

Government of Canada
New Building
Issue for Tender
Elk Point, Alberta

Addendum No. 4

March 09, 2016

The Bidding Documents are amended as noted in this Addendum, which consists of one (1) page and the following attachments:

1. Added Addendums:
 - a. Architectural Addendum A-02, (2) pages, Dated March 9, 2016.
 - b. Structural Addendum S-02, (1) pages, Dated March 9, 2016.
 - c. Mechanical Addendum M-02, (1) pages, Dated March 9, 2016.
 - d. Electrical Addendum E-02, (2)pages, Dated March 9, 2016.

This addendum is issued prior to bid closing to amend the bid documents. This Addendum will form part of the Contract Documents. Include in the Bid price all such revisions which will become part of the Work. Perform all such Work in accordance with the contract documents.

Acknowledge receipt of this Addendum by reference in the Bid Form submitted by the bidding Contractors. Ensure that all parties submitting bids are aware of all items included in this addendum.

END OF ADDENDUM NO. FOUR

The Bidding Documents are amended as noted in this Addendum, which consists of one (2) pages and the following attachments:

1. Added Drawings:
 - a. N/A
2. Specifications:
 - a. Transport Canada – Aeronautical Assessment Form for Obstruction Evaluation, (3) pages dated September 9, 2015.
 - b. Lot Line Adjustment Survey, File No. X107615, (1) pages dated January 21, 2016.

This addendum is issued prior to bid closing to amend the bid documents. This Addendum will form part of the Contract Documents. Include in the Bid price all such revisions which will become part of the Work. Perform all such Work in accordance with the contract documents.

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1.

SPECIFICATIONS

- .1 Information to Bidders;
 - .1 The Lot Line Adjustment Survey, File No. X107615 attached to this addendum has been provided for information only.
- .2 Section 01 14 00 – Work Restrictions
 - .1 Refer to 1.2 Security; Add the following sentence “.5 All personnel requiring access to the site for warranty work will require security clearance as per the requirements of sentence 1.2.2.”
- .3 Section 01 77 00 – Close-Out Procedures
 - .1 Refer to 1.1 Administration Requirements sentence .4; Add the following sub-sentence “.3 All work to be 100% complete including deficiencies prior to turn over to the departmental representative.”
- .4 Section 07 92 00 – Joint Sealing
 - .1 Refer to 2.2 Sealant Materials, Sentence .5; Replace the material requirements with the followings;
 - .1 Pecora Dynapoxy EP-430 Fast
 - .2 Pecora Dynapoxy EP 1200
 - .3 Sika AnchorFix 3001
 - .4 BASF Epolith G
- .5 Section 08 36 13.02 – Section Metal Doors (Architectural Addendum No. 1)
 - .1 Refer to 2.4 Heavy Duty Industrial Hardware sentence .9; Revise sub-sentence .1 to the following; “two horizontal sliding lock bolts on the interior”.

- .6 Finish Schedule Section 09 99 99 – FIN SCH-01
- .1 Delete row marked as DP-1 from the finish schedule.
- .7 Room Finish Schedule Section 09 99 99.10 – RM SCH-01
- .1 Refer to Room No. 101;
- .1 Revise South Wall Finish from “DP-1” to “PT-1”.
- .2 Add to comments section; “Paint exposed concrete curb PT-1 on North and East walls.”
- .8 Section 10 51 13 – Metal Lockers
- .1 Delete 2.2.2 Evidence Lockers from the specifications.
- .9 Section 33 81 16 – Antenna Towers
- .1 Refer to 3.2 Field Quality Control sentence .1. Delete sub-sentence .2 from the specifications.
- .2 Add Transport Canada – Aeronautical Assessment Form For Obstruction Evaluation to this section for information only.

1. DRAWINGS

- .1 A111 – Main Floor Plan
- .1 Refer to Room 133. Revise partition F4.1 on the east wall to P4.1.
- .2 A115 – Enlarged Plans
- .1 Refer to 1/A115 – Men’s Locker / Washroom; Revise the number of lockers noted as LC-1 from 6 to 9.
- .2 Refer to 3/A115 – Women’s Locker / Washroom; Revise the number of lockers noted as LC-1 from 4 to 7.

