



Public Works and  
Government Services  
Canada

Travaux publics et  
Services gouvernementaux  
Canada

WABUSH AIRPORT - WESTSIDE  
PARKING & AIR TERMINAL BUILDING  
ACCESS ROAD REDEVELOPMENT  
RECORD DRAWINGS  
PROJECT NO. R.050329.001

DRAWING LIST

CIVIL

- C01 LOCATION PLAN / GENERAL NOTES
- C02 CIVIL PLAN PARKING LOT, AIRPORT ROAD & MORAVIAN WAY
- C03 CIVIL PLAN PARKING LOT, AIRPORT ROAD & MORAVIAN WAY BLOW UP
- C04 CIVIL PLAN PARKING LOT, AIRPORT ROAD & MORAVIAN WAY BLOW UP
- C05 CIVIL PLAN PARKING LOT, AIRPORT ROAD & MORAVIAN WAY BLOW UP
- C06 PLAN AND PROFILE AIRPORT ROAD STA. 0+000 TO STA. 0+230
- C07 PROFILE AIRPORT ROAD STA. 0+230 TO STA. 0+510, MORAVIAN WAY STA. 3+000 TO STA. 3+110
- C08 PLAN AND PROFILE INUKSHUK BLVD STA. 6+000 TO STA. 6+270
- C09 PLAN AND PROFILE IRON ORE BLVD STA. 9+000 TO STA. 9+325
- C10 ELECTRICAL PLAN PARKING LOT, AIRPORT ROAD & MORAVIAN WAY

RECORD DRAWINGS ARE BASED ON  
INFORMATION PROVIDED BY CONTRACTOR

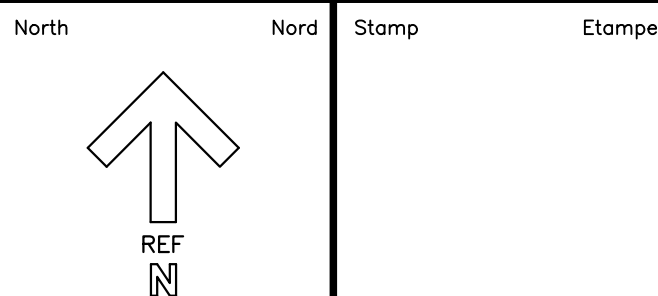




LEGEND		
	EXISTING	NEW
PROPERTY LINE	---	---
WATER MAIN	W --- W	W --- W
FIRE FLOW WATER MAIN	---	---
SANITARY SEWER	SAN --- SAN	SAN --- SAN
STORM SEWER	SW --- SW	SW --- SW
SANITARY MANHOLE	⊙	⊙
STORM MANHOLE	○	○
CATCH BASIN	□	□
WATER VALVE	⌵	⌵
CURB BOX	⌵	⌵
CHECK VALVE	⌵	⌵
FIRE HYDRANT	⌵	⌵
FLUSHING HYDRANT	⌵	⌵
BENDS	⌵	⌵
CURB STOP	⌵	⌵
TEES	⌵	⌵
CAPS OR PLUGS	⌵	⌵
REDUCER	⌵	⌵
SLEEVE OR COUPLING	⌵	⌵
DRAINAGE CULVERT	⌵	⌵
FENCE	⌵	⌵
POST AND CHAIN FENCING	⌵	⌵
SPOT ELEVATION	541.63	541.63
VEHICLE ACCESS GATE	⌵	⌵
TEST PIT / BORE HOLE	⌵	⌵
TREE	⌵	⌵
TREELINE	⌵	⌵
DITCH	⌵	⌵
SWALE	⌵	⌵
ELECTRICAL	⌵	⌵
UTILITY POLE	⌵	⌵
GUY WIRE	⌵	⌵
LIGHT FIXTURE	⌵	⌵

NOTE:  
COORDINATE SYSTEM USED FOR THIS PROJECT IS NAD83(CSRS) / UTM ZONE 19N.  
MONUMENT # USED FOR THIS PROJECT IS 88G4121.

consultant



0	ISSUED FOR RECORD DWGS	MAY 20 2018
revisions		date
project		projet

WABUSH AIRPORT  
WESTSIDE PARKING &  
AIR TERMINAL BUILDING  
ACCESS ROAD  
REDEVELOPMENT

drawing dessin

LOCATION PLAN/  
GENERAL NOTES

designed	SCOTT HARRISON	conçu
date	APR 21, 2015	
drawn	ANDY ST AMAND	dessiné
date	APR 21, 2015	
approved	SCOTT ROGERS	approuvé
date	APR 21, 2015	
Tender		Soumission

PWSSC Project Manager Administrateur de projets TPSSC

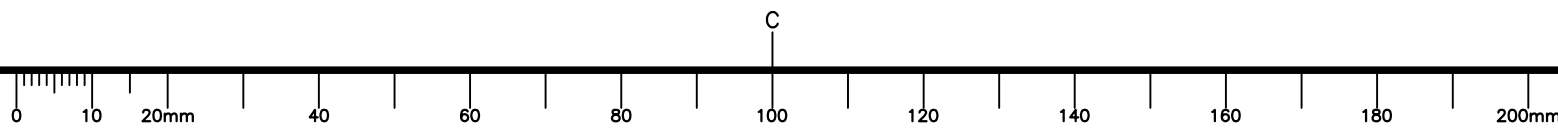
project number no. du projet

R.050329.001

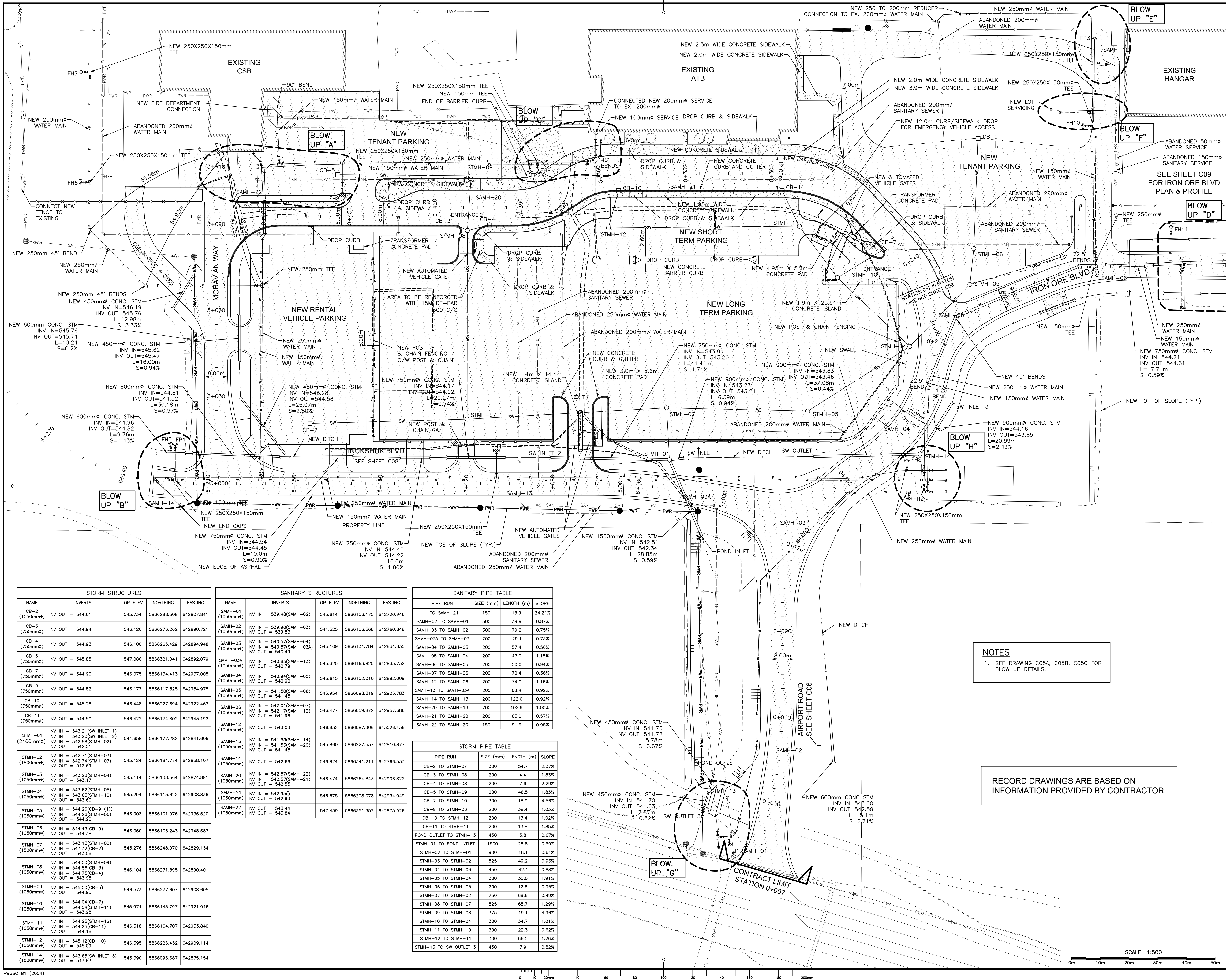
drawing no. no. du dessin

C01

RECORD DRAWINGS ARE BASED ON  
INFORMATION PROVIDED BY CONTRACTOR







STORM STRUCTURES				
NAME	INVERTS	TOP ELEV.	NORTHING	EASTING
CB-2 (1050mm)	INV OUT = 544.61	545.734	5866298.508	642807.841
CB-3 (750mm)	INV OUT = 544.94	546.126	5866276.262	642890.721
CB-4 (750mm)	INV OUT = 544.93	546.100	5866265.429	642894.948
CB-5 (750mm)	INV OUT = 545.85	547.086	5866321.041	642892.079
CB-7 (750mm)	INV OUT = 544.90	546.075	5866134.413	642937.005
CB-9 (750mm)	INV OUT = 544.82	546.177	5866117.825	642984.975
CB-10 (750mm)	INV OUT = 545.26	546.448	5866227.894	642922.462
CB-11 (750mm)	INV OUT = 544.50	546.422	5866174.802	642943.192
STMH-01 (2400mm)	INV IN = 543.21(SW INLET 1) INV IN = 543.20(SW INLET 2) INV OUT = 542.51	544.658	5866177.282	642841.606
STMH-02 (1800mm)	INV IN = 542.71(STMH-03) INV IN = 542.74(STMH-07) INV OUT = 542.69	545.424	5866184.774	642858.107
STMH-03 (1050mm)	INV IN = 543.23(STMH-04) INV OUT = 543.17	545.414	5866138.564	642874.891
STMH-04 (1050mm)	INV IN = 543.62(STMH-05) INV IN = 543.63(STMH-10) INV OUT = 543.60	545.294	5866113.622	642908.836
STMH-05 (1050mm)	INV IN = 544.26(CB-9 (1)) INV IN = 544.26(STMH-06) INV OUT = 544.20	546.003	5866101.976	642936.520
STMH-06 (1050mm)	INV IN = 544.43(CB-9) INV OUT = 544.36	546.060	5866105.243	642948.687
STMH-07 (1500mm)	INV IN = 543.13(STMH-08) INV IN = 543.32(CB-2) INV OUT = 543.08	545.276	5866248.070	642829.134
STMH-08 (1050mm)	INV IN = 544.00(STMH-09) INV IN = 544.86(CB-3) INV IN = 544.75(CB-4) INV OUT = 543.98	546.104	5866271.895	642890.401
STMH-09 (1050mm)	INV IN = 545.00(CB-5) INV OUT = 544.95	546.573	5866277.607	642908.605
STMH-10 (1050mm)	INV IN = 544.04(CB-7) INV IN = 544.04(STMH-11) INV OUT = 543.98	545.974	5866145.797	642921.946
STMH-11 (1050mm)	INV IN = 544.25(STMH-12) INV IN = 544.25(CB-11) INV OUT = 544.18	546.318	5866164.707	642933.840
STMH-12 (1050mm)	INV IN = 545.12(CB-10) INV OUT = 545.09	546.395	5866226.432	642909.114
STMH-14 (1800mm)	INV IN = 543.65(SW INLET 3) INV OUT = 543.63	545.390	5866096.687	642875.154

