



February 04, 2009

Phyllis Beaulieu  
Manager of Licensing  
Nunavut Water Board  
P.O. Box 119, Gjoa Haven NU X0B 1J0

NWB File: 2BB-MRY0710

Dear Ms. Beaulieu:

**Re: Baffinland Iron Mines Corporation (BIM) – Submission of Milne Inlet Tote Road – As-Built Final Alignment and Water Crossing Installation Locations Report**

Under Part J, Item 4, of Baffinland Iron Mines Corporation (BIM) Water Licence 2BBMRY0710, there is a requirement to submit as-built plans and drawings for all construction works.

Enclosed, herewith, is a copy of the subject report prepared by Knight Piésold Ltd. that describes the as-built final alignment and location of water crossing installations for the Milne Inlet Tote Road.

We trust that this submittal satisfies your current requirements. Should you have any questions, please do not hesitate to contact Cheryl Wray or Jim Millard, Environmental Superintendents at 403-450-8843 or by e-mail at [cheryl.wray@baffinland.com](mailto:cheryl.wray@baffinland.com) or [jim.millard@baffinland.com](mailto:jim.millard@baffinland.com).

Yours truly,

**Baffinland Iron Mines Corporation**

Per:

A handwritten signature in black ink, appearing to read 'D.L. Putnam'.

David L. Putnam, P.Eng.  
Director of Environment

cc. J. Millard, C. Wray, D. Chubb, D. McCann, A. Keim, INAC

Attach:

*Milne Inlet Tote Road - Summary of As-Built Final Alignment and Water Crossing Locations*, prepared by Knight Piésold Ltd for Baffinland Iron Mines Corporation, dated February 3, 2009.

**Baffinland Iron Mines Corporation**

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[www.baffinland.com](http://www.baffinland.com)

February 3, 2009

Mr. David Putnam

Director of Environment  
Baffinland Iron Mines Corporation  
1016 - 120 Adelaide Street West  
Toronto, Ontario  
Canada, M5H 1T1

Dear David,

**Re: Milne Inlet Tote Road - Summary of As-Built Final Alignment and Water Crossing  
Installation Locations**

The Mary River Project (the Project) is an advanced iron ore exploration project located in the North Baffin region of Baffin Island, Nunavut. The Mary River camp coordinates, which are central to the Project area, are approximately Latitude 71° 19' 35" North and Longitude 79° 22' 30" West.

Baffinland Iron Mines Corporation (Baffinland) is undertaking advanced exploration at the Project site, consisting of delineation drilling of the iron ore deposits, geotechnical drilling for proposed future infrastructure, baseline environmental studies and the completion of a Bulk Sampling Program. The purpose of the Bulk Sampling Program, which was completed in fall 2008, was to confirm the quality and marketability of the Mary River iron ore. Approximately 112,000 tonnes of bulk sample ore was transported to Milne Inlet using a fleet of conventional highway tri-axle trucks with pup trailers

As part of the Bulk Sampling Program, upgrades to the original Milne Inlet Tote Road (Tote Road) were necessary to facilitate the transport of the ore from the Mary River iron ore deposit to the port at Milne Inlet located approximately 100 km to the northwest, as shown on Figure 1. The original Tote Road was established in the 1960s and consisted of a track levelled over the natural ground surface. Numerous water crossings were installed along the original road alignment constructed of bolt-together culverts or, more commonly, 45 gallon barrels with their ends removed. These crossings were in various states of disrepair. The upgrades generally included upgrading of the road embankment and installation of water crossings.

This letter report presents the as-built alignment and water crossing installation locations. This information was required by Part J4(i) of License 2BB-MRY010 Type B the Nunavut Water Board's licence issued for the Mary River Project.

**Road Construction**

The Tote Road was widened from the existing width of approximately 5 m to between 8 to 10 m to accommodate the truck traffic. Pullouts or passing areas (localized areas of road approximately 16 to 20 m wide) were constructed as required to allow traffic to pass. Deviations from the original alignment were only completed for archaeological, environmental or safety reasons. All deviations were minimized. The upgraded Tote Road alignment and profile are shown on Drawing Nos. 300 and 310 respectively.

Road upgrades varied depending upon the foundation conditions that were encountered. Upgrades ranged from minor grading and levelling of the natural ground to placement of over 1 metre of fill in areas of ice rich or thaw susceptible ground. As is standard practice in permafrost regions, only very limited foundation preparation was completed to minimize thermal disturbance. The vast majority of the upgraded road was directly on the original road.

Geotextile was used under select sections of the road embankment where required, to provide additional foundation strength. In these cases, a combination of woven geotextile and geogrid were installed directly on the original road surface prior to placement of road embankment fill.

Material used for road embankment construction was typically free draining sand and gravel. Ice and snow were removed from the fill material as much as practicable. Material with high fines content was avoided due to its higher frost susceptibility. The upgraded road was compacted by routing the truck traffic over the entire road surface. Additionally, select sections of the road embankment were compacted using a vibratory roller.

### **Borrow Areas**

Material used to construct the road embankment and as culvert backfill was obtained from local borrow areas. The three primary borrow areas were the Milne Inlet Borrow Area, the Mid-Way Borrow Area and the Mary River Borrow Area. In addition to these areas, borrow material was also obtained from areas within 30 m of the Tote Road. The primary borrow sources are shown on Drawing No. 400.

The borrow areas were typically excavated to the top of the permafrost. Drainage was provided from the borrow areas where possible. The side slopes were generally graded to a slope of 1H:1V or flatter; however, additional grading and contouring will be completed as part of ongoing progressive reclamation.

### **Water Crossing Installations**

During the initial road investigation, drainage locations were confirmed along the Tote Road. The drainage crossings labelled numerically starting with CV or BG (i.e. CV001 and BG01) were categorized into five main categories based on catchment area, geometry and estimated peak flows: Extra-Small, Small, Medium, Large and Extra-Large. Each crossing classified as Small through Extra-Large required structures to pass the design flows. Culverts or composite; culvert and overflow swale arrangements were constructed at the majority of these crossings (i.e. Small to Large). A system using reinforced sea containers, culverts and overflow swales was used for the Extra-Large drainage crossings. Culverts and pipes were installed in the Extra-Small crossings as required to maintain access along the road. A summary of the installed water crossings is presented on Table 1 and the crossing locations are shown on Drawing No. 400.

Foundation preparation for the culvert and sea container installations generally involved excavation and grading to prepare a suitable base onto which the structures were installed. Each crossing regulated by the Department of Fisheries and Oceans (DFO) had at least one culvert embedded a minimum of 10% of the diameter into the bed of the crossing to provide flow for fish passage during low flow conditions. The individual culvert lengths were coupled together to accommodate the road design width and cross-section. The completed culverts ranged in length from 12 m to over 21 m. Backfill for each culvert was placed in specified lifts and compacted using hand compaction equipment. Riprap erosion protection was placed at the inlet to select water crossings.

