BRAMPTON
brampton.ca Flower City

Corporate Services
Purchasing

October 28, 2021 **(29 pages)**

ADDENDUM NO. 3

BID CALL NO. T2021-173

CONSTRUCTION OF FIRE STATION 201 AT 25 RUTHERFORD ROAD SOUTH

This Addendum is part of the Bid Document.

1. **Pertaining to Part E On-Line Bidding System – Cash Allowance**

   Cash Allowance has been increased from $392,500.00 to $520,000.00

2. **Pertaining to Part E On-Line Bidding System - Subcontractors**

   Subcontractor table has been removed from the Part E On-Line Bidding System.

   As mentioned in Addendum No. 2, Contractor must provide list of subcontractors within 24 hours upon request.

3. **Pertaining to Specifications and Drawings:**

   Refer to attached Consultant Addendum No. 2 (Total 28 pages).

All other terms & conditions remain unchanged.

If you have any questions, please do not hesitate to contact the undersigned.

Bidders are required to acknowledge all Addenda.

Santosh Mishra, CSCMP
Senior Buyer, Purchasing, Corporate Services
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Email: santosh.mishra@brampton.ca

THE BID DOCUMENTS, CONDITIONS OF CONTRACT, DRAWINGS AND SPECIFICATIONS ARE HEREBY AMENDED, AS FOLLOWS:

Questions & Responses:

Question 1:

"There is a discrepancy between drawing and the specifications for the sidewalk composition.
On the detail drawing for the sidewalk, they're using the composition Concrete/Granular A/Granular B. However, on the specification they call for Concrete/Granular A only. Please advise if the specs should take precedence over the drawings."

Response: The composition as shown on the drawing is correct, both Granular A and Granular B are required.

Question 2:

"There is no composition shown for the Concrete Driveway.

Response: MTE defers response to Geotech Consultant. Contractor to refer to Pavement Recommendations within Geotechnical Report prepared by SNC Lavalin.

Question 3:

"For the asphalt paving there is no composition shown on the Civil drawings. Please advise if we should refer to the Geo-tech suggested composition.

Response: MTE defers response to Geotech Consultant. Contractor to refer to Pavement Recommendations within Geotechnical Report prepared by SNC Lavalin.

Question 4:

"Referencing Landscape Drawing L1. please confirm the extent fo the seeding area is terminated at the identified Line of Work, and no scope is planned for the southern area of the property.

Response: The limit of seeding is based on restoring any disturbed areas (as per civil drawings limit of grading). There is no intent to seed undisturbed areas further south, though if they get disturbed due staging etc., they will need to be addressed.

Question 5:

"The civil drawings (C1.1 and C2.1) identify work taking place beyond the site boundary, including the temporary asphalt driveway, headwall, and select site removals. Please confirm if the scope of work is terminated at the site boundary, or if the work identified beyond to to form part of this contract.

Response: No the scope of work is not terminated at the site boundary; work shown beyond the site boundary forms part of the subject contract.

Question 6:

"If there is work occuring beyond the site boundary line identified in the civil drawings, why was the site boundary not drawn to capture all areas of work?G

Response: The site boundary delineates the portion of the City owned lands that are part of the Brampton Fire allocation, and is not a boundary to delineate limits of works. As such all proposed works as shown on the Civil plans form part of this contract (complete including works within the municipal road allowances.

Question 7:

"*Spec 284613, part 2.1.1 states that manufacturer model numbers are to establish minimum standards. Notifier by Honeywell is the only manufacturer listed. We assume other manufacturers will be accepted provided that they meet the minimum standards. Please verify.*

Response: Alternatives will not be entertained during the bid period, as per Supplementary Provision 2. Spec identifies "Notifier by Honeywell, Onyx NFS2-3030 series (as per City of Brampton standard)." As this is a City of Brampton standard no substitution of the fire alarm system manufacturer is permitted.

Question 8:

"Drawing M650, Detail 23 34 02.01. The detail indicates that the BAS is to have direct communications with the Destratification Fans System Controller. The specification for the these fans, CF-1 & CF-2 (23 34 00) does not indicate that the system will be provided with BACnet communications. Please clarify the method of communications between the BAS and the system controller.

Response: Refer to Mechanical Addendum 02.

Question 9:

"Regarding the Bunker Gear Racks, could you please advise on the compartment width?

Response: Bunker gear compartments are to be 18" in width.

Question 10:

"Could you please clarify on the foam depth vs R-value? Which value shall govern: 125mm or R-25?"

Response: The 125mm shall govern.

Question 11:

"Could you please clarify where the Fibreglass Reinforced Plastic Cladding is to be installed? There is no shown in the Room Finish Schedule.

Response: Refer to the revised Room Finish Schedule on sheet A600 included in this addendum.

Question 12:

"The Room Finish Schedule, A600, is incomplete for several rooms. Please provide a complete schedule.

Response: Refer to the revised Room Finish Schedule on sheet A600 included in this addendum.

Question 13:

"At the Apparatus Bay, is the exposed ceiling or exposed underside of deck (along with attached Mechanical/Electrical items) to be painted? This is not mentioned in the spec or the drawings, however as this is a large area, please confirm.

Response: Refer to the revised Room Finish Schedule on sheet A600 included in this addendum.

Question 14:

"Specification 07 52 00-2.1 calls for precast pavers & pedestals however none are shown on the Roof Plan, A203. Please advise if and where there are any Precast Pavers on this project.

Response: Please carry for 14 on the roof, these will be located at the mechanical equipment and access ladder.

Question 15:

"Specifications included section 09 67 70 Waterproofing Flooring. None is shown in the RFS on A600. Please advise where the Waterproof Flooring is located.

Response: This specification is not applicable to this project.

Question 16:

"Specification 09 51 00 - 2.1.10 only acknowledges ACT-1 however the drawings inlude ACT-2. Please provide the manufacturer and product Information for ACT-2 or confirm the only variance from ACT-1 to ACT-2 is the size as noted in the legend on A702."

Response: The variance is only in the size.

Question 17:

"Please provide the spec for Asphalt Paving. Please provide the sub-base material and depth for the asphalt paving."

Response: MTE defers response to Geotech Consultant. Contractor to refer to Pavement Recommendations within Geotechnical Report prepared by SNC Lavalin.

Question 18:

"Please provide thickness and NRC for ACT-1 and ACT-2."

Response: Refer to the colour and material schedule in the appendix of the specification for the specified products. As noted above ACT-1 and ACT-2 are to be the same except for the size.

Question 19:

"Specification 10 80 00 Miscellaneous Specialties calls for a CO-0 product from Construction Specialties, but this product does not exist. Please confirm the correct product.

Response: The correct product reference should be CO-8.

Question 20:

"Specifications 05 50 00 and 10 80 00 both identify different types of corner guards for the project. However none are shown on the drawings nor noted where to be used per the specs. Please confirm both are to be used on the project and their respective locations."

Response: Corner guards are to be per spec section 10 80 00. Refer to drawing A600 issued as part of this addendum for locations. There are 8 locations.

Question 21:

"Specification 12500 Site Furnishing: Please confirm the River Pebble Mulch is only at the shrubbery locations.

Response: River Pebble is only located along northwest property line between the parking lot curb and chain link fence/property line.

Question 22:

"Drawing A201 and detail 2/A211 show the bunker gear lockers with similar hatching/ shading as other Owner Supplied equipment. Please clarify if the bunker gear lockers are part of the contract scope. If yes, provide sizes as none are noted in specification 10 51 00 - 2.1.2

Response: Bunker gear lockers are to be a part of the contract scope per specification section 10 51 00. Lockers are to be 18" in width.

Question 23:

"Please advise where the FRP Wall Cladding is located. None is shown on the drawings and locations have not been identified in the specification.

Response: Refer to the revised Room Finish Schedule on sheet A600 included in this addendum.

Question 24:

"Specification 05 50 00 , Section 2.3 Fabrication Items item 12. Vanity Counter Supports. please identify the location of these items or confirm there are none on the project..

Response: No vanity counter supports are required on this project.

Question 25:

"A630. Please confirm if whether Door 102 (Univeral Washroom Door) shall be recieving glazing, as it is currently shown to have Door Type B which doesn't allow for glazing.

Response: Door 102 shall not receive glazing. The reference to Door Type B is correct.

Question 26:

"Please identify if there is any Wood Sealer required for the project. Painting spec calls for a 3 Coat Wood Sealer System as manufacturered by Sikkens Cetol 1RE. None Shown."

Response: There is no item identified as requiring this sealer.

Question 27:

"A101, Fig 2. Please confirm the proposed DO NOT STOP signage and pavement markings in front of the firestation station are to be included within the contract scope of work as no further details were provided in the documents.

A101, Fig 2. Please confirm the proposed STOP WHEN FLASHING overhead traffic signs are to be included with the contract scope of work as no further details were provided in the documents.

A101, Fig 2. Please confirm any electical connection to the proposed STOP WHEN FLASHING overhead traffic signs is not included in this contract. Electrical drawings do not show any of this work."

Response: Refer to the revised site plan drawing A101. References to these markings and signals have been removed. These are out of the scope of this contract.

Question 28:

"*Please accept Commdoor Aluminum or Windspec Inc as alternative products for Aluminum works. (Spec 08 44 00)*

Response: Alternatives will not be entertained during the bid period, as per Supplementary Provision 2. Approved alternatives will be considered after the award.

Question 29:

"Please identify the location required for the tactile attention indicators shown on Drawing A103 detail 4"

Response: Locations requiring this detail are indicated on the Site Plan drawing with BCC per the site plan legend on A101.

Question 30:

"01 21 00 - Allowances - As per specification 01 21 00 allowances, please clarify if the Automatic Door Operators are included as part of the allowance or if they are to be included separately by the contractor.

Response: Automatic door operators are included as part of the allowance for hardware and should be carried as such.

Question 31:

"01 21 00 Allowances - As per specification 01 21 00 allowances, please confirm all testing noted within the plans & specs will be included as part of this allowance and the contractor does not include additional 3rd party testing fees.

Response: Refer to specification 01 21 00 5.2.1 "Inspection & Testing – for charges from independent company(s) to provide services related to all areas of the project that require inspection and testing.

Question 32:

"01 50 00 Temporary Facilities - Please confirm the Construction Facilities in section 5 of 015000 are for contractor use only and additional field ofices for owner or architects will be by owner.

Response: Contractor is to provide a second site trailer to the same specification for owner/consultant use.

Question 33:

"For the specification 08 35 00 Four Folding Doors, only one manufacturer has been listed with there being a sole distributor. To make this specification more competitive can you please consider Spiral VP Doors by Rytec. The current specified door are not designed for high speed applications and frequent highspeed use wears out the doors quickly. These proposed doors are designed for high speed applications and operate at twice the speed of the specified 300m/s."

Response: Alternatives will not be entertained during the bid period, as per Supplementary Provision 2. Approved alternatives will be considered after the award.

Question 34:

"01 21 00 - Allowances, part 5.2.5 SCBA compressor. We assume that the furnish and install of the SCBA compressor is not part of the base bid and not part of the cash allowances. Please verify.

Response: Please refer to Mechanical Addendum 02.

Question 35:

"01 21 00 - Allowances, part 5.2.7 Communications Utility. We assume that the cost of service agreement with the communications company is part of the cash allowance. Please verify.

Response: This is correct.

Question 36:

"01 21 00 - Allowances, part 5.2.7 Communications Utility. We assume that the negotiation of service agreement with the communications company is part of the base bid. Please verify.

Response: This is correct.

Question 37:

"01 21 00 - Allowances, part 5.2.7 Communications Utility. We assume that the Div 27 tele/data communication cabling is part of the base bid and not the cash allowance. Please verify.

Response: All communications cabling downstream from the provider's demarcation point in the telecommunications entrance facility is in the scope of the base bid and not part of the cash allowance.

Question 38:

"01 21 00 - Allowances, part 5.2.13 Electrical Safety Authority references spec 260115 which is missing from the specifications. Please provide missing spec.

Response: The specification reference is incorrect. This item is for ESA Plan review if required. Per the Allowance description "General inspection fees are not to be a part of this fee. The Contractors to determine general inspection fees and include in tender price."

Question 39:

"Please verify if there is any fireproofing/intumescent paint required on the project. Given that this is a 1 storey facility, none should be required.

Response: Intumescent paint is not required on this project however spray fire proofing is required as indicated on the drawings.

Question 40:

"Please clarify which spec and/ or what product is to be used as the coating layer over the spray foam insulation in details 5,6 and 7/A405

Response: Refer to specification section 07 81 00.

Question 41:

"Please specify the exact profile for soffits. It is mentioned as a long board in the drawing (see enlarged details on A405), but as a perforated steel siding in the specification (see section 07 40 25).

Response: The soffits on this project are to be per specification section 07 42 41 Metal panel and Soffit System which calls for longboard.

Question 42:

"Appendix A1, Mach Alert Station Controller Installation Guide. This system is not shown on the drawings. We assume this will be furnished and installed (including conduit and wire) by the owner. Please verify. If this is to be part of the base bid, please issue specs and drawings indicating the extent of the work.

Response: Refer to keynote on Detail 3/E301.

Question 43:

"233516 Vehicle Exhaust Removal, part 2.1 references a filtration unit made by Airmation where shown on the drawings. This is not shown on the drawings. We assume this spec is not applicable to this project. Please verify.

Response: Please refer to Mechanical Addendum 02

Question 44:

"We assume that the cabling, devices, headend equipment and installation for the PA system will be by the owner. Please verify.

Response: This is correct.

Question 45:

"We assume that the cabling, devices, headend equipment and installation for the intrusion detection, cctv and card access systems will be by the owner. Please verify..

Response: Cabling, devices, headend equipment and installation for Intrusion detection and access control are to be in the base bid by the security contractor per 27 05 28.61 1.1.1.

Cabling, devices, headend equipment and installation for CCTV to be by owner per 27 05 28.63 1.1.1.

Question 46:

"Regarding the Door Schedule on A630, please clarify on EDS, EDC & EPR."

Response: The definition of each acronym is listed below. These items are also covered in detail by the hardware schedule.

EDS – Electronic Door Strike
EDC – Electronic Door Contact
EPR – Electronic Prox Reader

Question 47:

"Please advise the dimensions for the main headers of Domestic Cold and Hot Water lines On drawing M201. The shown size is incorrect."

Response: Refer to Mechanical Addendum 02.

Question 48:

"Single Line Distribution Diagram says "non-life safety", but spec calls for CSA282 and has a detailed description of motorized louvers, heating, lights, etc."

Response: Please refer to Electrical Addendum 02.

Question 49:

"Spec calls for a 2nd breaker for load bank. Not shown on Single Line Distribution Diagram."

Response: Please refer to Electrical Addendum 02.

Question 50:

"Spec Section 087113 - Please accept Horton as an alternate Manufacturer automatic door operators.

Response: Alternatives will not be entertained during the bid period, as per Supplementary Provision 2. Approved alternatives will be considered after the award.

Question 51:

"Drawing S201. There are several footings that to not have tags. Please provide the appropriate for these items. Examples would be the footing @ gridlines 5-U and 8-U."

Response: In the foundation schedule on S201, F1 is noted "Typ., U.N.O.". This is intended to mean that any spread footing that is not specifically tagged as an F2 or an F3 footing shall be a typical F1 footing.

Question 52:

"S106/S201. Please confirm which slab depressions are to a 'slab recess', and which are to be a 'slab depression' per the detail on S106."

Response: The depressed depressions are noted as "slab depression, typ. U.N.O." at one of the slab depressions between grid line C-B / 11-12. This is intended to mean that all depressions shown on the foundation plan are depressions (and not recesses) unless specifically noted.

Question 53:

"S201 shows several slab depressions, however, only one cut section of this is provided, for the floor grille entrance. Please confirm the depth of all slab depressions."

Response: Slab depression depths are governed by architectural requirements. The contractor shall reference Arch drawings to determine the required depth of depressions and reference the "slab depression" & "Typical slab on grade step details – U.N.O." details on S106 to determine the required slab step geometry and reinforcement (as required).

Question 54:

"Please provide the section details for interior foundation walls."

Response: Please refer to Structural Addendum S1.

Amendment 1

TABLE OF CONTENTS – Section 00 01 10

1.1 Remove section 07 40 25 – Exterior Soffit System.

1.2 Remove section 09 67 00 – Waterproofing Flooring.

1.3 Re-number Section 07 55 65 – Sheet Metal Roofing to 07 61 00.

Amendment 2

ALLOWANCES – Section 01 21 00

2.1 Modify 5.1 as follows:

ALLOWANCE AMOUNTS
.1 The Total Cash Allowance to be included in the Stipulated Price is ~~Three Hundred and Ninety Two Thousand and Five Hundred Dollars ($392,500)~~ Five Hundred and Twenty Thousand Dollars ($520,000) in Canadian funds.