SANITARY STRUCTURES				
NAME	INVERTS	TOP ELEV.	NORTHING	EASTING
SAMH-01 (1050mm)	INV IN = 539.48(SAMH-02) INV OUT = 539.83	543.614	5866106.175	642720.946
SAMH-02 (1050mm)	INV IN = 539.90(SAMH-03) INV OUT = 539.83	544.525	5866106.568	642760.848
SAMH-03 (1050mm)	INV IN = 540.57(SAMH-04) INV IN = 540.57(SAMH-03A) INV OUT = 540.49	545.109	5866134.784	642834.835
SAMH-03A (1050mm)	INV IN = 540.85(SAMH-13) INV OUT = 540.79	545.325	5866163.825	642835.732
SAMH-04 (1050mm)	INV IN = 540.94(SAMH-05) INV OUT = 540.90	545.615	5866102.010	642882.009
SAMH-05 (1050mm)	INV IN = 541.50(SAMH-06) INV OUT = 541.45	545.954	5866098.319	642925.783
SAMH-06 (1050mm)	INV IN = 542.01(SAMH-07) INV IN = 542.17(SAMH-12) INV OUT = 541.96	546.477	5866059.872	642957.686
SAMH-12 (1050mm)	INV OUT = 543.03	546.932	5866087.306	643026.436
SAMH-13 (1050mm)	INV IN = 541.53(SAMH-14) INV IN = 541.53(SAMH-20) INV OUT = 541.48	545.860	5866227.537	642810.877
SAMH-14 (1050mm)	INV IN = 542.57(SAMH-22) INV IN = 542.57(SAMH-21) INV OUT = 542.55	546.474	5866264.843	642906.822
SAMH-20 (1050mm)	INV IN = 542.95(CB-9) INV OUT = 542.93	546.675	5866208.078	642934.049
SAMH-21 (1050mm)	INV IN = 543.44 INV OUT = 543.84	547.459	5866351.352	642875.926

SANITARY PIPE TABLE			
PIPE RUN	SIZE (mm)	LENGTH (m)	SLOPE
TO SAMH-21	150	15.9	24.21%
SAMH-02 TO SAMH-01	300	39.9	0.87%
SAMH-03 TO SAMH-02	300	79.2	0.75%
SAMH-03A TO SAMH-03	200	29.1	0.73%
SAMH-04 TO SAMH-03	200	57.4	0.56%
SAMH-05 TO SAMH-04	200	43.9	1.15%
SAMH-06 TO SAMH-05	200	50.0	0.94%
SAMH-07 TO SAMH-06	200	70.4	0.36%
SAMH-12 TO SAMH-06	200	74.0	1.16%
SAMH-13 TO SAMH-03A	200	68.4	0.92%
SAMH-14 TO SAMH-13	200	122.0	0.92%
SAMH-20 TO SAMH-13	200	102.9	1.00%
SAMH-21 TO SAMH-20	200	63.0	0.57%
SAMH-22 TO SAMH-20	150	91.9	0.95%

STORM PIPE TABLE			
PIPE RUN	SIZE (mm)	LENGTH (m)	SLOPE
CB-2 TO STMH-07	300	54.7	2.37%
CB-3 TO STMH-08	200	4.4	1.83%
CB-4 TO STMH-08	200	7.9	2.29%
CB-5 TO STMH-09	200	46.5	1.83%
CB-7 TO STMH-10	300	18.9	4.56%
CB-9 TO STMH-06	200	38.4	1.03%
CB-10 TO STMH-12	200	13.4	1.02%
CB-11 TO STMH-11	200	13.8	1.85%
POND OUTLET TO STMH-13	450	5.8	0.67%
STMH-01 TO POND INLET	1500	28.8	0.59%
STMH-02 TO STMH-01	900	18.1	0.61%
STMH-03 TO STMH-02	525	49.2	0.93%
STMH-04 TO STMH-03	450	42.1	0.88%
STMH-05 TO STMH-04	300	30.0	1.91%
STMH-06 TO STMH-05	200	12.6	0.95%
STMH-07 TO STMH-02	750	69.6	0.49%
STMH-08 TO STMH-07	525	65.7	1.29%
STMH-09 TO STMH-08	375	19.1	4.96%
STMH-10 TO STMH-04	300	34.7	1.01%
STMH-11 TO STMH-10	300	22.3	0.62%
STMH-12 TO STMH-11	300	66.5	1.26%
STMH-13 TO SW OUTLET 3	450	7.9	0.82%

NOTES  
1. SEE DRAWING C05A, C05B, C05C FOR BLOW UP DETAILS.

