



HESS CORPORATION
1501 McKinney
Houston, TX 77010

Donald G. Bull
EHS Advisor
Environment, Health, Safety – Environmental & Regulatory
Phone: (713) 496-5759
FAX: (732) 352-7792

November 15, 2018

Mr. Victor Schock
North Dakota Public Service Commission
600 E Boulevard Ave Dept. 408
Bismarck, ND 58505

VIA: United Postal Service

RE: Hess Corporation Hawkeye Pipeline Tree and Shrub Replacement Execution Report

Dear Mr. Schock:

Attached for your review is the Hawkeye Pipeline Tree and Shrub Replacement Execution Report. This Report describes the proposed 2017 tree and shrub planting that did not happen due to drought conditions and the 2018 tree and shrub plantings that occurred during the week of October 15, 2018.

If you should have any questions or comments concerning this Report, please contact the undersigned at (713) 496-5759.

Sincerely,

Donald G. Bull

cc: Ms. Vicky Sund, Hess Corporation
Mr. Dale Weathersby, Hess Corporation
Mr. Brian Epperson, Hess Corporation

HAWKEYE PIPELINE TREE AND SHRUB REPLACEMENT EXECUTION REPORT

Planting Execution: October 16-19, 2018
Report Issuance: November 15, 2018 (Final)
Issued By: D. Bull (EHS-Houston)

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TREE AND SHRUB REPLACEMENT EXECUTION REPORT

1.0 INTRODUCTION

Hess North Dakota Pipelines LLC (Hess) has completed construction of an approximately 26-mile- long pipeline system connecting Bakken production fields south of Lake Sakakawea to existing processing facilities north of the lake. The Hawkeye Pipeline System Project (Project) will transport crude oil from the proposed Hawkeye Oil Facility near Keene, North Dakota, and natural gas and natural gas liquids (NGL) from the existing Hawkeye Compressor Station near Charlson, North Dakota, to the existing Ramberg Truck Facility (crude oil) and the existing Silurian Compressor Station (natural gas and NGL) near Tioga, North Dakota.

Per the North Dakota Public Service Commission (PSC) Tree and Shrub Mitigation Specifications requirements identified in the PSC's Findings of Facts, Conclusions of Law and Order for the Project (Case Nos. PU-15-31 and PU-15-32), trees and shrubs shall be inventoried for replacement, replaced at a 2:1 ratio, and monitored for 3 years to determine if a 75 percent survival rate has occurred. Hess will submit annual reports to the PSC following each year's monitoring efforts. Hess understands the PSC may order additional plantings if the survival rate after 3 years is less than 75 percent.

2.0 FALL 2018 REPLACEMENT PROCESS

This document serves as the tree and shrub replacement execution report required per the PSC Tree and Shrub Mitigation Specifications that details the proposed number, type, and location of plantings. The plantings were originally scheduled for installation during Spring of 2017; however due to drought conditions prevalent during this time, to ensure the success rate of the trees and shrubs the nursery suggested postponing the installation to 2018.

On October 16, 2018, the trees and shrubs were replaced by LOWE'S Garden Center of Minot, North Dakota using the same or similar species on a 2:1 basis pursuant to the PSC Tree and Shrub Mitigation Specifications. The required tree and shrub replacements that are not to be planted on Hess Hawkeye Pipeline affected properties, from which they were removed, were planted on a separate property owned by Hess. Trees were replaced using 2-year-old saplings and shrubs with stem cuttings. Based on the 2:1 mitigation ratio, planting of at least 10,992 trees and shrubs is required. The nursery provided a surplus of 158 chokecherry trees; therefore, increasing the total tree and shrub planting amount to 11,150. Most of the trees/shrubs were installed in two distinct areas at the Hess Tioga Rail Terminal (TRT); the original area outside the fence, northwest of the TRT, and an area within the fence, in the northeast section of the TRT property. The change was necessary to increase the survival rate by lengthening the plant spacing and to utilize the fauna for wind and snow breaks. The trees and shrubs were planted utilizing a John Deere 5100e tractor accompanied with a Mechanical Transplanter CT-5 tree planter. Table 2-1 lists the species, the number of each species and the properties on which they were planted. Figures and pictures depicting tree and shrub locations can be found in Appendix A.