The Small, Medium and Large water crossings were installed in accordance with the design intent and as such the design drawings are generally reflective of the as-built conditions. The design drawings for these water crossings are included in Appendix A. As-constructed drawings for the Extra-Large water

crossings CV128, BG50, CV217 and CV223 are presented on Drawing Nos. 441, 442, 443 and 444 respectively.

**Quality Assurance / Quality Control**

Representatives from Knight Piésold monitored the Quality Assurance / Quality Control (QA/QC) program for the road upgrades. This work generally consisted of:

- Technical direction of road and water crossing construction
- Environmental monitoring - as required by the Department of Fisheries and Oceans (DFO)
- Assistance with locating and marking borrow source
- Assistance with protecting the known archaeological sites along the alignment

**Construction Schedule**

Upgrades to the Tote Road started in August 2007 and the majority of the work was complete by November 2008. Transportation of the Bulk Sample from Mary River to Milne Inlet was completed by early October 2008. The remaining tasks, which mostly consist of compensation works as required by the DFO, are planned to be completed in 2009. The regrading and contouring works will be completed as part of ongoing reclamation.

Yours truly,  
**KNIGHT PIESOLD LTD.**

Signed:




C. A. (Andy) Phillips, P.Eng.  
Senior Engineer

Reviewed:

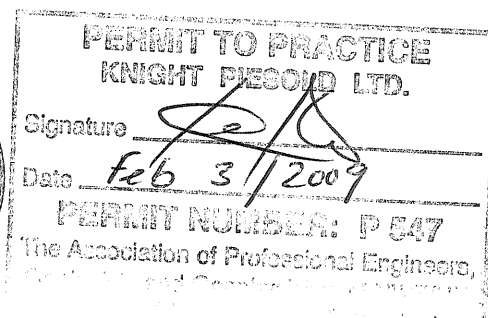
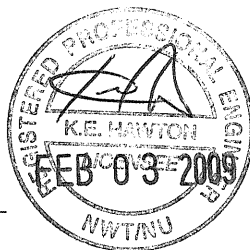


Kevin E. Hawton, P.Eng.  
Senior Engineer

Approved:



Ken D. Embree, P.Eng.  
Managing Director



Attachments:

Table 1 Rev 2      Water Crossing Installation Summary  
Figure 1 Rev 0      Project Location Map  
Drawing 300 Rev 2   Road Upgrades - Plan  
Drawing 310 Rev 2   Road Upgrades - Profile  
Drawing 400 Rev 2   Drainage Crossing Locations Plan (All Crossings)  
Drawing 441 Rev 2   Extra-Large Crossing CV128 - Plan and Sections  
Drawing 442 Rev 2   Extra-Large Crossing BG50 - Plan and Sections  
Drawing 443 Rev 2   Extra-Large Crossing CV217 - Plan and Sections  
Drawing 444 Rev 2   Extra-Large Crossing CV223 - Plan and Sections  
Appendix A          Design Drawings Issued for Construction

Copy To:          Derek Chubb, Baffinland Iron Mines Corporation  
                      Richard (Dick) Matthews, Baffinland Iron Mines Corporation

/cap

TABLE 1  
BAFFINLAND IRON MINES CORPORATION  
MARY RIVER PROJECT  
WATER CROSSING INSTALLATION SUMMARY

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Crossing Number	Crossing Size Classification	Original Chainage <sup>(1)</sup> (m)	Upgraded Chainage (m)	Date Installed		Number of Culverts Installed			
				Started	Completed	1.2 m Diam.	1.0 m Diam.	0.5 m Diam.	Sea Containers
CV183	Extra-Large	0+145	NA	Pending					
CV181	Medium	0+583	NA	Pending					
CV176	Small	2+638	A2+350	Pending					
CV170	Small	5+267	A4+987	2008-07-17	2008-07-17		1		
CV166	Small	6+056	NA	2008-10-05	2008-10-10		1	1	
CV165	Small	7+038	A6+748	See Note 2					
CV159	Extra-Small	8+407	A8+097	2007-08-26	2007-08-27		1		
CV157	Small	8+960	A8+660	2007-08-28	2007-08-30		1	1	
CV156	Extra-Small	9+223	NA	See Note 3					
CV154	Small	9+570	A9+248	2007-09-02	2007-09-02		1	1	
CV153	Small	10+218	A9+845	2007-09-02	2007-09-03			5	
CV152	Small	10+280	A9+937	2007-09-04	2007-09-04			5	
CV151	Small	10+460	A10+100	2007-09-05	2007-09-05			4	
CV146	Small	11+348	A11+014	2007-09-06	2007-09-06			5	
CV129	Large	15+650	A15+316	2007-09-16	2007-09-17	1			
CV128	Extra-Large	17+486	A17+115	2007-09-18	2007-09-23				20
CV125	Small	20+447	A19+938	2008-10-07	2008-11-07		1	0 (+1)	
CV120	Small	23+515	A23+011	2007-09-26	2007-09-27		1	3	
CV119	Small	24+264	A23+746	2008-07-15	2008-07-15		1		
CV117	Small	27+073	A26+580	2008-05-29	2008-05-29		1	1	
CV115	Small	27+686	A27+199	2008-05-28	2008-05-29		1	1	
CV114	Medium	29+647	A29+145	2007-09-29	2007-09-29		1		
CV113	Small	30+655	A30+152	2007-09-30	2007-09-30			4	
CV112	Small	31+450	A30+950	2008-05-31	2008-05-31	1		1	
CV111	Medium	31+990	A31+493	2007-09-28	2007-09-28		1		
CV202	Small	32+825	A32+332	2008-06-02	2008-06-02		1		
CV106	Small	33+170	A32+684	2008-06-02	2008-06-02		1		
CV104	Medium	33+794	A33+306	2007-10-01	2007-10-01	2			
CV203	Small	34+153	A33+642	2008-06-04	2008-06-05		1	2	
CV102	Small	36+028	A35+541	2007-10-02	2007-10-02		1	3	
CV099	Large	37+840	A37+336	2007-10-03	2007-10-04	3	0 (+1)	0 (+2)	
				2008-10-14	2008-10-15				
CV098	Medium	38+525	A38+055	2008-06-08	2008-06-09		1	0 (+1)	
CV094	Large	41+613	A41+109	2008-06-16	2008-06-17	1	0 (+1)		
				2008-10-08	2008-10-09				
CV093	Small	42+216	A41+694	2008-06-21	2008-06-21		1	1	
CV092	Medium	42+949	A42+432	2008-06-23	2008-06-24		3		
CV091	Medium	42+961	A42+432	See Note 4					
CV090	Small	44+832	A44+363	2008-06-25	2008-06-25		1	1	
CV087	Medium	46+223	A45+734	2008-06-27	2008-06-27	2		1	
CV086	Small	46+300	NA	2008-10-09	2008-10-11		1		
CV085	Small	46+422	A45+934	2008-06-28	2008-06-29		1		
CV083	Small	47+643	A47+174	2008-06-30	2008-07-01		1		
CV082	Small	49+655	A49+170	2008-07-05	2008-07-05			4	
CV079	Large	50+600	A50+061	2008-07-07	2008-07-08	2		0 (+2)	
				2008-10-15	2008-10-16				
CV078	Large	51+171	A50+692	2008-07-09	2008-07-09	1			
				2008-08-13	2008-08-13		0 (+1)		
				2008-10-16	2008-10-17		0 (+2)		
CV076	Small	53+028	A52+546	2008-02-26	2008-02-27		1		
CV075	Small	53+337	A52+828	2008-02-27	2008-02-29			5	
CV072	Large	53+878	A53+343	2008-02-29	2008-03-05	3			
CV060	Medium	58+856	A58+112	2008-02-25	2008-02-27		2		
CV059	Small	59+960	A59+215	2008-01-11	2008-01-13			4	
CV058	Small	60+523	A59+772	2008-02-11	2008-02-12	1		1	
CV057	Small	60+712	A59+965	2008-02-24	2008-02-25			3	
BG50	Extra-Large	62+804	A62+078	2007-10-23	2007-10-30	2			13
CV049	Large	63+302	A62+534	2008-03-09	2008-03-10	2			
CV048	Large	64+312	A63+552	2008-03-06	2008-03-09	2			
CV047	Small	66+426	A65+681	2008-03-09	2008-03-13	2			
CV046	Small	66+490	A65+737	2008-03-09	2008-03-24		1	4	