RECORD DRAWINGS ARE BASED ON INFORMATION PROVIDED BY CONTRACTOR

Public Works and Government Services Canada

Travaux Publics et Services gouvernementaux Canada

consultant

North

Nord

Stamp

Etampe

0

ISSUED FOR RECORD DWGS

MAY 20 2018

revisions

date

project

projet

WABUSH AIRPORT WESTSIDE PARKING & AIR TERMINAL BUILDING ACCESS ROAD REDEVELOPMENT

drawing

dessin

CIVIL PLAN PARKING LOT, AIRPORT ROAD & MORAVIAN WAY

designed

SCOTT HARRISON

conçu

date

APR 21, 2015

drawn

ANDY ST AMAND

dessiné

date

APR 21, 2015

approved

SCOTT ROGERS

approuvé

date

APR 21, 2015

Tender

Soumission

PWSSC Project Manager

Administrateur de projets TPSSC

project number

R.050329.001

no. du projet

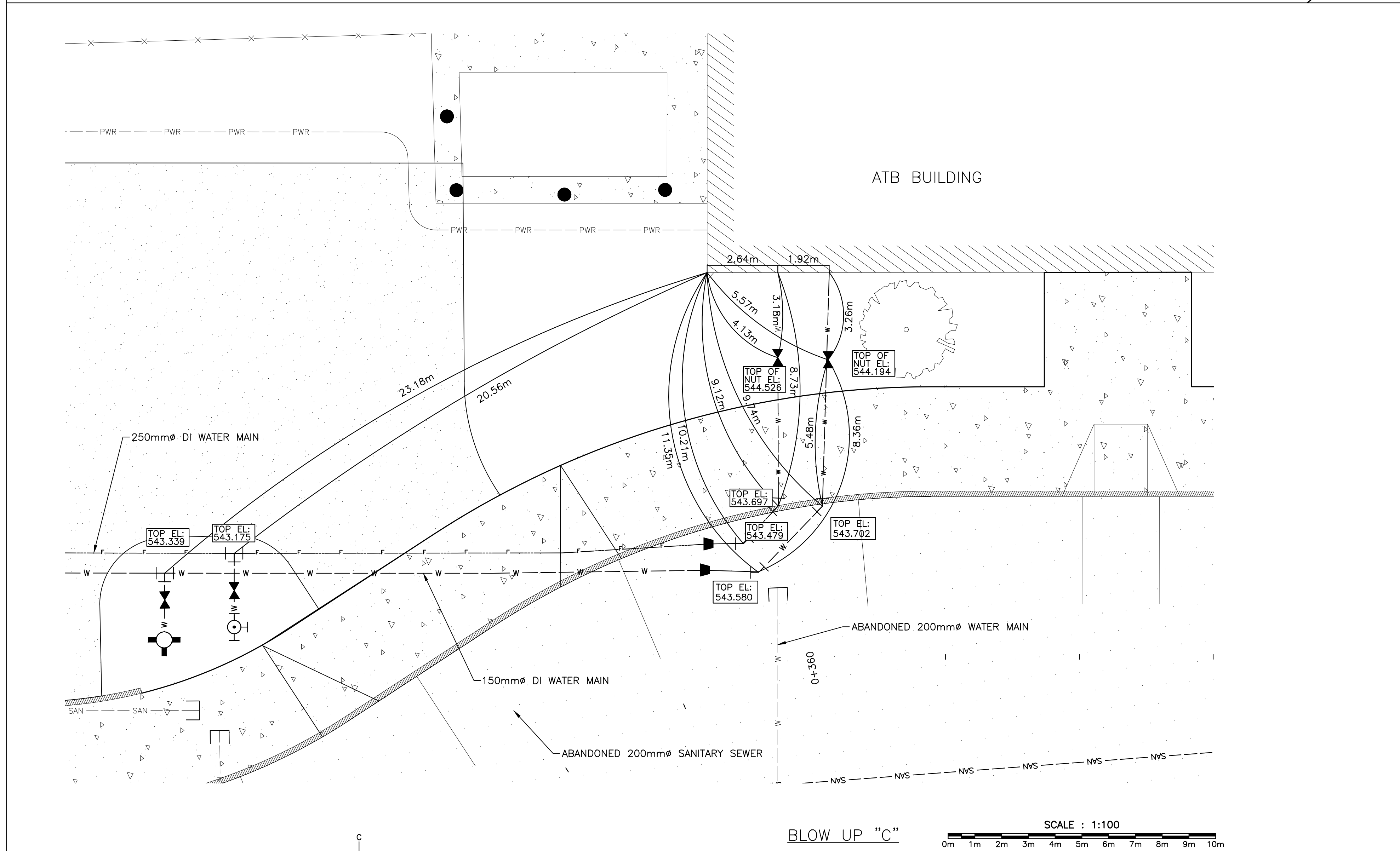
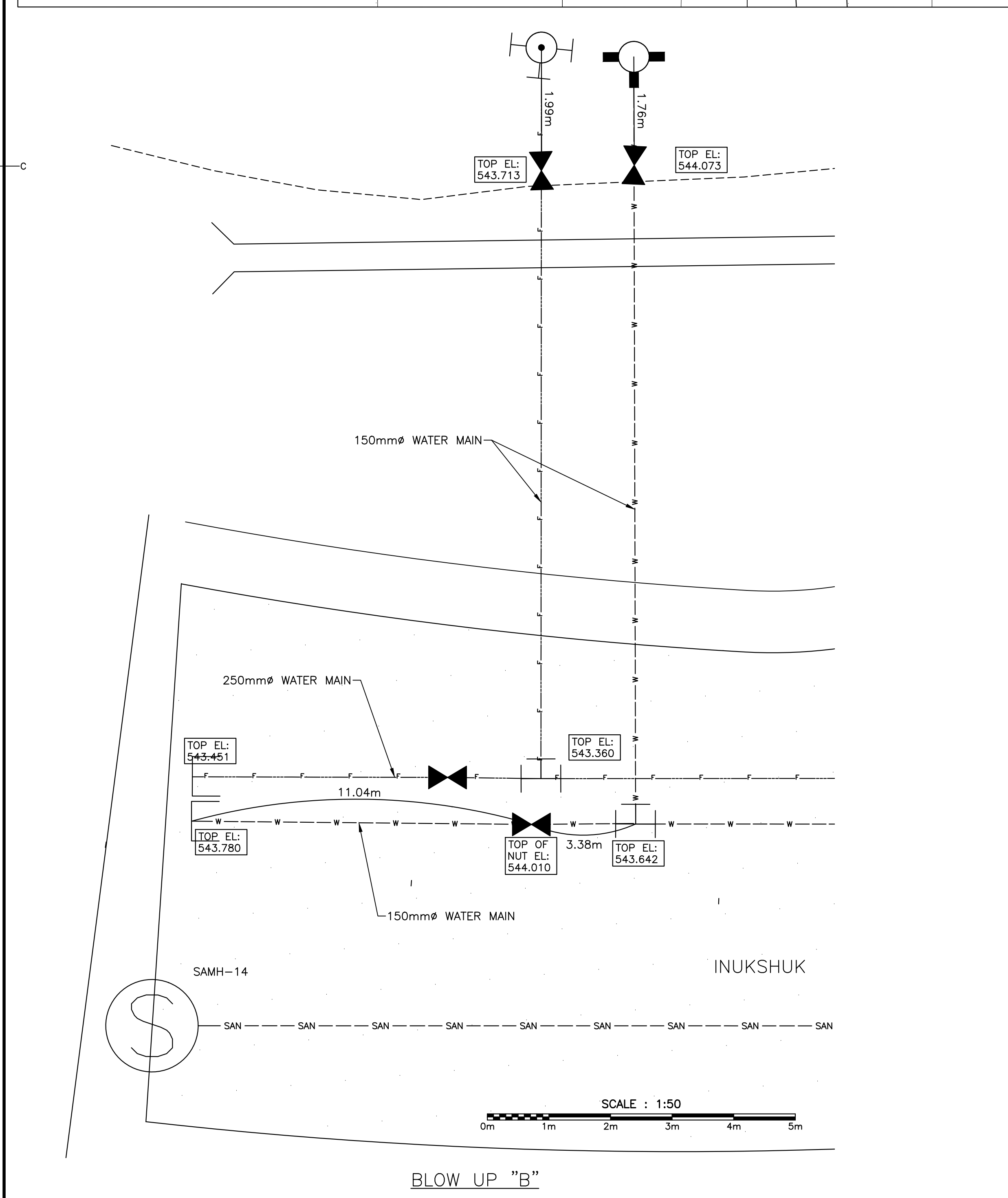
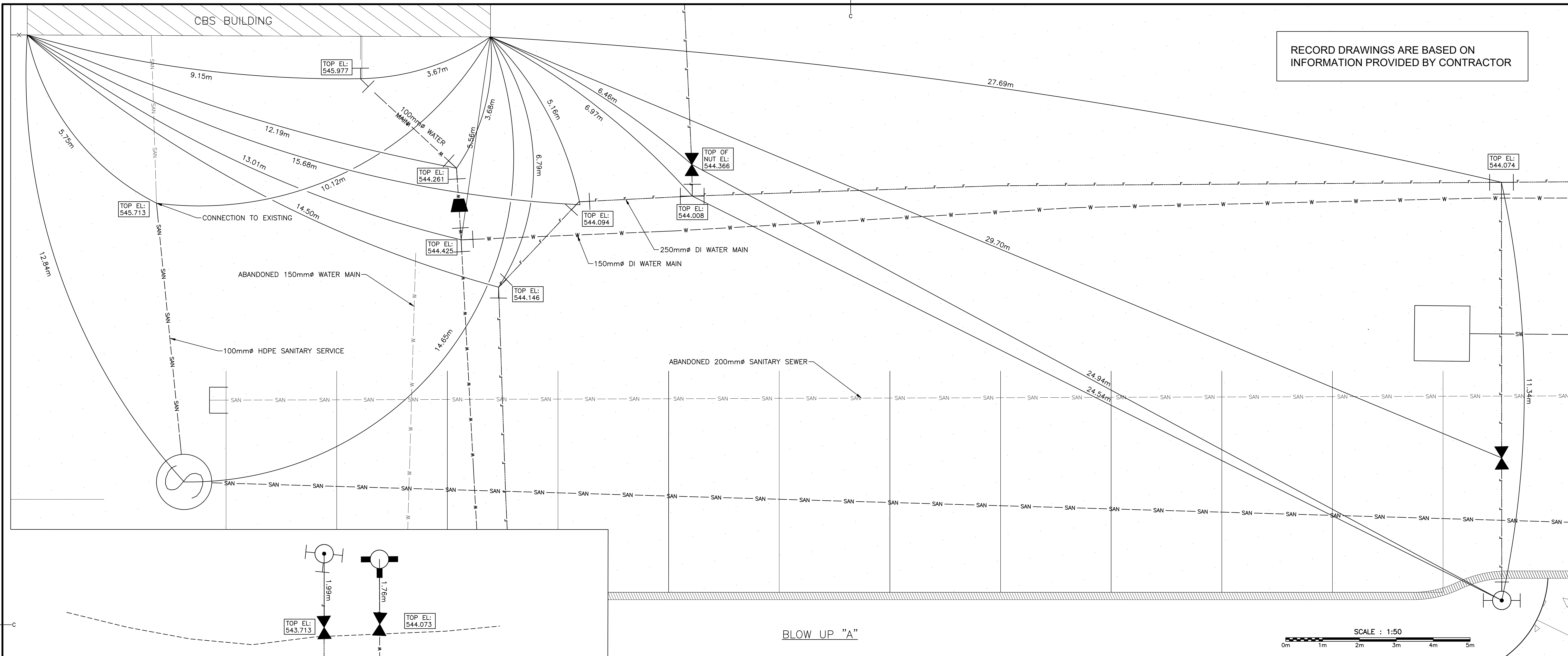
drawing no.

C02

no. du dessin

E-DRM/GDD-E: 518693





Public Works and Government Services Canada

Travaux Publics et Services gouvernementaux Canada

consultant

North

Stamp

0

ISSUED FOR RECORD DWGS

MAY 20 2018

revisions

date

project

project

WABUSH AIRPORT WESTSIDE PARKING & AIR TERMINAL BUILDING ACCESS ROAD REDEVELOPMENT

CIVIL PLAN PARKING LOT, AIRPORT ROAD & MORAVIAN WAY BLOW UPS

designed

SCOTT HARRISON

conçu

date

APR 21, 2015

drawn

ANDY ST AMAND

dessiné

date

APR 21, 2015

approved

SCOTT ROGERS

approuvé

date

APR 21, 2015

Tender

Soumission

PWSSC Project Manager

Administrateur de projets TPSSC

project number

R.050329.001

no. du projet

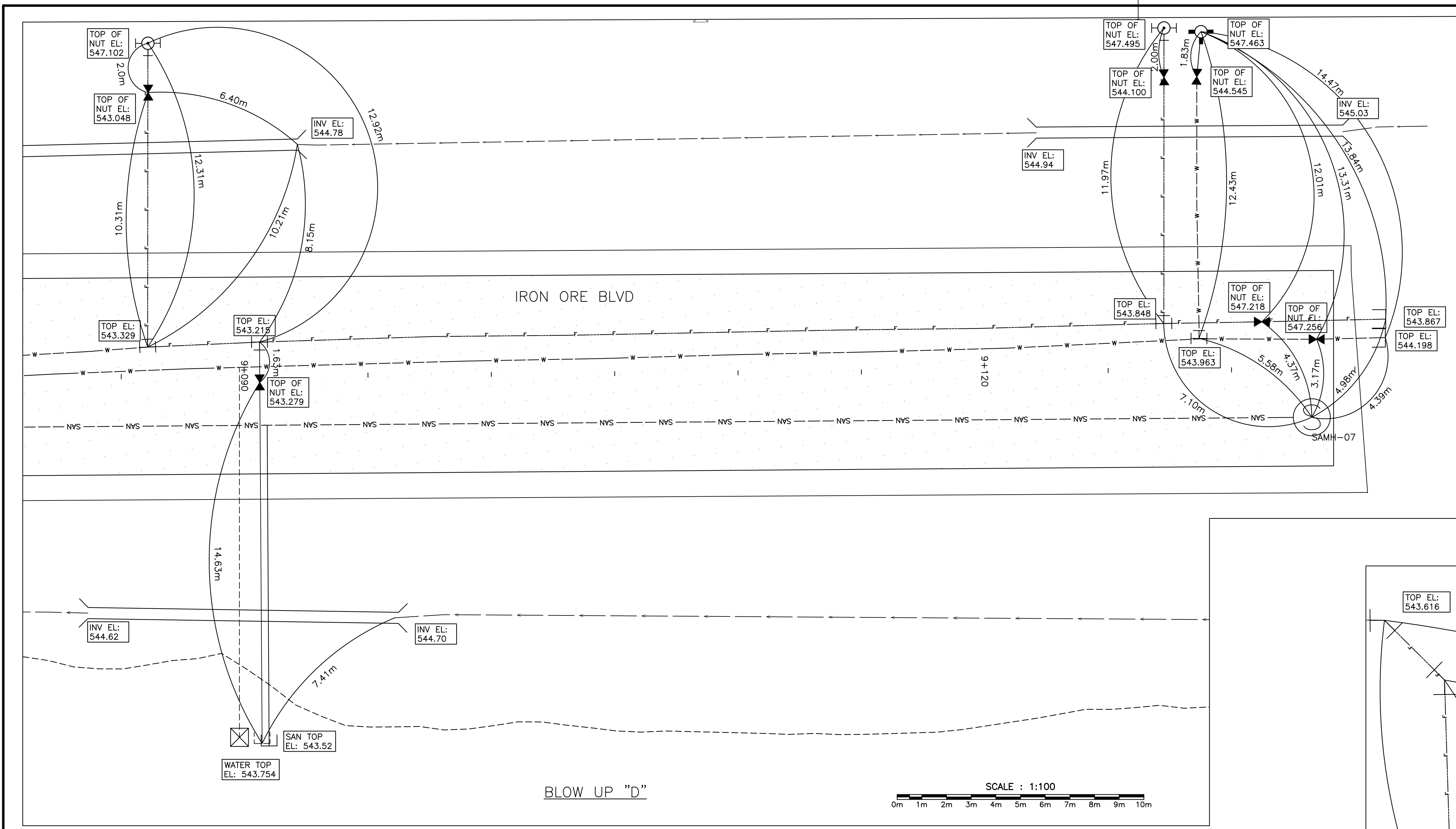
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no. du dessin

