

January 20, 2020

The following changes to the tender documents are effective immediately and will form part of the contract documents:

1. General

1.1 This Addendum is issued prior to Tender closing to provide for certain revisions as noted herein.

1.2 All such revisions will become part of the Work and the effects shall be included in the Bid Price.

1.3 All work shall be performed in accordance with the Contract Documents.

2. Questions & Answers

1-1 Question 1-1: Request for Approval for lighting. Drawing E101.

Answer: No request for equal is required. The equipment must meet the performance as specified.

1-2 Question 2-1a: Section 26 33 53 The specified product is only rated for single phase. Should we follow the spec exactly, or try to match the specified Beghelli unit?

Answer: Amendment was issued with revised drawings and specifications. Equipment must achieve the performance specified. Any manufacturers listed were for example only.

1-3 Question 2-1b: 2.3 - .2 Output power: Single phase, 120VAC. Can 208V 3phase output be accommodated?

Answer: We do not have any 3 phase loads on the unit. The specified unit is 208V single phase in and 120/240V out. If this unit is used, the UPS panel will need to be changed to 120/240V single phase.

1-4 Question 2-2: 1.1 – Standards. For emergency lighting is UL924 & CSA C22.2 No 141-10 a requirement?

Answer: CSA C22.2 No. 141: Emergency Lighting Equipment. Yes - the unit specified on the drawings meets this requirement. UL 924: Standard for Emergency Lighting and Power Equipment. No - UPS equipment is covered by UL 1778 which the unit specified on the drawings meets.

1-5 Question 2-3: 2.5 - .7 Ambient temperature range during operation -20 degrees C to +40 degrees C. Is this accurate info for the operating temperature requirements of the UPS?

Answer: The UPS is located in the tunnel.

1-6 Question 3-1: Request for Equal for Lighting.

Answer: No request for equal is required. The equipment must meet the performance as specified.

1-7 Question 5-1: Is Teck cable an acceptable alternative to the PVC called for on drawings E1.10 to E1.13?

Answer: Teck cable may be used to supply power to lights on drawing E1.10 and E1.11 as long as the appropriate connectors are used to enter fixtures/junction boxes. Power to receptacles to be in conduit.

1-8 Question 5-2: On drawings E1.10 and E1.11 you call for existing lighting to be re-fed from the new UPS panel in new building NTBU43+000

- Can we get the current amperage per existing light to make sure we allow for the proper size of wire for voltage drop?
- Can you confirm we are to maintain the 3% max voltage drop per circuit for the lights? (This is what electrical code is)
- Due to the length of the tunnel and all of the lights being fed from one end we will need to have very large wires to feed them due to voltage drop (#3awg/#2awg gauge wire to reach far end of tunnel). Can we get a detail of how you would like us to terminate these wires to existing lights/sensors?

Answer:

a) Amperage per circuit is shown in the panel schedule for the UPS.

b) Correct

c) Upsize conductor from panel to first fixture. Supply and install a junction box complete with terminals/lugs to transition from larger wire to #10 at first fixture/sensor. Use #10 from first fixture to end. Due to the small amperage of each fixture, conductors will likely remain as #10 and transition will not be required.

1-9 Question 5-4: What size of wire do you want us to allow for, for the new Plugs shown on drawings E1.12 and 1.13?

Answer: #10 as per drawings.

1-10 Question 6-2: Precast Alternate: Please confirm if a precast alternate would be acceptable for the cast-in-place tunnel component.

Answer: Pre-cast concrete tunnels are not acceptable.

1-11 Question 7-1: Request for Equal for Lighting.

Answer: No request for equal is required. The equipment must meet the performance as specified.

1-12 Question 8-1: Request for Equal.

Answer: No request for equal is required. The equipment must meet the performance as specified.

1-13 Question 9-1: Will the client accept City of Regina specifications for the roadwork and curb work? Right now it is listed as City of Calgary specifications, and it would be quite costly to specifically produce subbase, base and asphalt to Calgary specifications when the suppliers already have materials that meet City of Regina Specifications.

Answer: Yes, City of Regina specifications are acceptable.

1-14 Question 11-2: D1.01 - Any information regarding type, dimensions, and/or weight of airplane display.

Answer: Aircraft is a Beechcraft Model D18S with a Length of 10.41m, Wingspan of 14.53m and a maximum Weight of 4,264kg (in service)

1-15 Question 11-3: D1.01 - Length of offshoot tunnel to be removed at TBU43+080.

Answer: Length of offshoot tunnel at TBU43+080 is approximately 13.0 meters.

