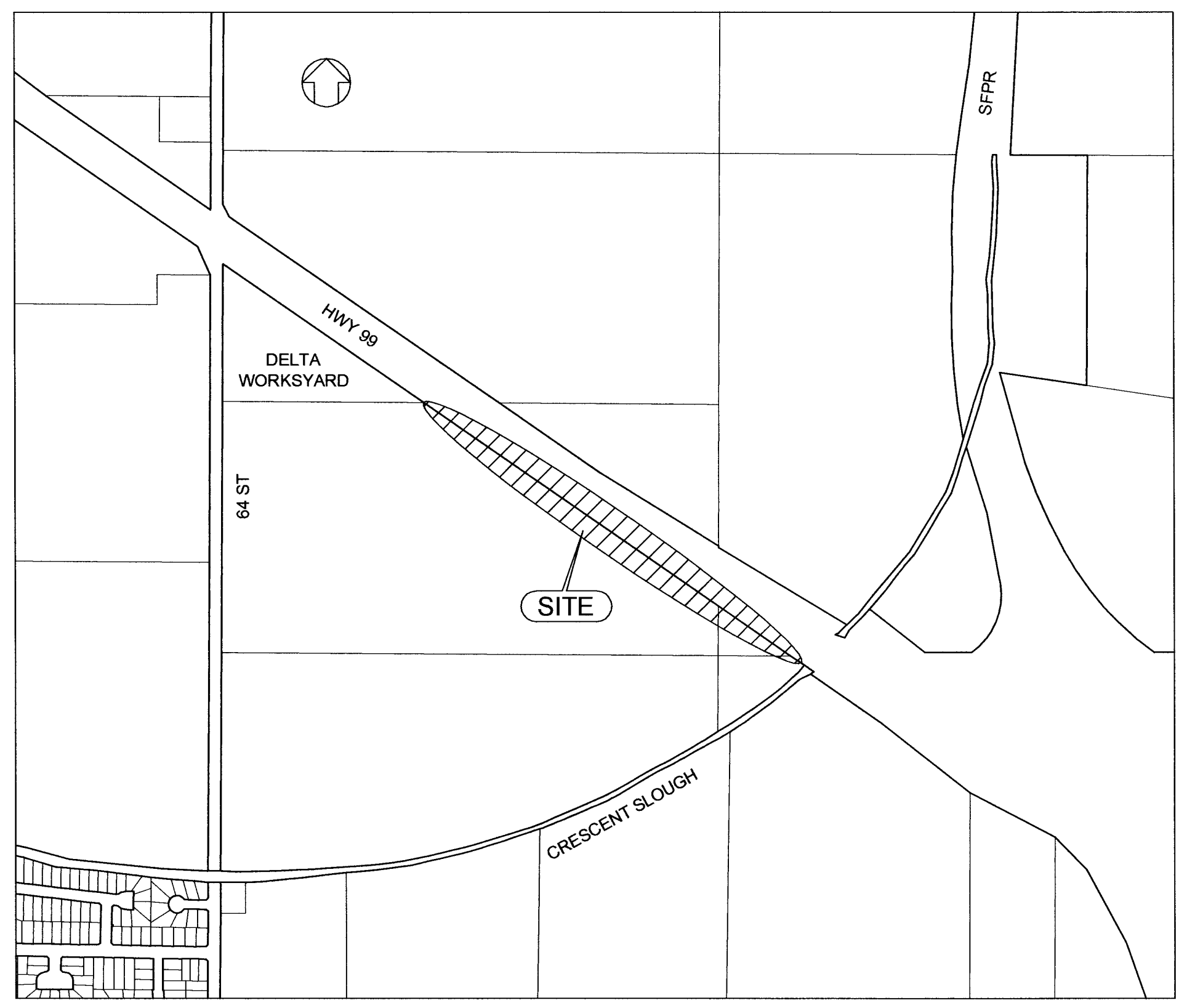


KEY PLAN

DRAWING INDEX		
SHEET No.	DWG No.	DESCRIPTION
1	D-3393-1	INDEX
PLAN AND PROFILES		
2	D-3393-2	DELTA WORKS YARD TO CRESCENT SLOUGH (STA 0+100 TO STA 0+400)
3	D-3393-3	DELTA WORKS YARD TO CRESCENT SLOUGH (STA 0+400 TO STA 0+700)
4	D-3393-4	DELTA WORKS YARD TO CRESCENT SLOUGH (STA 0+700 TO STA 0+890)
5	D-3393-5	DELTA OPERATIONS WORKS YARD



SITE PLAN

GENERAL NOTES:

- ELEVATIONS ARE GEODETIC.
- ALL CONSTRUCTION IS IN COMPLIANCE WITH DELTA'S MASTER SPECIFICATIONS.
- CONFIRMED LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AND APPURTANCES AS REQUIRED FOR NEW CONSTRUCTION.
- ALL WORKS ARE COORDINATED WITH FTG CONSTRUCTORS AND MINISTRY OF TRANSPORTATION & INFRASTRUCTURE.
- CONSTRUCTION LIMIT IS TO BE IN THE VICINITY OF HWY 99 WITHIN MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE'S APPROVED BOUNDARY.
- DURING INSTALLATION OF FORCEMAIN, ALL ROOTS IN AREA ARE REMOVED. ANY ROOTS LARGER THAN 2" IN DIAMETER WILL REQUIRE INSPECTION BY URBAN FORESTRY PRIOR TO REMOVAL.
- PRIOR TO STARTING WORK, THE CONTRACTOR WAS REQUIRED TO OBTAIN FRASER TRANSPORTATION GROUP CERTIFICATION RELATED TO THE WORK SITE. PART OF THIS PROCESS REQUIRES ATTENDANCE AT THE SAFETY ORIENTATION MEETINGS BY ALL PERSONNEL WHO WILL BE WORKING ON THE SITE.
- ALL CONSTRUCTION TRAFFIC TO ENTER SITE FROM 72nd STREET.

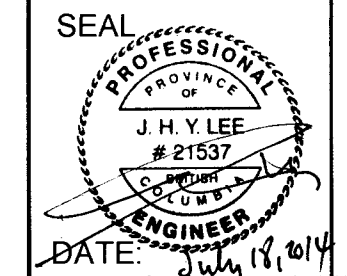
LEGEND

EXISTING	
PAVEMENT WITH CURB & GUTTER	
PAVEMENT	
EXTRUDED CURB	
SIDEWALK	
GROUND ELEVATION	
STORM SEWER	
SANITARY SEWER	
FORCE MAIN	
PUMP STATION	
WATERMAIN	
GASMAIN	
UNDERGROUND HYDRO	
UNDERGROUND TEL	
CULVERT	
DITCH	
SWALE	
FENCE	
CONDUIT, STREET LIGHT AND JUNCTION BOXES	
UTILITY POLE / WITH ANCHOR	
UTILITY POLE WITH LIGHT	
DAVID TRAFFIC SIGNAL POLE	
COMBINATION TRAFFIC SIGNAL POLE	
PRIMARY HEAD / SECONDARY OR PEDESTRIAN HEAD	
PEDESTRIAN PUSHBUTTONS / PEDESTRIAN PUSHBUTTON POST	
SERVICE PANEL AND TRAFFIC CONTROLLER	

PROPOSED	
CURB & GUTTER	
PAVEMENT	
ASPHALT RECLAMATION	
GROUND ELEVATION	
STORM SEWER	
SANITARY SEWER	
FORCE MAIN	
PUMP STATION	
WATERMAIN	
CULVERT	
DITCH	
SWALE	
FENCE	
CONDUIT, STREET LIGHT AND JUNCTION BOXES	
UTILITY POLE / WITH ANCHOR	
UTILITY POLE	

No	DATE	BY	CK	REVISIONS DESCRIPTION
1	2014 07 18	MM	JL	RECORD DRAWING
2	2013 04 25	MM	JL	SHEET 5 ADDED
3	2013 04 15	MM	JL	ISSUED FOR CONSTRUCTION
4	2013 02 01	MM	JL	ISSUED FOR TENDER
5	2013 01 30	MM	JL	ISSUED FOR MOTI APPROVAL - NEW ALIGNMENT
6	2012 11 22	MM	JL	ISSUED FOR MOTI APPROVAL

The Corporation of Delta
 4500 CLARENCE TAYLOR CRESCENT, DELTA, B.C., CANADA V4K-3E2
ENGINEERING DEPARTMENT
 TEL: (604) 946-3260 FAX: (604) 946-7492

