

POA-2013-665, Sagavanirktok River
Dalton Highway MP 401-414

LOCATION:
 UMIAT MERIDIAN (U)
 T8N R14E SECTION(S) 1,2,11,14,15,21,22
 T9N R14E SECTION(S) 1,12,13,23,24,26,34,35
 T10N R13E SECTION 36
 T10N R15E SECTIONS(S) 19,30,31

STATE OF ALASKA
 Department of Transportation and Public Facilities
 2301 Peger Rd. Fairbanks, AK 99709

DALTON HWY MP 401-414
 REHABILITATION PROJECT
 61366

Location & Vicinity Map

DATE: JANUARY 2014 SHEET: 1 OF: 36

SUMMARY OF PROJECT WETLAND IMPACTS

PERMANENT IMPACTS :

Permanent Impact Area (Road Embankment): 35.1 Acres
 Volume discharged into Waters of the U.S.: 185,000 cy
 *Material Site 65-9-101-2: 67.3 Acres
 *Material Site 65-9-102-2: 41.3 Acres
 *Material Site 65-9-026-2: 3.1 Acres

Total Permanent Impact Area: 146.8 Acres
 Total Volume of Fill in Waters of the U.S.: 188,700 cy

TEMPORARY IMPACTS:

Work Zones: 31.5 Acres
 Vegetative Buffers: 63 Acres

Total Temporary Impacts: 91.5 Acres

NOTES:

* See Material Site 65-9-101-2,
 Material Site 65-9-102-2, &
 Material Site 65-9-026-2
 Plan View Detail Sheets (Sheets 23, 26, 29)

** Legend Applies to Sheets 2-23, 26, & 29

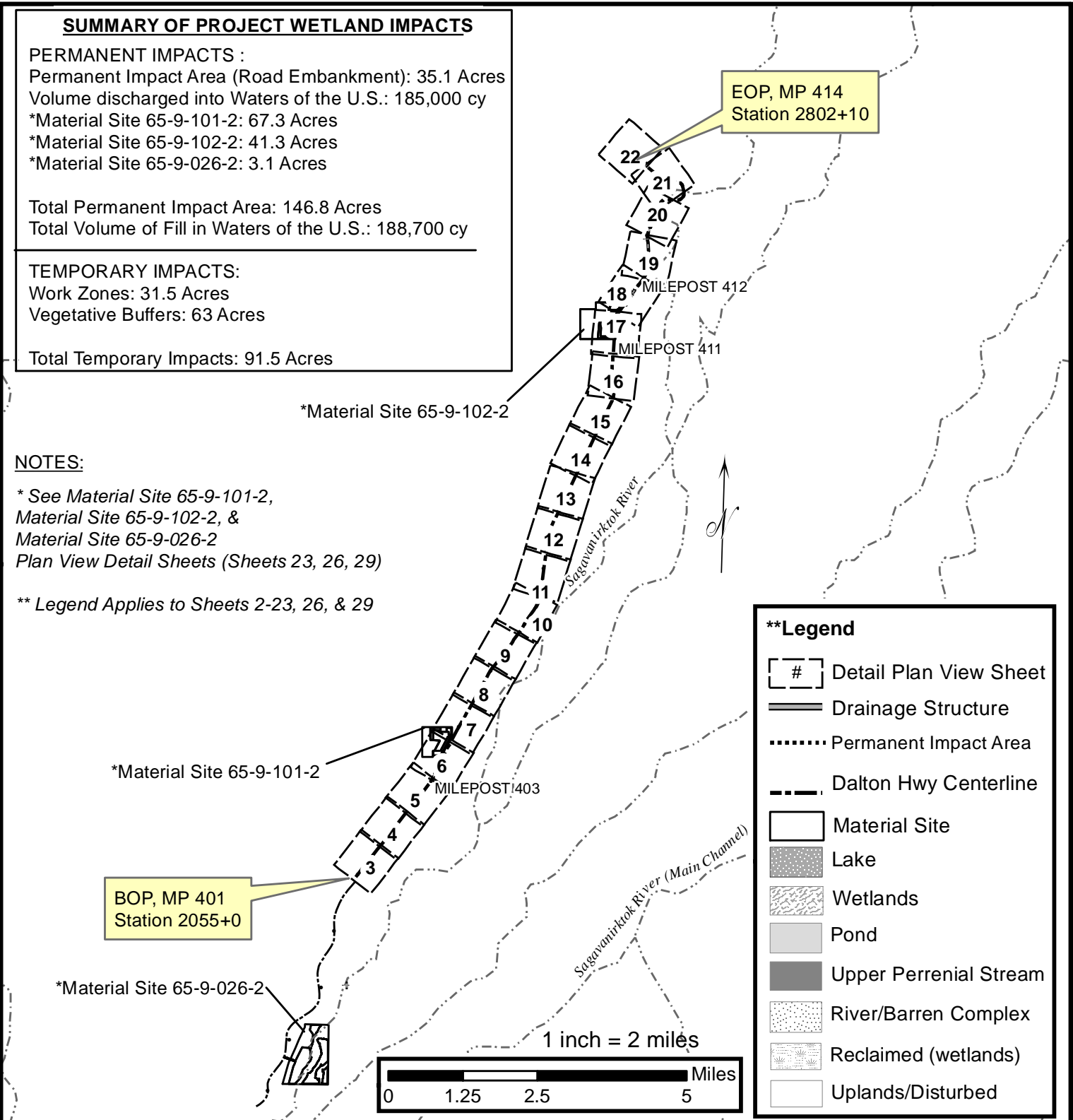
*Material Site 65-9-102-2

*Material Site 65-9-101-2

*Material Site 65-9-026-2

EOP, MP 414
 Station 2802+10

BOP, MP 401
 Station 2055+0



****Legend**

- # Detail Plan View Sheet
- Drainage Structure
- Permanent Impact Area
- Dalton Hwy Centerline
- Material Site
- Lake
- ▨ Wetlands
- Pond
- Upper Perennial Stream
- ▨ River/Barren Complex
- ▨ Reclaimed (wetlands)
- Uplands/Disturbed



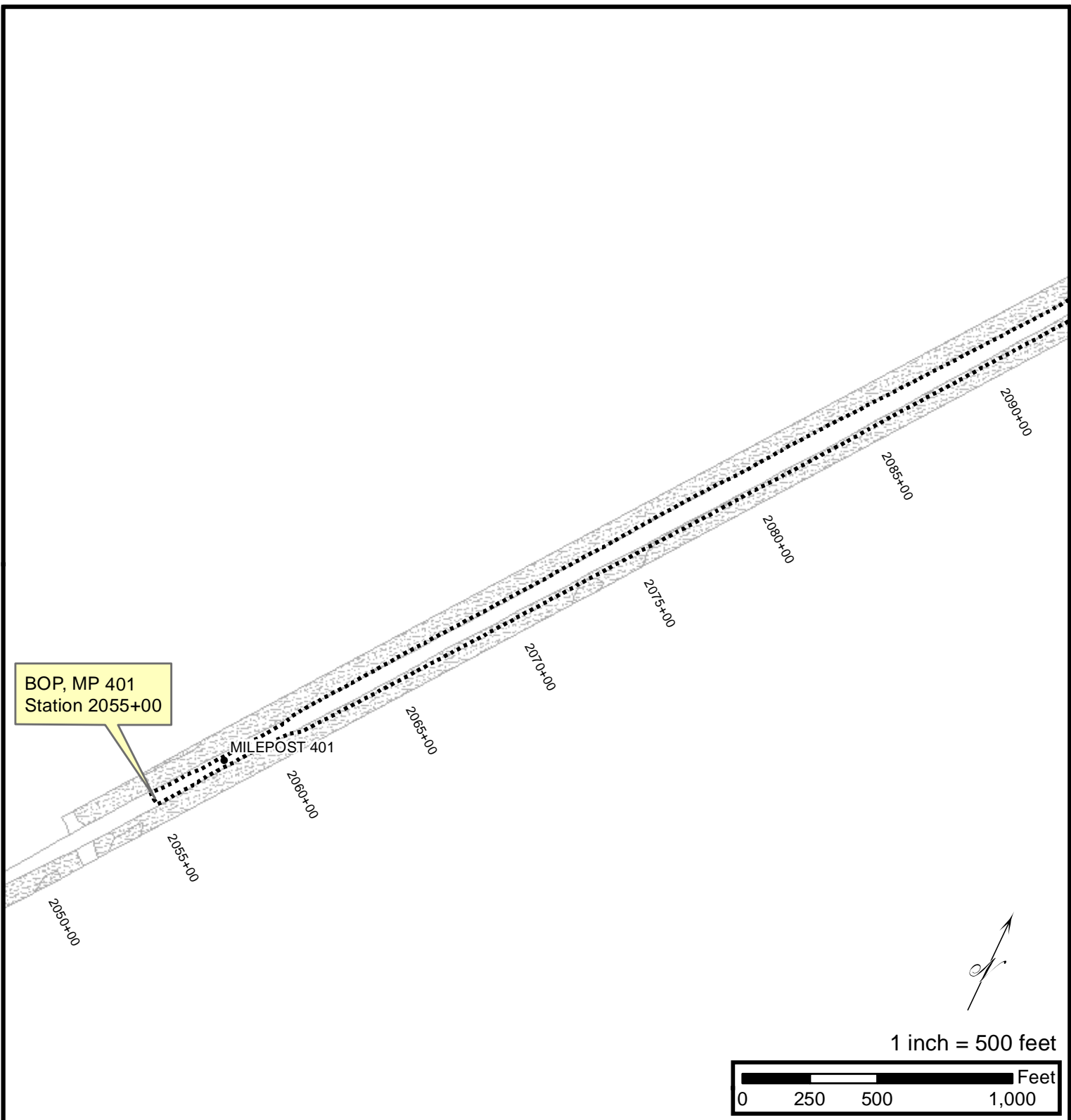
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Project Plan View

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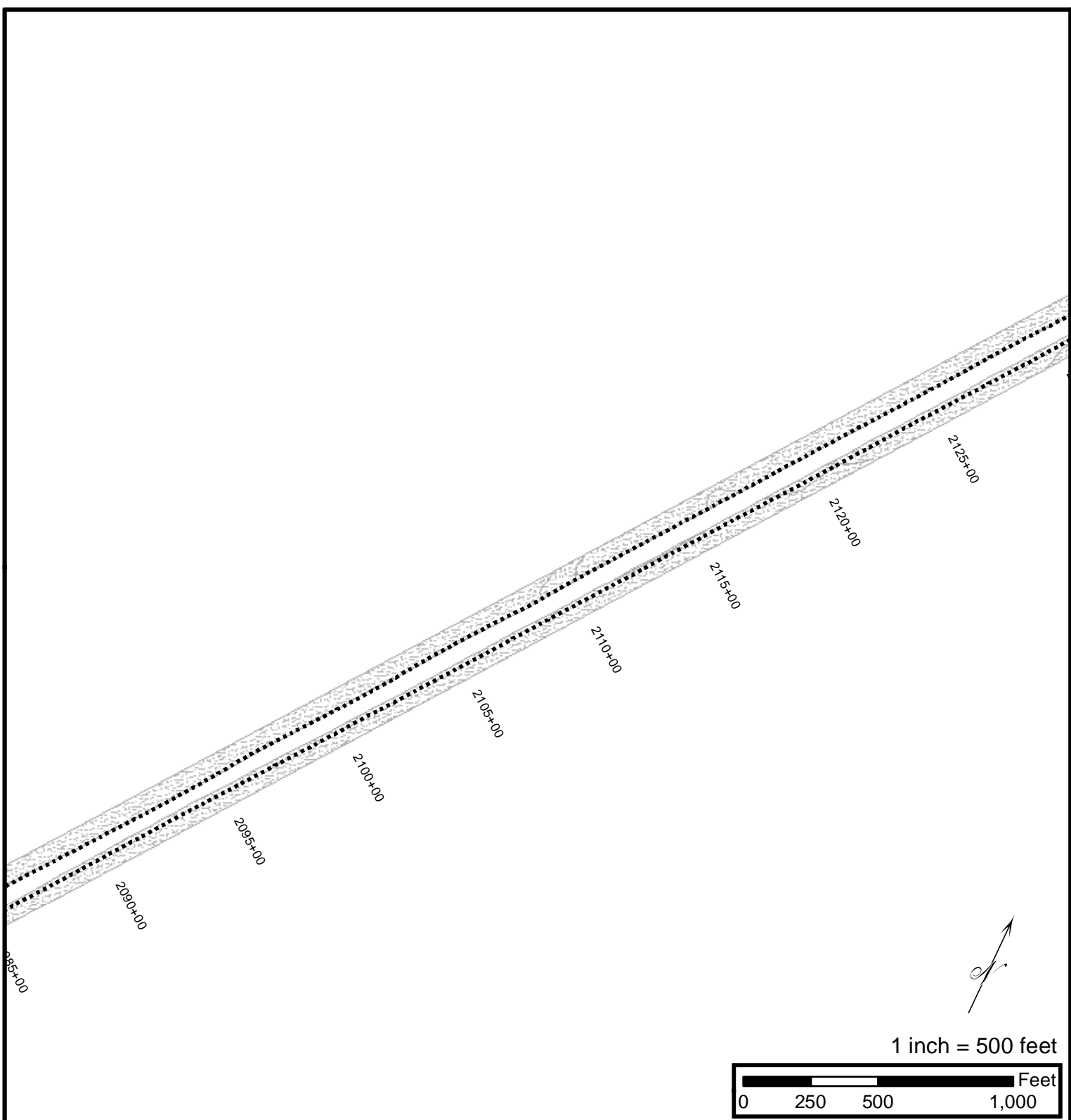
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PLAN VIEW DETAIL

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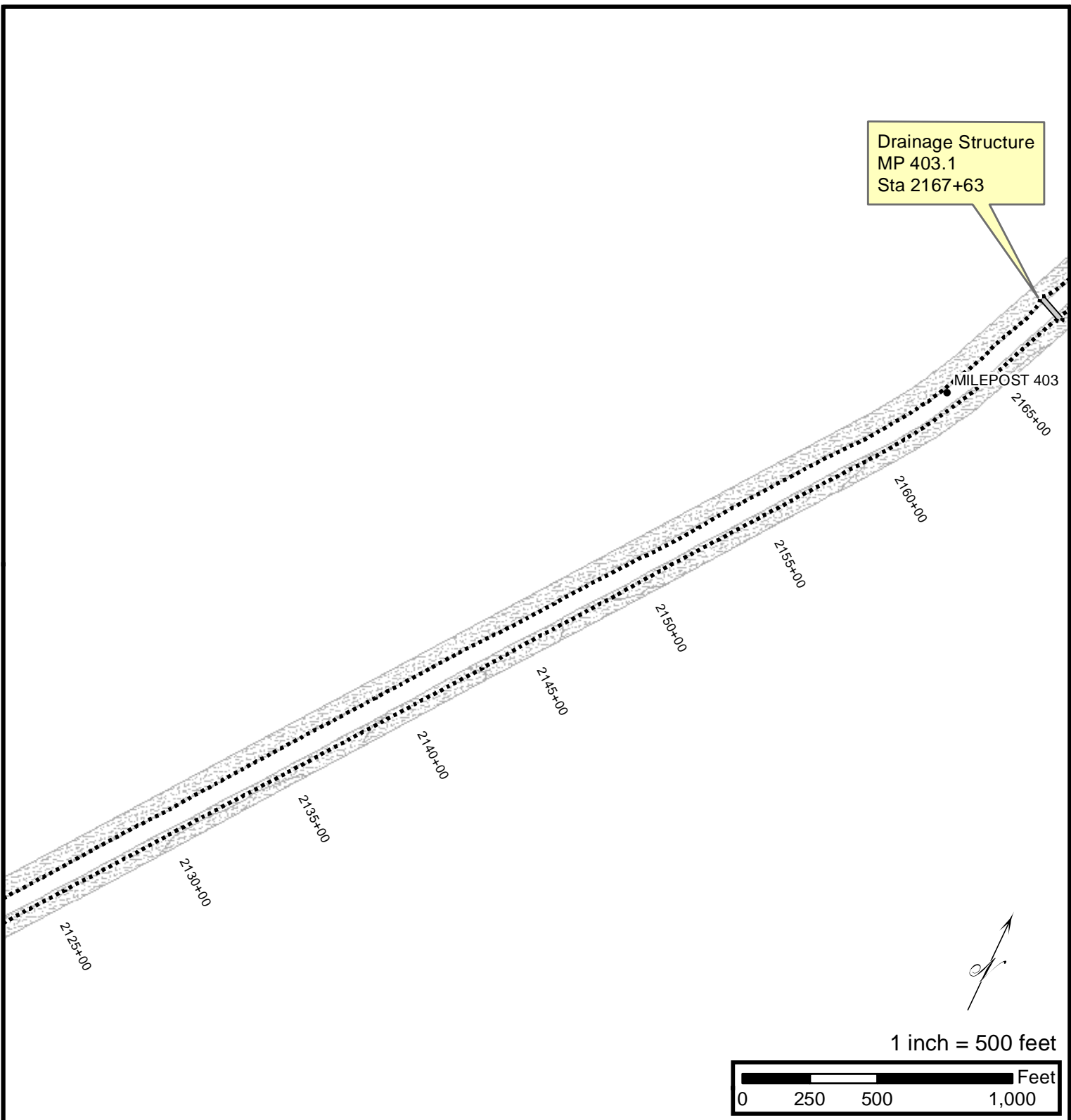
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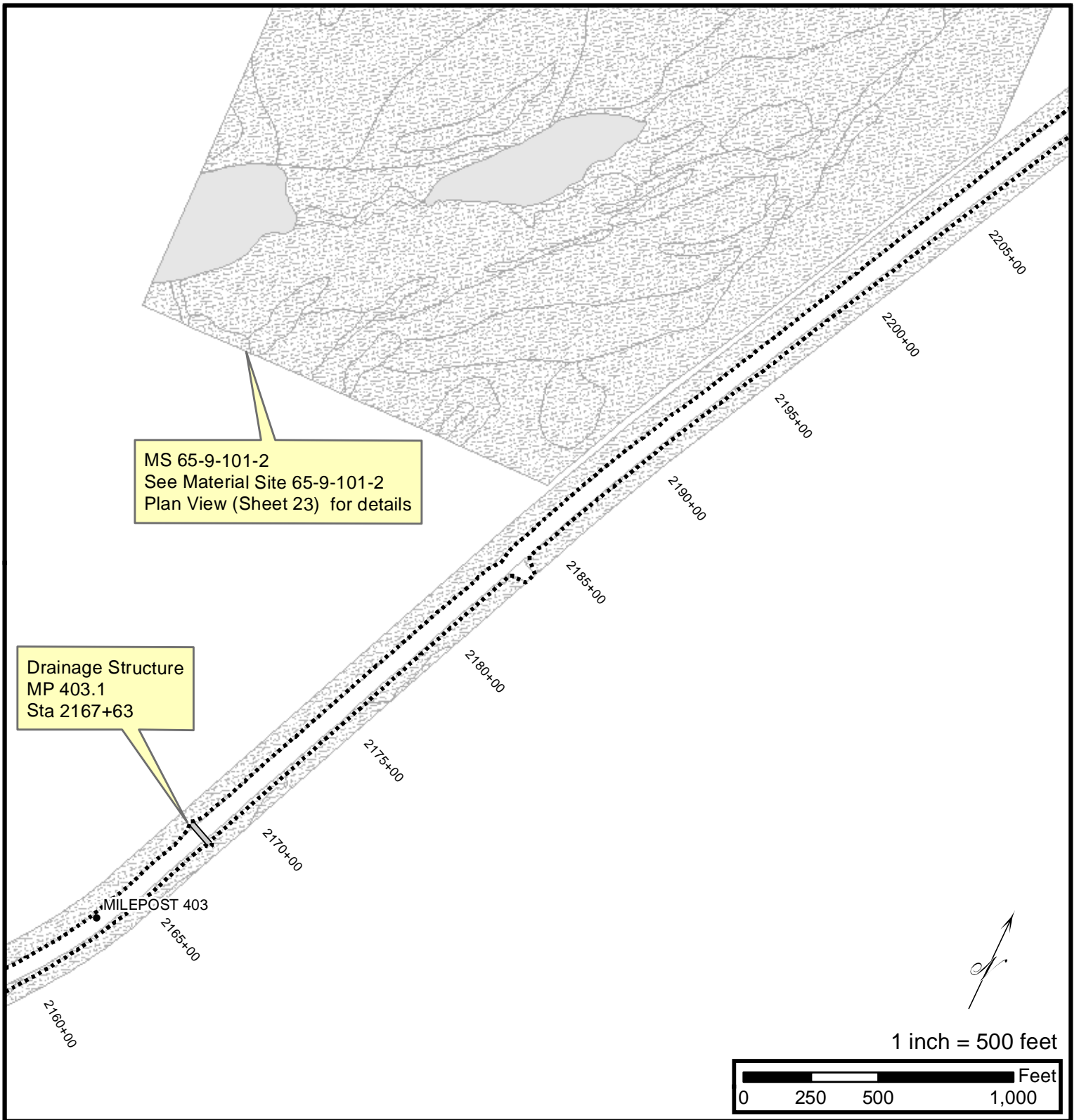
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PLAN VIEW DETAIL