END OF ARCHITECTURAL ADDENDUM NO. THREE



Transport Canada number 2015-735
Applicant number

AERONAUTICAL ASSESSMENT FORM FOR OBSTRUCTION EVALUATION

SECTION 1

Owner's Name		Contact Person	
Address			
City		Province	Postal Code
Telephone number	Fax number	Email Address	

SECTION 2

Applicant's Name Same as above		Contact Person	
Address			
City		Province	Postal Code
Telephone number (999-999-9999)	Fax number (999-999-9999)	Email Address	

SECTION 3

Description of Proposal (or as attached) 80' Radio Communications Tower with 10' antenna
--

SECTION 4

Geographic Coordinates <input checked="" type="checkbox"/> NAD83 <input type="checkbox"/> NAD27 <input type="checkbox"/> WGS84	N Latitude deg <u>53</u> min <u>53</u> sec <u>37.64</u>
For multiple structures in a grouping, submit geographical coordinates on a separate spreadsheet (e.g. windfarms, transmission lines)	W Latitude deg <u>110</u> min <u>54</u> sec <u>20.23</u>

SECTION 5

Nearest Community Elk Point	Province AB
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SECTION 6

Nearest Aerodrome

SECTION 7

Have you contacted the aerodrome? <input type="radio"/> Yes <input checked="" type="radio"/> No
--

SECTION 8

Notice of <input checked="" type="radio"/> New Construction <input type="radio"/> Change to existing structure

SECTION 9

Duration <input checked="" type="radio"/> Permanent <input type="radio"/> Temporary
--

2015-735

SECTION 10

Proposed Construction Date Beginning (yyyy-mm-dd)

2016-04-01

SECTION 11

Temporary Structure

From date (yyyy-mm-dd) _____ To date (yyyy-mm-dd) _____

SECTION 12

Marking and Lighting Proposed (refer to Standard 621)

- | | | |
|--|--|--|
| <input type="checkbox"/> Red lights and paint | <input type="checkbox"/> Red and M.I. white lights | <input type="checkbox"/> White M.I. lights |
| <input type="checkbox"/> Red and H.I. white lights | <input type="checkbox"/> White H.I. lights | <input type="checkbox"/> No painting |
| <input type="checkbox"/> No lighting | <input type="checkbox"/> Paint marking only | <input type="checkbox"/> Other (provide description) |

SECTION 13

Monitoring to Standard 621, article 4.7 Visual Inspection Remote indicator

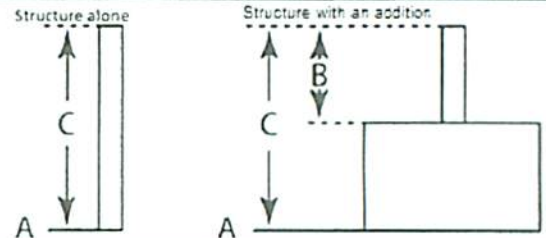
SECTION 14

Catenary/Cable Crossing

- | | | |
|--|---|--|
| <input type="checkbox"/> Paint supporting structures | <input type="checkbox"/> Cable marker spheres | <input type="checkbox"/> Shore markers |
| <input type="checkbox"/> Support structure lighting | <input type="checkbox"/> Cable marker lights | |

SECTION 15

	Feet	Metres
A Ground Elevation (AMSL)	1942	591.92
B Height of an addition to a structure		
C Total structure height including B (AGL)	90	27.432
Overall height (A plus C) (AMSL)	2032	619.35



SECTION 16

Does the proposal comply with **Airport Zoning Regulations**?

- Yes No N/A

Where the location of the object is on lands affected by **Airport Zoning Regulations**, a legal survey is required with the submittal.

I hereby certify that all the above statements made by me are true, complete and correct to the best of my knowledge. Also, I agree to mark and/or light and maintain the structure with established marking and lighting standards as necessary.

Name of person filing notice

Signature

2015-09-09

Date (yyyy-mm-dd)

TRANSPORT CANADA ASSESSMENT

Marking and lighting required (as per Standard 621)

- Lighting Required Marking Required Temporary Lighting Required No Lighting or marking required

Comments (Transport Canada use Only)



Completion of this form does not constitute authorization for construction nor replace other approvals or permits. See instruction D and E.

