

LOCATION AND VICINITY MAP **SHEET 1 OF 8**

LEGEND

- ==== Material Site Access Road
- ✚ Airport Boundary
- Material Site
- Existing Road
- Water Body

USACE PERMIT # POA-2012-549,
AMBLER RIVER
NAME: AMBLER AIRPORT
IMPROVEMENTS, Project # 61303

LOCATION: USGS Ambler River A-4;
Kateel River Meridian;
T20N, R5E;
Sections 19, 20, 21, 29, 30, and 31

WATER BODY: Grizzly Creek,
Ambler River, Kobuk River
DATE: May 9, 2013

PERMANENT IMPACTS		
	NWI CODE	HABITAT TYPE
AIRPORT/WARING ST	PFO4/SS1B	Black Spruce Forest Scrub/Shrub Wetland
	PSS1/4B	Black Spruce Scrub/Shrub Wetland
	PSS4/1B	Black Spruce Scrub/Shrub Wetland
	PSS1/EM1C	Low Shrub/Sedge Wetland
	PSS1C	Willow Thicket Wetland
	R3UBH	Stream
	TOTAL	3.81
MATERIAL SITE ROAD	PFO4/SS4B	Black Spruce Forest Scrub/Shrub Wetland
	PFO4	Black Spruce Forest Scrub/Shrub Wetland
	PSS4B	Black Spruce Scrub/Shrub Wetland
	PSS4/1B	Black Spruce Scrub/Shrub Wetland
	PSS4/EM1B	Low Shrub/Sedge Wetland
	PSS1/4B	Black Spruce Scrub/Shrub Wetland
	TOTAL	8.82
MATERIAL SITE	PSS1/4B	Black Spruce Scrub/Shrub Wetland
	PSS4/EM1B	Black Spruce Scrub/Shrub Wetland
	PSS1/EM1B	Low Shrub/Sedge Wetland
	PSS1C	Willow Thicket Wetland
	TOTAL	17.88
TOTAL PERMANENT WETLAND IMPACTS = 30.52		

TEMPORARY IMPACTS		
	NWI CODE	HABITAT TYPE
AIRPORT/WARING ST	PFO4/SS1B	Black Spruce Forest Scrub/Shrub Wetland
	PSS1/4B	Black Spruce Scrub/Shrub Wetland
	PSS4/1B	Black Spruce Scrub/Shrub Wetland
	PSS1/EM1C	Low Shrub/Sedge Wetland
	PSS1C	Willow Thicket Wetland
	PEM1C	Graminoid Meadow Wetland
	TOTAL	0.81
MATERIAL SITE ROAD	PFO4/SS1B	Black Spruce Forest Scrub/Shrub Wetland
	PFO4/SS4B	Black Spruce Forest Scrub/Shrub Wetland
	PFO4B	Black Spruce Forest Scrub/Shrub Wetland
	PSS4B	Black Spruce Scrub/Shrub Wetland
	PSS4/1B	Black Spruce Scrub/Shrub Wetland
	PSS4/EM1B	Black Spruce Scrub/Shrub Wetland
	TOTAL	4.56
TOTAL TEMPORARY WETLAND IMPACTS = 5.37		

* The area of temporary impact extends 15 feet from the cut/fill construction limit. Temporary impacts are reported for permitting purposes, but are not displayed on the map.



0 500 1,000
Feet

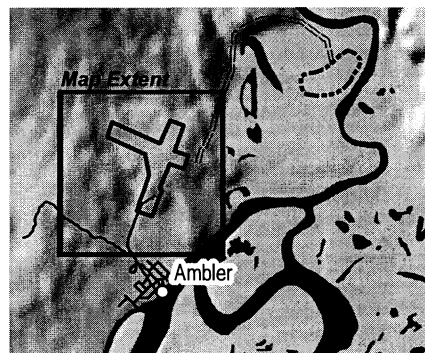
Stream crossing,
see Sheet 6 for detail.

