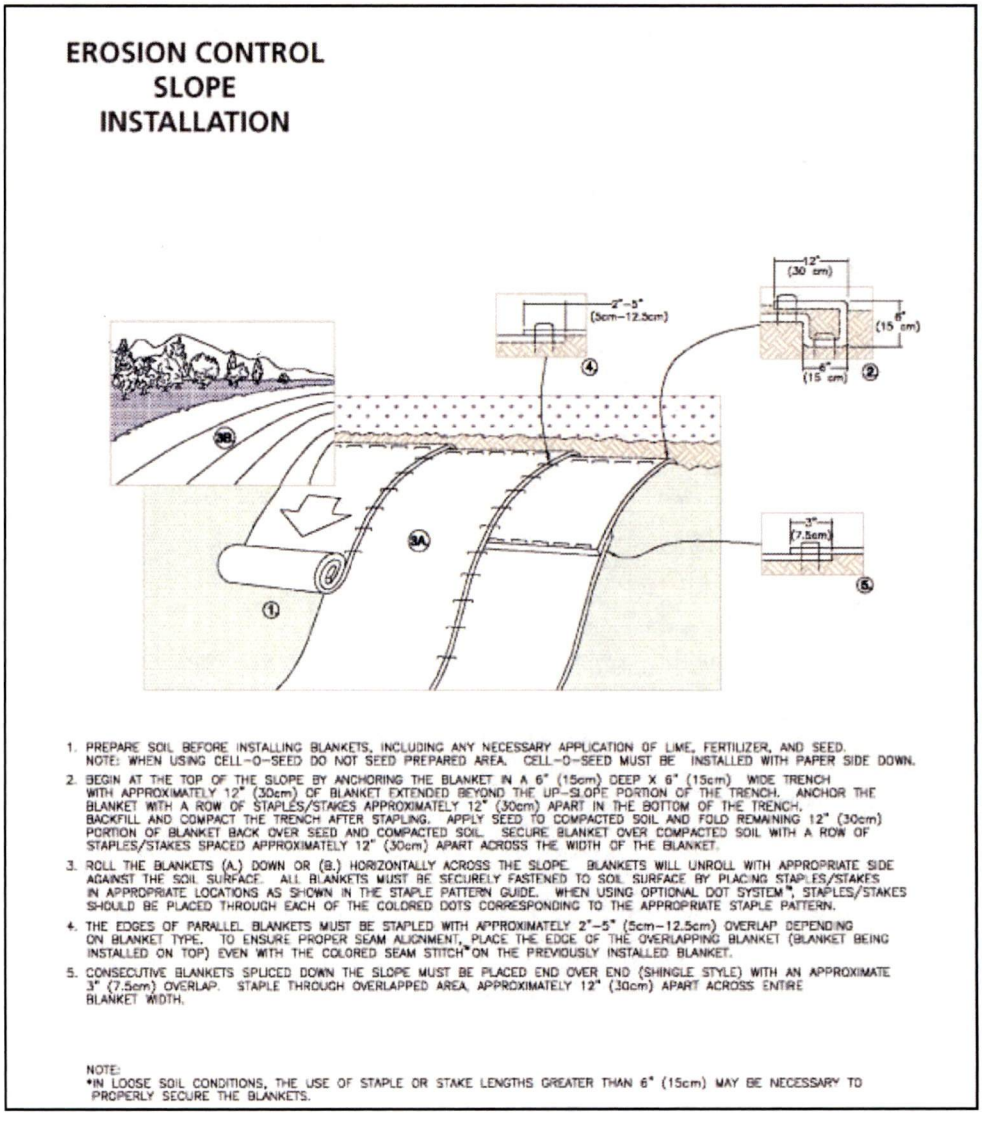


Figure A11-2. Erosion Control Slope Installation.

List of Common Placement/Installation Mistakes to Avoid

- Ensure the ends are properly secured.
- Install a sufficient number of staples to hold the blanket in place.
- Overlap the blanket to ensure water that flows on top of the blanket and is unable to flow under the blanket.

Inspection and Maintenance

Temporary erosion-control blankets should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following questions should be addressed during each inspection.

- **Are the ends pulled out?**

  Pulled out ends are usually caused by improper installation. Repeat the anchoring procedures for the ends, installing additional staples or increasing the trench size as necessary to ensure that the installation is secure.

- **Are the seams together?**

  If the seams are pulled apart, the blanket was not properly installed. Reinstall at the seams, adding more staples if necessary to hold the material in place.

- **Is the blanket sagging or misplaced?**

  A sagging or misplaced blanket usually is caused by lack of staples. Reinstall the blanket, using the correct number of staples.

Note: If at all possible, use a biodegradable or photodegradable erosion-control blanket. Using this type of product will save money because the blanket can be left in place. No additional time or resources will have to be exhausted to remove the material.

Appendix 12 – Seeding and Mulch

Purpose and Operation

Mulching is done primarily with Hydro-mulch or straw. Mulching involves the application of straw or other organic materials to form a temporary, protective soil cover. Mulch protects the soil surface from the forces of raindrop impact and overland flow. Organic mulches foster the growth of vegetation, reduce evaporation, insulate the soil, and suppress weed growth.

Seeding promotes the quick establishment of vegetation, which is the ultimate goal of the SWPPP.