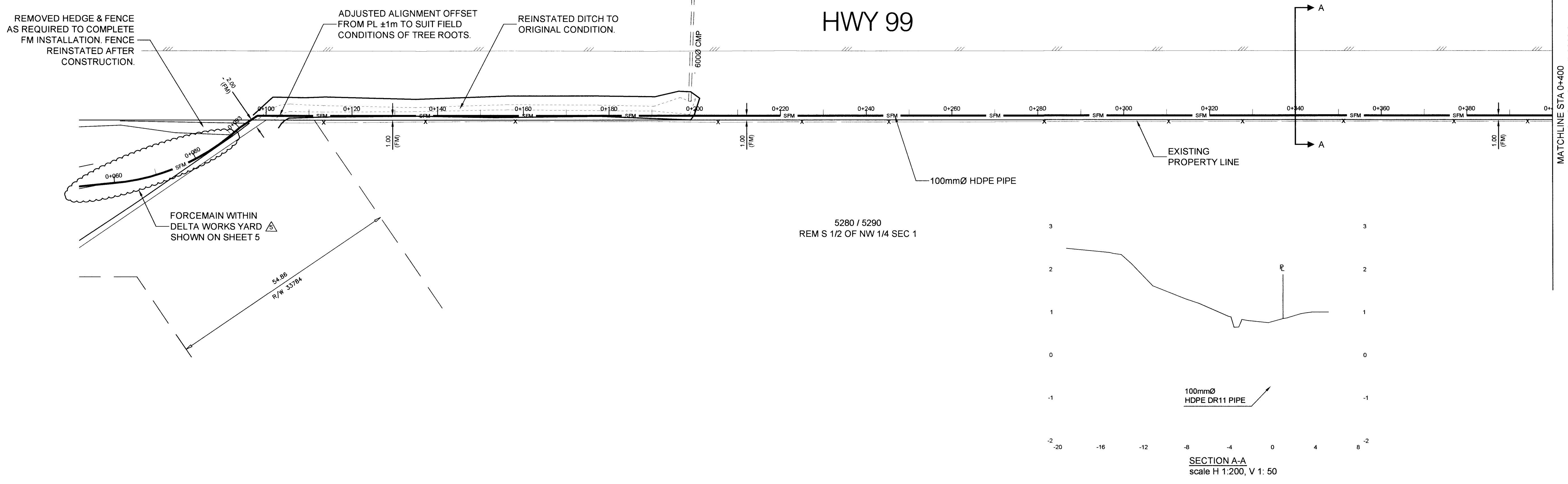
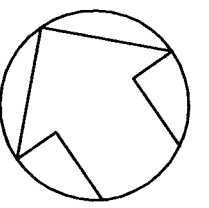


BENCHMARK
 ALL ELEVATIONS ARE METRIC DERIVED FROM THE MUNICIPALITY OF DELTA INTEGRATED MONUMENTS (CVD026)
 Morn# ELEVATION = m

DESIGN BY: RDJL DATE: 2012 10 01	Engineering File No.
DRAWN BY: MM DATE: 2012 10 01	S12-304
CHECKED BY: HF DATE: 2013-01-31	Contract No.
APPRVD BY: JL DATE: 2013-01-31	
SCALE	

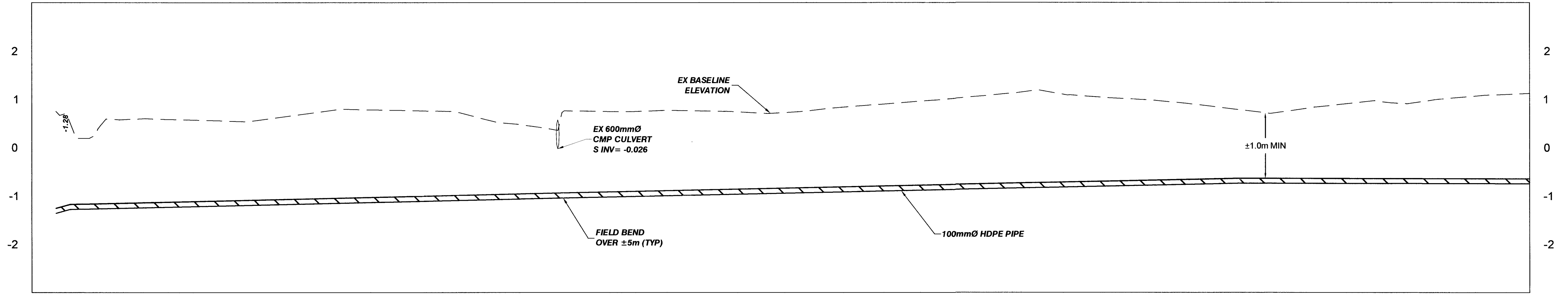
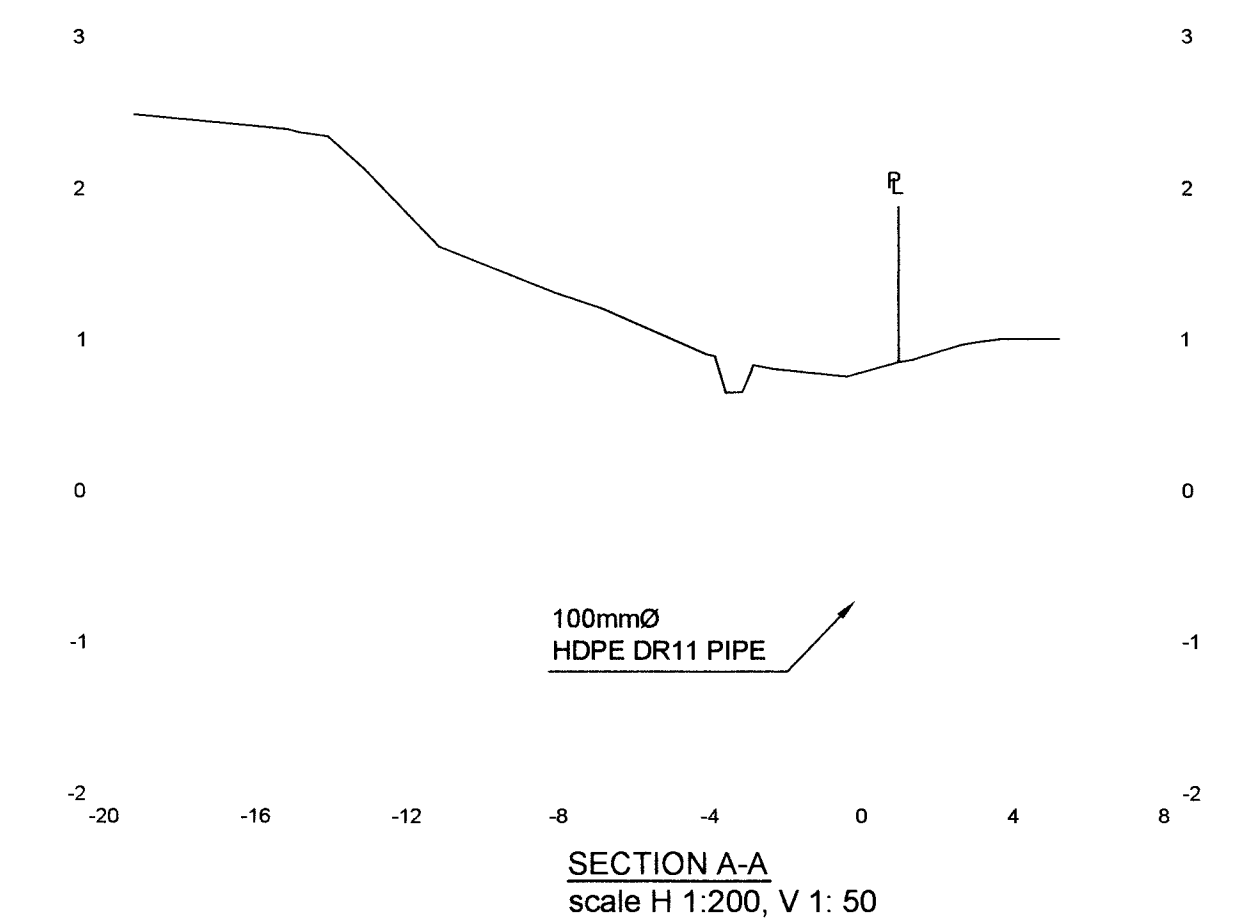
PROJECT: WORKS YARD SEWER FORCEMAIN
 LOCATION: INDEX

DRAWING No. **D-3393**
 SHEET **1** OF **5**
 REV **6**



MATCHLINE STA 0+400
FOR CONTINUATION SEE SHEET D-3393-3

5280 / 5290
REM S 1/2 OF NW 1/4 SEC 1

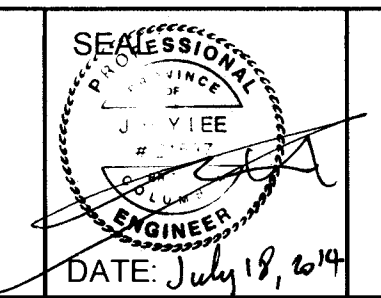


SANITARY SEWER LENGTH AND GRADE	102.1m of 100mmØ DR11 HDPE @ +0.24%										140.0m of 100mmØ DR11 HDPE @ +0.22%										100.0m of 100mmØ DR11 HDPE @ -0.01%									
	Chainage	Invert	Baseline	Chainage	Invert	Baseline	Chainage	Invert	Baseline	Chainage	Invert	Baseline	Chainage	Invert	Baseline	Chainage	Invert	Baseline												
	0+097.816	-1.28	0.188	0+100	-1.28	0.188	0+200	-1.04	0.744	0+210	-1.02	0.747	0+300	-0.80	1.051	0+340	-0.74	0.782	0+400	-0.75	1.120									
				0+110	-1.25	0.595				0+220	-1.00	0.788			1.099															
				0+120	-1.23	0.578				0+230	-0.98	0.756			1.104															
				0+130	-1.20	0.550				0+240	-0.95	0.717			1.051															
				0+140	-1.18	0.606				0+250	-0.93	0.755			0.991															
				0+150	-1.16	0.741				0+260	-0.91	0.654			0.902															
				0+160	-1.13	0.783				0+270	-0.89	0.690			0.802															
				0+170	-1.11	0.763				0+280	-0.87	1.009			0.759															
				0+180	-1.09	0.683				0+290	-0.85	1.099			0.886															
				0+190	-1.06	0.666				0+300	-0.82	1.164			0.942															
				0+200	-1.04	0.744				0+310	-0.80	1.051			0.866															
				0+210	-1.02	0.747				0+320	-0.78	0.991			1.076															
				0+220	-1.00	0.788				0+330	-0.76	0.902			0.942															
				0+230	-0.98	0.756				0+340	-0.74	0.782			0.866															
				0+240	-0.95	0.717				0+350	-0.74	0.759			0.886															
				0+250	-0.93	0.755				0+360	-0.74	0.886			0.886															
				0+260	-0.91	0.654				0+370	-0.74	0.942			0.886															
				0+270	-0.89	0.690				0+380	-0.74	0.886			0.886															
				0+280	-0.87	1.009				0+390	-0.74	0.886			0.886															
				0+290	-0.85	1.099				0+400	-0.75	1.120			0.886															