WARING STREET
IMPROVEMENTS

AIRPORT
IMPROVEMENTS

WETLAND IMPACTS: AIRPORT SHEET 2 OF 8

- LEGEND**
- Wetland Impacts
 - Mapped Wetlands
 - Wetland Mapping Area
 - Cut/Fill Limits
 - Airport Boundary
 - Existing Road
 - Water Body
 - Stream



USACE PERMIT # POA-2012-549,
AMBLER RIVER
NAME: AMBLER AIRPORT
IMPROVEMENTS, Project # 61303

LOCATION: USGS Ambler River A-4;
Kateel River Meridian;
T20N, R5E;
Sections 19, 20, 21, 29, 30, and 31

WATER BODY: Grizzly Creek,
Ambler River, Kobuk River
DATE: May 9, 2013

TEMPORARY IMPACTS		
NWI CODE	HABITAT TYPE	ACRES
AIRPORT/WARNING ST	PFO4/SS1B Black Spruce Forest Scrub/Shrub Wetland	0.34
	PSS1/4B Black Spruce Scrub/Shrub Wetland	0.22
	PSS4/1B Black Spruce Scrub/Shrub Wetland	0.08
	PSS1/EM1C Low Shrub/Sedge Wetland	0.12
	PSS1C Willow Thicket Wetland	0.02
	PEM1C Graminoid Meadow Wetland	0.02
R3UBH	Stream	0.01
	TOTAL	0.81
MATERIAL SITE ROAD	PFO4/SS1B Black Spruce Forest Scrub/Shrub Wetland	0.20
	PFO4/SS4B Black Spruce Forest Scrub/Shrub Wetland	2.19
	PFO4B Black Spruce Forest Scrub/Shrub Wetland	0.30
	PSS4B Black Spruce Scrub/Shrub Wetland	1.48
	PSS4/1B Black Spruce Scrub/Shrub Wetland	0.07
	PSS4/EM1B Black Spruce Scrub/Shrub Wetland	0.11
	PSS1/4B Black Spruce Scrub/Shrub Wetland	0.06
	PSS1/EM1C Low Shrub/Sedge Wetland	0.09
	PEM1C Graminoid Meadow Wetland	0.05
	PEM1F Sedge Marsh Wetland	0.01
	TOTAL	4.56
		TOTAL TEMPORARY WETLAND IMPACTS = 5.37

* The area of temporary impact extends 15 feet from the cut/fill construction limit. Temporary impacts are reported for permitting purposes, but are not displayed on the map.

Stream crossing
see Sheets 6-8
for detail.