Material Specification

- At least 50% of hay or straw mulch by weight should be 10 inches or more in length.
- Straw mulch material should consist of native hay or the straw from oats or barley, and should be seed free to prevent introduction of weeds.
- Hydro-mulch contains a wood cellulose fiber that has not been treated with any germination or growth inhibitive substance but will be treated with a tackifier to enhance seed and mulch placement and adherence to the soil. The mulch should be free of contamination from noxious weed seed and seed from competitive plants.
- Seed should be weed free.
- Seed should most often be native perennial species that grow quickly and develop strong roots.

Placement and Installation

- The mulch should be machine blown and should be uniformly distributed over the seeded areas. The machine should be of a design that minimizes cutting or breaking of the mulching material.
- Mulching operations should not be performed during periods of excessively high winds, which would preclude the proper placing of the mulch.
- Straw mulch containing excessive moisture which prevents uniform feeding through the machine should not be used.
- Straw bales should be broken up and loosened as they are fed into the blower to avoid placement of matted or unbroken lumps.
- The mulch should be placed within 24 hours after the seeding has been completed.
- Straw mulch should be placed uniformly over the seeded areas at the rate of 2 tons per acre.
- Approximately 10% of the soil surface should be visible through straw mulch blanket before the mulch tiller (punching) operation.

- Hydro mulch should be uniformly applied at a rate of one ton per acre and should cover a minimum of 95% of the seedbed area. After application, the mulch should permit percolation of water to the underlying soil.
- Seed should be raked into the topsoil and spread at a rate recommended by the seed distributor.

Inspection and Maintenance

Mulched areas should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following questions should be addressed during each inspection.

- **Are there any rills or gullies forming?**

  If rills or gullies are forming on a slope, the area may need regrading and reseeding along with additional erosion controls.

- **Are there any bare soil patches?**

  If there are bare soil patches, the areas may need additional mulch and seed.

- **Is there any sediment at the toe of the slope?**

  If there is sediment at the toe of a slope, the area may need regrading and reseeding along with additional erosion controls.

Appendix 13 – Vegetated Channels

Purpose and Operation

A vegetated channel conveys stormwater runoff through a stable conduit. Vegetation in the channel slows down concentrated runoff. Because grassed channels are not usually designed to control peak runoff loads by themselves, they are often used with other BMPs.

Where moderately steep slopes require drainage, grassed channels can include excavated depressions or check dams to enhance runoff storage, decrease flow rates, and improve pollutant removal. Peak discharges can be reduced by temporarily holding them in the channel. Pollutants can be removed from stormwater by filtration through vegetation, by deposition, or in some cases by infiltration of soluble nutrients into the soil. The degree of pollutant removal in a channel depends on how long the water stays in the channel and the amount of contact with vegetation and the soil surface. Local conditions affect the removal efficiency.

Material Specifications

- Native grass or vegetation with deep roots. Fast growing, annual grass varieties can be used on conjunction with perennial varieties.

Proper Installation Method

- Construct and vegetate the channel before grading and paving activities begin.
- Make sure design velocities are less than 5 feet per second.
- Consider using geotextiles to stabilize vegetation until it is fully established.
- Consider covering the bare soil with sod, mulches with netting, or geotextiles to provide reinforced stormwater conveyance immediately.
- Use triangular channels with low velocities and small quantities of runoff; use parabolic grass channels for larger flows and where space is available; use trapezoidal channels with large, low-velocity flows (low slope).
- Install outlet stabilization structures if the runoff volume or velocity might exceed the capacity of the receiving area.
- Slope the sides of the channel less than 2:1; slope triangular channels along roads 2:1 or less for safety.
- Remove all trees, brushes, stumps, and other debris during construction.

List of Common Placement/Installation Mistakes to Avoid

- Do not place any equipment, construction debris, or extra soil in the buffer strip.

Inspection and Maintenance

Inspect the buffer strip at regular intervals to ensure proper functioning. Check for damage by equipment and vehicles. In newly planted areas, check the progress of germination and plant growth, and arrange for fertilizing, if needed, to enhance growth and establishment. (Planted ground should not be used for a sediment trap until the vegetation is well established.) Make sure that water flowing through the buffer strip is not causing additional erosion nearby and not forming ponds due to erosion within the buffer strip.

Buffer strips in natural vegetation do not generally require maintenance; however, on some sites it may be necessary to remove sediments and replant on a regular basis. Promptly repair any damage from equipment, vehicles, or erosion.

Appendix 14 – Silt Fence Slope Barriers

Purpose and Operation

Silt fence slope barriers operate by intercepting and ponding sediment-laden slope runoff. Ponding the water reduces the velocity of the incoming flow and allows most of the suspended sediment to settle. Water exits the silt fence slope barrier by percolating through the silt fence.

Material Specification

- The posts used to support the silt fence fabric should be a hardwood material with the following minimum dimensions: 2 inches square (nominal) by 4 feet long. **Note:** For structural stability, metal posts should be used in areas where water will pond.
- Silt fence fabric should be attached to the wooden posts with staples, wire, zip ties, or nails.

