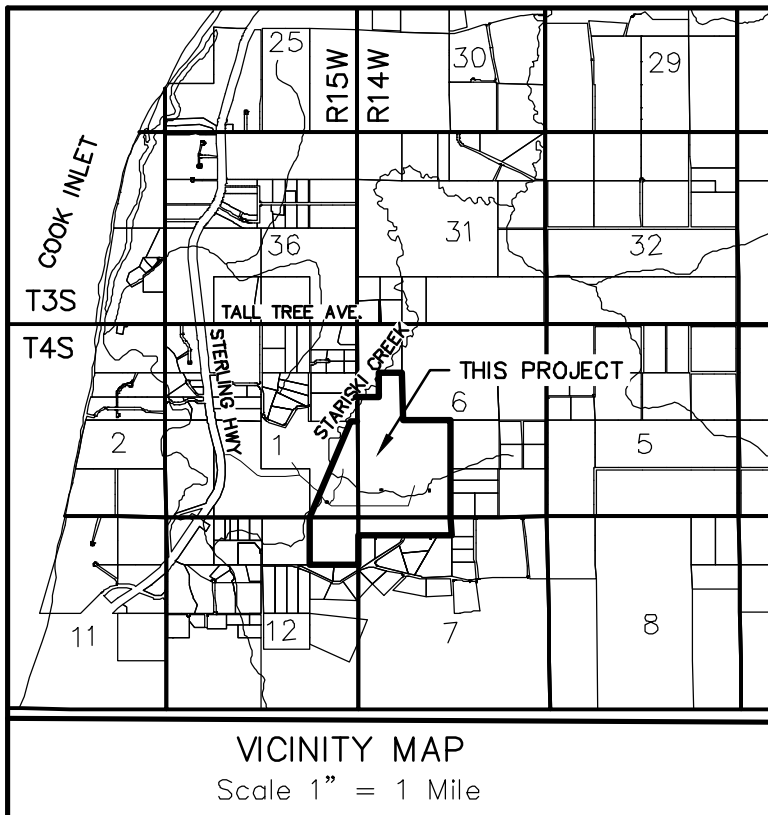
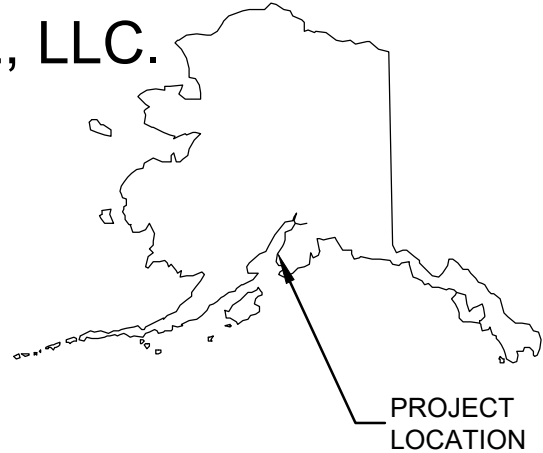


**TRIMARK EARTH RESERVE, LLC.
SE1/4 & E1/2 SE1/4 & SW1/4
NE1/4 EXCL. STARISKI
RIDGE No. 2
ANCHOR PONT, ALASKA**



LEGEND	
	WETLAND
	PROPOSED ROAD SHOULDER
	DAYLIGHT LIMITS
	SECTION LINE
	PROPERTY LINE

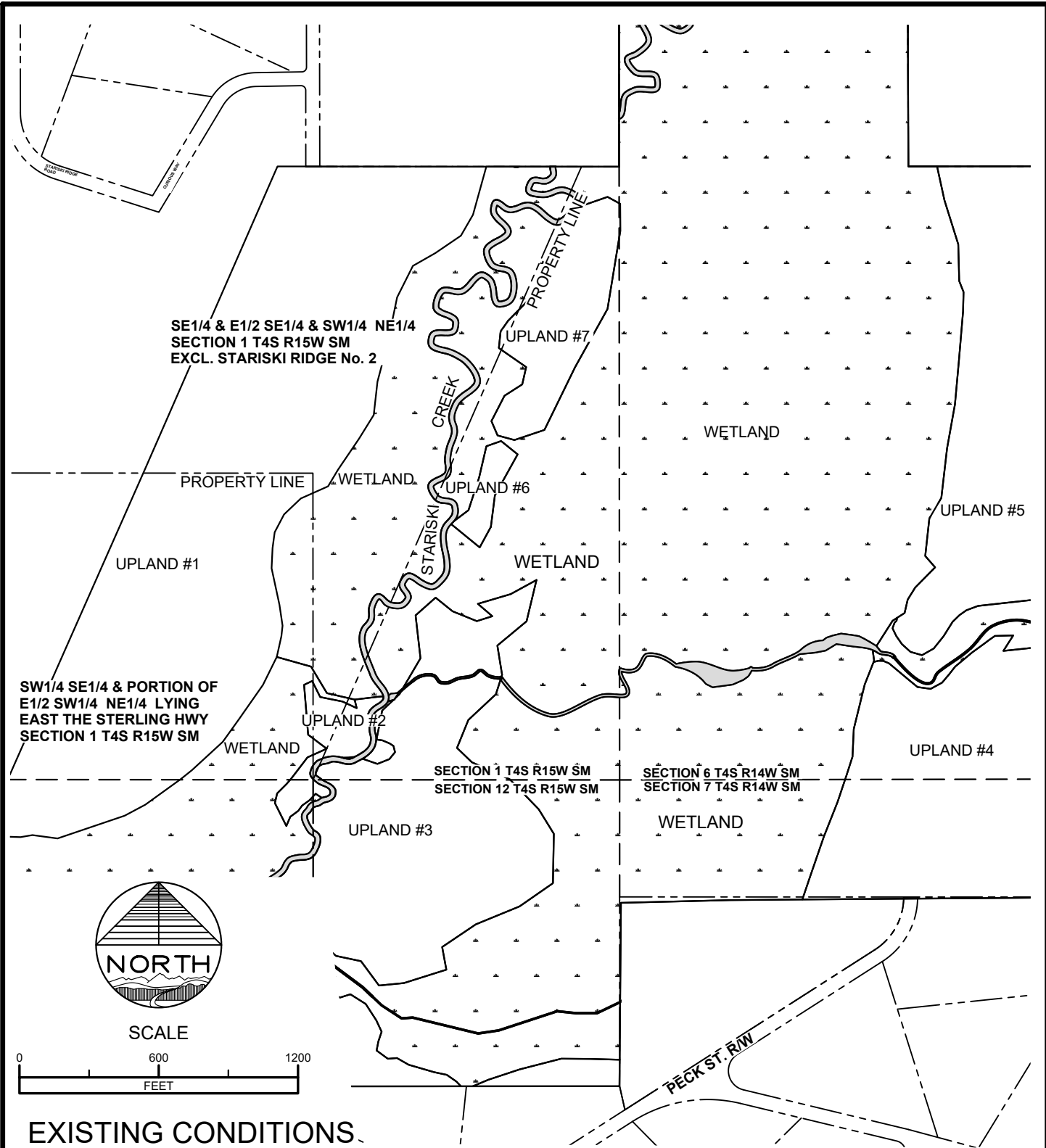
INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	COVER
2	EXISTING CONDITIONS
3	PROPOSED ACCESS OVERVIEW
4-8	PROPOSED ACCESS
9-15	DETAILS
16	WETLAND IMPACT TABLE

WETLAND MAPPING UTILIZED IN THIS REVISION IS FROM DELINEATION COMPLETED BY RESTORATION SCIENCE & ENGINEERING, LLC IN SEPTEMBER 2019.

DESCRIPTION FILE: POA-2017-00546 WATERBODY: STARISKI CREEK
LOCATION T4S, R15W, S1 SEWARD MERIDIAN LAT/LONG; 59° 51' 09"N, 151° 46' 20" W
APPLICANTS TRIMARK EARTH RESERVE, LLC. 34481 NORTH FORK RD.; ANCHOR POINT, AK 99556



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SCALE: 1"= 1 MILE
PROJECT NO. 184013
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EXISTING CONDITIONS.