TABLE 1  
BAFFINLAND IRON MINES CORPORATION  
MARY RIVER PROJECT  
WATER CROSSING INSTALLATION SUMMARY

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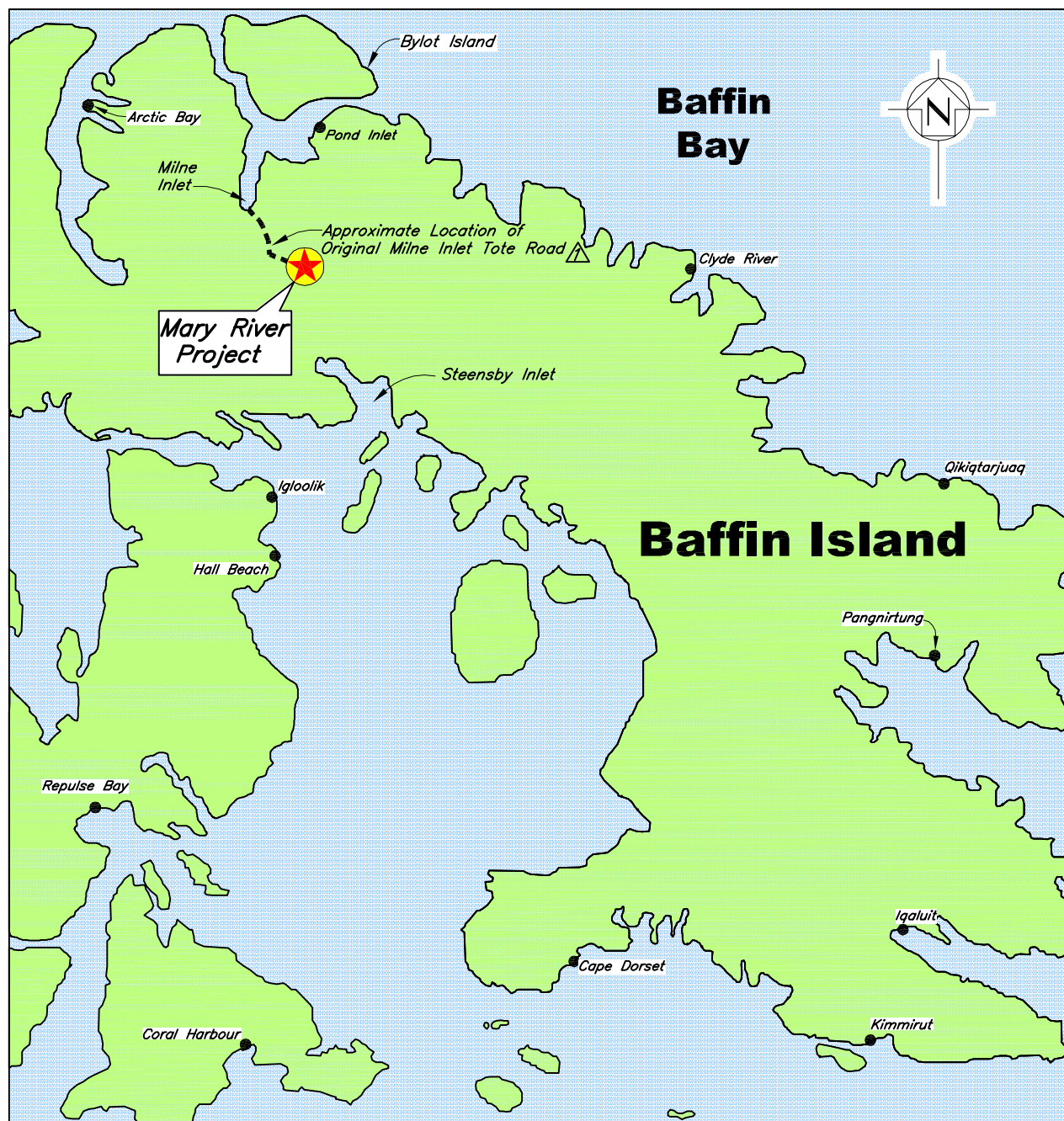
Crossing Number	Crossing Size Classification	Original Chainage <sup>(1)</sup> (m)	Upgraded Chainage (m)	Date Installed		Number of Culverts Installed			
				Started	Completed	1.2 m Diam.	1.0 m Diam.	0.5 m Diam.	Sea Containers
CV043	Small	67+469	A66+735	2008-03-21	2008-03-25		1	2	
CV040	Large	72+263	A72+049	2008-03-26	2008-03-29	2 (+1)			
				2008-10-17	2008-10-17				
CV030	Small	77+506	A77+434	2008-03-27	2008-04-02		1	1	
BG32	Large	78+161	A78+128	2008-04-02	2008-04-04	2			
CV215	Small	79+572	A79+533	2008-04-04	2008-04-05			4	
CV217	Extra-Large	79+915	A79+829	2008-04-05	2008-04-17	3			14
CV216	Large	80+646	A80+576	2008-06-05	2008-06-08	3			
CV023	Small	83+147	A83+092	2008-05-28	2008-05-30		1		
BG30	Small	84+636	A84+539	2008-05-18	2008-05-21		1		
BG29	Small	84+805	A84+702	2008-05-21	2008-05-22		1		
BG27	Small	86+609	A86+492	2008-05-16	2008-05-18			3	
BG24	Medium	87+710	A87+608	2008-05-13	2008-05-15	3 (+1)			
				2008-10-18	2008-10-19				
BG17	Large	90+167	A90+018	2008-05-05	2008-05-09	2			
BG16	Extra-Small	90+218	NA	See Note 5					
BG04	Medium	94+148	A93+991	2008-05-03	2008-05-05	2			
CV001	Small	94+728	A94+350	2008-05-04	2008-05-08		1	2	
CV223	Extra-Large	97+155	NA	2008-04-14	2008-05-03	5			16
CV224	Medium	97+758	A97+570	2008-05-01	2008-05-04		2		
CV225	Large	98+989	NA	2007-09-21	2007-09-21	1 (+1)			
				2008-10-19	2008-10-20				
BG01	Medium	99+672	NA	2007-09-20	2007-09-20	1 (+2)			
				2008-10-20	2008-10-21				
CV186	Small	102+812	NA	2008-04-24	2008-04-29		1	2	
CV187	Small	103+078	NA	2008-05-06	2008-05-07		1	1	
				2008-06-13	2008-06-14				
CVD1-1	NA	See Note 7	NA	2008-09-24	2008-09-26		1		
CVD1-3	NA	See Note 7	NA	2008-09-22	2008-09-22		1		
CVD1-4	NA	See Note 7	NA	2008-09-24	2008-09-24		1		
CVD1-5	NA	See Note 7	NA	2008-09-17	2008-09-17	1	1		
CVD1-5B	NA	See Note 7	NA	2008-09-21	2008-09-21		1		
CVD1-6	NA	See Note 7	NA	2008-09-18	2008-09-18		1		
CVD1-7	NA	See Note 7	NA	2008-09-18	2008-09-18		1		
CVD1-8	NA	See Note 7	NA	2008-09-19	2008-09-19		1		
CVD1-9	NA	See Note 7	NA	2008-09-19	2009-09-19		1		
CVD1-10	NA	See Note 7	NA	2008-09-20	2008-09-20		1		
CVD1-11	NA	See Note 7	NA	2008-09-19	2008-09-19		1		
CVD1-12	NA	See Note 7	NA	2008-09-20	2008-09-20		1		
CVD1-13	NA	See Note 7	NA	2008-09-21	2008-09-21		1		
CVD1-14	NA	See Note 7	NA	2008-09-23	2008-09-24		1		
CVSSR-1	NA	See Note 8	NA	NA	NA				
CVSSR-2	NA	See Note 8	NA	NA	NA				