Placement

- A slope barrier should be used at the toe of a slope when a ditch does not exist. The slope barrier should be placed on nearly level ground 5 to 10 feet away from the toe of a slope to provide adequate storage for settling sediment.
- When practicable, silt fence slope barriers should be placed along contours to avoid concentrated flows.
- Silt fence slope barriers also can be placed along right-of-way fence lines to keep sediment from crossing onto adjacent property. When placed in this manner, the slope barrier will not likely follow contours.

Proper Installation Method

- Along the length of the planned slope barrier excavate a trench that is 6 inches deep by 4 inches wide. Make sure that the trench is excavated along a single contour. When practicable, slope barriers should be placed along contours to avoid a concentration of flow. Place the soil on the up-slope side of the trench for later use. **Note:** Using a trencher or chisel plow to install the silt fence is less labor intensive. The silt fence will last longer and is less likely to blowout underneath.
- Roll out a continuous length of silt fence fabric on the down-slope side of the trench. Place the edge of the fabric in the trench starting at the top up-slope edge. Line all three sides of the trench with the fabric. Backfill over the fabric in the trench with the excavated soil, and compact. After filling the trench, drive posts into the ground to a depth of at least 24 inches. Place posts no more than 4 feet apart.
- Attach the silt fence to the anchored post with staples, wire, zip ties, or nails.

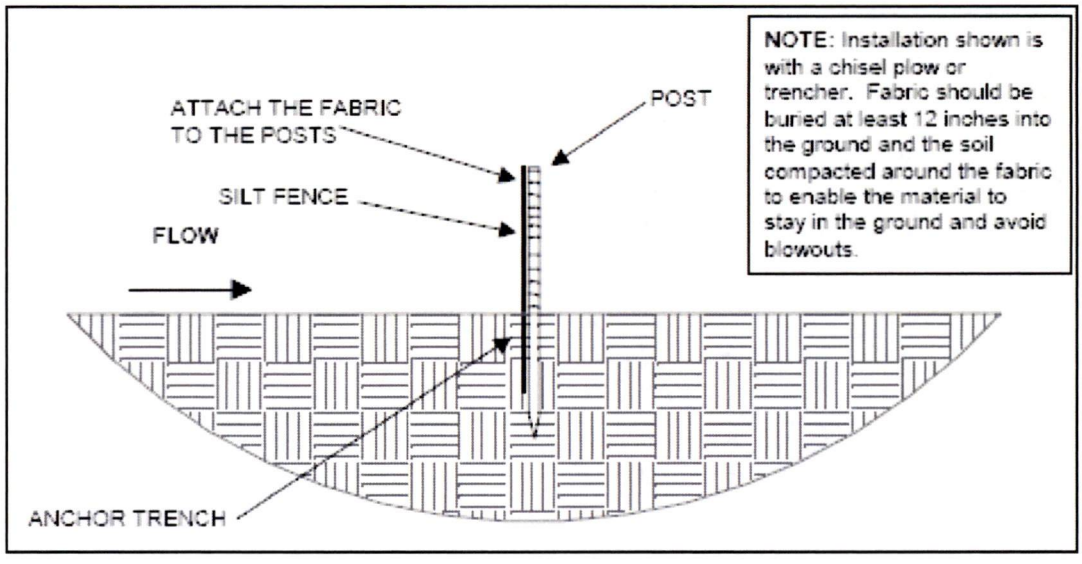


Figure A14-1. Side View - Silt Fence Slope Barrier.

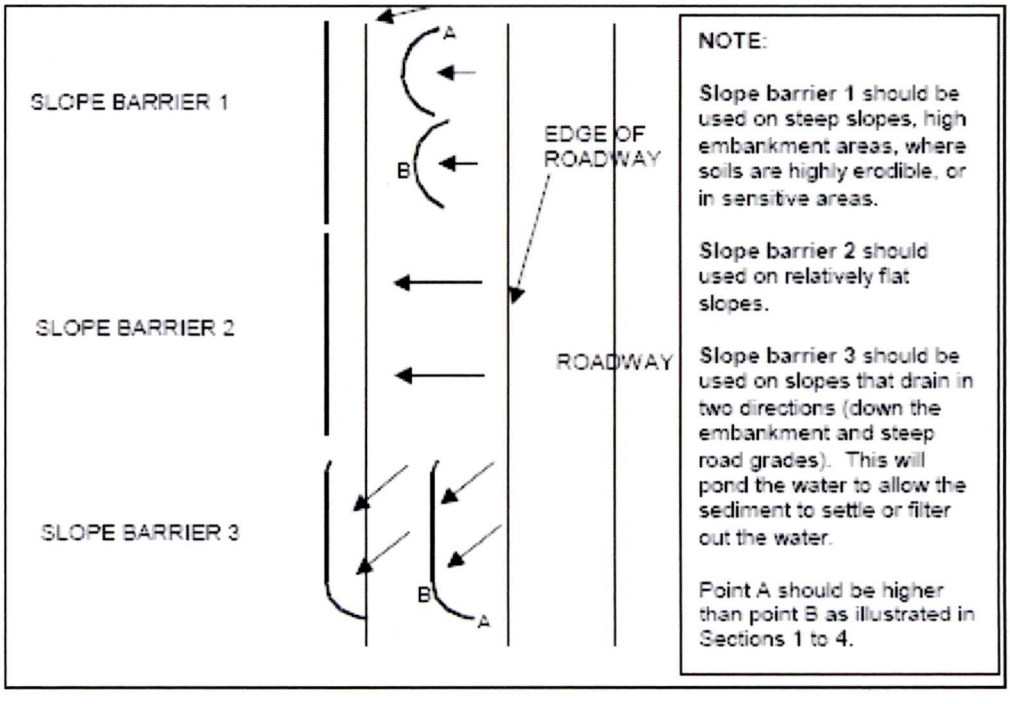


Figure A14-2. Placement of Silt Fence Slope Barrier.