2.2 Add item 5.2.14:

Vehicle Exhaust Extraction System (Nederman) – Provision and installation of equipment and ducting associated with the Nederman vehicle exhaust extraction system. Electrical installation of the equipment (including high voltage hook-up for the VFD and fan).

Amendment 3

MISCELLANEOUS AND METAL FABRICATIONS – Section 05 50 00

3.1 Modify 2.3.11 as follows:

Bollards (protection posts):
.1 Provide bollards as indicated on drawings. Posts to be ~~250~~ **150** mm diameter with a wall thickness of 8 mm, **hot dip galvanized**. Place posts into a 1200 mm foundation, fill with ~~20Mpa~~ **25 MPa** concrete and round top. Project pipes 1200mm above finished grade. ~~Finish prime coat.~~
.2 Finish: Provide ~~paint finish in accordance with Section 09 91 00, colour to be selected by Consultant~~ **yellow bollard shield, min 3mm thick HDPE to suit size of pipe. By Sureguard Security Products or similar.**

Amendment 4

ALUMINUM PANEL AND SOFFIT SYSTEM – Section 07 42 41

4.1 Modify 07 42 41 2.1.1 as follows:

Aluminum Panels: Horizontal or Vertical, 1.78mm aluminum alloy panels, pre-finished, wood-look panels **in a 6" v-profile c/w venting strips**, as manufactured by Longboard Inspiring Facades or approved alternative.

Amendment 5

MODIFIED BITUMINOUS ROOFING – Section 07 52 00

5.1 Modify 07 52 00 1.3.1.1.3 as follows:

Rigid insulation (two layers, ~~65~~ **75 mm** thick each, adhered)

Amendment 6

SHEET METAL ROOFING – Section 07 61 00

6.1 Modify 07 61 00 1.3.1.1.3 as follows:

Rigid insulation (two layers, ~~65~~ **75 mm** thick each, adhered)

6.2 Replace 07 61 00 2.1.13 with the following:

Insulation:
.1 Polyisocyanurate insulation: CAN/ULC S704, rigid, closed cell, polyisocyanurate foam insulation integrally laminated to perforated black glass reinforced felt facers, square edges, thickness as indicated on Drawings, use maximum size board possible. Insulation thickness under 50 mm use single layer board. Insulation thickness over 50 mm use two equal thickness boards.

Amendment 7

ARCHITECTURAL DRAWINGS

7.1 Replace drawing A101 – Site Plan and OBC Matrix, with revision 13 dated October 25th 2021 and issued herewith.

7.2 Replace drawing A600 – Level 1 Finishes Plan & Room Finish Schedule, with revision 5 dated October 25th, 2021 and issued herewith.

Amendment 8

ELECTRICAL ADDENDUM

8.1 Refer to Electrical Addendum 01 dated October 22nd, 2021 and issued herewith.

8.2 Refer to Electrical Addendum 02 dated October 26th, 2021 and issued herewith.

Amendment 9

MECHANICAL ADDENDUM

9.1 Refer to Mechanical Addendum 02 dated October 26th, 2021 and issued herewith.

Amendment 10

MECHANICAL ADDENDUM

10.1 Refer to Structural Addendum S1 dated October 27th, 2021 and issued herewith.

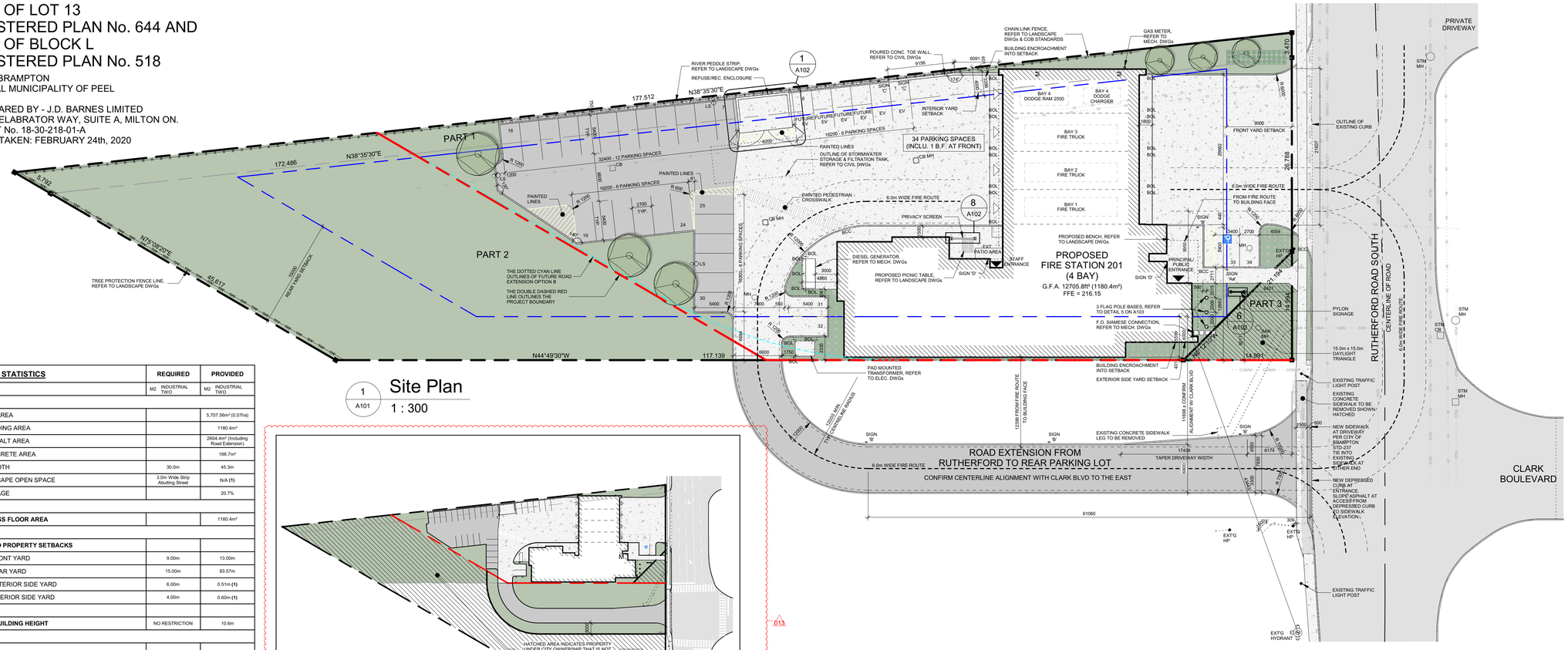
END OF ADDENDUM No. 2

INFORMATION TAKEN FROM:

BLOCK A AND PART OF LOT 13 REGISTERED PLAN No. 644 AND PART OF BLOCK L REGISTERED PLAN No. 518

CITY OF BRAMPTON
REGIONAL MUNICIPALITY OF PEEL

AS PREPARED BY - J.D. BARNES LIMITED
401 WHEELABRATOR WAY, SUITE A, MILTON ON.
PROJECT No. 18-30-218-01-A
SURVEY TAKEN: FEBRUARY 24th, 2020



1 A101 **Site Plan**
1 : 300

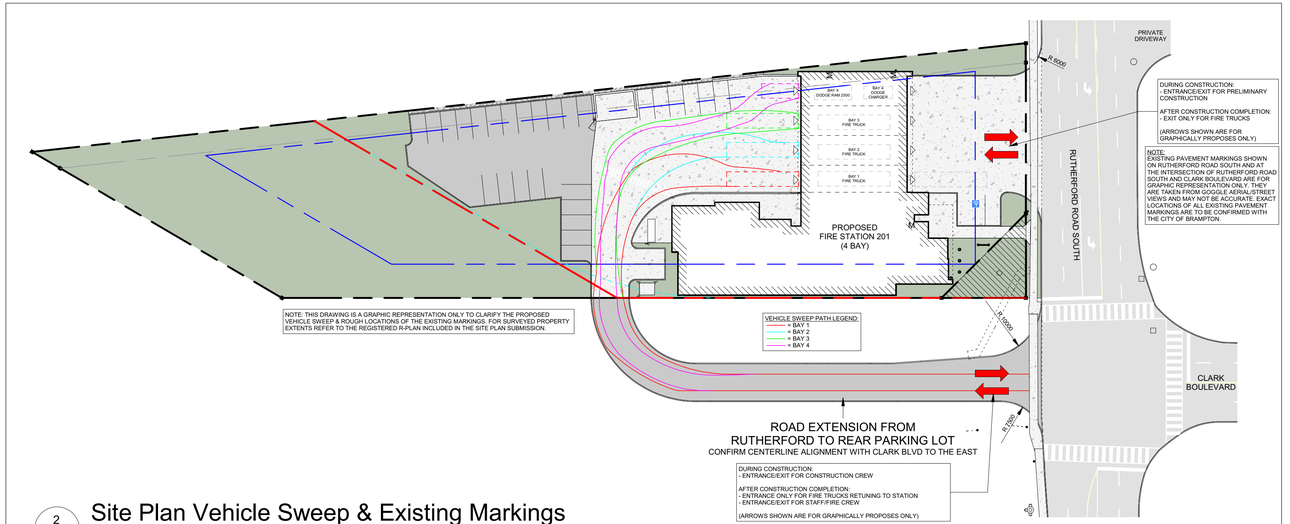
3 A101 **Key Plan - Property Vs Project Site**
1 : 1000

PROJECT STATISTICS	REQUIRED	PROVIDED
ZONING	M2 INDUSTRIAL TWO	M2 INDUSTRIAL TWO
TOTAL LOT AREA		5,707.56m² (0.57ha)
TOTAL BUILDING AREA		1180.4m²
TOTAL ASPHALT AREA		2604.4m² (Including Road Extension)
TOTAL CONCRETE AREA		166.7m²
MIN. LOT WIDTH	30.0m	45.3m
MIN. LANDSCAPE OPEN SPACE	3.0m Wide Strip Abutting Street	N/A **(1)**
LOT COVERAGE		20.7%
TOTAL GROSS FLOOR AREA		1180.4m²
BUILDING TO PROPERTY SETBACKS		
MINIMUM FRONT YARD	9.00m	13.00m
MINIMUM REAR YARD	15.00m	83.57m
MINIMUM EXTERIOR SIDE YARD	6.00m	0.51m **(1)**
MINIMUM INTERIOR SIDE YARD	4.00m	0.60m **(1)**
MAXIMUM BUILDING HEIGHT	NO RESTRICTION	10.6m
PARKING		
PARKING SPACES		33 **(1)**
BARRIER FREE PARKING SPACES		1 **(1)** (1 Type A)
TOTAL PARKING SPACES		34 **(1)**
ELECTRIC VEHICLE PARKING SPACES (Spaces Included In Total Above)		2 (+ 4 Future Spaces)
GREEN VEHICLE PARKING SPACES (Spaces Included In Total Above)		
BARRIER FREE ENTRANCES O.B.C. 3.8.1.2. (TOTAL ENTRANCES = 2)	2	2

NOTES

(1) AS PER SECTION **8.33.1** FROM THE CITY OF BRAMPTON COMPREHENSIVE ZONING BY-LAW "A PUBLIC USE, INCLUDING AN ACCESSORY USE THERETO, OWNED OR LEASED BY THE CORPORATION OF THE CITY OF BRAMPTON IS PERMITTED IN ALL ZONING CATEGORIES AND IS NOT SUBJECT TO REQUIREMENTS AND RESTRICTIONS APPLICABLE TO ANY ZONE CATEGORY."

ITEM	ONTARIO BUILDING CODE DATA MATRIX PARTS 3 & 9			OBC REFERENCE
1	PROJECT DESCRIPTION	■ NEW □ ADDITION □ ALTERATION □ CHANGE OF USE		■ PART 3 FOR NEW BUILDING
2	MAJOR OCCUPANCY(S)	GROUP D & F3		3.2.2.56.
3	BUILDING AREA (m²)	12705.8ft² (1180.4m²)		1.1.3.2.
4	GROSS AREA (m²)	12705.8ft² (1180.4m²)		1.1.3.2.
5	NUMBER OF STOREYS	1 (ONE)		3.2.1.1. & 1.1.3.2.
6	HEIGHT OF BUILDING (m)	10.6m		
7	NUMBER OF STREETS/ACCESS ROUTES	2 (TWO) STREETS AS INDICATED ON DRAWINGS		3.2.2.10. & 3.2.5.5.
8	BUILDING CLASSIFICATION	GROUP D, UP TO 2 STOREYS, SPRINKLERED		3.2.2.56.
9	SPRINKLER SYSTEM PROPOSED	■ ENTIRE BUILDING □ ADDITION	□ IN LIEU OF ROOF RATING □ NOT REQUIRED	3.2.2.56.
10	STANDPIPE REQUIRED	□ YES	■ NO	3.2.9.
11	FIRE ALARM REQUIRED	■ YES	□ NO	3.2.4.
12	WATER SERVICE/SUPPLY IS ADEQUATE	■ YES	□ NO	3.2.5.7.
13	HIGH BUILDING	□ YES	■ NO	3.2.6.
14	PERMITTED CONSTRUCTION ACTUAL CONSTRUCTION	□ COMBUSTIBLE □ COMBUSTIBLE	□ NON- COMBUSTIBLE ■ BOTH ■ NON- COMBUSTIBLE □ BOTH	3.2.2.56.
15	MEZZANINE(S) AREA (m²)	N/A		3.2.1.1.
16	OCCUPANT LOAD BASED ON	□ m² / PERSON ■ DESIGN OF BUILDING		3.1.17.
17	BARRIER FREE DESIGN	■ YES	□ NO (EXPLAIN)	3.8.
18	HAZARDOUS SUBSTANCES	□ YES	■ NO	M.2.1.2(1) & 3.3.1.19(1)
19	REQUIRED FIRE RESISTANCE RATING (FRR)	FLOOR ASSEMBLIES LOAD BEARING WALLS & COLUMNS ROOF RATING	45min. IF COMBUSTIBLE CONSTRUCTION 45min. IF COMBUSTIBLE CONSTRUCTION N/A	3.2.2.56.
20	SPATIAL SEPARATION			3.2.3.



2 A101 **Site Plan Vehicle Sweep & Existing Markings**
1 : 500

AERIAL VIEW N.T.S.

SITE PLAN GENERAL NOTES:

1. THE CONTRACT CONSISTS OF ALL WORK WITHIN THE 'EXTENT OF CONTRACT' LINE INDICATED ON THE SITE PLAN PLUS ANY WORK SPECIFICALLY NOTED OUTSIDE OF THAT LINE. ALL WORK DONE OUTSIDE OF THESE LIMITS MUST BE EXECUTED IN STRICT ACCORDANCE WITH THE STANDARDS OF THE MUNICIPALITY AND ALL OTHER AUTHORITIES HAVING JURISDICTION. MAKE GOOD AT NO ADDITIONAL COST TO THE OWNER OR MUNICIPALITY ANY DAMAGE CAUSED BY THIS CONSTRUCTION TO MATERIALS OR FINISHES BEYOND THE EXTENT OF CONTRACT LINE.
2. CONTRACTOR IS TO RESTRICT ALL WORK, EQUIPMENT, AND MATERIALS STORAGE TO AREAS WITHIN 'EXTENT OF CONTRACT' LINE EXCEPT WHERE NOTED OTHERWISE. PRIMARY SITE ACCESS POINT & CONSTRUCTION PARKING IS TO BE CONFIRMED WITH BUILDER, NO PARKING IN MUNICIPALITY RIGHT-OF-WAY.
3. LOCATE EXCAVATED MATERIALS & TOPSOIL PILES AS DIRECTED. AT COMPLETION OF PROJECT ANY EXCESS MATERIAL IS TO BE REMOVED AND AREA MADE GOOD TO ARCHITECT'S SATISFACTION.
4. FOR TRENCHING & BACKFILLING OF ALL SERVICE LINES AND DIVISION OF RESPONSIBILITY, REFER TO APPROPRIATE SECTIONS IN SPECIFICATIONS.
5. SUPPLY AND PLACE TOPSOIL TO THICKNESS SPECIFIED OVER ALL SODDED AND PLANTER AREAS INDICATED ON DRAWINGS. PROVIDE ADDITIONAL TOPSOIL AS REQUIRED OVER AND ABOVE TOPSOIL TAKEN FROM SITE. PROVIDE SODDING TO AREAS INDICATED AND TERMINATE AT 'EXTENT OF CONTRACT' LINE. EXTEND SODDING BEYOND PROPERTY LINES TO ROADWAYS WHERE INDICATED.
6. NOTE THAT EXACT LOCATIONS OF ALL NEW MECHANICAL & ELECTRICAL ITEMS ARE APPROXIMATE UNLESS DIMENSION GIVEN. ADJUST LOCATION AS REQUIRED AND AS APPROVED BY CONSULTANT TO SUIT SITE CONDITIONS.
7. NOTE THAT ALL MECHANICAL AND ELECTRICAL UNDERGROUND SERVICE LINES INDICATED ON DRAWINGS ARE APPROXIMATE ONLY AND ARE INDICATED AS ACCURATELY AS POSSIBLE FROM INFORMATION SUPPLIED. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT TYPES, LOCATIONS AND DEPTHS OF ALL UNDERGROUND SERVICES IN AREA OF NEW CONSTRUCTION INCLUDING GAS LINES, TELEPHONE, CABLE TV, ETC. AND VERIFY THEIR LOCATION WITH THE APPROPRIATE AUTHORITIES BEFORE EXCAVATING.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE RECORDS OF CONSTRUCTION TO FACILITATE AS-CONSTRUCTED DRAWINGS.
9. REFER TO CIVIL DRAWINGS FOR SITE SERVICING AND GRADING, EROSION AND SEDIMENT CONTROL, STORM WATER MANAGEMENT AND DRAINAGE, AND ANY OTHER RELATED WORKS.
10. REFER TO LANDSCAPE DRAWINGS FOR PLANTING, SODDING, TREE AND SHRUB LAYOUT / SCHEDULE (INCLUDING PRESERVATION AND REMOVALS), PAVER LAYOUTS, SITE AMENITIES, AND ANY OTHER RELATED WORKS.
11. REFER TO MAE DRAWINGS FOR SITE LIGHTING / POWER AND ANY OTHER RELATED WORKS.
12. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL DRAWINGS FROM ALL DISCIPLINES. ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED ON THE JOB. ANY DISCREPANCIES ARE TO BE REPORTED TO THE CONSULTANT. ALL DRAWINGS REMAIN THE PROPERTY OF THE CONSULTANT. ONLY LATEST APPROVED DRAWINGS ARE TO BE USED FOR CONSTRUCTION.