P:\LOCAL\2011\PROJECTS\DELTA OPERATIONS SANITARY SEWER FORCEMAIN\DRAWINGS SURVEY BASE

No	DATE	BY	CK	REVISIONS DESCRIPTION
1	2014 07 18	MM	JL	RECORD DRAWING
2	2013 04 25	MM	JL	NOTE AND SHEET 5 ADDED
3	2013 04 15	MM	JL	ISSUED FOR CONSTRUCTION
4	2013 02 01	MM	JL	ISSUED FOR TENDER
5	2013 01 30	MM	JL	ISSUED FOR MOTI APPROVAL - NEW ALIGNMENT
6	2012 11 22	MM	JL	ISSUED FOR MOTI APPROVAL

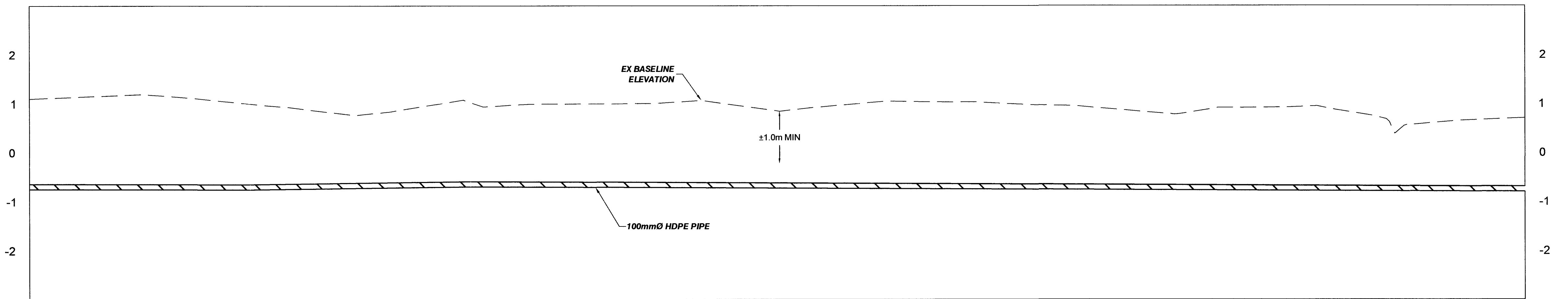
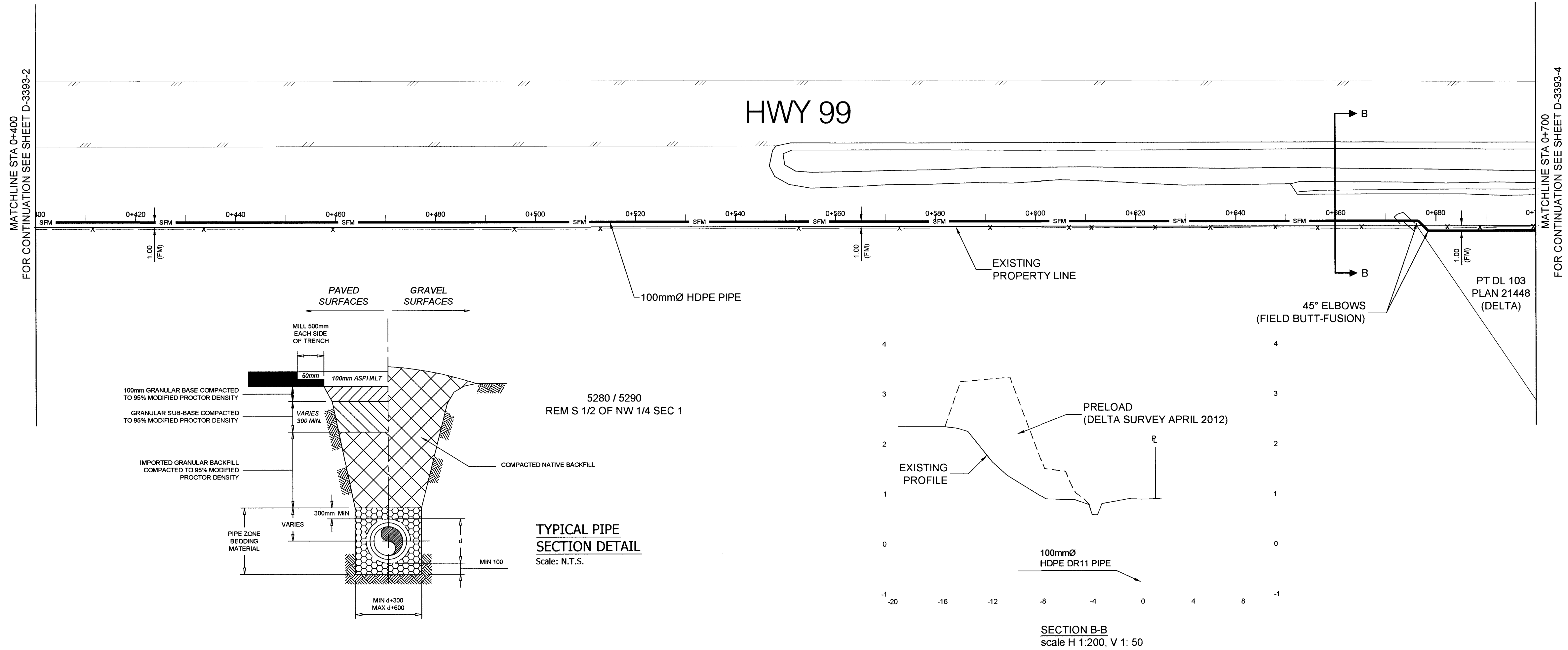
Delta The Corporation of Delta
 4500 CLARENCE TAYLOR CRESCENT, DELTA, B.C., CANADA V4K-3E2
 ENGINEERING DEPARTMENT
 TEL: (604) 946-3260 FAX: (604) 946-7492



DESIGN BY: RDJL	DATE: 2012 10 01	Engineering File No.
DRAWN BY: MM	DATE: 2012 10 01	S12-304
CHECKED BY: HF	DATE: 2013-01-31	Contract No.
APPRVD BY: JL	DATE: 2013-01-31	
SCALE: HORIZ 1:500	VERT 1:50	

PROJECT: WORKS YARD SEWER FORCEMAIN
 LOCATION: DELTA WORKS YARD TO CRESCENT SLOUGH (STA 0+100 TO STA 0+400)

DRAWING No. D-3393
 SHEET 2 OF 5
 REV 6

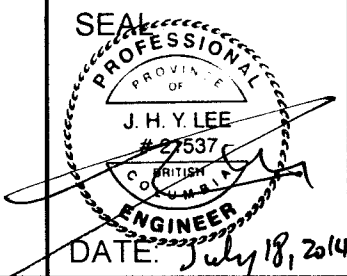


SANITARY SEWER LENGTH AND GRADE	100.0m of 100mmØ DR11 HDPE @ -0.01%										45.0m of 100mmØ DR11 HDPE @ +0.15%										191.5m of 100mmØ DR11 HDPE @ -0.05%										2.8m of 100mmØ DR11 HDPE @ +0.02%		21.5m of 100mmØ DR11 HDPE @ +0.03%																																																																																														
	INVERT	BASELINE	CHAINAGE	INVERT	BASELINE	CHAINAGE	INVERT	BASELINE	CHAINAGE	INVERT	BASELINE	CHAINAGE	INVERT	BASELINE	CHAINAGE	INVERT	BASELINE	CHAINAGE	INVERT	BASELINE	CHAINAGE	INVERT	BASELINE	CHAINAGE	INVERT	BASELINE	CHAINAGE																																																																																																				
-0.75	1.120	0+400	-0.75	1.161	0+410	-0.75	1.119	0+420	-0.75	1.098	0+430	-0.75	0.995	0.995	0+440	-0.74	0.903	0.903	0+450	-0.72	0.780	0.780	0+460	-0.71	0.890	0.890	0+470	-0.70	1.020	1.020	0+480	-0.70	0.952	0.952	0+490	-0.69	0.952	0.952	0+500	-0.70	0.992	0.992	0+510	-0.70	0.997	0.997	0+520	-0.71	1.002	1.002	0+530	-0.71	1.052	1.052	0+540	-0.72	0.955	0.955	0+550	-0.72	0.898	0.898	0+560	-0.73	0.995	0.995	0+570	-0.73	1.050	1.050	0+580	-0.74	1.006	1.006	0+590	-0.74	1.021	1.021	0+600	-0.75	0.972	0.972	0+610	-0.75	0.904	0.904	0+620	-0.76	0.850	0.850	0+630	-0.77	0.794	0.794	0+640	-0.77	0.913	0.913	0+650	-0.78	0.920	0.920	0+660	-0.78	0.897	0.897	0+670	-0.79	0.722	0.722	0+676.500	-0.79	0.950	0.950	0+677.500	-0.79	0.950	0.950	0+680	-0.79	0.864	0.864	0+690	-0.80	0.704	0.704	0+700