DESCRIPTION

FILE: POA-2017-00546
 WATERBODY: STARISKI CREEK

LOCATION

T4S, R15W, S1 SEWARD MERIDIAN
 LAT/LONG; 59° 51' 09"N, 151° 46' 20" W

APPLICANT'S

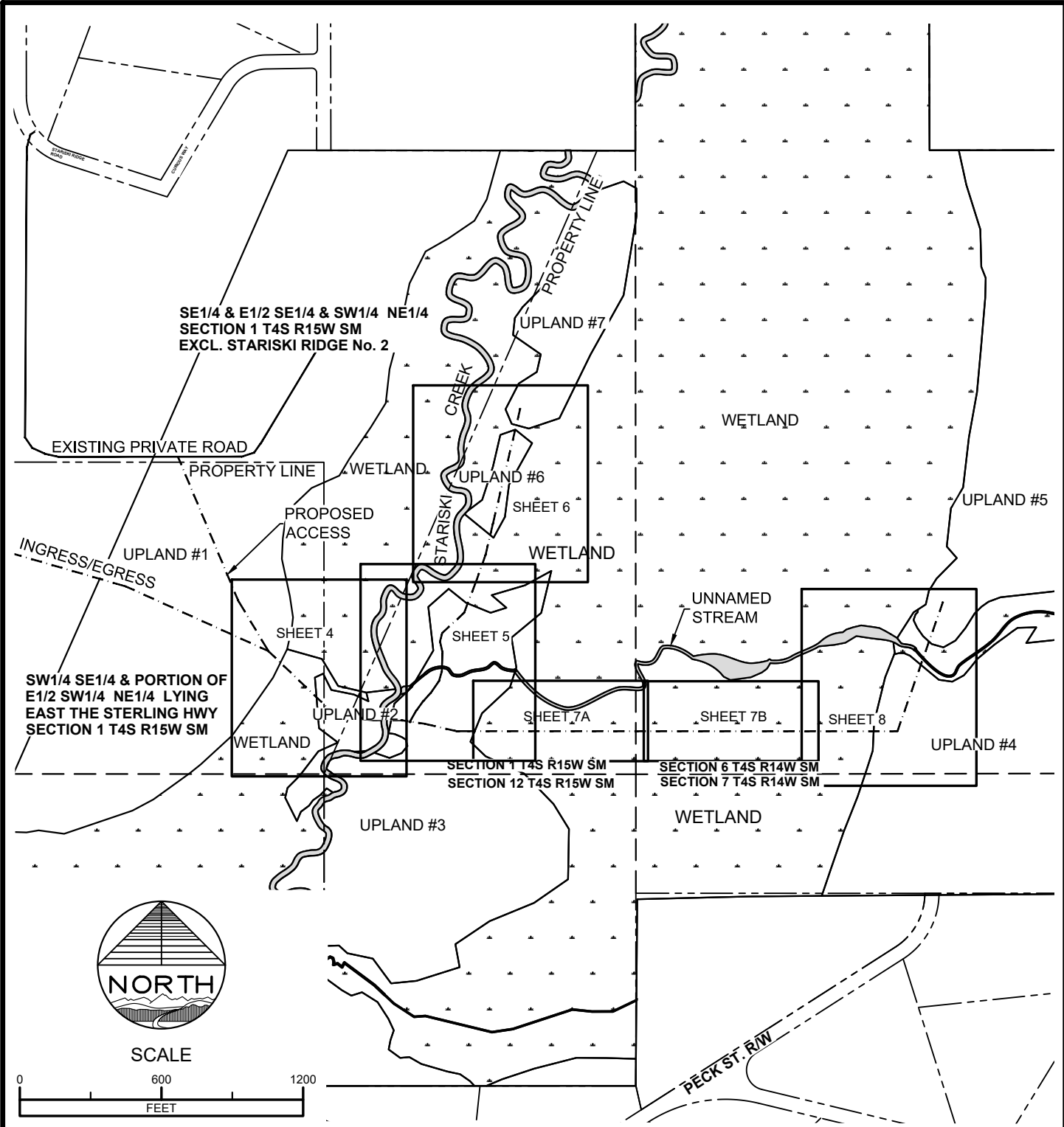
TRIMARK EARTH RESERVE, LLC.
 34481 NORTH FORK RD.; ANCHOR POINT, AK 99556



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 CONSULTING INC.

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 DATE: 10/29/2019
 DRAWN BY: GMD/BGB
 SCALE: 1"= 600'
 PROJECT NO. 184013
 SHEET

2 OF 16

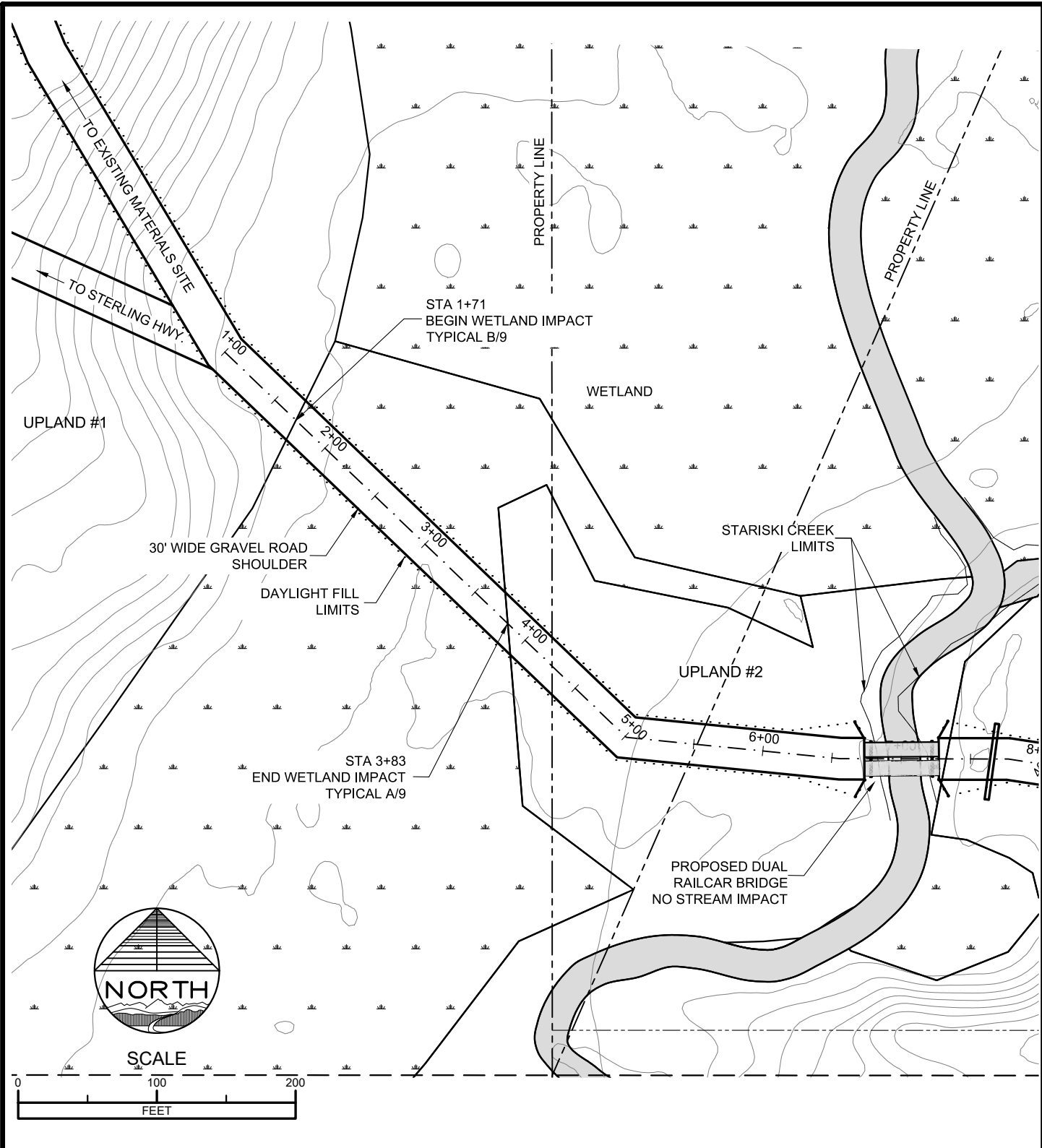


PROPOSED

DESCRIPTION	FILE: POA-2017-00546 WATERBODY: STARISKI CREEK
LOCATION	T4S, R15W, S1 SEWARD MERIDIAN LAT/LONG; 59° 51' 09"N, 151° 46' 20" W
APPLICANT'S	TRIMARK EARTH RESERVE, LLC. 34481 NORTH FORK RD.; ANCHOR POINT, AK 99556

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PROJECT NO. 184013
SHEET 3 OF 16



DESCRIPTION FILE: POA-2017-00546 WATERBODY: STARISKI CREEK	
LOCATION T4S, R15W, S1 SEWARD MERIDIAN LAT/LONG; 59° 51' 09"N, 151° 46' 20" W	
APPLICANT'S TRIMARK EARTH RESERVE, LLC. 34481 NORTH FORK RD.; ANCHOR POINT, AK 99556	