SPA-2021-0032

No.	Revision	Date
013	Issued for Addendum #2	2021-10-25
012	Issued For Addendum #1	2021-10-19
011	Issued For Site Plan Resubmission	2021-10-19
010	Issued For Tender	2021-09-20
09	Issued For Building Permit	2021-07-27
08	Issued for SPA Comment Response	2021-06-23
07	Issued For 90% Construction Documents	2021-05-03
06	Issued For Site Plan Resubmission	2021-04-23
05	Issued For Site Plan Application	2021-02-12
04	Issued For 50% Construction Documents	2021-02-05
03	Issued For 100% Design Development	2021-01-19
02	Issued For Schematic Design Submission	2020-12-22
01	Issued For Site Plan Pre-Consultation	2020-12-15

SITE PLAN LEGEND:

- PROPERTY LINE / EXTENT OF CONTRACT
- PART LOT / EASEMENT LINE
- FIRE ACCESS ROUTE
- IB / SIB PER SURVEY
- PROPERTY SETBACK
- LS — POLE MOUNTED LIGHT STANDARD AS PER ELEC. DWGs
- MH — MANHOLE AS PER CIVIL DWGs
- CB — CATCH BASIN AS PER CIVIL DWGs
- CB MH — CATCH BASIN/MANHOLE AS PER CIVIL DWGs
- FH&V — FIRE HYDRANT AS PER CIVIL DWGs
- BOL — METAL BOLLARD
- POST MOUNTED SIGN
- BH1 — BOREHOLE LOCATION
- BCC — BARRIER FREE CUT CURB
- PUBLIC AND/OR STAFF ENTRANCE/EXIT
- APPARATUS BAY ENTRANCE/EXIT
- GOMM - GOMM - GOMM — EXISTING U/G COMMUNICATIONS LINE
- GAS - GAS - GAS — EXISTING U/G NATURAL GAS LINE
- SAN - SAN - SAN — EXISTING U/G SANITARY LINE
- STM - STM - STM — EXISTING U/G STORMWATER LINE
- W - W - W — EXISTING U/G WATER LINE
- EXISTING ASPHALT PAVEMENT
- LIGHT-DUTY ASPHALT PAVEMENT
- HEAVY-DUTY ASPHALT PAVEMENT
- CONCRETE PAVING / SIDEWALK
- GRASS / SOD /SOFT SCAPING REFER TO LANDSCAPE DWGs

Orientation

PROJECT NORTH

Seal

ONTARIO ASSOCIATION OF ARCHITECTS
GERRY P. PILON
LICENCE
5042

All dimensions to be checked and verified on the job by the Contractor. Any discrepancies are to be reported to the Consultant prior to action. Only the latest approved drawings to be used for construction in conformance with all applicable codes, by-laws and regulations. All drawings remain the property of the Consultant.

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151 Ferris Lane, Suite 400 Barrie, Ontario L4M 6C1
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Project Information

BFES Station 201

27 Rutherford Rd. S., Brampton, ON. L6W 3J3

For

City of Brampton Fire & Emergency Services

Drawing Title

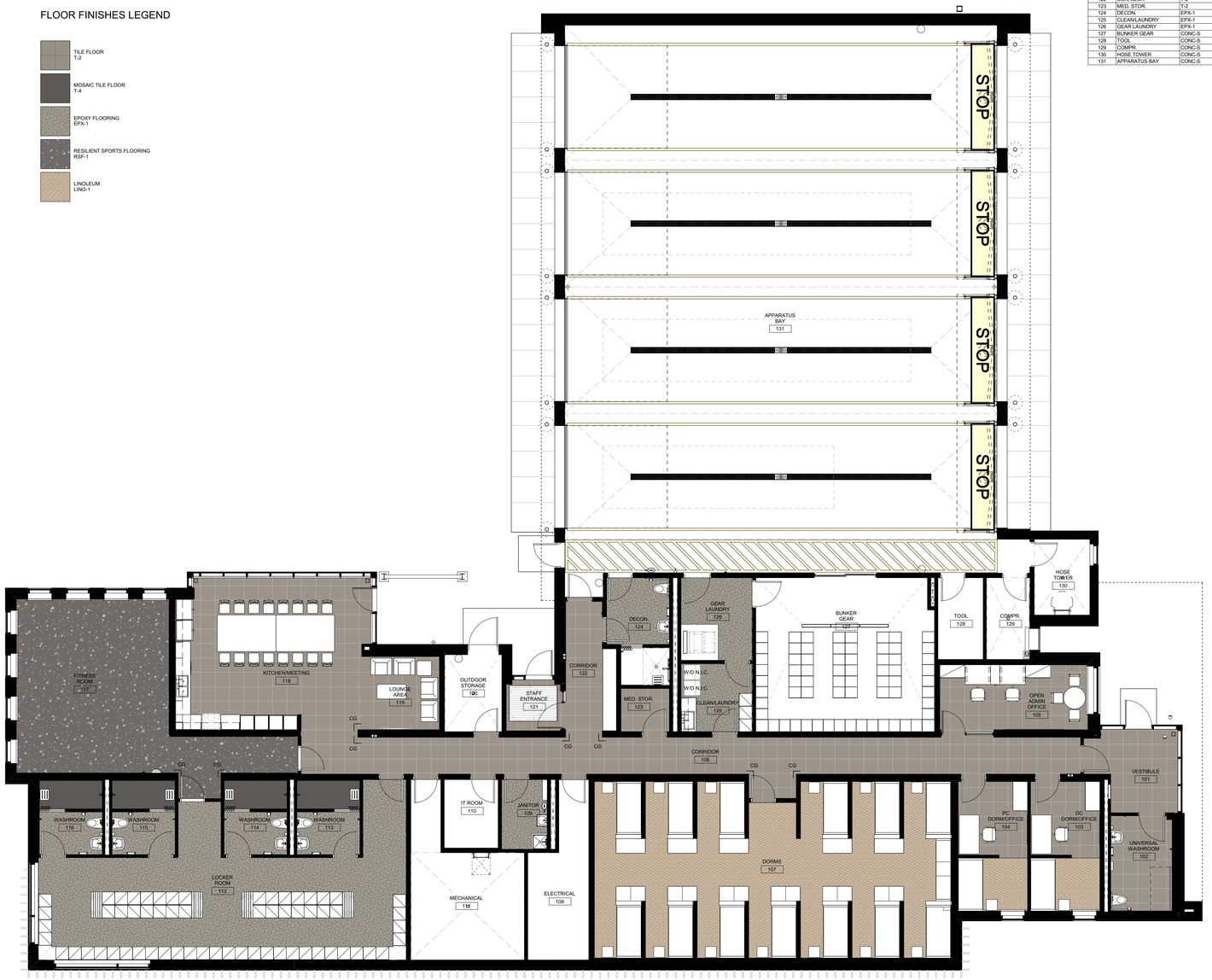
Site Plans & OBC Matrix

Date	Project No	Drawing No
2021-10-25	20019	A101
Drawn by: BB, NL		
Scale: As indicated		

BIM 360://20019 - BFES Station 201/20019 BFES Station 201_Central_R20.rvt
2021-10-25 1:39:40 PM

FLOOR FINISHES LEGEND

- TILE FLOOR
  T-2
- MOSAIC TILE FLOOR
  T-4
- EPOXY FLOORING
  EPX-1
- RESILIENT SPORTS FLOORING
  RSF-1
- LINOLEUM
  LINO-1



1 / A600 Level 1 Floor Finishes Plan

1 : 100

Room Finish Schedule

ROOM NO.	ROOM NAME	Floor Material	Floor Finish	Base Material	Base Finish	Walls North Material	Walls North Finish	Walls East Material	Walls East Finish	Walls South Material	Walls South Finish	Walls West Material	Walls West Finish	Ceiling Material	Ceiling Finish	Comments
101	VESTIBULE	T-2		T-2		CW	-	CW	-	GWB	PT-1/PT-5	GWB	PT-1/PT-5	GWB	PT-3	
102	UNIVERSAL WASHROOM	T-2		T-2		GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-3	
103	DC DORM/OFFICE	T-2/LINO-1		RB-1		GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-3	
104	PC DORM/OFFICE	T-2/LINO-1		RB-1		GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-3	
105	OPEN ADMIN OFFICE	T-2		T-2		GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-3	
106	CORRIDOR	T-2		T-2		GWB	PT-1/PT-4	GWB	PT-1	GWB	PT-1/PT-5	GWB	PT-1	ACT-1	-	
107	DORMS	LINO-1		RB-1		GWB	Varies	GWB	Varies	GWB	Varies	GWB	Varies	ACT-1/GWB	-/PT-3	
108	ELECTRICAL	CONC-S		RB-2		BLK	PT-1	BLK	PT-1	BLK	PT-1	BLK	PT-1	EXP	PT-3	
109	JANITOR	EPX-1		EPX-2		BLK	EP-1	BLK	EP-1/FRP*	BLK	EP-1/FRP*	BLK	EP-1	EXP	PT-3	* FRP at Slop Sink
110	IT ROOM	SDT		RB-2		BLK	PT-1	BLK	PT-1	BLK	PT-1	BLK	PT-1	ACT-1	PT-3	
111	MECHANICAL	CONC-S		RB-2		BLK	PT-1	BLK	PT-1	BLK	PT-1	BLK	PT-1	EXP	PT-3	
112	LOCKER ROOM	EPX-1		EPX-2		GWB	PT-6/PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1/GWB	-/PT-3	
113	WASHROOM	EPX-1/T-4		EPX-2/		TBB	T-3	TBB	T-3	TBB	T-3	TBB	T-1	GWB	EP-3	
114	WASHROOM	EPX-1/T-4		EPX-2/		TBB	T-3	TBB	T-1	TBB	T-3	TBB	T-3	GWB	EP-3	
115	WASHROOM	EPX-1/T-4		EPX-2/		TBB	T-3	TBB	T-3	TBB	T-3	TBB	T-1	GWB	EP-3	
116	WASHROOM	EPX-1/T-4		EPX-2/		TBB	T-3	TBB	T-1	TBB	T-3	TBB	T-3	GWB	EP-3	
117	FITNESS ROOM	RSF-1		RB-3		GWB	PT-1	GWB	PT-1	GWB	PT-7	GWB	PT-1	EXP	-	
118	KITCHEN/MEETING	T-2		T-2		CW	-	CW/ -		GWB	PT-1	GWB	PT-1	GWB	PT-3	
119	LOUNGE AREA	T-2		T-2		GWB	PT-1	GWB	PT-1	GWB	PT-1	-	PT-4	ACT-2/GWB	-/PT-3	
120	OUTDOOR STORAGE	CONC-S		RB-2		BLK	EP-1	BLK	EP-1	BLK	EP-1	BLK	EP-1	EXP	PT-3	
121	STAFF ENTRANCE	T-2		T-2		GWB/GL	PT-1/ -	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-3	
122	CORRIDOR	T-2		T-2		GWB	PT-1	GWB	PT-1	-	-	GWB	PT-4	ACT-1	-	
123	MED. STOR.	T-2		T-2		GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	-	
124	DECON.	EPX-1		EPX-2		BLK	FRP	BLK	FRP	BLK	FRP	BLK	FRP	GWB	EP-3	
125	CLEAN/LAUNDRY	EPX-1		EPX-2		BLK	EP-1	BLK	EP-1	BLK	EP-1	BLK	EP-1	GWB	EP-3	
126	GEAR LAUNDRY	EPX-1		EPX-2		BLK	EP-1	BLK	EP-1	BLK	EP-1	BLK	EP-1	GWB	EP-3	
127	BUNKER GEAR	CONC-S		RB-2		BLK	EP-1	BLK	EP-1	BLK	EP-1	BLK	EP-1	EXP	EP-3	
128	TOOL	CONC-S		RB-2		BLK	EP-1	BLK	EP-1	BLK	EP-1	BLK	EP-1	EXP	EP-3	
129	COMPR.	CONC-S		RB-2		BLK	EP-1	BLK	EP-1	BLK	EP-1	BLK	EP-1	EXP	EP-3	
130	HOSE TOWER	CONC-S		RB-2		BLK	EP-1	BLK	EP-1	BLK	EP-1	BLK	EP-1	EXP	EP-3	
131	APPARATUS BAY	CONC-S		RB-2		BLK	EP-1	BLK	EP-1	BLK	EP-1	BLK	EP-1	EXP	EP-3	

No.	Revision	Date
05	Issued for Addendum #2	2021-10-25
04	Issued For Tender	2021-09-20
03	Issued For 90% Construction Documents	2021-05-03
02	Issued For 50% Construction Documents	2021-02-05
01	Issued For 100% Design Development	2021-01-19

No.	Revision	Date

Orientation

Seal

ONTARIO ASSOCIATION OF ARCHITECTS
GERRY P. PILON
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Project Information

BFES Station 201

27 Rutherford Rd. S., Brampton, ON. L6W 3J3

For

City of Brampton Fire & Emergency Services

Drawing Title

Level 1 Finishes Plan & Room Finish Schedule

Date	Project No	Drawing No
2021-10-25	20019	A600
Drawn by: BB, JL		
Scale: 1 : 100		

Project Name:	City of Brampton Fire Station 201	**Date Issued:**	October 22, 2021
Quasar Project #:	CM-21-083		
Client Project #:	20019		

Distribution

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Addendum #:	E01
Revision #:	0

This Addendum forms part of the Contract Specifications and Drawings, and modifies the Bidding Documents, with Amendments and Additions noted below. This Addendum shall be added to the front of the specifications as issued. Bidders shall acknowledge receipt of this Addendum in the space provided in the Bid Form and include in bid amount.

This addendum includes modifications to the drawings as summarized below. Unless otherwise noted, all drawings listed below are attached herewith.

Revisions to Drawings:

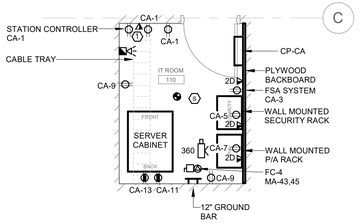
1. **Drawing E301 – Level 1 Plan – Power & Systems**
    a. Add hand dryer connection in Universal Washroom 102.
    b. Add hand dryer connection in Decon 124
2. **Detail 1/E501 – Single Line Distribution Diagram**
    a. Revise drawing to add neutral conductor for incoming service.
    b. For SPD (Surge Protective Device), delete 30A/3P breaker and add 60A/3P breaker. Revise feeder as noted to suit.
3. **Drawing E601 – Electrical Schedules (1)**
    a. Lighting fixture schedule, add note 1: “Substitute manufacturers in accordance with Section 26 50 00.”
4. **Drawing E603 – Electrical Schedules (3)**
    a. Add two 20A/1P GFI breakers on circuits RA-68 and RA-70 to feed hand dryers.
    b. Add 7 x 15A/1P and 3 x 20A/1P spare breakers to panelboard RA.