The three private property plantings (Dilland, Halverson, and Moe) were completed on October 16 and 17, 2018 and were installed by hand. Table 2-1 lists the species, the number of each species and the properties on which they were planted. Figures and pictures depicting tree and shrub locations can be found in Appendix B through D.

Table 2-1 Replacement Trees and Shrubs Installed Fall 2018

Landowner/Replacement Location	Tree/Shrub Type	Number
USFS	Green Ash 1	-
Dillard	Chokecherry	50
Halverson	Chokecherry	12
Moe	Chokecherry	68
	Silver Buffaloberry	56
Hess Tioga Rail Terminal Northeast Area (Inside Fence)	Green Ash 1	-
	Chokecherry	4,997
	American Elm 1	-
	Nannyberry 1	-
	Downy Hawthorn 1	-
	Common Juniper	22
	Redosier Dogwood 1	-
Rocky Mountain Juniper	2	
Hess Tioga Rail Terminal Northwest Area (Outside Fence)	Green Ash 1	-
	Chokecherry	2,197
	American Elm 1	-
	Nannyberry 1	-
	Silver Buffaloberry	160
	Juneberry	160
	Skunkbush Sumac 1	-
Total		7,724

Notes:

1 = Plantings will commence in Spring 2019

158 Oversupply of Chokecherry trees from nursery

3.0 SPRING 2019 REPLACEMENT PLAN

Due to the unavailability of the 2-year-old saplings and shrubs with stem cuttings (Green Ash, American Elm, Nannyberry, Downy Hawthorn, Redosier Dogwood, and Skunkbush Sumac) during the Fall of 2018, Hess proposes to install the remaining trees and shrubs during the Spring 2019 season. In addition, Hess and the USFS negotiated a partial replacement of the number of trees and shrubs removed from the USFS lands. The replacement will consist of 1200 Green Ash trees only and no shrubs. The trees and shrubs will be planted utilizing a John Deere 5100e tractor accompanied with a Mechanical Transplanter CT-5 tree planter and/or hand tools. Table 2-2 lists the species, the number of each species and the properties on which they will be planted.

Table 2-2 Replacement Trees and Shrubs to be Installed in Spring 2019

Landowner/Replacement Location	Tree/Shrub Type	Number
USFS	Green Ash 1	1,200
Dilland	Chokecherry	-
Halverson	Chokecherry	-
Moe	Chokecherry	-
	Silver Buffaloberry	-
Hess Tioga Rail Terminal Northeast Area (Inside Fence)	Green Ash 1	746
	Chokecherry	-
	American Elm 1	65
	Nannyberry 1	40
	Downy Hawthorn 1	8
	Common Juniper	-
	Redosier Dogwood 1	80
	Rocky Mountain Juniper	-
Hess Tioga Rail Terminal Northwest Area (Outside Fence)	Green Ash 1	690
	Chokecherry	-
	American Elm 1	335
	Nannyberry 1	160
	Silver Buffaloberry	-
	Juneberry	-
	Skunkbush Sumac 1	102
Total		3,426

Notes:

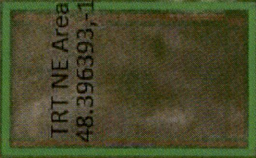
1 = Plantings will commence in Spring 2019

4.0 REPLACEMENT MONITORING

Hess will inspect tree and shrub replacements once a year for 3 years on the anniversary of the plantings, and complete a report documenting the status and condition of plantings on or shortly before October 1 of each year. This report will be submitted to the PSC. Survival success rates will be determined by monitoring replacement plantings and on a species-by-species basis. As many of the species to be used for the replacement plantings are colonizer species, individual plants propagating naturally will be included in the survival success rates determination. Hess understands the PSC may order additional plantings if survival rates are less than 75 percent after 3 years.