PROJECT: OPERATIONS SANITARY MAINS DRAWING - SURVEY BASE

No	DATE	BY	CK	REVISIONS DESCRIPTION
1	2012 11 22	MM	JL	ISSUED FOR MOTI APPROVAL
2	2013 01 30	MM	JL	ISSUED FOR MOTI APPROVAL - NEW ALIGNMENT
3	2013 02 01	MM	JL	ISSUED FOR TENDER
4	2013 04 15	MM	JL	ISSUED FOR CONSTRUCTION
5	2013 04 25	MM	JL	SHEET 5 ADDED
6	2014 07 18	MM	JL	RECORD DRAWING

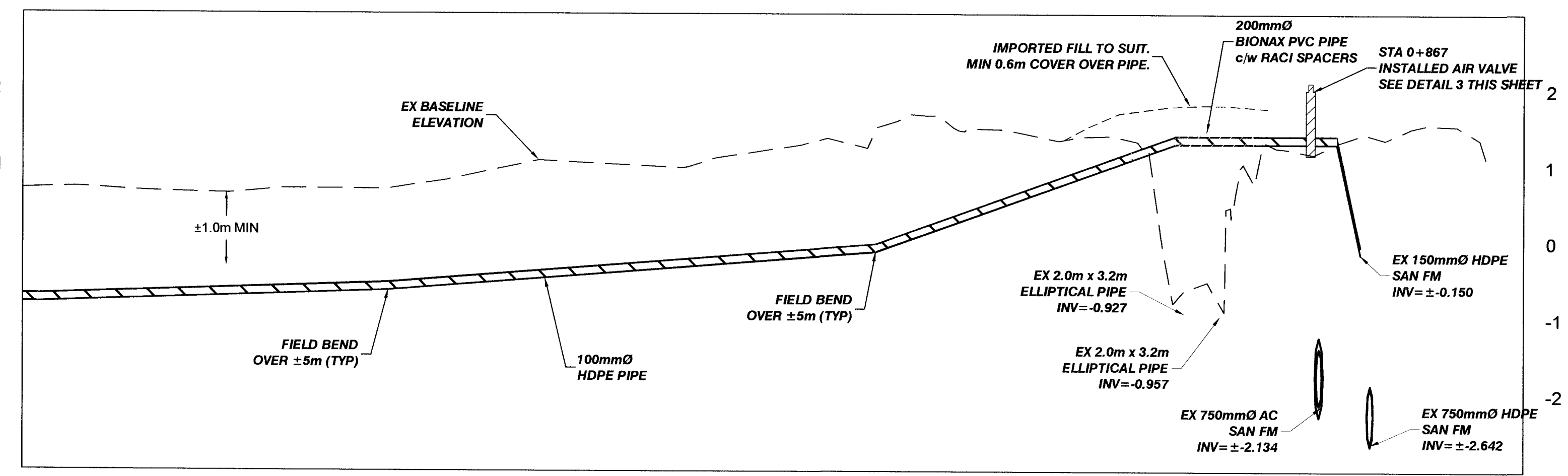