E-DRM/GDD-E: 518693

PWSSC B1 (2004)

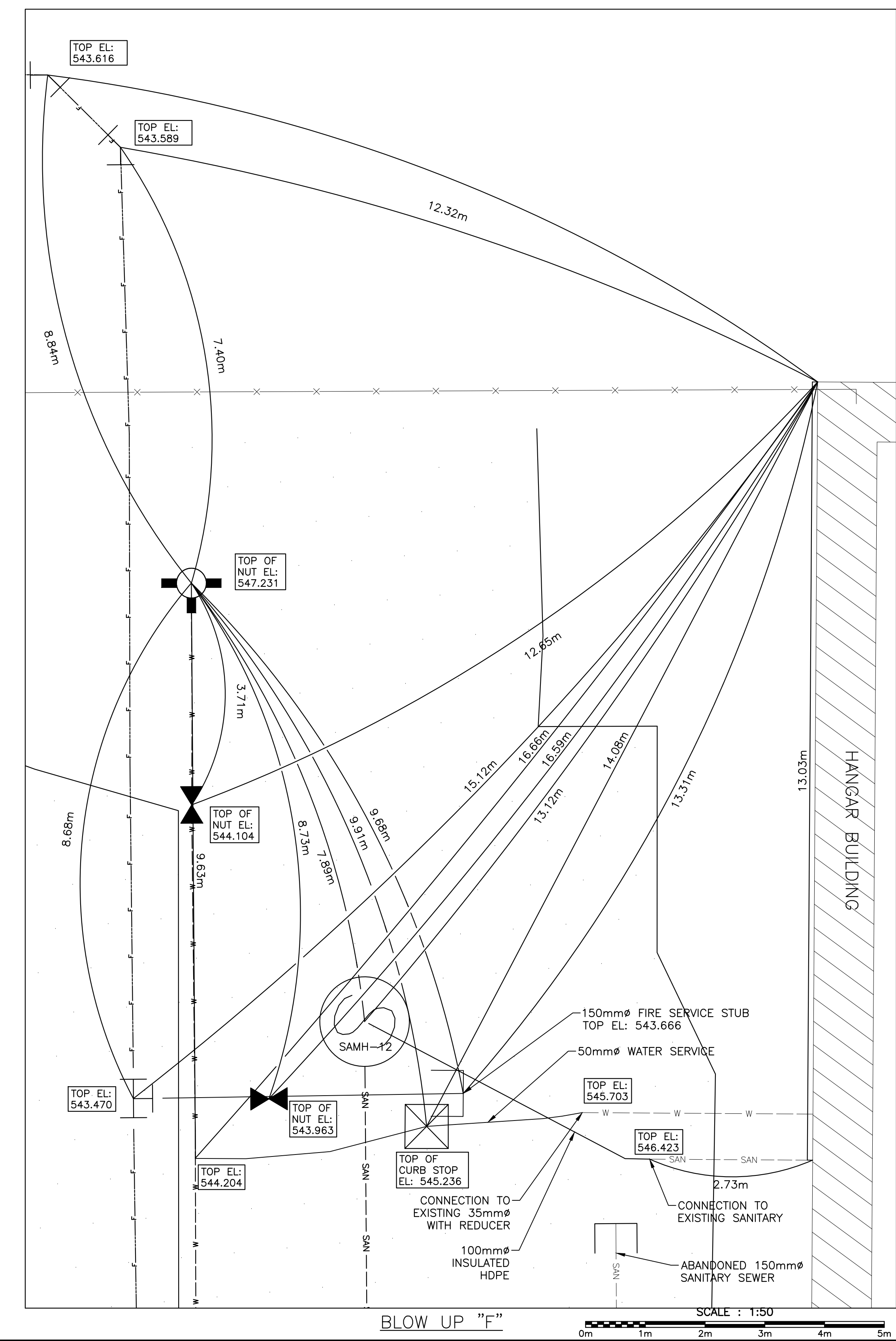
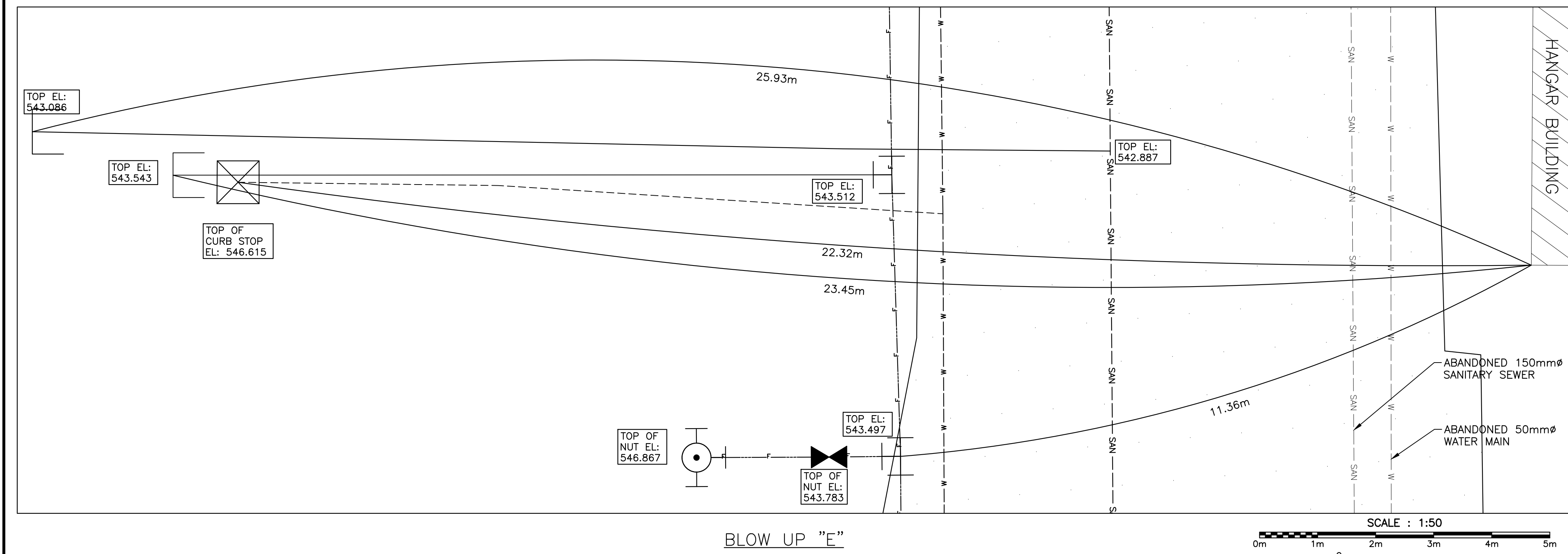
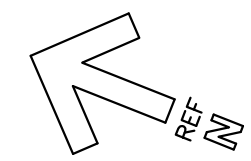


RECORD DRAWINGS ARE BASED ON  
INFORMATION PROVIDED BY CONTRACTOR

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North Nord Stamp Etampe



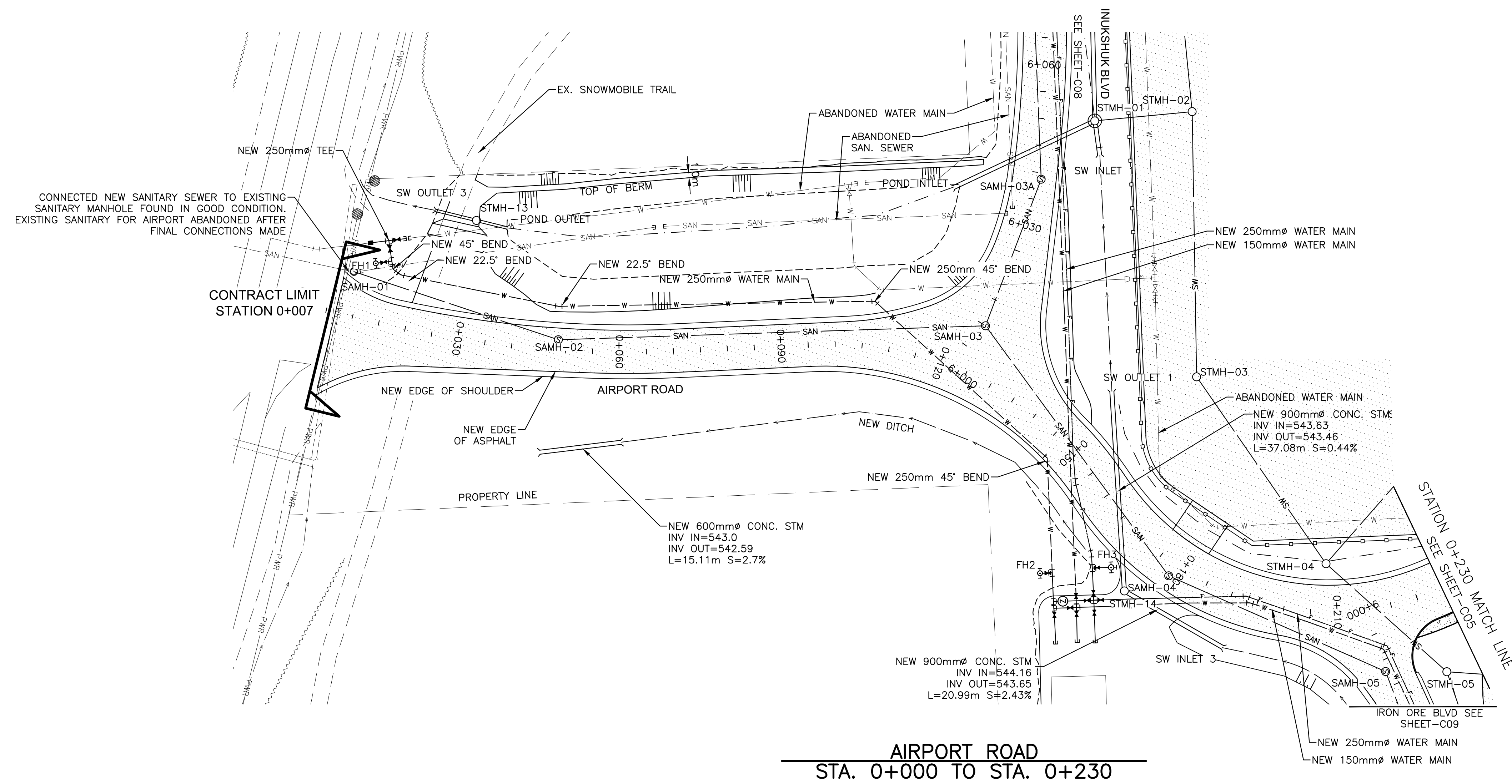
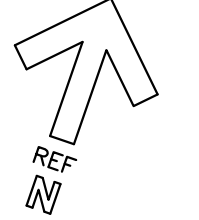
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revisions		date
project	WABUSH AIRPORT WESTSIDE PARKING & AIR TERMINAL BUILDING ACCESS ROAD REDEVELOPMENT	projet
drawing	CIVIL PLAN PARKING LOT, AIRPORT ROAD & MORAVIAN WAY BLOW UPS	dessin
designed	SCOTT HARRISON	conçu
date	APR 21, 2015	
drawn	ANDY ST AMAND	dessiné
date	APR 21, 2015	
approved	SCOTT ROGERS	approuvé
date	APR 21, 2015	
Tender		Soumission
PWSSC Project Manager	Administrateur de projets TPSSC	
project number	R.050329.001	no. du projet
drawing no.	C04	no. du dessin





