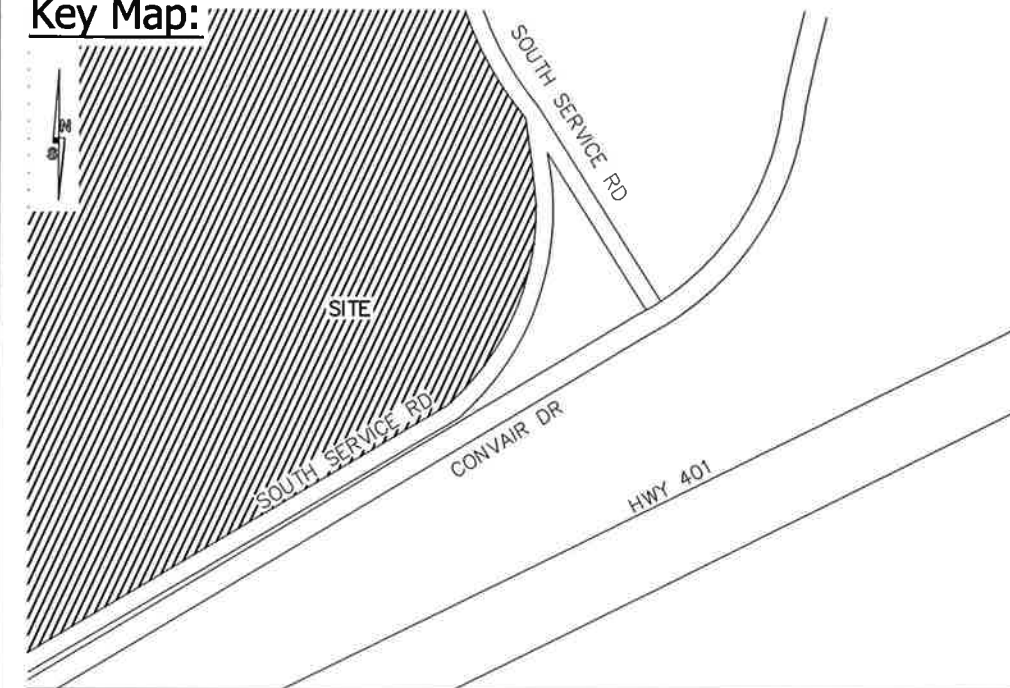


# Environment Canada

## Key Map:



## Project Information:

Site Type: SODAR INSTALLATION  
Site Name: ENVIRONMENT CANADA  
Address: N/A  
City: MISSISSAUGA  
Project Number: 131-23844-00

## Contacts:

### ENVIRONMENT CANADA

MONIKA BAILEY  
4905 DUFFERIN STREET  
TORONTO, ON, M3H 5T  
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### STRUCTURAL / ELECTRICAL ENGINEERS

GENIVAR  
220 ADVANCE BOULEVARD  
BRAMPTON, ON, L6T 4J5  
OFFICE: (905) 799-8220  
FAX: (905) 790-8511

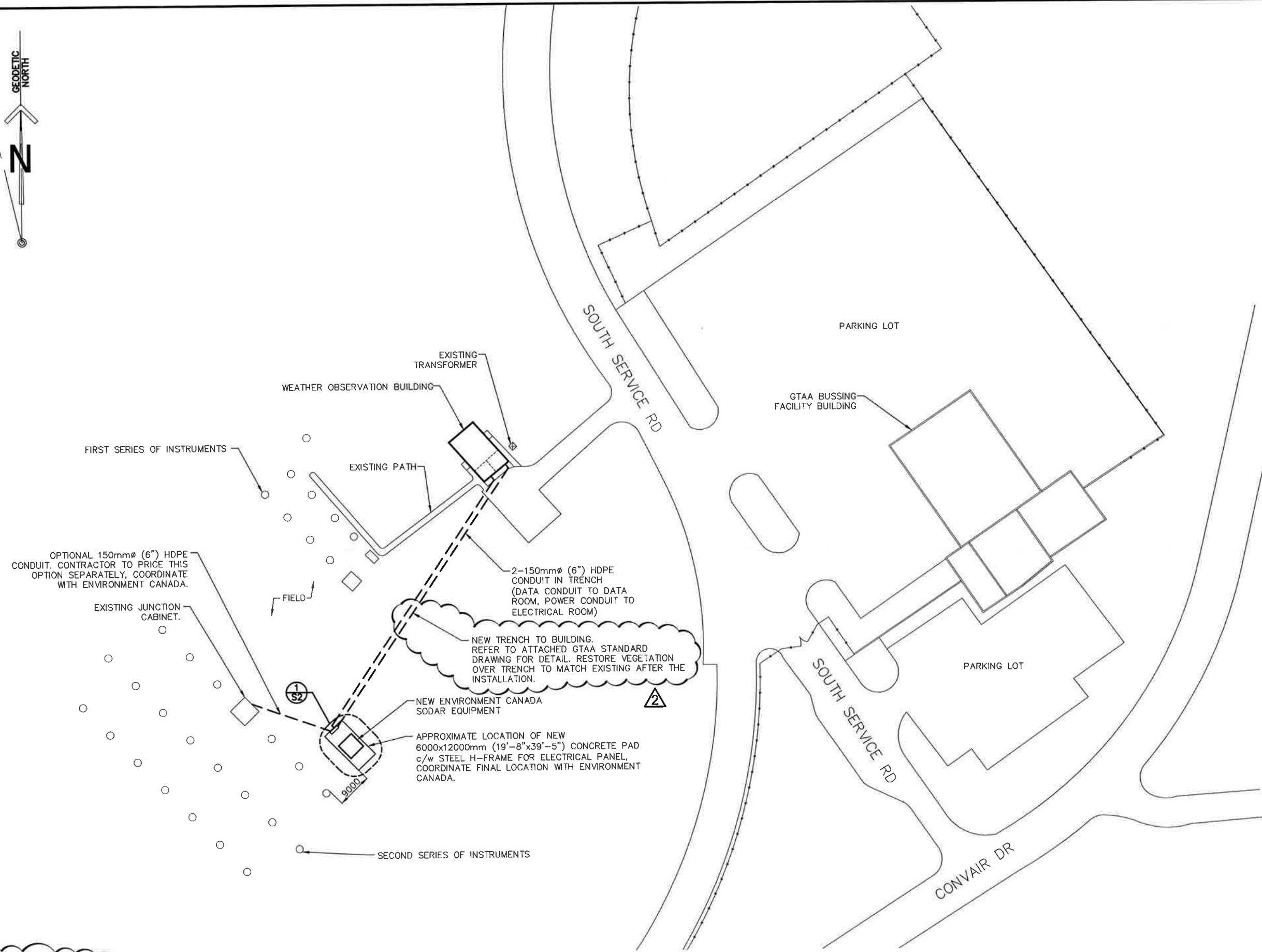
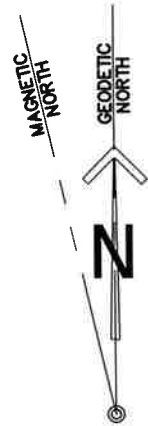
## Drawing List:

			ISSUE	DATE	DESCRIPTION
SITE PLAN	S1	PAGE:1	2	01/07/2014	NOTES ADDED
CONCRETE PAD DETAILS	S2	PAGE:2	2	01/07/2014	DETAIL REVISED
H-FRAME MOUNT DETAILS	S3	PAGE:3	2	01/07/2014	REMOVED TRENCH DETAIL
GENERAL NOTES	N1	PAGE:4	2	01/07/2014	NOTES ADDED
GENERAL NOTES	N2	PAGE:5			
ELECTRICAL	E1	PAGE:6	2	01/07/2014	NOTES ADDED
GTAA TRENCH DETAIL		PAGE:7			



# GENIVAR

220 Advance Boulevard, Brampton, Ontario L6T 4J5  
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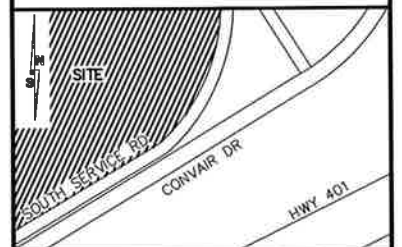


#### PLAN NOTES

- 1 - EXISTING BUILDING INFORMATION WAS OBTAINED FROM SITE OBSERVATIONS BY GENIVAR CONDUCTED ON SEPTEMBER 5 AND NOVEMBER 1, 2013.
- 2 - REFER TO DRAWINGS N1 AND N2 FOR GENERAL NOTES.

**1 SITE PLAN**  
SCALE: N.T.S.

#### KEY MAP (N.T.S.)



#### REFERENCE DRAWINGS


#### NOTES

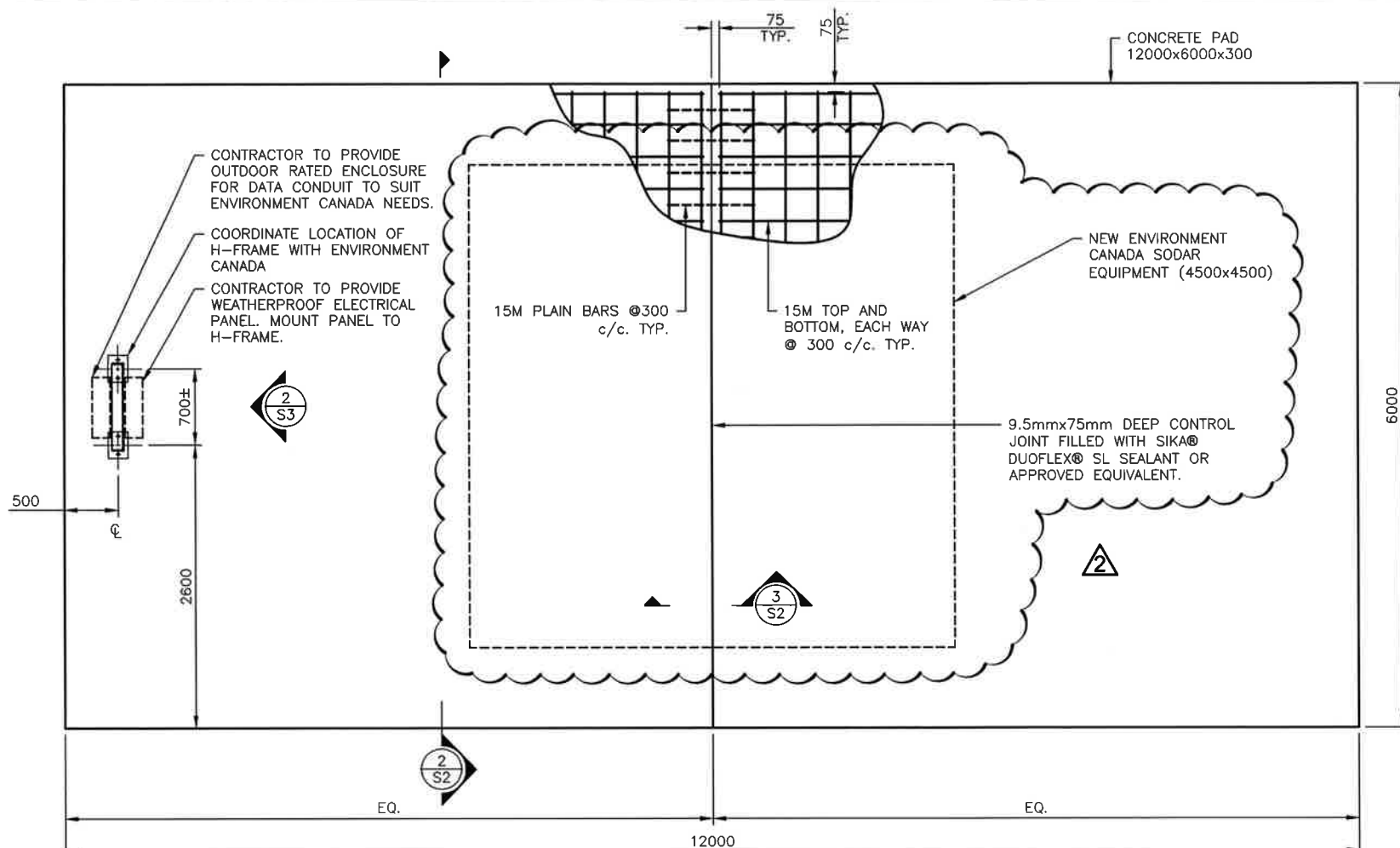
THE INFORMATION CONTAINED IN THIS SCHEMATIC PLAN IS SOLELY INTENDED AS A GENERIC REPRESENTATION OF EQUIPMENT LOCATION. THESE DRAWINGS ARE COPYRIGHT AND THE PROPERTY OF GENIVAR AND MAY NOT BE USED UNTIL MARKED AS ISSUED FOR CONSTRUCTION. REPRODUCTION OF THESE DRAWINGS WITHOUT THE CONSENT OF THE ENGINEER, IS STRICTLY PROHIBITED. DO NOT SCALE THESE DRAWINGS. ANY ERRORS OR DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER.