1-16 Question 11-4: D1.01 – Approximate depth of existing coverage to top of existing tunnel roof.

Answer: Depth of existing coverage varies from 300 mm to 1200 mm.

1-17 Question 11-5: Confirm chain-link fence height, and size of gates required on L1.02, details on L1.04 has multiple sizes indicated.

Answer: 1830mm high chainlink fence. Two pedestrian gates and one vehicle gate.

1-18 Question 11-6: Lafarge would like to request that pre-cast concrete be an approved system for the tunnel, see attached sketch.

Answer: Pre-cast concrete tunnels are not acceptable.

1-19 Question 12-1: Will it be acceptable to have a cold joint in the air plane foundation pile/column? It will be very difficult to construction this in a single concrete pour.

Answer: No cold joints in the air plane foundation pile/column are permitted.

1-20 Question 13-2: Section 01 14 00 - 1.2.4 & part 1.2.6 appear to contradict each other. Please clarify whom is to provide toilet facilities for the contractors use.

Answer: Contractor to supply washroom facilities for their use.

1-21 Question 13-3a: Section 01 56 00 – 1.4. This section requires the contractor supply and install decorative banners around all work sites to screen the construction.

a. Please provide specifications and drawings for the banner.

Answer: We have banners that can be used for this, they will need to install. The banner was hung using zip ties and or tie wire.

1-22 Question 13-5: At the site visit on December 18 it was mentioned that the construction personnel access would be off 11th Avenue. Please confirm the following:

- a) Is the access to be from Garrett Avenue onto the football field and then onto site via Cameron Avenue?
- b) Please confirm if the athletic track and field are to be operational during construction.
- c) Please confirm if trees, shrubs, fencing or any demolition is required to accommodate this access
- d) Further to this please provide details for gates (if required) for the construction access point
- e) Please confirm if there is a gate large enough for vehicle access through the existing fence along Garrett Avenue.
- f) Please confirm the owner will provide the new security checking shack, including electrical and/or heat to said shack.
- g) Please confirm the owner will staff the construction access security shack, and costs for staffing are by owner.

Answer:

- a) Staff and cadets will need access past the track near the north end. The contractor will need to fence off their required area in order to avoid people entering inadvertently. This fence will not require banners to be installed.
- b) Owner is responsible for any demolition that is required to accommodate access
- c) Gates, Temp guard hut and any tree's/shrubs that need to be removed will be done prior to the contractor taking over the area.
- d) Gates, Temp guard hut and any tree's/shrubs that need to be removed will be done prior to the contractor taking over the area.
- e) A new 24' gate is being installed
- f) Correct
- g) Correct

- 1-23 Question 13-6: At the site visit on December 18 it was mentioned that new tunnel progress would be limited to 100m increments. This limitation would seem to have a phasing plan in mind. Please distribute this information to bidders.
Answer: There is no phasing in mind, the intent is to ensure access to the buildings and avoid the entire core looking like a construction site at the same time. We need to keep the site as clean as possible throughout.
- 1-24 Question 13-7: Please confirm the land bridge along Cameron Avenue has capacity for loaded commercial vehicle access. The largest anticipated load would be concrete truck deliveries.
Answer: No information is available regarding the load limit for the land bridge on Cameron Avenue.
- 1-25 Question 13-8: Is there a geotechnical report available for the project?
Answer: There is no geotechnical report for this project. A copy of the report prepared for the Ft. Walsh Dormitory 3 is available for reference.
- 1-26 Question 13-11: Please provide details of the existing asphalt structure, including granular in the parking lot areas to be repaired after the new utility installations.
Answer: Existing street structure is unknown. Proposed street structure as per Drawing No. C1.08
- 1-27 Question 13-12: Please provide details of hoisting limitations for the airplane to be removed. Please provide the weight of the air plane and mount.
Answer: Aircraft is a Beechcraft Model D18S with a Length of 10.41m, Wingspan of 14.53m and a maximum Weight of 4,264kg (in service).
- 1-28 Question 13-13: Please clarify what the elevation markings are on drawing C1.03 represent.
Answer: Elevations are Subdrain pipe inverts. Subdrain is designed to follow the tunnel grades as much as possible but in some locations, this was not possible due to available subdrain discharge locations.
- 1-29 Question 14-15: Please provide design elevations for all top of raft points at each chainage station for the new tunnels.
Answer: Tunnel raft and roof slab elevations are provided on drawing S1.14. Tunnel is to slope uniformly between these points.
- 1-30 Question 14-16: For the new water main between ~ -0+18.995 – 0+160 (drawings C1.04, C1.05) – please confirm the sequencing of the install is such that the new line cannot be installed until the existing tunnel has been removed.
Answer: New watermain between 0+19 to 0+63 must be scheduled to minimize disruption to services for TBU34. Watermain 0+63 to 0+160 provides looping for the watermain system and can temporarily out of service during construction.
- 1-31 Question 14-17: Please provide an installation detail for the new water lines crossing the existing tunnel, servicing TBU 40 & 41. Or, confirm if this new water line can be installed after the existing tunnel is demolished.
Answer: Service to be maintained to TBU 40 & 41 during construction, means and methods are the contractor's responsibility.
- 1-32 Question 14-18: TBU 1 fire water Service connection appears to tie into the existing service line within the existing tunnel. This existing tunnel is scheduled to be demolished. Please confirm the intent here.
Answer: Connect to existing fire service line following the demolition of tunnel.