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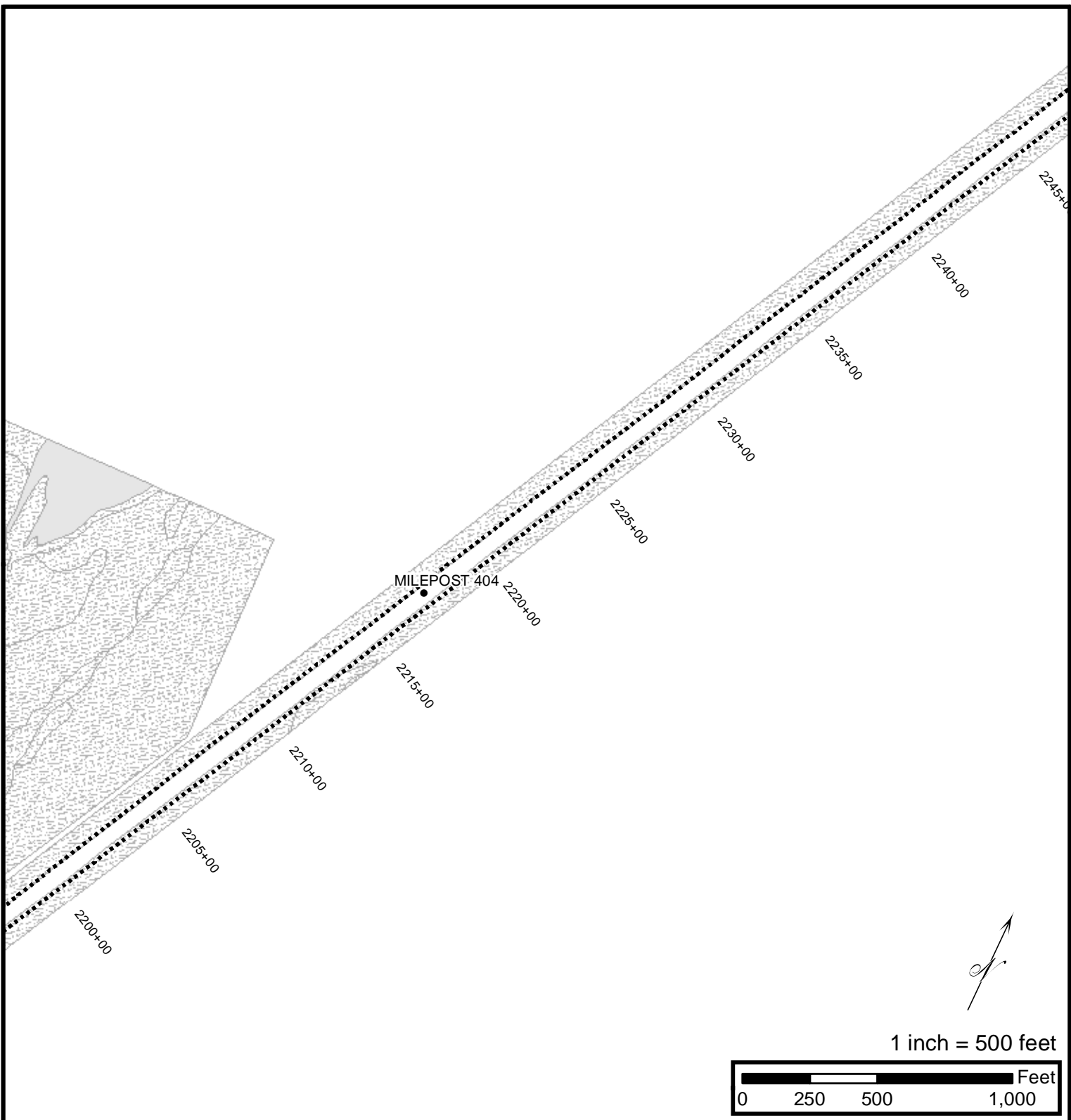
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PLAN VIEW DETAIL

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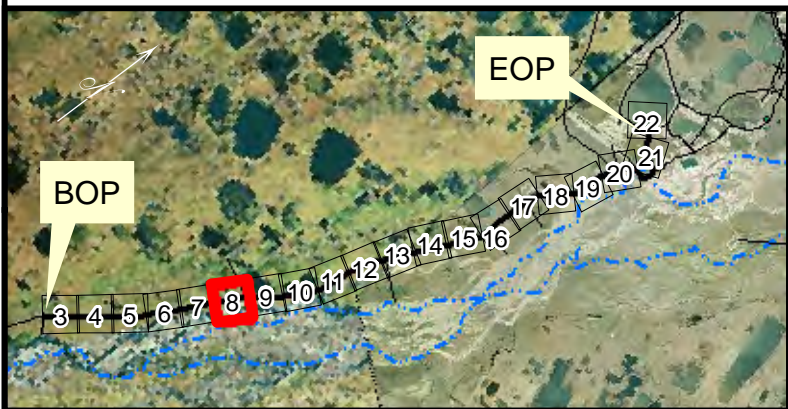
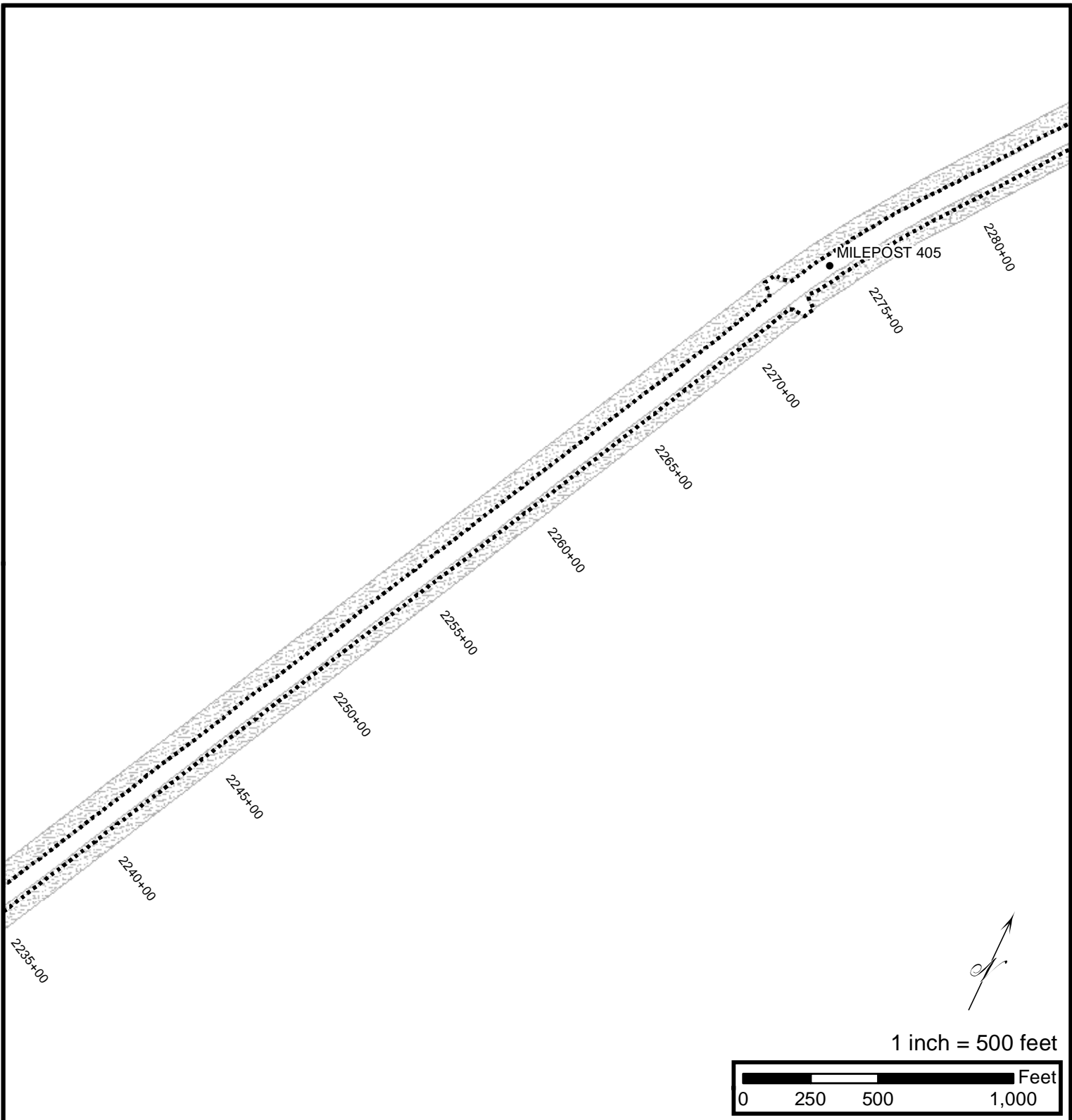
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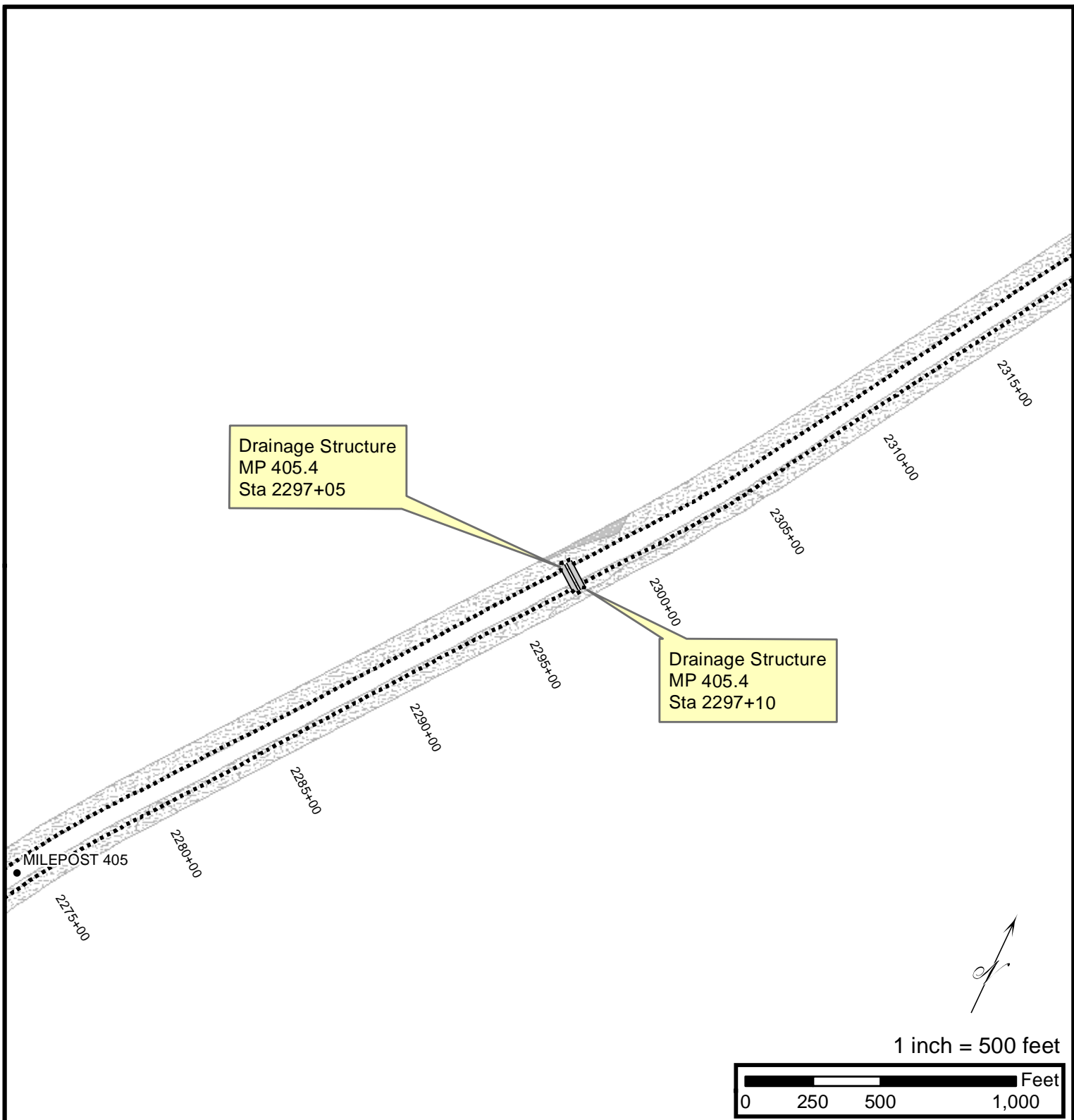
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PLAN VIEW DETAIL

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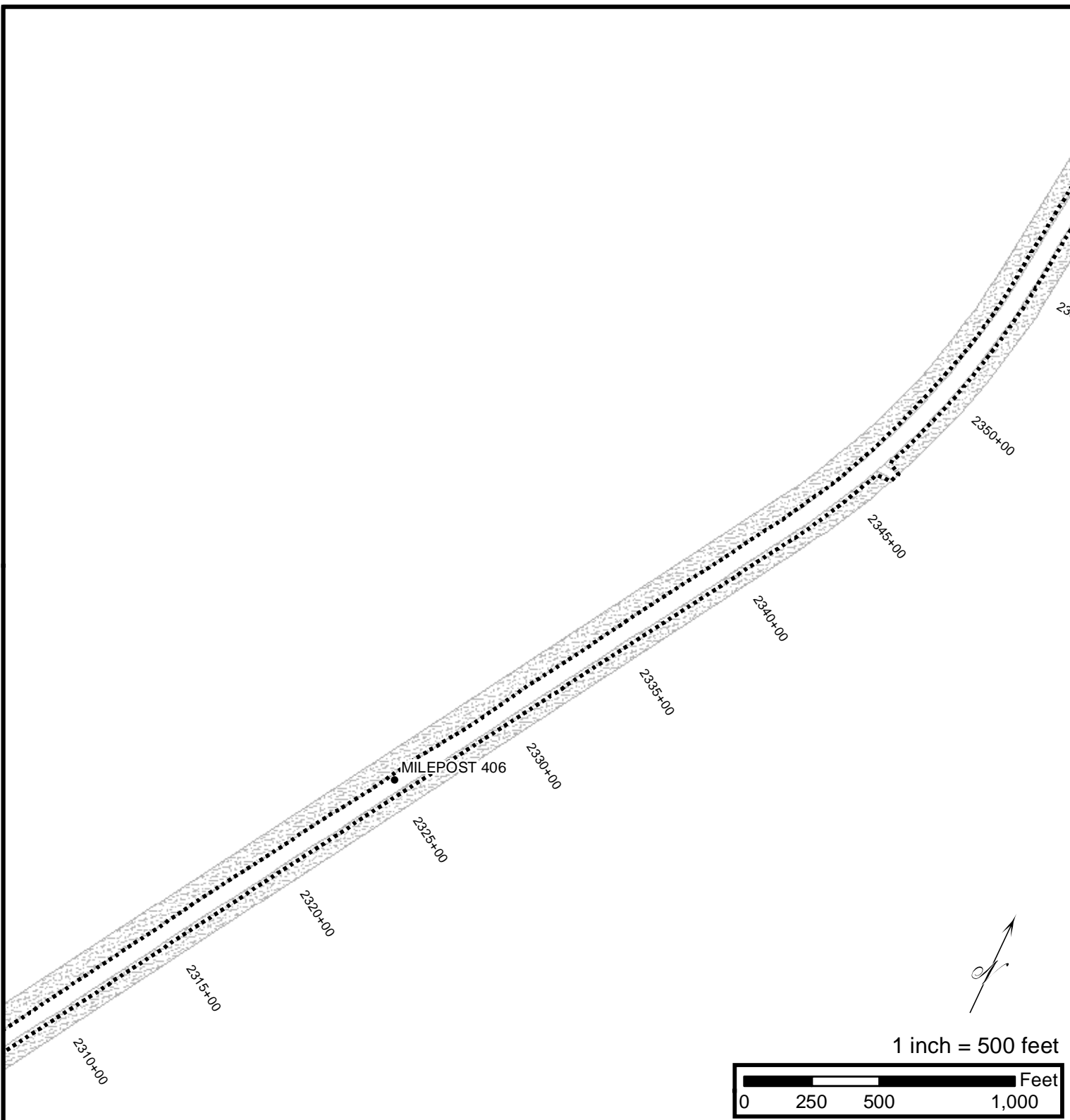
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PLAN VIEW DETAIL