2	01/07/2014	NOTES ADDED	J.E.
1	11/20/2013	ISSUED FOR F.A.P.	K.F.
0	11/11/2013	ISSUED FOR REVIEW	K.L.
No.	DATE	REVISIONS	BY

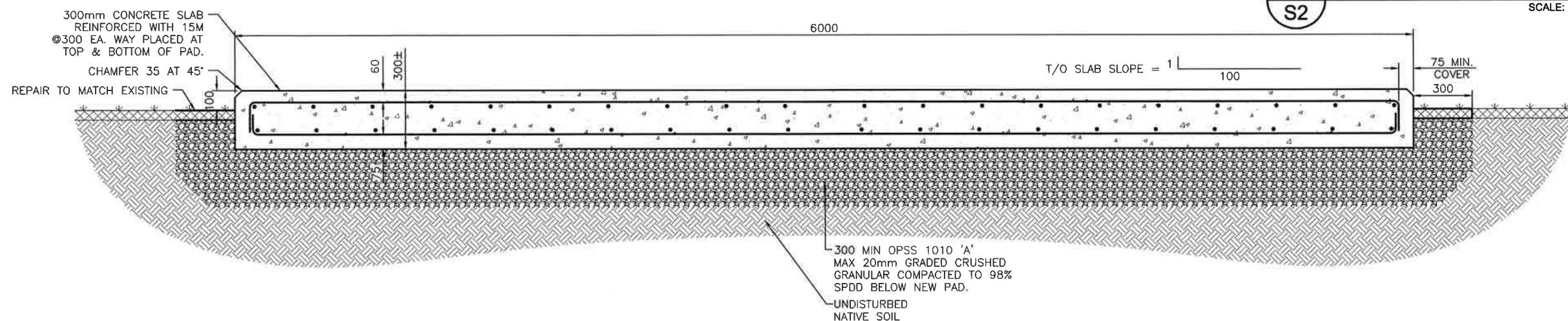


TITLE:	<b>SITE PLAN</b>
DESCRIPTION:	<b>SODAR INSTALLATION</b>
ADDRESS:	<b>N/A</b>
PLOT DATE:	Jan. 7, 14
SCALE:	AS NOTED
GENIVAR PROJECT #	131-23844-00
DESIGNED BY:	I.H.
DRAWN BY:	K.F.
DATE:	1
REVISIONS:	
	<b>S1</b>



1 CONCRETE PAD PLAN  
S2 SCALE: 1:60

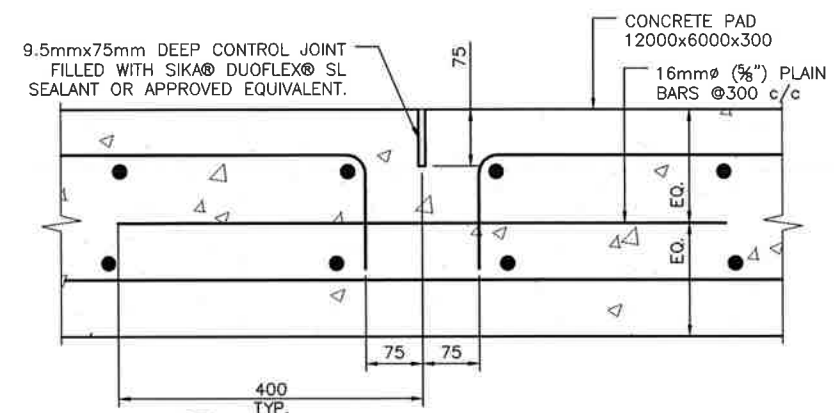
DO NOT EXCAVATE OR DISTURB EXISTING  
GROUND SURFACES PRIOR TO OBTAINING  
LOCATES AND CLEARANCES FOR ALL EXISTING  
SERVICES, INCLUDING SERVICES ON PRIVATE  
PROPERTY.



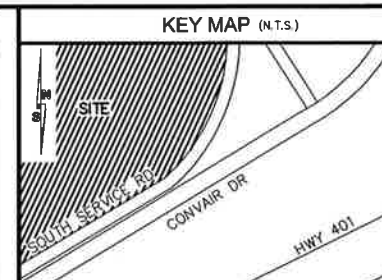
2 CONCRETE PAD SECTION  
S2 SCALE: 1:25

GENERAL NOTES:

- 1 - CONTRACTOR SHALL VERIFY EXISTING DIMENSIONS, DETAILS AND CONDITIONS PRIOR TO FABRICATION, REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- 2 - ALL MATERIALS TO BE HOT DIP GALVANIZED AFTER FABRICATION INCLUDING NUTS, BOLTS, AND WASHERS, UNLESS NOTED OTHERWISE.
- 3 - ALL DRILLING BY ROTATION ONLY. HAMMER DRILLING NOT PERMITTED.
- 4 - DESIGN IS BASED ON N.B.C.C. 2010  
WEIGHT OF SODAR = 6.35kN (1397LBS)  
1 IN 50 YEAR RETURN PERIOD  
WIND REFERENCE VELOCITY PRESSURE  $q = 440 \text{ Pa}$   
GROUND SNOW PRESSURE  $S_s = 1.1 \text{ kPa}$   
ASSOCIATED RAIN LOAD  $S_r = 0.4 \text{ kPa}$   
SEISMIC FORCE  $I_e = 1.0$   
 $S_a(0.2) = 0.21$   
ASSUME SITE: CLASS D
- 5 - BOLTS SHALL BE IN FULL BEARING WITH THREADS EXCLUDED FROM THE SHEAR PLANE.
- 6 - CONTRACTOR TO SECURE THE EQUIPMENT ON CONCRETE SLAB IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS. COORDINATE BOLTING REQUIREMENTS WITH THE MANUFACTURER.
- 7 - CONCRETE:  
CONCRETE STRENGTH = 35MPa AT 28 DAYS.  
CEMENT TYPE = GU  
EXPOSURE CLASS = C-1  
AIR CONTENT = 4-7%  
MAX AGGREGATE SIZE = 19mm
- 8 - ASSUMED ALLOWABLE SOIL BEARING CAPACITY: 140KPa.
- 9 - REFER TO DRAWING N1 AND N2 FOR GENERAL NOTES.



3 CONTROL JOINT SECTION  
S2 SCALE: 1:10



### REFERENCE DRAWINGS


## NOTES

THESE DRAWINGS ARE COPYRIGHT AND THE PROPERTY OF GENIVAR AND MAY NOT BE USED UNTIL MARKED AS ISSUED FOR CONSTRUCTION. REPRODUCTION OF THESE DRAWINGS WITHOUT THE CONSENT OF THE ENGINEER, IS STRICTLY PROHIBITED.

DO NOT SCALE THESE DRAWINGS.