- 1-33 Question 14-19a: Please confirm the new electrical, data and/or any other services that are to be rerouted out of the existing tunnel (to be demolished) feeding existing buildings; TBU 4, 28, 31, 36, 37, 38, 39, 40, 41, 53, 56 75, 86.
a. The intent for new services to these buildings is unclear.

Answer: As shown on E1.43

- two sets of 6 SM fiber cable go from TBU1 to TBU4.
- TBU 28

- 1-34 Question 14-22: C1.07 – is the 150mm fire hydrant supply line to be demolished? Please confirm the routing of this line. It doesn't appear to show up on any other drawings.

Answer: Yes.

- 1-35 Question 15-3: Specification 26 05 36-page 1 item 2.1 .1 references cable tray ... "and width as required to prevent cable de-rating". Please confirm the tray width as the drawings do not indicate what will be installed in the tray so width is unknown regarding the cable de-rating.

Answer: In general, the tray will be used for communication cables. However, Item 5.1 above gives permission to use teck cable for the luminaires. Should the contractor choose to use teck cable this could also be in the tray.

- 1-36 Question 15-4: Drawings E1.21 note 7 reference cable tray bonding. Please confirm bonding requirements as it is unknown what all systems may be in the tray.

Answer: What is installed in the new tray is up to the contractor. Bonding will be required as per CEC.

- 1-37 Question 15-5: Drawing E1.02 detail 1 references wall anchors for the tray bracket but the specification 26 05 36 2.2.2 references strut mounted vertically in wall. Please confirm requirement.

Answer: Strut mounted vertically IN wall is for the new tunnel. In the existing tunnel you will have to use wall anchors to mount the strut to the wall.

- 1-38 Question 15-6: Specification 26 53 13 references Photoluminescent Signage. But the drawings do not seem to indicate any of these. Are there any for this project?

Answer: As per item 2.4.9, the Photoluminescent Exit signs are required at every tunnel 10m mark and at every tunnel branch location and every branch 10m mark for TBU 43 and NTBU 43. Item will be revised to delete TBU44, 88, 89 and NTBU44.

- 1-39 Question 15-7: Drawing E1.24 – symbol for ground rod and ground well. Please clarify which is which.

Answer: Per drawing E1.02 detail 3, all ground rods are installed in inspection wells.

- 1-40 Question 15-8: Specification 26 33 53 references the UPS to be 120volt single phase output but the panel it is feeding is referenced as a 120/208V 100A 3phase 4 wire. Please clarify.

Answer: Panel to be 120/240V single phase 3 wire, complete with 2P40A main breaker.

- 1-41 Question 15-9: The UPS on Drawing E1.21 is referenced as a 7.5KW but drawings E1.50 indicates the UPS to be fed with a 100A breaker. Please confirm this is correct.

Answer: Breaker to be revised from 3P100A to 2P40A.

- 1-42 Question 15-10: At the site visit we were provided a slide show but were advised we able to view any of the existing tunnels or buildings. Please provide pictures with serial #s or information for the existing panel 05-212-0-PNL-6A as drawing E1.50 references a new 60A3P breaker to be installed in the existing board.

Answer:

1-43 Question 15-11: Drawing E1.13 Note 5 references existing 347/600V3P4W panel 05-212-0-60EA. What is this note advising us and where is this note on the floor plate?

Answer: This is showing the location of the panel referenced in item 12.

1-44 Question 15-12: Please provide pictures with serial #s or information for the existing panel 05-212-0-PNL-6E as drawing E1.52 references a new 50A3P breaker to be installed in the existing board.