Quasar Consulting Group

Christopher Borcsok

Christopher Borcsok, P.Eng., LC, LEED AP

Senior Project Engineer

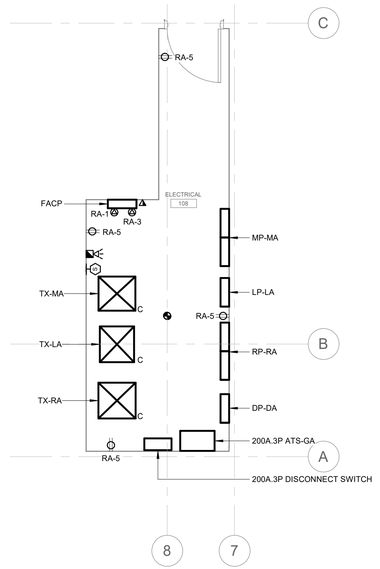


KEYNOTES:

1. REFER TO APPENDIX A1 FOR ALL INSTALLATION REQUIREMENTS, SPECIFICATIONS AND WIRING DIAGRAMS FOR MACH ALERT STATION CONTROLLER. CONTRACTOR TO PROVIDE ALL ACCESSORIES AS REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM. COORDINATE ALL LOCATIONS FOR EQUIPMENT WITH CITY OF BRAMPTON FIRE SERVICES AND MOTOROLLA PRIOR TO INSTALLATION.

3 IT ROOM 109 - LAYOUT

SCALE: 1 : 50



GENERAL NOTES:

1. ALL TRANSFORMERS SHOWN ARE TO BE SUSPENDED FROM CEILING SLAB.

2 ELECTRICAL ROOM 108 - LAYOUT

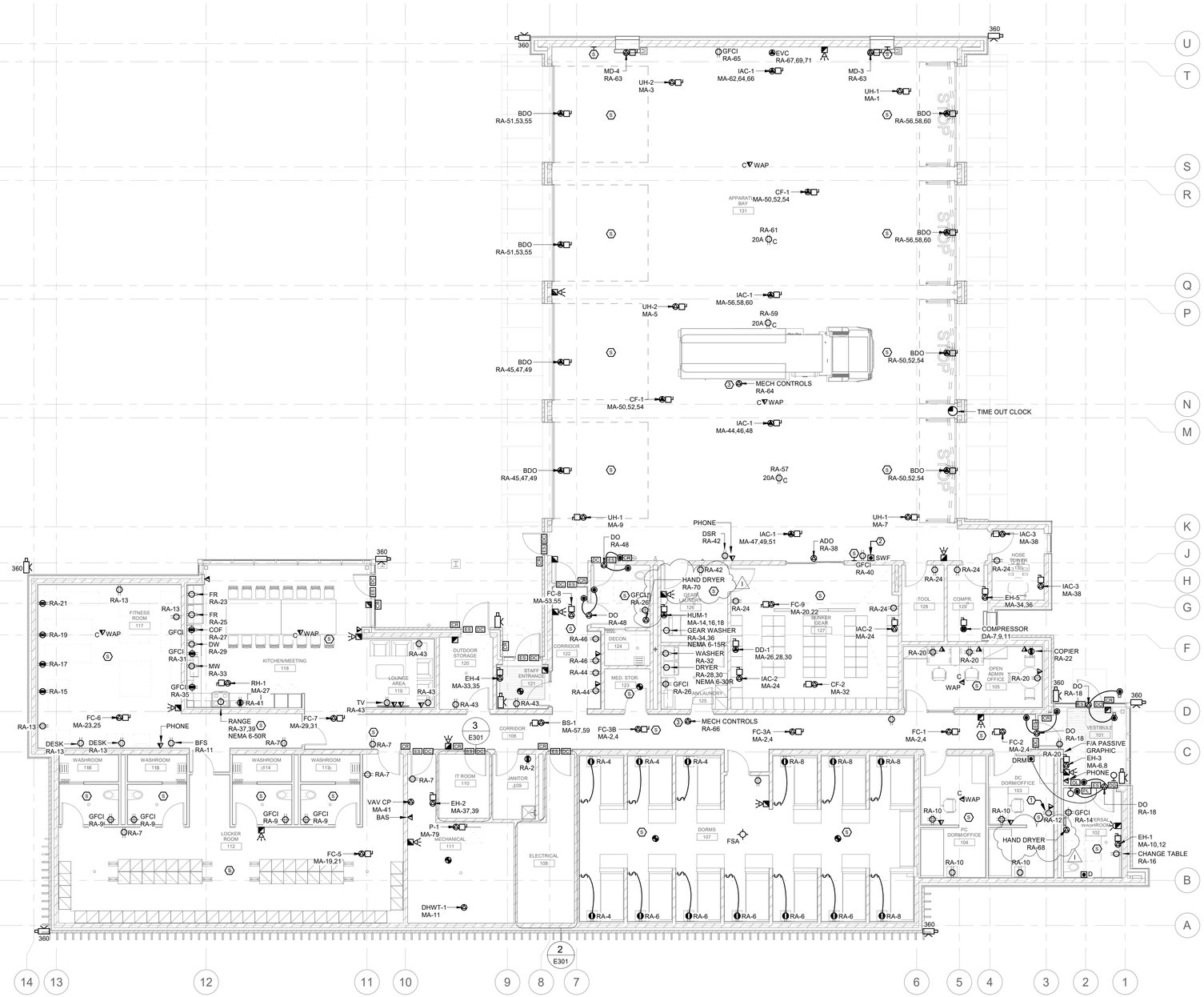
SCALE: 1 : 50

GENERAL NOTES:

1. ALL RECEPTACLES AND COMMUNICATION OUTLET BOXES TO BE INSTALLED UNDER DESKS ARE TO BE MOUNTED 775mm ABOVE FINISHED FLOOR AS PER CITY OF BRAMPTON IT SPECIFICATION'S APPENDIX C (SECTION 27 00 00).
2. PROVIDE A NEMA 5-15 RECEPTACLE FED FROM PANEL RP-RA (CCT. #62) AND PROTECTED BY A 15A 1P DEDICATED BREAKER TO BE LOCATED ADJACENT TO RADIO EQUIPMENT CABINET. CONFIRM EXACT LOCATION OF CABINET WITH SIGNALLING CONTRACTOR PRIOR TO INSTALLATION.
3. PROVIDE 1 -2" CONDUIT FROM ELECTRICAL ROOM TO ROOF FOR FUTURE SOLAR PANEL ARRAY. CONFIRM EXACT TERMINATION POINTS OF CONDUIT ON SITE.

KEYNOTES:

1. RECEPTACLE TO BE USED FOR WALL MOUNTED DISPLAY THAT MONITORS CCTV CAMERA LOCATED IN VESTIBULE 101. CONFIRM EXACT LOCATION ON SITE.
2. PROVIDE ONE (1) 53mm CONDUIT FROM "STOP WHEN FLASHING" PUSH BUTTON TO RADIO ANTENNA LOCATED ON ROOF OF HOSE TOWER 130. CONFIRM EXACT LOCATION WITH SIGNALLING CONTRACTOR PRIOR TO INSTALLATION.
3. PROVIDE JUNCTION BOX FOR MECHANCIAL CONTROLS TO BE MOUNTED IN CEILING SPACE AS SHOWN. CONFIRM EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.



1 LEVEL 1 PLAN - POWER & SYSTEMS

SCALE: 1 : 100

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

No.	Revision	Date
I	ADDENDUM E01	2021-10-20
H	ISSUED FOR TENDER	2021-08-12
G	ISSUED FOR BUILDING PERMIT	2021-07-27
F	90% CD	2021-05-03
E	SPA	2021-02-12
D	50% CD	2021-02-05
C	BUILDING PERMIT	2021-02-05
B	PERMIT/SPA COORDINATION	2021-02-02
A	100% DESIGN DEVELOPMENT	2021-01-19

Orientation

Seal

The specifications are to be considered as an integral part of these drawings and neither the drawings nor the specifications shall be used alone. Refer to architectural drawings for dimensions. Do not scale.

QUASAR CONSULTING GROUP
250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARCG.COM

Project Information

BFES Station 201
(SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

For

City of Brampton Fire & Emergency Services

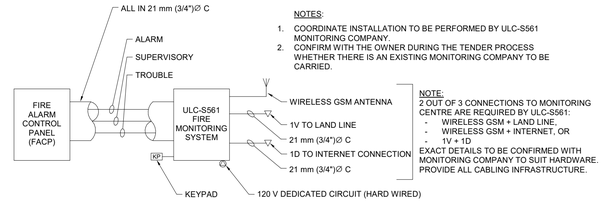
Drawing Title

LEVEL 1 PLAN - POWER & SYSTEMS

Date	Project No	Drawing No
2021-10-20	CM-20-063	E301
Drawn by: DTH		
Scale: As indicated		

FIRE ALARM ZONE AND SUPERVISORY ZONE SCHEDULE

	SD - SMOKE DETECTOR DSD - DUCT SMOKE DETECTOR HD - HEAT DETECTOR		MPS - MANUAL PULL STATION FS - FLOW SWITCH SV -SUPERVISED VALVE		PS - PRESSURE SWITCH						FAZ - ALARM FSZ-SUPERVISORY FAR - RELAY
ZONE (2012 OBC 3.2.4.9)	DESCRIPTION	ALARM	ANNUNCIATOR A - ALARM S - SUPERVISORY R - RELAY OUTPUT	FA DEVICES							REMARKS
				SD	DSD	HD	MPS	FS	SV	PS	
	POWER ON		GREEN								
	COMMON TROUBLE		YELLOW								
FAZ-1	SECTION 01		A	X			X				
FAZ-2	SECTION 02		A				X				
FAZ-3	FS-1 - SECTION 1 FLOW SWITCH		A					X			
FAZ- 4 TO X	SPARE ALARM ZONES										
FSZ-1	SV-1 - SPRINKLER DOUBLE CHECK ISOLATION		S						X		
FSZ-2	SV-2 - SPRINKLER DOUBLE CHECK ISOLATION		S						X		
FSZ-3	SV-3 - EXCESS PRESSURE PUMP CONTROL VALVE		S						X		
FSZ-4	SV-4 - CHECK ISOLATION		S						X		
FSZ-5	SV-5 - EXCESS PRESSURE PUMP CONTROL VALVE		S						X		
FSZ-6	SV-6 - CHECK ISOLATION		S						X		
FSZ-7	SV-7 - GROUND CONTROL VALVE (WET ZONE 1)		S						X		
FSZ-8 TO X	SPARE SUPERVISORY ZONES										
FAR-1	MAKEUP AIR UNIT MAU-1, SHUTDOWN ON SPRINKLER FLOW		R								
FAR-2	DEDICATED OUTSIDE AIR SYSTEM DOAS-1, SHUTDOWN ON SPRINKLER FLOW		R								
FAR-3 TO X	SPARE OUTPUT RELAY ZONES										



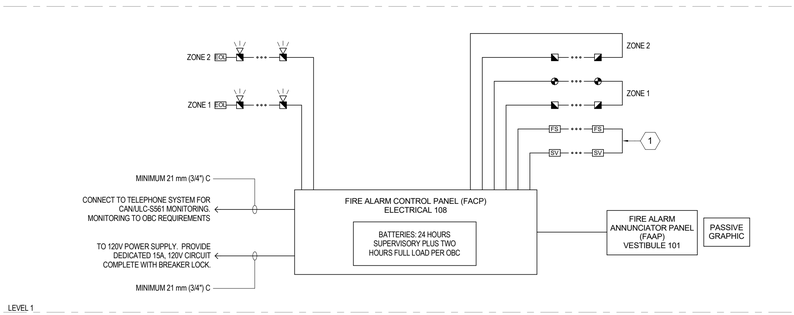
NOTES:
1. COORDINATE INSTALLATION TO BE PERFORMED BY ULC-S561 MONITORING COMPANY.
2. CONFIRM WITH THE OWNER DURING THE TENDER PROCESS WHETHER THERE IS AN EXISTING MONITORING COMPANY TO BE CARRIED.

NOTE:
2 OUT OF 3 CONNECTIONS TO MONITORING CENTRE ARE REQUIRED BY ULC-S561:
- WIRELESS GSM + LAND LINE,
- WIRELESS GSM + INTERNET, OR
- 1V + 1D

EXACT DETAILS TO BE CONFIRMED WITH MONITORING COMPANY TO SUIT HARDWARE. PROVIDE ALL CABLING INFRASTRUCTURE.

3 FIRE ALARM INTERFACE TO ULC-S561 MONITORING

SCALE: N.T.S.



DETAIL GENERAL NOTES :

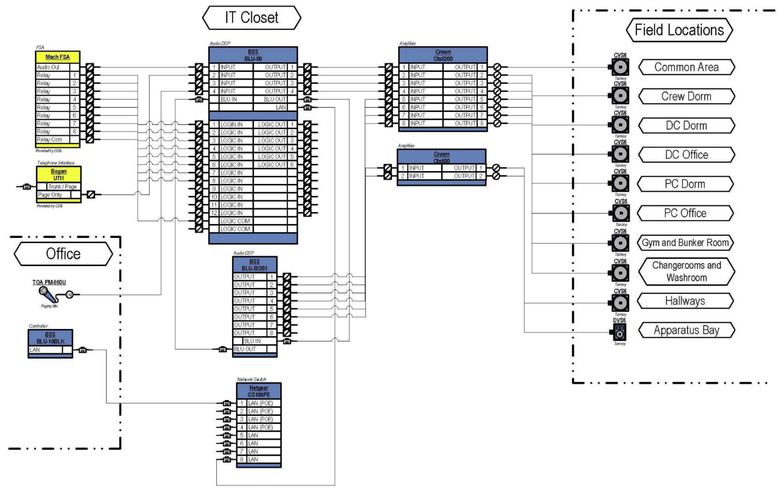
1. THIS RISER IS DIAGRAMMATIC ONLY AND DOES NOT SHOW ALL DEVICES, COMPONENTS AND/OR CONNECTIONS. REFER TO FLOOR PLANS FOR LOCATION AND QUANTITY OF FIRE ALARM DEVICES.

DETAIL KEYNOTES :

1 TYPICAL FLOW SWITCH AND SUPERVISED VALVE LOOP. REFER TO MECHANICAL DRAWINGS FOR EXACT QUANTITY AND LOCATIONS OF DEVICES.

5 FIRE ALARM SCHEDULE

SCALE: N.T.S.



DETAIL NOTES:

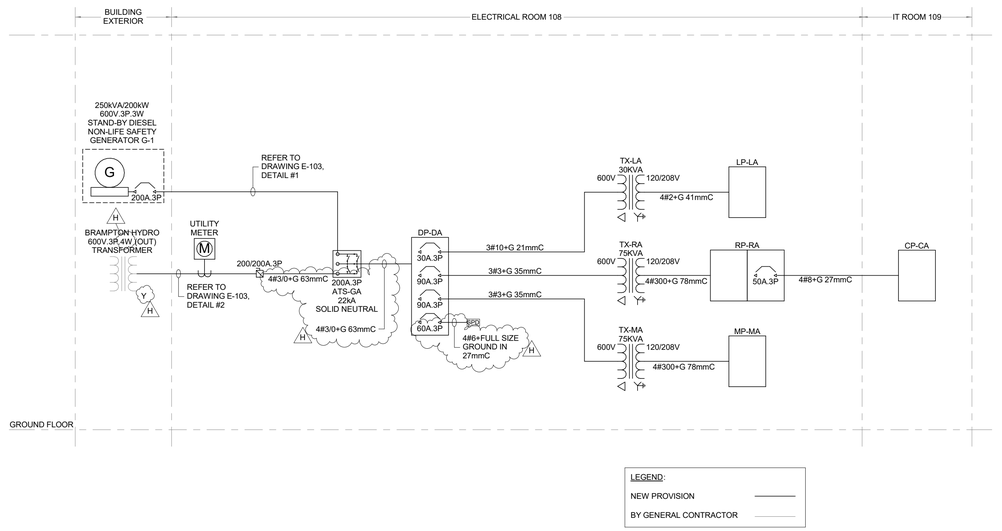
1. RISER DETAIL WAS PROVIDED BY UNDERWRITERS SECURITY CONTROLS INCORPORATED ON APRIL 8TH, 2021. COORDINATE ALL PA SYSTEM INSTALLATIONS WITH UNDERWRITERS PRIOR TO INSTALLATION.
2. ALL WIRING CONNECTIONS SHOWN WILL BE RUN IN 21mm EMT UNLESS OTHERWISE NOTED. REFER TO FLOOR PLANS FOR LOCATIONS. ELECTRICAL CONTRACTOR TO PROVIDE ROUGH-IN AND CONDUIT INFRASTRUCTURE, PA SYSTEM CONTRACTOR TO PROVIDE ALL WIRING, TERMINATIONS, AND HARDWARE EQUIPMENT.
3. ALL SPEAKER LOCATIONS ARE TO HAVE THEIR CONDUIT TERMINATE AT P/A RACK LOCATED IN IT ROOM 109.