I:\102-00181-13\Assignment\Correspondence\NB09-00084 - Road Summary Letter (SS NB09-00042)\Table 1 - Culvert Summary, Rev 2.xls\Table 1

NOTES:

1. THE ORIGINAL CHAINAGE IS BASED ON THE ORIGINAL TOTE ROAD ALIGNMENT AND IS FOR IDENTIFICATION PURPOSES ONLY.
2. EXISTING CULVERTS REMAINING AT CV165.
3. CROSSING CV156 WAS AVOIDED.
4. CROSSING CV091 AND CV092 WERE COMBINED INTO ONE CROSSING.
5. COMPLETED BUT DATE NOT AVAILABLE.
6. # (+#) THE FIRST NUMBER INDICATES THE ORIGINAL DESIGN QUANTITY AND THE NUMBER IN PARENTHESES INDICATES THE NUMBER OF ADDITIONAL CULVERTS INSTALLED.
7. CROSSINGS CVD1-1 TO 14 ARE LOCATED ON THE ROAD TO DEPOSIT NO. 1.
8. CROSSINGS CVSSR-1 TO 2 ARE LOCATED ON THE SALT STATION ROAD (DEPOSIT NO. 1).
9. "NA" INDICATES NO DATA AVAILABLE.
10. SOME CROSSINGS WERE INSTALLED IN STAGES, THE CONSTRUCTION DATES FOR EACH STAGE ARE SHOWN.
11. THE GENERAL DIMENSIONS OF THE SEA CONTAINERS WERE 2.4M WIDE, 2.6M HIGH AND 6.1M LONG.

2	FEB0309	ISSUED WITH CONT. No. NB09-00084	CAP	KEH	KDE
1	JAN2309	ISSUED WITH CONT. No. NB09-00042	CAP	KEH	KDE
0	DEC1908	ISSUED WITH CONT. No. NB08-01211	CAP	KEH	KDE
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D