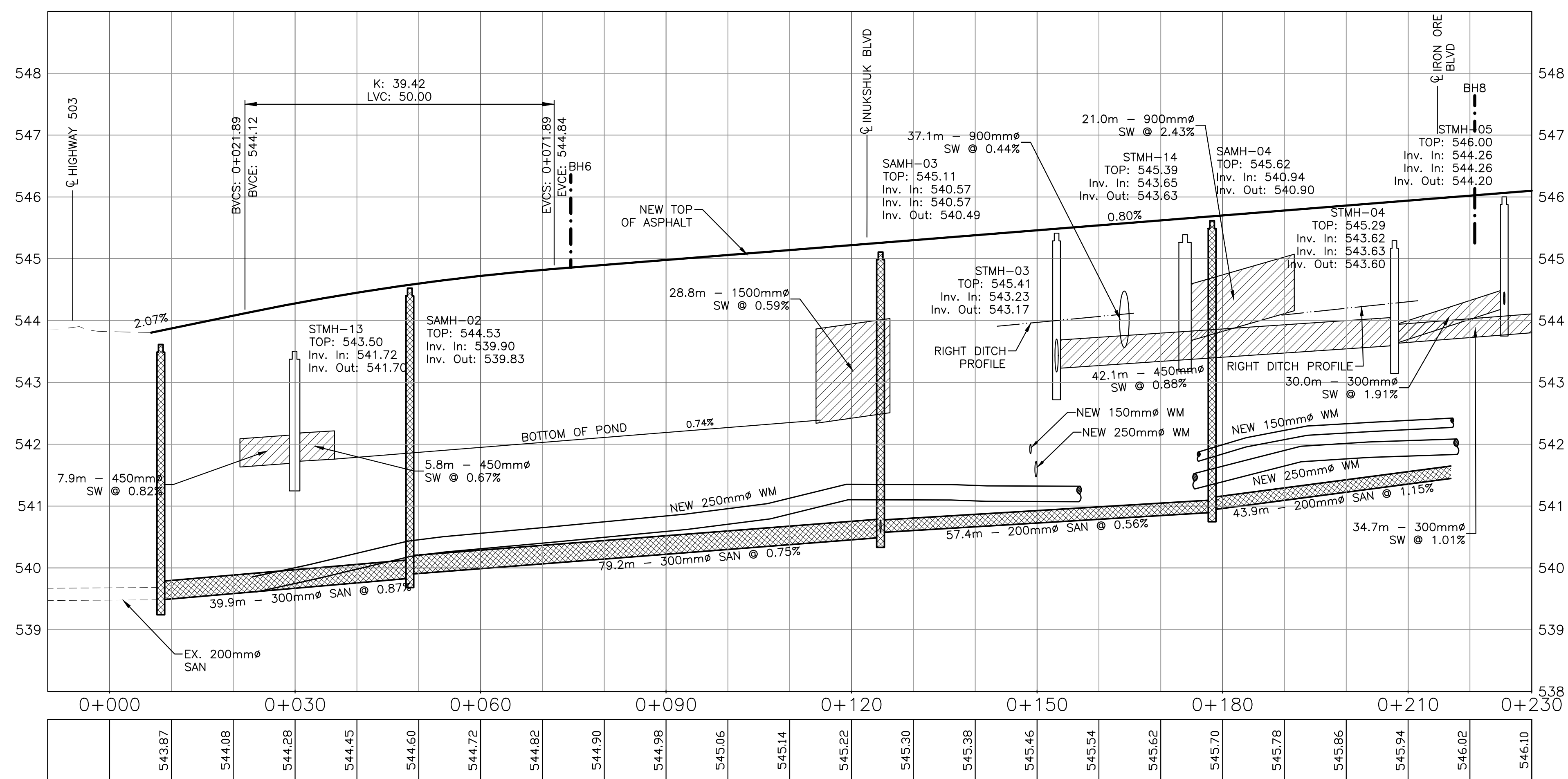


North	Nord	Stamp	Etampe
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RECORD DRAWINGS ARE BASED ON  
INFORMATION PROVIDED BY CONTRACTOR

SCALE: 1:500



0	ISSUED FOR RECORD DWGS	MAY 20 2018
revisions		date
project	project	

WABUSH AIRPORT  
WESTSIDE PARKING &  
AIR TERMINAL BUILDING  
ACCESS ROAD  
REDEVELOPMENT

drawing	dessin
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PLAN AND PROFILE  
AIRPORT ROAD  
STA. 0+000 TO STA. 0+230

designed	SCOTT HARRISON	conçu
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date APR 21, 2015

drawn ANDY ST AMAND dessiné

date APR 21, 2015

approved SCOTT ROGERS  
APR 21 2015

date	APR 21, 2015
Tender	Soumission

PWGSC Project Manager      Administrateur de projets TPSGC

project number	no. du projet
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R.050329.001

drawing no.	no. du dessin
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C06

E-DBM/CDD-E: 518693

E-BROW/GBD-E: 510000

 Public Works and  
Government Services  
Canada



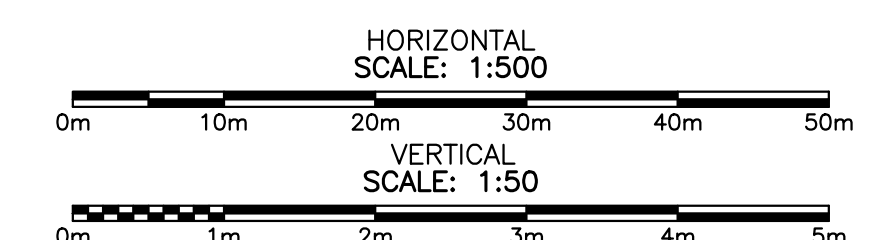
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PROFILE  
AIRPORT ROAD  
STA. 0+230 TO STA. 0+510  
MORAVIAN WAY  
STA. 3+000 TO STA. 3+110

PWGSC Project Manager    Administrateur de projets TPSGC	
project number	no. du projet
R.050329.001	

C07

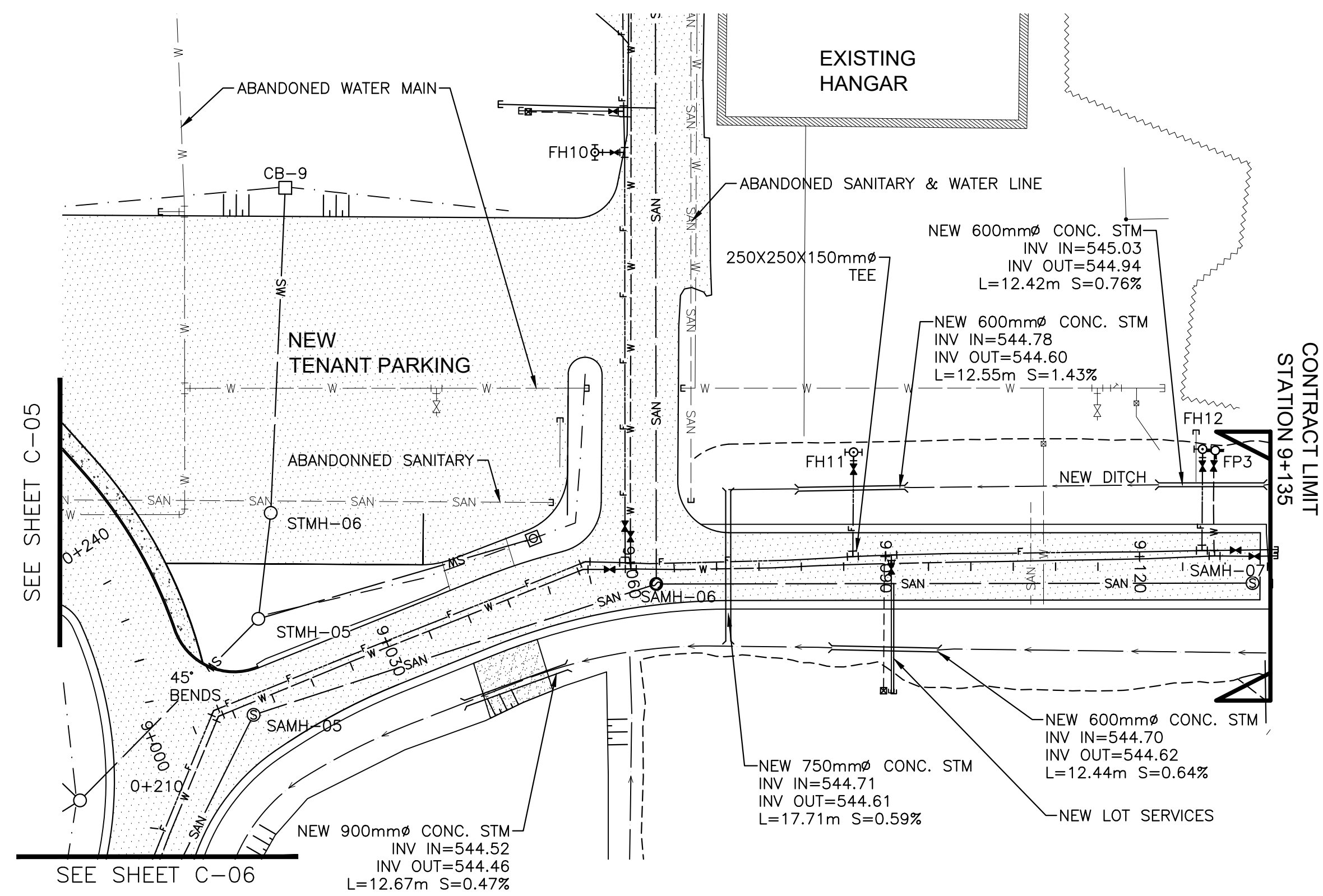
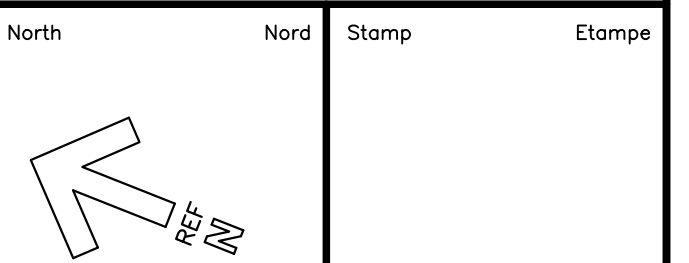