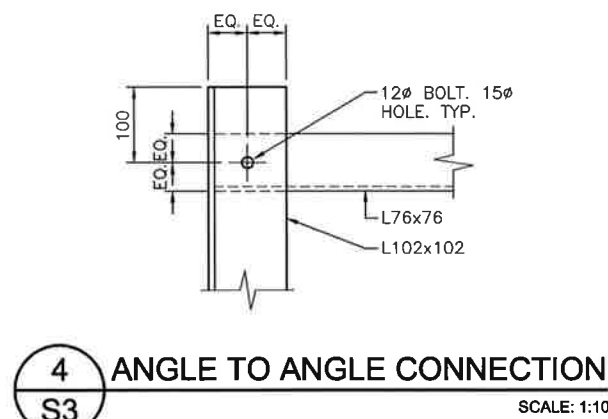
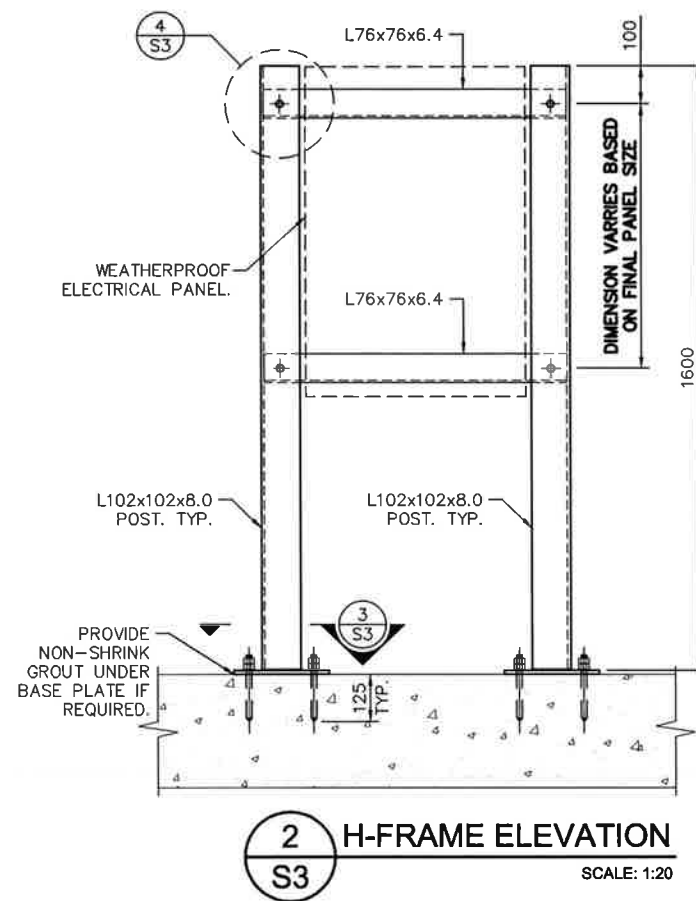
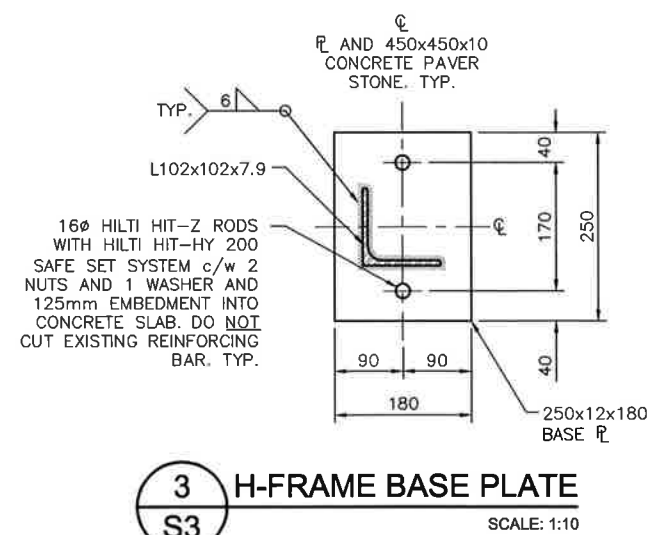
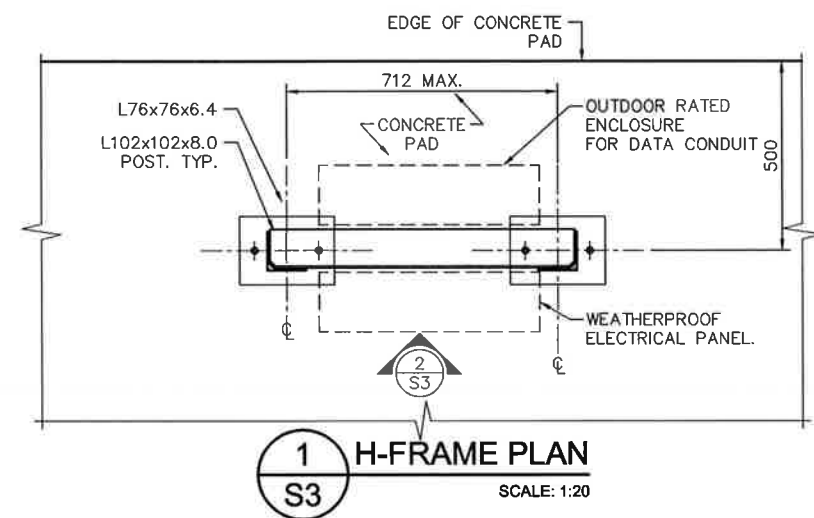
ANY ERRORS OR DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER.



2	01/07/2014	DETAIL REVISED	
1	11/20/2013	ISSUED FOR F.A.P.	
0	11/11/2013	ISSUED FOR REVIEW	
No.	DATE	REVISIONS	



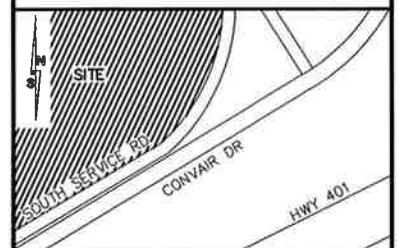
TITLE:		CONCRETE PAD DETAILS	
DESCRIPTION:		SODAR INSTALLATION	
ADDRESS:		N/A	
PLOT DATE: Jan. 7, 14	SCALE:	AS NOTED	
SITE CODE:	—	DRAWING NO.	S2
GENIVAR PROJECT #		PAGE NO.	
131-23844-00			
DESIGNED BY:	DRAWN BY:	2	
L.H.	K.F.		



#### GENERAL NOTES

- CONTRACTOR SHALL VERIFY EXISTING DIMENSIONS, DETAILS AND CONDITIONS, REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- ALL MATERIALS TO BE HOT DIP GALVANIZED AFTER FABRICATION INCLUDING NUTS, BOLTS, AND WASHERS, UNLESS NOTED OTHERWISE.
- DESIGN IS BASED ON N.B.C.C. 2010 AND CSA S37-01  
WIND REFERENCE VELOCITY PRESSURE:  
450Pa, 1/10 YEAR RETURN PERIOD  
GUST FACTOR = 2.5
- BOLTS SHALL BE IN FULL BEARING WITH THREADS EXCLUDED FROM THE SHEAR PLANE.
- REFER TO DRAWING N1 AND N2 FOR ADDITIONAL NOTES.

#### KEY MAP (N.T.S.)



#### REFERENCE DRAWINGS


#### NOTES

THESE DRAWINGS ARE COPYRIGHT AND THE PROPERTY OF GENIVAR AND MAY NOT BE USED UNTIL MARKED AS ISSUED FOR CONSTRUCTION. REPRODUCTION OF THESE DRAWINGS WITHOUT THE CONSENT OF THE ENGINEER, IS STRICTLY PROHIBITED.  
DO NOT SCALE THESE DRAWINGS. ANY ERRORS OR DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER.