Civil Aviation Inspector

Signature

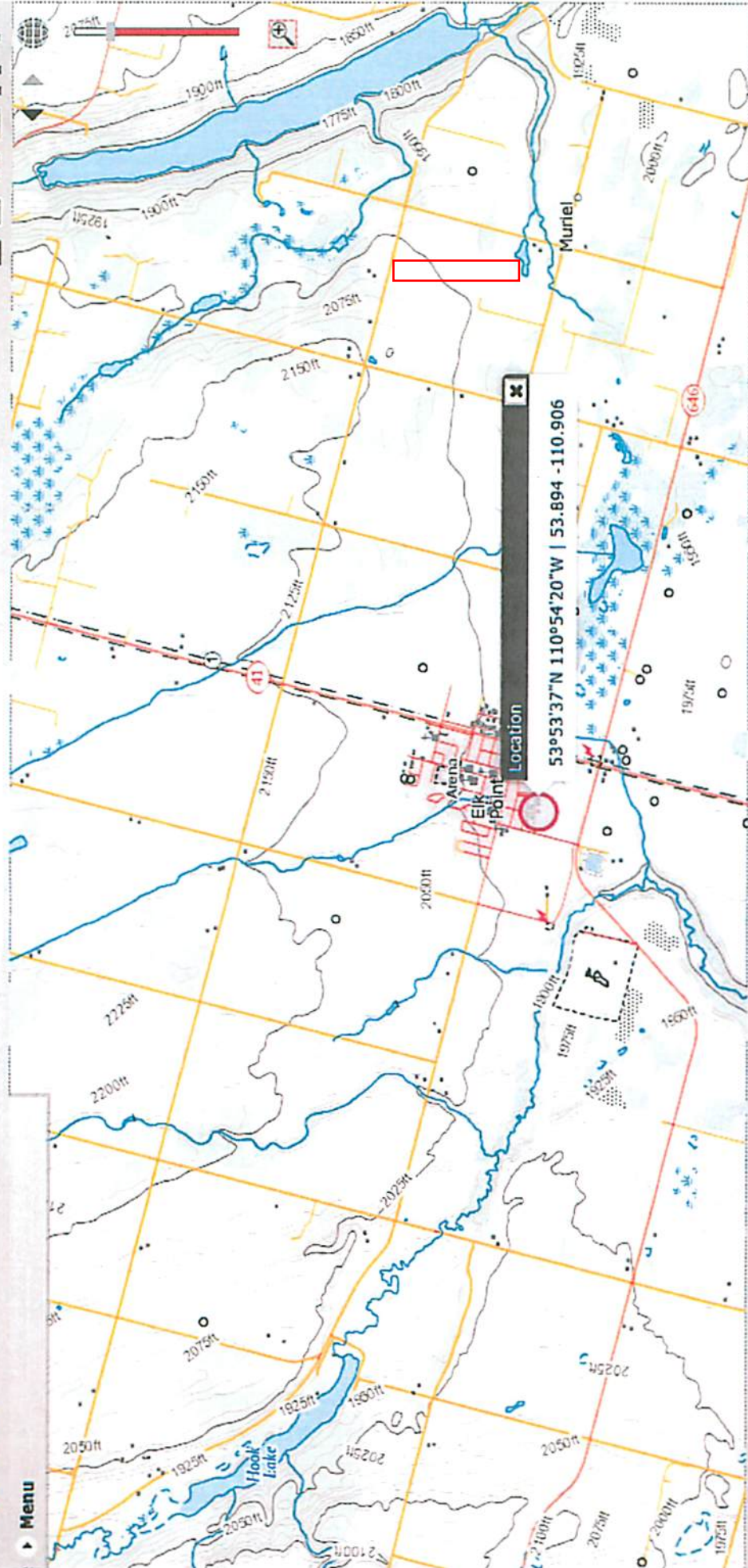
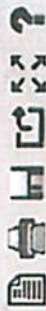
SCOTT GOYER
SCOTT GOYER

Date (yyyy-mm-dd)

2015-10-02

Note 1: This assessment expires 18 months from the date of assessment unless extended, revised or terminated by the issuing office.

Note 2: If there is a change to the intended installation, a new submittal is required.



Location
53°53'37"N 110°54'20"W | 53.894 -110.906

LAND TITLES OFFICE **PLAN No.** 162 0258
 ENTERED AND REGISTERED
 ON January 21, 2016
INSTRUMENT No: 162 023 165
Margen Cajinaka
A.D. REGISTRAR

LEGEND

STATUTORY IRON POSTS FOUND SHOWN THUS: ●
 STATUTORY IRON POSTS PLACED SHOWN THUS: ○
 GEO-REFERENCED POINT SHOWN THUS: ○ RP
 DISTANCES ARE GROUND AND IN METRES AND DECIMALS THEREOF AND ARE BETWEEN POSTS UNLESS OTHERWISE SHOWN
 ALL IRON POSTS PLACED ARE MARKED: "P242"
 AREAS TO BE REGISTERED ARE SHOWN THUS: _____
 AND CONTAINS 0.001 ha

ABBREVIATIONS

ASC.M. Alberta Survey Control Marker
 c.s. countersunk
 E. East
 ha. hectare
 M. mound or meridian
 Mk.d. marked
 Mp. marker post
 N. North
 N.A.D. North American Datum
 P.L. pipeline
 P.P. pipe
 R.P. right-of-way
 R.W. right-of-way
 S. South
 Sec. section
 Twp. township
 U.T.M. Universal Transverse Mercator
 W. West

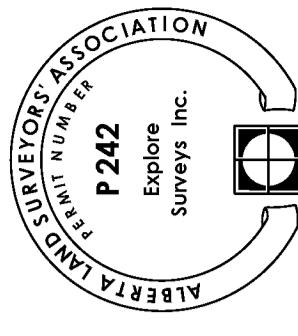
NOTES

- The Geo-Referenced Point is the ASCM 799528 and has UTM Coordinates (Zone 12 / NAD83 / Original / Published ASCM 799528) : Northing 5971665.246 m. Easting 506016.996 m
 - Bearings are UTM NAD83 derived from a line between ASCM 799528 and ASCM 962357 and are referred to 111° West Longitude.
 - Distances have been scaled to ground and are displayed in metres & decimals thereof unless otherwise indicated.
 - Ground to grid Combined Scale Factor = 0.999511

SURVEYOR

KATIE HUNTER

SURVEYED ON THE DATE OF NOVEMBER 26, 2015.
 IN ACCORDANCE WITH THE PROVISIONS OF THE SURVEYS ACT.