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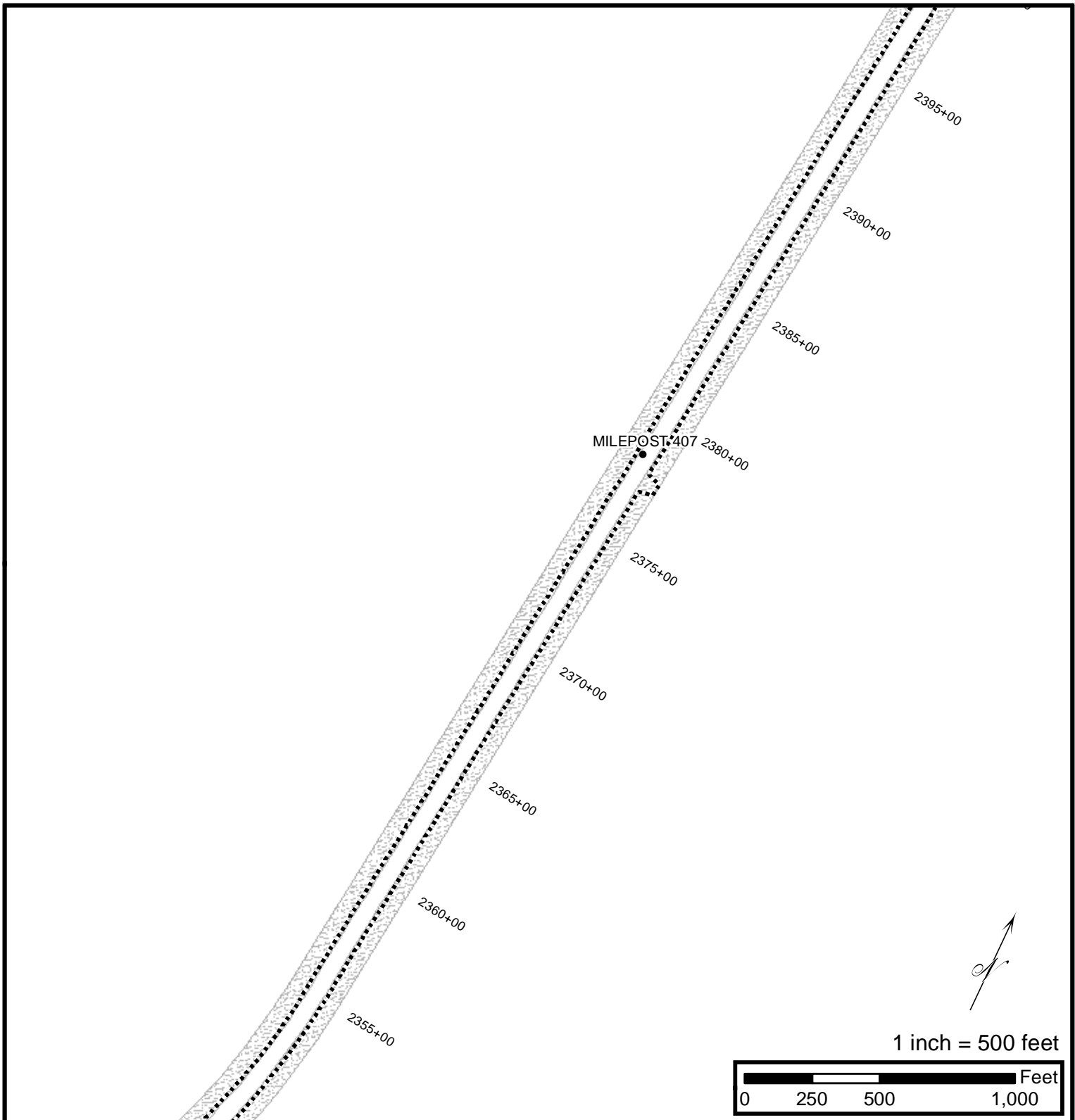
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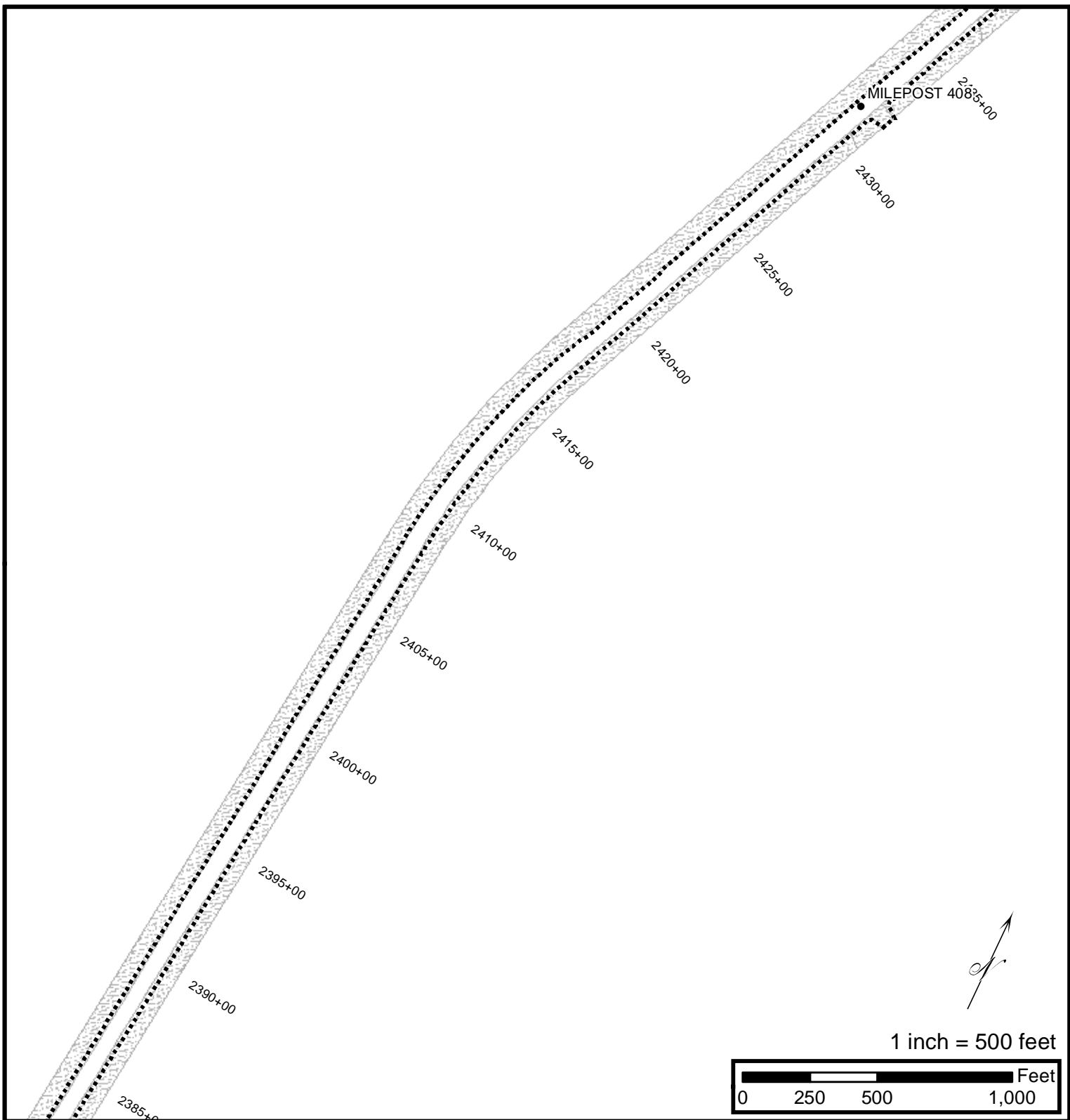
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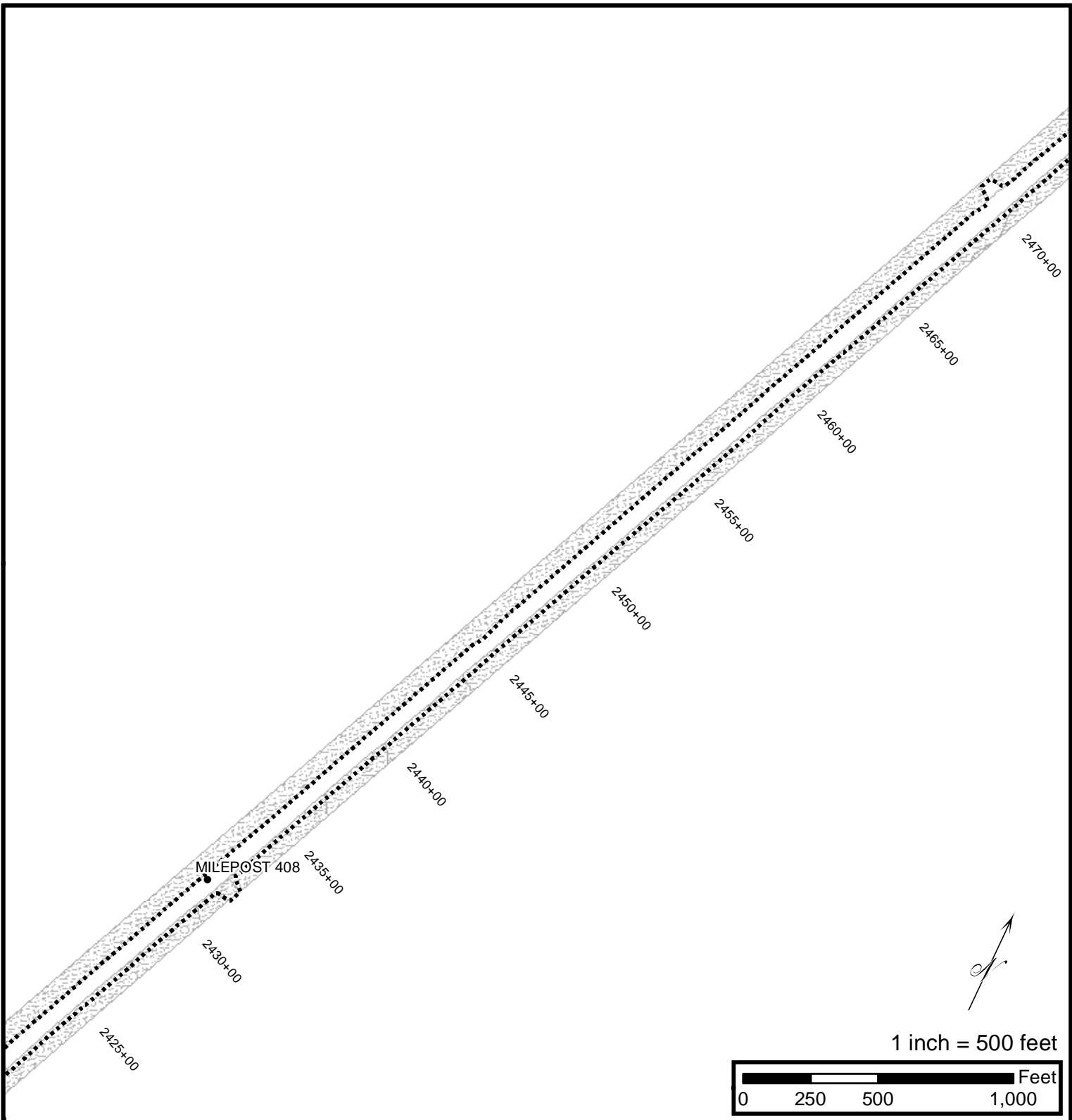
POA-2013-665, Sagavanirktok River
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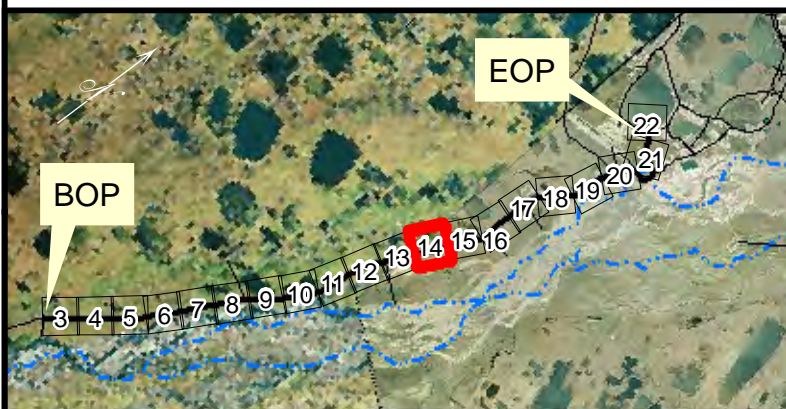
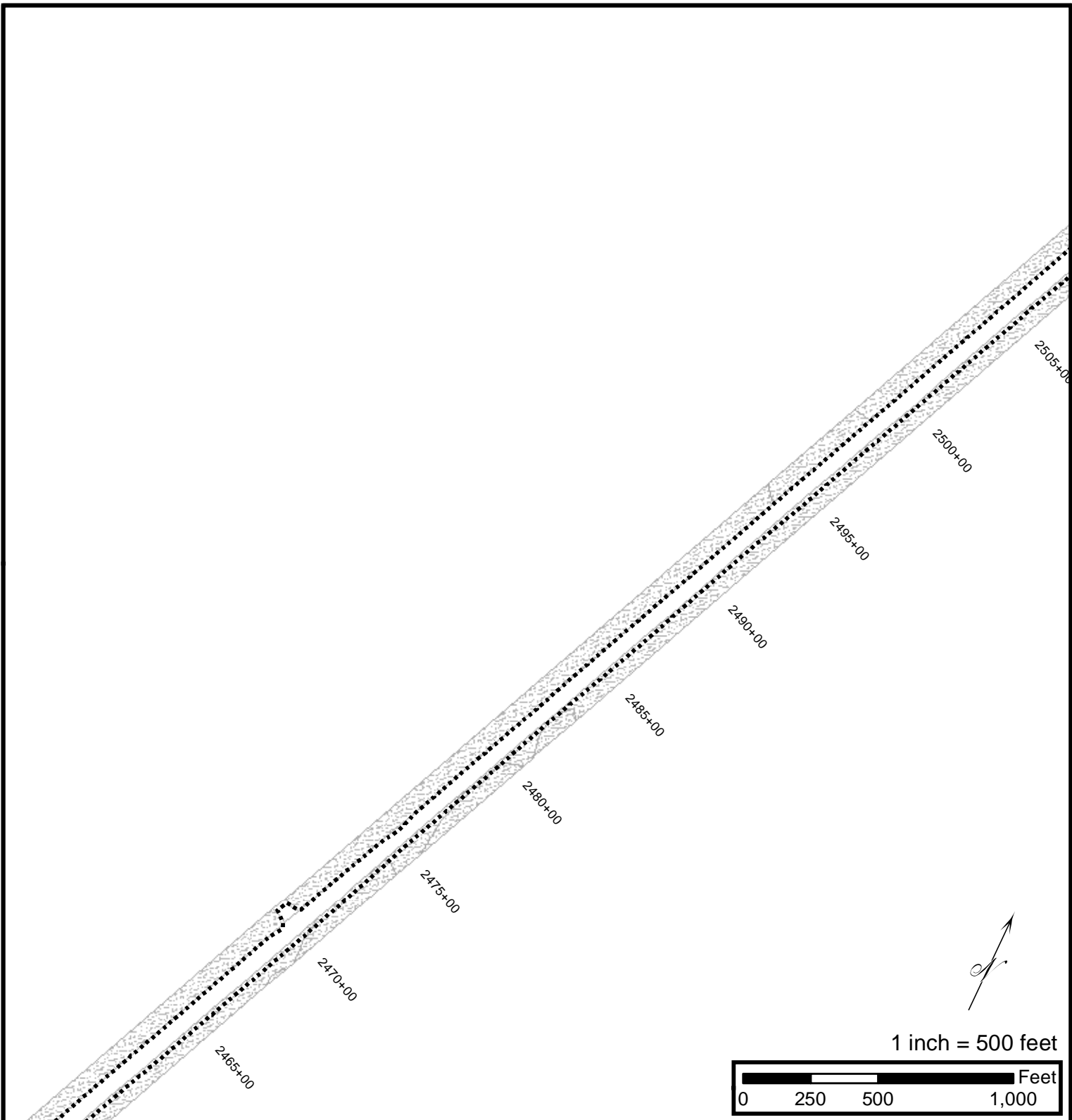
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PLAN VIEW DETAIL