Answer: Panel is actually 05-212-0-PNL-60EA.

1-45 Question 16-15: Drawing E1.42 references the new SaskTel- Zayo Fibre Optic and telephone service feed. Please confirm costs associated with this work including all required associated trenching in concrete and direct buried and decommissioning of the Zayo fiber optic cable will be completed by SaskTel for the owner. Electrical contractor is to coordinate only.

Answer: Contractor is responsible coordinating the work, trenching on Owner's property, installing conduit and providing entry into the building.

1-46 Question 16-17: Is there a P&ID drawing in the tender documents or only the instrument layout on drawing E1.05? Drawings and specification drawings reference P&ID drawings in numerous locations but there does not appear to be actual drawings identified as P&ID drawings.

Answer: Drawing E1.01 delete the title "P&ID Legend" and replace with "Instrumentation Legend." Sections 40 63 43 and 40 78 01 will be revised to replace "P&ID" with "Instrumentation."

1-47 Question 16-18: Drawing E1.05 also references package 2 TBU44. Please confirm this information pertaining to TBU44 is not in contract.

Answer: Amendment will be issued with revised drawing E1.05 identifying TBU44 components are not in contract.

1-48 Question 16-20: Specification 40 63 43 part 3.1.11 references "existing PLC control panels". Please clarify.

Answer: Specification 40 63 43 item 3.1.11 shall be revised to state "Unless otherwise specified, upgrades and modifications to existing BMS control panels shall utilize hardware components compatible with the existing BMS and programming modifications shall be made using existing installed software."

1-49 Question 16-21: Specification 40 63 43 part 3.1.12 references "New Lift station". Please clarify.

Answer: Specification 40 63 43 part 3.1.12 shall be revised to state "All new processors are to be adequately sized to provide sufficient memory and processing capacity to handle the I/O, logic, communications, and data requirements for the new HVAC system based on the defined I/O mix and the process control narrative requirements."

1-50 Question 17-1: What brand(s) fire alarm are existing in the buildings involved in this bid scope? In order to allow for adding to existing fire alarms at all building the tunnels attaches to for DO NOT ENTER warning strobes, we will require this information.

Answer: The brand of existing fire alarms serving the buildings is Notifier.

1-51 Question 17-3: Will Wirewerks be accepted as an equivalent for fibre optics cable and equipment?

Answer: No request for equal is required. The equipment must meet the performance as specified.

1-52 Question 18-1: Request for Approval for UPS.

Answer: No request for equal is required. The equipment must meet the performance as specified.

1-53 Question 20-1: How many piles are needed for the relocation of the airplane display? I have found the details of where it is to be relocated and the pile description but wasn't able to find the number of piles for it.

Answer: One (1) pile is required for the relocation of the airplane display. Pile detail is provided on drawing S1.22.

1-54 Question 20-2: In Specifications Section 06 10 00 Rough Carpentry
2.2 Pressure preservative treated material
.1.6 Kiln dry Lumber materials to 8% moisture content or less.

This material does not exist. Standard kiln dry is to 18% moisture not 8%. After it is Kiln dry the material is pressure treated with no further kiln drying afterwards. Please confirm standard pressure treatment procedure is acceptable

Answer: Standard pressure treatment procedure is acceptable.

1-55 Question 20-3: 2.2 Pressure preservative treated material
.2 Pressure preservative treated Plywood, again asks for kiln dry to 8% moisture content or less after treatment.

This material does not exist. Standard kiln dry is to 18% moisture not 8%. After it is Kiln dry the material is pressure treated with no further kiln drying afterwards. Please confirm standard pressure treatment procedure is acceptable.

Answer: Standard pressure treatment procedure is acceptable.

1-56 Question 22-22: Drawing E1.3 note 2 references install new fiber cable in existing patch panel in TBU1 Network room. Are the patch panels located in the other buildings referenced on this drawing also existing except for the NTBU43+0000 ?

Answer: Note 2 on Drawing E1.43 is revised to state: "Install new fiber cable in new patch panel in TBU1 Network room."

1-57 Question 23-1: What is the fire stopping system required for new installs and repairs to existing? That is re-closable fire sleeves, fire bricks, fire caulk, etc.?

Answer: Use fire stopping system specific to the type of penetration being stopped. See Specification 07 84 00.

1-58 Question 23-2: E1.01 for the WP receptacle symbol – is a GFI receptacle with WP cover required or only WP cover on regular 15A receptacle?

Answer: GFI receptacle required.