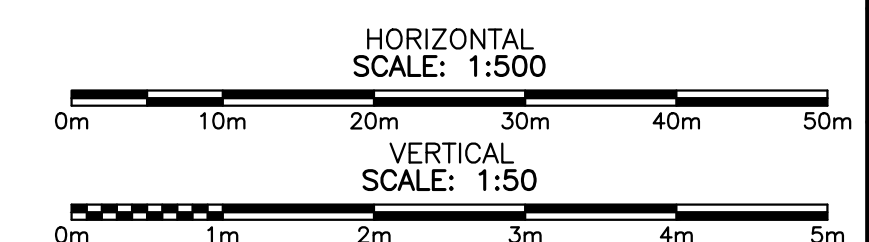
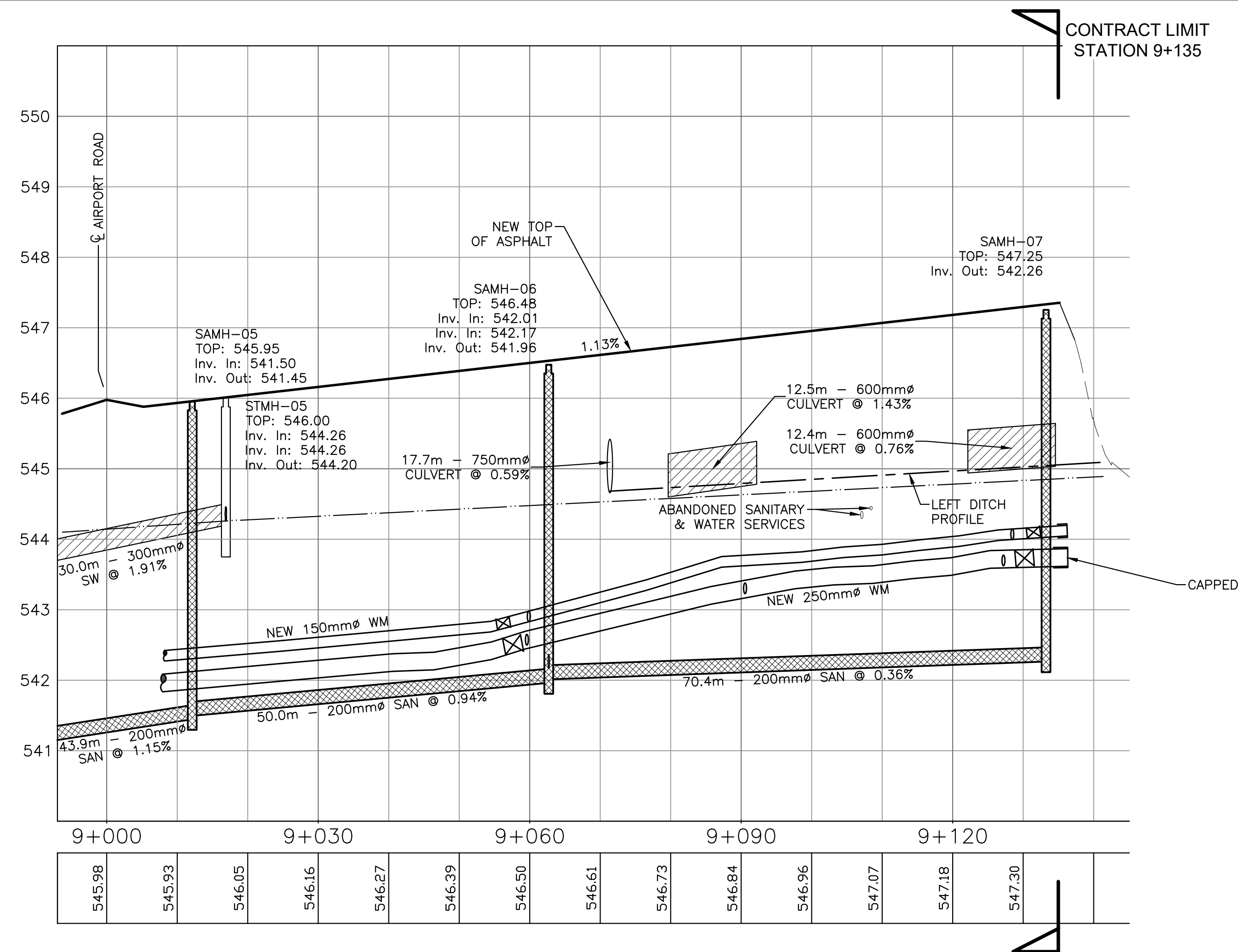
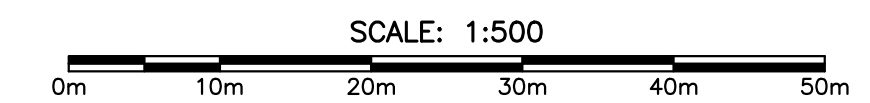


RECORD DRAWINGS ARE BASED ON  
INFORMATION PROVIDED BY CONTRACTOR

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IRON ORE BLVD  
STA. 9+000 TO STA.9+325



0	ISSUED FOR RECORD DWGS	MAY 20 2018
revisions		date
project		project

WABUSH AIRPORT  
WESTSIDE PARKING &  
AIR TERMINAL BUILDING  
ACCESS ROAD  
REDEVELOPMENT

PLAN AND PROFILE  
IRON ORE BLVD  
STA. 9+000 TO STA. 9+325

designed	SCOTT HARRISON	conçu
date	APR 21, 2015	
drawn	ANDY ST AMAND	dessiné
date	APR 21, 2015	
approved	SCOTT ROGERS	approuvé
date	APR 21, 2015	
Tender		Soumission

PWSSC Project Manager	Administrateur de projets TPSSC
project number	no. du projet
R.050329.001	
drawing no.	no. du dessin
C09	





consultant



North	North	Stamp	Elapse
		PEBA Professional Engineering Association of Alberta 2015/03/04 2015/03/04	

NOTES:  
1. ALL SUBGRADE FILL MATERIAL REQUIREMENTS WITHIN 1500mm OF FINISH GRADE TO BE SELECT BORROW MATERIAL AS PER SPECIFICATIONS.

PROVINCE OF NEWFOUNDLAND AND LABRADOR  
PEBA  
Professional Engineering  
Association of  
Alberta  
PERMIT HOLDER  
This Permit Allows  
CRANDALL ENGINEERING LTD.  
To practice Professional Engineering  
in Newfoundland and Labrador  
Permit No. as issued by PEBA  
which is valid for the year 2015

revision	ISSUED FOR TENDER	date
0		MAY 2 2016

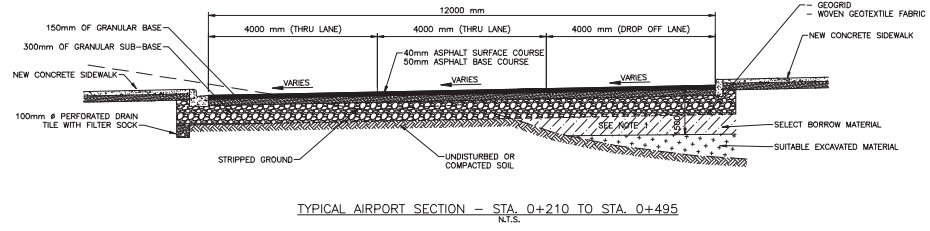
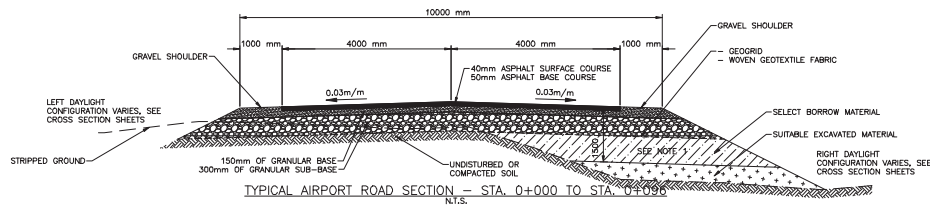
WABUSH AIRPORT  
WESTSIDE PARKING &  
AIR TERMINAL BUILDING  
ACCESS ROAD  
REDEVELOPMENT

DETAILS  
TYPICAL  
CROSS SECTIONS

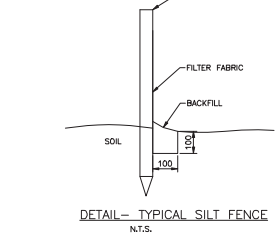
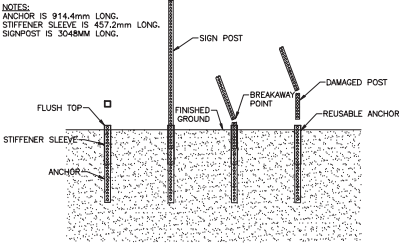
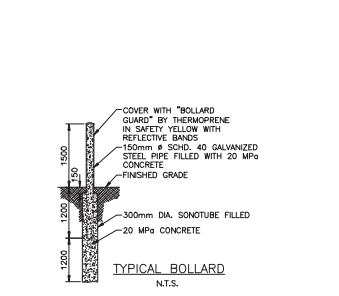
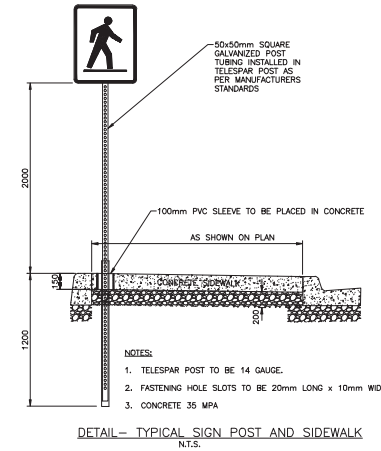
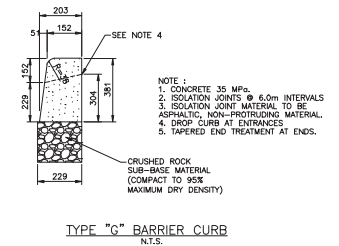
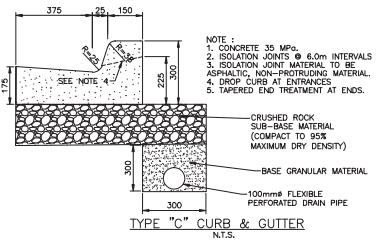
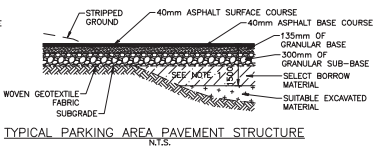
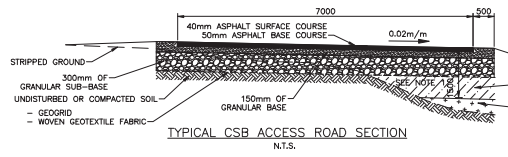
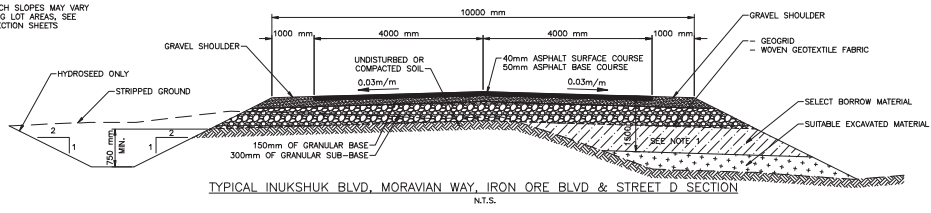
designed	ANDY ST AMAND	checked
date	APR 21, 2015	
drawn	DAVID PHILLIPS	checked
date	APR 21, 2015	
approved	SCOTT ROGERS	approved
date	APR 21, 2015	
project number	2016/04/10	
project name	Administration de projets TPDC	
drawing no.	R.050329.001	
scale	as shown	