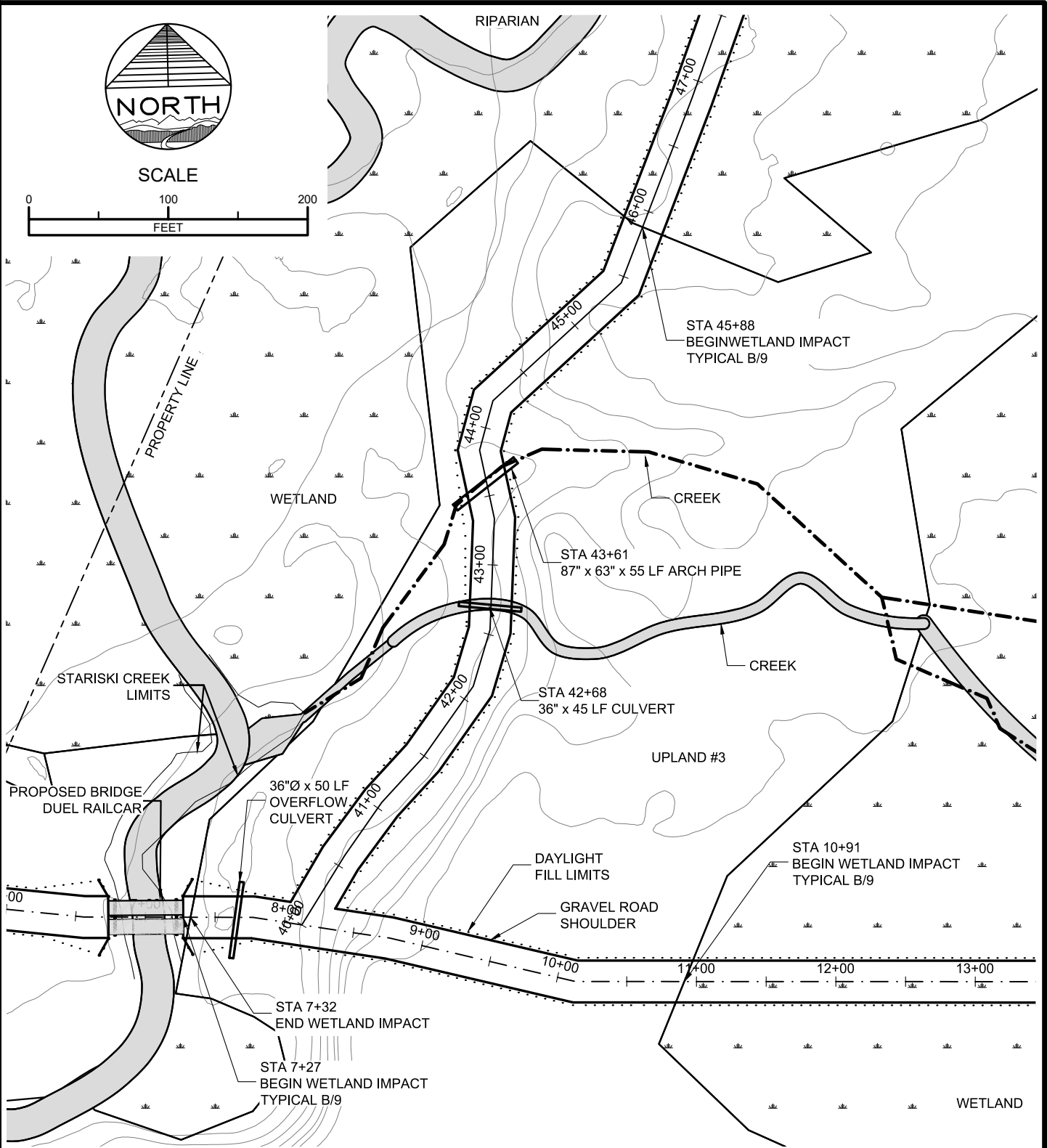
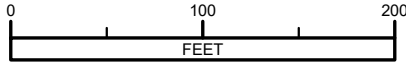


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SCALE: 1"= 100'
PROJECT NO. 184013
SHEET 4 OF 16



SCALE



DESCRIPTION

FILE: POA-2017-00546
WATERBODY: STARISKI CREEK

LOCATION

T4S, R15W, S1 SEWARD MERIDIAN
LAT/LONG; 59° 51' 09"N, 151° 46' 20" W

APPLICANT'S

TRIMARK EARTH RESERVE, LLC.
34481 NORTH FORK RD.; ANCHOR POINT, AK 99556



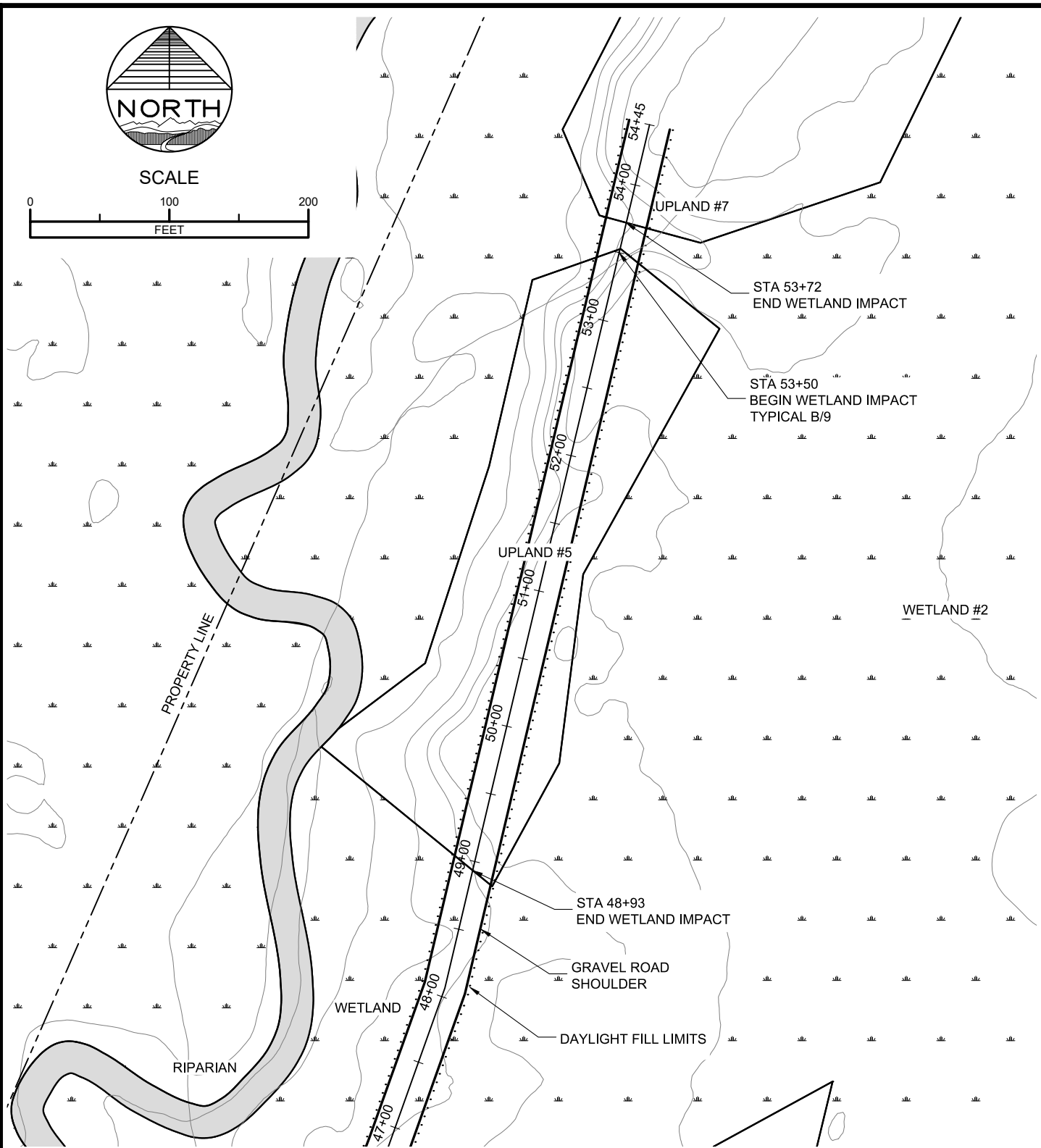
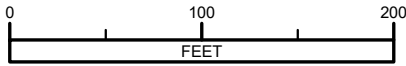
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DATE: 10/29/2019
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SCALE: 1"= 100'
PROJECT NO. 184013