4 PA SYSTEM RISER DIAGRAM - UNDERWRITERS

SCALE: N.T.S.

2 FIRE ALARM RISER DIAGRAM

SCALE: N.T.S.



LEGEND:
NEW PROVISION
BY GENERAL CONTRACTOR

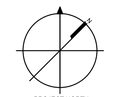
1 SINGLE LINE DISTRIBUTION DIAGRAM

SCALE: N.T.S.

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

No.	Revision	Date
H	ADDENDUM E01	2021-10-20
G	ISSUED FOR TENDER	2021-08-12
F	ISSUED FOR BUILDING PERMIT	2021-07-27
E	90% CD	2021-05-03
D	SPA	2021-02-12
C	50% CD	2021-02-05
B	BUILDING PERMIT	2021-02-05
A	PERMIT/SPA COORDINATION	2021-02-02

Orientation



Seal

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WEB: WWW.QUASARCG.COM

Project Information

BFES Station 201
(SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

For
City of Brampton Fire & Emergency Services

Drawing Title
ELECTRICAL DETAILS (1)

Date	Project No	Drawing No
2021-10-20	CM-20-063	E501
Drawn by: DTH		
Scale: As indicated		

LUMINAIRE SCHEDULE

FIXTURE TAG	DESCRIPTION	BASIS OF DESIGN MANUFACTURER AND CAT. NO.	VOLTAGE (V)	LAMP	WATTS (W)	COLOUR TEMPERATURE	LUMENS	CRI	DRIVER	MOUNTING
D1	4" ROUND SHOWER RATED DOWNLIGHT LUMINAIRE COMPLETE WITH STEEL HOUSING, NON-CONDUCTIVE SHOWER TRIM, WHITE FINISHED TRIM AND FLANGE	PRESCOLITE - LITEISTRY 4" ROUND NON-CONDUCTIVE SHOWER DOWNLIGHT - LTR-4RD (SH) LTR-4RD-H-SL15L-DM1-LTR-4RD-SHSL35K8-WTACL	120	LED	18	3500K	1500	> 80	0-10V DIMMABLE	RECESSED - CEILING
D2	4" ROUND DOWNLIGHT LUMINAIRE COMPLETE WITH STEEL HOUSING, MEDIUM LIGHT DISTRIBUTION, AND SPECULAR FINISHED TRIM, ACRYLIC CLEAR LENS	PRESCOLITE - LITEISTRY 4" ROUND DOWNLIGHT LTR-4RD LT4-4RD-H-SL10L-DM1-LTR-4RD-T-SL35K8MD-S	120	LED	12	3500K	1000	> 80	0-10V DIMMABLE	RECESSED - CEILING
D3	6" ROUND DOWNLIGHT LUMINAIRE COMPLETE WITH WET LOCATION RATED NEW CONSTRUCTION HOUSING AND TRIM, SPECULAR REFLECTOR, AND MEDIUM BEAM DISTRIBUTION.	PRESCOLITE - LITEISTRY 6" ROUND DOWNLIGHT LTR-6RD-H-ML20L-DM1-LTR-6RD-ML40K8MD-S	120	LED	23	4000K	2000	> 80	0-10V DIMMABLE	RECESSED - CANOPY, OUTDOOR
L1	4'(L) x 5"(W) x 2.5"(H) DIRECT PENDANT LUMINAIRE COMPLETE WITH SNAP-IN FROSTED ACRYLIC LENS, STEEL HOUSING THAT IS SUITABLE FOR DAMP LOCATIONS, WHITE FINISH, AND AIRCRAFT CABLE SUSPENSION SYSTEM. LUMINAIRE TO BE MOUNTED AT 5200mm AFF.	PEERLES ELECTRIC - EVALUX SERIES, WRE WRE-4-40W-40K-MV3	120	LED	40	4000K	5,000	> 80	0-10V DIMMABLE	SUSPENDED
L2	4'(L) x 3.74"(W) x 3.15"(H) LINEAR DIRECT LED LUMINAIRE COMPLETE WITH ALUMINUM HOUSING, SNAP-IN FROSTED ACRYLIC LENS AND WHITE FINISH.	PEERLESS ELECTRIC - ARCLUX SERIES, LDXR LDXR-95-4-TD-100-35K-FA-MV	120	LED	33	3500K	1000/FT	> 80	0-10V DIMMABLE	RECESSED - TRIM, DRYWALL
L3	4'(L) x 2'(W) x 3"(H) TROFFER INDIRECT/DIRECT LUMINAIRE COMPLETE WITH FROSTED ACRYLIC LENS, STEEL HOUSING, AND WHITE FINISH.	PEERLESS ELECTRIC - PEERLUX SERIES, SLD-3x-1ACF SDL-3-1ACF-24G-48-35K-MV	120	LED	37	3500K	4800	> 80	0-10V DIMMABLE	RECESSED - T-BAR
L4	UNDERCABINET LINEAR DIRECT LUMINAIRE COMPLETE WITH ALUMINUM LOW PROFILE HOUSING, WHITE FINISH, AND POLYCARBONATE LENS. EXACT LENGTH OF FIXTURE TO BE CONTINUOUS WITH NO BREAKS ACROSS MILLWORK AS SHOWN ON DRAWINGS.	COLUMBIA LIGHTING - CUC UNDERCABINET CUC4-CS-ED120	120	LED	24	3500K	1666	> 80	0-10V DIMMABLE	SURFACE - UNDERCABINET
L5	4'(L) x 2.8"(W) x 3.75"(H) LINEAR NARROW STRIP LUMINAIRE COMPLETE WITH ROUNDED FROSTED ACRYLIC LENS, STEEL HOUSING, AND WHITE FINISH.	PEERLESS ELECTRIC - PEERLUX SERIES, NSL-RA NSL-RA-4-46-35K-W-A4-MV	120	LED	33	3500K	4600	> 80	0-10V DIMMABLE	SURFACE - CEILING
P1	OUTLDOOR POLE LUMINAIRE COMPLETE WITH CORROSION RESISTANT ALUMINUM HOUSING, TYPE 4W LIGHT DISTRIBUTION WITH ZERO UPLIGHT, ACRYLIC LENS, BLACK MATTE FINISH, AND 7-PIN RECEPTACLE WITH PHOTO CONTROL. FIXTURE HEAD TO BE MOUNTED AT 6m.	HUBBELL OUTDOOR LIGHTING - AIRO MICRO STRIKE ASL1-160L-115-4K7-4W-UNV-ASQU-7PR-TL-BLT REFER TO SPECIFICATION 26 56 13.00 FOR POLE	120	LED	109	4000K	15,000	> 70	0-10V DIMMABLE	POLE - ARM SQUARE, UNIVERSAL MOUNT
P1A	OUTLDOOR POLE LUMINAIRE COMPLETE WITH CORROSION RESISTANT ALUMINUM HOUSING, TYPE 4W LIGHT DISTRIBUTION WITH ZERO UPLIGHT, ACRYLIC LENS, BLACK MATTE FINISH, AND 7-PIN RECEPTACLE WITH PHOTO CONTROL. FIXTURE HEAD TO BE MOUNTED AT 6m.	HUBBELL OUTDOOR LIGHTING - AIRO MICRO STRIKE ASL1-80L-25-4K7-4W-UNV-ASQU-7PR-TL-BLT (FIXTURE) REFER TO SPECIFICATION 26 56 13.00 FOR POLE	120	LED	25	4000K	3,000	> 70	0-10V DIMMABLE	POLE - ARM SQUARE, UNIVERSAL MOUNT
W1	WALL PACK DOWNLIGHT DIRECT LUMINAIRE COMPLETE WITH ALUMINUM TRAPEZOID-SHAPED WET LOCATION RATED HOUSING, TYPE-IV LIGHT DISTRIBUTION, BLACK MATTE FINISH, AND PHOTOCONTROLLER. FIXTURE TO BE MOUNTED AT 4.5m.	HUBBELL OUTDOOR LIGHTING - GEOPAK SERIES 1 TRP1-12L-30-4K7-4-UNV-BLT-PC	120	LED	30	4000K	2789	> 70	0-10V DIMMABLE	SURFACE - WALL

NOTES:
1. SUBSTITUTE MANUFACTURERS IN ACCORDANCE WITH SECTION 26 50 00.

D

EMERGENCY LIGHTING SCHEDULE

FIXTURE TAG	DESCRIPTION	BASIS OF DESIGN MANUFACTURER AND CAT. NO.	VOLTAGE (V)	LAMP	WATTS (W)	COLOUR TEMPERATURE	LUMENS	CRI	DRIVER	MOUNTING
X1	GREEN RUNNING-MAN EXIT SIGN	REFER TO SPECIFICATIONS SECTION 26 52 13.16	120	LED	3	N/A	N/A	N/A	N/A	RECESSED - CEILING
X2	GREEN RUNNING-MAN EXIT SIGN	REFER TO SPECIFICATIONS SECTION 26 52 13.16	120	LED	3	N/A	N/A	N/A	N/A	SURFACE - WALL
X3	DOUBLE-HEAD EMERGENCY REMOTE LUMINAIRE	REFER TO SPECIFICATIONS SECTION 26 52 13.13	120	LED	12	N/A	N/A	N/A	N/A	SURFACE - WALL
X4	SINGLE-HEAD EMERGENCY REMOTE LUMINAIRE	REFER TO SPECIFICATIONS SECTION 26 52 13.13	120	LED	6	N/A	N/A	N/A	N/A	SURFACE - WALL
XB	DOUBLE-HEAD EMERGENCY REMOTE LUMINAIRE COMPLETE WITH BATTERY PACK	REFER TO SPECIFICATIONS SECTION 26 52 13.13	120	LED	12	N/A	N/A	N/A	N/A	SURFACE - WALL

LIGHTING CONTROL DEVICE SCHEDULE

SYMBOL	DESCRIPTION	BASIS OF DESIGN MANUFACTURERS AND PRODUCT SERIES	CONTROL WIRING	VOLTAGE OUTPUT	MOUNTING	FITNESS	KITCHEN/ MEETING	OUTDOOR STORAGE	CORRIDOR/ VEST / STAFF ENTRANCE	DECON	MD STOR.	APPRATUS BAY	LUANDRY	WAHSROOM	LOCKER ROOM	SERVICE ROOMS	IT ROOM	JANITUR	TOOL/ COMPR./ HOSE TOWER	OFFICES	DORMS	BUNKER GEAR
$_{2}^{1}$	WALL SWITCH OCCUPANCY SENSOR, SINGLE ZONE CONTROL (ON/OFF), 120 VOLT, DUAL TECHNOLOGY SENSOR	ACUITY BRANDS CONTROLS/SENSOR SWITCH WSX-SERIES LEGRAND/WATTSTOPPER PW-301 SERIES LUTRON MAESTRO SERIES MS-OPS2 LEVITON EQUAL		120 V	WALL		X	X		X				X			X	X				
$_{3}^{1}$ 8B	EIGHT BUTTON WALL STATION.	ACUITY BRANDS CONTROLS/nLIGHT, nPODM SERIES LEGRAND/WATTSTOPPER LMSW-108 SERIES LEVITON LUTRON EQUAL	DIGITAL	120 V	WALL							X										
$_{2}^{1}$ DIM	DIMMING OCCUPANCY WALL SWITCH, 0-10 VOLT DIMMING CONTROL, 120 VOLT, PASSIVE INFRARED SENSOR	ACUITY BRANDS CONTROLS/SENSOR SWITCH WSX-D-SA SERIES LEGRAND/WATTSTOPPER PW-311 SERIES LEVITON OSD10-I0 SERIES LUTRON MAESTRO SERIES MS-Z101	0-10 V DIMMING	120 V	WALL								X							X		
$_{2}^{1}$	ONE BUTTON WALL STATION, ONE BUTTON ON-OFF TOGGLE.	ACUITY BRANDS CONTROLS/SENSOR SWITCH WSX-PDT SERIES LEGRAND/WATTSTOPPER DSW-301 SERIES LUTRON MAESTRO SERIES MS-A102 LEVITON EQUAL		120 V	WALL						X					X			X			
$_{2}^{1}$ DIM	DIMMING WALL STATION FOR ONE ZONE CONTROL, MULTI-BUTTON WALL INTERFACE CONTROL C/W ENGRAVED BUTTONS.	ACUITY BRANDS CONTROLS PODM-1SB SERIES LEGRAND/WATTSTOPPER LMSW-101 LUTRON EQUAL LEVITON EQUAL	DIGITAL	120 V	WALL	X	X															X
D1	CEILING MOUNTED OCCUPANCY SENSOR, NETWORKED, DUAL TECHNOLOGY SENSOR, 12 FOOT, 360 DEGREE COVERAGE PATTERN	ACUITY BRANDS CONTROLS NPODM SERIES LEGRAND/WATTSTOPPER EQUAL LUTRON EQUAL LEVITON EQUAL	DIGITAL	120 V	WALL	X			X						X						X	X
BT	WALL MOUNT DUAL TECHNOLOGY SENSOR, NETWORKED	ACUITY BRANDS CONTROLS/nLIGHT, nPODM SERIES LEGRAND/WATTSTOPPER LMSW-108 SERIES LEVITON LUTRON EQUAL	DIGITAL	120 V	WALL							X										
BT LR	WALL MOUNT DUAL TECHNOLOGY SENSOR, NETWORKED, COMPLETE WITH LONG RANGE LENS	ACUITY BRANDS CONTROLS CM-PDT-9-RJB SERIES LEGRAND/WATTSTOPPER EQUAL LUTRON EQUAL LEVITON EQUAL	DIGITAL	120 V	CEILING							X										
$_{2}^{3}$	WALL SWITCH OCCUPANCY SENSOR, SINGLE ZONE CONTROL (ON/OFF), SWITCH 3-WAY, 120 VOLT, PASSIVE INFRARED SENSOR	LEGRAND/WATTSTOPPER LMDX-100 SERIES ACUITY EQUAL LUTRON EQUAL LEVITON EQUAL	DIGITAL	120 V	WALL								X		X						X	

LIGHTING CONTROLS SCHEDULE NOTES:
1. LIGHTING CONTROLS OF ONE MANUFACTURER THROUGH PROJECT TO ENSURE PRODUCT COMPATIBILITY.
2. DUAL TECHNOLOGY SENSORS: PASSIVE INFRARED/ULTRASONIC, OR PASSIVE INFRARED/MICROPHONIC, DEPENDING ON MANUFACTURER. MICROPHONIC SENSORS ACCEPTABLE IN LIEU OF ULTRASONIC.
3. POSITION CEILING MOUNTED OCCUPANCY SENSORS A MINIMUM 1200 mm (4'-0") FROM NEAREST AIR DIFFUSER, HVAC OUTLETS, HEATING BLOWERS, ETC.
4. CONFIRM INSTALLATION REQUIREMENTS, WIRING DIAGRAMS, ETC. WITH MANUFACTURER'S DETAILS.
5. SUBMIT SHOP DRAWINGS FOR CONSULTANT'S REVIEW PRIOR TO PLACING ANY ORDER.
6. CONFIRM FINISH COLOUR WITH CONSULTANT DURING SUBMITTAL REVIEW.

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

No.	Revision	Date
D	ADDENDUM E01	2021-10-20
C	ISSUED FOR TENDER	2021-08-12
B	ISSUED FOR BUILDING PERMIT	2021-07-27
A	90% CD	2021-05-03

Orientation

Seal

QUASAR CONSULTING GROUP
250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
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WEB: WWW.QUASARCG.COM

Project Information

BFES Station 201
(SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

For
City of Brampton Fire & Emergency Services

Drawing Title
ELECTRICAL SCHEDULES (1)

Date	Project No	Drawing No
2021-10-20	CM-20-063	E601
Drawn by DTH		
Scale 1 : 1		

Branch Panel: MP-MA

Location: ELECTRICAL 108
Supply From: TX-MA
Mounting: SURFACE
Enclosure: SPRINKLERPROOF

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10kA
Mains Type: Cu
Mains Rating: 225 A
MCB Rating: 1 A

Notes:
60 CIRCUIT DOUBLE-TUB PANEL (TOTAL 120 CIRCUITS).

