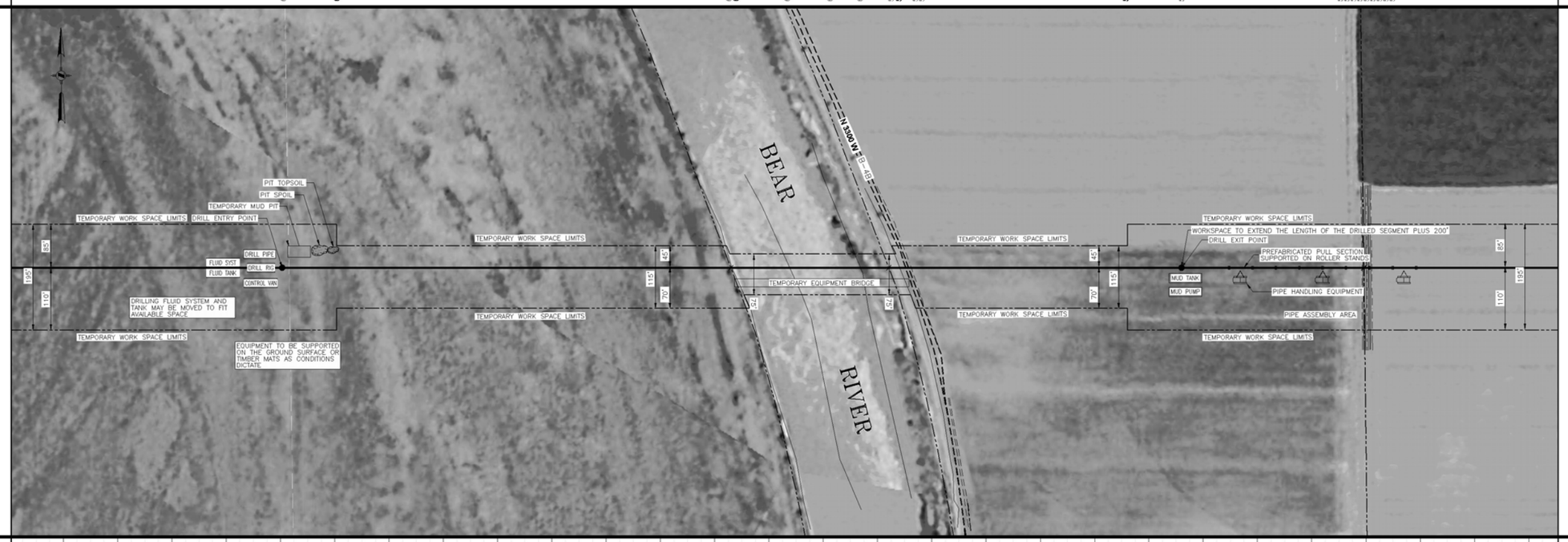
PIPELINE STATIONING

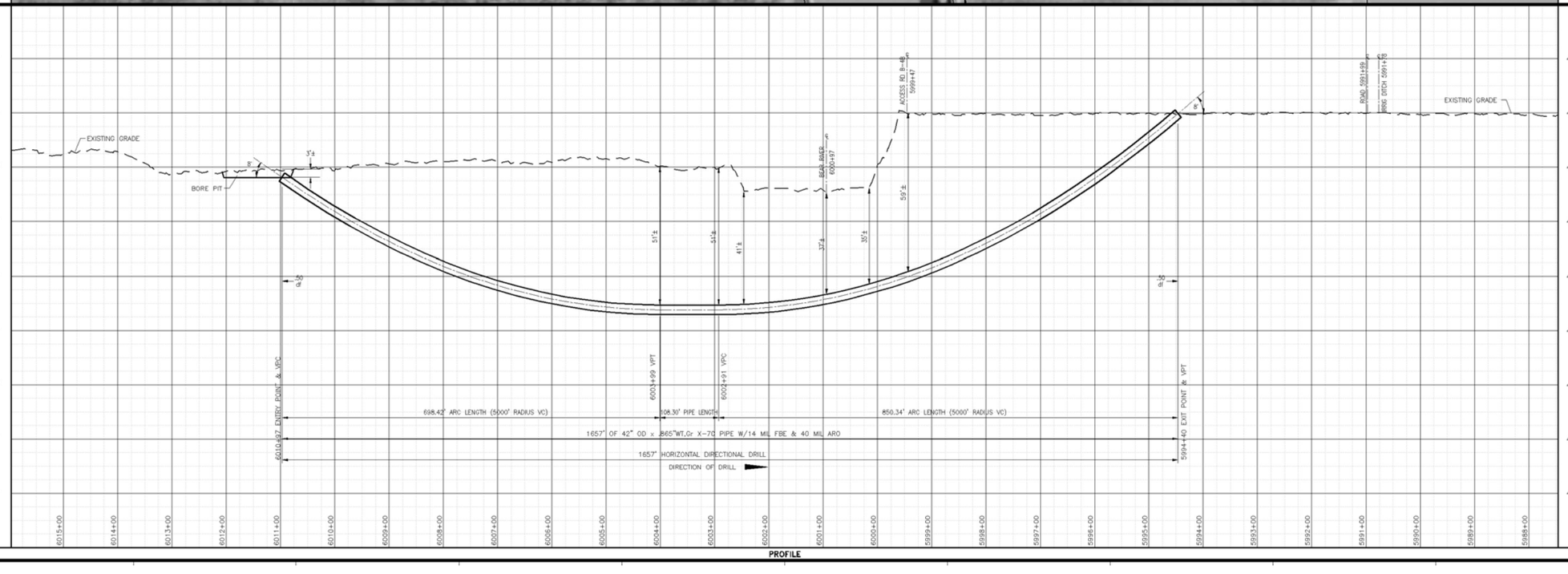
6010+97 DRILL ENTRY POINT
6009+97 DID 115'W/RON 195'W TEMP WORK SPACE
6003+20 PROPERTY LINE
6002+31 TOP BANK & DID 75'W/RON 115'W TEMPORARY WORK SPACE
6001+62 TOE BANK
6000+97 BEAR RIVER
6000+31 TOE BANK2
5999+79 PROPERTY LINE
5999+60 TOP BANK & DID 115'W/ROW 75'W TEMPORARY WORK SPACE
5999+48 ACCESS RD B-48
5999+37 CROP LINE
5985+40 DID 195'W/RON 115'W TEMP WORK SPACE
5984+40 DRILL EXIT POINT
5931+07 CROP LINE
5931+54 TOE BANK
5931+99 TOP BANK
5990+98 EPNG DITCH XING/CANAL
5990+98 TOE BANK
5990+94 TOP BANK
5990+91 TOE BANK
5990+89 CROP LINE

PIPELINE STATIONING

ALIGNMENT



ALIGNMENT



PROFILE

REFERENCE DRAWINGS

300A-48 ALIGNMENT SHEET

GENERAL NOTES

1. THIS PIPELINE INSTALLED UNDER CODE: TITLE 49, PART 192 CFR, CLASS 1. PIPE DESIGN FACTOR IS 0.50
2. RIVER CROSSING TO BE INSTALLED BY THE HORIZONTAL DIRECTIONAL DRILL (HDD) METHOD.
3. HDD CONTRACTOR TO DESIGN PROFILE IN ACCORDANCE WITH INDUSTRY STANDARDS AND EQUIPMENT LIMITATION.
4. PRIOR TO ACTUAL INSTALLATION, THE PIPE SHALL BE WELDED ON THE BANK AND HYDROSTATICALLY TESTED FOR 4 HOURS.
5. A MINIMUM OF FIFTEEN (15) FEET COVER TO TOP OF PIPE SHALL BE REQUIRED UNDER THE RIVER. COVER SHALL BE MEASURED FROM THE TOP OF THE PIPELINE TO THE ORIGINAL RIVER BED ELEVATION.