SHEET
5 OF 16



SCALE



DESCRIPTION

FILE: POA-2017-00546
WATERBODY: STARISKI CREEK

LOCATION

T4S, R15W, S1 SEWARD MERIDIAN
LAT/LONG; 59° 51' 09"N, 151° 46' 20" W

APPLICANT'S

TRIMARK EARTH RESERVE, LLC.
34481 NORTH FORK RD.; ANCHOR POINT, AK 99556

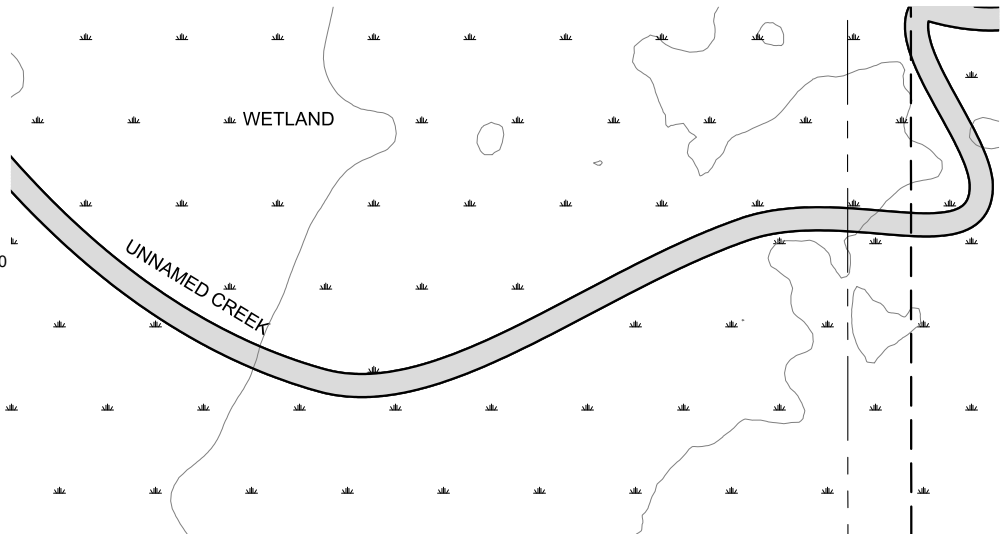
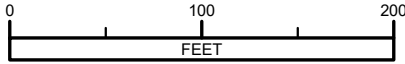


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DATE: 10/29/2019
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SCALE: 1"= 100'
PROJECT NO. 184013
SHEET 6 OF 16

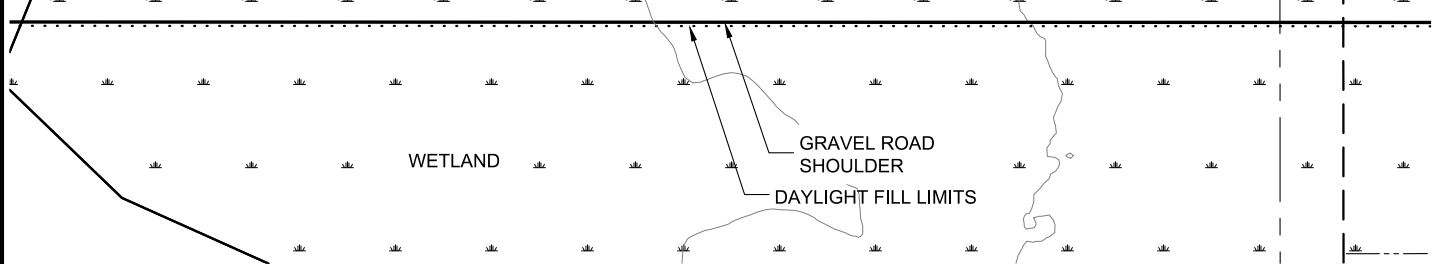


SCALE



STA 10+91
BEGIN WETLAND IMPACT
TYPICAL B/9

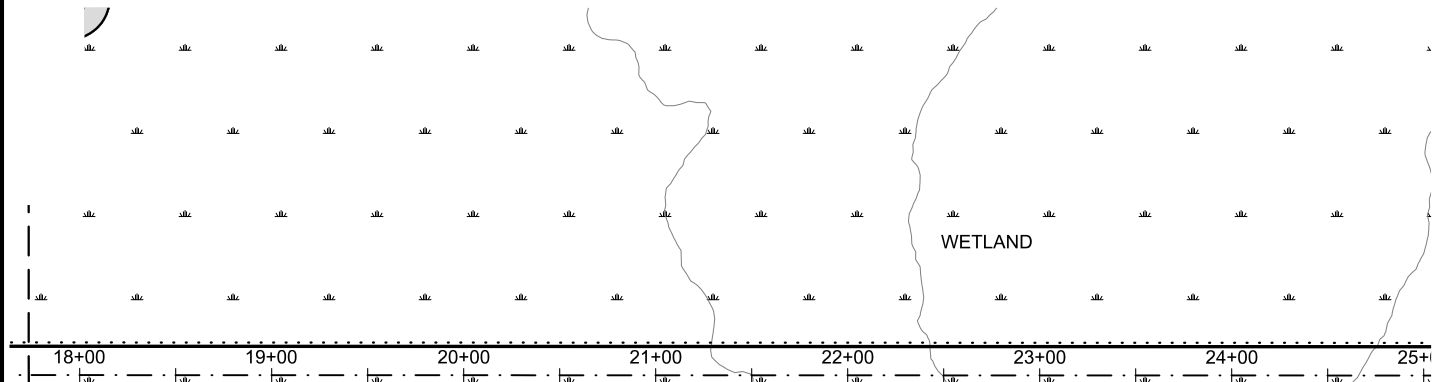
11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00



WETLAND

GRAVEL ROAD SHOULDER

DAYLIGHT FILL LIMITS



WETLAND

18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00

WETLAND

GRAVEL ROAD SHOULDER

DAYLIGHT FILL LIMITS

SECTION 6
T4S R15W SM

DESCRIPTION

FILE: POA-2017-00546
WATERBODY: STARISKI CREEK

LOCATION

T4S, R15W, S1 SEWARD MERIDIAN
LAT/LONG; 59° 51' 09"N, 151° 46' 20" W

APPLICANT'S

TRIMARK EARTH RESERVE, LLC.
34481 NORTH FORK RD.; ANCHOR POINT, AK 99556

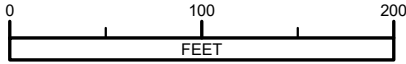


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DATE: 10/29/2019
DRAWN BY: GMD/BGB
SCALE: 1"= 100'
PROJECT NO. 184013
SHEET 7 OF 16