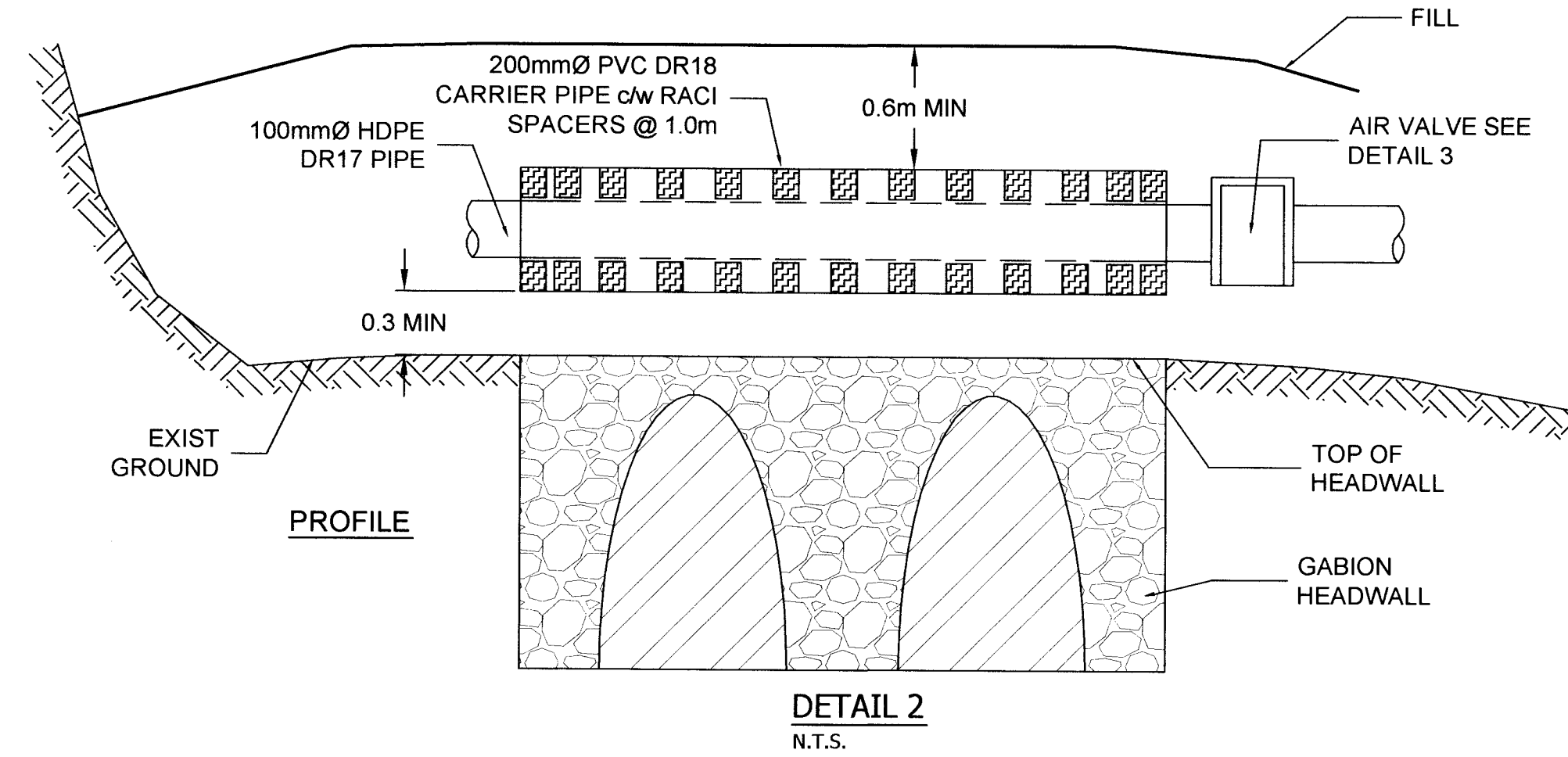
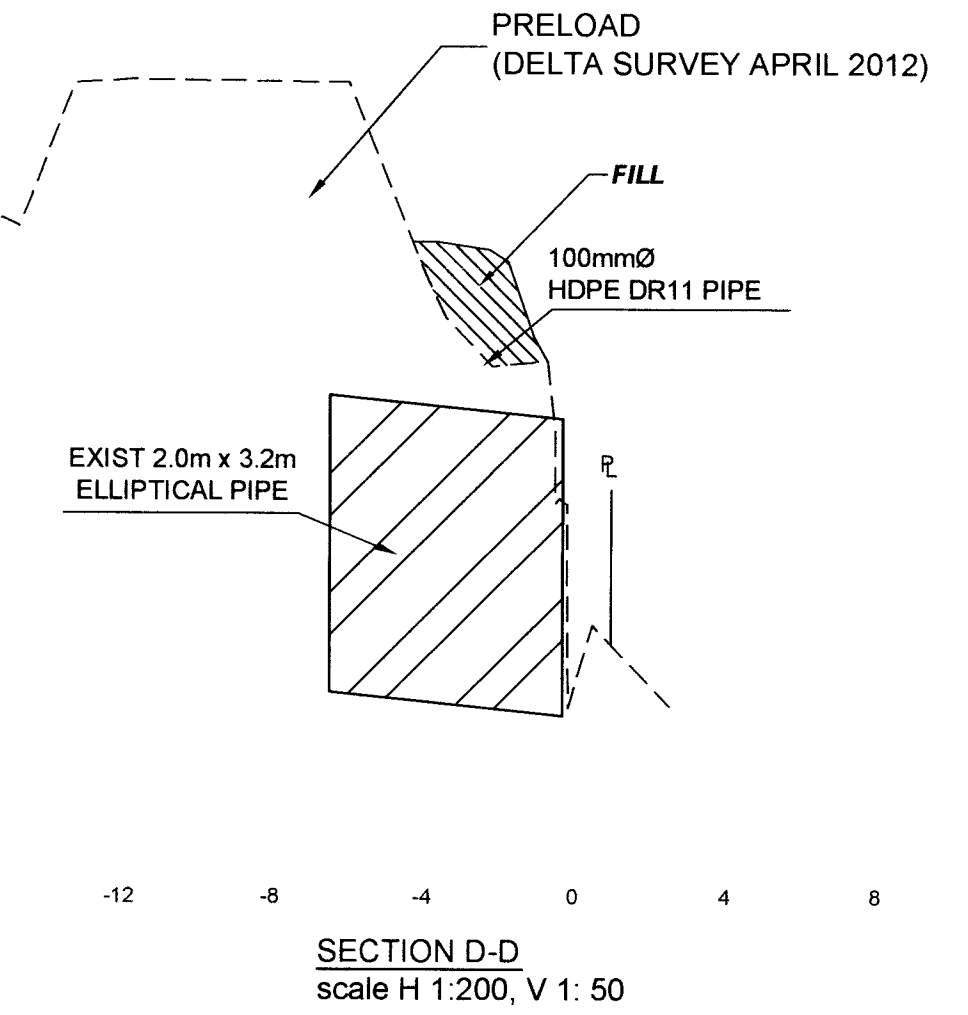
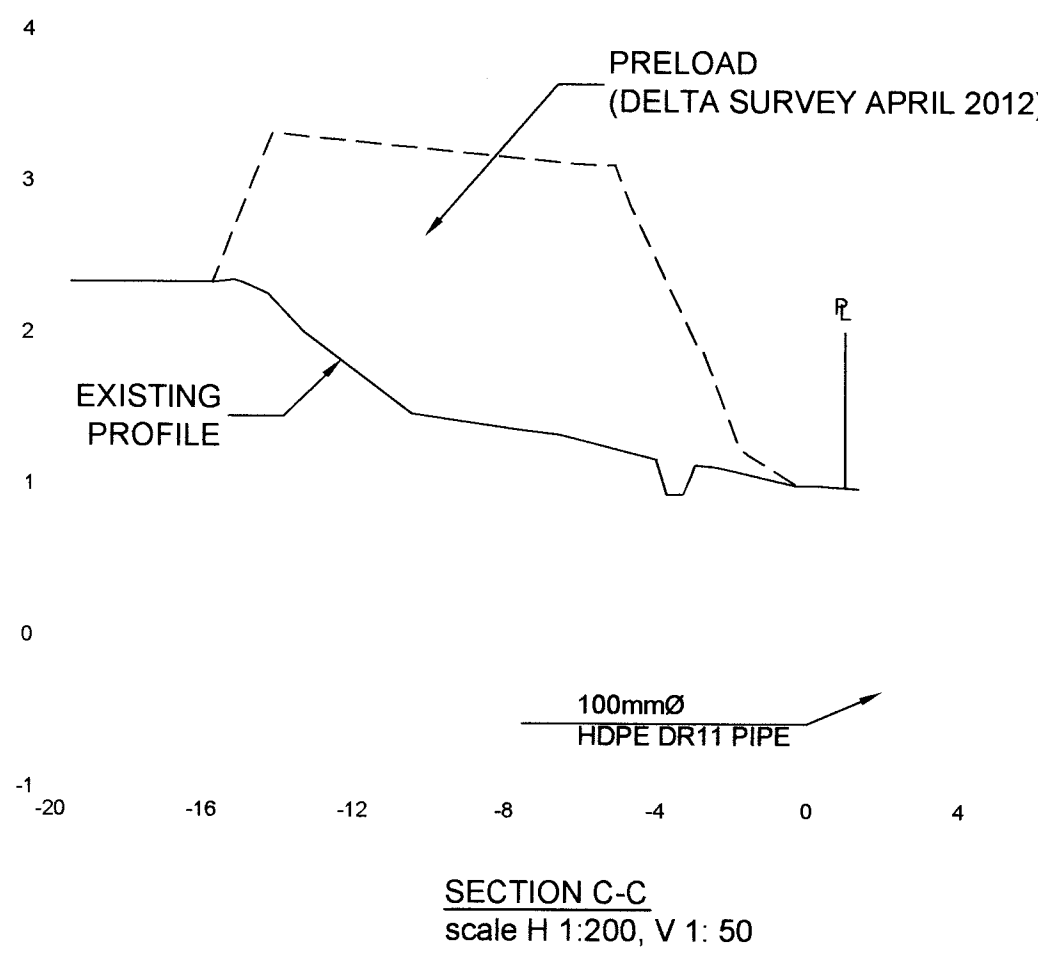
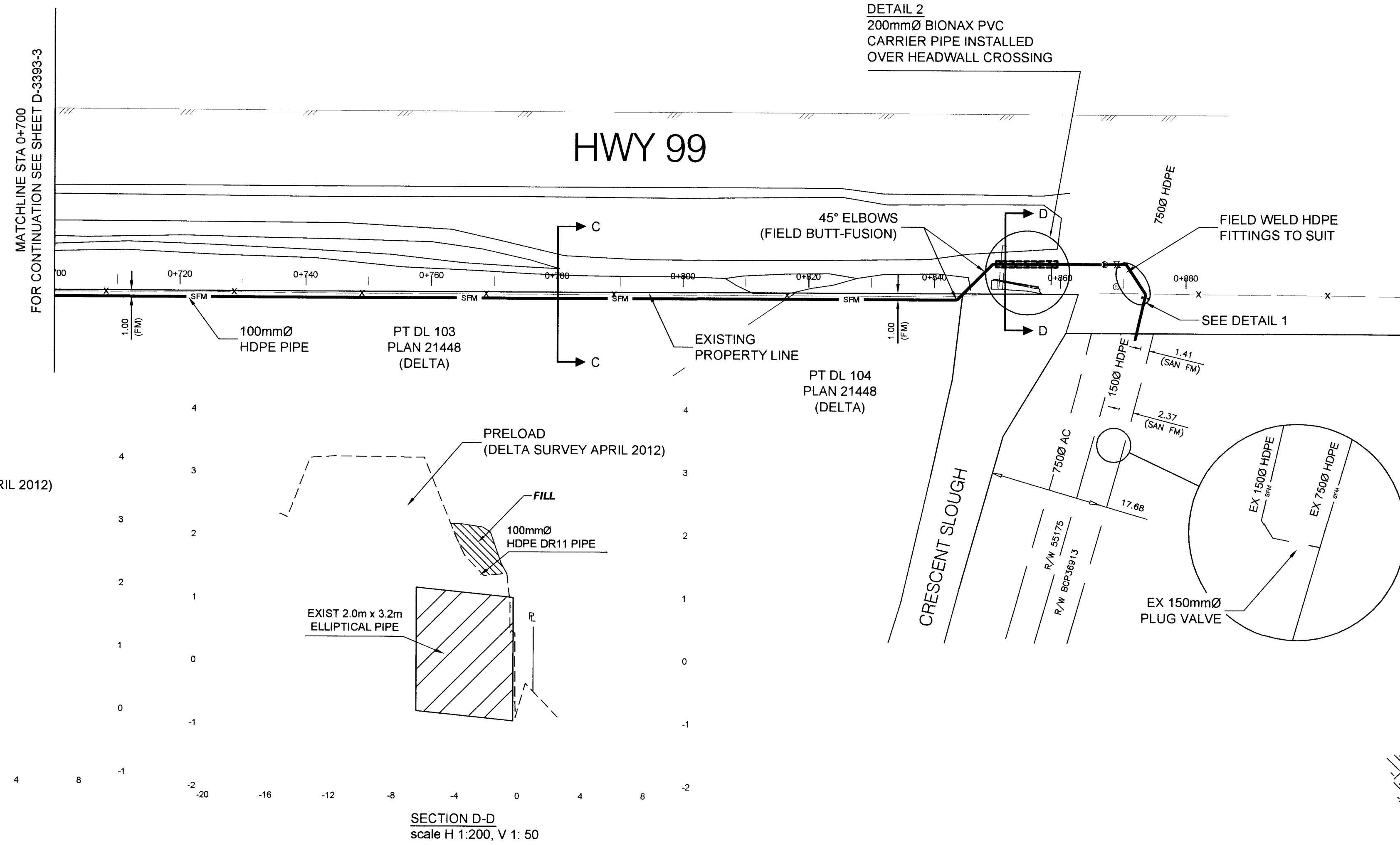
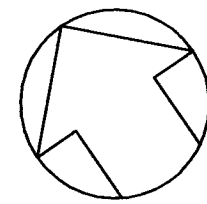
Delta The Corporation of Delta
 4500 CLARENCE TAYLOR CRESCENT, DELTA, B.C., CANADA V4K 3E2
 ENGINEERING DEPARTMENT
 TEL: (604) 946-3290 FAX: (604) 946-7452