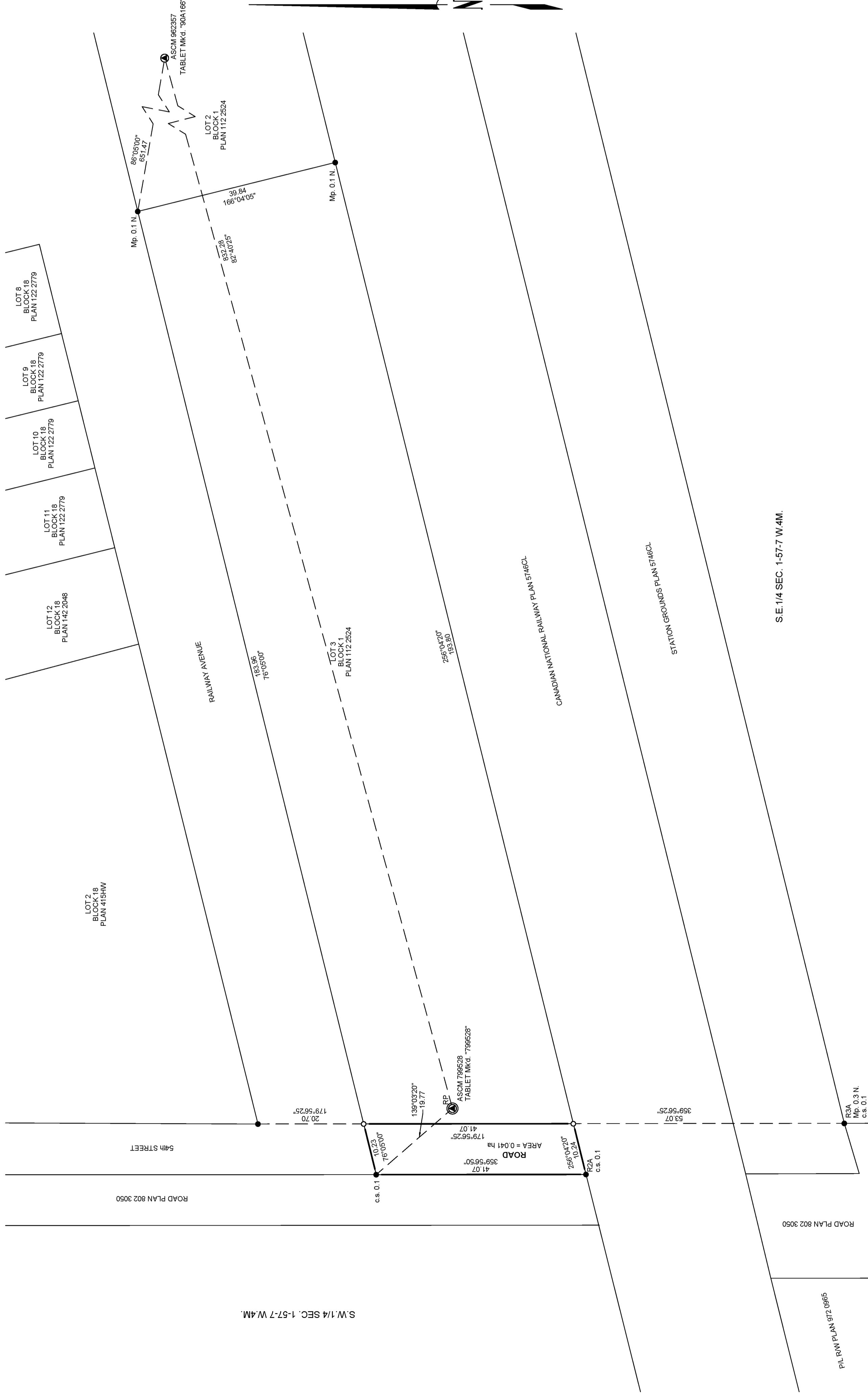


TOWN OF ELK POINT

PLAN SHOWING SURVEY OF
ROAD

WITHIN A PORTION OF
LOT 3, BLOCK 1, PLAN 112 2524
 WITHIN
S.E. 1/4 Sec. 1 Twp. 57 Rge. 7 W. 4M.

TOWN OF ELK POINT
 ALBERTA



SCALE: 1:500

KATIE HUNTER, ALBERTA LAND SURVEYOR
 EXPLORE SURVEYS INC. **2015** DRAYTON VALLEY ALBERTA
 SURVEYED BY: N.T. CALC'D BY: J.O. DRAWN BY: J.O.