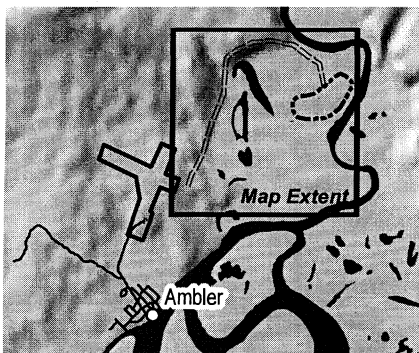
MATERIAL SITE
ROAD

Stream crossing,
see Sheets 6-8 for detail



0 500 1,000 2,000
Feet

PERMANENT IMPACTS		
NWI CODE	HABITAT TYPE	ACRES
AIRPORT/WARNING ST	PFO4/SS1B Black Spruce Forest Scrub/Shrub Wetland	0.28
	PSS1/4B Black Spruce Scrub/Shrub Wetland	2.97
	PSS4/1B Black Spruce Scrub/Shrub Wetland	0.14
	PSS1/EM1C Low Shrub/Sedge Wetland	0.35
	PSS1C Willow Thicket Wetland	0.03
	R3UBH Stream	0.05
	TOTAL	3.81
MATERIAL SITE ROAD	PFO4/SS4B Black Spruce Forest Scrub/Shrub Wetland	4.73
	PFO4B Black Spruce Forest Scrub/Shrub Wetland	0.58
	PSS4B Black Spruce Scrub/Shrub Wetland	2.78
	PSS4/1B Black Spruce Scrub/Shrub Wetland	0.07
	PSS4/EM1B Low Shrub/Sedge Wetland	0.19
	PSS1/4B Black Spruce Scrub/Shrub Wetland	0.12
	PSS1/EM1C Low Shrub/Sedge Wetland	0.27
	PEM1C Graminoid Meadow Wetland	0.08
	TOTAL	8.82
MATERIAL SITE	PSS1/4B Black Spruce Scrub/Shrub Wetland	3.48
	PSS4/EM1B Black Spruce Scrub/Shrub Wetland	0.14
	PSS1/EM1B Low Shrub/Sedge Wetland	10.17
	PSS1C Willow Thicket Wetland	3.86
	PEM1C Graminoid Meadow Wetland	0.24
	TOTAL	17.88
		TOTAL PERMANENT WETLAND IMPACTS = 30.52



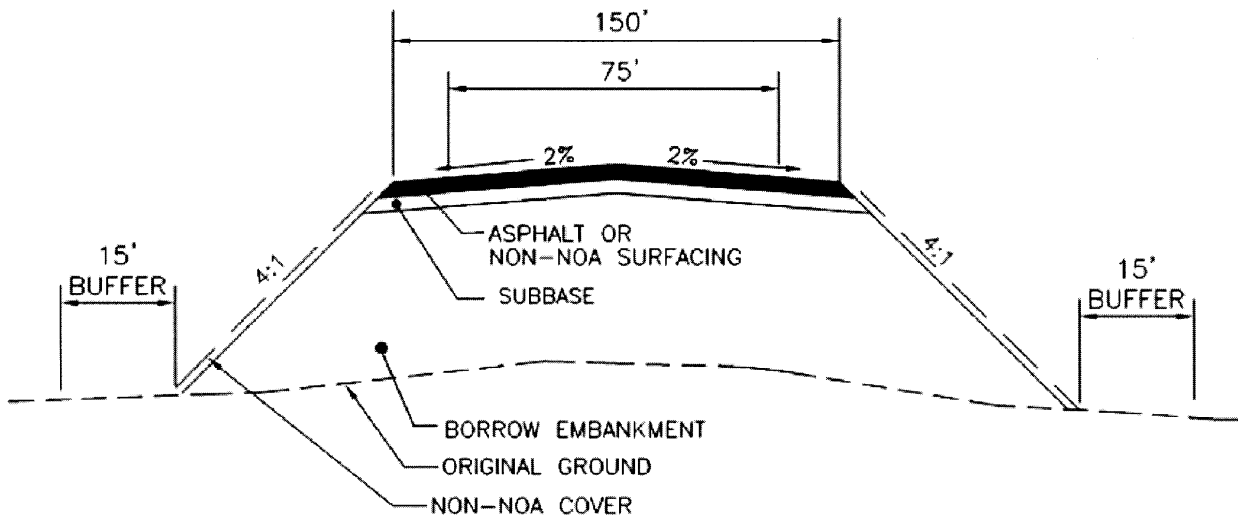
WETLAND IMPACTS: MATERIAL SITE & ACCESS ROAD SHEET 3 OF 8

- LEGEND**
- Wetland Impacts
 - Mapped Wetlands
 - Wetland Mapping Area
 - Cut/Fill Limits
 - Airport Boundary
 - Water Body
 - Stream