APPENDIX A: TIOGA RAIL TERMINAL PROPERTY

TRT NE Area
48.396393, -102.954352

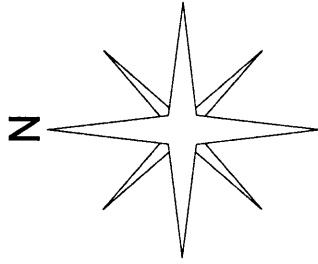


TRT NW AREA
48.393434, -102.971242

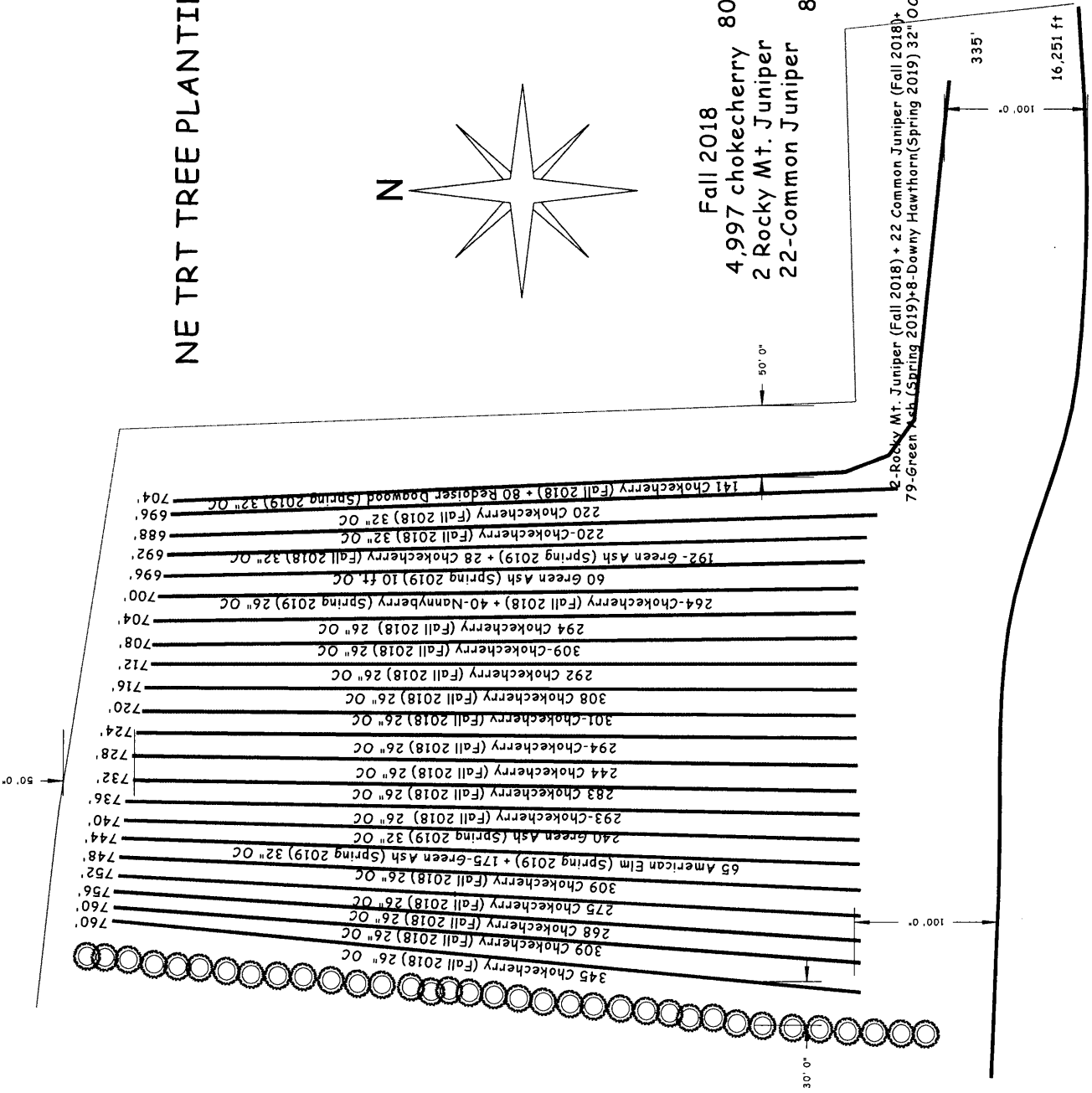


HESS CORPORATION
TIOGA RAIL TERMINAL