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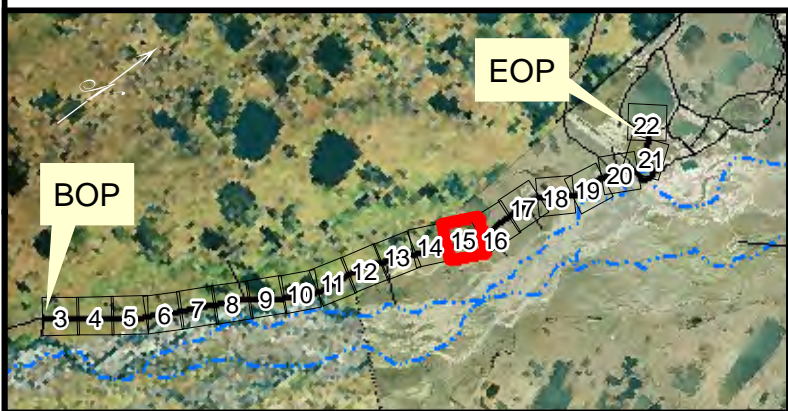
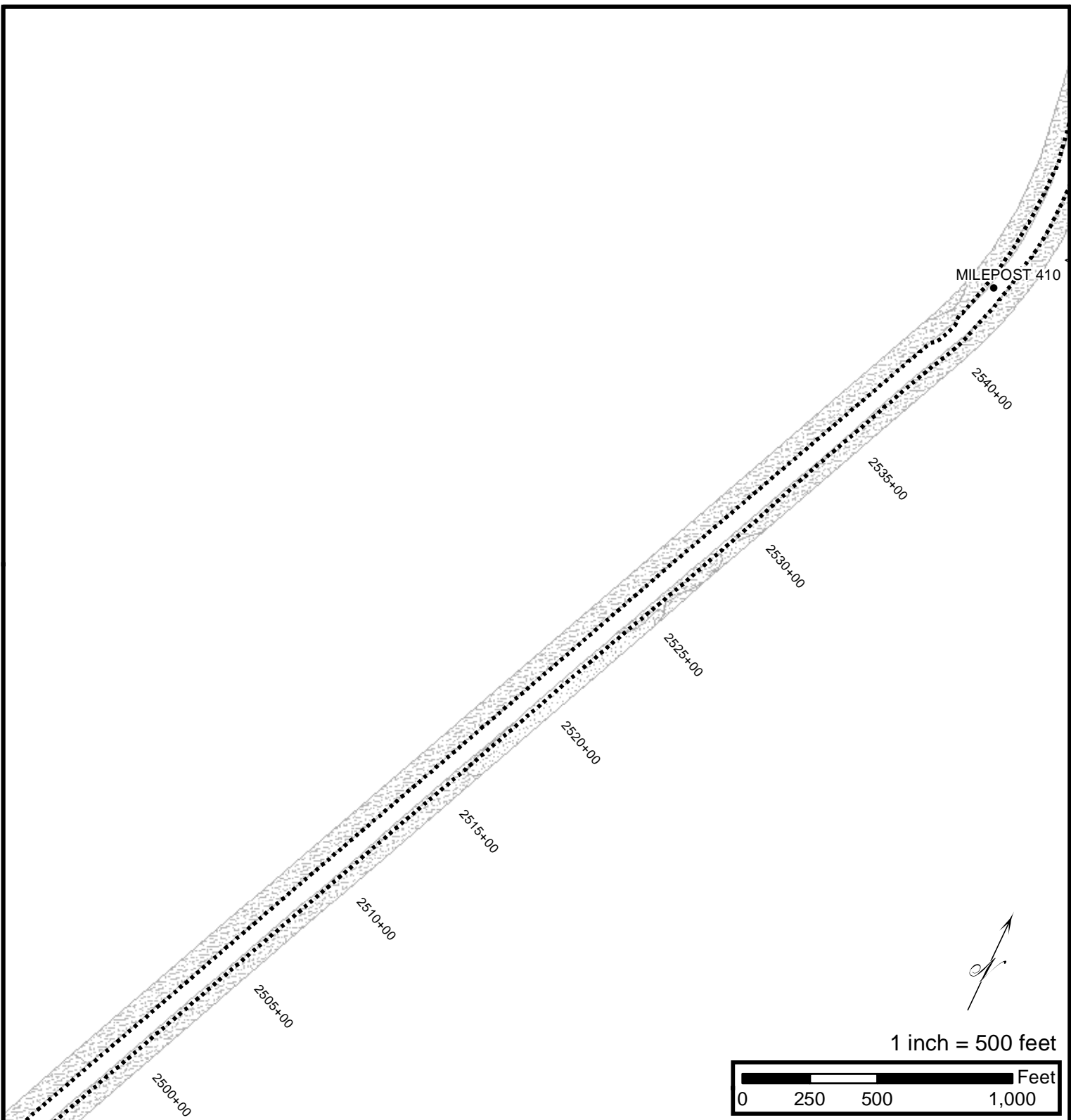
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PLAN VIEW DETAIL

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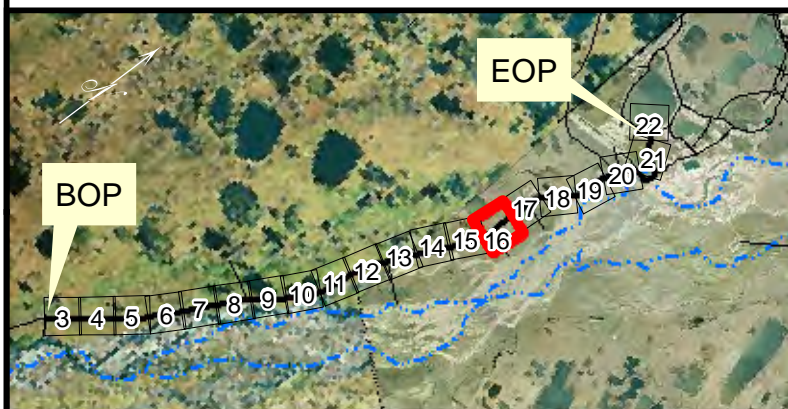
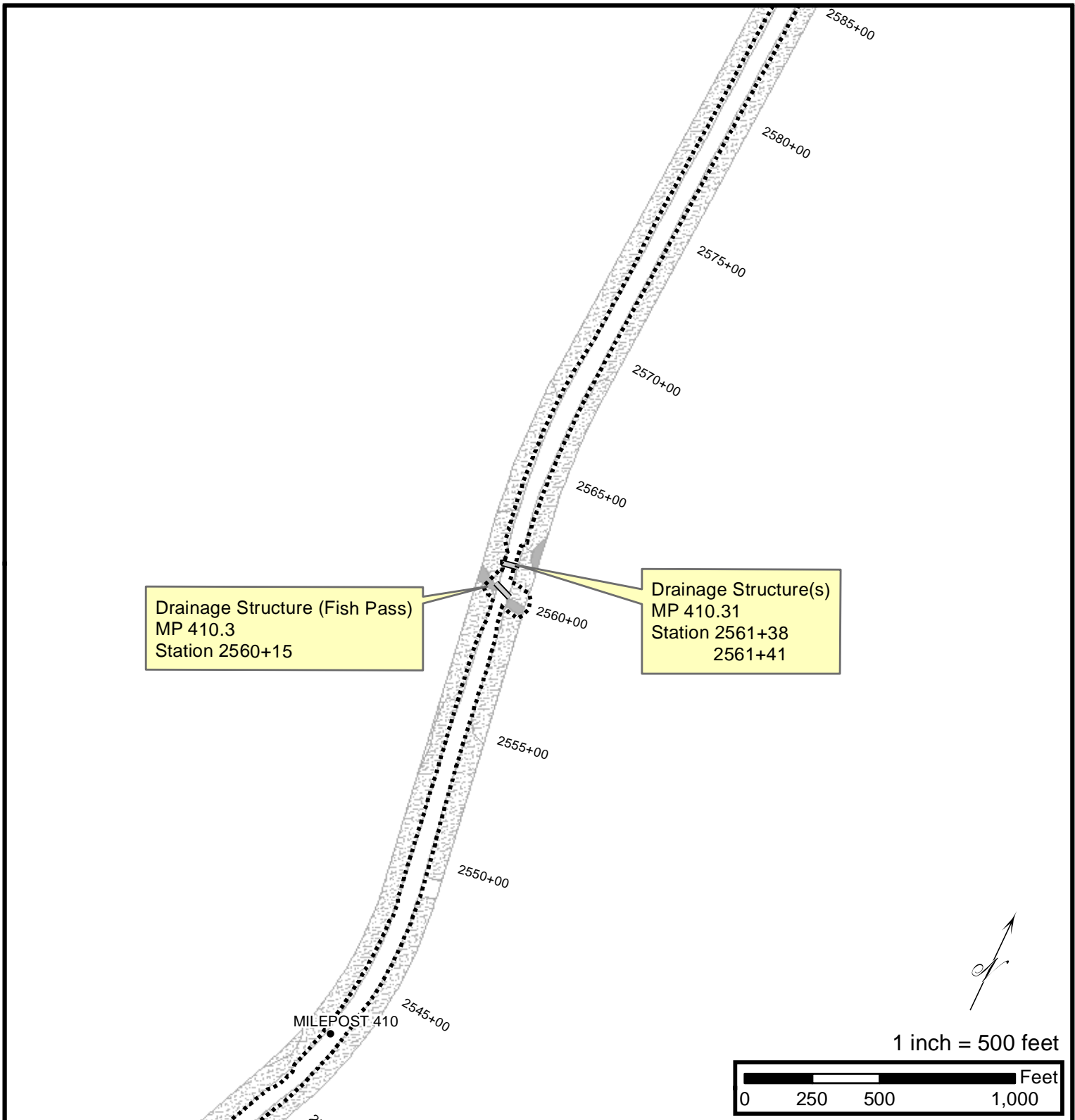
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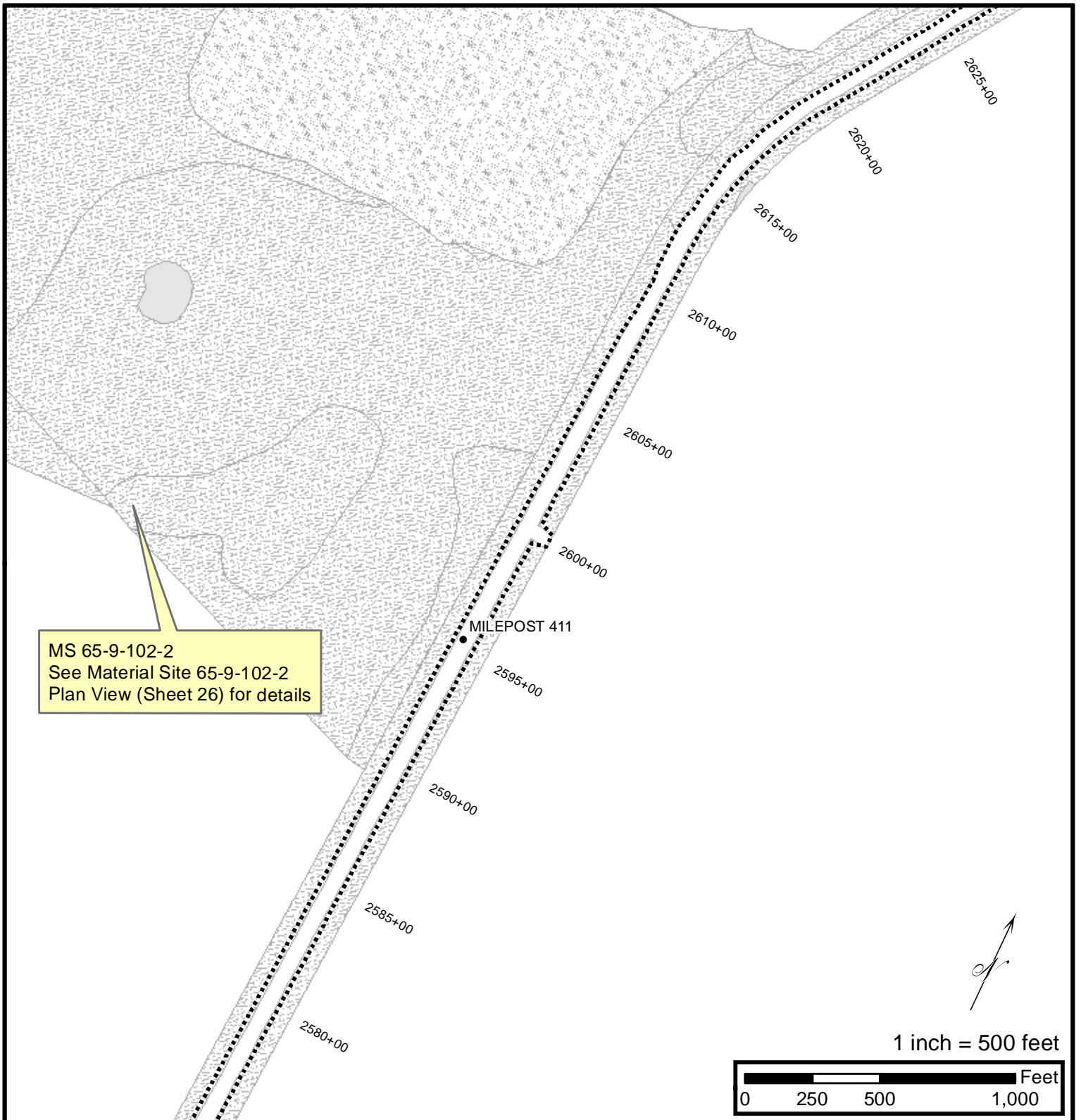
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PLAN VIEW DETAIL