List of Common Placement/Installation Mistakes to Avoid

- When practicable, do not place silt fence slope barriers across contours. Slope barriers should be placed along contours to avoid concentration of flow. When the flow concentrates, it overtops the barrier, and the silt fence slope barrier quickly deteriorates.
- Do not place silt fence posts on the up-slope side of the silt fence fabric. In this configuration, the force of the water is not restricted by the posts, but only by the staples, wire, zip ties, nails, etc. The silt fence will rip and fail.
- Do not place silt fence slope barriers in areas with shallow soils underlain by rock. If the barrier is not sufficiently anchored, it will wash out.
- Silt fence slope barriers must be dug into the ground; silt fence at ground level does not work because water will flow underneath.

Inspection and Maintenance

Silt fence slope barriers should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following questions should be addressed during each inspection.

- **Are there any points along the slope barrier where water is concentrating?**

  When slope barriers are not placed along contours, water concentrates at low points of the slope barrier. This concentrated flow usually causes a failure of the slope barrier. Even if the barrier does not fail, the concentration of flow drastically reduces the overall storage capacity of the slope barrier. The only solution to this problem is reinstalling the slope barrier (or sections of it) so that it is level.

- **Does water flow under the slope barrier?**

  Water flowing under the slope barrier can be caused by posts that are too far apart, a trench that is too shallow, or an improper backfill procedure. Posts should be no more than 4 feet apart. The trench should be at least 4 inches wide by 6 inches deep. The bottom edge of the silt fence should be anchored securely by backfilling over the fabric in the trench with the excavated soil and then compacting. If these guidelines have not been met, the silt fence slope barrier should be reinstalled, or the deficiencies should be remedied.

- **Does the silt fence sag excessively?**

  Sagging silt fence is caused by excessive post spacing and/or overtopping of the silt fence. Silt fence posts should be no more than 4 feet apart. If the post spacing exceeds 4 feet, additional posts should be added to decrease spacing between posts. Water should flow through a silt fence slope barrier, not over it. Silt fence installations quickly deteriorate when water overtops them. If a silt fence slope barrier is regularly overtopped, it has probably been placed in a location that receives flows beyond intended capacity. If this is the case, discontinue the use of silt fence in this area and try something different (e.g., straw roll slope barrier).

- **Has the silt fence torn or become detached from the posts?**

  Silt fence can be torn by the force of ponded water, or by winds that rip the silt fence fabric away from the posts. If a silt fence develops tears for any reason, it should be replaced.

- **Does sediment need to be removed from behind the slope barrier?**

  Sediment accumulated behind the slope barrier should be removed when it reaches one-half of the original exposed height of the silt fence. Allowing too much sediment to accumulate behind a slope barrier drastically reduces its effectiveness. Because one high-intensity rainfall can dislodge enough sediment from surrounding slopes to completely fill up the space behind the slope barrier, it is extremely important to inspect slope barriers within 24 hours of a heavy rainfall.

  Note: When removing sediment from behind a silt fence slope barrier with a bulldozer or backhoe, take care not to undermine the entrenched silt fence.

Appendix 15 – Water Bar Slope Barriers

Purpose and Operation

Water bars operate by intercepting and ponding sediment-laden slope runoff. Ponding the water reduces the velocity of the incoming flow and allows most of the suspended sediment to settle. Water exits the water bar slope barrier by flowing over the bales.

Material Specification

- Water bars are generally constructed out of the existing soil on the site.

Placement

- A water bar should be used on a slope that has been subjected to surface disturbance where no concentrated preferential flow path is evident.
- Water bars should be placed along contours to avoid concentrated flow laterally along the uphill side of the water bar. Ideally, the entire length of each water bar should be at the same elevation.
- Spacing of the water bars decreases as the hill slope steepens. The following table provides recommended spacing:

Water Bar Spacing	
Slope (%)	Spacing (feet)
<5	125
5 to 10	100
10 to 20	75
20 to 35	50
>35	25

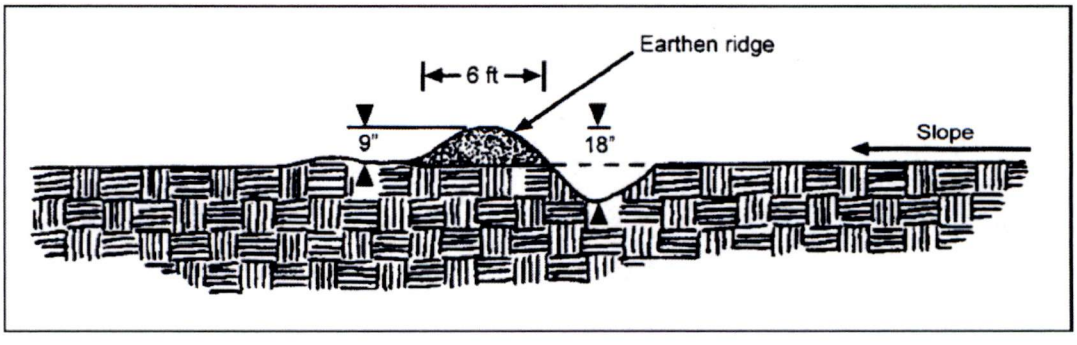


Figure A15-1. Side View of Water Bar.