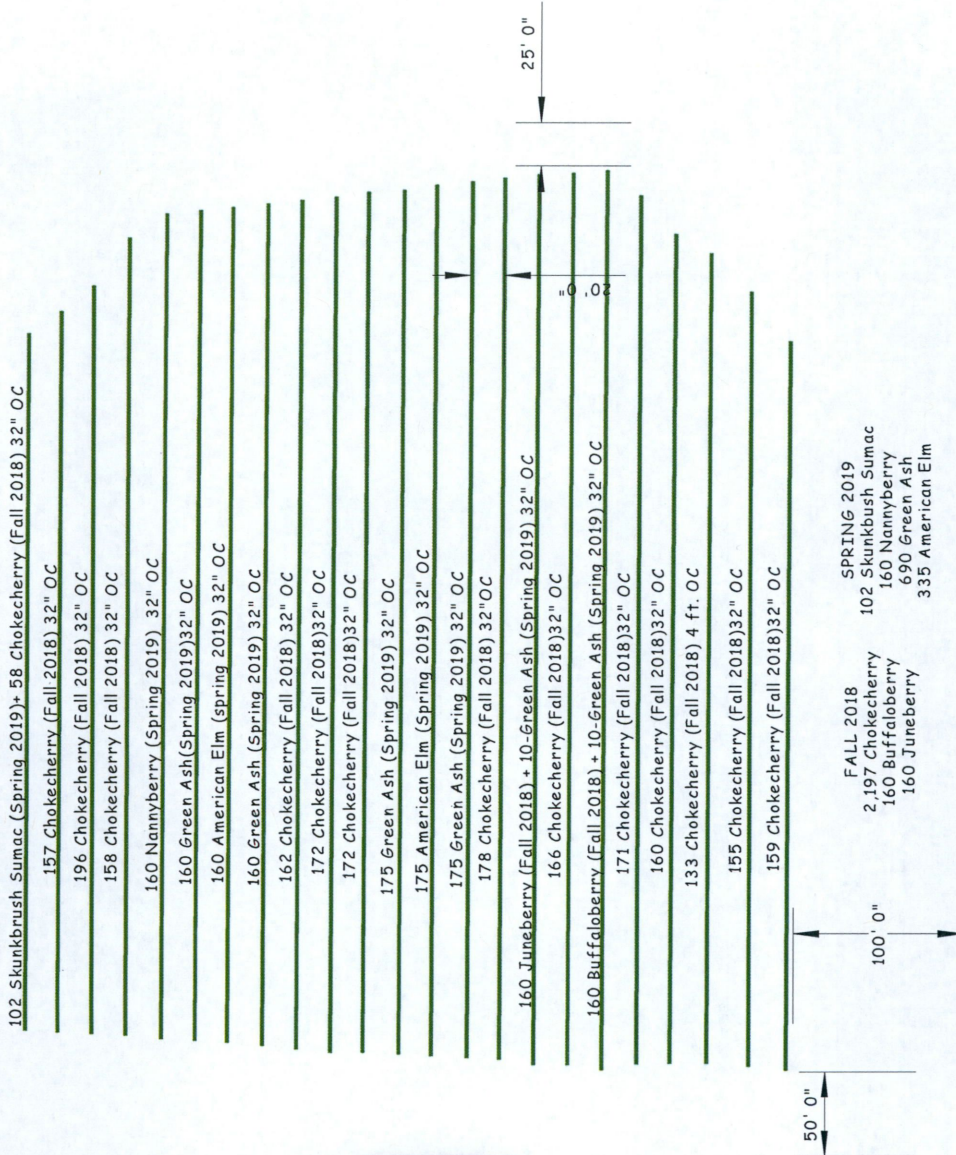
NE TRT TREE PLANTING



- Spring 2019
 - 40-Nannyberry
 - 80-Redoiser Dogwood
 - 65-American Elm
 - 746-Green Ash
 - 8-Downy Hawthorn
-
- Fall 2018
 - 4,997 chokecherry
 - 2 Rocky Mt. Juniper
 - 22-Common Juniper