No.	DATE	REVISIONS	BY
2	01/07/2014	REMOVED TRENCH DETAIL	J.E.
1	11/20/2013	ISSUED FOR F.A.P.	K.F.
0	11/11/2013	ISSUED FOR REVIEW	K.L.



TITLE: H-FRAME MOUNT DETAILS	
DESCRIPTION: SODAR INSTALLATION	
ADDRESS: N/A	
PLOT DATE: Jan. 7, 14	SCALE: AS NOTED
SITE CODE: -	DRAWING No. S3
GENIVAR PROJECT #: 131-23844-00	
DESIGNED BY: I.H.	DRAWN BY: K.F.
PAGE NO. 3	

GENERAL NOTES

1. REPORT ANY INCONSISTENCIES BETWEEN DRAWINGS AND SITE CONDITIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE THESE DRAWINGS.
2. THESE DRAWINGS ARE THE PROPERTY OF ENVIRONMENT CANADA AND GENIVAR INC. AND SHALL NOT BE REPRODUCED IN ANY MANNER, INCLUDING FOR SHOP DRAWING PREPARATION WITHOUT WRITTEN APPROVAL.
3. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER FROM GENIVAR INC. AND WHEN MARKED IN THE REVISION BLOCK WITH "ISSUED FOR F.A.P."
4. THESE DRAWINGS SHOW THE COMPLETED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY ON THE JOB SITE, AND FOR DESIGN, INSTALLATION, AND SUPERVISION OF ALL TEMPORARY BRACING, SUPERIMPOSED CONSTRUCTION LOADS, AND SUPPORTS DURING CONSTRUCTION. DO NOT EXCEED ORIGINAL BUILDING DESIGN LOADS WITHOUT SHORING. OBTAIN ALL APPROVALS AND CLEARANCES FROM GTAA BEFORE BEGINNING ANY WORK.
5. PROTECT THE EXISTING BUILDING AND FINISHES AGAINST DAMAGE DURING THE COURSE OF WORK. THE CONTRACTOR IS TO LOCATE ALL HIDDEN REINFORCING STEEL AND STRUCTURAL MEMBERS PRIOR TO CUTTING THROUGH ANY WALL, FLOOR OR ROOF ASSEMBLY. COMPLETE ALL LOCATES OF STRUCTURAL REINFORCING STEEL AND SERVICES USING X-RAYS TO THE REQUIREMENTS OF THE GTAA. SEAL ALL OPENINGS AND PROVIDE FIRE SEALANT WHERE HOLES PENETRATE THROUGH FIRE RATED ASSEMBLIES. REFER TO FIRE STOPPING DETAILS PROVIDED WITH THE SET.
6. ALL DIMENSIONS ARE IN MILLIMETRES, ELEVATIONS IN METRES U/N.
7. THE CONTRACTOR IS REQUIRED TO COORDINATE ALL INDEPENDENT INSPECTION AND TESTING SERVICES. IF REQUIRED BY GTAA OR ENVIRONMENT CANADA, REPORTS ARE TO BE SUBMITTED TO THIS OFFICE FOR REVIEW. THE CONTRACTOR IS TO PROVIDE A SCHEDULE AND KEEP THIS OFFICE UPDATED WITH RESPECT TO SITE PROGRESS TO ALLOW COORDINATION OF PERIODIC FIELD REVIEW BY THE ENGINEER.
8. ALL STRUCTURAL MEMBERS ARE LOADED CONCENTRICALLY AT MEMBER CENTRELINES, U/N.
9. INSTALL ALL ANCHORS AND PREFABRICATED COMPONENTS IN ACCORDANCE WITH FULL MANUFACTURERS INSTRUCTIONS, FOR THE PROJECT AND WEATHER CONDITIONS PRESENT AT THE TIME OF INSTALLATION.
10. THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING STRUCTURE AND PROPERTIES ADJACENT TO THE AREAS OF WORK. ALL DISTURBED AREAS, DAMAGED PROPERTIES OR STRUCTURES SHALL BE RESTORED TO ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR AND TO THE SATISFACTION OF THE GTAA.
11. THE CONTRACTOR MUST NOTIFY THE ENGINEER IF ANY CHANGES TO STEEL OR EQUIPMENT PLACEMENT ARE NECESSARY DUE TO SITE CONDITIONS PRIOR TO PROCEEDING WITH ANY WORK.
12. SUBMIT REDLINES/AS-BUILT DRAWINGS CAPTURING ALL OF THE CHANGES THAT OCCURRED DURING CONSTRUCTION.

MATERIAL AND DESIGN DATA

1. ALL LOADS SHOWN ON DRAWINGS ARE UNFACTORED SERVICE LOADS IN kN AND kPa UNLESS OTHERWISE NOTED. ALL MATERIALS TO BE NEW.
2. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS: 25 MPa UNLESS NOTED. SUPPLY CONCRETE AS PER CSA A23.1-04 TABLE 13 ,ALTERNATIVE 3, CLEARLY COORDINATING MIX DESIGNATIONS WITH AIR CONTENT CATEGORY, EXPOSURE CLASS, UNLESS INDICATED ON THE DRAWINGS.
3. REINFORCING STEEL: TO CSA G30.18-M92. GRADE 400R.
4. STRUCTURAL STEEL: TO CSA G40.20-04/G40.21-04.

A) ROLLED W. SHAPES: GRADE 350W

B) OTHER SHAPES AND PLATES: GRADE 300W

C) HOLLOW STRUCTURAL SECTIONS: GRADE 350W – CLASS C

D) WELDING ELECTRODES: E480XX

E) STRUCTURAL BOLTS: ASTM A325

F) ANCHOR RODS: GRADE 300W

G) LINDAPTER HOLLOW BOLTS: 316 STAINLESS STEEL
5. MASONRY MATERIALS:

A) LOAD BEARING BLOCK: TO CSA A165.SERIES-04.

WEIGHT: LIGHTWEIGHT NORMAL WEIGHT

HOLLOW: H/15/C/M H/15/A/M

SOLID: S/15/C/M S/15/A/M

B) LOAD BEARING BRICK: TO CSA A82.1-M87

C) MORTAR: CSA A179-04, TO PROPERTY SPECIFICATIONS

LOAD BEARING ABOVE GRADE MORTAR: TYPE 'S'

NON-BEARING OR VENEER ABOVE GRADE MORTAR: TYPE 'N'

BELOW GRADE MORTAR: TYPE 'S'

D) GROUT: CSA A179-04 TO PROPERTY SPECIFICATIONS.

6. STRUCTURAL LUMBER TO BE GRADE MARKED TO CONFORM TO CSA STANDARD 0141-05.

A) SPECIES GROUP: SPF U/N

B) GRADE: NO. 2 OR BETTER
7. DESIGN LOADS: BASED ON 2010 N.B.C.C.