Proper Installation Method

- The width of the water bar should be at least 6 feet.
- The water bar should be at least 18 inches high.
- The side slope should be as level as possible along the contour of the hill slope.
- Before the water bar is constructed, the base should be scarified to provide a bond between the existing soil and the fill material.
- The fill used to construct the water bar should be compacted.
- As soon as is practicable, the entire disturbed area should be seeded.

Common Placement/Installation Mistake to Avoid

- When practicable, do not install the water bar in a manner that will cause water to flow laterally along the upstream side of the water bar. Water bars should be placed along contours to avoid concentration of flow. When the flow concentrates, it overtops the water bar, which causes the water bar to fail.

Inspection and Maintenance

Water bars should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following questions should be addressed during each inspection.

- **Are there any points along the water bar where water is concentrating?**

  When water bars are not placed along contours, water concentrates at low points of the water bar. This concentrated flow usually causes a failure of the of the water bar. Even if the water bar does not fail, the concentration of flow drastically reduces the overall storage capacity of the water bar. The only solution to this problem is reinstalling the water bar (or sections of it) so that it is level.

- **Have portions of the water bar been eroded by overtopping?**

  Overtopping a water bar is caused by portions of the water bar being lower than others, excessive space between water bars, or by extreme runoff events. Water bar installations quickly deteriorate when water overtops them. If a water bar is regularly overtopped, it has probably been placed in a location that receives flows beyond intended capacity. If this is the case, increase the size of the water bar or add additional water bars.

- **Does sediment need to be removed from behind the water bar?**

  Sediment accumulated behind the water bar should be removed when it reaches one-half of the original height of the water bar. Allowing too much sediment to accumulate behind a water bar drastically reduces its effectiveness. Because one high-intensity rainfall can dislodge enough sediment from surrounding slopes to completely fill up the space behind the water bar, it is extremely important to inspect water bars within 24 hours of a heavy rainfall.

  Note: When removing sediment from behind a water bar with a bulldozer or backhoe, take care not to undermine the water bar.

Appendix 16 – Straw Roll Slope Barriers

Purpose and Operation

Straw roll slope barriers operate by intercepting and ponding sediment-laden runoff. Ponding the water dissipates the energy of the incoming flow and allows much of the suspended sediment to settle. Water exits the straw roll slope barrier by flowing through the straw rolls.

Material Specifications

- Straw rolls are made from straw that is wrapped in tubular mesh netting. They are usually about 8 inches in diameter and 20 to 25 feet long.
- Biodegradable or photodegradable mesh netting may be preferential in order to reduce the need to remove the straw rolls after revegetation has been completed.
- Wooden stakes should be approximately 3/4 by 3/4 by 24 inches. Willow cuttings or 3/8-inch rebar can also be used for stakes.

Placement and Installation

- It is critical that straw rolls are installed perpendicular to the flow direction and parallel to the slope contour.
- Narrow trenches should be dug across the slope on contour to a depth of 3 to 5 inches on clay soils and soils with gradual slopes. On loose soils, steep slopes, and areas with high rainfall, the trenches should be dug to a depth of 5 to 7 inches, or one-half to two-thirds of the thickness of the straw roll.
- Start building trenches and installing straw rolls from the base of the slope and work up. Excavated material should be spread evenly along the uphill slope and compacted using hand tamping or other methods.
- Construct trenches at contour intervals of 3 to 30 feet apart depending on the steepness of the slope, soil type, and rainfall. The steeper the slope the closer together the trenches will be placed to each other.
- Install the straw rolls snugly into the trenches and abut tightly end to end. Do not overlap the ends.
- Install stakes at each end of the straw roll, and at 4-foot centers along entire length of straw roll.
- If required, install pilot holes for the stakes using a straight bar to drive holes through the straw roll and into the soil.
- At a minimum, wooden stakes should be approximately 3/4 by 3/4 by 24 inches. Willow cuttings or 3/8-inch rebar can also be used for stakes.
- Stakes should be driven through the middle of the straw roll, leaving 2 to 3 inches of the stake protruding above the straw roll.