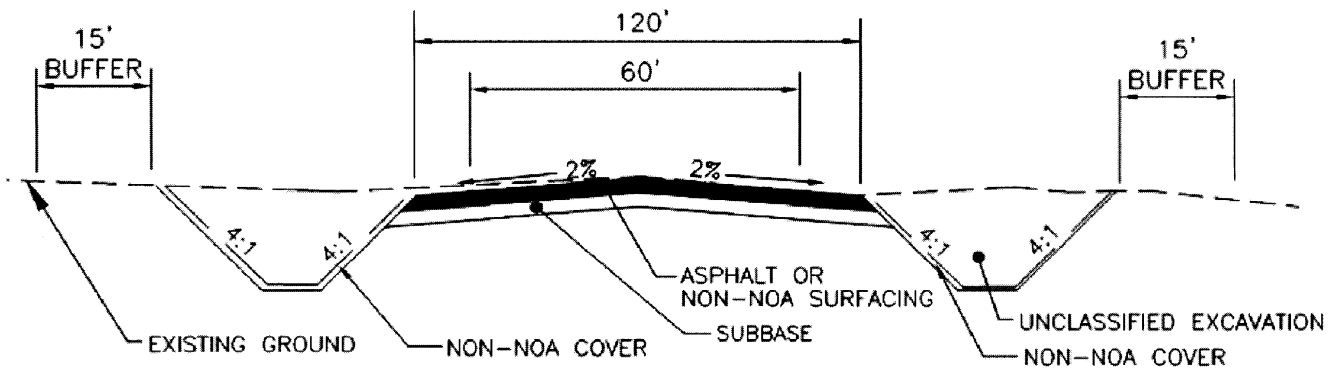
USACE PERMIT # POA-2012-549,
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NAME: AMBLER AIRPORT
IMPROVEMENTS, Project # 61303

LOCATION: USGS Ambler River A-4;
Kateel River Meridian;
T20N, R5E;
Sections 19, 20, 21, 29, 30, and 31

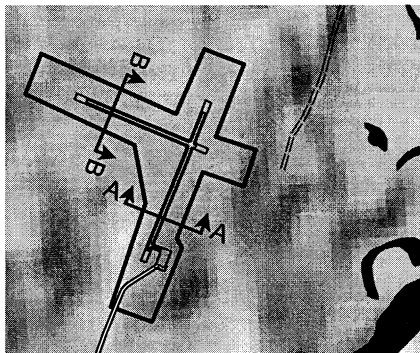
WATER BODY: Grizzly Creek,
Ambler River, Kobuk River
DATE: May 9, 2013



RUNWAY 18/36 TYPICAL FILL SECTION A



RUNWAY 9/27 TYPICAL FILL SECTION B



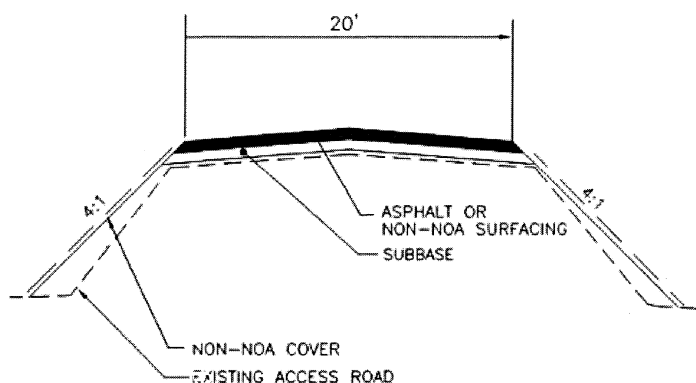
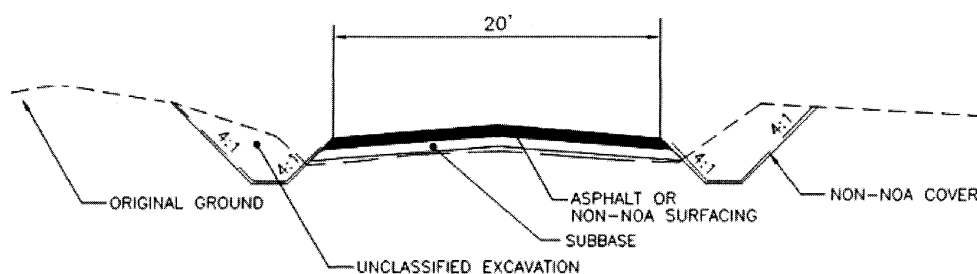
**TYPICAL SECTIONS:
RUNWAY TYPICAL SECTIONS
SHEET 4 OF 8**