A) DESIGN IS IN ACCORDANCE WITH CSA S37.01 ANTENNAS AND SUPPORTING STRUCTURES WITH Q (1/30) RETURN WIND LOAD = 450Pa
- CODES AND STANDARDS (LATEST EDITIONS)
1. CONFORM TO REQUIREMENTS OF THE NATIONAL BUILDING CODE AND THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (LATEST EDITIONS).

2. CONCRETE: TO CSA STANDARD CAN/CSA A23.1, A23.2, A23.3, A23.4.

MASONRY: TO CSA STANDARD CSA-S304.1 AND CSA-A370, CSA-A371.

CONNECTORS FOR MASONRY: TO CSA-A370.

MASONRY CONSTRUCTION FOR BUILDINGS: TO CSA-A371.

STRUCTURAL STEEL: TO CAN/CSA-S16.

LIGHT GAUGE STEEL: TO CAN/CSA-S136.

WELDING: TO CSA STANDARDS W59, CAN/CSA-S16, AND W47.1.

TIMBER: TO CAN/CSA-086.

ALUMINUM: TO CAN3-S157.
- INSPECTION AND TESTING
1. GTAA OR ENVIRONMENT CANADA MAY APPOINT AN INDEPENDENT INSPECTION AND TESTING AGENCY. THE COST OF THE INSPECTION SHALL BE PAID BY GTAA OR ENVIRONMENT CANADA. WORK WILL BE INSPECTED TO ENSURE CONFORMANCE WITH THE CONTRACT DOCUMENTS. SCHEDULING OF INSPECTIONS WILL BE COMPLETED BY THE GENERAL CONTRACTOR. REPORTS ARE TO BE SUBMITTED TO THIS OFFICE WITHIN THREE (3) WORKING DAYS OF SUCH INSPECTION.
- AIRSIDE STANDARDS
1. ALL WORK AND EQUIPMENT INSTALLED MUST COMPLY WITH THE OBSTACLE LIMITATION SURFACES OUTLINED IN TRANSPORT CANADA TP312E.
- ENVIRONMENTAL
1. DO NOT EXCAVATE OR DISTURB EXISTING GROUND SURFACES PRIOR TO OBTAINING LOCATES AND CLEARANCES FOR ALL EXISTING SERVICES.

2. REPAIR DISTURBED GROUND SURFACES TO MATCH EXISTING. RESTORE VEGETATION.

3. ALL EXCESS MATERIALS FROM EXCAVATION TO BE REMOVED FROM SITE.

4. NO CONCRETE EQUIPMENT CAN BE WASHED ON SITE.

5. CONCRETE MUST NOT BE DEPOSITED INTO THE STORM SYSTEM.

6. ALL WASTE MUST BE REMOVED FROM SITE AND DISPOSED OF FOLLOWING ALL FEDERAL, PROVINCIAL, AND MUNICIPAL REGULATIONS.
- 2
- KEY MAP (N.T.S.)

REFERENCE DRAWINGS

NOTES

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2	01/07/2014	NOTES ADDED		J.E.
1	11/20/2013	ISSUED FOR F.A.P.		K.F.
0	11/11/2013	ISSUED FOR REVIEW		K.L.
No.	DATE	REVISIONS		BY

220 Advance Boulevard, Brampton, Ontario L8T 4J5  
Telephone: (905) 799-8220

TITLE: GENERAL NOTES

DESCRIPTION: SODAR INSTALLATION

ADDRESS: N/A

PLOT DATE: Jan. 7, 14SCALE: AS NOTED

SITE CODE: —DRAWING NO: N1

GENIVAR PROJECT #: 131-23844-00PAGE NO: 4

DESIGNED BY: I.H.DRAWN BY: K.F.