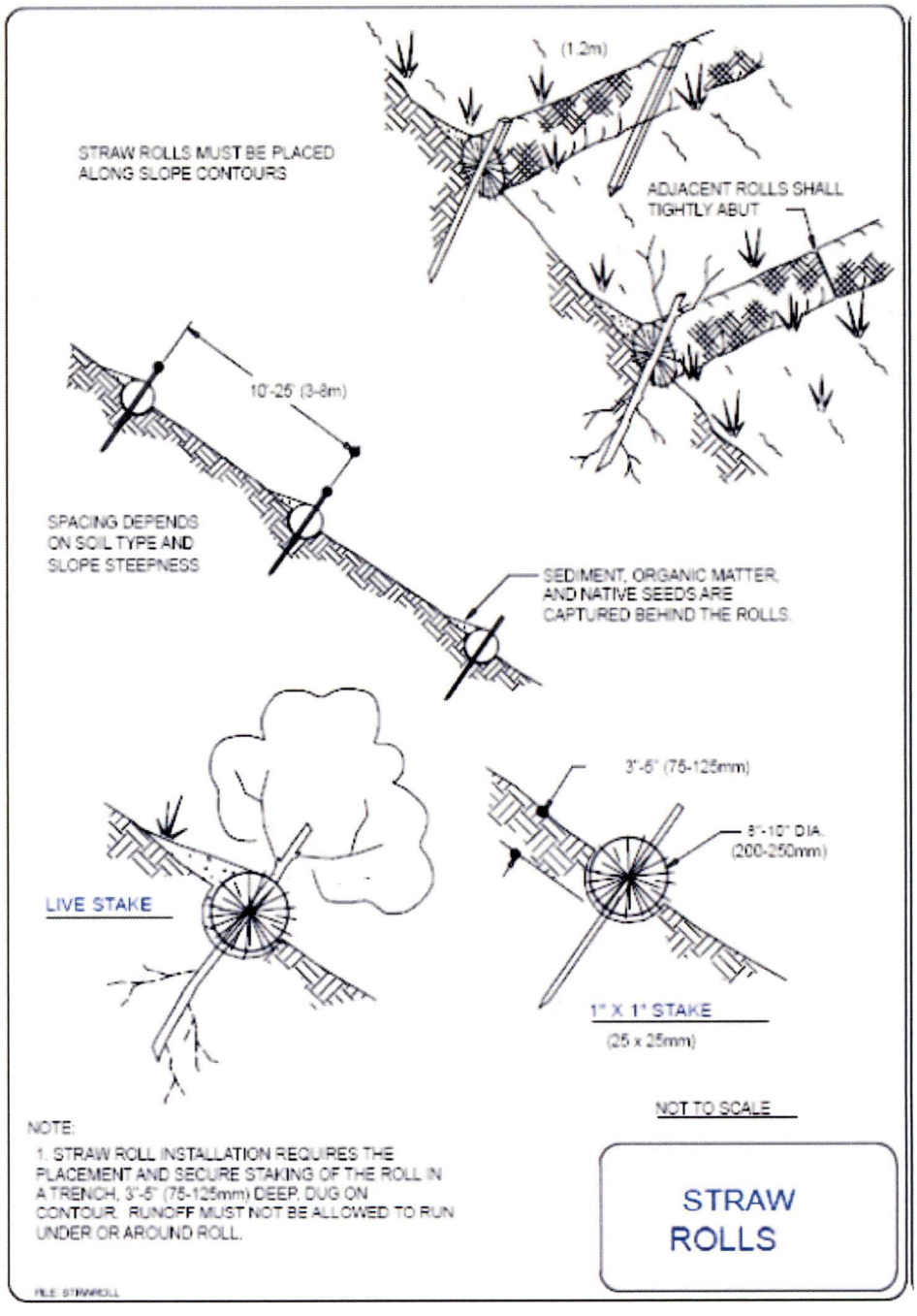


Figure A16-1. Straw Roll Installation.

List of Common Placement/Installation Mistakes to Avoid

- When practicable, do not place straw roll slope barriers across contours. Slope barriers should be placed along contours to avoid a concentration of flow. Concentrated flow over a slope barrier creates a scour hole on the down-slope side of the barrier. The scour hole eventually undermines the straw roll and the barrier fails.

- Do not place straw roll slope barriers in areas with shallow soils underlain by rock. If the barrier is not anchored sufficiently, it will wash out.

Inspection and Maintenance

Straw rolls should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following items should be addressed during each inspection.

- Straw rolls may require maintenance to ensure they are in contact with soil and thoroughly entrenched, especially after significant rainfall on steep sandy soils.
- Inspect the slope after significant storms and repair any areas where straw rolls are not tightly abutted or water has scoured beneath the straw rolls.
- **Does water flow under the straw roll?**

  Water flowing under the straw rolls usually is caused by not trenching the straw rolls deep enough during installation. If the problem is improper trenching, the entire straw roll should be removed and a new one installed using the proper trench depth.

- **Does water flow through spaces between abutting straw rolls?**

  Water flowing between straw rolls is usually caused by not butting the straw rolls tightly during initial installation. Ensure that the straw rolls are butted tightly together or overlap at the ends.

- **Are any straw rolls dislodged?**

  Under normal conditions, the maximum useful life of a straw roll is one to two seasons (but may be longer during prolonged dry periods). Inspect the straw rolls for signs of decomposition and replace as necessary.

- **Does sediment need to be removed from behind the slope barrier?**

  Sediment accumulated behind the slope barrier should be removed when it reaches one-half of the original exposed height of the bales. Allowing too much sediment to accumulate behind a slope barrier drastically reduces its effectiveness. Because one high-intensity rainfall can dislodge enough sediment from surrounding slopes to completely fill up the space behind the slope barrier, it is extremely important to inspect slope barriers within 24 hours of a heavy rainfall.