*** Non-NOA Cover = Material that
does not contain Naturally
Occurring Asbestos above 0.25%
by weight**
*** Drawing Not to Scale**

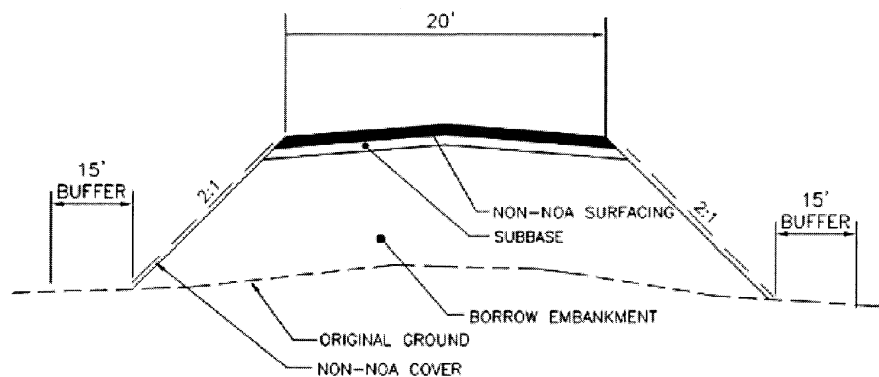
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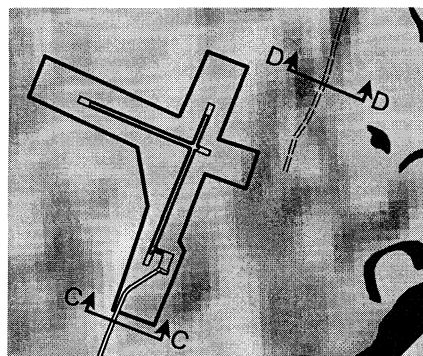
WATER BODY: Grizzly Creek,
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WARING STREET TYPICAL FILL SECTION C