**LEGEND:**

- Water
- Existing Community

Scale 65 32.5 0 65 130 195 260 325  
(Approx.) Km



MARY RIVER PROJECT – BULK SAMPLING PROGRAM

PROJECT LOCATION MAP

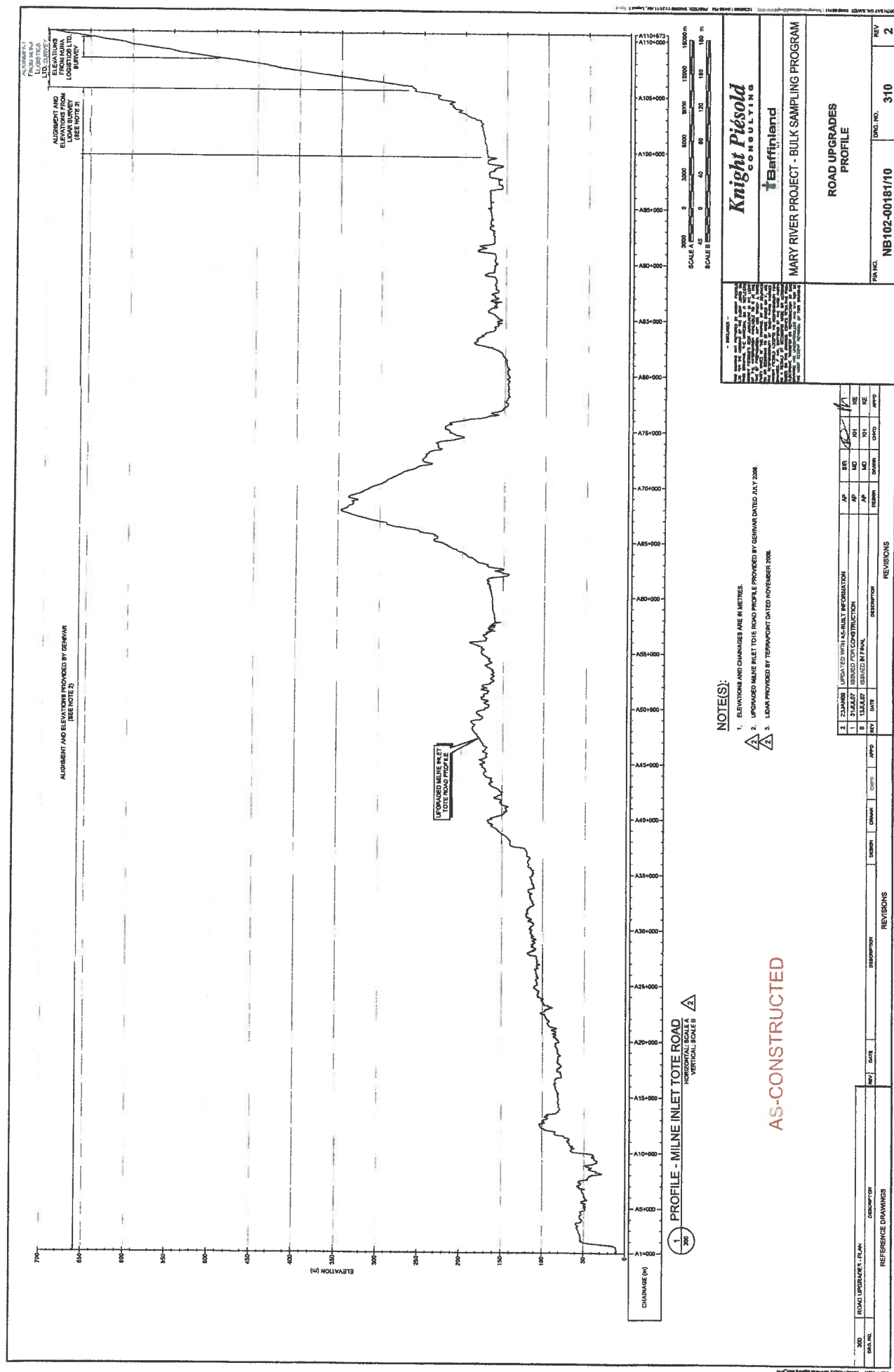
**Knight Piésold**  
CONSULTING

P/A NO. NB102-181/13	REF. NB09-00084	REV. 0
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FIGURE 1