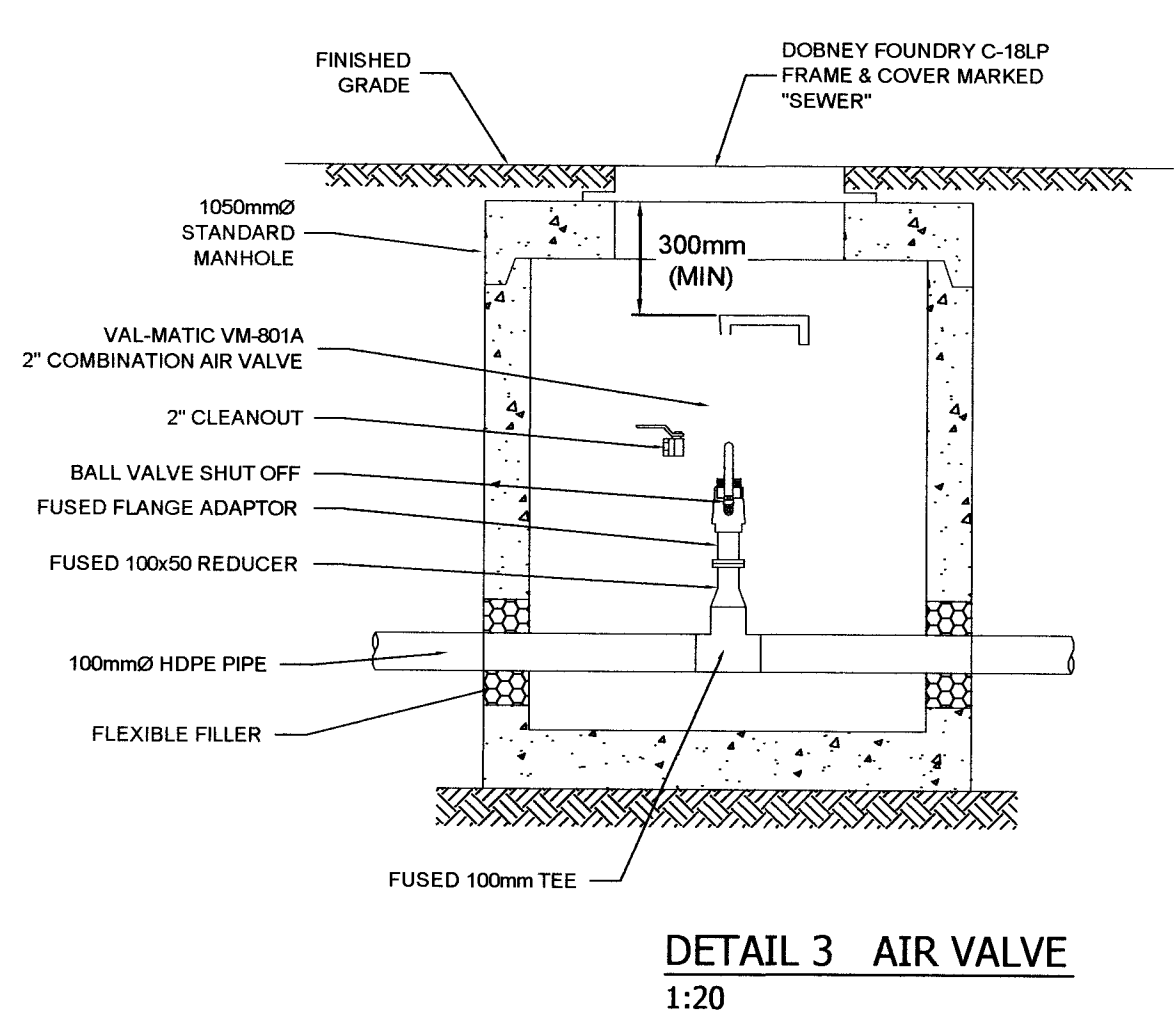
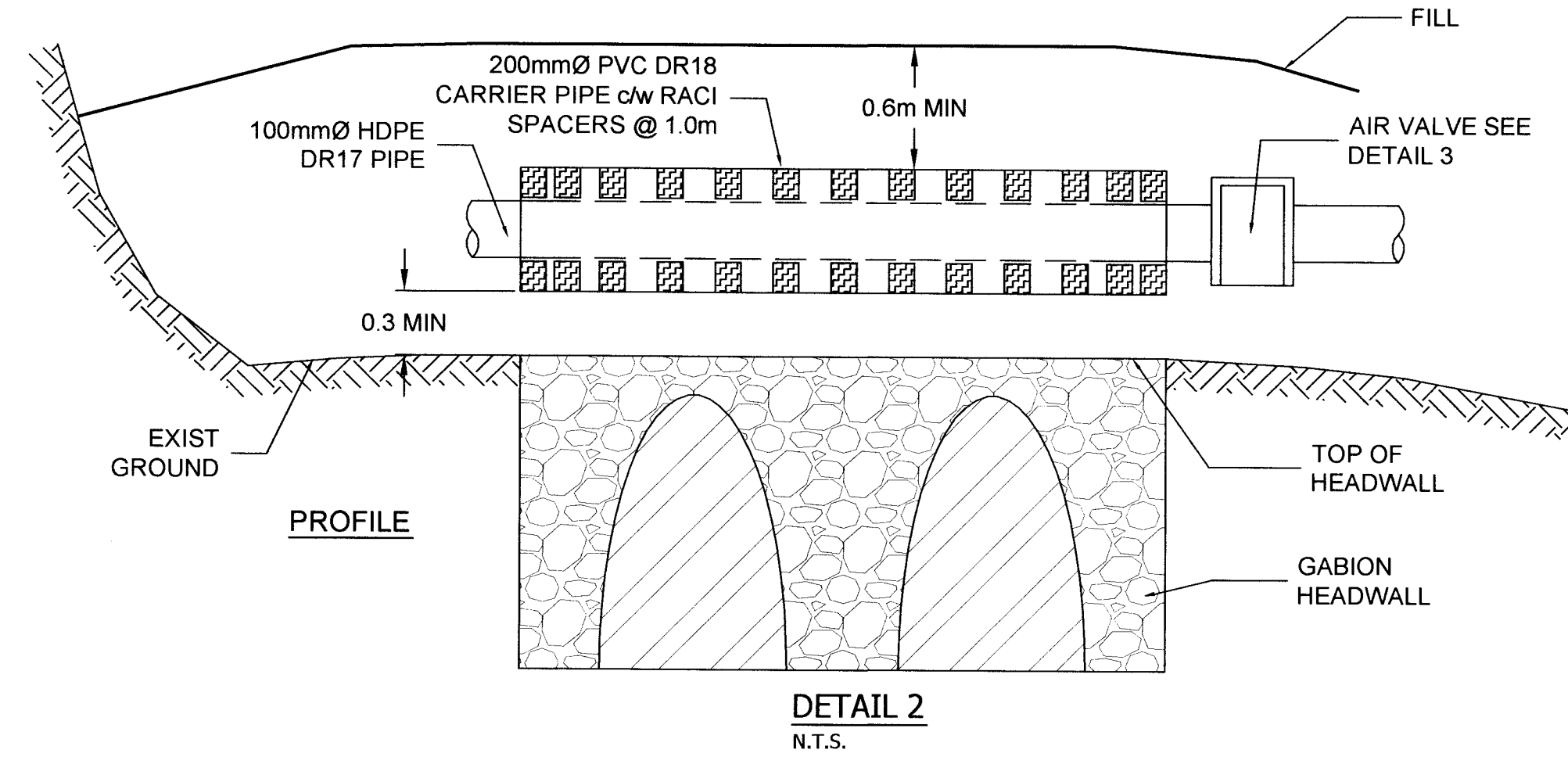
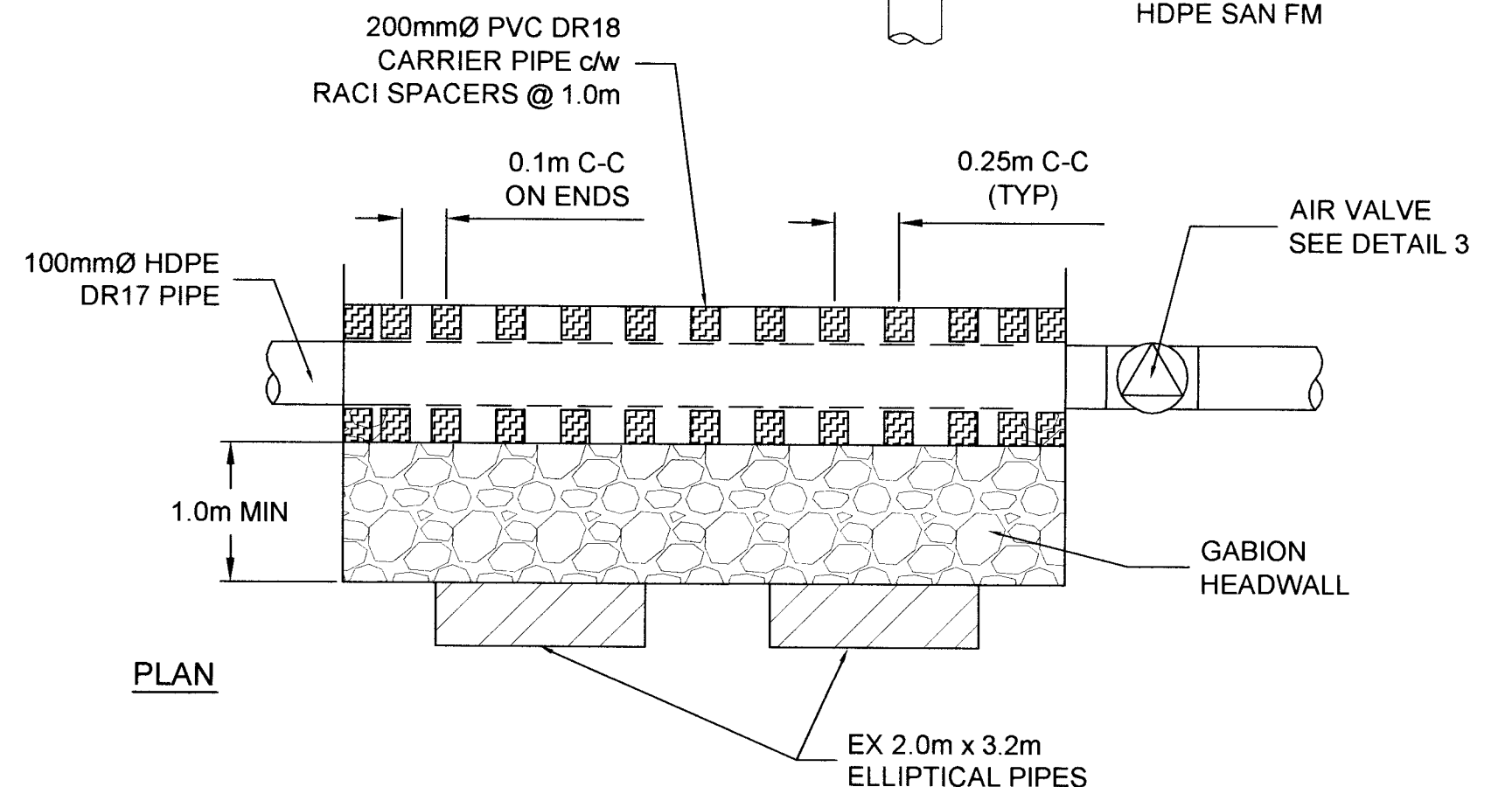
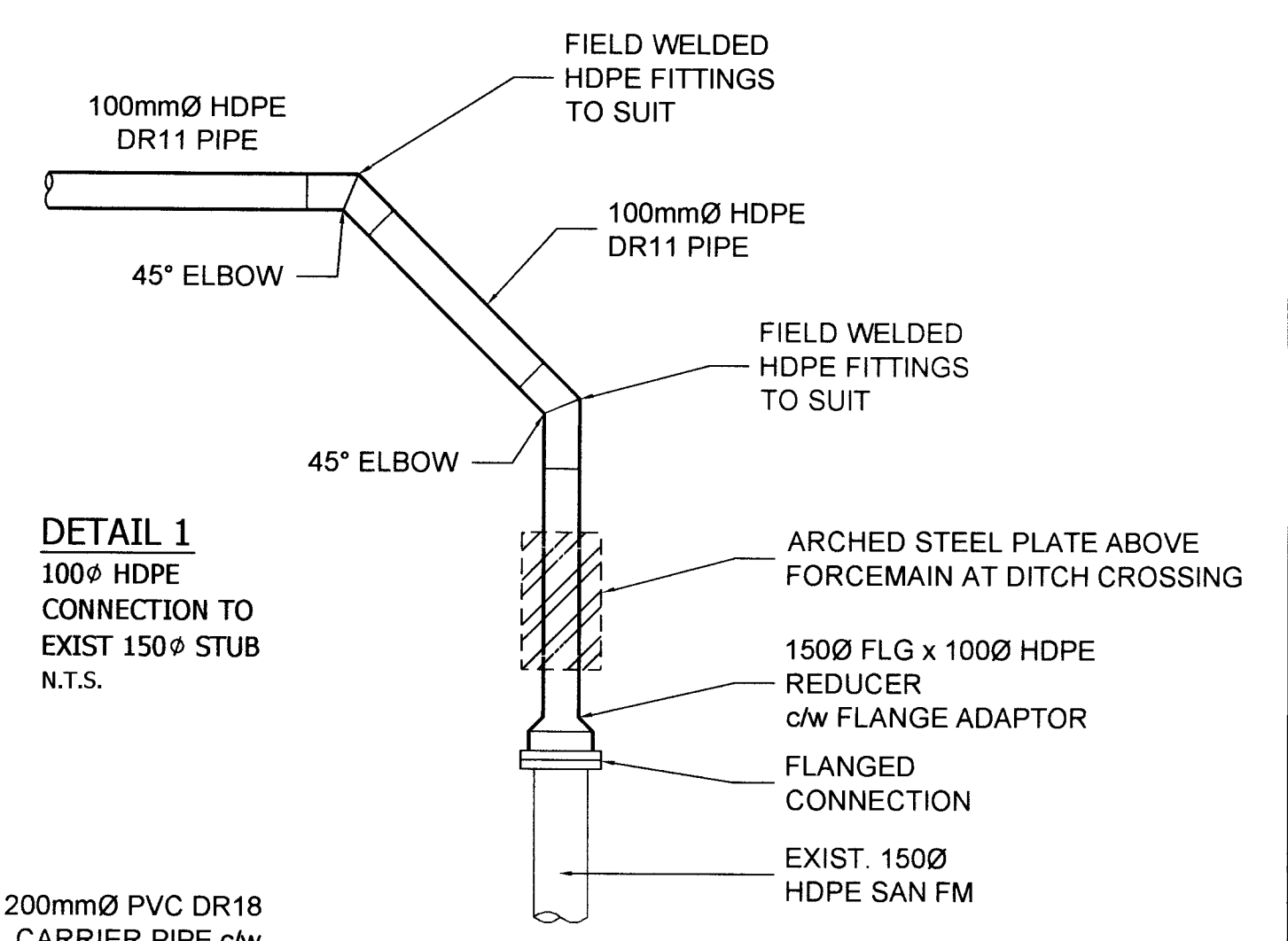
DESIGN BY: RDJL DATE: 2012 10 01	Engineering File No.
DRAWN BY: MM DATE: 2012 10 01	S12-304
CHECKED BY: HF DATE: 2013-01-31	Contract No.
APPRVD BY: JL DATE: 2013-01-31	
SCALE	