MATERIAL SITE ROAD TYPICAL FILL SECTION D



**TYPICAL SECTIONS:
WARING ST. AND MATERIAL
SITE ROAD TYPICAL SECTIONS
SHEET 5 OF 8**

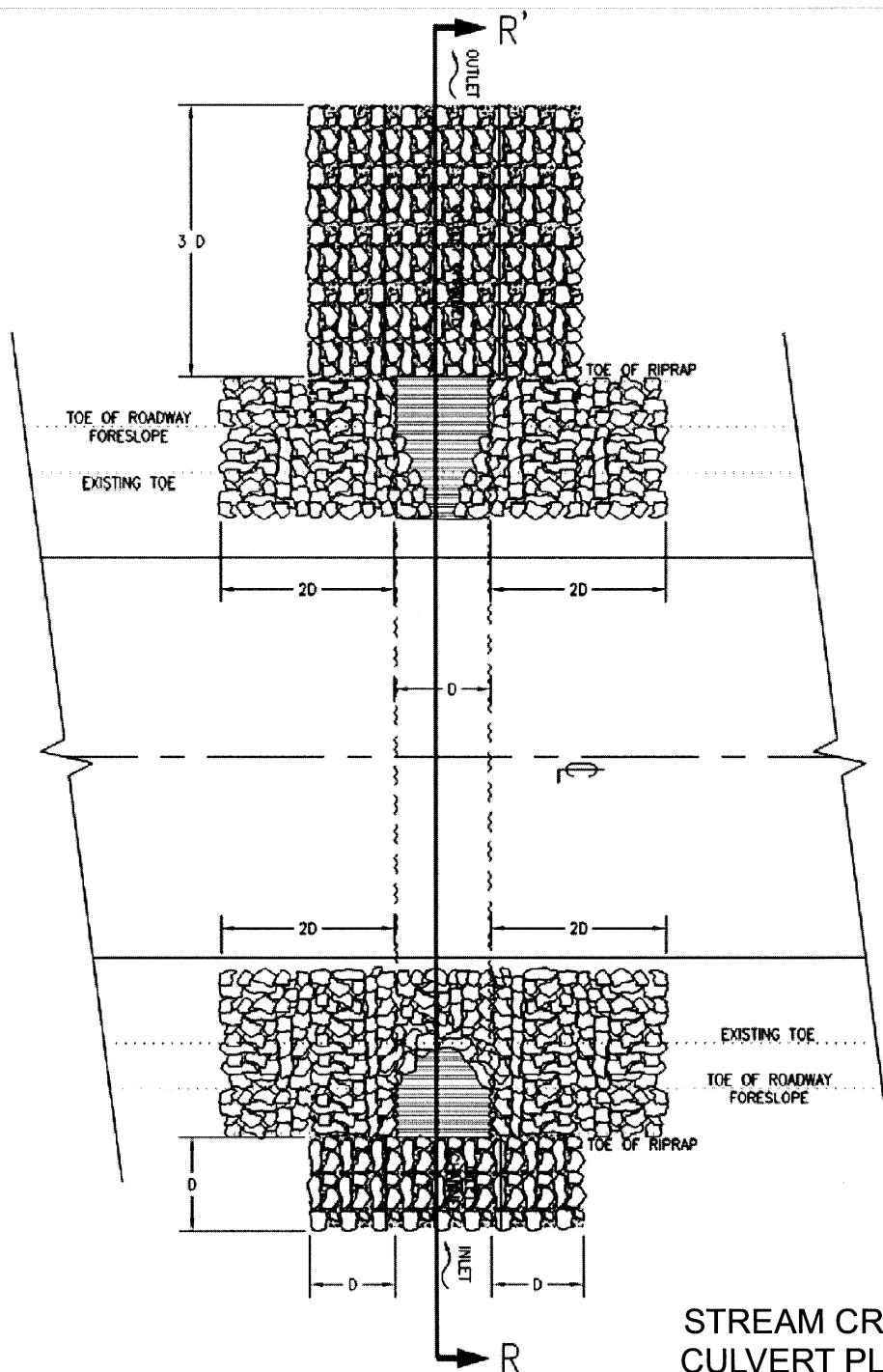
*** Non-NOA Cover = Material that
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Occurring Asbestos above 0.25%
by weight**

*** Drawing Not to Scale**

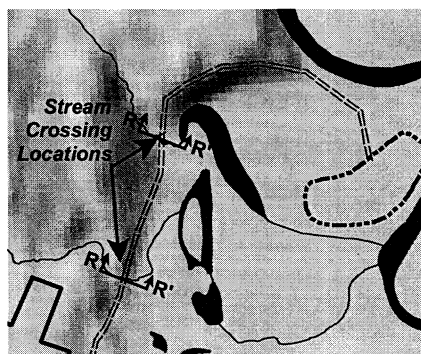
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**STREAM CROSSING
CULVERT PLAN VIEW**