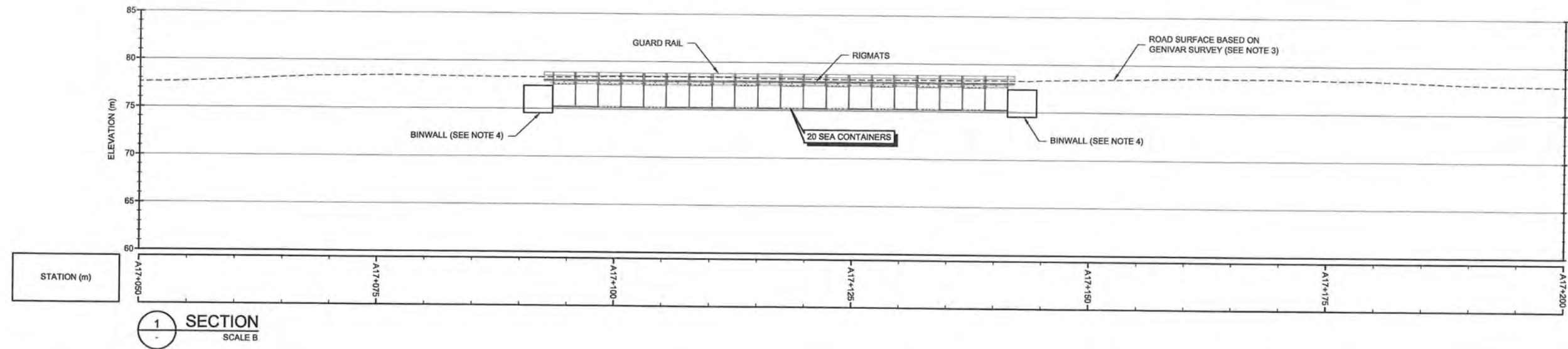




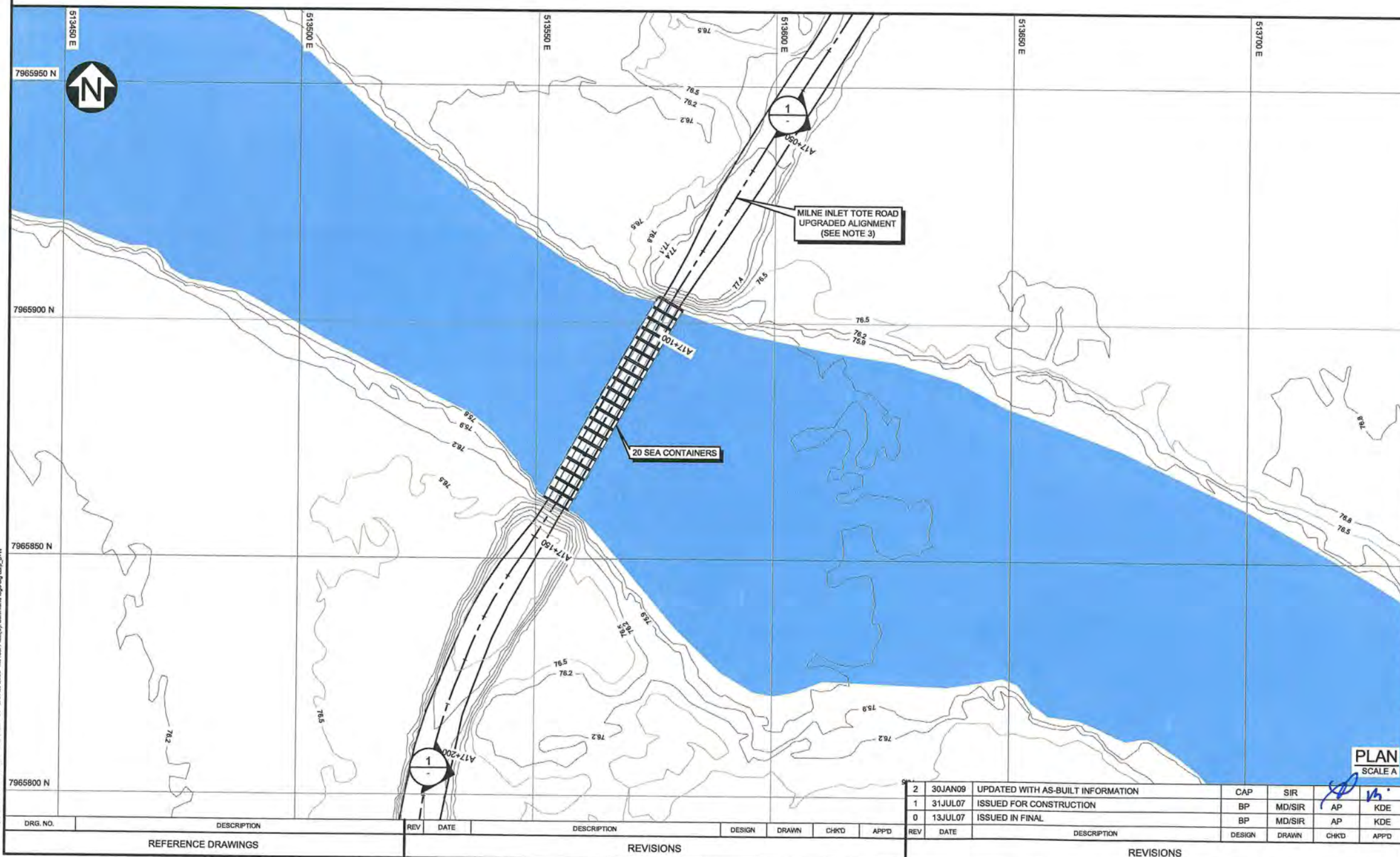








1 SECTION  
SCALE B



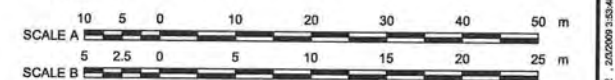
## AS-CONSTRUCTED

### LEGEND:

- WATER
- MAJOR CONTOUR
- MINOR CONTOUR
- ROAD SURFACE BASED ON GENIVAR (SEE NOTE 3)
- ROAD ALIGNMENT (SEE NOTE 3)

### NOTE(S):

- COORDINATE GRID IS UTM (NAD83) ZONE 17 AND IS IN METRES.
- CONTOURS BASED ON LIDAR SURVEY COMPLETED NOVEMBER 2008. CONTOUR INTERVAL IS 0.3 METRES.
- AS-CONSTRUCTED ROAD ALIGNMENT PROVIDED BY GENIVAR DATED JULY 2008.
- BINWALL LOCATIONS AND ELEVATIONS ARE APPROXIMATE AND WERE NOT SURVEYED.



DISCLAIMER  
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**Knight Piesold**  
CONSULTING

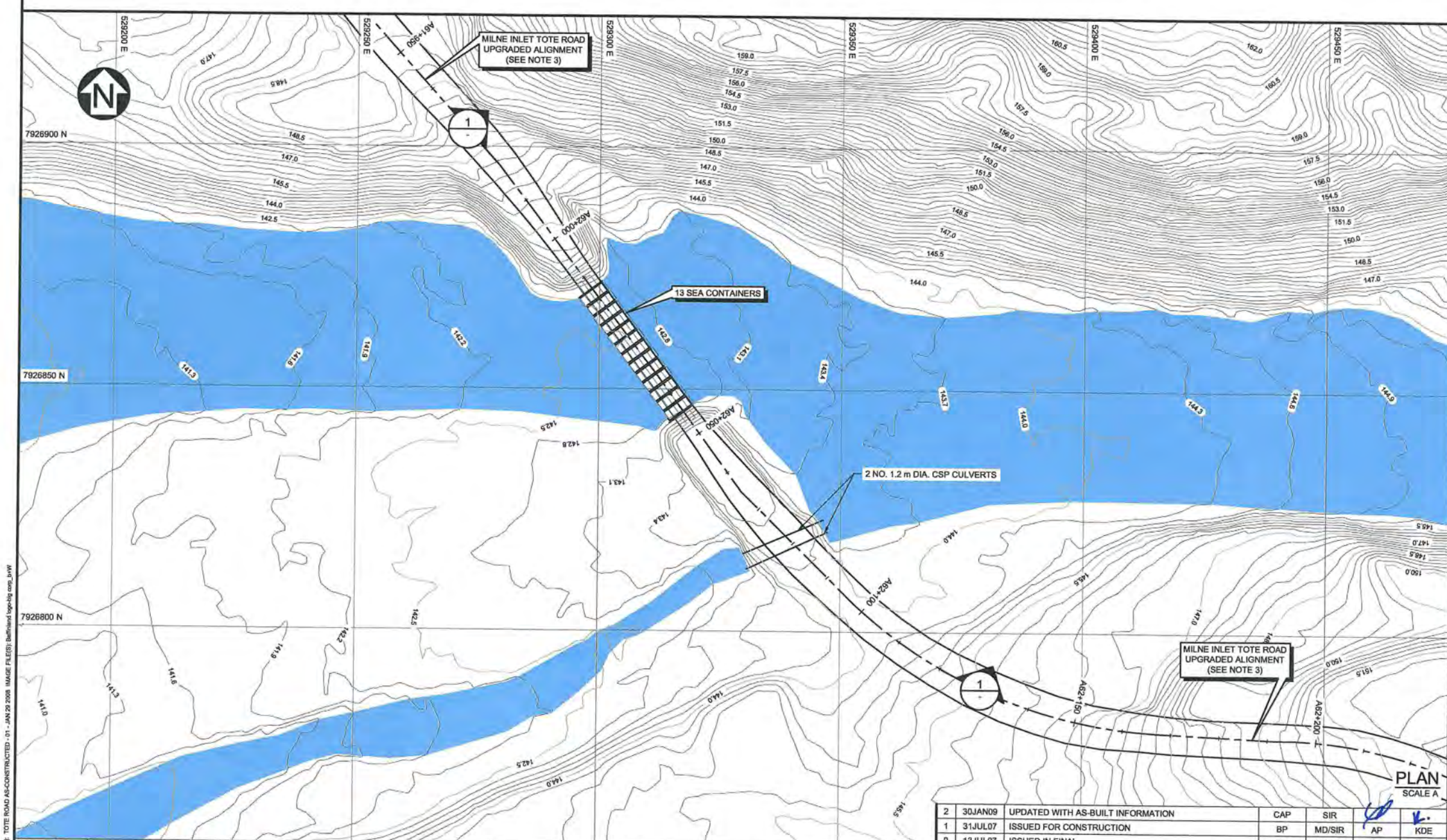
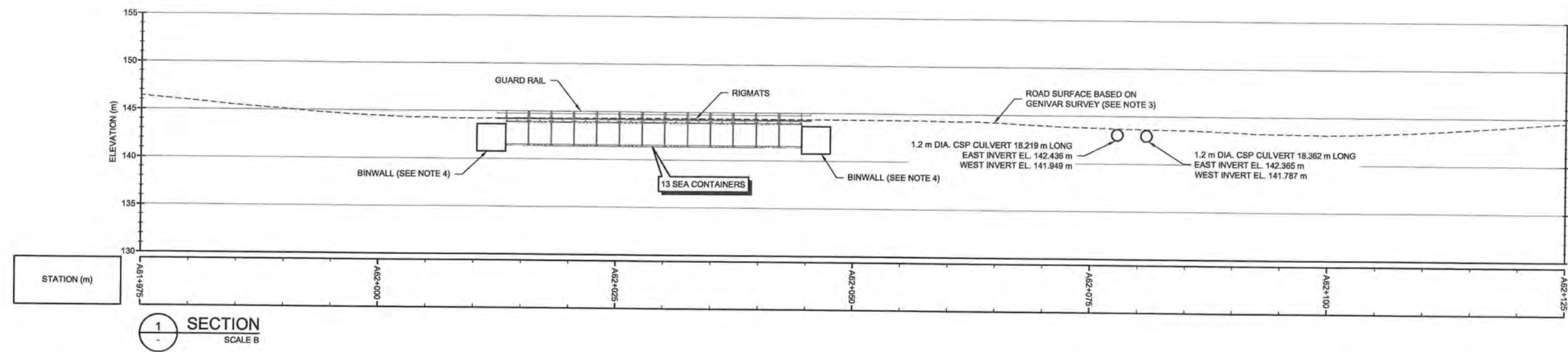
**Baffinland**  
IRON MINES CORPORATION