6. THERE WILL BE LIMITED ACCESS, NO PARKING, NO REFUELING, NO VEHICLE MAINTENANCE, NO STORAGE WITHIN 100 FT. OF EACH HIGH BANK
7. CONSTRUCTION WORK IF REQUIRED AT THE RIVER BANK SHALL BE PERFORMED IN SUCH MANNER AS TO KEEP TO A MINIMUM DAMAGE TO SHORELINE, WATER CROSSED, AND FISH AND WILDLIFE HABITATS.
8. EROSION CONTROL DEVICES WILL BE INSTALLED AND INSPECTED AND MAINTAINED BY THE CONTRACTOR IN ACCORDANCE WITH THE APPROVED ENVIRONMENTAL PLAN AND PROCEDURES.
9. A 10 FT. VEGETATED BUFFER STRIP, EXCEPT FOR VEHICLE CROSSING, ON BOTH BANKS OF THE RIVER SHALL BE MAINTAINED.
10. STABILIZING VEGETATION REMOVAL SHALL BE KEPT TO A MINIMUM. CRUSHING OR SHEARING STREAMSIDE WOODY VEGETATION IS PREFERABLE TO COMPLETE REMOVAL.
11. CONTRACTOR MAY INSTALL A TEMPORARY BRIDGE FOR DAILY TRAFFIC ACCROSS THE RIVER. CONTRACTOR HAS THE CHOICE OF INSTALLING GRAVEL OVER THE FLUME(S) OR USING MATTS, RAILROAD CARS OR OTHER PORTABLE BRIDGING TO BRIDGE THE RIVER.
12. IF GRAVEL IS USED ACROSS THE FLUME, CONTRACTOR WILL SPREAD THE GRAVEL ALONG LOWER BANKS FOR STABILIZATION OR ALONG STREAM BOTTOM AS SPAWNING HABITAT AFTER REMOVAL OF THE FLUME. THE GRADIENT AT THE STREAM BOTTOM MUST BE THE SAME AS BEFORE CONSTRUCTION STARTED. THE GRAVEL SHALL CONSIST OF 1" TO 3" DIAMETER ROUND RIVER ROCK WITH A MINIMUM OF FINE MATERIAL.
13. ROW IS LIMITED TO 75 FEET IN THE WETLANDS LOCATED AT WATERS EDGE ON BOTH SIDES OF THE RIVER.