Appendix 17 – Surface Roughening

Purpose and Operation

Roughening the soil surface by leaving horizontal depressions or grooves in the soil will serve to intercept and pond sediment-laden water, trap seed, and reduce the velocity of the runoff. Roughening can be accomplished by "track walking" slopes with tracked equipment, by using a serrated wing blade attached to the side of a bulldozer, or by other agricultural equipment. Alternately, roughening can be accomplished by cutting "stair-step cut slopes" across the slope.

Design Specifications

- All slopes need to be seeded immediately after roughening, preferably in conjunction with mulch in order to obtain optimal seed germination and growth.
- Primarily used on slopes of 3:1 or less, but can be used on steeper slopes in conjunction with additional slope control BMPs.
- Height of grousers, or tracks, should be 1½ inches or greater.
- Tracking should be accomplished by driving straight up and down the slope, not across the slope.
- Cut stair step cut slopes when slope is greater than 3:1.
- Use stair-step grading on all erodible material soft enough to be ripped with a bulldozer. Slopes consisting of soft rock with the same subsoil are particularly suited to stair-step grading.
- Make the vertical cut distance less than the horizontal distance, and slightly slope the horizontal position of the step inward toward the vertical wall.
- Do not make individual cuts more than 2 feet high in soft materials, or more than 3 feet in rocky material.

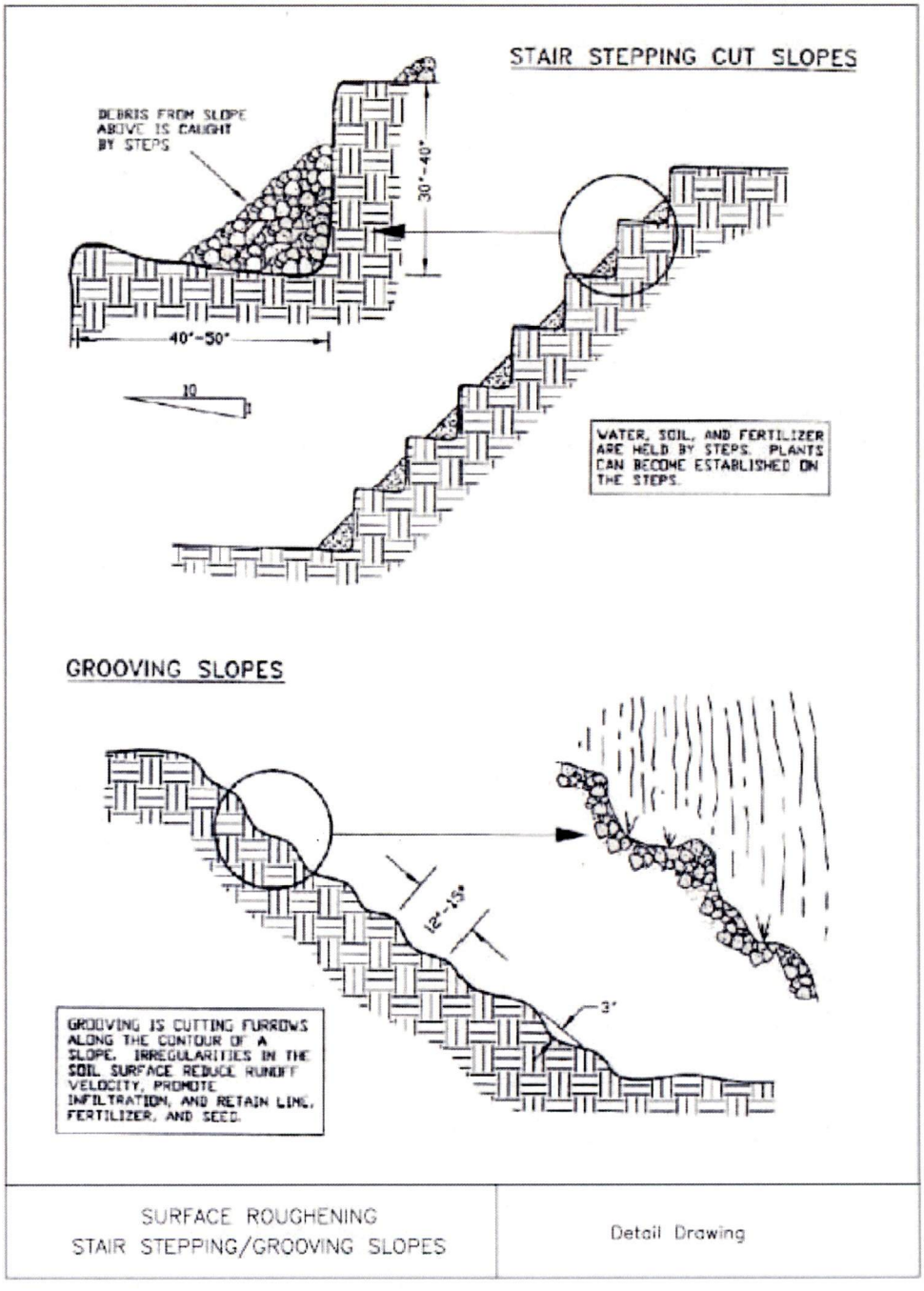


Figure A17-1. Illustration of Stair Stepping and Grooving Slopes.