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
MA-1	UH-1	15 A	1	510 VA			300 VA			2	15 A	FC-1, FC-2, FC-3A, FC-3B	MA-2
MA-3	UH-2	15 A	1		510 VA			300 VA					MA-4
MA-5	UH-2	15 A	1			510 VA			1000 VA	2	15 A	EH-3	MA-6
MA-7	UH-1	15 A	1	510 VA			1000 VA						MA-8
MA-9	UH-1	15 A	1		510 VA			500 VA		2	15 A	EH-1	MA-10
MA-11	DHWT-1	15 A	1			360 VA			500 VA				MA-12
MA-13	MAU-1B (CONDENSER UNIT)	20 A	2	1165 VA			4000 VA			3	60 A	HUM-1	MA-14
MA-15					1165 VA			4000 VA					MA-16
MA-17	MAU-1A	30 A	1			2330 VA			4000 VA				MA-18
MA-19	FC-5	15 A	2	167 VA			145 VA			2	15 A	FC-9	MA-20
MA-21					167 VA			145 VA					MA-22
MA-23	FC-6	15 A	2			185 VA			1160 VA	1	15 A	IAC-2 (2)	MA-24
MA-25				185 VA			3973 VA						MA-26
MA-27	RH-1	15 A	1		540 VA			3973 VA		3	60 A	DD-1	MA-28
MA-29	FC-7	15 A	2			260 VA			3973 VA				MA-30
MA-31				260 VA			180 VA			1	15 A	CF-2	MA-32
MA-33	EH-4	15 A	2		1000 VA			1000 VA		2	15 A	EH-5	MA-34
MA-35						1000 VA			1000 VA				MA-36
MA-37	EH-2	15 A	2	500 VA			580 VA			1	15 A	IAC-3 (2)	MA-38
MA-39					500 VA			400 VA		1	20 A	NEMA 5-20 MAINTENANCE RECEPTACLE	MA-40
MA-41	VAV CONTROL PANEL	15 A	1			250 VA			560 VA	1	15 A	EF-5	MA-42
MA-43	FC-4	20 A	2	1415 VA			900 VA			3	15 A	IAC-1	MA-44
MA-45					1415 VA			900 VA					MA-46
MA-47	IAC-1	15 A	3			900 VA			900 VA				MA-48
MA-49				900 VA			507 VA						MA-50
MA-51					900 VA			507 VA		3	15 A	CF-1 (2)	MA-52
MA-53	FC-8	15 A	2			85 VA			507 VA				MA-54
MA-55				85 VA			900 VA						MA-56
MA-57	BS-1	15 A	2		40 VA			900 VA		3	15 A	IAC-1	MA-58
MA-59						40 VA			900 VA				MA-60
MA-61	EF-3	15 A	1	370 VA			900 VA						MA-62
MA-63	EF-2	15 A	1		400 VA			900 VA		3	15 A	IAC-1	MA-64
MA-65	NEMA 5-20 MAINTENANCE RECEPTACLE	20 A	1			400 VA			900 VA				MA-66
MA-67	CU-2	15 A	3	720 VA			0 VA			1	15 A	SPARE	MA-68
MA-69					720 VA			0 VA		1	15 A	SPARE	MA-70
MA-71						720 VA			0 VA	1	15 A	SPARE	MA-72
MA-73	EF-4	20 A	3	1370 VA			0 VA			--	--	SPACE	MA-74
MA-75					1370 VA			0 VA		--	--	SPACE	MA-76
MA-77						1370 VA			0 VA	--	--	SPACE	MA-78
MA-79	P-1	15 A	1	70 VA			0 VA			--	--	SPACE	MA-80
MA-81	SPARE	15 A	1		0 VA			0 VA		--	--	SPACE	MA-82
MA-83	SPARE	15 A	1			0 VA			0 VA	--	--	SPACE	MA-84
MA-85	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-86
MA-87	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-88
MA-89	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-90
MA-91	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-92
MA-93	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-94
MA-95	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-96
MA-97	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-98
MA-99	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-100
MA-101	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-102
MA-103	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-104
MA-105	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-106
MA-107	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-108
MA-109	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-110
MA-111	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-112
MA-113	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-114
MA-115	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-116
MA-117	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-118
MA-119	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-120
		Total Load:		21612 VA			22762 VA			23810 VA			
		Total Amps:		180 A			191 A			200 A			

Legend:

Panel Totals	
Total Conn. Load:	68184 VA
Total Est. Demand:	68184 VA
Total Conn.:	189 A
Total Est. Demand:	189 A

Notes:

Branch Panel: RP-RA

Location: ELECTRICAL 108
Supply From: TX-RA
Mounting: SURFACE
Enclosure: SPRINKLERPROOF

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10kA
Mains Type: Cu
Mains Rating: 225 A
MCB Rating: 1 A

Notes:
60 CIRCUIT DOUBLE-TUB PANEL (TOTAL 120 CIRCUITS).

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
RA-1	FIRE ALARM PANEL	20 A	1	500 VA			400 VA			1	20 A	RECEPTACLE - NEMA 5-20	RA-2
RA-3	FIRE ALARM PANEL	20 A	1		500 VA			720 VA		1	15 A	RECEPTACLES	RA-4
RA-5	RECEPTACLES	15 A	1			800 VA			900 VA	1	15 A	RECEPTACLES	RA-6
RA-7	RECEPTACLES	15 A	1	1000 VA			720 VA			1	15 A	RECEPTACLES	RA-8
RA-9	GFCI RECEPTACLES	15 A	1		800 VA			1200 VA		1	15 A	RECEPTACLES	RA-10
RA-11	BFS RECEPTACLE	15 A	1			400 VA			350 VA	1	15 A	SECURITY MONITOR RECEPTACLE	RA-12
RA-13	RECEPTACLES	15 A	1	1000 VA			200 VA			1	15 A	GFCI RECEPTACLE	RA-14
RA-15	RECEPTACLE - NEMA 5-20	20 A	1		500 VA			500 VA		1	15 A	CHANGE TABLE RECEPTACLE	RA-16
RA-17	RECEPTACLE - NEMA 5-20	20 A	1			500 VA			1200 VA	1	15 A	DOOR OPERATORS (3)	RA-18
RA-19	RECEPTACLE - NEMA 5-20	20 A	1	500 VA			1200 VA			1	15 A	RECEPTACLES	RA-20
RA-21	RECEPTACLE - NEMA 5-20	20 A	1		500 VA			1200 VA		1	20 A	COPIER RECEPTACLE, NEMA 5-20	RA-22
RA-23	FRIDGE	15 A	1			1000 VA			1000 VA	1	15 A	RECEPTACLES	RA-24
RA-25	FRIDGE	15 A	1	1000 VA			400 VA			1	15 A	GFCI RECEPTACLES	RA-26
RA-27	COFFEE	20 A	1		1000 VA			1000 VA		2	15 A	DRYER - NEMA 6-30R	RA-28
RA-29	DISHWASHER	15 A	1			1000 VA			1000 VA				RA-30
RA-31	RECEPTACLE - NEMA 5-20	20 A	1	200 VA			1000 VA			1	15 A	WASHER	RA-32
RA-33	MICROWAVE	15 A	1		1000 VA			1000 VA		2	15 A	GEAR WASHER - NEMA 6-15R	RA-34
RA-35	RECEPTACLE - NEMA 5-20	20 A	1			200 VA			1000 VA				RA-36
RA-37	RANGE (NEMA 6-50R, 2#8+G)	50 A	2	1000 VA			500 VA			1	15 A	DOOR OPERATOR	RA-38
RA-39					1000 VA			200 VA		1	15 A	GFCI RECEPTACLE	RA-40
RA-41	RECEPTACLE - NEMA 5-20R	20 A	1			200 VA			400 VA	1	15 A	RECEPTACLES, DSR	RA-42
RA-43	TV, RECEPTACLES	15 A	1	1200 VA			400 VA			1	15 A	RECEPTACLES	RA-44
RA-45	BAY DOOR OPERATOR (2)	15 A	3		373 VA			400 VA		1	15 A	RECEPTACLES	RA-46
RA-47				373 VA		373 VA			1000 VA	1	15 A	DOOR OPERATORS (2)	RA-48
RA-49					373 VA			373 VA					RA-50
RA-51	BAY DOOR OPERATOR (2)	15 A	3			373 VA			373 VA	3	15 A	BAY DOOR OPERATOR (2)	RA-52
RA-53				373 VA			373 VA						RA-54
RA-55					373 VA			373 VA					RA-56
RA-57	NEMA 5-20R, CEILING MOUNTED	20 A	1		1000 VA			373 VA		3	15 A	BAY DOOR OPERATOR (2)	RA-58
RA-59	NEMA 5-20R, CEILING MOUNTED	20 A	1			1000 VA			373 VA				RA-60
RA-61	NEMA 5-20R, CEILING MOUNTED	20 A	1	1000 VA			400 VA			1	15 A	RADIO EQUIPMENT CABINET	RA-62
RA-63	MOTORIZED DAMPER, MD-3, MD-4	15 A	1		200 VA			500 VA		1	15 A	MECHANICAL CONTROLS	RA-64
RA-65	GFCI RECEPTACLE	15 A	1			200 VA			500 VA	1	15 A	MECHANICAL CONTROLS	RA-66
RA-67	EV CHARGING STATION (3#3+G, 35mmC)	90 A	3	8333 VA			500 VA			1	20 A	HAND DRYER UNIV WR 102 (GFI)	RA-68
RA-69					8333 VA			500 VA		1	20 A	HAND DRYER DECON 124 (GFI)	RA-70
RA-71						8333 VA			0 VA	--	--	SPACE	RA-72
RA-73	EXTERIOR EV CHARGING STATION (2#8+G)	40 A	2	3120 VA			0 VA			--	--	SPACE	RA-74
RA-75					3120 VA			0 VA		--	--	SPACE	RA-76
RA-77	EXTERIOR EV CHARGING STATION (2#8+G)	40 A	2	3120 VA			0 VA			--	--	SPACE	RA-78
RA-79						3120 VA			0 VA	--	--	SPACE	RA-80
RA-81	SPARE	15 A	1		0 VA			0 VA		--	--	SPACE	RA-82
RA-83	SPARE	15 A	1			0 VA			0 VA	--	--	SPACE	RA-84
RA-85	SPARE	15 A	1	0 VA			0 VA			--	--	SPACE	RA-86
RA-87	SPARE	15 A	1		0 VA			0 VA		--	--	SPACE	RA-88
RA-89	SPARE	15 A	1			0 VA			0 VA	--	--	SPACE	RA-90
RA-91	SPARE	15 A	1	0 VA			0 VA			--	--	SPACE	RA-92
RA-93	SPARE	15 A	1		0 VA			0 VA		--	--	SPACE	RA-94
RA-95	SPARE	20 A	1			0 VA			0 VA	--	--	SPACE	RA-96
RA-97	SPARE	20 A	1	0 VA			0 VA			--	--	SPACE	RA-98
RA-99	SPARE	20 A	1		0 VA			0 VA		--	--	SPACE	RA-100
RA-101	SPACE	--	--			0 VA			0 VA	--	--	SPACE	RA-102
RA-103	SPACE	--	--	0 VA			0 VA			--	--	SPACE	RA-104
RA-105	SPACE	--	--		0 VA			0 VA		--	--	SPACE	RA-106
RA-107	SPACE	--	--			0 VA			0 VA	--	--	SPACE	RA-108
RA-109	SPACE	--	--	0 VA			0 VA			--	--	SPACE	RA-110
RA-111	SPACE	--	--		0 VA			0 VA		--	--	SPACE	RA-112
RA-113	SPACE	--	--			0 VA			0 VA	--	--	SPACE	RA-114
RA-115	SPACE	--	--	0 VA			2800 VA						RA-116
RA-117	SPACE	--	--		0 VA			900 VA		3	50 A	CP-CA	RA-118
RA-119	SPACE	--	--			0 VA			2400 VA				RA-120
		Total Load:		31987 VA			27567 VA			27997 VA			
		Total Amps:		267 A			230 A			234 A			

Legend:

Panel Totals	
Total Conn. Load:	87550 VA
Total Est. Demand:	74405 VA
Total Conn.:	243 A
Total Est. Demand:	207 A

Notes:

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

No.	Revision	Date
B	ADDENDUM E01	2021-10-20
A	ISSUED FOR TENDER	2021-08-12

Orientation

PROJECT NORTH

Seal

QUASAR CONSULTING GROUP

250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARCG.COM

Project Information

BFES Station 201
(SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

For
City of Brampton Fire & Emergency Services

Drawing Title
ELECTRICAL SCHEDULES (3)

Date	Project No	Drawing No
2021-10-20	CM-20-063	E603
Drawn by: DTH		
Scale		

BIM 360://20019 - BFES Station 201/CM-20-063 - QCG ME Model_R20.rvt
2021-10-20 3:47:29 PM

Project Name:	City of Brampton Fire Station 201	**Date Issued:**	October 26, 2021
Quasar Project #:	CM-21-083		
Client Project #:	20019		

Distribution

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Addendum #:	E02
Revision #:	0

This Addendum forms part of the Contract Specifications and Drawings, and modifies the Bidding Documents, with Amendments and Additions noted below. This Addendum shall be added to the front of the specifications as issued. Bidders shall acknowledge receipt of this Addendum in the space provided in the Bid Form and include in bid amount.

This addendum includes modifications to the drawings as summarized below. Unless otherwise noted, all drawings listed below are attached herewith.

Revisions to Specifications:

1. **Section 26 32 13.13 – Diesel-Engine-Driven Generator Sets**

    a. Paragraph 2.11.1.6: Revise paragraph as noted. Deletions noted by strikethrough and insertions noted by underline:

    .6 Accessories to be fed from a panelboard pre-installed within the generator enclosure, rated ~~100~~ 60 A 120/208V, ~~3~~1-Ph, ~~4W~~3W, 10 kA IC, c/w main breaker, and c/w full size, bolt-on breakers, installed with vibration isolation from the generator enclosure.

Revisions to Drawings:

2. **Detail 1/E501 – Single Line Distribution Diagram**

    a. Add note: “Provide 2#18 AWG stranded from ATS “Start/stop” signal to Generator G-1.

    b. Add Generator Accessory Panel (Integral with Generator Enclosure. 120/208 V 1-Ph 3W.

    c. Add 60A/2P breaker on panel RP-RA.

    d. Add new feeder, 3#4 AWG + Gnd in 53 mm (2”) C from the aforementioned 60A/2P breaker to the Generator Accessory Panel.

    e. Add 200A/3P load bank breaker c/w shunt trip and lugs for connecting mobile load bank. Add note to provide 2#18 AWG stranded from breaker shunt trip to “on emergency source” contacts on ATS-GA.

    f. Add note to single line diagram with respect to generator: “Provide all accessories required for a CSA C282 generator set.”

3. **Drawing E603 – Electrical Schedules (3)**

    a. Add one 60A/2P breaker on circuit RA-72/74 to feed generator accessory panel in generator enclosure.

Quasar Consulting Group

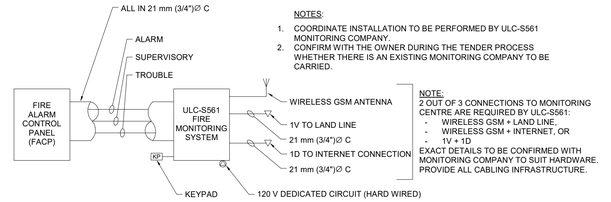
Christopher Borcsok

Christopher Borcsok, P.Eng., LC, LEED AP

Senior Project Engineer

FIRE ALARM ZONE AND SUPERVISORY ZONE SCHEDULE

	SD - SMOKE DETECTOR DSD - DUCT SMOKE DETECTOR HD - HEAT DETECTOR	MPS - MANUAL PULL STATION FS - FLOW SWITCH SV -SUPERVISED VALVE		PS - PRESSURE SWITCH							FAZ - ALARM FSZ-SUPERVISORY FAR - RELAY
ZONE (2012 OBC 3.2.4.9)	DESCRIPTION	ALARM	ANNUNCIATOR A - ALARM S - SUPERVISORY R - RELAY OUTPUT	FA DEVICES							REMARKS
				SD	DSD	HD	MPS	FS	SV	PS	
	POWER ON		GREEN								
	COMMON TROUBLE		YELLOW								
FAZ-1	SECTION 01		A	X			X				
FAZ-2	SECTION 02		A				X				
FAZ-3	FS-1 - SECTION 1 FLOW SWITCH		A					X			
FAZ- 4 TO X	SPARE ALARM ZONES										
FSZ-1	SV-1 - SPRINKLER DOUBLE CHECK ISOLATION		S						X		
FSZ-2	SV-2 - SPRINKLER DOUBLE CHECK ISOLATION		S						X		
FSZ-3	SV-3 - EXCESS PRESSURE PUMP CONTROL VALVE		S						X		
FSZ-4	SV-4 - CHECK ISOLATION		S						X		
FSZ-5	SV-5 - EXCESS PRESSURE PUMP CONTROL VALVE		S						X		
FSZ-6	SV-6 - CHECK ISOLATION		S						X		
FSZ-7	SV-7 - GROUND CONTROL VALVE (WET ZONE 1)		S						X		
FSZ-8 TO X	SPARE SUPERVISORY ZONES										
FAR-1	MAKEUP AIR UNIT MAU-1, SHUTDOWN ON SPRINKLER FLOW		R								
FAR-2	DEDICATED OUTSIDE AIR SYSTEM DOAS-1, SHUTDOWN ON SPRINKLER FLOW		R								
FAR-3 TO X	SPARE OUTPUT RELAY ZONES										



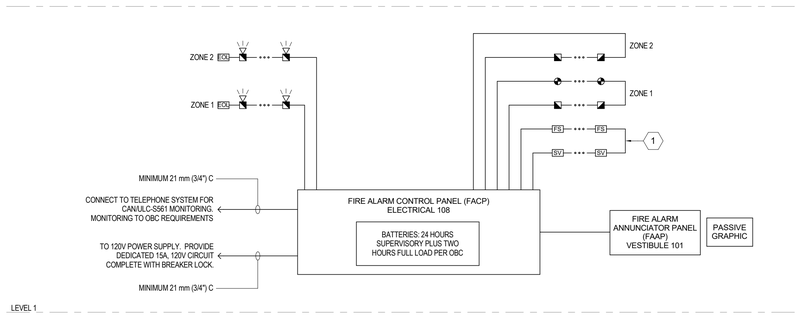
NOTES:
1. COORDINATE INSTALLATION TO BE PERFORMED BY ULC-S561 MONITORING COMPANY.
2. CONFIRM WITH THE OWNER DURING THE TENDER PROCESS WHETHER THERE IS AN EXISTING MONITORING COMPANY TO BE CARRIED.