PROJECT: WORKS YARD SEWER FORCEMAIN
 LOCATION: DELTA WORKS YARD TO CRESCENT SLOUGH (STA 0+400 TO STA 0+700)

D-3393	DRAWING No.
3 OF 5	SHEET
6	REV

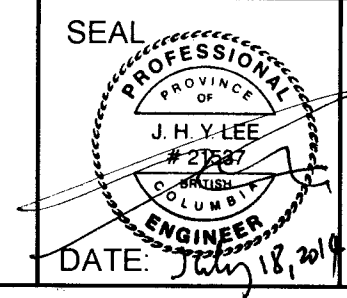


SANITARY SEWER LENGTH AND GRADE	46.0m of 100mm DR11 HDPE @ +0.36%										64.0m of 100mm DR11 HDPE @ +0.80%										33.6m of 100mm DR11 HDPE @ +3.61%										17.7m of 100mm DR11 HDPE @ +0.00%										5.7m of 100mm DR11 HDPE @ -25.44%																															
	Chainage	Invert	Elevation	Chainage	Invert	Elevation	Chainage	Invert	Elevation	Chainage	Invert	Elevation	Chainage	Invert	Elevation	Chainage	Invert	Elevation	Chainage	Invert	Elevation	Chainage	Invert	Elevation	Chainage	Invert	Elevation																																													
	0+700	-0.80	0.704	0+710	-0.76	0.692	0+720	-0.72	0.651	0+730	-0.69	0.603	0+740	-0.65	0.597	0+746	-0.63	0.761	0+750	-0.60	0.781	0+760	-0.52	0.952	0+770	-0.44	1.054	0+780	-0.36	1.002	0+790	-0.28	1.126	0+800	-0.20	1.276	0+810	-0.12	1.482	0+820	0.24	1.508	0+830	0.60	1.423	0+840	0.96	1.403	0+845.92	1.09	1.403	0+848.316	1.30	1.076	0+850	1.30	0.924	0+857.054	1.30	0.756	0+870.490	1.295	0.295	0+873.617	-0.15	1.493	0+880	-0.15	1.493	0+890	-0.15	1.124



No	DATE	BY	CK	REVISIONS DESCRIPTION
1	2014 07 18	MM	JL	RECORD DRAWING
2	2013 04 25	MM	JL	SHEET 5 ADDED
3	2013 04 15	MM	JL	ISSUED FOR CONSTRUCTION
4	2013 02 01	MM	JL	ISSUED FOR TENDER
5	2013 01 30	MM	JL	ISSUED FOR MOTI APPROVAL - NEW ALIGNMENT
6	2012 11 22	MM	JL	ISSUED FOR MOTI APPROVAL

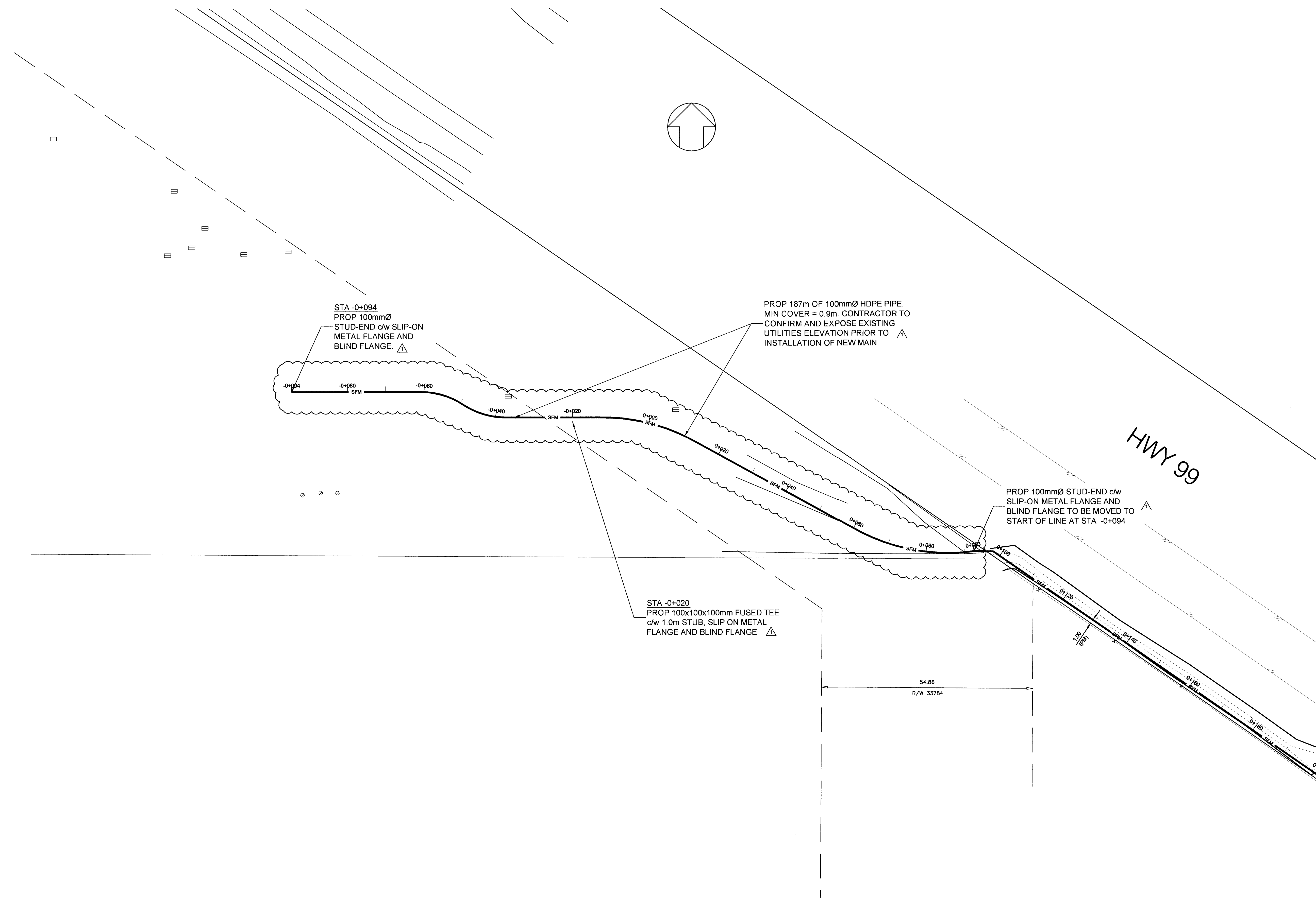
Delta
The Corporation of Delta
4500 CLARENCE TAYLOR CRESCENT, DELTA, B.C., CANADA V4K-3E2
ENGINEERING DEPARTMENT
TEL: (604) 946-3290 FAX: (604) 946-7492