1-59 Question 23-3: Please clarify if all light fixtures and receptacles in TBU43 (drawings E1.10, E1.11, E1.13) are existing to remain?

Answer: For drawings E1.10 and E1.11 the light fixtures are existing. For E1.12 and E1.13, provide new WP GFI receptacles.

1-60 Question 23-5: Drawing E1.02 Detail 3, is an inspection well required for all ground rods?

Answer: Yes

1-61 Question 23-8: Drawing E1.51, the panel schedule for PNL TBU 43 000-UPS has circuit 4 listed as Smoke/Horn. Please clarify what this circuit is feeding as I do not see it referenced on drawings?

Answer: Circuit 4 will be revised to "spare."

1-62 Question 23-9: Drawings E1.42, please clarify scope for the new SaskTel and Zayo fibre optic and telephone service feeds. Who is responsible for supply and install of cable, trenching, etc.?

Answer: Contractor is responsible coordinating the work, trenching on Owner's property, installing conduit and providing entry into the building.

1-63 Question 23-10: Drawing E1.43, please clarify which patch panels are new (to be supplied in electrical scope) and which are existing as per Note 2.

Answer: Note 2 will be revised to read "new patch panels".

1-64 Question 23-11: For drawings E1.32 through E1.37 please provide a scale size for drawings.

Answer: Okay.

1-65 Question 23-12: Specification section 26 53 13 photoluminescent signage references providing wayfinding signs for all tunnels TBU43, 44, 88, 89 NTBU 43, and 44. As this bid package 1 scope is TBU 43 and NTBU 43 are we also required to provide signs for the other tunnels as well? If so, please provide total quantity of signs required to be included in this bid as distances of other tunnels not in scope are unknown.

Answer: Include signage for bid package 1 only, TBU 43 and NTBU 43.

1-66 Question 24-2: Confirm UPS Power requirements. Single line indicates 3P panel downstream of UPS, but Specs 2.3.2.1 indicate 1P output from UPS.

Answer: Panel to be 120/240V single phase 3 wire, complete with 2P40A main breaker. UPS to have 120/240V output to feed panel.

1-67 Question 26-29: Drawing E1.45 references note 4. Note 4 is not shown anywhere for designation but is assumed it should be located at the manhole on 11th avenue. Please confirm.

Answer: References both cables between the manhole and TBU1

1-68 Question 28-1: 1. Please verify Color of Tyndall Stone®
There does not appear to be any indication of Color required for the Tyndall Stone® components within the contract documents (Specifications or Architectural Drawings).
Please indicate if Grey Colour Tyndall Stone® or Buff Colour Tyndall Stone® is required.

Answer: The colour will be chosen that best matches the existing stone. Samples to be submitted for colour selection during construction.

1-69 Question 28-2: Please verify if 190 mm Thick Parapet Cap would be acceptable
Drawings A1.14 and A1.18 indicate a Parapet Cap thickness of 200 mm sloping down to 185 mm Thick.

Please note that Tyndall Stone® 200 mm Thickness is not a "Standard Thickness" for Tyndall Stone®.

There would be a cost savings in switching to 190 mm Thick sloping down to 175 mm.

Please verify if 190 mm Thick Parapet Cap would be acceptable.

Answer: Yes, 190mm parapet cap is acceptable.

1-70 Question 28-3: Please verify if acceptable to supply Parapet Cap as Flat Stone
Drawings A1.14 and A1.18 indicate a Parapet Cap thickness of 200 mm sloping down to 185 mm Thick.

There would be a cost savings in switching from a Sloped Cap Stone to a Flat Cap Stone (with less processing of Tyndall Stone® required). The 2% slope of the Parapet Cap could be achieved by sloping the Flat Parapet Cap during installation, with the difference being accounted for in the grout joint. Please verify if a Flat Parapet Cap Stone would be acceptable.

NOTE:

Tyndall Stone® is a natural stone product, and as such will have naturally occurring variations in colour and pattern on mottling • Given the inherent nature of Tyndall Stone®, typically, Grey Colour Tyndall Stone® would be less susceptible to staining than Buff Colour Tyndall Stone®
• Installer to ensure that: ◦ White non-staining thinset / grout is used ◦ Thinset is applied to back of each tile with full coverage, and at even thickness ◦ Tiles must be pre-sealed before grouting

Answer: Yes, a flat parapet cap stone is acceptable. The 2% slope will be accounted for in the grout joint.

1-71 Question 30-1- Drawing A1.15 – finish schedule reads TBU43-516 but this drawing reflects the details of building TBU43+520. Is this finish schedule for building TBU43+520?