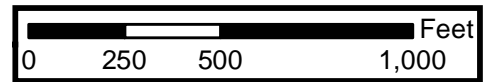
DATE: JANUARY 2014 SHEET: 16 OF: 36



MS 65-9-102-2
 See Material Site 65-9-102-2
 Plan View (Sheet 26) for details

MILEPOST 411

1 inch = 500 feet



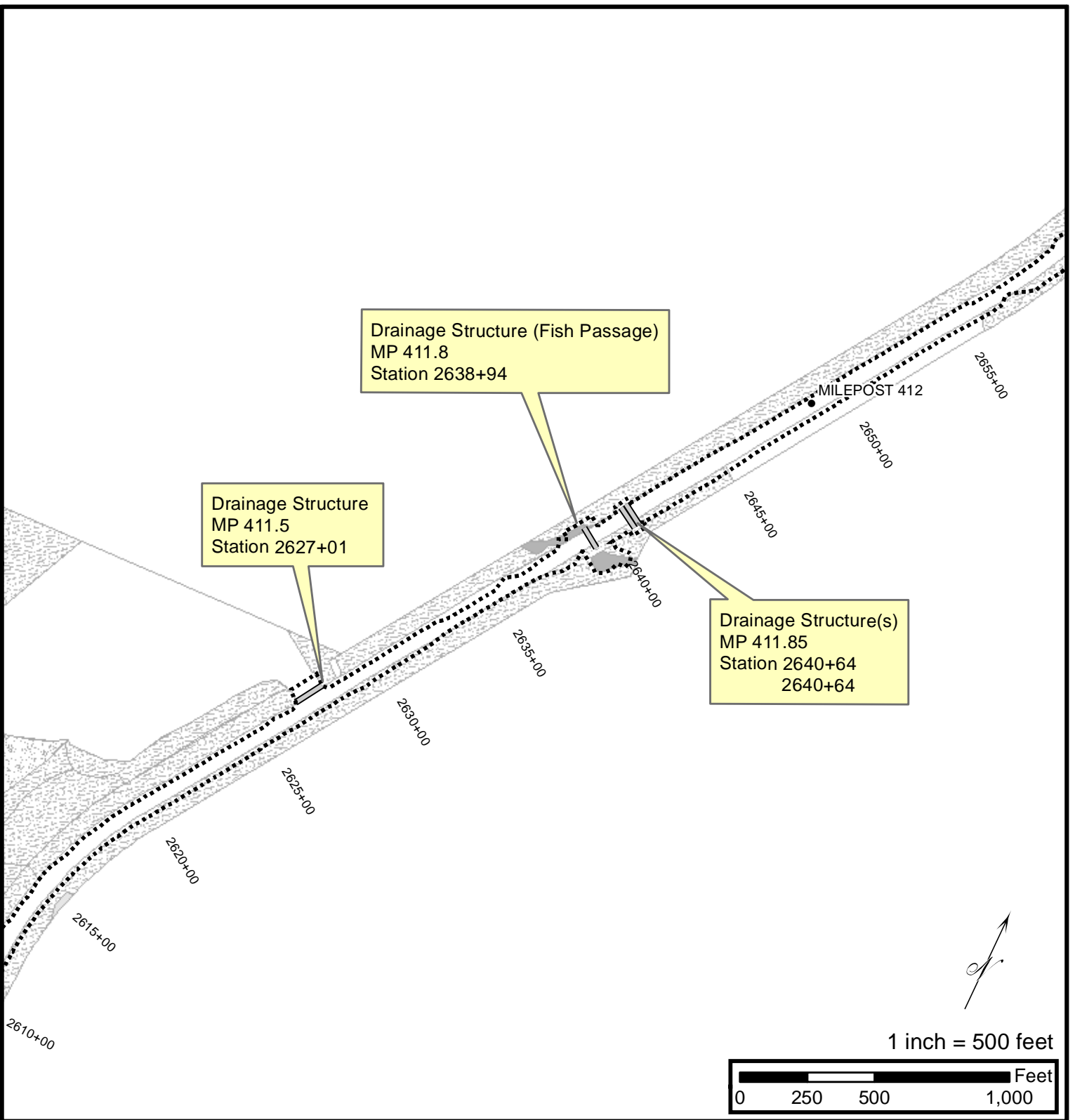
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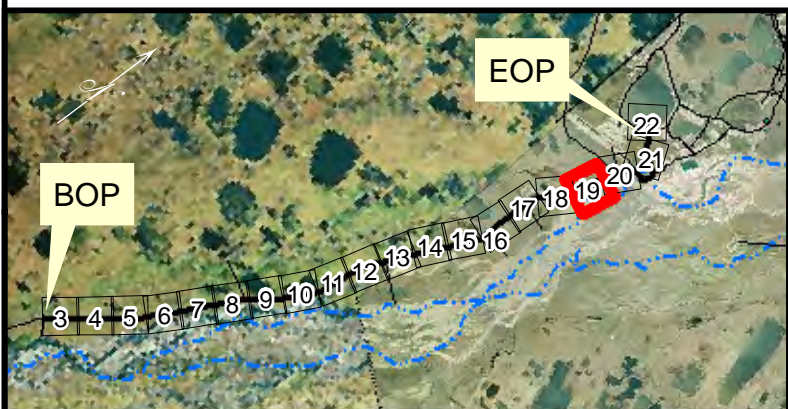
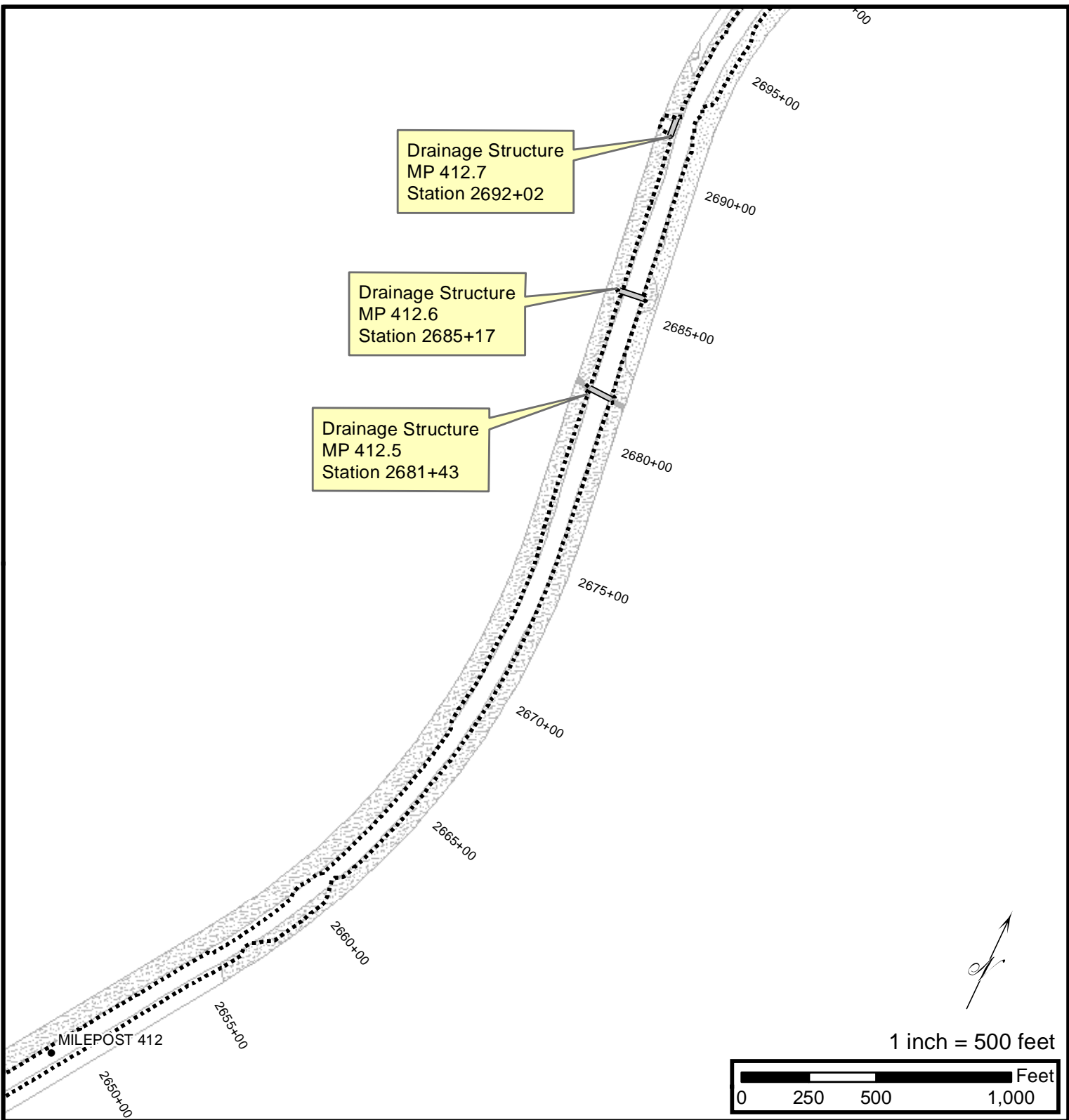
POA-2013-665, Sagavanirktok River
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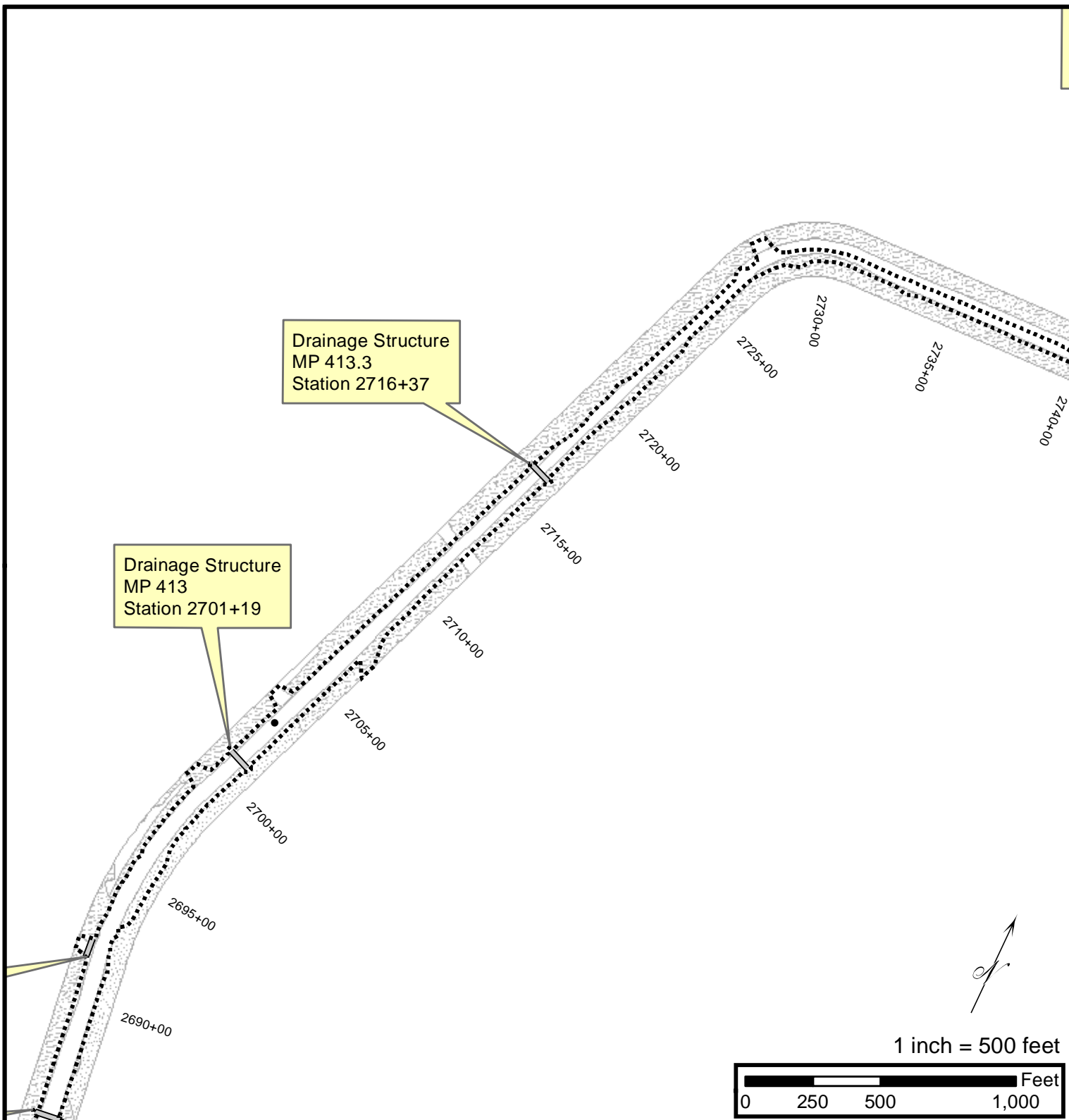
POA-2013-665, Sagavanirktok River
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PLAN VIEW DETAIL

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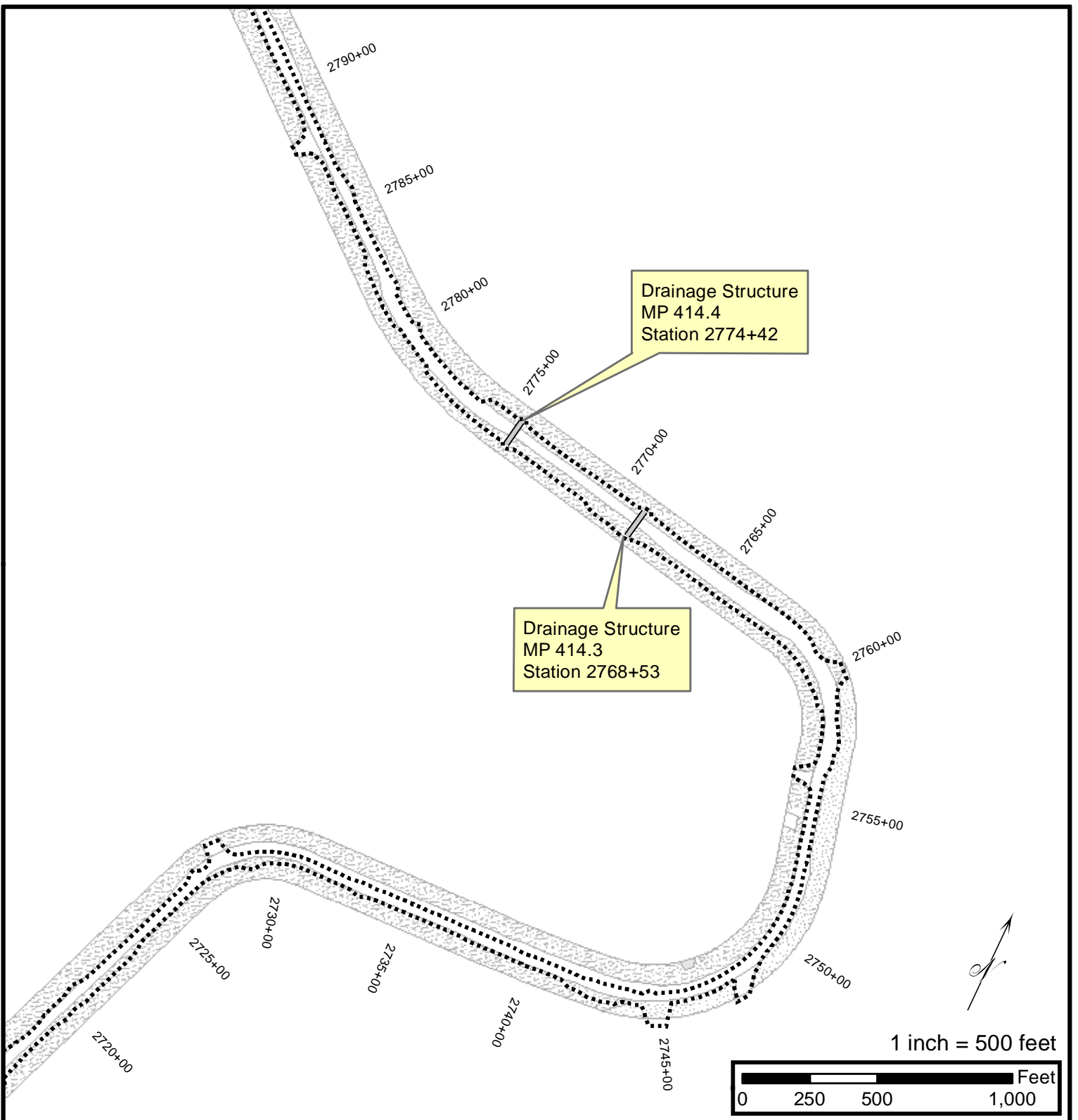
POA-2013-665, Sagavanirktok River
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PLAN VIEW DETAIL

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POA-2013-665, Sagavanirktok River
Dalton Highway MP 401-414

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Department of Transportation and Public Facilities
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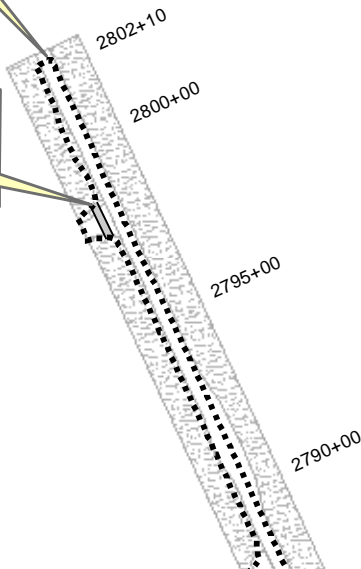
DALTON HWY MP 401-414
REHABILITATION PROJECT
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PLAN VIEW DETAIL

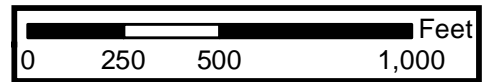
DATE: JANUARY 2014 SHEET: 21 OF: 36

EOP
MP 414
Station 2802+10

Drainage Structure
MP 413.9
Sta 2797+79



1 inch = 500 feet



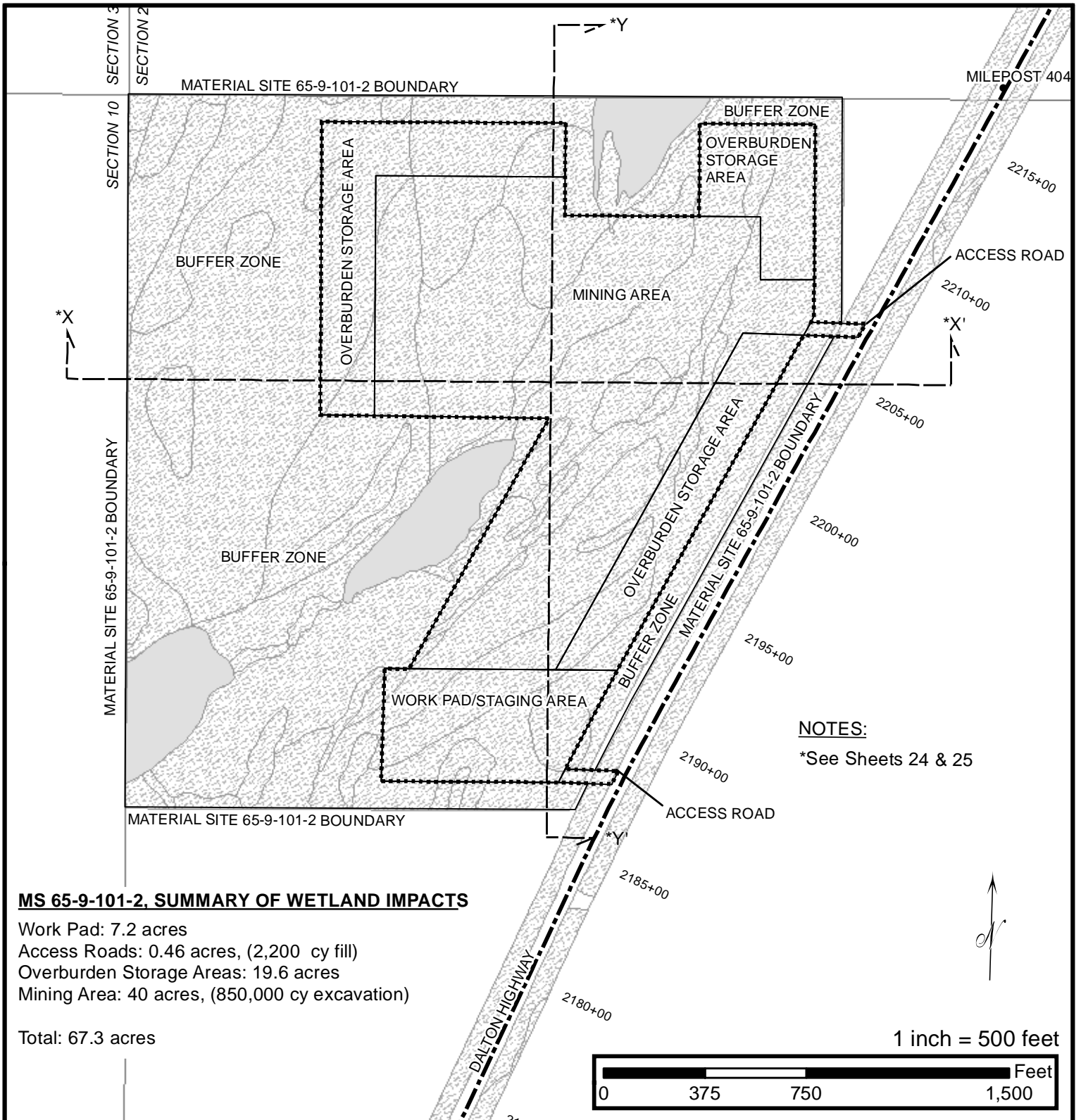
POA-2013-665, Sagavanirktok River
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PLAN VIEW DETAIL

DATE: JANUARY 2014 SHEET: 22 OF: 36



MS 65-9-101-2, SUMMARY OF WETLAND IMPACTS

Work Pad: 7.2 acres
 Access Roads: 0.46 acres, (2,200 cy fill)
 Overburden Storage Areas: 19.6 acres
 Mining Area: 40 acres, (850,000 cy excavation)
 Total: 67.3 acres