FILE No. X107615

The Bidding Documents are amended as noted in this Addendum, which consists of one (1) page and the following attachments:

1. Revised Specifications:

31 63 23 Bored Concrete Piles

This addendum is issued prior to bid closing to amend the bid documents. This Addendum will form part of the Contract Documents. Include in the Bid price all such revisions which will become part of the Work. Perform all such Work in accordance with the contract documents.

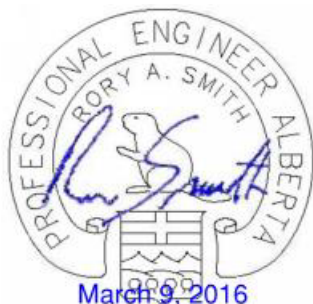
Acknowledge receipt of this Addendum by reference in the Bid Form submitted by the bidding Contractors. Ensure that all parties submitting bids are aware of all items included in this addendum.

1. SPECIFICATIONS

.1 Section 31 63 23 – Bored Concrete Piles

- .1 Refer to Part 1 General – Revise the section numbering after section 1.8 Design to continue in sequence from 1.9 Quality Control to 1.14 Lump Sum.
- .2 Add sentence - 1.14.4 Provide unit price (cost/metre of length) for pile length add/delete.
- .3 Refer to 2.2 Reinforcement – Revise the third sentence number from 2.2.1 to 2.2.3 and read *Reinforcing steel material*
- .4 Refer to Part 2 Products – Revise the section number 2.2 Concrete Mixes to 2.3 Concrete Mixes.
- .5 Refer to Part 2 Products – Revise the section number 2.3 Casing to 2.4 Casing.
- .6 Refer to Part 3 Execution – Revise the sentence numbering after sentence 3.1.11 to continue in sequence, 3.1.12, 3.1.13 and so on to 3.1.24.

END OF ADDENDUM NO. S-02



Part 1 General

1.1 Related Work Specified in Other Sections

- .1 Geotechnical Report
- .2 Cast-in-Place Concrete Section 03 30 00
- .3 Concrete Reinforcing Section 03 20 00
- .4 Earthwork Section 31 00 00

1.2 Reference Standards

- .1 All standards to be latest issue at time of tender.
- .2 NBC 2010, "Alberta Building Code".
- .3 CAN/CSA-A3000, "Cementitious Materials Compendium".
- .4 CSA-A23.1-10, "Concrete Materials and Methods of Concrete Construction".
- .5 CSA-A23.2-10, "Methods of Test and Standard Practices for Concrete".
- .6 CSA-A283-00(R2011), "Qualification Code for Concrete Testing Laboratories".
- .7 CAN/CSA-G30.18-09 (R2014), "Billet Steel Bars for Concrete Reinforcement".

1.3 Regulations

- .1 Abide by the current bylaws and regulations of the province and/or municipality in which the work is located, and abide by the current laws and regulations with regard to public safety.
- .2 Safety requirements to comply with Construction Manager's requirement, the regulations of the Minister of Labour, Occupational Health and Safety Act, the Workers' Compensation Board and other applicable acts administered by the authority having jurisdiction of the province apply to the work of this section.

1.4 Geotechnical Report

- .1 Refer to the geotechnical reports and supplements which are included in these specifications and available in the office of the Engineer and Construction Manager.
- .2 Ensure the requirements of the geotechnical report and associated supplements are read and understood prior to commencing with work.

1.5 Special Conditions

- .1 Ensure that all underground services are located and are not damaged by piling operations. Repair any damage done to existing services at no additional cost to the contract. Services indicated on the drawings are in accordance with available records. The Contractor is responsible for verifying all locations in the field.

- .2 The Contractor is to undertake a thorough inspection of existing structures and facilities and document any existing damage. The Contractor will be responsible for repairs of any damage caused by piling operations..
- .3 Confirm and establish the locations and extents of all underground structures, services and utilities in the work area prior to commencement of piling work by notifying the applicable owners, authorities or agencies. Clearly mark such locations to prevent disturbance or damage.
- .4 Arrange and pay for disconnecting, removing and capping, services and utilities within area of piling work. Disconnect and stub off as required by the authority having jurisdiction.
- .5 Place markers to indicate location of disconnected services and utilities. Identify utility and service lines and capping locations on as-built drawings.

1.6 Safety

- .1 Carry out cast-in-place concrete work in accordance with the Alberta Building Code and current Occupational Health and Safety Act construction safety regulations.
- .2 Carry out piling work in accordance with CSA S350 Code of Practice in Demolition of Structures, Alberta Building Code and current Occupational Health and Safety Act construction safety regulations.

1.7 Qualifications

- .1 Engage a professional structural engineer registered in the Province of Alberta, fully qualified and experienced in the design of bored piles, to be responsible for the design of and supervision of installing these piles.

1.8 Design

- .1 Pile design has been based on a Factored Ultimate Limit States (ULS) approach. Confirm all soil parameters and design requirements with the geotechnical engineer.