Answer: Yes, this schedule is for building TBU43+520.

1-72 Question 30-2- Drawing A1.05 – detail 7 refers to fire separation wall detail; which detail is this referring to?

Answer: The detail being referred to is Detail 6, Drawing A1.06

1-73 Question 30-3- Drawing A1.05 – detail 7 refers to a lot of photos; are these references for fire separation only?

Answer: Detail 7 refers to one photo labeled as "PHOTO - DETAIL 7" on the same sheet. This photo is included as a reference to the existing conditions at that location.

1-74 Question 30-4- Drawing A1.05 – detail 7 refers to P12 to P19 where are these pictures located?

Answer: The items labels as "P" in Detail 7 refer to penetrations, not photos.

1-75 Question 30-5- Drawing A1.04 – details 2A and 2B, what is the extent of the reflected ceiling?

Answer: The extent of the reflected ceiling plan is 1030 x 2200 as dimensioned on Details 2A and 2B.

1-76 Question 30-6- Drawing E1.42 indicates that there is a new SaskTel service feed. Is this done by SaskTel? If so, is SaskTel also doing the concrete for these cables?

Answer: Contractor is responsible coordinating the work, trenching on Owner's property, installing conduit and providing entry into the building.

1-77 Question 30-10- Is there a drawing that shows the areas that will need to be paved? There is a detail for paving structure in the civil drawings but nothing that defines the pavement repair areas.

Answer: All surface damage caused by installation of underground utilities must be repaired. Pavement repair areas will depend on contractors means and methods.

1-78 Question 32-1: Please provide the Geotechnical Report if available.

Answer: There is no geotechnical report for this project. A copy of the report prepared for the Ft. Walsh Dormitory 3 is available for reference.

1-79 Question 33-1: Are you able to tell me what height is requested for the chain link fence? The spec. on L1.04 shows 3 different heights.

Answer: 1830mm high chainlink fence.

1-80 Question 33-2. Is there a stockpile of used topsoil or do we need to bring in all new topsoil?

Answer: Topsoil to be imported.

1-81 Question 33-3. Is there a specific manufacture you would like to use for the polyflex landscape edging or can we use any plastic edging?

Answer: No.

1-82 Question 36-1. S1.06 – Make up Air Building Landing Pad – Does this require a thickened edge?

Answer: No thickened edge is required.

- 1-83 Question 36-2. UPS Power Requirements – Single Line indicates 3 Phase Panel downstream from UPS, Spec 2.3.2.1 indicated 1 Phase output power from UPS
- Answer: Panel to be 120/240V single phase 3 wire, complete with 2P40A main breaker. UPS to have 120/240V output to feed panel.
- 1-84 Question 37-1. What is the size required for the Photoluminescent Wayfinding Signage (specification 26 53 13)?
- Answer: Size the sign will be dictated by the design criteria listed in the specification, see 26 53 13.2.1 and 26 53 13.2.3.
- 1-85 Question 37-2. For all the fibre patch panels shown on E1.43, are new racks/enclosures required? Please provide specification of racks/enclosures required for each size of patch panel and locations they are required.
- Answer: Existing communications must remain operational until the new system is tested and commissioned. Amendment to be issued updating specification 27 05 13 to include patch panel.
- 1-86 Question 38-1: Request for Equal - Emergi-Lite
- Answer: No request for equal is required. The equipment must meet the performance as specified.
- 1-87 Question 39-1: One of the landscaping subcontractors has concerns regarding the level of nitrogen for the newly planted plants, he believes it to be more appropriate to use a low nitrogen – high phosphorous fertilizer and would like the Landscaping Designer to review this.
- Answer: Fertilizer will be reviewed as part of the submittal process. Fertilizer could be adjusted based on the soil test report.
- 1-88 Question 40-1: I have some questions on the UPS spec. I see on the one drawing its calling out a Beghelli Auroa system but it's a single phase unit. I was wondering if the Borealis (see attached) would work for this application.
- Answer: No request for equal is required. The equipment must meet the performance as specified.
- 1-89 Question 43-2. For the tunnels what type of jacket is required for the for armoured fibre, Cat 3, and panel feed runs? That is FT4, FT4 LSZH, or FT6?
- Answer: FT6 jacket is required.
- 1-90 Question 43-3. Regarding drawing E1.45, for the 200 pair, 100 pair, 25 pair and 6 pair copper telephone cable required, is Cat 3 acceptable?
- Answer: As per contract documents refer to specification section 27 05 13 article 2.1
- 1-91 Question 44-1. On drawing D1.01 key note S7 it says to repair existing opening for offshoots in foundation wall, where are we repairing these as the drawings show the existing tunnels not going to a building? Is a concrete wall fine?
- Answer: If the offshoot tunnel does not connect to a building there is no repairs required to an existing opening. Where the tunnel offshoots do connect to a building (TBU34, TBU41, TBU40 and TBU4) repairs will be required to close the openings. Concrete is acceptable.
- 1-92 Question 44-2. On drawing D1.01 key note S8 it says to cap tunnel at existing building foundation, is the capping to be a concrete wall?
- Answer: Concrete or CMU is acceptable.
- 1-93 Question 45-1: Also, what is the weight/dimensions of the airplane that is to be removed?