Fall Count 2018



NW TRT Tree Planting



TRT NE LOOKING NORTH



TRT NE LOOKING WEST



TRT NE LOOKING NORTH

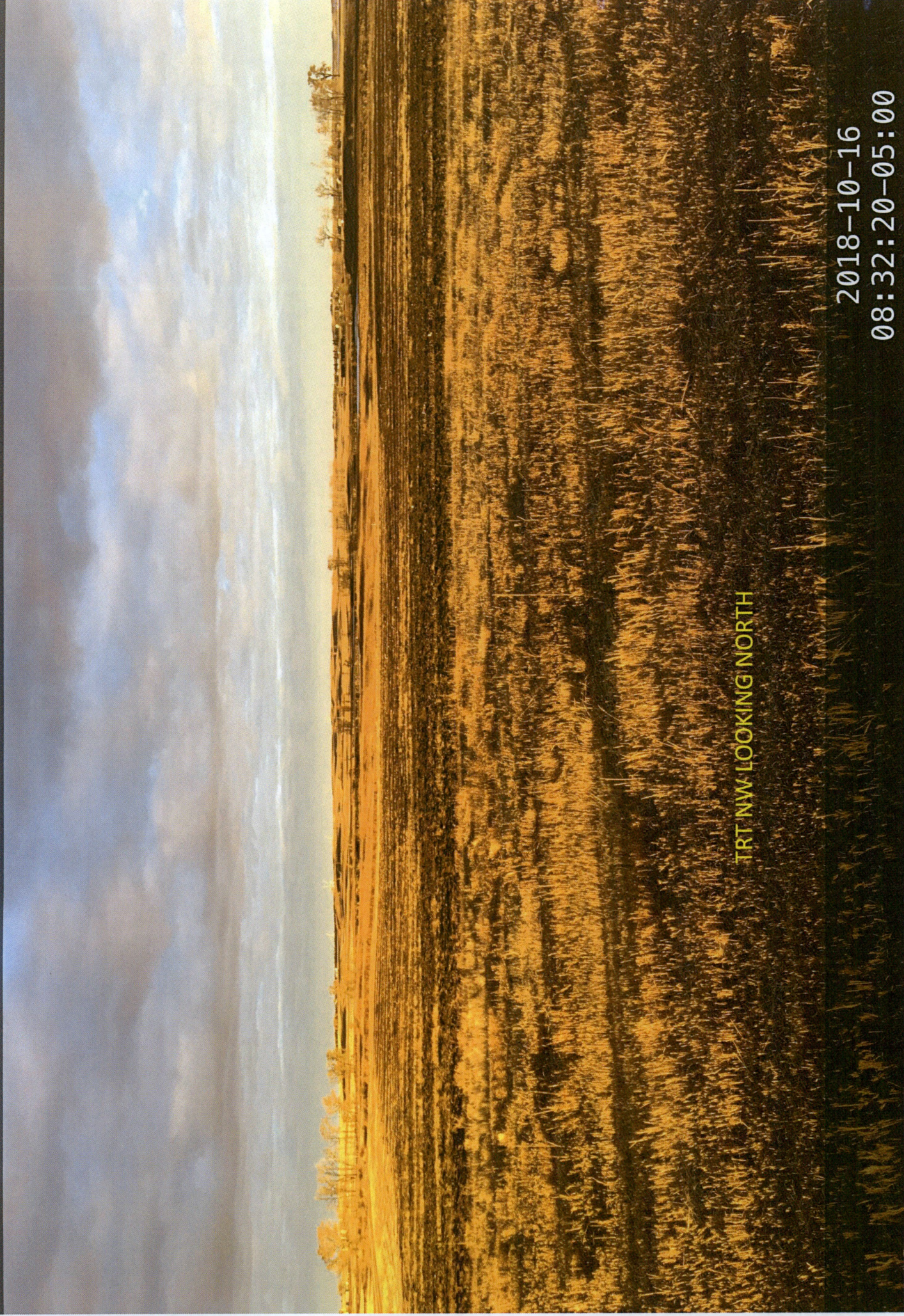


TRT NE LOOKING SOUTHWEST

DIRECTION
10 deg(T)