Soil Depth (m)	Factored Ultimate Skin Friction (kPa)	Factored Ultimate End Bearing (kPa)
0 – 1.5m	0	0
1.5m and below	12	240

Geotechnical resistance factor of 0.4 has been applied

- .2 End bearing piles (Belled Piles) to be founded minimum 4m below existing ground surface or final grade whichever is lower.
- .3 Geotechnical resistance factors may be increased to the values provided in and under the requirements of the NBC 2010.
- .4 Piles to be based at the elevation specified or as directed by the Inspection Agency.
- .5 See pile schedule for reinforcement and lengths

.6 Pile reinforcing is to extend full length of piles to the bottom of pile.

1.9 Quality Control

.1 Perform concrete work in accordance with the requirements of CSA-A23.1 and Section 03 30 00 unless indicated otherwise herein.

.2 The Piling Contractor must not assign the responsibility of coordination of placing reinforcing steel and placing concrete. To this end, a full time qualified superintendent representing the Contractor is to be in attendance during all phases of the work.

1.10 Inspection and Testing

.1 Piling Contractor is to provide a video camera complete with a monitor suitable for pile base inspection for the duration of the piling contract. Piling Contractor is to video tape the base inspection of the pile as directed by the Inspection Agency and to identify the pile number at the start of each taped recording. The requirements of this clause apply to end-bearing piles only.

.2 Testing of concrete will be carried out by an independent testing firm certified in accordance with CSA A283, retained and paid for by the Owner and approved by the Engineer in accordance with Section 01400 of these specifications.

.3 Test concrete in accordance with CSA-A23.2.

.4 Testing agency is to take at least one slump test and one entrained air test for each set of cylinder taken.

.5 Testing agency to moist cure and test one cylinder in 7 days and the remainder two cylinders in 28 days.

.6 Full time pile inspection of piling operations will be carried out by an independent geotechnical firm, retained and paid for by the Owner and approved by the Engineer. Inspection of the pile bases will be performed by the Inspection Agency for bearing capacity verification. Video camera may be employed where appropriate.

.7 Inspection and testing firm to submit to the Engineer a final report summarizing their inspection and testing and Contractor's degree of compliance with the contract documents and reviewed shop drawings, including any remedial requirements that may have been required during the course of work. This report is to be submitted under the seal and signature of a professional geotechnical engineer registered in the Province of Alberta.

.8 Notify Engineer and inspection and testing firm five (5) working days in advance of starting piling work on site.

.9 Testing agency shall direct the use of steel casing when site conditions warrant. Keep record of piles that require steel casing and the size and length of the casing used.

.10 Testing agency shall keep record of the pile base elevation of each pile installed. The record is to be used as the basis for calculating the payment to the contractor.

1.11 Submittals

- .1 Prior to commencing the work, the Contractor's engineer is to submit documentation showing qualifications and experience. The Contractor's engineer is to further acknowledge in writing that he or she has reviewed the specifications and drawings and is aware that he or she is to inspect the fabrication and installation of work and certify the work at completion.
- .2 Submit proof or certificate of source of reinforcement material. Clearly identify recycled content (post-consumer and post-industrial).
- .3 Submit in writing evidence of qualifications for welding under C.W.B.

1.12 Shop Drawings

- .1 Submit shop drawings in accordance with Section 01300 of these specifications.
- .2 Clearly indicate the following information:
 - .1 Pile layout, schedule of installation and placing sequence.
 - .2 Type of pile, sizes and details.
 - .3 Grade and details of reinforcing steel.
 - .4 Type of cement, air content, slump and concrete strength.
 - .5 Elevation of pile bases.
 - .6 Elevation of top of pile.
 - .7 Pile cap sizes and details.
- .3 Review of the shop drawings by the Engineer is intended to assist the Contractor and does not relieve the Contractor of responsibility for the completeness and accuracy of the work and its conformance with the contract drawings and specifications.

1.13 Field Records and Drawings

- .1 Maintain accurate records of all piles installed. Records are to include the following:
 - .1 Locations of piles.
 - .2 Sequence of placing.
 - .3 Final base and head elevations.
 - .4 Drilled shaft and bell diameters.
 - .5 Condition of base material.
 - .6 Date and time of drilling.