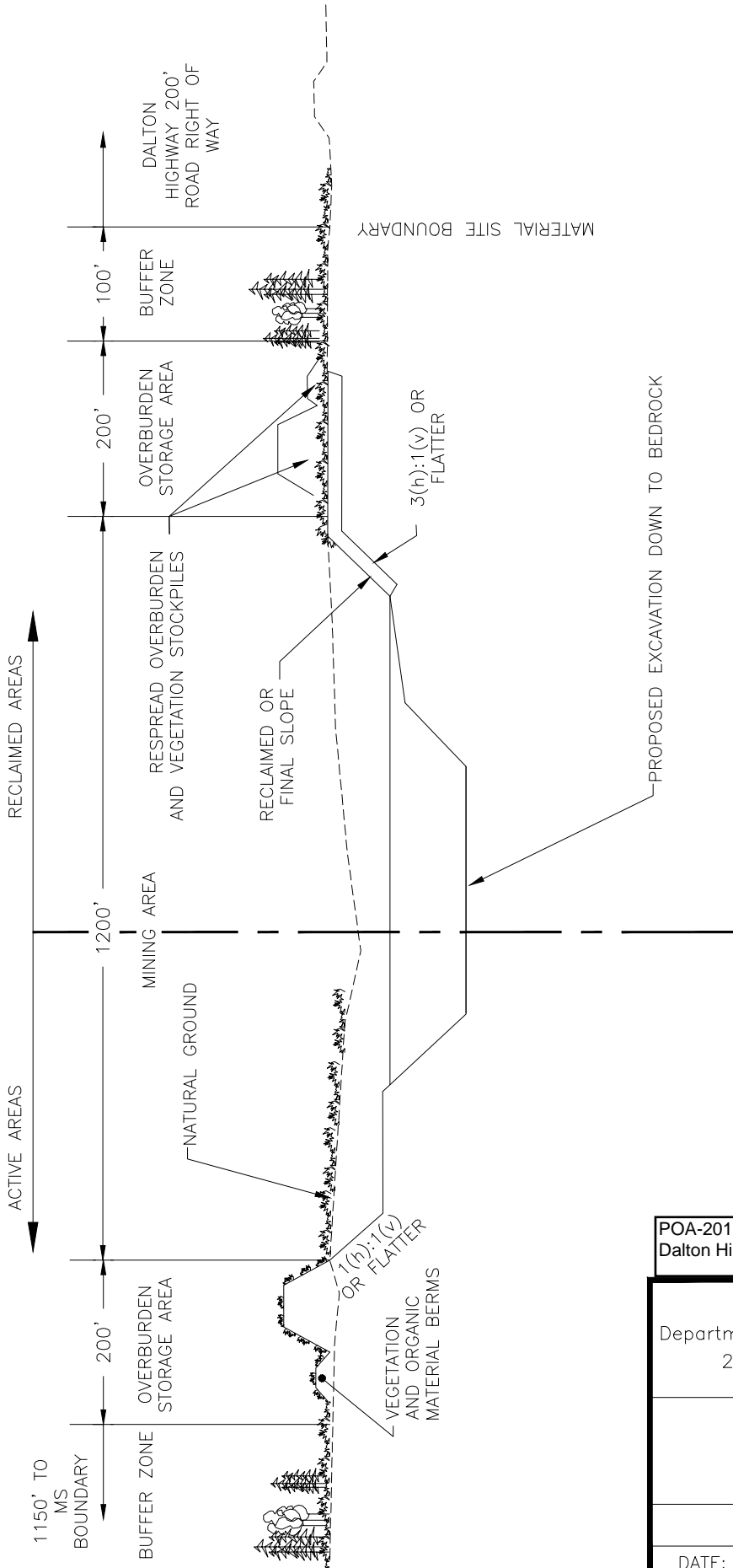
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 REHABILITATION PROJECT
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Material Site 65-9-101-2 Plan View
 DATE: JANUARY 2014 SHEET: 23 OF: 36

V:\Valdez\61366 Dalton 362-414\Environmental\04Permits\COE\401-414 Wetland Permit\Wetlands Permit Figures\CAD Files\Material Site Permit Drawing-MS 65-9-101-2 X-X' Tue, 06/May/14 02:17pm



MATERIAL SITE MS 65-9-101-2
 CROSS SECTION X-X'
 NOT TO SCALE

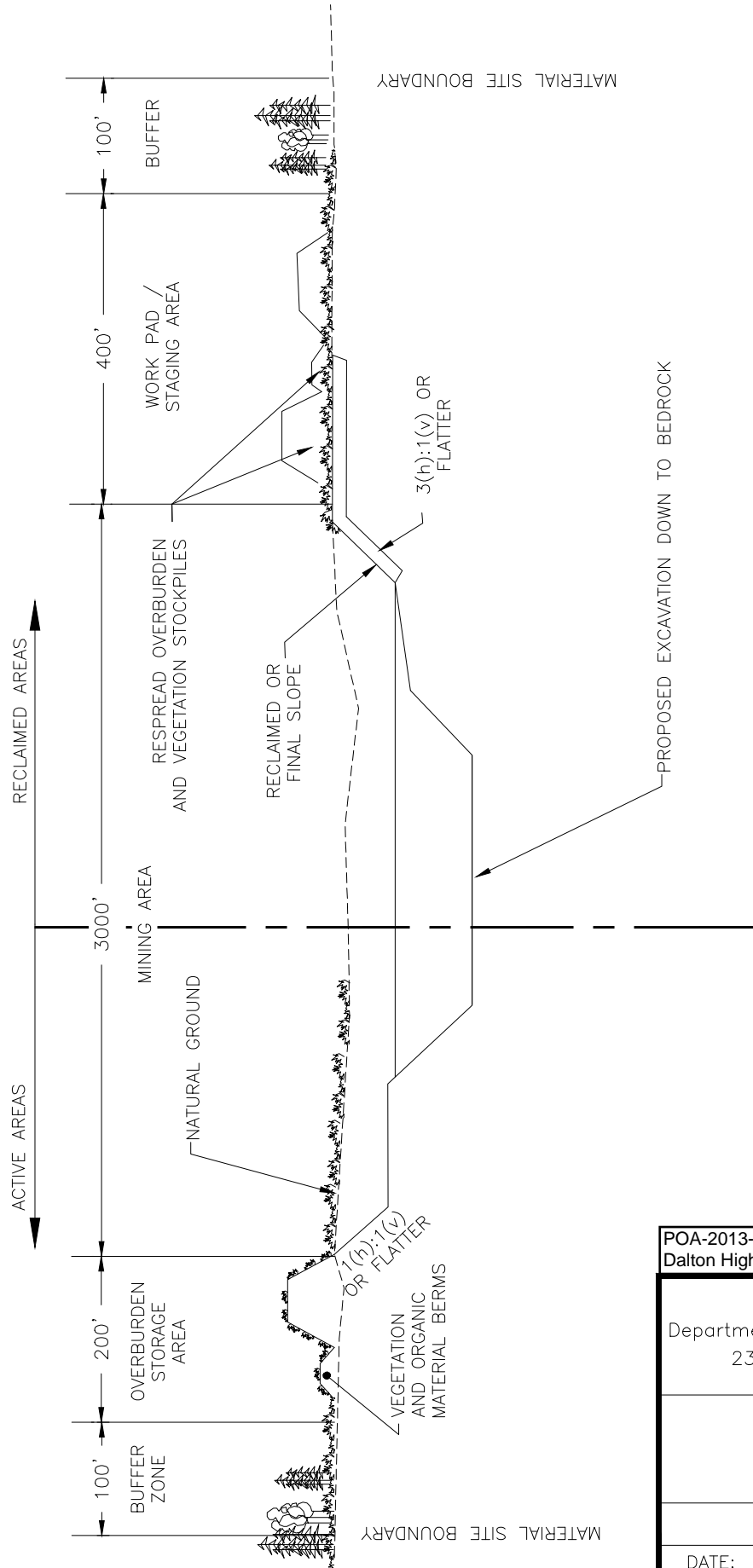
NOTES:
 1. SEE MATERIAL SITE 65-9-101-2 PLAN VIEW FOR DETAILS (SHEET 23).

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MS 65-9-101-2 SECTION X-X'
 DATE: JANUARY 2014 SHEET: 24 OF: 36



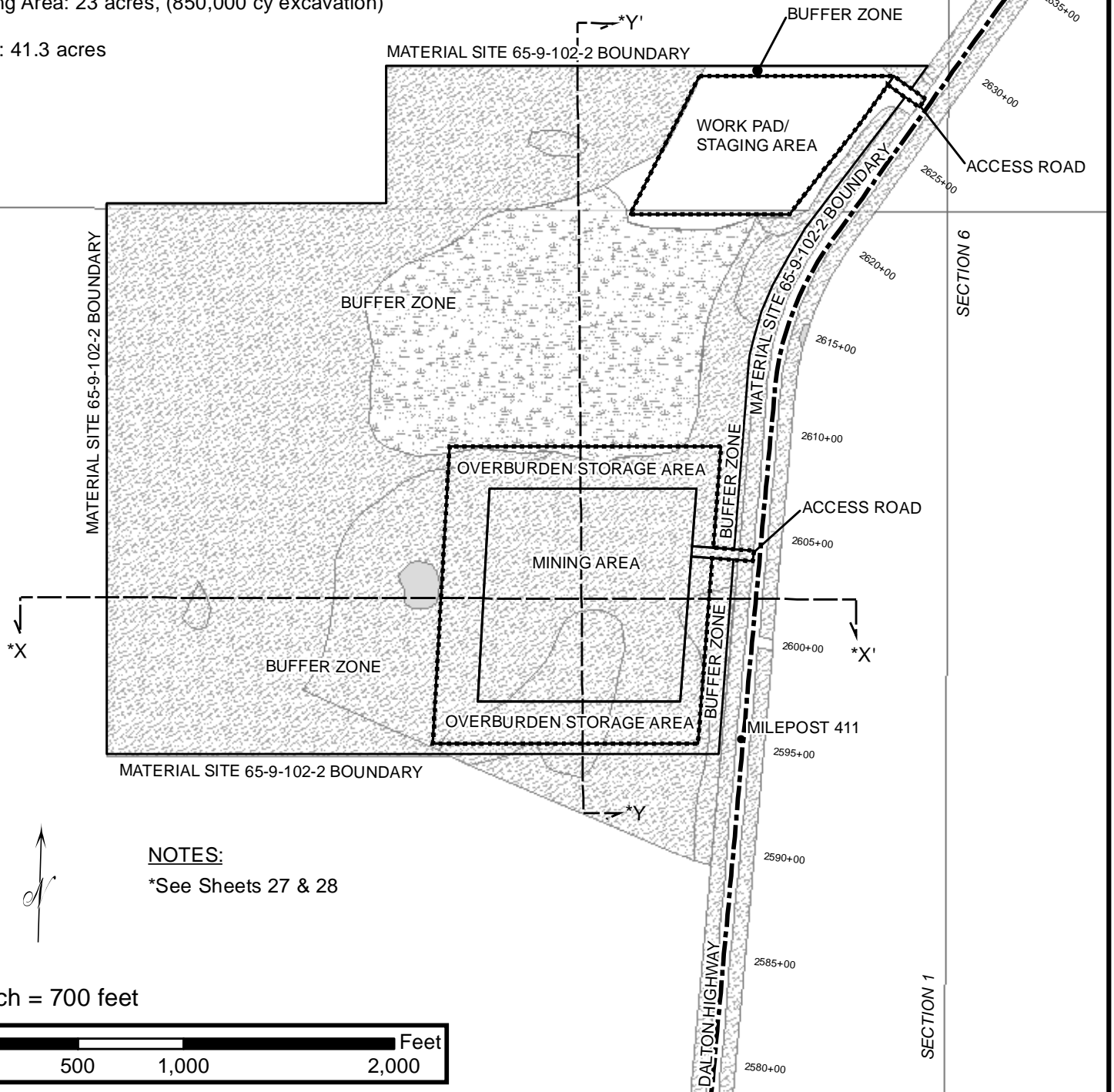
MATERIAL SITE MS 65-9-101-2
CROSS SECTION Y-Y'
NOT TO SCALE

NOTES:
1. SEE MATERIAL SITE 65-9-101-2 PLAN VIEW FOR DETAILS (SHEET 23).

POA-2013-665, Sagavanirktok River Dalton Highway MP 401-414	
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DALTON HWY MP 401-414 REHABILITATION PROJECT 61366	
MS 65-9-101-2	SECTION Y-Y'
DATE: JANUARY 2014	SHEET: 25 OF: 36

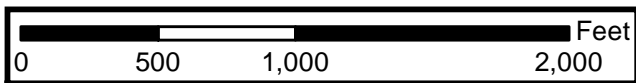
MS 65-9-102-2, SUMMARY OF WETLAND IMPACTS

Work Pad: 0 acres
 Access Roads: 0.33 acres, (1500 cy fill)
 Overburden Storage Areas: 18 acres
 Mining Area: 23 acres, (850,000 cy excavation)
 Total: 41.3 acres



NOTES:
 *See Sheets 27 & 28

1 inch = 700 feet

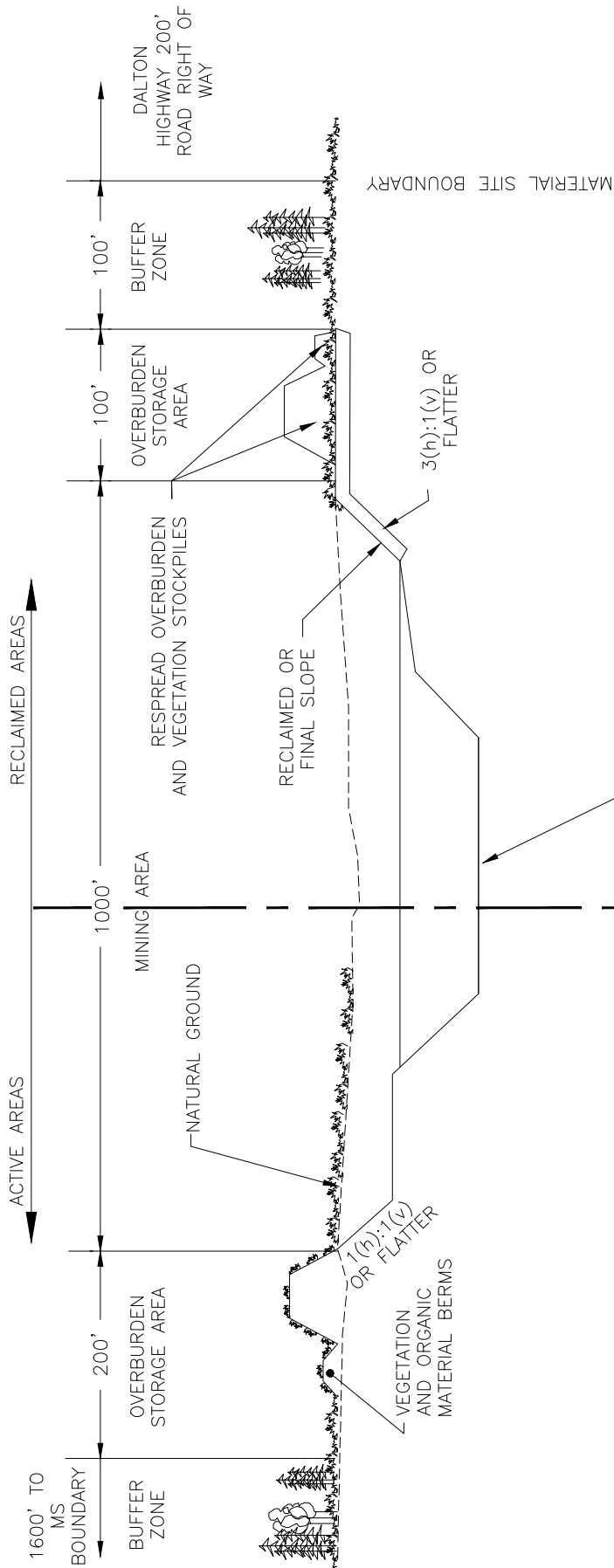


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Material Site 65-9-102-2 Plan View
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MATERIAL SITE MS 65-9-102-2
CROSS SECTION X-X'
NOT TO SCALE

NOTES:
1. SEE MATERIAL SITE 65-9-102-2 PLAN VIEW FOR DETAILS (SHEET 26).

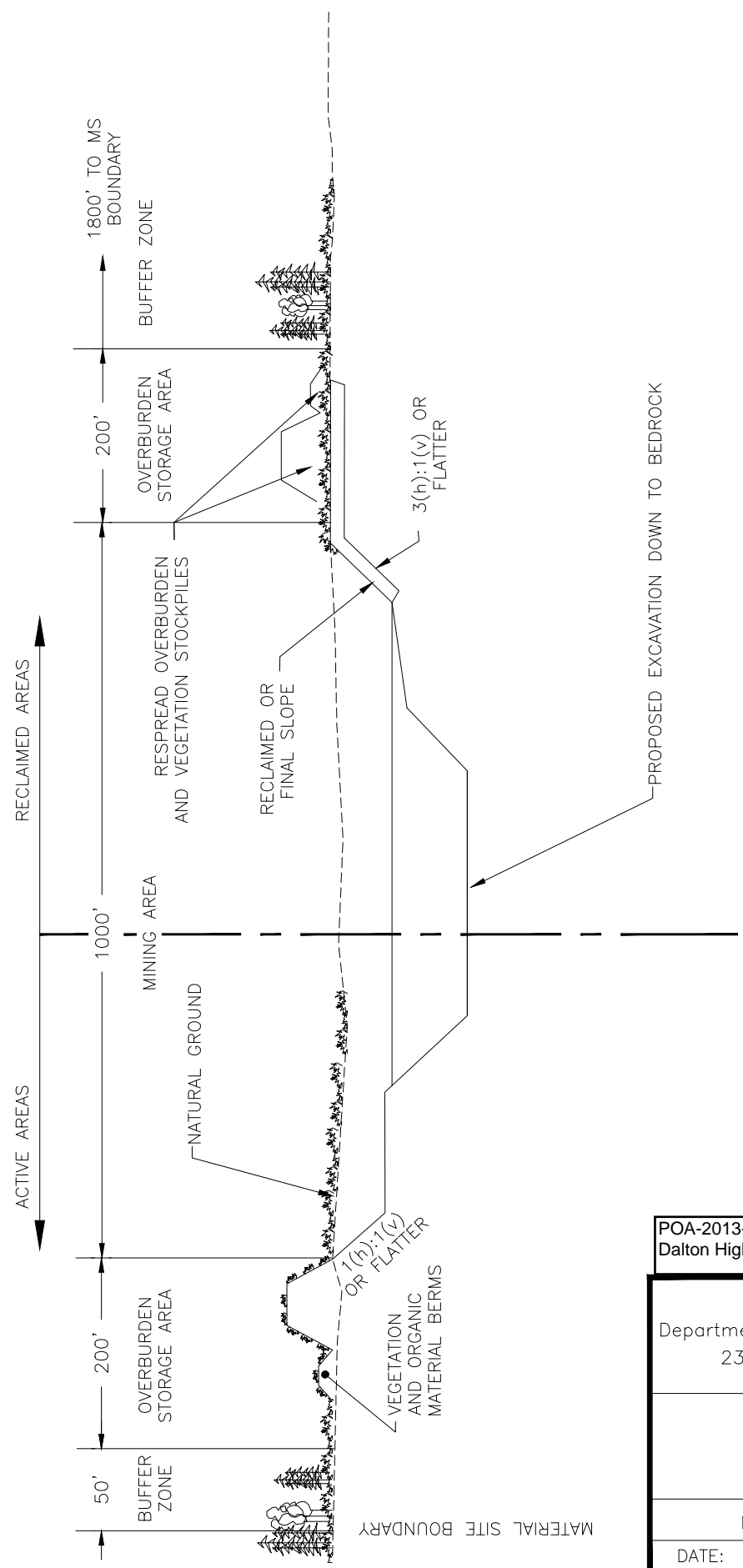
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MS 65-9-102-2 SECTION X-X'
DATE: JANUARY 2014 SHEET: 27 OF: 36

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MATERIAL SITE MS 65-9-102-2
 CROSS SECTION Y-Y'
 NOT TO SCALE

NOTES:
 1. SEE MATERIAL SITE 65-9-102-2 PLAN VIEW FOR DETAILS (SHEET 26).