Answer: Aircraft is a Beechcraft Model D18S with a Length of 10.41m, Wingspan of 14.53m and a maximum Weight of 4,264kg (in service).

- 1-94 Question 46-1. It says "Panic Hardware. Turn knob interior access." Well, the panic bar is usually installed on the interior. Panic bar and turn knob are two different things and both cannot occupy the inside of the door. Also, the answer depends if it is single-leaf or double-leaf.

Answer: Panic bar required on the tunnel side. No turn knob required on the tunnel side. There is no double leaf floor hatch in the scope of work.

- 1-95 Question 46-1.a: Let's assume it is single-leaf. And let's say they want a panic bar (not a turn knob), then we can put a Sargent Rim Cylinder 64-34 with construction interchangeable core on the exterior. That's not a mortise cylinder but it might be close enough for the customer to accept it. The customer will have to decide whether or not it is suitable to their needs. Keep in mind, that is for a single-leaf panic bar on underside.

Answer: Door Numbers 7,8,10,46: Provide rim cylinder for exterior access. Keying to Specification 08 71 00.2.4. Provide threaded cover pug. Provide lever handle that can be inserted when lifting hatch from the exterior. Panic bar required on tunnel side. Door Number 2: No rim cylinder required, no locking required. Provide lever handle that can be inserted when lifting hatch from the exterior. Panic bar required on tunnel side.

- 1-96 Question 46-1.b: For a double-leaf panic bar scenario, I don't have a good solution for using a Sargent cylinder on the topside.

Answer: There are no double leaf floor hatch in the scope of work.

- 1-97 Question 46-2. If they don't want a panic bar single-leaf and only want a turn knob installed on the underside, then we can put the Sargent cylinder, mentioned above, onto the topside. It wouldn't have a panic bar.

Answer: Panic bar is required.

- 1-98 Question 47-1: Request for Equals

Answer: No request for equal is required. The equipment must meet the performance as specified.

- 1-99 Question 49-1: I would like to clarify spec 26 05 34 – Conduit Installation. Note 3 is calling for rigid steel conduit but in note 5, it states that anything about 2.4m is allowed to be EMT. The way I interpret this is we are allowed to use EMT in the tunnels as long as it's above 2.4m. Please confirm

Answer: Rigid galvanized steel to be used below 2.4 m, and EMT is allowed above 2.4 m.

- 1-100 Question 51-7. Section 01 56 00 clause 1.3.1 notes wood framed and plywood covered site fence but clause 1.3.6 notes snow fence can be used for temporary site enclosures. Please clarify the extent where wood framed plywood covered site fence versus snow fence is required. Also, please confirm if the Contractor is responsible to provide decorative banners per clause 1.4 and identify the extent of the banners required.

Answer: Section 01 56 00 clause 1.3.1 notes wood framed and plywood covered site fence but clause 1.3.6 notes snow fence can be used for temporary site enclosures. Please clarify the extent where wood framed plywood covered site fence versus snow fence is required. Also, please confirm if the Contractor is responsible to provide decorative banners per clause 1.4 and identify the extent of the banners required.

- 1-101 Question 51-8. Section 01 91 31 please clarify if the Specialist Cx Agency specified is provided by the Departmental Representative or the Contractor.

Answer: The Specialist Cx Agency specified is provided by the Contractor.

1-102 Question 51-9. The directive given at the site meeting was that it is not permissible to close both Oliver and Cameron streets simultaneously, only one street could be closed at one time. Please confirm.

Answer: It is not permissible to close both Oliver and Cameron streets simultaneously.

1-103 Question 51-10. There are no as-builts of existing structures to provide a determination of the extent of shoring. Please provide as-built information for existing structures, or provide where anticipated shoring locations are required, including where existing utility and tree locations are to remain undisturbed.