C18

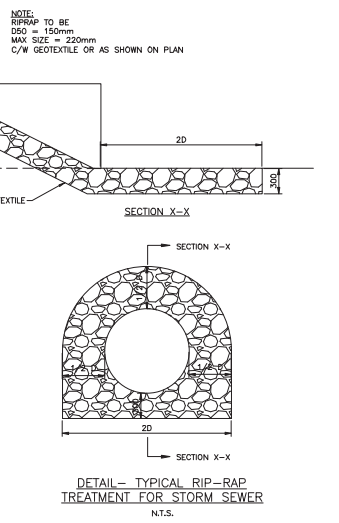
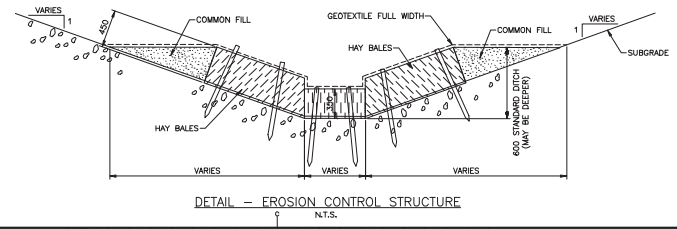
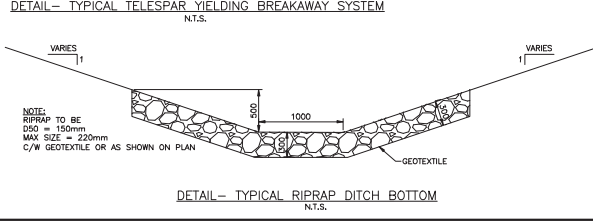
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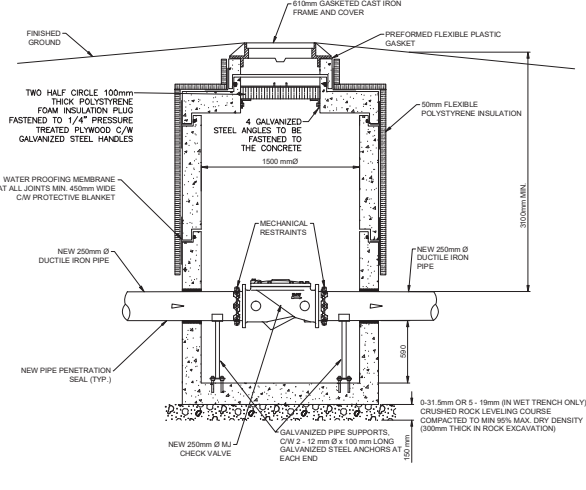
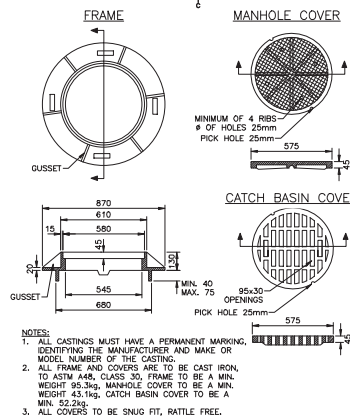
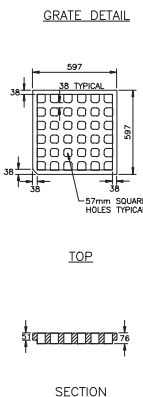
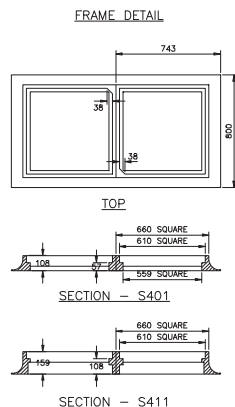
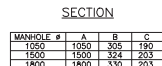
NOTE: DITCH SLOPES MAY VARY IN PARKING LOT AREAS, SEE CROSS SECTION SHEETS



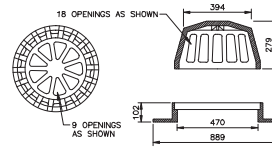
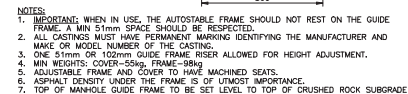
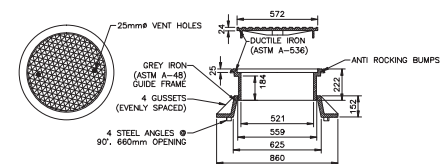
- INSTALLATION OF GEOTEXTILE SILT FENCE
1. EXCAVATE A 100x100 TRENCH IN A CRESCENT SHAPE ACROSS THE FLOW PATH WITH ENDS POINTING UPSLOPE
  2. DRIVE STURDY STAKES, SPACED 3000 APART, INTO THE GROUND ALONG THE DOWNSLOPE SIDE OF THE TRENCH
  3. INSTALL THE FILTER FABRIC FROM A CONTINUOUS ROLL AND CUT TO REQUIRED LENGTH. THE FILTER FABRIC SHOULD BE STAPLED TO THE UPSTREAM SIDE OF THE STAKES, EXTENDING THE BOTTOM 200 INTO THE TRENCH. BACKFILL AND COMPACT THE SOIL INTO THE TRENCH OVER THE FILTER FABRIC.



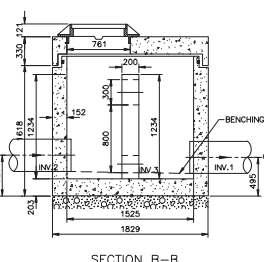
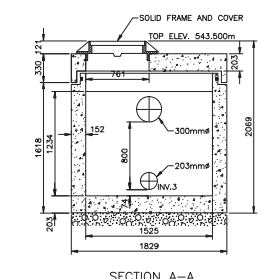




DETAIL - 1500mm WATER CHECK VALVE  
CHAMBER  
N.T.S.

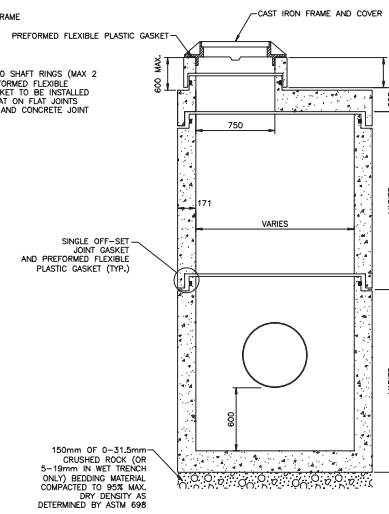
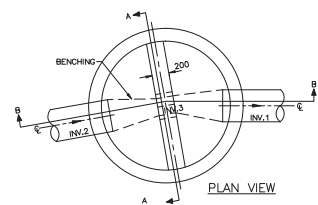


DETAIL - DOME TYPE COVER  
N.T.S.



DETAIL- STMH-13 CONTROL STRUCTURE  
N.T.S.

	ELEV.	PIPE	CONNECTOR	ANGLE
INW.1	541.696m	457mm RCP	457 CONC. IN-WALL GASK.	0°
INW.2	541.721m	457mm RCP	457 CONC. IN-WALL GASK.	170°
INW.3	541.708m			



150 AND 300 SHAFT RINGS (MAX. 2 RINGS) PREFORMED FLEXIBLE PLASTIC GASKET TO BE INSTALLED BETWEEN FLAT ON FLAT JOINTS AND FRAME AND CONCRETE JOINT

2'-0"

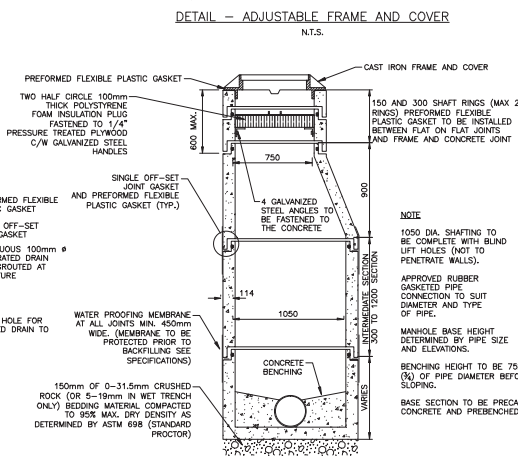
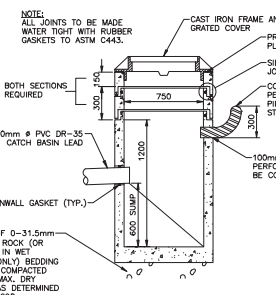
WALLS

NOTE

SHIFTLING TO BE COMPLETE WITH BLIND LIFT HOLES (NOT TO PENETRATE WALLS).

APPROVED RUBBER GASKETED PIPE CONNECTION TO SUIT DIAMETER AND TYPE OF PIPE.

MANHOLE BASE HEIGHT DETERMINED BY PIPE SIZE AND ELEVATIONS.



**NOTE**

1050 DIA. SHIFTING TO BE COMPLETE WITH BLIND LIFT HOLES (NOT TO PENETRATE WALLS).

APPROVED RUBBER GASKETED PIPE CONNECTION TO SUIT DIAMETER AND TYPE OF PIPE.