**STREAM CROSSING STRUCTURE
DETAILS: PLAN VIEW
SHEET 6 OF 8**

*** D = Diameter of culvert**

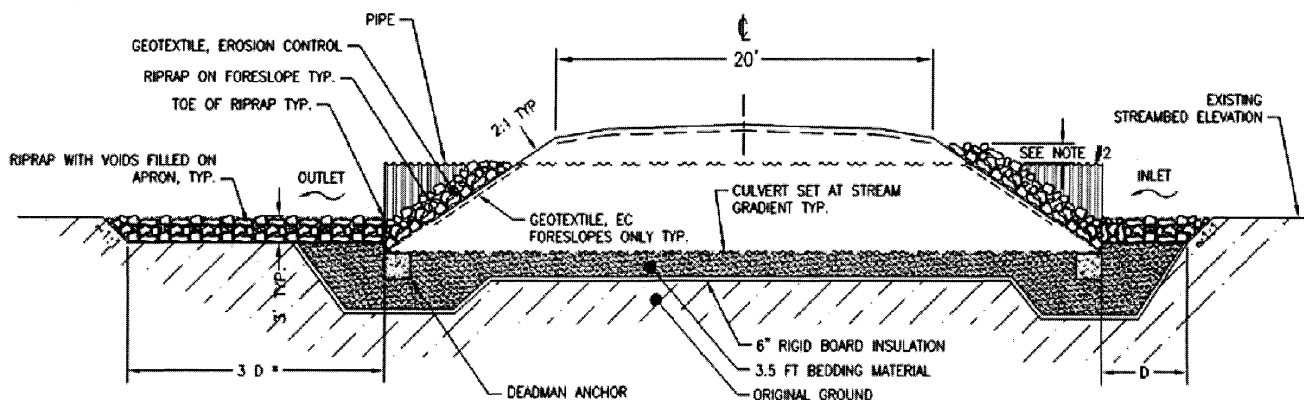
**(D = 7.5' & 9' for two culverts
on Material Site Access Road)**

*** Drawing Not to Scale**

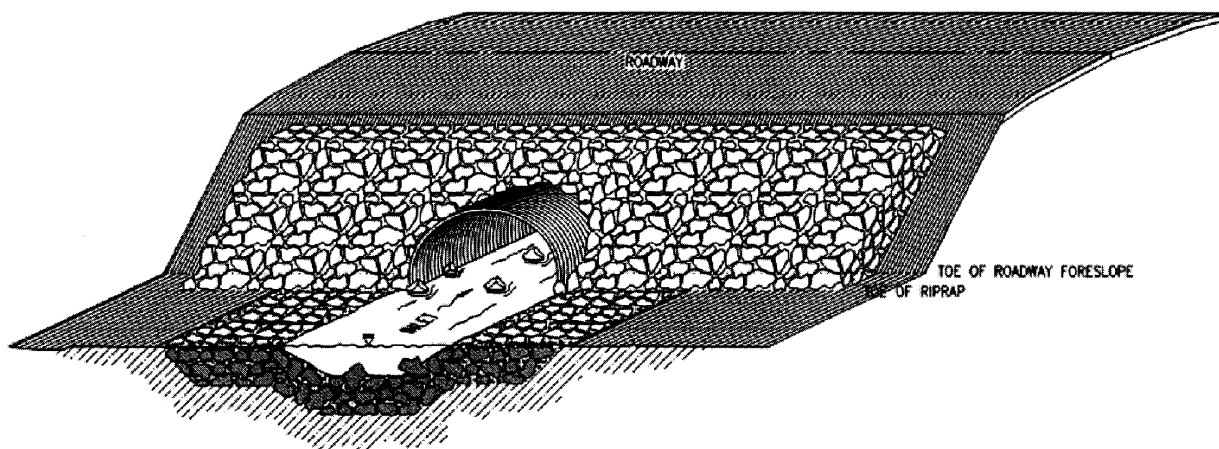
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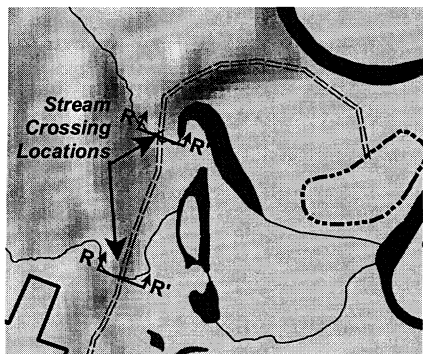
STREAM CROSSING
CULVERT TYPICAL SECTION R-R'



STREAM CROSSING
CULVERT OBLIQUE VIEW

NOTES:

1. Erosion control structures are approximate and may be field adjusted by the engineer to take advantage of existing channel features.
2. Extend riprap 3 feet above the pipe on the inlet side or to edge of shoulder, whichever is less. On the outlet side, the riprap shall extend to the top of the pipe.
3. Fill voids in the inlet and outlet channel bottom riprap aprons with gravel.