-
- .7 Length of casing.
 - .8 Reinforcing details.
 - .9 Date and time of placing concrete.
 - .10 Details of unusual occurrences.
 - .11 Inspector's name.
 - .12 For end-bearing piles only, the Piling Contractor is to provide the video tapes of pile bases inspected by video camera and tapes shall indicate pile reference by the grid location.
- .2 Submit three (3) copies of all field records and drawings to the Engineer.
- 1.14 Lump Sum
- .1 In accordance with Bid Form, submit for each type of pile:
 - .1 A price for each pile installed.
 - .2 All prices to include costs of drilling, concrete and reinforcing in place as required. Prices shall also include all overheads, profit mark-ups and supervision, etc.
 - .3 Length of pile is measured from the final pile base elevation to the specified top of pile cut off elevation. Piling Contractor is responsible for all costs associated with installing top of pile to the specified elevation.
 - .4 Provide unit price (cost/metre of length) for pile length add/delete.
- Part 2 Products
- 2.1 Concrete Materials
- .1 Conform to the requirements noted under Concrete Materials in Section 03 30 00 of these specifications and as noted herein.
 - .2 Portland cement: to CAN/CSA-A5 Normal - Type GU as indicated within the specifications section 03 30 00 Cast-in-Place Concrete.
- 2.2 Reinforcement
- .1 Reinforcing steel: To CAN/CSA-G30.18, Grade 400R deformed billet steel bars.
 - .2 Reinforcing steel: To CAN/CSA-G30.18, Grade 400W special low alloy deformed billet steel for welded bars with equivalent carbon content not exceeding 0.5.
 - .3 Reinforcing steel material shall consist of minimum 40% post-consumer and 20% post-industrial recycled content.

2.3 Concrete Mixes

- .1 Conform to the requirements noted under Concrete Mixes in Section 03 30 00 of these specifications and as noted herein.
- .2 Provide concrete mix that is suitable for placement of concrete using tremie under submerged conditions.

2.4 Casing

- .1 Conform to ASTM A252, Grade 2, steel casing tube of required diameter for temporary use in wet or soft strata.
- .2 Provide steel casing for all piles where required to prevent sloughing and ingress of water.

Part 3 Execution

3.1 Installation

- .1 Notify the Engineer and inspection and testing firm 48 hours prior to any installations on site.
- .2 Ensure site conditions are adequate to support piling equipment and to allow proper performance of pile operations.
- .3 Ensure piling equipment is adequate for soil conditions. Piling Contractor is responsible for maintenance of the site grade and restoring any damages caused by the use of inappropriate equipment.
- .4 Do not use piling methods that could cause damage to nearby or existing structures.
- .5 Install piles where indicated on drawings. Piling Contractor is responsible for their own survey and layout from designated control point or bench mark.
- .6 Ensure pile shafts are drilled vertically and that pile bases are founded minimum depths into bearing material as indicated on the drawings, specified herein, and as indicated in the geotechnical report.
- .7 To prevent breakthrough from one pile to another, drill and install piles alternately. Where pile spacing is less than three bell diameters, do not drill the adjacent pile before the previous pile concrete has set or for at least 24 hours.
- .8 Use steel casing for all piles to top of bell to prevent sloughing and ingress of water where recommended in the geotechnical report or where required by site conditions. Requirements for casing will be determined and directed by the inspection agency and approved by the Consultant.
- .9 Clean pile bases of loose material, and place reinforcing steel and concrete. Perform these operations as soon as possible, but not later than two hours after drilling for each pile. Do not leave any unfilled shafts overnight.

-
- .10 Construct all piles to the top of pile cut off elevation and project vertical reinforcement as specified. Ensure concrete at the pile cut off elevation is sound and satisfactory to the Consultant that no additional preparation or repair work will be required for pile cap construction.
 - .11 Arrange for and allow inspection of pile shafts and bases before concrete and reinforcing steel are placed.
 - .12 Provide video surveillance for inspection of pile bases as directed by Inspection Agency.
 - .13 Provide full length casing and protective cage with hoist and lowering equipment to facilitate downhole inspection and hand cleaning in accordance with the requirements of the Occupational Health and Safety Act.
 - .14 Place reinforcing steel in accordance with CSA-A23.1, and extend reinforcement into structure above as indicated on the drawings. Use four 64 mm diameter by 450 mm long PVC pipes on the reinforcing steel cage at maximum 3000 mm on centre to ensure proper concrete cover for the reinforcing steel.
 - .15 Extend reinforcement full length of pile.
 - .16 Place concrete in vertical piles where the shaft and base are dry by means of a chute minimum 4000 mm in length held rigidly and centred in the pile shaft and the rebar cage. Concrete discharged from the chute is to be prevented from striking the sides of the shaft and the rebar cage.
 - .17 Vibrate concrete to full depth of reinforcing in the pile.
 - .18 Remove water from any source by pumping to allow placing concrete in dry conditions.
 - .19 Place concrete by means of a tremie should an inflow of water occur that can not be removed by pumping. Place to a height sufficient to affect a seal. Notify Engineer prior to carrying out this work. Revise concrete mix design and placing methods as directed by the Engineer.
 - .20 Protect concrete from freezing. Do not place concrete against frozen ground.
 - .21 Where casing is used, withdraw casing by vibratory methods to reduce the possibility of concrete arching in the casing. Ensure sufficient head of concrete above the bottom of the casing to resist lateral soil pressures. Ensure pile reinforcement is secure and does not settle due to vibratory methods.
 - .22 Clean casing thoroughly after each use.
 - .23 Discontinue piling operations and immediately notify the Geotechnical consultant and Engineer in the event that unusual soil conditions are encountered such that pile load capacities can not be obtained.
 - .24 Fill abandoned piles with lean mix 2 MPa concrete. Contractor to replace at no additional cost to the contract all piles abandoned due to inadequate equipment or piling operation breakdown.