MANHOLE BASE HEIGHT DETERMINED BY PIPE SIZE AND ELEVATIONS.

BENCHING HEIGHT TO BE 75% (¾) OF PIPE DIAMETER BEFORE SLOPING.

BASE SECTION TO BE PRECAST CONCRETE AND PREBENDED.

150mm OF 0-31.5mm CRUSHED  
ROCK (OR 5-19mm IN WET  
TRENCH ONLY) BEDDING MATERIAL  
COMPACTED TO 95% MAX. DRY  
DENSITY AS DETERMINED BY  
ASTM 698 (STANDARD PROCTOR)

DETAIL - TYPICAL 1500mm DIA. AND  
LARGER STORM MANHOLE  
N.T.S.

DETAIL - TYPICAL CATCH BASIN  
N.T.S.

DETAIL - TYPICAL 1050mm DIA. SANITARY MANHOLE  
N.T.S.

Technical drawing of a gate structure, showing cross-section and elevation views with detailed dimensions and material specifications.

**Dimensions and Spacing:**

- 43mm  $\phi$  TOP RAIL
- TYPICAL SPACING 3048
- 60mm  $\phi$  LINE POSTS
- 43mm  $\phi$  DIAGONAL BRACE
- 6090
- 43mm  $\phi$  TOP RAIL
- 3 STRANDS OF 4 POINT BARBED WIRE
- 43mm  $\phi$  TOP RAIL
- 300
- 2130
- 89mm  $\phi$  CORNER POST (TYP.)
- FINISHED GRADE
- 5mm SINGLE STRAND-TENSION WIRE FASTENED  $\phi$  500mm C/C
- 2400
- 915
- 75 (MAX)
- 43mm  $\phi$  GATE FRAME
- 1440
- 2400 TYP. FOR CORNER POSTS AND GATE
- 915
- 2400 TYP. FOR DIAGONAL BRACING
- 2130

**Notes:**

- TYPICAL FOR FIRST PANEL AFTER GATE AND CORNER POST (EACH SIDE) 300mm  $\phi$  BORED HOLE FILLED WITH 50MPa CONCRETE
- TYPICAL FOR GATE POSTS 300mm  $\phi$  BORED HOLE FILLED WITH 50MPa CONCRETE

[illegible]

19mm BAR @ 150mm  
HORIZ. (OUTLET PIPE)  
WELDED AND GALVANIZED  
AFTER FABRICATION

CONCRETE OR  
PVC PIPE

GRATE

GRATE ANCHORED TO PIPE WITH  
300 x 600mm GALVANIZED STEEL  
PLATE AND 3-19mm  $\Phi$  GALVANIZED  
HD BOLTS AND WASHERS

CONCRETE

NOTE:  
THREE VERTICAL 19mm  
GALVANIZED BAR TO BE ADDED IN  
THE CENTER FOR 1500mm PIPE

PLAN

PROFILE

DETAIL - SECURITY STORM END TREATMENT  
N.T.S.

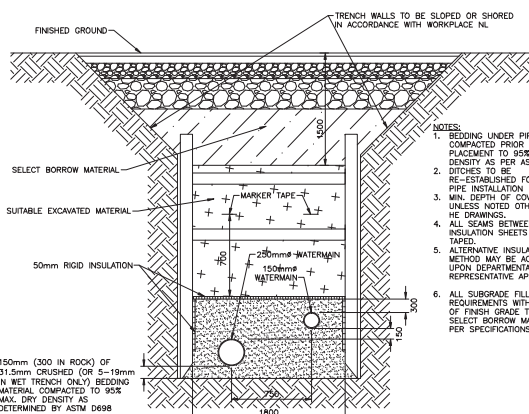


Diagram illustrating the cross-section of a trench construction, showing various layers and materials:

- FINISHED GROUND
- TRENCH WALLS TO BE SLOPED OR SHORED IN ACCORDANCE WITH WORKPLACE NL
- SELECT BORROW MATERIAL
- SUITABLE EXCAVATED MATERIAL
- MARKER TUBE
- 50mm RIGID INSULATION
- 200mm $\phi$  SANITARY SEWER
- 150mm (300 IN ROCK) OF 31.5mm CRUSHED (OR 5-19mm IN WET TRENCH ONLY) BEDDING MATERIAL COMPACTED TO 95% MAX. DRY DENSITY AS DETERMINED BY ASTM D698
- SELECTED COMMON BACKFILL MATERIAL COMPACTED TO 95% MAX. DENSITY, AS PER ASTM D698 (STANDARD PROCTOR).
- TO BE PIPE X, D698
- WING
- BE
- ED
- VAL.
- TERIAL
- 500mm
- AL AS

TRENCH WALLS TO BE SLOPED OR SHORED IN ACCORDANCE WITH WORKPLACE N.E.

1500

700

MARKER TAPE

SELECT BORROW MATERIAL

SUITABLE EXCAVATED MATERIAL

SELECTED COMMON BACKFILL MATERIAL COMPACTED TO 95% MAX. DENSITY, AS PER ASTM D698 (STANDARD PROCTOR).

300

1200 MAX.

STORM SEWER OR CULVERT

1500mm (300 IN ROCK) OF 31.5mm CRUSHED (OR 5-19mm) IN WET TRENCH ONLY BEDDING MATERIAL COMPACTED TO 95% MAX. DRY DENSITY AS DETERMINED BY ASTM D698

300 300

Diagram illustrating the cross-section of a drainage system. The system consists of a 100mm diameter flexible perforated drain pipe with a 200mm diameter filter sock, surrounded by drainage stone. The stone layer is 300mm high above the bottom of the sub-base. The filter sock is 200mm in diameter.

[illegible]

Diagram illustrating the components and dimensions of a 60mm galvanized steel post complete with cap:

- 60mm CENTER BAND (TYP.)
- 6.4mm HOT DIP GALVANIZED STEEL CHAIN
- 60mm GALVANIZED STEEL POST COMPLETE WITH CAP
- FINISHED GRADE
- 3048mm (TYP.) SPACING
- 1200 mm
- 1500 mm

Technical drawing of a security fence system. The main diagram shows a side view of a fence with two vertical posts and a chain. The posts are 1500mm high and 60mm diameter galvanized steel. The chain is 6.4mm hot dip galvanized steel with turnbuckles. The fence is 1200mm high at the posts. The ground is finished grade. A driveway/access road is shown in the background. A detail view shows a cross-section of the chain with reflective yellow and black stripes, 350mm wide, and 150mm high.

Labels and dimensions in the drawing include:

- REFLECTIVE YELLOW
- BLACK
- 150
- 350
- 6.4mm $\phi$  HOT DIP GALVANIZED STEEL CHAIN WITH ATTACHMENT TURNBUCKLES
- DRIVEWAY/ACCESS ROAD
- 1200
- WATERPROOF SECURITY LOCK (MIN. 2 KEYS)
- 1500
- 6000 OR TO SUIT
- FINISHED GRADE
- 60mm $\phi$  GALVANIZED STEEL POST COMPLETE WITH CAP
- GALVANIZED EYE BOLT

NOTE:  
LETTERING TO BE WHITE; STANDARD NUMBER 37875 OF THE STANDARD U.S.  
FONT—STD. 505. ALL COLOURS USED IN GOVERNMENT PROCUREMENT.





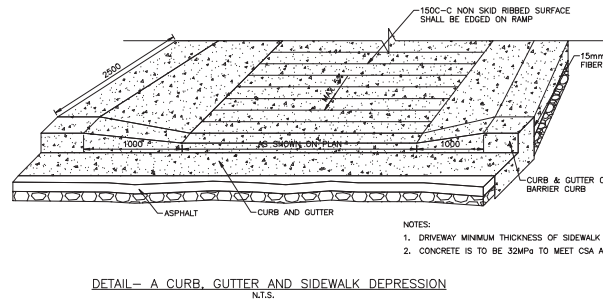
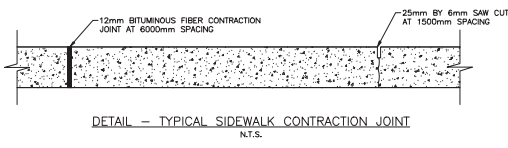
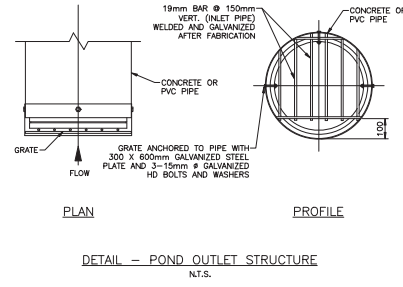
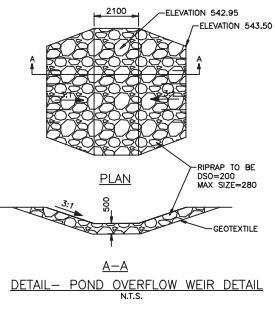
consultant



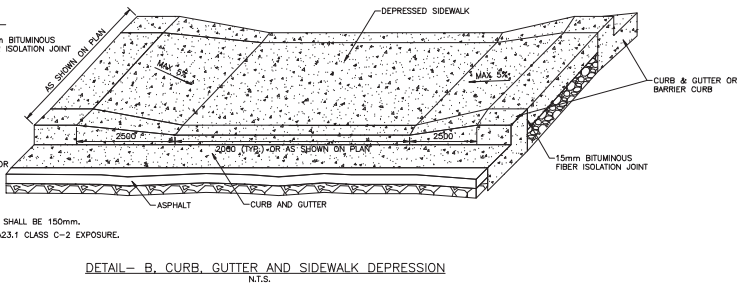
North Nord Stamp Estamp



PROVINCE OF NEWFOUNDLAND AND LABRADOR  
PERMIT HOLDER  
This Permit Allows  
CRANDALL ENGINEERING LTD.  
To practice Professional Engineering  
in Newfoundland and Labrador  
Permit No. as issued by PEGLN, 2/10/2016  
which is valid for the year 2016.



- NOTES:  
1. DRIVEWAY MINIMUM THICKNESS OF SIDEWALK SHALL BE 150mm.  
2. CONCRETE IS TO BE 32MPa TO MEET CSA A23.1 CLASS C-2 EXPOSURE.



0	ISSUED FOR TENDER	MAY 21 2016
revision		date
project	WABUSH AIRPORT WESTSIDE PARKING & AIR TERMINAL BUILDING ACCESS ROAD REDEVELOPMENT	project
drawing	DETAILS MISCELLANEOUS	drawing
designed	ANDY ST AMANT	designed
date	APR 21, 2015	date
drawn	DAVID PHILLIPS	drawn
date	APR 21, 2015	date
approved	SCOTT ROGERS	approved
date	APR 21, 2015	date
tender	2016/04/15	tender
PW00C Project Manager	Administrateur de projets TP00C	project number
R.050329.001		no. du projet
drawing no.		no. du dessin
C22		