STREAM CROSSING STRUCTURE
DETAILS: TYPICAL SECTION
SHEET 7 OF 8

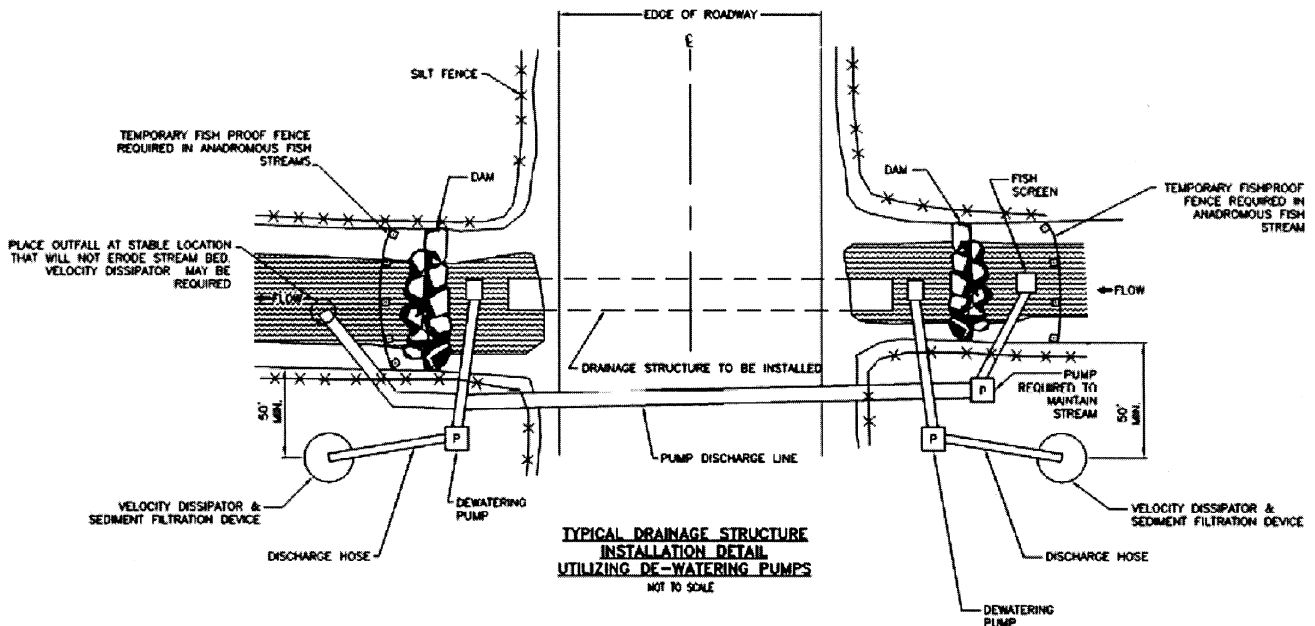
* D = Diameter of Culvert Pipe

* Drawing Not to Scale

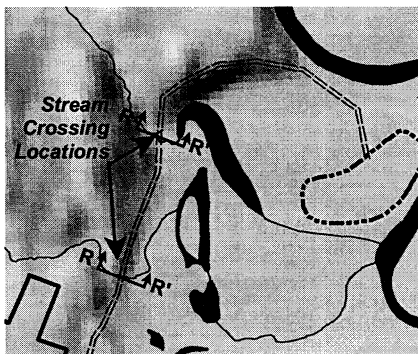
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TYPICAL DRAINAGE STRUCTURE INSTALLATION DETAIL UTILIZING DE-WATERING PUMPS



STREAM CROSSING STRUCTURE DETAILS: CONSTRUCTION DETAILS SHEET 8 OF 8

* Drawing Not to Scale

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