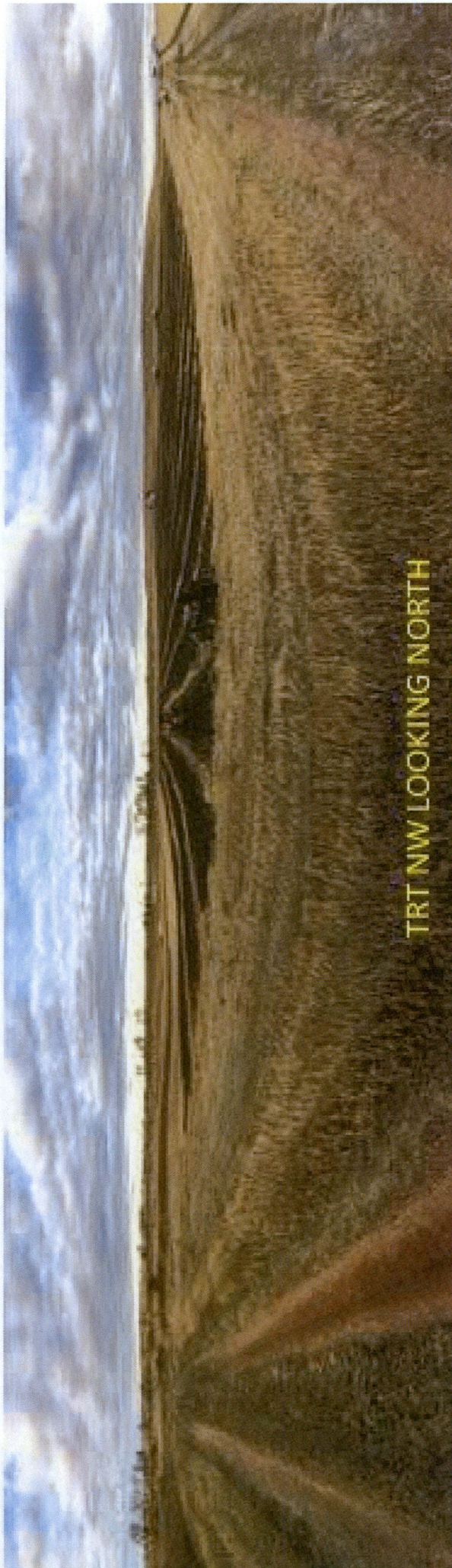
48.39267°N
102.97191°W

ACCURACY 5 m
DATUM WGS84



TRT NW LOOKING NORTH

2018-10-16
08:32:20-05:00

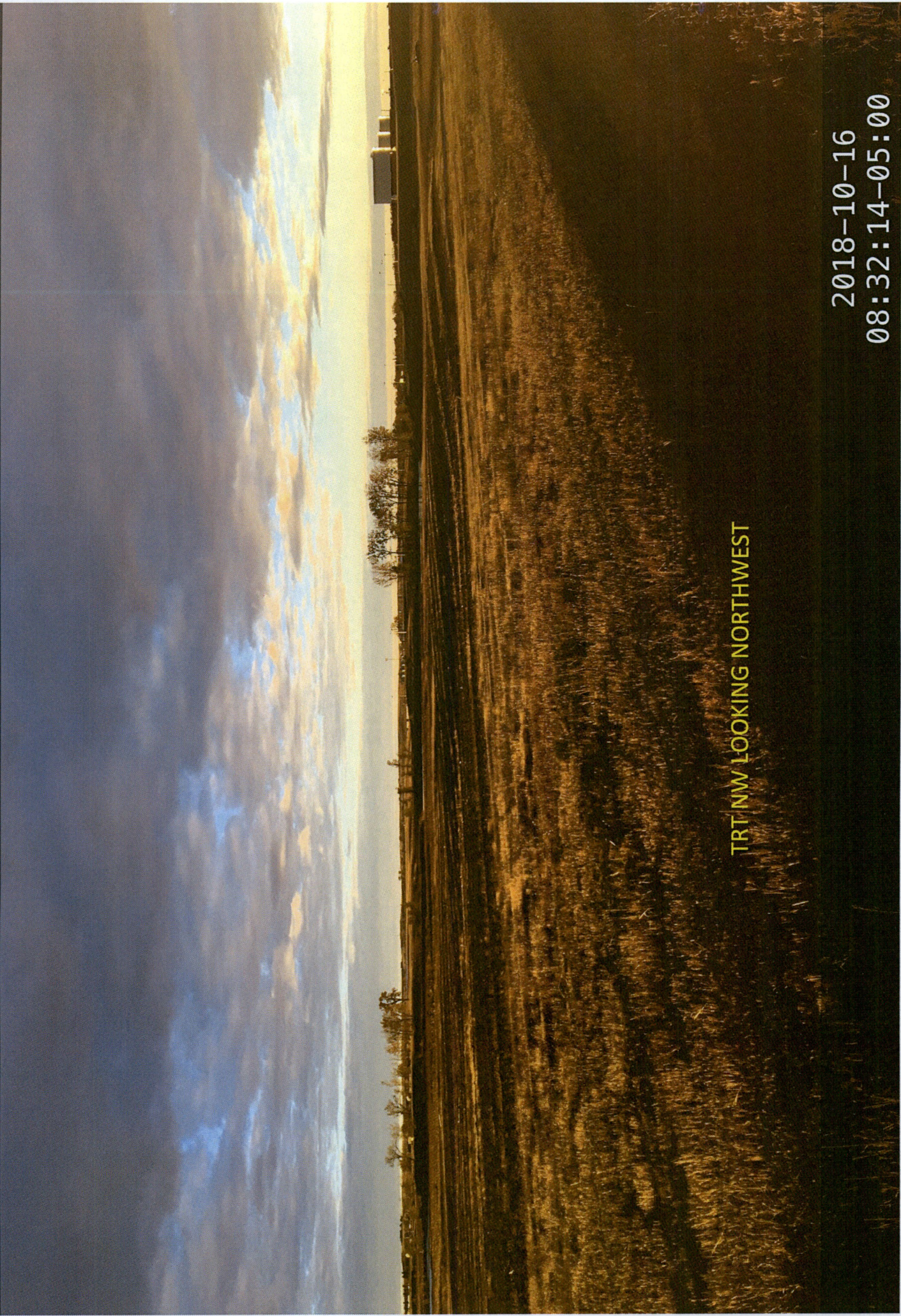


TRT NW LOOKING NORTH

DIRECTION
65 deg(T)

48.39267°N
102.97191°W

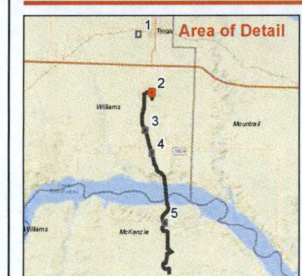
ACCURACY 5 m
DATUM WGS84



TRT/NW LOOKING NORTHWEST

2018-10-16
08:32:14-05:00

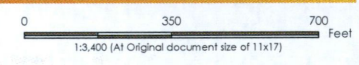
APPENDIX B: DILLAND PROPERTY



- Proposed Tree/Shrub Replanting Locations**
- Chokecherry
- Project Components**
- Stationing
 - Bore
 - Trench Installation
 - Additional TWS
 - Permanent Easement
 - Temporary Easement

Notes
 1. Coordinate System: NAD 1983 StatePlane North Dakota North
 FIPS 3301 Feet