Answer: There are no record drawings available for the existing buildings.

1-104 Question 51-11. If the information contained with the Designated Substance Report referenced in spec section 02 41 00 is relevant, please provide a copy.

Answer: If the information contained with the Designated Substance Report referenced in spec section 02 41 00 is relevant, please provide a copy.

1-105 Question 51-13. It appears that the paving removal equipment criteria (section 02 41 13-13) calls for only milling asphalt. Is it acceptable for paving to be removed through normal bulk demolition methods?

Answer: Yes, it is acceptable for paving to be removed through normal bulk demolition methods.

1-106 Question 51-16. Please provide a geotechnical report showing the existing soils information and groundwater depths within the construction limits.

Answer: There is no geotechnical report for this project. A copy of the report prepared for the Ft. Walsh Dormitory 3 is available for reference.

1-107 Question 51-18. There is no weeping tile shown around the foundation of the building located at TBU 43+000. Is it required?

Answer: Weeping tile is shown on the Architectural drawings. Drawing C1.03 will be revised accordingly.

1-108 Question 51-19. Would the Departmental Representative consider precast concrete as an equal to a cast in place tunnel system?

Answer: Pre-cast concrete tunnels are not acceptable.

1-109 Question 52-1: Request for Equal

Answer: No request for equal is required. The equipment must meet the performance as specified.

1-110 Question 54-1As discussed, can you please request clarification on the following? (Division 27) Is fiber to be armored in the tray?

Answer: Yes, fiber is to be armored in the cable tray.

1-111 Question 55-1: S1.11 it is showing the stairs are steel grating, however no size is provided. Please provide grating size for stair treads

Answer: Stair treads are to a manufactured product which are bolted to the stringers. Size of the grating bearing bars should be selected based on the tread span.

1-112 Question 55-2: 05 51 00 2.2.6 Stair Treads states steel grating with cast aluminum abrasive nosing. Please confirm if these treads are to be Steel or Aluminum (Steel and Aluminum cannot weld together)

Answer: Manufactured steel stair treads are available with cast aluminum abrasive nosings.

1-113 Question 55-3: 32 92 23, 32 93 10 – Concerning Landscaping Quality Assurance it has been requested that “Or Equivalent” be included in the qualifications as a Red Seal Trade Landscape Horticulturist is the same or higher equivalent to the requirement.

Answer: Section 32 92 23 Sodding delete 1.3.1.1, 1.3.1.2 and 1.3.1.3 and replace with:
1.3.1.1 Landscape Contractor: to be a Member in Good Standing of Landscape Saskatchewan or Departmental Representative approved equivalent.
1.3.1.2 Landscape Planting Supervisor: Landscape Industry Certified Technician with Softscape Installation designation or Departmental Representative approved equivalent.
1.3.1.3 Landscape Maintenance Supervisor: Landscape Industry Certified Technician with Turf Maintenance designation or Departmental Representative approved equivalent.

Section 32 93 10 Trees, Shrubs, and Ground Cover Planting delete 1.5.1.1, 1.5.1.2 and 1.5.1.3 and replace with:

1.5.1.1 Landscape Contractor: to be a Member in Good Standing of Landscape Saskatchewan or Departmental Representative approved equivalent.
1.5.1.2 Landscape Planting Supervisor: Landscape Industry Certified Technician with Softscape Installation designation or Departmental Representative approved equivalent.
1.5.1.3 Landscape Maintenance Supervisor: Landscape Industry Certified Technician with Ornamental Maintenance designation or Departmental Representative approved equivalent.

1-114 Question 56-1: Please confirm location of TBU+473 as shown on drawing E145

Answer: TBU43+474 is the start of the new tunnel/end of the old tunnel. Location is identified on drawing E1.13.

1-115 Question 57-1: Request for approval.

Answer: No request for equal is required. The equipment must meet the performance as specified.

1-116 Question 59-1. On drawing E142, it says new SaskTel and zayo fiber optic and telephone service feed. Trenched in concrete and direct buried. Will this be done by SaskTel? If so, do the generals have to provide the concrete ductbank or will SaskTel be?

Answer: Contractor is responsible coordinating the work, trenching on Owner's property, installing conduit and providing entry into the building.

1-117 Question 61-1: Request for Equal (roofing).

Answer: No request for equal is required. The equipment must meet the performance as specified.

1-118 Question 66-1: SPEC 27 05 13 - Can we please confirm if armored or non-armored fiber cable is required?

Answer: Armored required.