NOTE:
2 OUT OF 3 CONNECTIONS TO MONITORING CENTRE ARE REQUIRED BY ULC-S561:
- WIRELESS GSM + LAND LINE,
- WIRELESS GSM + INTERNET, OR
- 1V + 1D

EXACT DETAILS TO BE CONFIRMED WITH MONITORING COMPANY TO SUIT HARDWARE. PROVIDE ALL CABLING INFRASTRUCTURE.

3 FIRE ALARM INTERFACE TO ULC-S561 MONITORING

SCALE: N.T.S.



DETAIL GENERAL NOTES :

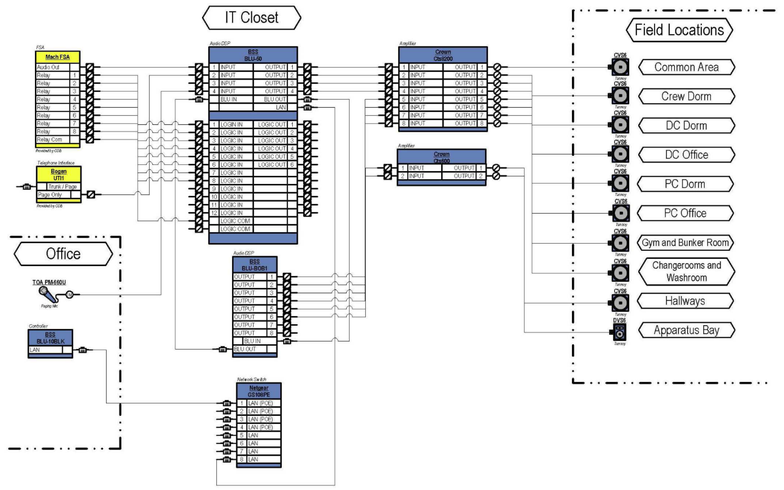
1. THIS RISER IS DIAGRAMMATIC ONLY AND DOES NOT SHOW ALL DEVICES, COMPONENTS AND/OR CONNECTIONS. REFER TO FLOOR PLANS FOR LOCATION AND QUANTITY OF FIRE ALARM DEVICES.

DETAIL KEYNOTES :

1 TYPICAL FLOW SWITCH AND SUPERVISED VALVE LOOP. REFER TO MECHANICAL DRAWINGS FOR EXACT QUANTITY AND LOCATIONS OF DEVICES.

5 FIRE ALARM SCHEDULE

SCALE: N.T.S.



DETAIL NOTES:

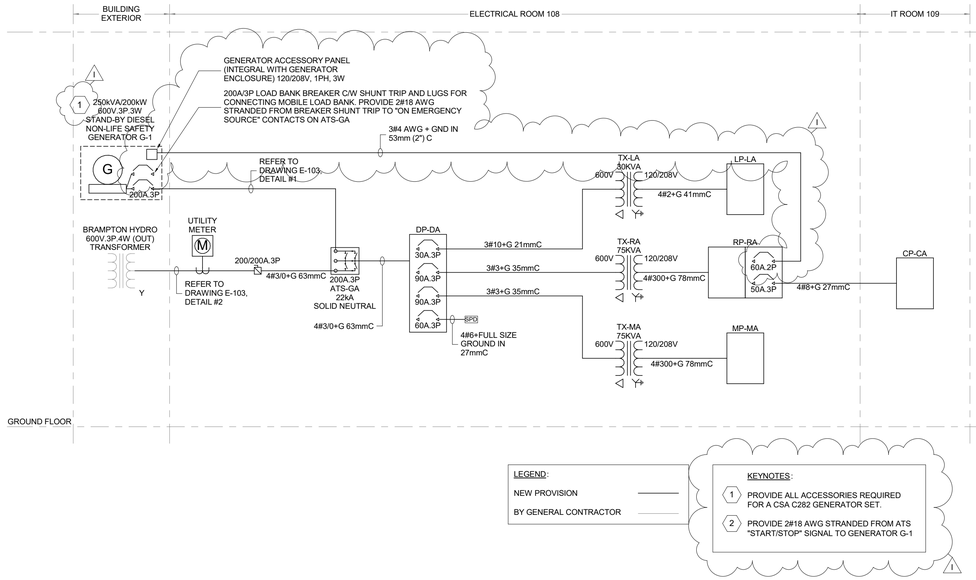
1. RISER DETAIL WAS PROVIDED BY UNDERWRITERS SECURITY CONTROLS INCORPORATED ON APRIL 8TH, 2021. COORDINATE ALL PA SYSTEM INSTALLATIONS WITH UNDERWRITERS PRIOR TO INSTALLATION.
2. ALL WIRING CONNECTIONS SHOWN WILL BE RUN IN 21mm EMT UNLESS OTHERWISE NOTED. REFER TO FLOOR PLANS FOR LOCATIONS. ELECTRICAL CONTRACTOR TO PROVIDE ROUGH-IN AND CONDUIT INFRASTRUCTURE, PA SYSTEM CONTRACTOR TO PROVIDE ALL WIRING, TERMINATIONS, AND HARDWARE EQUIPMENT.
3. ALL SPEAKER LOCATIONS ARE TO HAVE THEIR CONDUIT TERMINATE AT P/A RACK LOCATED IN IT ROOM 109.

4 PA SYSTEM RISER DIAGRAM - UNDERWRITERS

SCALE: N.T.S.

2 FIRE ALARM RISER DIAGRAM

SCALE: N.T.S.



LEGEND:
NEW PROVISION
BY GENERAL CONTRACTOR

KEYNOTES:
1. PROVIDE ALL ACCESSORIES REQUIRED FOR A CSA C282 GENERATOR SET.
2. PROVIDE 2#18 AWG STRANDED FROM ATS "START/STOP" SIGNAL TO GENERATOR G-1

1 SINGLE LINE DISTRIBUTION DIAGRAM

SCALE: N.T.S.

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

No.	Revision	Date
I	ADDENDUM E02	2021-10-26
H	ADDENDUM E01	2021-10-20
G	ISSUED FOR TENDER	2021-08-12
F	ISSUED FOR BUILDING PERMIT	2021-07-27
E	90% CD	2021-05-03
D	SPA	2021-02-12
C	50% CD	2021-02-05
B	BUILDING PERMIT	2021-02-05
A	PERMIT/SPA COORDINATION	2021-02-02

Orientation

PROJECT NORTH

Seal

QUASAR CONSULTING GROUP
250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARCG.COM

Project Information

BFES Station 201
(SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

For
City of Brampton Fire & Emergency Services

Drawing Title
ELECTRICAL DETAILS (1)

Date	Project No	Drawing No
2021-10-26	CM-20-063	E501
Drawn by: DTH		
Scale: As indicated		

Branch Panel: MP-MA

Location: ELECTRICAL 108
Supply From: TX-MA
Mounting: SURFACE
Enclosure: SPRINKLERPROOF

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10kA
Mains Type: Cu
Mains Rating: 225 A
MCB Rating: 1 A

Notes:
60 CIRCUIT DOUBLE-TUB PANEL (TOTAL 120 CIRCUITS).

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
MA-1	UH-1	15 A	1	510 VA			300 VA			2	15 A	FC-1, FC-2, FC-3A, FC-3B	MA-2
MA-3	UH-2	15 A	1		510 VA			300 VA					MA-4
MA-5	UH-2	15 A	1			510 VA			1000 VA	2	15 A	EH-3	MA-6
MA-7	UH-1	15 A	1	510 VA			1000 VA						MA-8
MA-9	UH-1	15 A	1		510 VA			500 VA		2	15 A	EH-1	MA-10
MA-11	DHWT-1	15 A	1			360 VA			500 VA				MA-12
MA-13	MAU-1B (CONDENSER UNIT)	20 A	2	1165 VA			4000 VA			3	60 A	HUM-1	MA-14
MA-15					1165 VA			4000 VA					MA-16
MA-17	MAU-1A	30 A	1			2330 VA			4000 VA				MA-18
MA-19	FC-5	15 A	2	167 VA			145 VA			2	15 A	FC-9	MA-20
MA-21					167 VA			145 VA					MA-22
MA-23	FC-6	15 A	2			185 VA			1160 VA	1	15 A	IAC-2 (2)	MA-24
MA-25				185 VA			3973 VA						MA-26
MA-27	RH-1	15 A	1		540 VA			3973 VA		3	60 A	DD-1	MA-28
MA-29	FC-7	15 A	2			260 VA			3973 VA				MA-30
MA-31				260 VA			180 VA			1	15 A	CF-2	MA-32
MA-33	EH-4	15 A	2		1000 VA			1000 VA		2	15 A	EH-5	MA-34
MA-35						1000 VA			1000 VA				MA-36
MA-37	EH-2	15 A	2	500 VA			580 VA			1	15 A	IAC-3 (2)	MA-38
MA-39					500 VA			400 VA		1	20 A	NEMA 5-20 MAINTENANCE RECEPTACLE	MA-40
MA-41	VAV CONTROL PANEL	15 A	1			250 VA			560 VA	1	15 A	EF-5	MA-42
MA-43	FC-4	20 A	2	1415 VA			900 VA			3	15 A	IAC-1	MA-44
MA-45					1415 VA			900 VA					MA-46
MA-47	IAC-1	15 A	3			900 VA			900 VA				MA-48
MA-49				900 VA			507 VA						MA-50
MA-51					900 VA			507 VA		3	15 A	CF-1 (2)	MA-52
MA-53	FC-8	15 A	2			85 VA			507 VA				MA-54
MA-55				85 VA			900 VA						MA-56
MA-57	BS-1	15 A	2		40 VA			900 VA		3	15 A	IAC-1	MA-58
MA-59						40 VA			900 VA				MA-60
MA-61	EF-3	15 A	1	370 VA			900 VA						MA-62
MA-63	EF-2	15 A	1		400 VA			900 VA		3	15 A	IAC-1	MA-64
MA-65	NEMA 5-20 MAINTENANCE RECEPTACLE	20 A	1			400 VA			900 VA				MA-66
MA-67	CU-2	15 A	3	720 VA			0 VA			1	15 A	SPARE	MA-68
MA-69					720 VA			0 VA		1	15 A	SPARE	MA-70
MA-71						720 VA			0 VA	1	15 A	SPARE	MA-72
MA-73	EF-4	20 A	3	1370 VA			0 VA			--	--	SPACE	MA-74
MA-75					1370 VA			0 VA		--	--	SPACE	MA-76
MA-77						1370 VA			0 VA	--	--	SPACE	MA-78
MA-79	P-1	15 A	1	70 VA			0 VA			--	--	SPACE	MA-80
MA-81	SPARE	15 A	1		0 VA			0 VA		--	--	SPACE	MA-82
MA-83	SPARE	15 A	1			0 VA			0 VA	--	--	SPACE	MA-84
MA-85	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-86
MA-87	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-88
MA-89	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-90
MA-91	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-92
MA-93	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-94
MA-95	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-96
MA-97	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-98
MA-99	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-100
MA-101	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-102
MA-103	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-104
MA-105	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-106
MA-107	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-108
MA-109	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-110
MA-111	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-112
MA-113	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-114
MA-115	SPACE	--	--	0 VA			0 VA			--	--	SPACE	MA-116
MA-117	SPACE	--	--		0 VA			0 VA		--	--	SPACE	MA-118
MA-119	SPACE	--	--			0 VA			0 VA	--	--	SPACE	MA-120
			Total Load:	21612 VA			22762 VA			23810 VA			
			Total Amps:	180 A			191 A			200 A			

Legend:

	Panel Totals	
Total Conn. Load:	68184 VA	
Total Est. Demand:	68184 VA	
Total Conn.:	189 A	
Total Est. Demand:	189 A	

Notes:

Branch Panel: RP-RA

Location: ELECTRICAL 108
Supply From: TX-RA
Mounting: SURFACE
Enclosure: SPRINKLERPROOF

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10kA
Mains Type: Cu
Mains Rating: 225 A
MCB Rating: 1 A

Notes:
60 CIRCUIT DOUBLE-TUB PANEL (TOTAL 120 CIRCUITS).