MARY RIVER PROJECT - BULK SAMPLING PROGRAM

**EXTRA-LARGE CROSSING CV128**  
**PLAN AND SECTIONS**

P/A NO.	DRG. NO.	REV
NB102-181/10	441	2





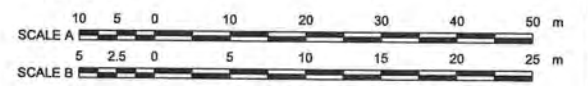
AS-CONSTRUCTED

LEGEND:

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- MAJOR CONTOUR
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- ROAD SURFACE BASED ON GENIVAR SURVEY (SEE NOTE 3)
- ROAD ALIGNMENT (SEE NOTE 3)

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**Knight Piesold**  
CONSULTING

**Baffinland**  
Iron Mines Corporation

MARY RIVER PROJECT - BULK SAMPLING PROGRAM

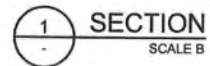
EXTRA-LARGE CROSSING BG50  
PLAN AND SECTIONS

P/A NO.	DRG. NO.	REV
NB102-181/10	442	2

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NORTH BAY, ON. S.WED: 11:02:08 11-03-2008 Project: Mary River Bulk Sampling Program 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000



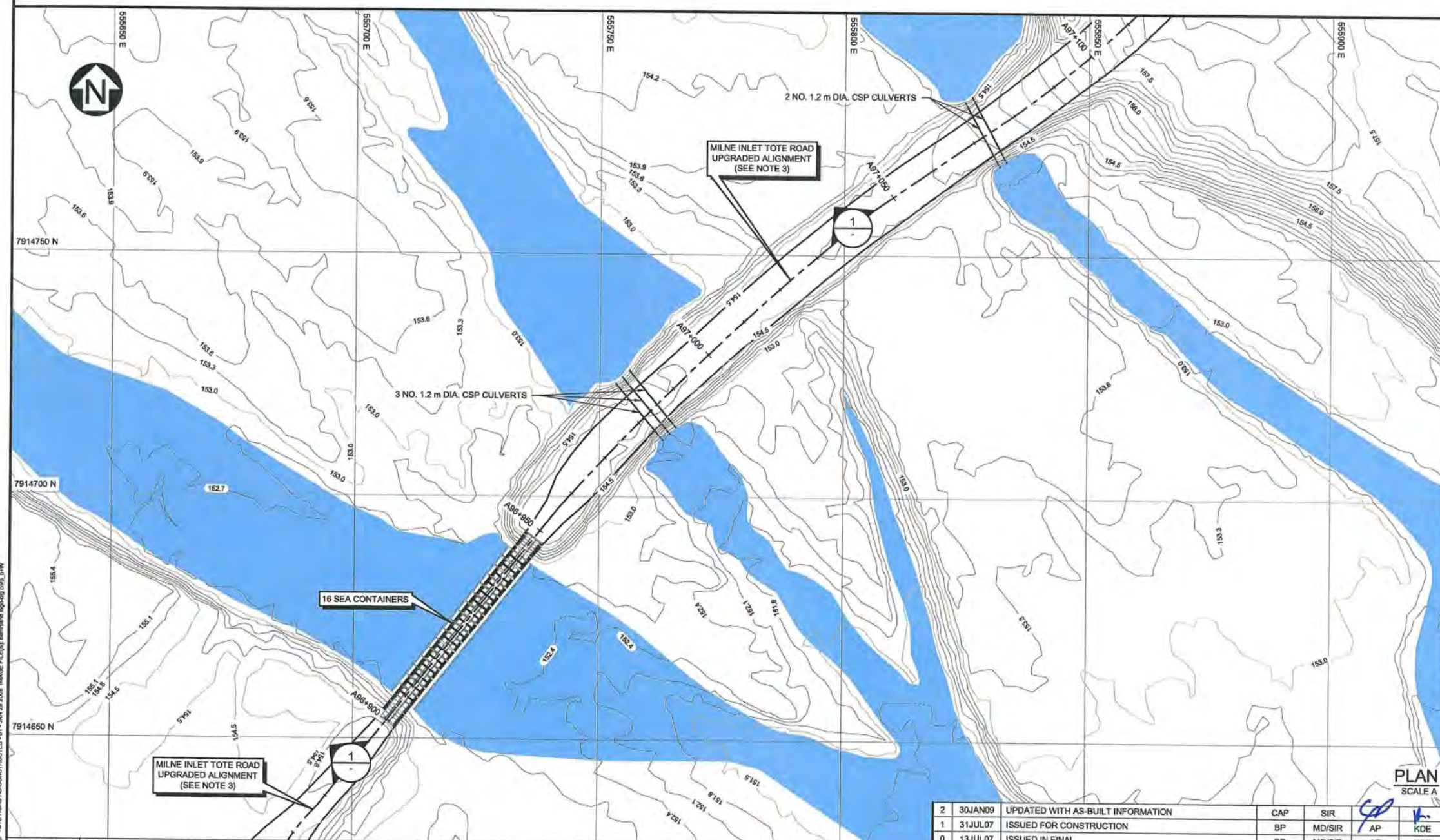
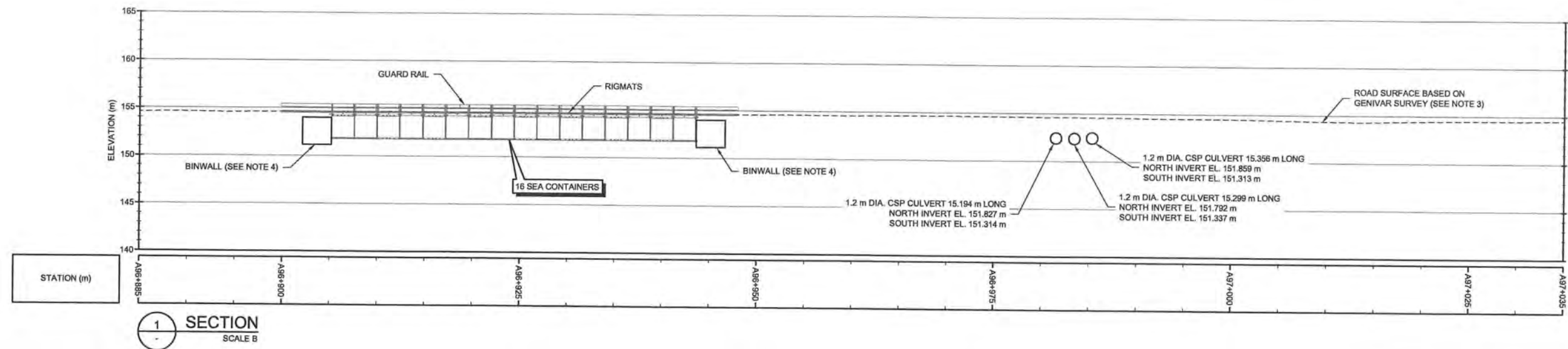