SCALE



WETLAND

UPLAND #5

RIPARIAN

UNNAMED CREEK

36"Ø x 45 LF CULVERT

STA 31+80
BEGIN WETLAND IMPACT
TYPICAL B/9

STA 32+84
END WETLAND IMPACT

25+00 26+00 27+00 28+00 29+00

STA 27+80
END WETLAND IMPACT

WETLAND

GRAVEL ROAD
SHOULDER
DAYLIGHT FILL LIMITS

UPLAND #4

DESCRIPTION

FILE: POA-2017-00546
WATERBODY: STARISKI CREEK

LOCATION

T4S, R15W, S1 SEWARD MERIDIAN
LAT/LONG; 59° 51' 09"N, 151° 46' 20" W

APPLICANT'S

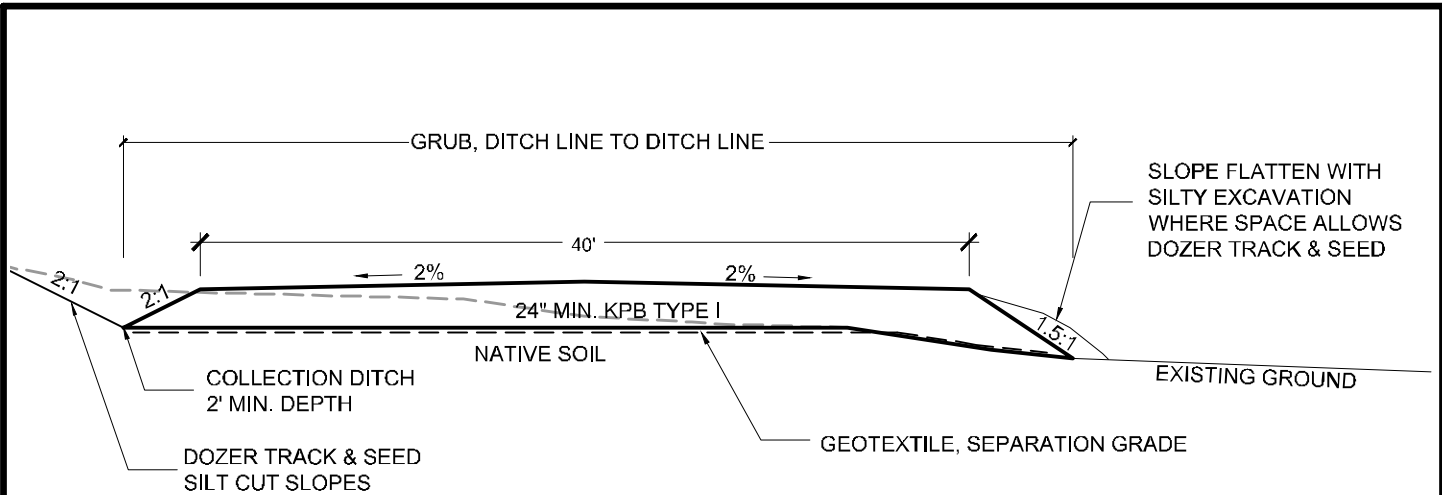
TRIMARK EARTH RESERVE, LLC.
34481 NORTH FORK RD.; ANCHOR POINT, AK 99556



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REVISION: 6
DATE: 10/29/2019
DRAWN BY: GMD/BGB
SCALE: 1"= 100'
PROJECT NO. 184013

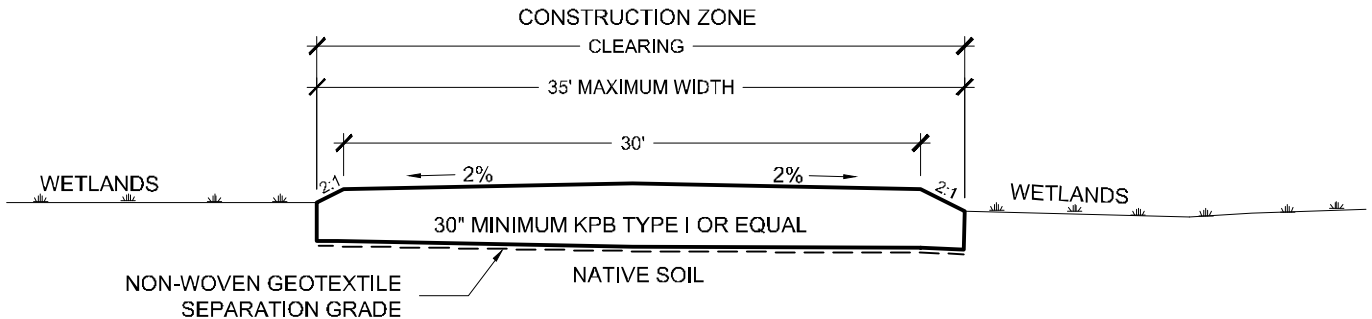
SHEET
8 OF 16



NOTES:

1. GRAVEL FILL SHALL BE PLACED IN NO GREATER THAN 8" LIFTS AND COMPACTED TO 95% OF MAXIMUM DENSITY.
2. TOP 4" SELECTED MATERIAL TYPE A SHALL BE COBBLE FREE (3" MINUS).
3. GRAVEL FILL SHALL BE UNDERLAIN WITH GEOTEXTILE, SEPARATION GRADE, WHERE SOFT UNDERLYING SOILS ARE ENCOUNTERED.
4. RESERVE TOPSOIL FOR STABILIZATION AND SEEDING ON CUT SLOPES.

A
9 **40' WIDE ROAD SECTION - UPLANDS**
SCALE: 1" = 10'



NOTES:

1. GRAVEL FILL SHALL BE PLACED IN NO GREATER THAN 12" LIFTS AND COMPACTED TO 95% OF MAXIMUM DENSITY, AS DETERMINED BY AASHTO T 180, METHOD D.
2. TOP 4" SELECTED MATERIAL TYPE A SHALL BE COBBLE FREE (3" MINUS).
3. GRAVEL FILL SHALL BE UNDERLAIN WITH NON-WOVEN GEOTEXTILE, GEOTEX NW 601 OR EQUAL.
4. IN WETLAND AREAS GEOGRID, BX 1100 OR EQUAL, MAY BE USED TO HELP STABILIZE GRAVEL FILL AS DETERMINED IN THE FIELD.
5. IN WETLAND AREAS CONTRACTOR MAY NOT PLACE FILL, REMOVE NATIVE MATERIAL, OR RUN EQUIPMENT OUTSIDE DESIGNATED CONSTRUCTION ZONE.

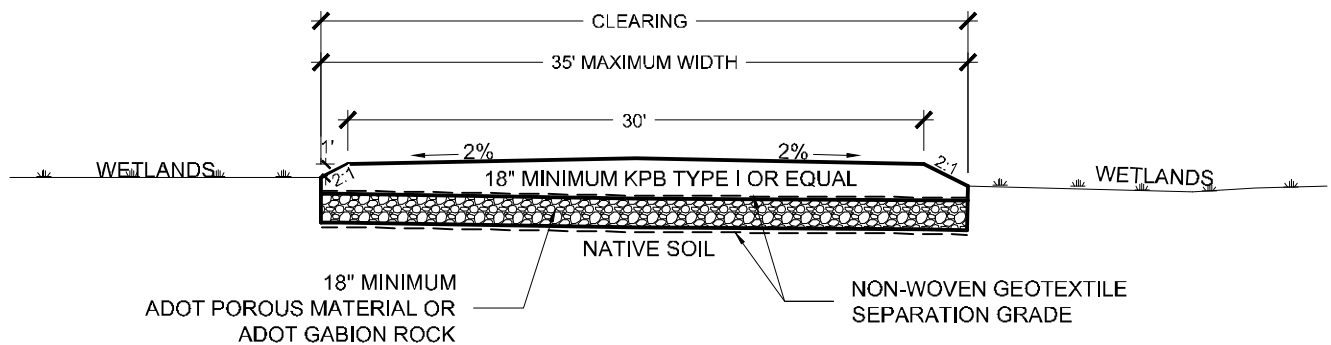
B
9 **30' WIDE ROAD SECTION - WETLANDS**
SCALE: 1" = 10'

DESCRIPTION	FILE: POA-2017-00546 WATERBODY: STARISKI CREEK
LOCATION	T4S, R15W, S1 SEWARD MERIDIAN LAT/LONG; 59° 51' 09"N, 151° 46' 20" W
APPLICANT'S	TRIMARK EARTH RESERVE, LLC. 34481 NORTH FORK RD.; ANCHOR POINT, AK 99556



MCLANE
CONSULTING INC.

REVISION: 6
DATE: 10/29/2019
DRAWN BY: GMD/BGB
SCALE: 1" = 100'
PROJECT NO. 184013
SHEET 9 OF 16



NOTES:

1. ROCK UNDER DRAIN SECTIONS SHALL BE 15' IN LENGTH AND FULL WIDTH OF ROAD.
2. INSTALL NON-WOVEN GEOTEXTILE ABOVE AND BELOW THE UNDER DRAIN ROCK MATERIAL.
3. LOCATIONS FOR UNDER DRAINS SHALL BE DETERMINED IN THE FIELD AT AN INSTALLATION FREQUENCY OF AT LEAST ONE PER 100' OF ROAD ALIGNMENT.

A
10

ROCK UNDERDRAIN ROAD SECTION - WETLANDS

SCALE: 1" = 10'

DESCRIPTION

FILE: POA-2017-00546
WATERBODY: STARISKI CREEK

LOCATION

T4S, R15W, S1 SEWARD MERIDIAN
LAT/LONG; 59° 51' 09"N, 151° 46' 20" W

APPLICANT'S

TRIMARK EARTH RESERVE, LLC.
34481 NORTH FORK RD.; ANCHOR POINT, AK 99556



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CONSULTING INC.