## GENERAL

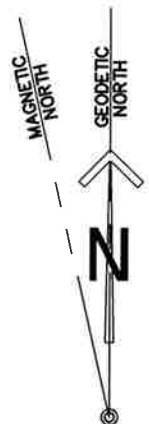
- ## PRODUCTS

- ## EXECUTION

- ## CHEMICAL AND MECHANICAL ANCHORS SPECIFICATIONS

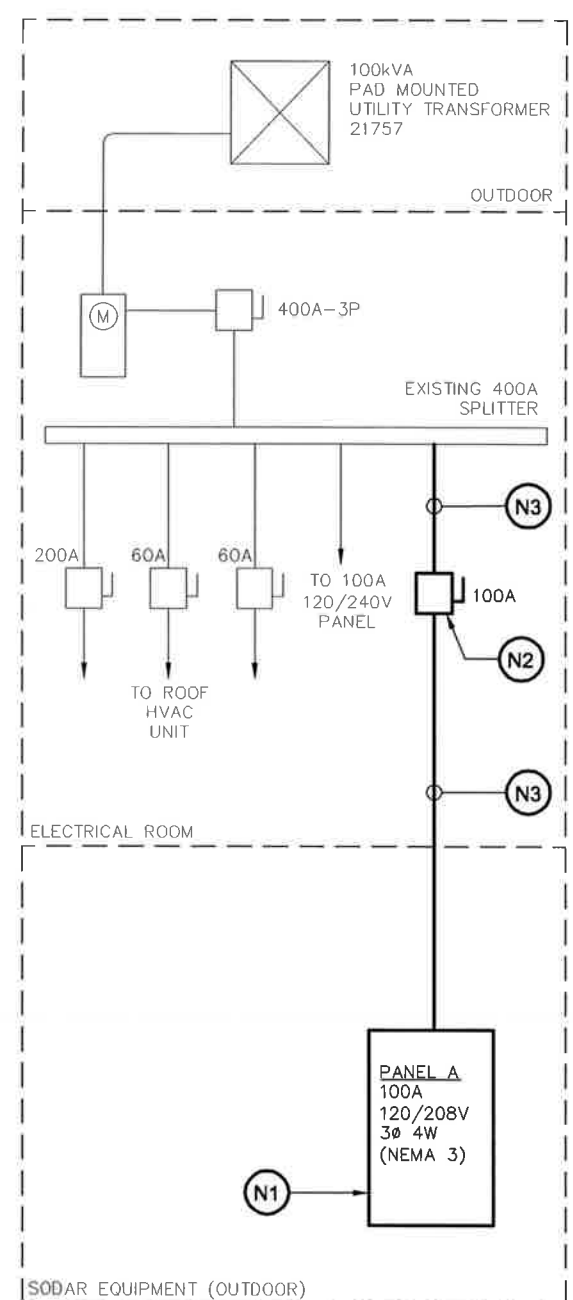
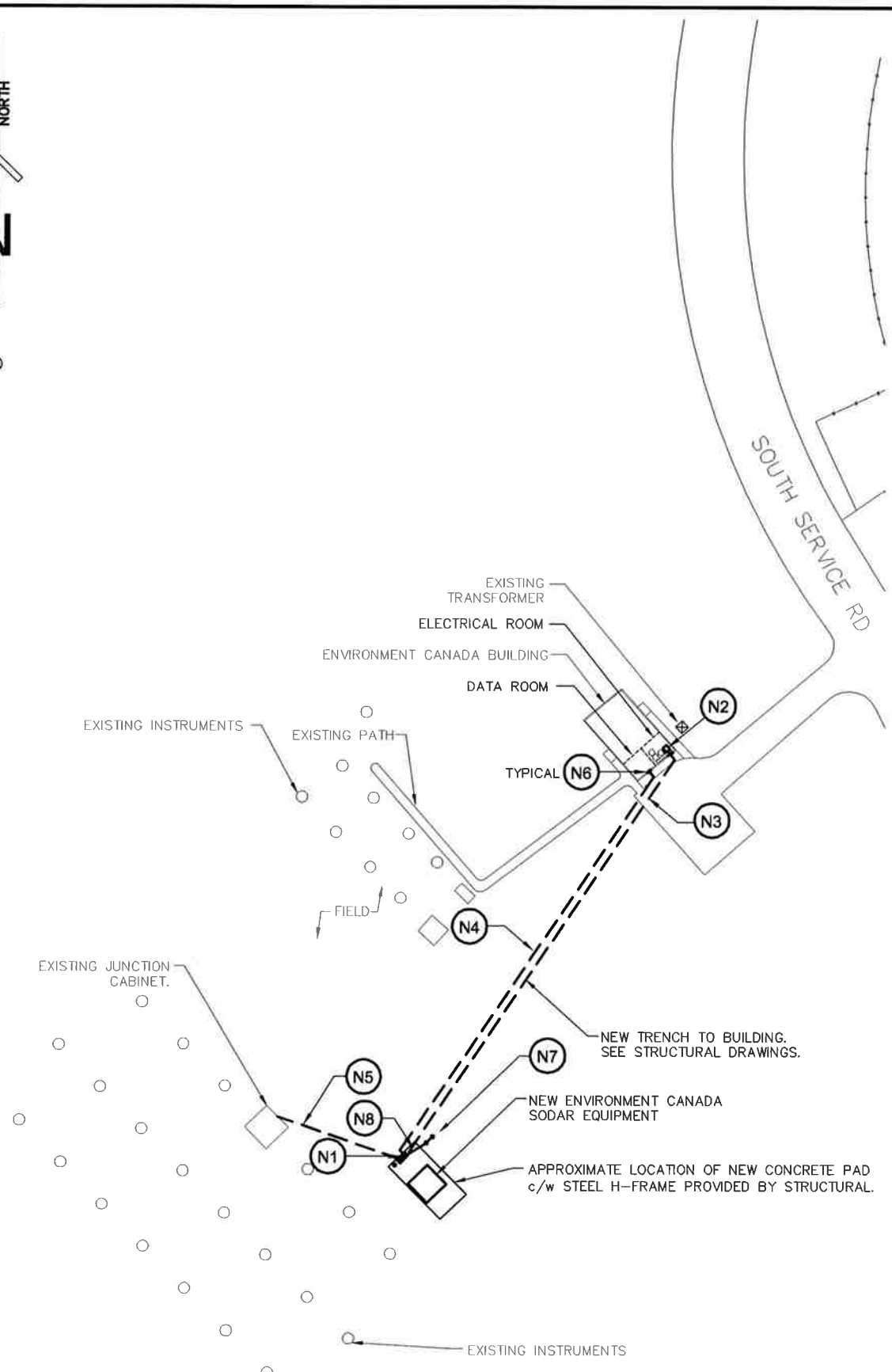
- CONCRETE:**

- | <b>KEY MAP (N.T.S.)</b>  |             |                    |           |
|--|-------------|--------------------|-----------|
|  |             |                    |           |
| <b>REFERENCE DRAWINGS</b>  |             |                    |           |
|  |             |                    |           |
|  |             |                    |           |
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|  |             |                    |           |
| <b>NOTES</b>   |             |                    |           |
| <p>THESE DRAWINGS ARE COPYRIGHT AND THE PROPERTY OF GENIVAR AND MAY NOT BE USED UNTIL MARKED AS ISSUED FOR CONSTRUCTION REPRODUCTION OF THESE DRAWINGS WITHOUT THE CONSENT OF THE ENGINEER, IS STRICTLY PROHIBITED.</p> <p>DO NOT SCALE THESE DRAWINGS.</p> <p>ANY ERRORS OR DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER.</p> |             |                    |           |
|  |             |                    |           |
|  |             |                    |           |
| <b>Environment<br/>Canada</b>  |             |                    |           |
|  |             |                    |           |
|  |             |                    |           |
|  |             |                    |           |
|  |             |                    |           |
| 1  | 11/20/2013  | ISSUED FOR F.A.P.  | K.F.      |
| 0  | 11/11/2013  | ISSUED FOR REVIEW  | K.L.      |
| <b>No.</b>   | <b>DATE</b> | <b>REVISIONS</b>   | <b>BY</b> |
| <h1 style="margin: 0;">GENIVAR</h1> <p>220 Advance Boulevard, Brampton, Ontario L6T 4J5<br/>Telephone (905) 799-8220</p>   |             |                    |           |
| <b>TITLE:</b>  |             |                    |           |
| <b>GENERAL NOTES</b>   |             |                    |           |
| <b>DESCRIPTION:</b>  |             |                    |           |
| <b>SODAR INSTALLATION</b>  |             |                    |           |
| <b>ADDRESS:</b>  |             |                    |           |
| <b>N/A</b>   |             |                    |           |
| <b>PLOT DATE:</b>  |             | <b>SCALE:</b>      |           |
| Nov. 20, 13  |             | AS NOTED           |           |
| <b>SITE CODE:</b>  |             | <b>DRAWING NO:</b> |           |
| —  |             | <b>N2</b>          |           |
| <b>GENIVAR PROJECT #</b>   |             | <b>PAGE NO:</b>    |           |
| 131-23844-00   |             | 5                  |           |
| <b>DESIGNED BY:</b>  |             | <b>DRAWN BY:</b>   |           |
| I.H.   |             | K.F.               |           |



# 1 SITE PLAN

SCALE: N.T.S.



## 2 SINGLE LINE DIAGRAM

N.T.S.