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MS 65-9-102-2	SECTION Y-Y'
DATE: JANUARY 2014	SHEET: 28 OF: 36

MS 65-9-026-2 Summary of Impacts

Stockpile Area: 7.5 Acres below OHW

Mining Area (12' mining depth):
23 Acres below OHW (450,000 cy excavation)

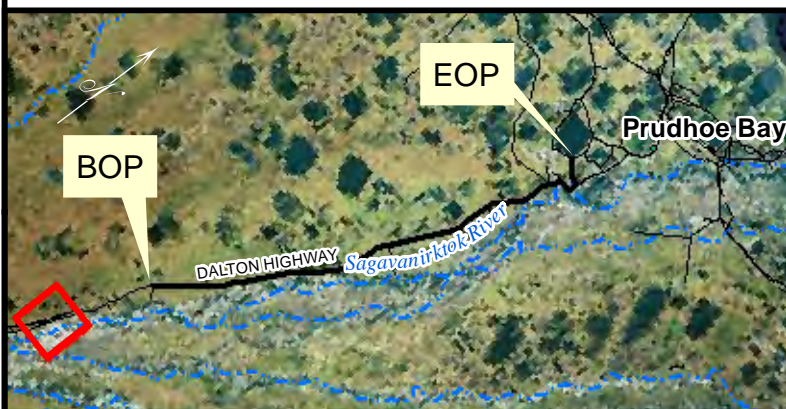
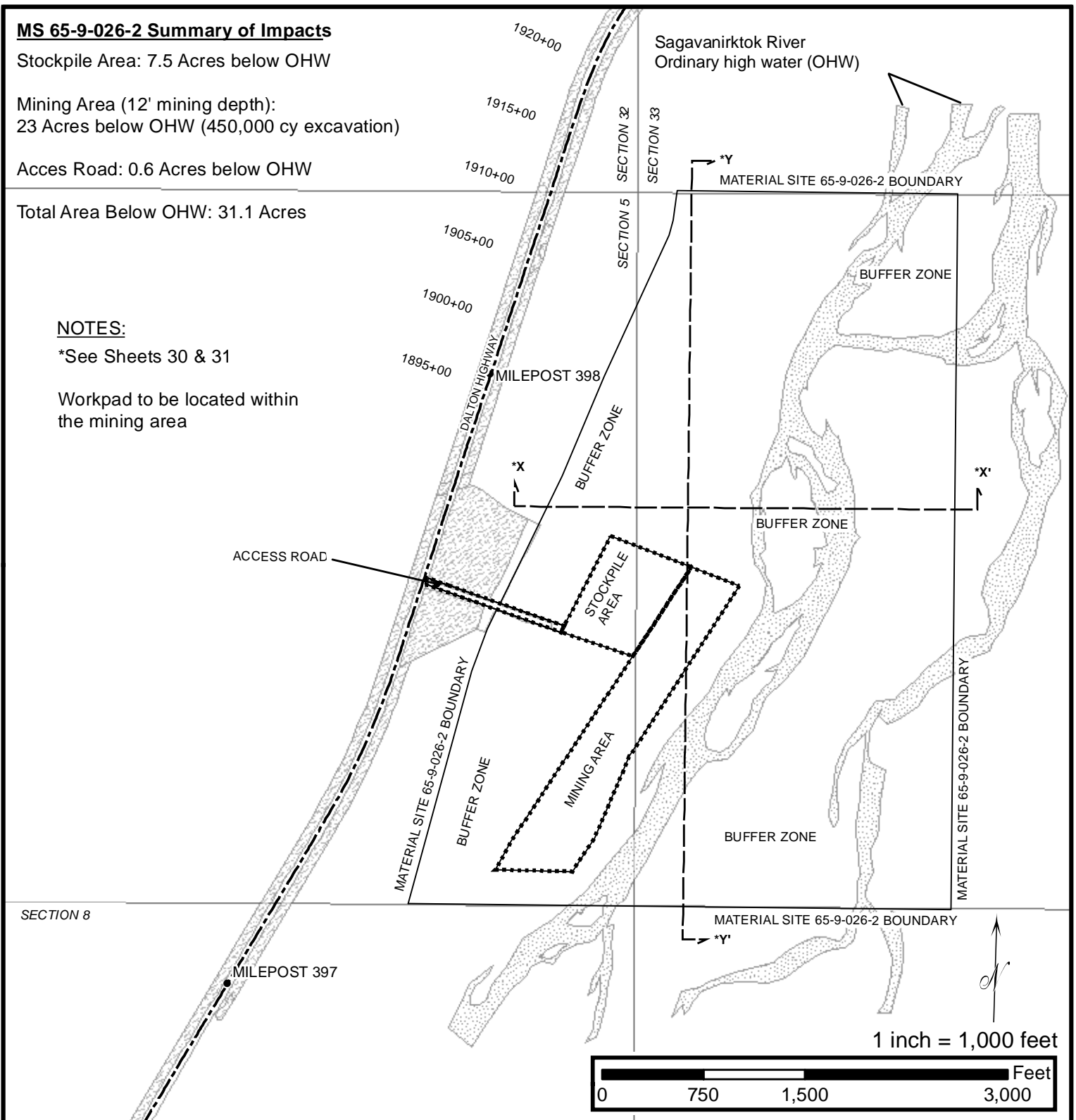
Acces Road: 0.6 Acres below OHW

Total Area Below OHW: 31.1 Acres

NOTES:

*See Sheets 30 & 31

Workpad to be located within
the mining area

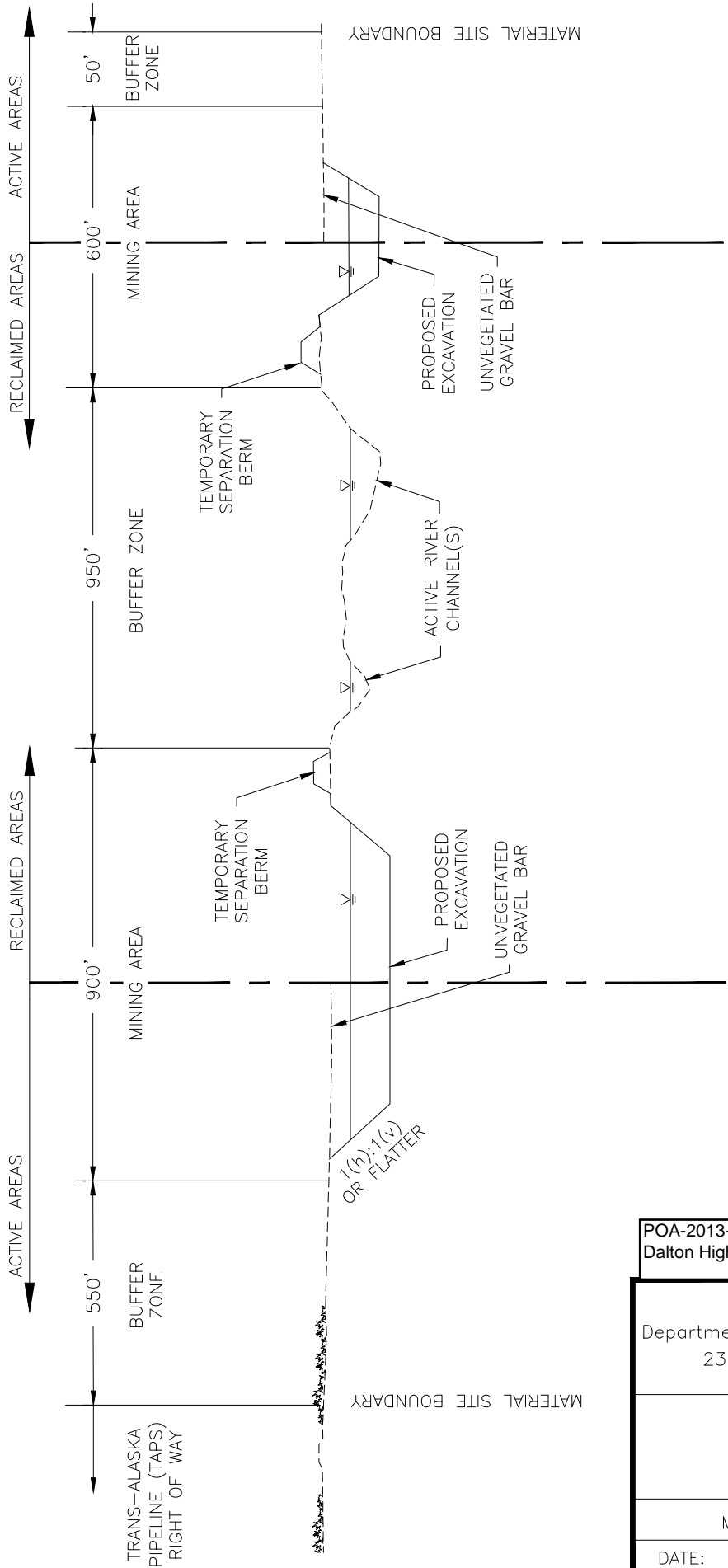


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Material Site 65-9-026-2 Plan View
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MATERIAL SITE MS 65-9-026-2
 CROSS SECTION X-X'
 NOT TO SCALE

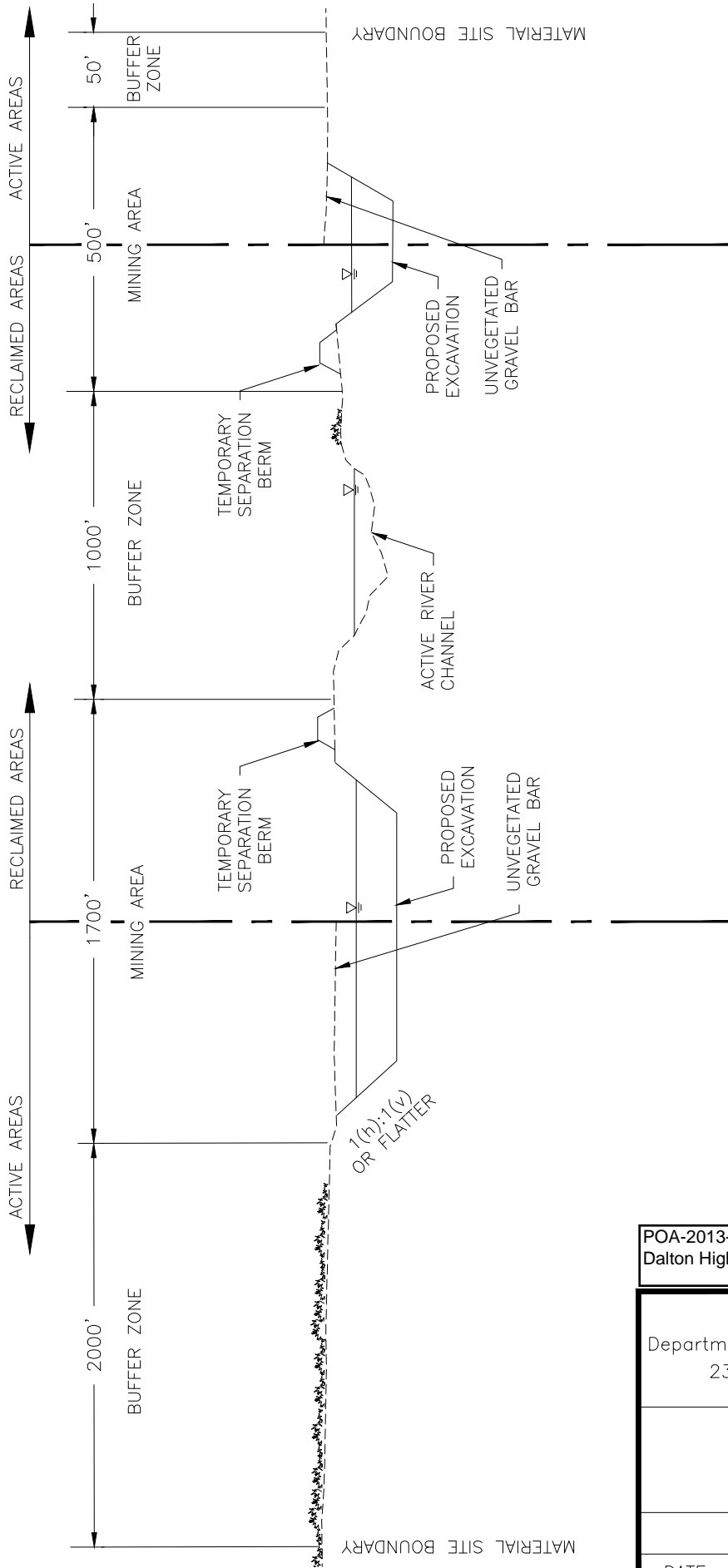
NOTES:
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MS 65-9-026-2 SECTION X-X'

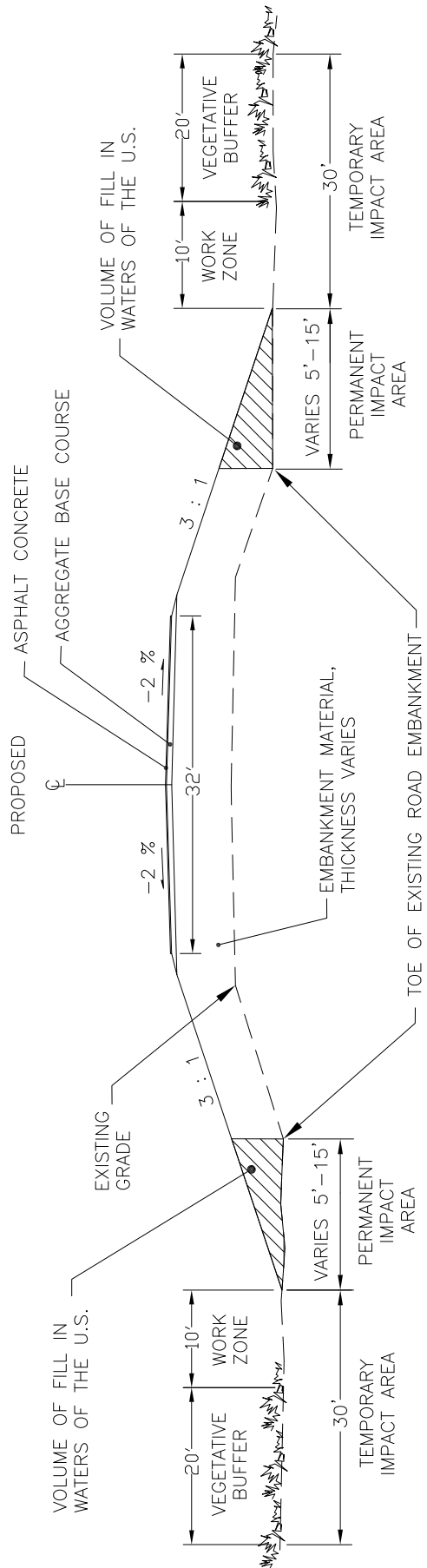


MATERIAL SITE MS 65-9-026-2
 CROSS SECTION Y-Y'
 NOT TO SCALE

NOTES:
 1. SEE MATERIAL SITE 65-9-026-2 PLAN VIEW FOR DETAILS (SHEET 29).

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MS 65-9-026-2	SECTION Y-Y'
DATE: JANUARY 2014	SHEET: 31 OF: 36



ROADWAY TYPICAL SECTION
NOT TO SCALE

NOTES:

1. THE TEMPORARY IMPACT AREA EXTENDS 30' ON EITHER SIDE OF THE PERMANENT IMPACT AREA, AND IS DIVIDED INTO TWO SECTIONS; THE WORK ZONE; AND THE VEGETATIVE BUFFER. AS SHOWN ABOVE.
2. WORK WITHIN THE WORK ZONE INCLUDES VEGETATIVE CLEARING (NO GRUBBING), AND EQUIPMENT ACCESS TO ALLOW THE CONTRACTOR ADEQUATE ROOM TO CONSTRUCT EMBANKMENT SLOPES.
3. THE NATURAL VEGETATIVE MAT SHALL BE PRESERVED WITHIN THE VEGETATIVE BUFFER ZONE, AND SHALL SERVE AS A BEST MANAGEMENT PRACTICE (BMP) TO PROTECT SURROUNDING WETLAND AREAS FROM SEDIMENT RUNOFF.