REVISION: 6

DATE: 10/29/2019

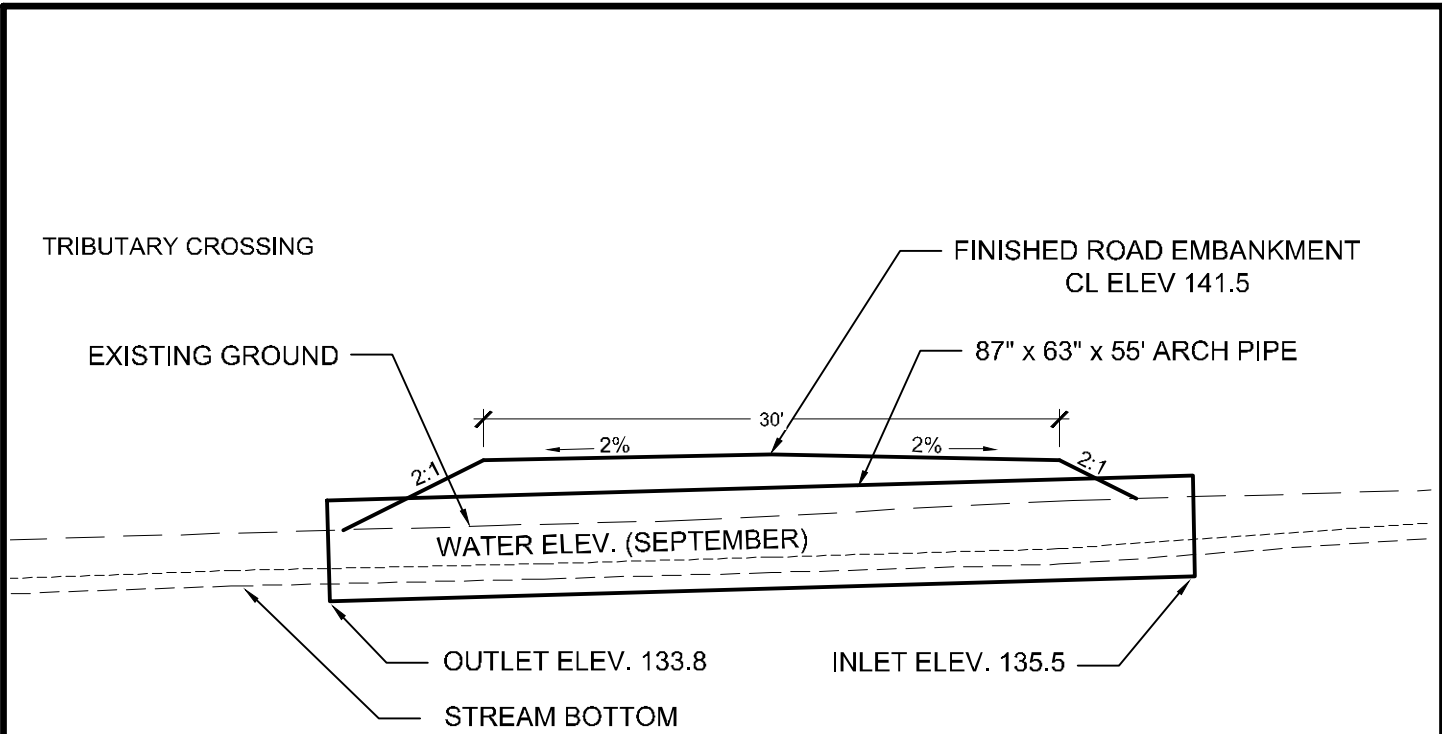
DRAWN BY: GMD/BGB

SCALE: 1" = 10'

PROJECT NO. 184013

SHEET

10 OF 16




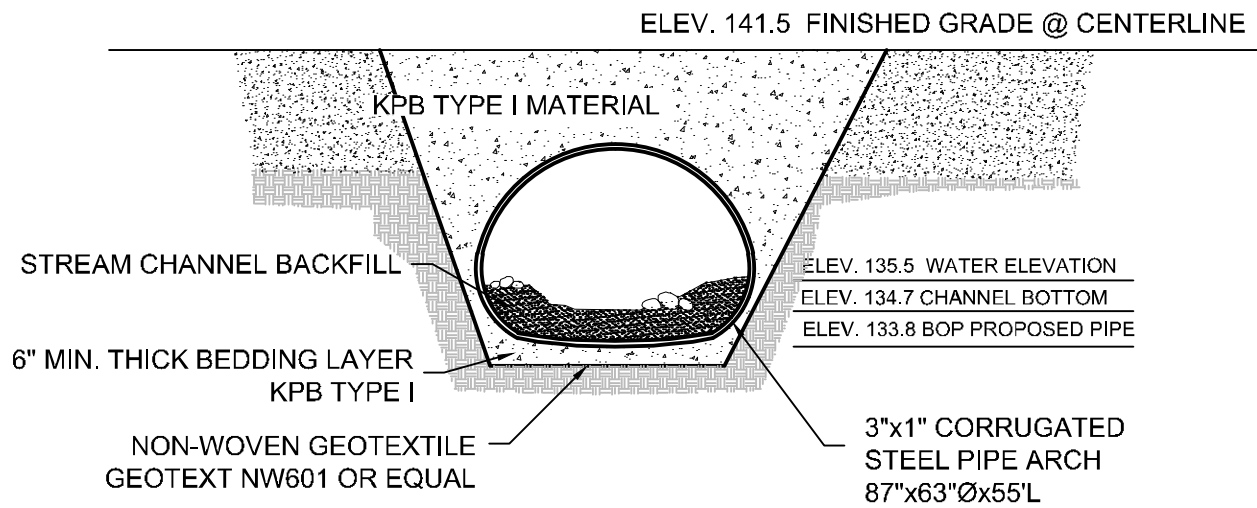
1. CONTRACTOR SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF AGENCY PERMITS.
2. NO IN-WATER EQUIPMENT WORK OR TRAFFIC. PREPARE STREAM DIVERSION AND DEWATERING PLAN BEFORE BEGINNING WORK. PASS STREAM FLOW THROUGH THE DIVERSION SYSTEM. USE SCREEN AT PUMP INTAKE SUMP TO INSURE FISH ARE NOT DRAWN INTO THE PUMP.
3. USE SUITABLE BMPs TO INSURE STREAM FLOW STAYS CLEAN DURING DIVERSION.
 - a. DIKE UPSTREAM AND DOWNSTREAM FLOW WITH SANDBAGS AND IMPERMEABLE LINER,
 - b. BYPASS WATER THROUGH PUMP WITH FISH SCREEN COVERED INTAKE,
 - c. DISCHARGE THROUGH NON-WOVEN GEOTEXTILE AND ENERGY DISSIPATOR TO PREVENT SCOUR,
 - d. ALLOW DISCHARGE TO OVERLAND FLOW TO DOWNSTREAM CHANNEL.
4. REMOVE ALL UNSUITABLE MATERIAL FROM EXCAVATION. DISPOSE OF AT CONTRACTOR FURNISHED SITE. SUITABLE MATERIAL MAY BE USED AS BACKFILL.
5. COMPACT ALL EMBANKMENT TO 95% MINIMUM. PROVIDE 18" MINIMUM COVER OVER PIPE.
6. USE LOCAL NATIVE MATERIAL INSIDE PIPE FOR CHANNEL BED. FORM 30" WIDE, MEANDERING LOW WATER CHANNEL. INSTALL SMALL BOULDERS (12") AT 6 FT. INTERVALS.

A
11

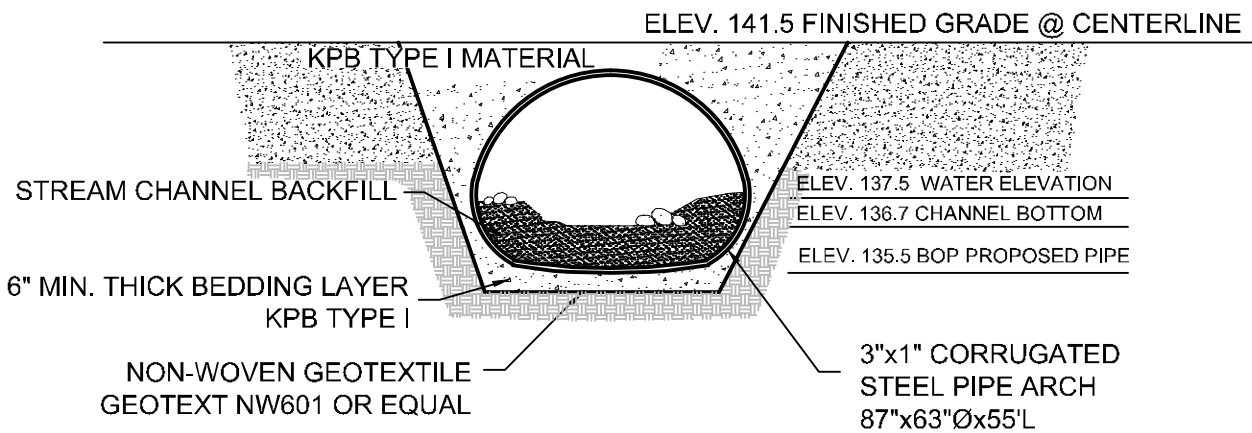
ROAD SECTION AT ARCH PIPE

SCALE: 1" = 10'