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Project Location: 212205020-200.3-40 REV8
 Williams County and Mountrail County, ND
 Prepared by BST on 2016-11-09
 Technical Review by EB on 2016-11-18
 Independent Review by CTT on 2016-11-18

Client/Project
 Hess Hawkeye Pipeline System Project

Figure No.
C-2

Title
Proposed Tree/Shrub Replanting Locations - Dillard Property Location

DIRECTION
1 deg(T)

48.29838°N
102.93381°W

ACCURACY 5 m
DATUM WGS84



DRELAND PROPERTY

2018-10-16
11:14:57-05:00

DIRECTION
71 deg(T)

48.29843°N
102.93388°W

ACCURACY 5 m
DATUM WGS84



DILLAND PROPERTY LOOKING EAST

2018-10-16
11:44:40-05:00

DIRECTION
222 deg(T)

48.29842°N
102.93373°W

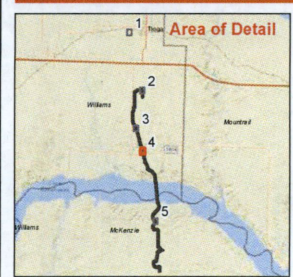
ACCURACY 5 m
DATUM WGS84



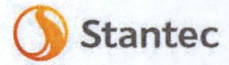
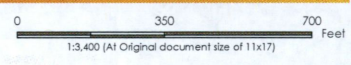
DILLAND PROPERTY LOOKING WEST

2018-10-16
11:41:39-05:00

APPENDIX C: HALVERSON PROPERTY



- Proposed Tree/Shrub Replanting Locations**
- Chokecherry
- Project Components**
- Stationing
 - HDD
 - Trench Installation
 - Additional TWS
 - Permanent Easement
 - Temporary Easement



Project Location: Williams County and Mountrail County, ND
 21200020-200.3.40 REV8
 Prepared by BBT on 2016-11-09
 Technical Review by EB on 2016-11-18
 Independent Review by CHT on 2016-11-18

Client/Project:
 Hess Hawkeye
 Pipeline System Project

Figure No.
C-4

Title:
**Proposed Tree/Shrub
 Replanting Locations -
 Halverson Property Location**

Notes
 1. Coordinate System: NAD 1983 StatePlane North Dakota North
 FPS 3301 Feet

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DIRECTION
154 deg(T)

48.20264°N
102.92907°W

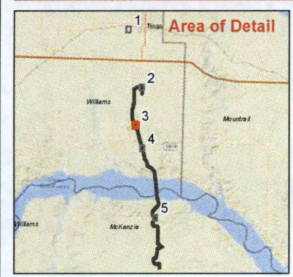
ACCURACY 5 m
DATUM WGS84



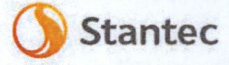
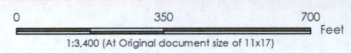
HALVERSON PROPERTY

2018-10-17
10:41:49-05:00

APPENDIX D: MOE PROPERTY



- Proposed Tree/Shrub Replanting Locations**
- Chokecherry
 - Buffalobery, Chokecherry
- Project Components**
- Stationing
 - Trench Installation
 - Additional TWS
 - Permanent Easement
 - Temporary Easement



Project Location
Williams County and Mountrail County, ND

212205020-200.340 REV8
Prepared by B37 on 2016-11-09
Technical Review by ES on 2016-11-18
Independent Review by CH on 2016-11-18

Client/Project
Hess Hawkeye Pipeline System Project

Figure No.
C-3

Title
Proposed Tree/Shrub Replanting Locations - Moe Property Location

Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet

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DIRECTION
138 deg(T)

48.23742°N
102.94598°W

ACCURACY 5 m
DATUM WGS84



MOE PROPERTY NORTH PLANTING

2018-10-02
11:22:41-05:00

DIRECTION
193 deg(T)

48.23527°N
102.94480°W

ACCURACY 5 m
DATUM WGS84



MJOE PROPERTY

2018-10-17
14:54:30-05:00