### ELECTRICAL NOTES:

- N1 - PROVIDE NEW PANEL A, PANEL SHALL BE MINIMUM 42 CIRCUIT WITH COPPER BUS RATED FOR 100A, 120/208V, 3Ø, 4W WITH A 100A MAIN BREAKER. BRANCH BREAKERS SHALL BE BOLTED TYPE BREAKERS. PROVIDE COMPATIBLE BREAKERS AS REQUIRED TO SUIT BRANCH CIRCUIT REQUIREMENTS. PANEL SHALL BE CUTLER HAMMER POWER-LINE 1 AND RATED FOR OUTDOOR USE (NEMA 3). SECURE PANEL TO THE STEEL FRAME, SEE STRUCTURAL DRAWINGS. CONFIRM MOUNTING HEIGHT WITH CLIENT REPRESENTATIVE PRIOR TO INSTALLATION. PROVIDE A LAMACOID NAMEPLATE FOR ALL NEW EQUIPMENT.
- N2 - PROVIDE A NEW THREE PHASE 100A NON-FUSIBLE DISCONNECT SWITCH FOR THE NEW POWER SERVICE TO THE SODAR EQUIPMENT.
- N3 - RUN 3-#2/0 + #8 GRND IN 53mmC FROM THE SPLITTER, THROUGH THE DISCONNECT SWITCH, TO THE NEW PANEL A AS INDICATED.
- N4 - PROVIDE TWO (2) 150mm (6") HDPE CONDUITS FOR TELEPHONE/FIBRE FROM THE EXISTING DATA ROOM TO THE NEW CONCRETE PAD. THIS CONDUIT SHALL RUN IN PARALLEL TO THE POWER CONDUIT AS INDICATED. PROVIDE A NYLON PULLCORD IN EMPTY CONDUITS. VERIFY LOCATION FOR TERMINATION OF CONDUIT WITH CLIENT REPRESENTATIVE.
- N5 - PROVIDE A 150mm (6") HDPE CONDUIT AS INDICATED. CONTRACTOR SHALL PROVIDE A SEPARATE PRICE FOR THIS WORK AND SHALL REQUEST APPROVAL FROM THE CLIENTS REPRESENTATIVE PRIOR TO INSTALLATION. COORDINATE ALL WORK WITH ENVIRONMENT CANADA. PROVIDE A NYLON PULLCORD IN EMPTY CONDUIT.
- N6 - CORE DRILL THROUGH WALLS, SLABS AND OTHER PARTITIONS WITH APPROVAL OF STRUCTURAL ENGINEER FOR ALL CONDUIT RUNS. PROVIDE FIRE RATED PATCH AROUND PENETRATION POINTS FROM ANY LOCATIONS WHERE CONDUITS PASS THROUGH FIRE RATED STRUCTURES. X-RAY AS REQUIRED TO ENSURE AREAS TO BE CORED ARE ACCEPTABLE LOCATIONS.
- N7 - PROVIDE TWO GROUND RODS SPACED AT NO LESS THAN 3.0m APART. GROUND RODS SHALL BE 19mm X 3.0m AND OF MANUFACTURED GROUNDING ELECTRODE TYPE. THE GROUND RODS SHALL BE BONDED TOGETHER BY #2/0 BARE COPPER GROUND CONDUCTOR AND INSTALLED IN ACCORDANCE WITH OESC AND ESA STANDARDS.
- N8 - PROVIDE #2/0 GROUND CONNECTION FROM THE GROUND RODS TO PANEL A AS INDICATED.
- N9 - RUN POWER AND TEL./FIBRE CONDUITS FOR THE NEW ENVIRONMENT CANADA SODAR EQUIPMENT ALONG THE OUTSIDE WALL TO UNDERGROUND AS INDICATED. THE CONDUIT RUN OUTSIDE OF THE BUILDING SHALL BE BURIED PVC CONDUIT IN ACCORDANCE WITH THE ONTARIO ELECTRICAL SAFETY CODE AND ESA REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING LANDSCAPE. CONDUIT RUNS INDOOR SHALL BE EMT. RUN CONDUIT CONCEALED, PARALLEL TO BUILDING LINES.
- N10 - PROVIDE LABELING FOR ALL EQUIPMENT AND EXPOSED CONDUITS AT 15' INTERVALS OR WHERE CONDUITS PASS THROUGH WALLS OR FLOORS. CONDUIT LABELING TO INDICATE "ENVIRONMENT CANADA" AND "POWER" OR "DATA" AS APPLICABLE.
- N11 - TERMINATE POWER WIRING AND FIBRE CONDUITS TO ENVIRONMENT CANADA'S REQUIREMENTS.
- N12 - ALL WORK SHALL BE PERFORMED TO ENVIRONMENT CANADA STANDARDS AND IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, ESA AND THE ONTARIO ELECTRICAL SAFETY CODE.
- N13 - ENDS OF ALL DUCTS AND CONDUITS SHALL BE SEALED TO PREVENT ANY DEBRIS FROM ENTERING.
- N14 - ESA CERTIFICATE IS REQUIRED AND SHALL BE PROVIDED TO GTAA PM/COORDINATOR.

### GENERAL NOTES:

- 1 - INDICATED DIMENSIONS ARE IN mm AND ARE APPROXIMATE.
- 2 - INDICATED LOCATIONS OF NEW EQUIPMENT ARE APPROXIMATE. VERIFY EXACT LOCATIONS ON SITE WITH CLIENT REPRESENTATIVE.
- 3 - COORDINATE EXACT ROUTING OF NEW CONDUITS FOR POWER AND FIBER ON SITE WITH CLIENT REPRESENTATIVE.

KEY MAP (N.T.S.)

REFERENCE DRAWINGS

NO.	DATE	REVISIONS	BY
3	01/02/2014	NOTES ADDED	J.K.
2	11/26/2013	ISSUED FOR F.A.P.	J.K.
1	11/18/2013	ISSUED FOR REVIEW	J.K.
0	11/15/2013	ISSUED FOR REVIEW	J.K.

NOTES

THE INFORMATION CONTAINED IN THIS SCHEMATIC PLAN IS SOLELY INTENDED AS A GENERIC REPRESENTATION OF EQUIPMENT LOCATION. THESE DRAWINGS ARE COPYRIGHT AND THE PROPERTY OF GENIVAR AND MAY NOT BE USED UNTIL MARKED AS ISSUED FOR CONSTRUCTION. REPRODUCTION OF THESE DRAWINGS WITHOUT THE CONSENT OF THE ENGINEER, IS STRICTLY PROHIBITED. DO NOT SCALE THESE DRAWINGS. ANY ERRORS OR DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER.

LICENSED PROFESSIONAL ENGINEER  
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02-JAN-2014  
PROVINCE OF ONTARIO

Environment Canada

3 01/02/2014 NOTES ADDED J.K.  
2 11/26/2013 ISSUED FOR F.A.P. J.K.  
1 11/18/2013 ISSUED FOR REVIEW J.K.  
0 11/15/2013 ISSUED FOR REVIEW J.K.

GENIVAR

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TITLE: ELECTRICAL  
DESCRIPTION: NEW EQUIPMENT INSTALLATION  
ADDRESS: PEARSON AIRPORT  
PLOT DATE: Jan. 2, 14 SCALE: AS NOTED  
SITE NAME: - DRAWING NO: E1  
GENIVAR PROJECT #: 131-23844-00-E1  
DESIGNED BY: J.K. DRAWN BY: W.A. PAGE NO: 6