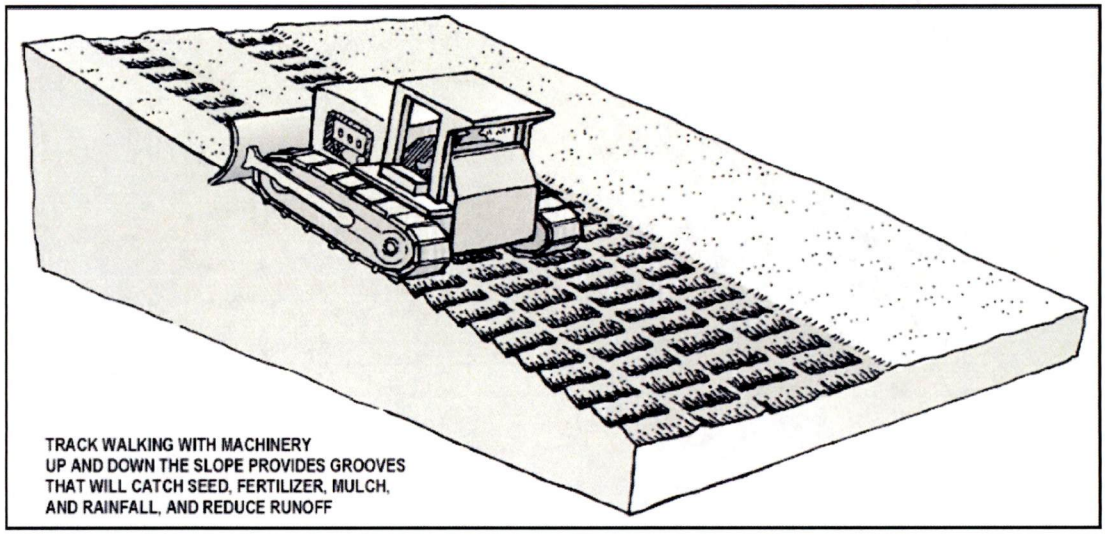


Figure A17-2. Surface Roughening with Bulldozer.

List of Common Placement/Installation Mistakes to Avoid

- Do not cross contours when tracking, doing so will provide preferential pathways that accelerate erosion.
- Do not track up and down the slope more than necessary to provide full coverage of tracks. Doing so will compact the soil and make it difficult for seed to germinate.

Inspection and Maintenance

Areas of slope roughening should be inspected every 14 days and within 24 hours of a rainfall of 0.5 inch or more. The following questions should be addressed during each inspection.

- **Are there any points along the roughened slope where water is concentrating?**

  If water is concentrating on slope roughened areas, rilling and erosion can occur. If this happens, install other BMPs to control the runoff. Attempting to repair the roughened surface may cause excessive damage to the slope, and should probably not be attempted.

- **Has the roughened slope filled with sediment or washed away?**

  Sediment accumulated in the roughened slope or if the roughening has washed away is probably an indication that additional, alternate BMPs need to be installed.

Appendix 18 – Inspection Forms

Inspection and Maintenance Form
Plains All-American Pipeline, L.P. Nelson Take-off to Ross Pipeline SWPPP

Project Name: _____

Date of inspection: _____

Inspector: _____

This inspection is a:

- ☐ 14-day inspection (active const.)
- ☐ Monthly inspection (site inactive)
- ☐ Rain event inspection (must inspect w/in 24 hours of event)

Best Management Practices (BMPs)

Silt fence, straw roll, and rock check dams:

- ☐ Silt fence, straw roll, and rock check dams are in good condition.
- ☐ Silt fence, straw roll, and rock check dams need the following repairs, maintenance, changes (note needed activity and location):

_____

_____

_____

Storm water diversion trenches and ditch relief culverts:

- ☐ Diversion trenches and ditch relief culverts are in good condition.
- ☐ Diversion trenches and ditch relief culverts need the following repairs, maintenance, changes (note needed activity and location):

_____

_____

_____

Slope barriers:

- ☐ Slope barriers are in good condition.
- ☐ Slope barriers need the following repairs, maintenance, changes (note needed activity and location):

_____

_____

_____

Mulched areas:

☐ Mulched areas are in good condition.

☐ Mulched areas need the following repairs, maintenance, changes (note needed activity and location):

_____

_____

_____

Water bars:

☐ Water bars are in good condition.

☐ Water bars need the following repairs, maintenance, changes (note needed activity and location):

_____

_____

_____

Low Water Crossings:

☐ Low water crossings are in good condition.

☐ Low water crossings need the following repairs, maintenance, changes (note needed activity and location):

_____

_____

_____

Diversion Dips:

☐ Diversion dips are in good condition.

☐ Diversion dips need the following repairs, maintenance, changes (note needed activity and location):

_____

_____

_____

Trash is being contained and hauled off site? ☐ Yes ☐ No

Fuel storage area is in conformance with site SPCC? ☐ Yes ☐ No

Note any deficiencies and repairs needed for these BMPs.

_____

_____

_____

Briefly describe any repairs or changes to the SWPPP implemented as a result of this inspection.

_____

_____

_____

☐ Check here if the facility *is in compliance* with the site SWPPP and the large construction general storm water permit.

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

Printed Name of Person Signing Title

_____ _____ _____

Signature of Applicant Date Telephone