<p>DESCRIPTION FILE: POA-2017-00546 WATERBODY: STARISKI CREEK</p>	 MCLANE CONSULTING INC.	<p>REVISION: 6 DATE: 10/29/2019 DRAWN BY: GMD/BGB SCALE: 1"= 10' PROJECT NO. 184013 SHEET</p>
<p>LOCATION T4S, R15W, S1 SEWARD MERIDIAN LAT/LONG; 59° 51' 09"N, 151° 46' 20" W</p>		<p>11 OF 16</p>
<p>APPLICANT'S TRIMARK EARTH RESERVE, LLC. 34481 NORTH FORK RD.; ANCHOR POINT, AK 99556</p>		



A ARCH PIPE OUTLET
12 SCALE: 1" = 10'



B ARCH PIPE INLET
12 SCALE: 1" = 10'

DESCRIPTION

FILE: POA-2017-00546
WATERBODY: STARISKI CREEK

LOCATION

T4S, R15W, S1 SEWARD MERIDIAN
LAT/LONG; 59° 51' 09"N, 151° 46' 20" W

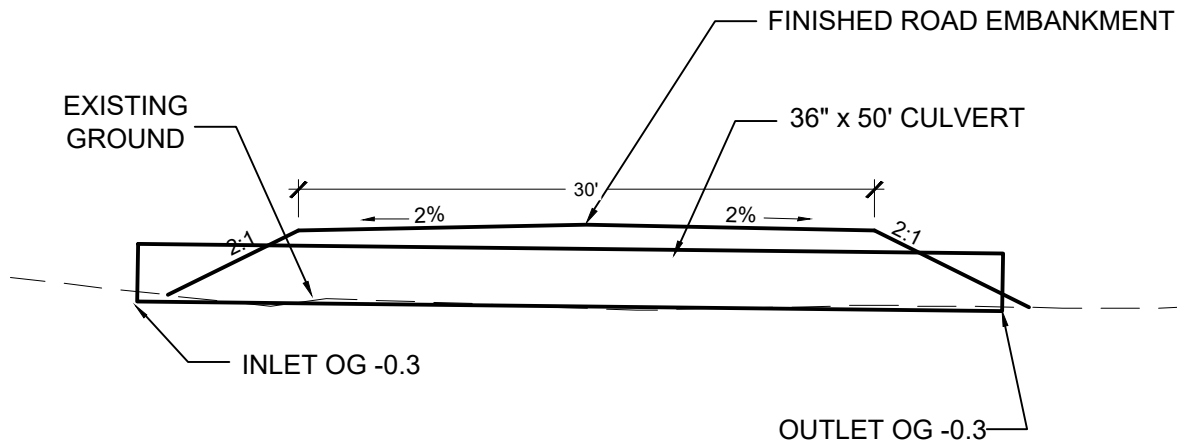
APPLICANT'S

TRIMARK EARTH RESERVE, LLC.
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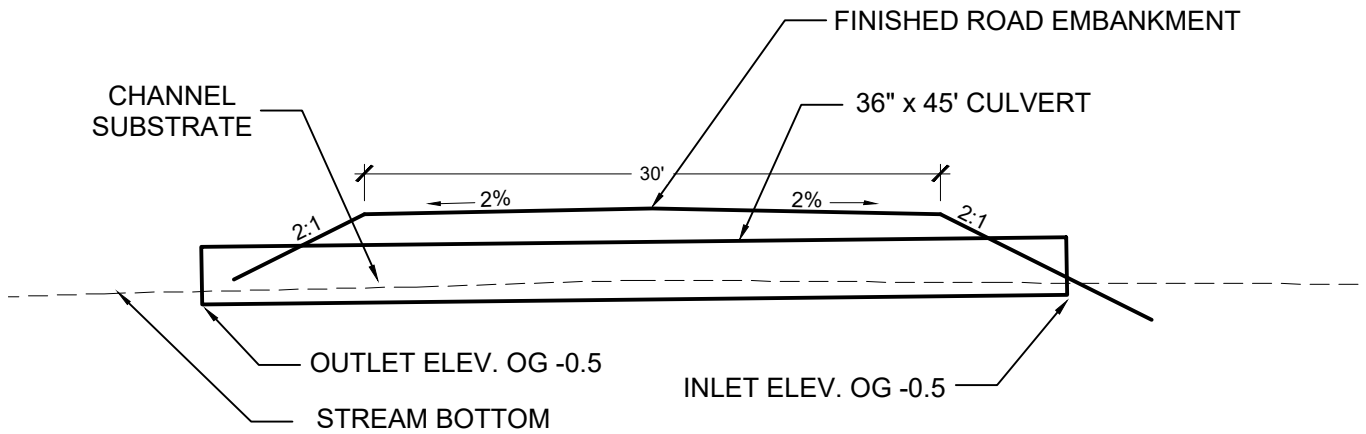
MCLANE
CONSULTING INC.

REVISION: 6
DATE: 10/29/2019
DRAWN BY: GMD/BGB
SCALE: 1"= 10'
PROJECT NO. 184013
SHEET 12 OF 16



1. REMOVE ALL UNSUITABLE MATERIAL FROM EXCAVATION. DISPOSE OF AT CONTRACTOR FURNISHED SITE. SUITABLE MATERIAL MAY BE USED AS BACKFILL.
2. COMPACT ALL EMBANKMENT TO 95% MINIMUM. PROVIDE 18" MINIMUM COVER OVER PIPE.

A STA 7+65 ROAD AT 36" CULVERT
 13 SCALE: 1" = 10'



1. SEE NOTES TYPICAL SECTION A/11.

B STA 32+14 ROAD AT 36" CULVERT
 13 SCALE: 1" = 10'