P/A NO.	DRG. NO.	REV
<b>NB102-181/10</b>	<b>443</b>	<b>2</b>

2	30JAN09	UPDATED WITH AS-BUILT INFORMATION	CAP	SIR	AP	KDE
1	31JUL07	ISSUED FOR CONSTRUCTION	BP	MD/SIR	AP	KDE
0	13JUL07	ISSUED IN FINAL	BP	MD/SIR	AP	KDE
REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHKD	APPD

REVISIONS





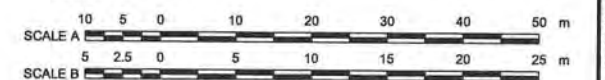
## AS-CONSTRUCTED

### LEGEND:

- WATER
- MAJOR CONTOUR
- MINOR CONTOUR
- ROAD SURFACE BASED ON GENIVAR SURVEY (SEE NOTE 3)
- ROAD ALIGNMENT (SEE NOTE 3)

### NOTE(S):

1. COORDINATE GRID IS UTM (NAD83) ZONE 17 AND IS IN METRES.
2. CONTOURS BASED ON LIDAR SURVEY COMPLETED NOVEMBER 2008. CONTOUR INTERVAL IS 0.3 METRES.
3. AS-CONSTRUCTED ROAD ALIGNMENT PROVIDED BY GENIVAR DATED JULY 2008.
4. BINWALL LOCATIONS AND ELEVATIONS ARE APPROXIMATE AND WERE NOT SURVEYED.



DISCLAIMER

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IRON MINES CORPORATION

MARY RIVER PROJECT - BULK SAMPLING PROGRAM

**EXTRA-LARGE CROSSING CV223**  
PLAN AND SECTIONS

P/A NO. **NB102-181/10** DRG. NO. **444** REV **2**

**APPENDIX A**

DESIGN DRAWINGS ISSUED FOR CONSTRUCTION

(3 Pages)

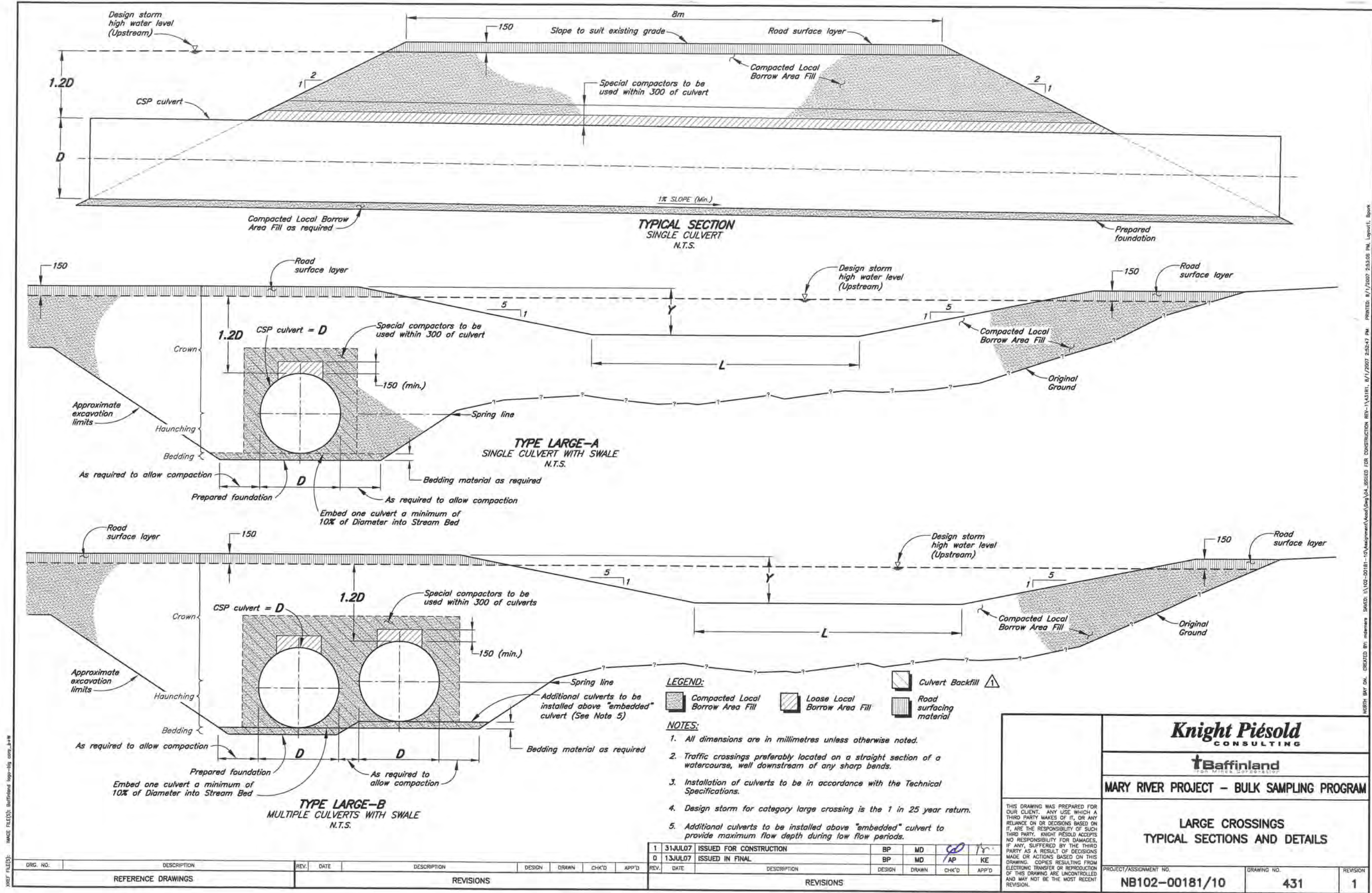












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**Knight Piésold**  
CONSULTING

**Baffinland**  
FOR MINES CORPORATION

**MARY RIVER PROJECT – BULK SAMPLING PROGRAM**

**LARGE CROSSINGS**  
**TYPICAL SECTIONS AND DETAILS**

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
NB102-00181/10	431	1

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