DESIGN BY: RD/JL DATE: 2012 10 01 Engineering File No. S12-304
DRAWN BY: MM DATE: 2012 10 01
CHECKED BY: HF DATE: 2013-01-31
APPRVD BY: JL DATE: 2013-01-31 Contract No.
SCALE: HORIZ 1:500 VERT 1:50

PROJECT: WORKS YARD SEWER FORCEMAIN
LOCATION: DELTA WORKS YARD TO CRESCENT SLOUGH (STA 0+700 TO STA 0+890)

DRAWING NO. D-3393
SHEET 4 OF 5
REV 6



STA -0+094
 PROP 100mmØ
 STUD-END c/w SLIP-ON
 METAL FLANGE AND
 BLIND FLANGE ▲

PROP 187m OF 100mmØ HDPE PIPE.
 MIN COVER = 0.9m. CONTRACTOR TO
 CONFIRM AND EXPOSE EXISTING
 UTILITIES ELEVATION PRIOR TO ▲
 INSTALLATION OF NEW MAIN.

PROP 100mmØ STUD-END c/w
 SLIP-ON METAL FLANGE AND
 BLIND FLANGE TO BE MOVED TO
 START OF LINE AT STA -0+094 ▲

STA -0+020
 PROP 100x100x100mm FUSED TEE
 c/w 1.0m STUB, SLIP ON METAL
 FLANGE AND BLIND FLANGE ▲

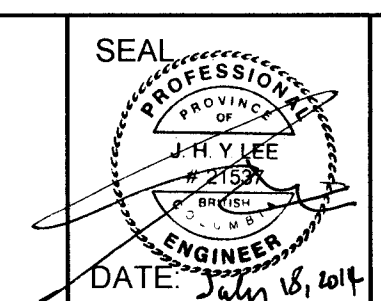
HWY 99

54.86
 R/W 33784

F:\Civil\2011\Projects\Delta Operations San Forcemain\Drawings - Survey Base\D-3393 Base.dwg

No	DATE	BY	CK	REVISIONS DESCRIPTION
1	2014 07 18	-	-	RECORD DRAWING
2	2013 04 15	MM	JL	ISSUED FOR CONSTRUCTION

Delta The Corporation of Delta
 4500 CLARENCE TAYLOR CRESCENT, DELTA, B.C., CANADA V4K 3E2
 ENGINEERING DEPARTMENT
 TEL: (604) 946-3260 FAX: (604) 946-7492

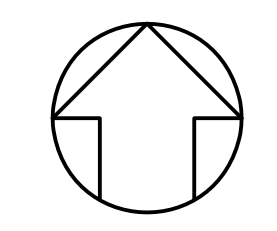
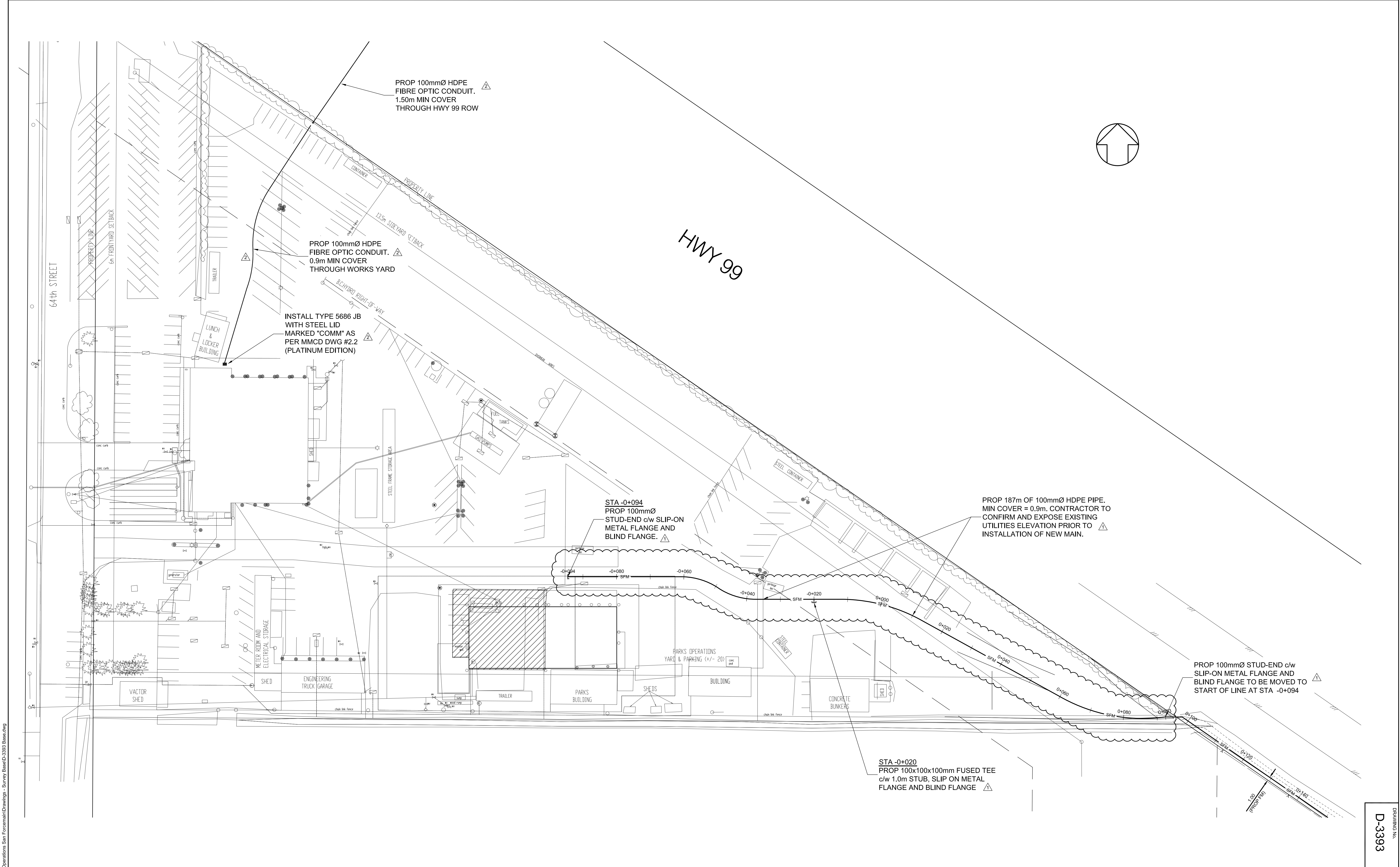


DESIGN BY: RDJL	DATE: 2012 10 01
DRAWN BY: MM	DATE: 2012 10 01
CHECKED BY: HF	DATE: 2013-01-31
APPRVD BY: JL	DATE: 2013-01-31
SCALE	HORIZ 1:500

Engineering File No.	S12-304
Contract No.	

PROJECT:	WORKS YARD SEWER FORCEMAIN
LOCATION:	DELTA OPERATIONS WORKS YARD

DRAWING NO.	D-3393
SHEET	5 OF 5
REV	2



F:\GIS\2011\Projects\Delta Operations\Site Foreman\Drawings - Survey Base\D-3393 Base.dwg
 2013-05-30
 2013-04-15
 No

No	DATE	BY	CK	REVISIONS DESCRIPTION
1	2013 05 30	MM	RD	FIBRE OPTIC CASING PIPE AND JUNCTION BOX ADDED
2	2013 04 15	MM	JL	ISSUED FOR CONSTRUCTION

The Corporation of Delta
4500 CLARENCE TAYLOR CRESCENT, DELTA, B.C., CANADA V4K-3E2
ENGINEERING DEPARTMENT
TEL : (604) 946-3260 FAX : (604) 946-7492

SEAL _____
 DATE: _____

DESIGN BY: RD/JL	DATE: 2012 10 01	Engineering File No.
DRAWN BY: MM	DATE: 2012 10 01	S12-304
CHECKED BY: HF	DATE: 2013-01-31	Contract No.
APPRVD BY: JL	DATE: 2013-01-31	
SCALE	HORIZ 1:500	

PROJECT : **WORKS YARD SEWER FORCEMAIN FIBRE OPTIC CASING PIPE INSTALLATION**
 LOCATION : **DELTA OPERATIONS WORKS YARD**

DRAWING NO. **D-3393**
 SHEET **6 OF 6**
 REV **2**