3.2 Top of Pile Elevation

- .1 Make allowance to place concrete to correct top of pile elevations specified on the drawings.

3.3 Tolerances

- .1 Do not deviate from true vertical alignment more than 2% of pile length.
- .2 Do not deviate from centre of true location more than 50 mm.
- .3 Do not deviate from specified head elevations more than 25 mm.

3.4 Non-Conforming Piles

- .1 Non-conforming piles are piles that are placed out of position or are damaged and/or piles not conforming to size, length and material specifications.
- .2 Provide additional piles or supplement piles with additional pile caps or grade beams to meet specified requirements as directed by the Engineer at no additional cost to the contract.

3.5 Certification

- .1 Certify at completion of work all piles installed by the piling contractor under the seal and signature of the Contractor's professional engineer responsible for this work.
- .2 Certify that all piles are capable of developing the capacities specified in the contract specifications and on the drawings.
- .3 Certify that all piles are installed in accordance with the contract documents and the reviewed shop drawings.

3.6 Survey Verification

- .1 Piling Contractor will survey all pile locations including non-conforming piles. Survey is to be carried out by an independent legal surveyor registered in the Province of Alberta. Piling Contractor is to submit proposed remedial work for non-conforming piles to Consultants for approval prior to proceeding with the work.

3.7 As-Built Drawings

- .1 Submit an as-built drawing prepared by an independent legal surveyor registered in the Province of Alberta showing final pile locations, shaft diameter, top of pile elevation of each pile including all deviations and details of unusual occurrences from the original contract document within five (5) days after the completion of all piles.

END OF SECTION

The Bidding Documents are amended as noted in this Addendum, which consists of one (1) page and the following attachments:

1. Added Specifications:

N/A

2. Drawings:

N/A

This addendum is issued prior to bid closing to amend the bid documents. This Addendum will form part of the Contract Documents. Include in the Bid price all such revisions which will become part of the Work. Perform all such Work in accordance with the contract documents.

Acknowledge receipt of this Addendum by reference in the Bid Form submitted by the bidding Contractors. Ensure that all parties submitting bids are aware of all items included in this addendum.

1. SPECIFICATIONS

.1 Section 23 09 00- Instrumentation and Control for HVAC

.1 Clause 2.1.1: Add “.6 Kinetic Building Management Systems – Johnson Controls” as an approved contractor.

2. DRAWINGS

.1 N/A

END OF ADDENDUM NO. TWO

The Bidding Documents are amended as noted in this Addendum, which consists of two (2) pages and the following attachments:

1. Added Specifications:

None

2. Drawings:

None

This addendum is issued prior to bid closing to amend the bid documents. This Addendum will form part of the Contract Documents. Include in the Bid price all such revisions which will become part of the Work. Perform all such Work in accordance with the contract documents.

Acknowledge receipt of this Addendum by reference in the Bid Form submitted by the bidding Contractors. Ensure that all parties submitting bids are aware of all items included in this addendum.

1. SPECIFICATIONS

- .1 Refer to section 271005.00 1.6.1. This sentence to read "The Telecommunications Contractors shall be experienced and trained by the manufacturing company, in all aspects of the placement; terminating, connecting and testing of products described herein and provide certified proof prior to start of work."

2. DRAWINGS

- .1 Refer to drawing E001 Electrical symbol legend, notes and drawings list page 1 dated 2016.04.29. Revise security notes 1 and 2 on drawing E001 as follow:
 - .1 The electrical contractor shall provide all conduit and back boxes for the security devices as per locations indicated on the drawings.
 - .2 Supply, installation and programming of security devices shall be by others.
- .2 Refer to drawing E301 Main Floor Plan System page 5 dated 2016.04.29.:
 - .1 Delete the card reader, electric strike and reference to 1/E502 from the staff entrance door.

- .3 Refer to drawing E501 detail number 3 - electrical details page 9 dated 2016.04.29.:
 - .1 Cat 6A with red 8 position connector for radio remote to be relocated to under table floor box.

- .4 Refer to drawing E501 detail number 7 - electrical details page 9 dated 2016.04.29.:
 - .1 Run an additional 53mm EMT conduit from room 114 to each of the following areas: above drop ceiling in room 113, room 116E and area 136.

- .5 Refer to drawing E501 detail number 8 - electrical details page 9 dated 2016.04.29.:
 - .1 Add additional note #2 as follows:
 - a. Building and tower must be completed in coordination and be ready at the same time for acceptance.

END OF ADDENDUM NO. E-02