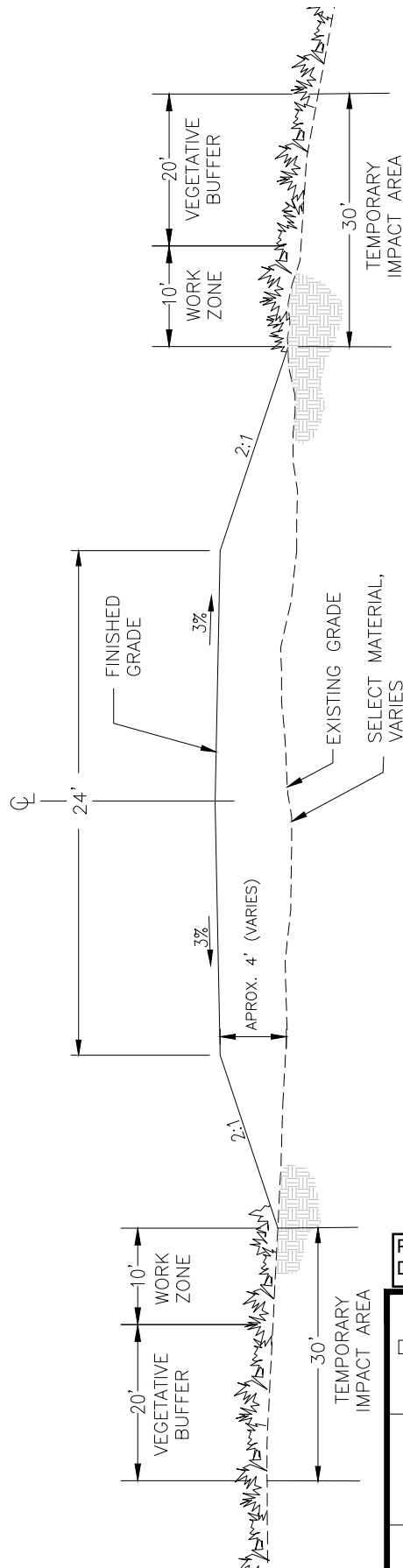
POA-2013-665, Sagavanirktok River
Dalton Highway MP 401-414

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2301 Peger Rd. Fairbanks, AK 99709

DALTON HWY MP 401-414
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61366

ROADWAY TYPICAL SECTION

DATE: JANUARY 2014 SHEET: 32 OF: 36



MATERIAL SITE ACCESS ROAD
TYPICAL SECTION
NOT TO SCALE

NOTES:

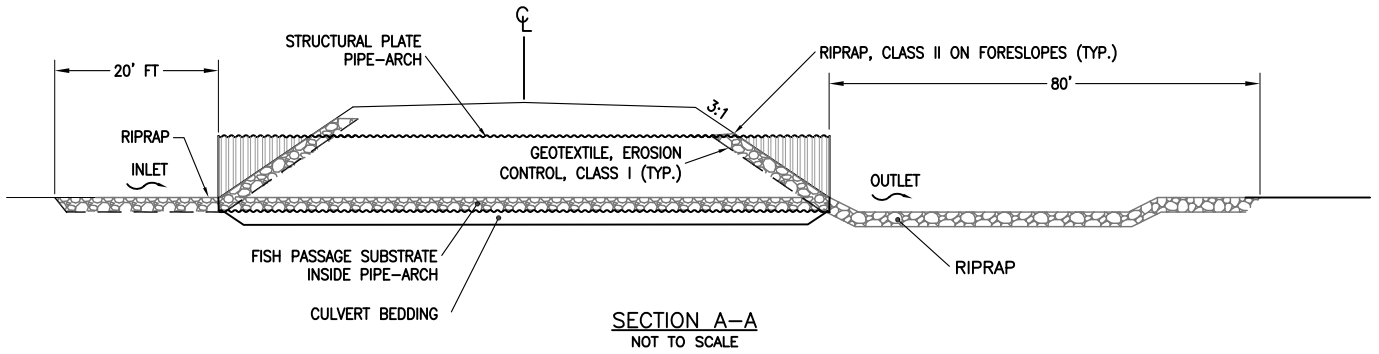
1. THE TEMPORARY IMPACT AREA EXTENDS 30' ON EITHER SIDE OF THE PERMANENT IMPACT AREA, AND IS DIVIDED INTO TWO SECTIONS; THE WORK ZONE, AND THE VEGETATIVE BUFFER, AS SHOWN ABOVE.
2. WORK WITHIN THE WORK ZONE INCLUDES VEGETATIVE CLEARING (NO GRUBBING), AND EQUIPMENT ACCESS TO ALLOW THE CONTRACTOR ADEQUATE ROOM TO CONSTRUCT EMBANKMENT SLOPES.
3. THE NATURAL VEGETATIVE MAT SHALL BE PRESERVED WITHIN THE VEGETATIVE BUFFER ZONE, AND SHALL SERVE AS A BEST MANAGEMENT PRACTICE (BMP) TO PROTECT SURROUNDING WETLAND AREAS FROM SEDIMENT RUNOFF.
4. SEE MATERIAL SITE PLAN VIEW SHEETS (SHEETS 23, 26, & 29) FOR PROPOSED MATERIAL SITE ACCESS ROAD LOCATION INFORMATION.

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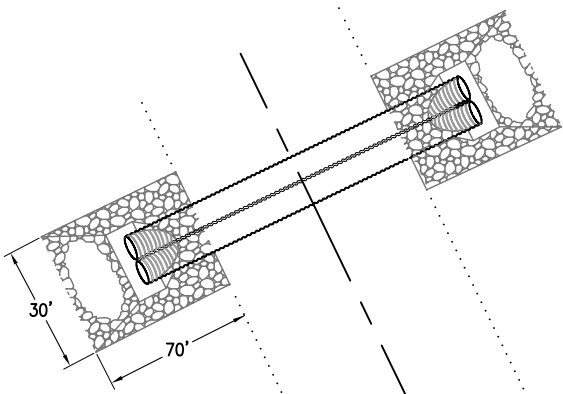
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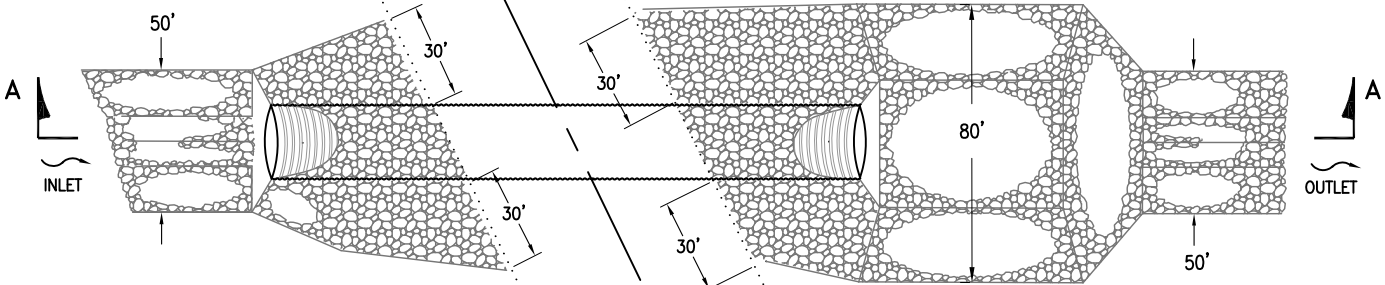
MATERIAL SITE ACCESS ROAD TYPICAL SECTION



FLOOD RELIEF PIPES			
Station	Milepost (MP)	Diameter (D) in	Length ft
2561+38	410.31	60	61
2561+41	410.31	60	61



FISH PASSAGE PIPE			
Station	Milepost (MP)	Diameter (D) in	Length ft
2560+15	410.3	126	73



FISH PASSAGE PIPE AND FLOOD RELIEF PIPE DETAIL
NOT TO SCALE

NOTE: DIMENSIONS ARE APPROXIMATE AND SUBJECT TO FIELD ADJUSTMENTS TO FIT EXISTING CHANNEL CONFIGURATIONS

POA-2013-665, Sagavanirktok River
Dalton Highway MP 401-414

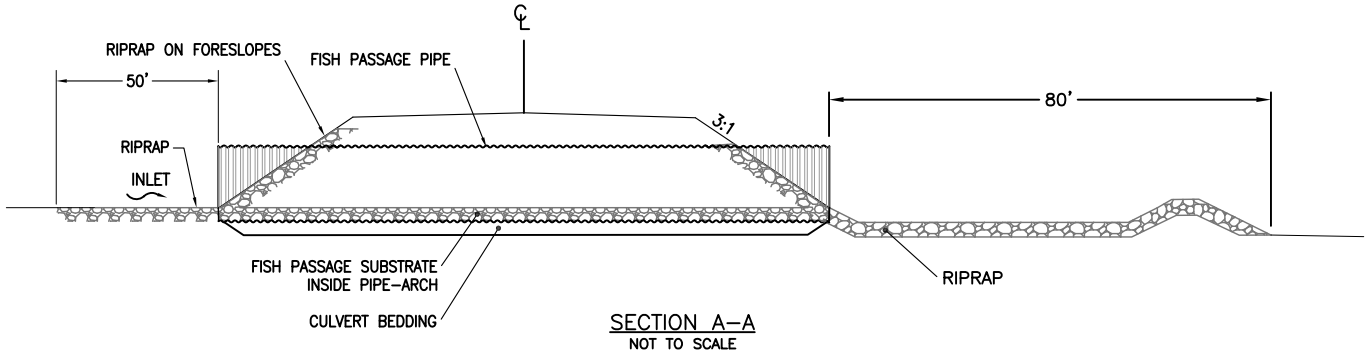
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REHABILITATION PROJECT
61366

FISH PASSAGE PIPE & FLOOD RELIEF PIPE DETAIL
MP 410.3

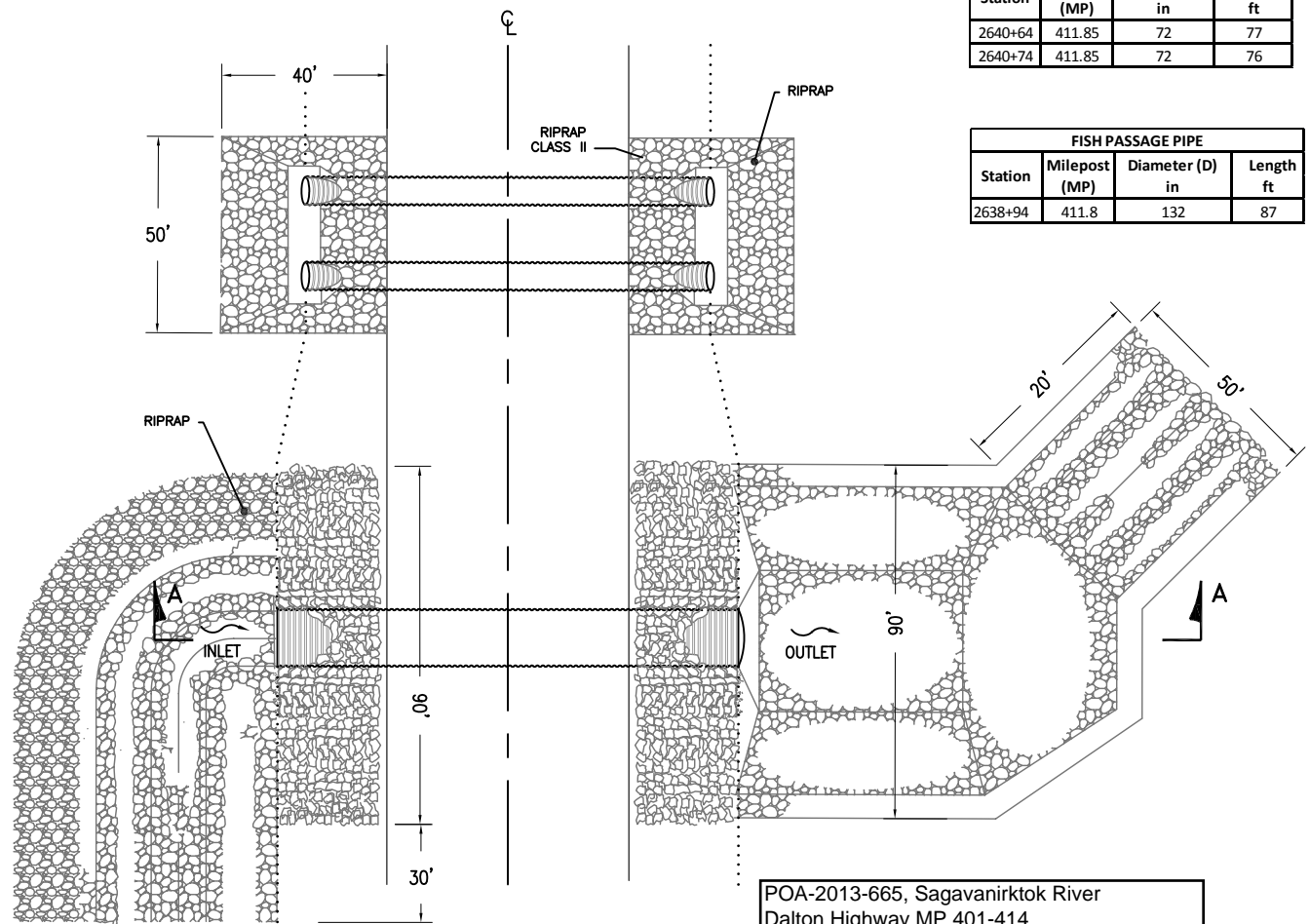
DATE: MAY 2014 SHEET: 34 OF 36

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FLOOD RELIEF PIPES			
Station	Milepost (MP)	Diameter (D) in	Length ft
2640+64	411.85	72	77
2640+74	411.85	72	76

FISH PASSAGE PIPE			
Station	Milepost (MP)	Diameter (D) in	Length ft
2638+94	411.8	132	87



POA-2013-665, Sagavanirktok River
Dalton Highway MP 401-414

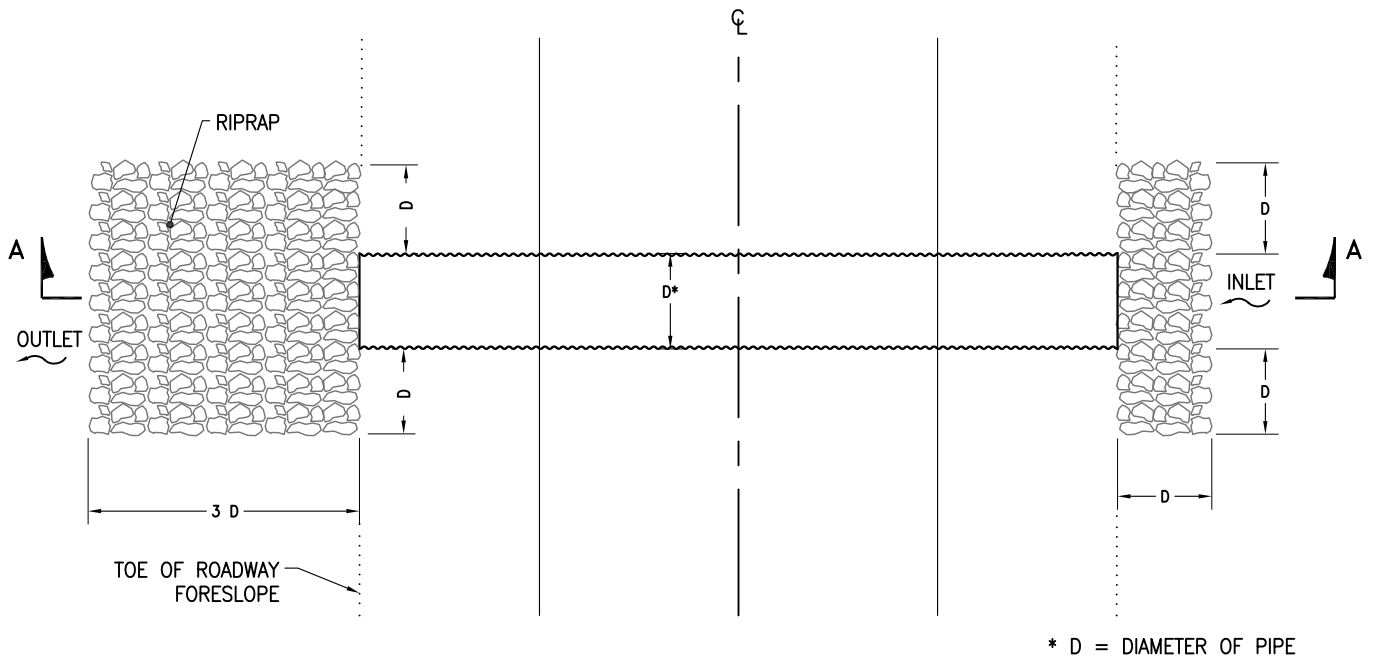
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Department of Transportation and Public Facilities
APPLICANT/AGENT: State of Alaska
2301 Peger Rd. Fairbanks, AK 99709

DALTON HWY MP 401-414
REHABILITATION PROJECT
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FISH PASSAGE PIPE & FLOOD RELIEF PIPE DETAIL
MP 411.8

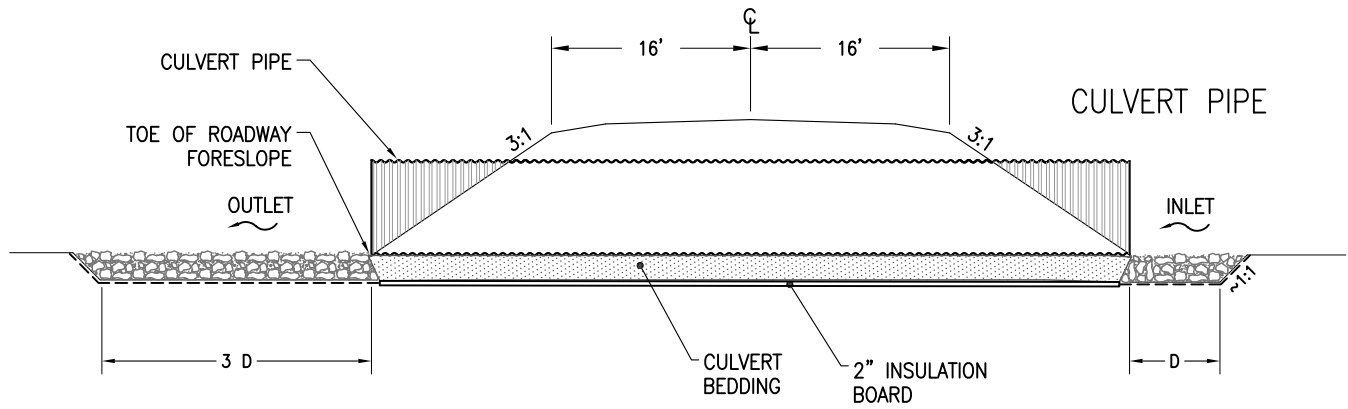
DATE: MAY 2014 SHEET: 35 OF 36

NOTE: DIMENSIONS ARE APPROXIMATE AND SUBJECT TO FIELD ADJUSTMENTS TO FIT EXISTING CHANNEL CONFIGURATIONS



* D = DIAMETER OF PIPE

TYPICAL CULVERT DETAIL
N.T.S.



SECTION A-A
N.T.S.

POA-2013-665, Sagavanirktok River
Dalton Highway MP 401-414

NOTE: DIMENSIONS ARE APPROXIMATE AND SUBJECT TO FIELD ADJUSTMENTS TO FIT EXISTING CHANNEL CONFIGURATIONS AND DESIGN FLOW RATES

STATE OF ALASKA Department of Transportation and Public Facilities APPLICANT/AGENT: State of Alaska 2301 Peger Rd. Fairbanks, AK 99709	
DALTON HWY MP 401-414 REHABILITATION PROJECT 61366	
TYPICAL CROSS CULVERT	
DATE: MAY 2014	SHEET: 36 OF 36

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