SITE SPECIFIC NOTES

1. CONTRACTOR MAY REQUEST A SHIFT IN WORK SPACE AS REQUIRED WITHIN THE STUDIED CORRIDOR.
2. CONTRACTOR WILL BE ALLOWED A ONE TIME PASS THROUGH THE RIVER CROSSING FOR EACH CONSTRUCTION CREW
3. EXTRA WORK SPACE IN RIVER WILL ONLY BE USED IN EVENT OF "FRAC OUT".
4. IF A "FRAC OUT" OCCURS IN THE RIVER
   (A) DRILLING IS TO CEASE IMMEDIATELY.
   (B) CONTRACTOR SHALL HAVE CONTAINMENT BOOMS OR SIMILAR CONTAINMENT DEVICE AVAILABLE TO CONTAIN DRILLING MUD IN THE RIVER.
   (C) CONTRACTOR SHALL ATTEMPT TO REMOVE AS MUCH OF THE DRILLING MUD AS PRACTICAL FROM THE RIVER BOTTOM BY SUCTION HOSE OR OTHER DEVICES.
   (D) CONTRACTOR MAY ATTEMPT TO RESUME DRILL WITH A ALTERNATE MUD VISCOSITY.
   (E) IF "FRAC OUT" CANNOT BE STOPPED BY CHANGING THE DRILLING FLUID, A NEW PILOT HOLE MAY BE DRILLED AT A DEEPER DEPTH.
   (F) OPEN CUTTING THE RIVER WILL ONLY BE PROPOSED IF ALL ATTEMPTS AT DRILLING FAIL. OPEN CUTTING REQUIRES PRIOR APPROVAL OF THE FREC, THE FISH & WILDLIFE SERVICE AND OTHER PERMITTING AGENCIES.

DESIGN DATA

CODE: TITLE 49, PART 192 CFR, CLASS 1, df=.50
PRESSURE: 1440 PSIG MAOP

SCALE, PROJECTION & SURVEY DATA

50' 25' 0 50' 100'

SCALE: 1"=100' HORIZONTAL
1"= 20' VERTICAL

GPS SURVEY (G.P.S. TRIMBLE 5800 SERIES)
UTM ZONE 12, NAD83 (US FT), NAVD88, GEOID03

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
B	3/18/10	JDK	IMPLEMENTATION FILING	128575	JJJ
A	7/10/09	JDK	ISSUE FOR FERC FILING	128575	JJJ

REVISIONS

RUBY PIPELINE LLC

PLAN AND PROFILE
RUBY PIPELINE LN 300A-42 INCH CROSSING BEAR RIVER (MP 113.7) BY HORIZONTAL DIRECTIONAL DRILL (MAJOR WATERBODY)

Division: ROCKY MOUNTAIN		Op. Area: ELKO	
State: UTAH		Co./Par.: BOX ELDER	
Section: 29	Township: 10N	Range: 2W	
Drafter: JDK	Date: 02/04/09	Project ID: 128575	Type: C3D
Chk'd:	Date:	Scale: AS SHOWN	
Appr:	Date:	Filename: 0300-A-0048A	

300A-48A

Sheet: 1 of 1 | Rev: 0

IMPLEMENTATION PLAN 05/24/2010

Jan 14, 2010 - 3:56PM