DESCRIPTION

FILE: POA-2017-00546
 WATERBODY: STARISKI CREEK

LOCATION

T4S, R15W, S1 SEWARD MERIDIAN
 LAT/LONG; 59° 51' 09"N, 151° 46' 20" W

APPLICANT'S

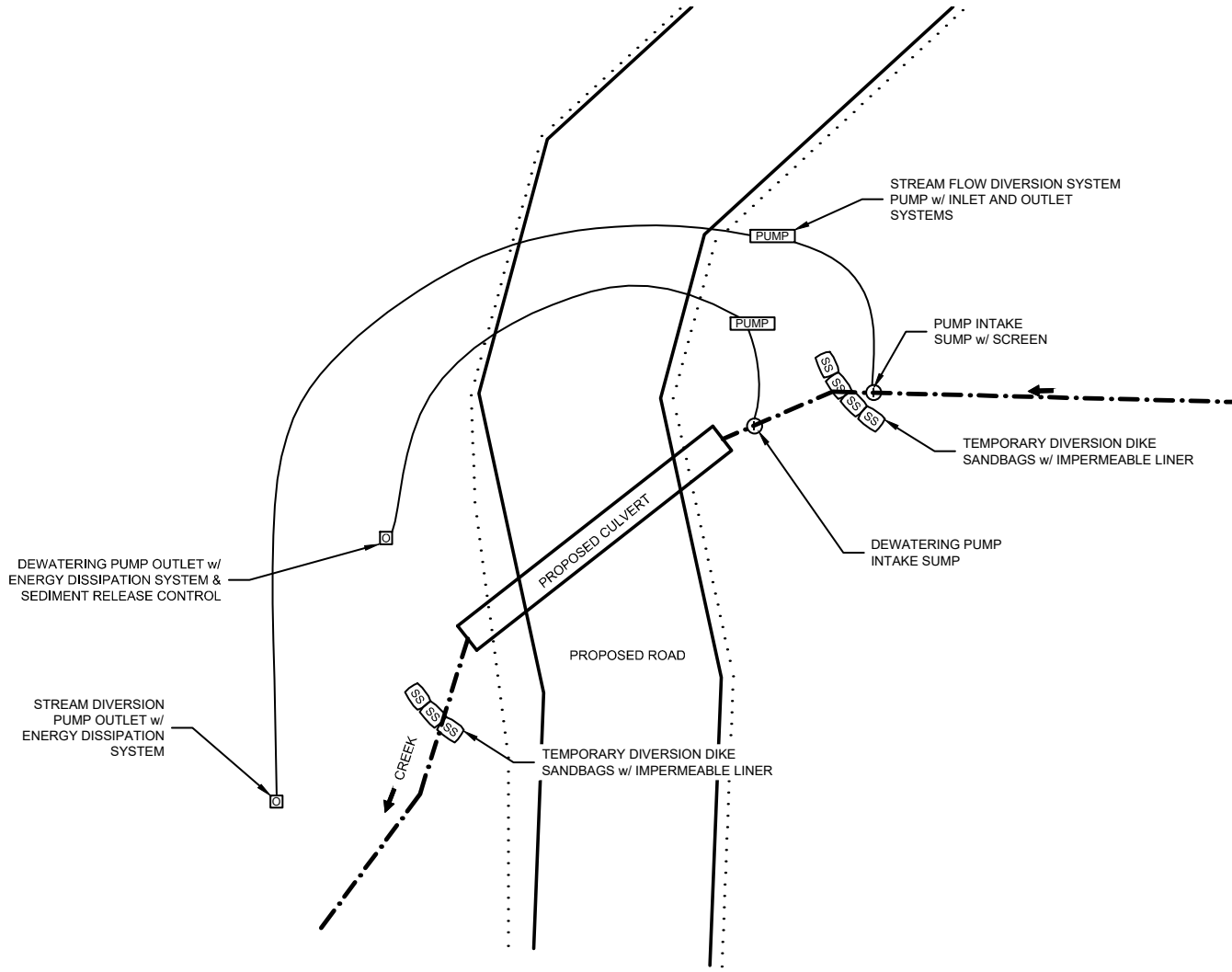
TRIMARK EARTH RESERVE, LLC.
 34481 NORTH FORK RD.; ANCHOR POINT, AK 99556



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REVISION: 6
 DATE: 10/29/2019
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 SCALE: -
 PROJECT NO. 184013
 SHEET

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NOTES:

1. ISOLATE WORK AREA FROM CREEK CHANNEL FLOW AND WATER OF SURROUNDING AREA.
2. NEW CULVERT AND CHANNEL SUBSTRATE SHALL BE PLACED IN THE DRY.
3. PUMP INTAKE MUST MEET ADFG PERMIT REQUIREMENTS. USE SCREEN AT PUMP INTAKE SUMP TO INSURE FISH ARE NOT DRAWN INTO THE PUMP.
4. ALL DISCHARGE POINTS REQUIRE TEMPORARY VELOCITY CONTROLS. PROVIDE FOR SEDIMENT REMOVAL FOR ALL DEWATERING ACTIVITY PRIOR TO DISCHARGE FROM THE PROJECT UNTIL ANY WATER OF THE UNITED STATES. DEWATERING DISCHARGE POINT MUST ALLOW FOR SEDIMENT REMOVAL THROUGH THE RIPARIAN VEGETATION BUFFER.
5. ALL DEWATERING PUMPS SHALL BE SIZED TO CARRY THE LARGEST FLOW REASONABLY EXPECTED TO OCCUR DURING CONSTRUCTION INCLUDING SURFACE AND SUBSURFACE FLOWS.
6. USE SUITABLE BMPs TO INSURE STREAM FLOW STAYS CLEAN DURING DIVERSION.
7. REMOVE DIVERSION AFTER STREAM FLOW HAS BEEN RE-INTRODUCED TO THE NEW CULVERT.

A
14

STREAM DIVERSION AND DEWATERING TYPICAL

SCALE: 1" = 30'

DESCRIPTION

FILE: POA-2017-00546
WATERBODY: STARISKI CREEK

LOCATION

T4S, R15W, S1 SEWARD MERIDIAN
LAT/LONG; 59° 51' 09"N, 151° 46' 20" W

APPLICANT'S

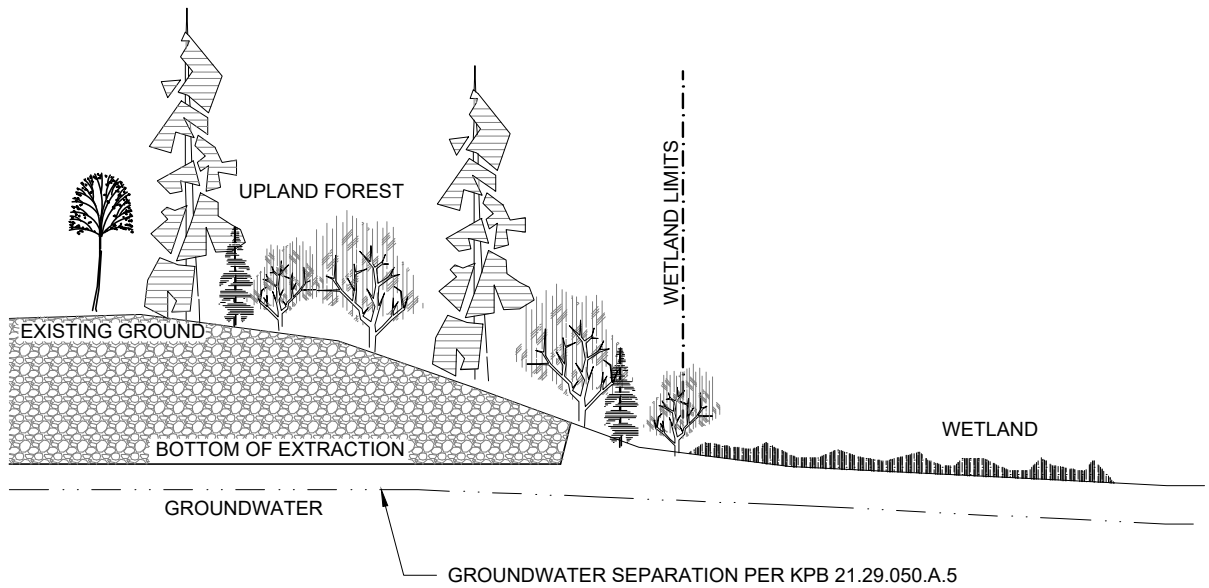
TRIMARK EARTH RESERVE, LLC.
34481 NORTH FORK RD.; ANCHOR POINT, AK 99556



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SCALE: -
PROJECT NO. 184013

SHEET
14 OF 16



A UPLAND EXTRACTION TYPICAL SECTION
 15 SCALE: 1" = 15'

DESCRIPTION

FILE: POA-2017-00546
 WATERBODY: STARISKI CREEK

LOCATION

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APPLICANT'S

TRIMARK EARTH RESERVE, LLC.
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DATE: 10/29/2019
DRAWN BY: GMD/BGB
SCALE: -
PROJECT NO. 184013
SHEET 15 OF 16

TABLE 1. ACCESS ROAD IMPACTS						
	Begin	End	Length (LF)	Impact Width (FT)	Impact Area (SF)	Fill Volume (CY)
Impact 1	1+71	3+83	212	35	7,420	806
Impact 2	7+27	7+32	5	varies	233	43 *
Impact 3	10+91	27+80	1689	35	59,115	6,418
Impact 4	31+80	32+84	105	35	3,675	399
Impact 5	45+88	48+93	305	35	10,675	1,159
Impact 6	53+50	53+72	22	35	770	84
TOTALS			2011		70,443 SF	7,666 CY
					1.62 AC	

NOTES:

1. WETLAND IMPACT VOLUME IS ESTIMATED AT 3.8 CY/LF OF ROAD EMBANKMENT PER TEMPLATE FILL.

* WETLAND IMPACT VOLUME IS BASED ON 5' FILL AT BRIDGE ABUTMENT AND WINGWALL WIDTH.

TABLE 2. STREAM IMPACTS				
Crossing Location (Station)	Length (LF)	Impact Area (SF)	CSP Bedding (CY)	Channel Substrate (CY)
32+14	45	67.5	4.5	8.0
42+68	45	67.5	4.5	8.0
43+61	55	137.5	40.3	51.3
TOTALS	145	272.5	49.3	67.3

NOTES:

1. BEDDING MATERIAL IS INCLUDED IN QUANTITY IN TABLE 1.

2. STREAM SUBSTRATE MATERIAL IS INCLUDED IN TABLE 1.

TABLE 3. TYPES & QUANTITIES OF MATERIAL BEING DISCHARGED			
PROJECT COMPONENT	KPB TYPE I (CY)	ADOT GABION ROCK (CY)	Channel Substrate (CY)
ACCESS ROAD	7078.6	587.2	67.3
	CY	CY	CY

NOTES:

1. GABION ROCK ESTIMATED AT 29.2 CY/100 LF OF WETLAND IMPACT.

DESCRIPTION

FILE: POA-2017-00546
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MCLANE CONSULTING INC.

REVISION: 6

DATE: 10/29/2019

DRAWN BY: GMD/BGB

SCALE: -

PROJECT NO. 184013

SHEET

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