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
RA-1	FIRE ALARM PANEL	20 A	1	500 VA			400 VA			1	20 A	RECEPTACLE - NEMA 5-20	RA-2
RA-3	FIRE ALARM PANEL	20 A	1		500 VA			720 VA		1	15 A	RECEPTACLES	RA-4
RA-5	RECEPTACLES	15 A	1			800 VA			900 VA	1	15 A	RECEPTACLES	RA-6
RA-7	RECEPTACLES	15 A	1	1000 VA			720 VA			1	15 A	RECEPTACLES	RA-8
RA-9	GFCI RECEPTACLES	15 A	1		800 VA			1200 VA		1	15 A	RECEPTACLES	RA-10
RA-11	BFS RECEPTACLE	15 A	1			400 VA			350 VA	1	15 A	SECURITY MONITOR RECEPTACLE	RA-12
RA-13	RECEPTACLES	15 A	1	1000 VA			200 VA			1	15 A	GFCI RECEPTACLE	RA-14
RA-15	RECEPTACLE - NEMA 5-20	20 A	1		500 VA			500 VA		1	15 A	CHANGE TABLE RECEPTACLE	RA-16
RA-17	RECEPTACLE - NEMA 5-20	20 A	1			500 VA			1200 VA	1	15 A	DOOR OPERATORS (3)	RA-18
RA-19	RECEPTACLE - NEMA 5-20	20 A	1	500 VA			1200 VA			1	15 A	RECEPTACLES	RA-20
RA-21	RECEPTACLE - NEMA 5-20	20 A	1		500 VA			1200 VA		1	20 A	COPIER RECEPTACLE, NEMA 5-20	RA-22
RA-23	FRIDGE	15 A	1			1000 VA			1000 VA	1	15 A	RECEPTACLES	RA-24
RA-25	FRIDGE	15 A	1	1000 VA			400 VA			1	15 A	GFCI RECEPTACLES	RA-26
RA-27	COFFEE	20 A	1		1000 VA			1000 VA		2	15 A	DRYER - NEMA 6-30R	RA-28
RA-29	DISHWASHER	15 A	1			1000 VA			1000 VA				RA-30
RA-31	RECEPTACLE - NEMA 5-20	20 A	1	200 VA			1000 VA			1	15 A	WASHER	RA-32
RA-33	MICROWAVE	15 A	1		1000 VA			1000 VA		2	15 A	GEAR WASHER - NEMA 6-15R	RA-34
RA-35	RECEPTACLE - NEMA 5-20	20 A	1			200 VA			1000 VA				RA-36
RA-37	RANGE (NEMA 6-50R, 2#8+G)	50 A	2	1000 VA			500 VA			1	15 A	DOOR OPERATOR	RA-38
RA-39					1000 VA			200 VA		1	15 A	GFCI RECEPTACLE	RA-40
RA-41	RECEPTACLE - NEMA 5-20R	20 A	1			200 VA			400 VA	1	15 A	RECEPTACLES, DSR	RA-42
RA-43	TV, RECEPTACLES	15 A	1	1200 VA			400 VA			1	15 A	RECEPTACLES	RA-44
RA-45	BAY DOOR OPERATOR (2)	15 A	3		373 VA			400 VA		1	15 A	RECEPTACLES	RA-46
RA-47						373 VA			1000 VA	1	15 A	DOOR OPERATORS (2)	RA-48
RA-49				373 VA			373 VA						RA-50
RA-51	BAY DOOR OPERATOR (2)	15 A	3		373 VA			373 VA		3	15 A	BAY DOOR OPERATOR (2)	RA-52
RA-53						373 VA			373 VA				RA-54
RA-55				373 VA			373 VA						RA-56
RA-57	NEMA 5-20R, CEILING MOUNTED	20 A	1		1000 VA			373 VA		3	15 A	BAY DOOR OPERATOR (2)	RA-58
RA-59	NEMA 5-20R, CEILING MOUNTED	20 A	1			1000 VA			373 VA				RA-60
RA-61	NEMA 5-20R, CEILING MOUNTED	20 A	1	1000 VA			400 VA			1	15 A	RADIO EQUIPMENT CABINET	RA-62
RA-63	MOTORIZED DAMPER, MD-3, MD-4	15 A	1		200 VA			500 VA		1	15 A	MECHANICAL CONTROLS	RA-64
RA-65	GFCI RECEPTACLE	15 A	1			200 VA			500 VA	1	15 A	MECHANICAL CONTROLS	RA-66
RA-67	EV CHARGING STATION (3#3+G, 35mmC)	90 A	3	8333 VA			500 VA			1	20 A	HAND DRYER UNIV WR 102 (GFI)	RA-68
RA-69					8333 VA			500 VA		1	20 A	HAND DRYER DECON 124 (GFI)	RA-70
RA-71						8333 VA			1000 VA	2	60 A	GENERATOR ACCESSORY PANEL	RA-72
RA-73	EXTERIOR EV CHARGING STATION (2#8+G)	40 A	2	3120 VA			1000 VA						RA-74
RA-75					3120 VA			0 VA		--	--	SPACE	RA-76
RA-77	EXTERIOR EV CHARGING STATION (2#8+G)	40 A	2			3120 VA			0 VA	--	--	SPACE	RA-78
RA-79				3120 VA			0 VA			--	--	SPACE	RA-80
RA-81	SPARE	15 A	1		0 VA			0 VA		--	--	SPACE	RA-82
RA-83	SPARE	15 A	1			0 VA			0 VA	--	--	SPACE	RA-84
RA-85	SPARE	15 A	1	0 VA			0 VA			--	--	SPACE	RA-86
RA-87	SPARE	15 A	1		0 VA			0 VA		--	--	SPACE	RA-88
RA-89	SPARE	15 A	1			0 VA			0 VA	--	--	SPACE	RA-90
RA-91	SPARE	15 A	1	0 VA			0 VA			--	--	SPACE	RA-92
RA-93	SPARE	15 A	1		0 VA			0 VA		--	--	SPACE	RA-94
RA-95	SPARE	20 A	1			0 VA			0 VA	--	--	SPACE	RA-96
RA-97	SPARE	20 A	1	0 VA			0 VA			--	--	SPACE	RA-98
RA-99	SPARE	20 A	1		0 VA			0 VA		--	--	SPACE	RA-100
RA-101	SPACE	--	--			0 VA			0 VA	--	--	SPACE	RA-102
RA-103	SPACE	--	--	0 VA			0 VA			--	--	SPACE	RA-104
RA-105	SPACE	--	--		0 VA			0 VA		--	--	SPACE	RA-106
RA-107	SPACE	--	--			0 VA			0 VA	--	--	SPACE	RA-108
RA-109	SPACE	--	--	0 VA			0 VA			--	--	SPACE	RA-110
RA-111	SPACE	--	--		0 VA			0 VA		--	--	SPACE	RA-112
RA-113	SPACE	--	--			0 VA			0 VA	--	--	SPACE	RA-114
RA-115	SPACE	--	--	0 VA			2800 VA						RA-116
RA-117	SPACE	--	--		0 VA			900 VA		3	50 A	CP-CA	RA-118
RA-119	SPACE	--	--			0 VA			2400 VA				RA-120
			Total Load:	32987 VA			27567 VA			28997 VA			
			Total Amps:	277 A			230 A			243 A			

Legend:

	Panel Totals	
Total Conn. Load:	89550 VA	
Total Est. Demand:	76405 VA	
Total Conn.:	249 A	
Total Est. Demand:	212 A	

Notes:

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

No.	Revision	Date
C	ADDENDUM E02	2021-10-26
B	ADDENDUM E01	2021-10-20
A	ISSUED FOR TENDER	2021-08-12

Orientation

PROJECT NORTH

Seal

QUASAR CONSULTING GROUP

250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARCG.COM

Project Information

BFES Station 201
(SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

For
City of Brampton Fire & Emergency Services

Drawing Title

ELECTRICAL SCHEDULES (3)

Date	Project No	Drawing No
2021-10-26	CM-20-063	E603
Drawn by: DTH		
Scale		

BIM 360://20019 - BFES Station 201/CM-20-063 - QCG ME Model_R20.rvt
2021-10-26 1:26:50 PM

Project Name:	City of Brampton Fire Station 201	**Date Issued:**	October 26, 2021
Quasar Project #:	CM-21-083		
Client Project #:	20019		

Distribution

Salter Pilon Architecture	Ryan Stitt	rstitt@salterpilon.com
Salter Pilon Architecture	Brandon Bortoluzzi	bbortoluzzi@salterpilon.com
Salter Pilon Architecture	Nick Laurin	nlaurin@salterpilon.com

Addendum #:	2
Revision #:	0

This Addendum forms part of the Contract Specifications and Drawings, and modifies the Bidding Documents, with Amendments and Additions noted below. This Addendum shall be added to the front of the specifications as issued. Bidders shall acknowledge receipt of this Addendum in the space provided in the Bid Form and include in bid amount.

This addendum includes modifications to the drawings as summarized below. Unless otherwise noted, all drawings listed below are attached herewith. Answers to Requests For Information below shall form part of the project specifications and are identified in bold following QCG (Quasar Consulting Group).

Requests for Information:

1. 01 21 00 - Allowances, part 5.2.5 SCBA compressor. We assume that the furnish and install of the SCBA compressor is not part of the base bid and not part of the cash allowances. Please verify. **QCG: Installation of owner supplied SCBA compressor is to be part of base bid.**
2. 23 35 16 Vehicle Exhaust Removal, part 2.1 references a filtration unit made by Airmation where shown on the drawings. This is not shown on the drawings. We assume this spec is not applicable to this project. Please verify. **QCG: The Airmation systems are part of the contract. Refer to INDUSTRIAL AIR CLEANERS schedule on drawing M610 and note there are three different types of units that comprise the full Airmation package. Refer to drawings M302 and M303 for location and quantity of IAC units required.**
3. Drawing M650, Detail 23 34 02.01. The detail indicates that the BAS is to have direct communications with the Destratification Fans System Controller. The specification for these fans, CF-1 & CF-2 (23 34 00) does not indicate that the system will be provided with BACnet communications. Please clarify the method of communications between the BAS and the system controller. **QCG: Destratification fans to be complete with BACnet adapter per spec revision below.**
4. Please advise the dimensions for the main headers of Domestic Cold and Hot Water lines On drawing M201. The shown size is incorrect. **QCG: Sizing clarified with this addendum.**

Changes to Specification:

1. **Section 23 34 00.00 - HVAC FANS (not issued)**

   Refer to previously issued section 23 30 00, article 2.2.1.9 Advanced Digital Fan Controller and add the following:

   ".13 **The digital control shall include a BACnet adapter and shall support BACnet IP or MS/TP, as coordinated with controls contractor.**"

Changes to Drawings:

1. **Drawing M201 LEVEL 1 PLAN – PLUMBING & DRAINAGE**

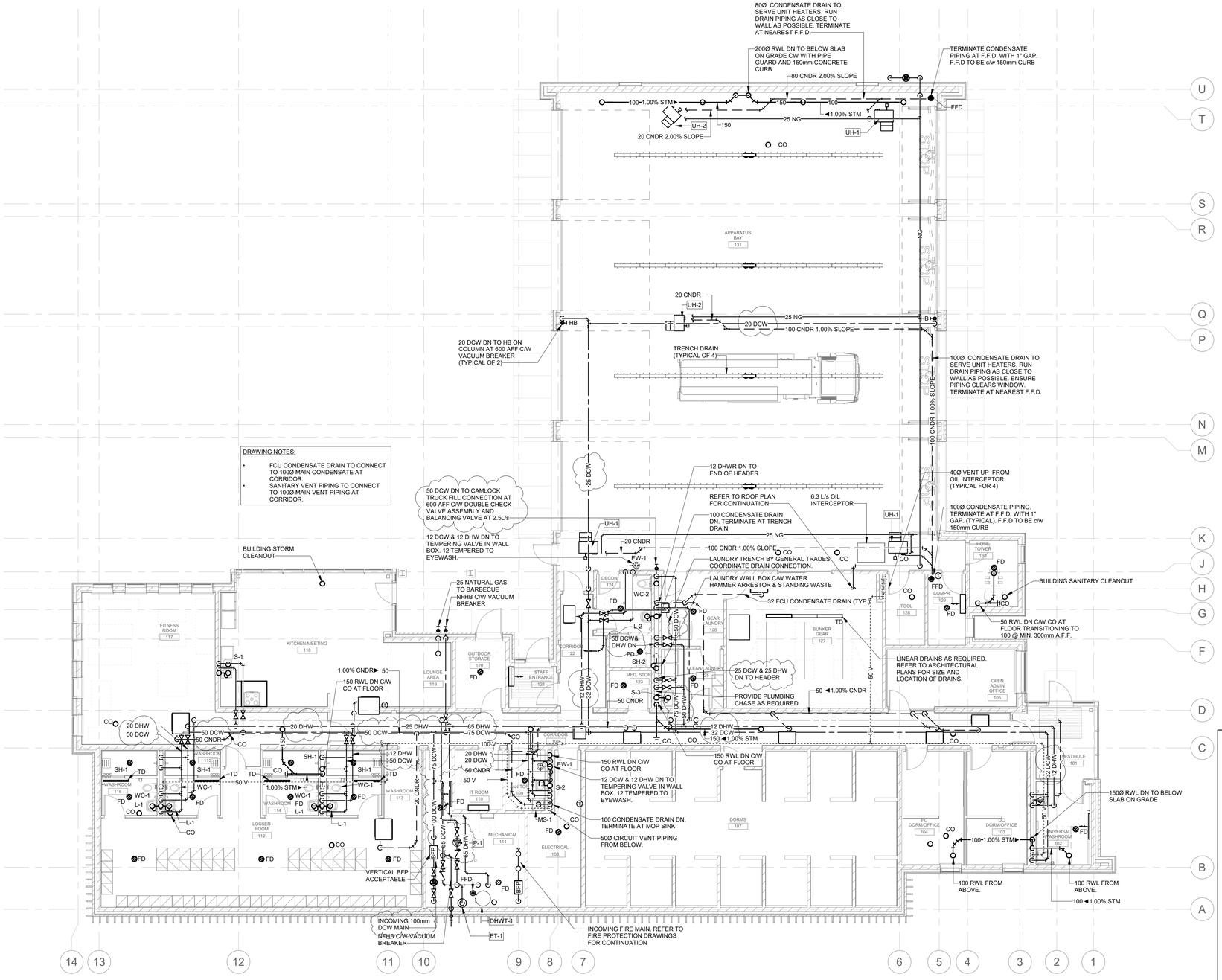
   Refer to attached drawings and note the following revisions:

   a. Domestic hot and cold-water pipe sizing tags added or revised.

Quasar Consulting Group

Craig Watson

Craig Watson, P.Eng.
Team Lead - Commercial



1 Level 1 Plan - Plumbing and Drainage

SCALE: 1 : 100

GENERAL NOTES:

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL LOCATIONS OF EQUIPMENT AND CONNECTING SERVICES. DRAWINGS ARE NOT TO BE DIMENSIONED OR SCALED.
2. NOTE THAT ANY REFERENCE TO CONTRACTOR ON MECHANICAL DRAWINGS IS NOT EXCLUSIVE TO MECHANICAL CONTRACTOR OR ON PARTICULAR SUB-TRADE. IT IS UNDERSTOOD THAT THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATE OF ALL TRADES' WORK AND AS SUCH SHALL BE RESPONSIBLE FOR REVIEW OF DOCUMENTS PREPARED BY ALL DISCIPLINES (I.E. MECHANICAL AND ELECTRICAL) AND INCLUDING ALL ASSOCIATED COSTS FOR THE SCOPE OF WORK AS IDENTIFIED IN ALL SUB-DISCIPLINE'S DOCUMENTS.
3. ALL WORK TO BE DONE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE AND ALL OTHER REGULATORY REQUIREMENTS.
4. SUPPLY ALL LABOUR AND MATERIALS TO PROVIDE A COMPLETE MECHANICAL INSTALLATION. ITEMS NOT EXPLICITLY ILLUSTRATED ON THE DRAWINGS ARE NOT TO BE EXCLUDED FROM THE SCOPE OF WORK IF REQUIRED AS PART OF A PROPER INSTALLATION. PERMITS, TESTING, BALANCING, AND OCCUPANT OPERATIONAL TRAINING WILL BE PART OF THE WORK.
5. COORDINATE PLUMBING WITH WORK OF OTHER TRADES PRIOR TO FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS AND TRANSITIONS REQUIRED FOR COMPLETE WORKABLE INSTALLATION.
6. COORDINATE LOCATIONS OF ALL ROOF OPENINGS WITH STRUCTURAL, MECHANICAL AND ARCHITECTURAL PLANS PRIOR TO ANY INSTALLATION.
7. PROVIDE FULL VENTING SYSTEM IN ACCORDANCE TO PART 7 OF THE OBC. COORDINATE LOCATION OF VTRS WITH AIR INTAKES.
8. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN GUIDELINES. PROVIDE ALL FITTINGS, OFFSETS AND TRANSITIONS AS REQUIRED FOR COMPLETE INSTALLATION.
9. TRAP, PRIME AND VENT ALL FLOOR DRAINS.
10. ALL DRAINAGE PIPING 100Ø AND LARGER TO BE SLOPED AT 1%. ALL DRAINAGE PIPING 75Ø AND LESS TO BE SLOPED AT 2%.
11. MINIMUM PIPE SIZE IS 12Ø UNLESS NOTED OTHERWISE.
12. PROVIDE ISOLATION VALVES AT EACH PLUMBING FIXTURE.
13. ALL JANITOR'S SINKS, WALL HYDRANTS AND HOSE BIBBS TO BE PROVIDED C/W CSA VACUUM BREAKER PER OBC REQUIREMENTS.

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

No.	Revision	Date
I	ADDENDUM M02	2021-10-26
H	ISSUED FOR TENDER	2021-08-12
G	ISSUED FOR BUILDING PERMIT	2021-07-27
F	90% CD	2021-05-03
E	SPA	2021-02-12
D	50% CD	2021-02-05
C	BUILDING PERMIT	2021-02-05
B	PERMIT/SPA COORDINATION	2021-02-02
A	100% DESIGN DEVELOPMENT	2021-01-19

Orientation

PROJECT NORTH

Seal

QUASAR CONSULTING GROUP
250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARCG.COM

Project Information

BFES Station 201
(SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

For

City of Brampton Fire & Emergency Services

Drawing Title

LEVEL 1 PLAN - PLUMBING & DRAINAGE

Date	Project No	Drawing No
2021-10-25	CM-20-063	M201
Drawn by: CMW		
Scale: As indicated		

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2021-10-25 6:24:22 PM

STRUCTURAL TENDER ADDENDUM NO. S01

Project:	BFES Station 201	Project No.:	TOR.129270.0001
Client:	Salter Pilon Architecture Inc.	Date:	October 27, 2021
Contact:	Ryan Stitt (rstitt@salterpilon.com) Brandon Bortoluzzi (bbortoluzzi@salterpilon.com)	Page:	1 of 1 + 1 sheet
		Issued By:	Scott Dion

This addendum forms part of the contract documents and amends the original drawings, specifications, schedules, and details Issued for Tender, August 30th, 2021.

1.0 DRAWINGS ISSUED

1.1. S-103 – Typical Details

2.0 SPECIFICATIONS ISSUED

2.1. None

3.0 SKETCHES ISSUED

3.1. None

4.0 DESCRIPTION OF ADDITIONAL REVISIONS

4.1. None

END OF STRUCTURAL TENDER ADDENDUM NO S01

Copy to:

Copy to:

Read Jones Christoffersen Ltd.
Creative Thinking **Practical Results**
100 University Ave, North Tower, Suite 400
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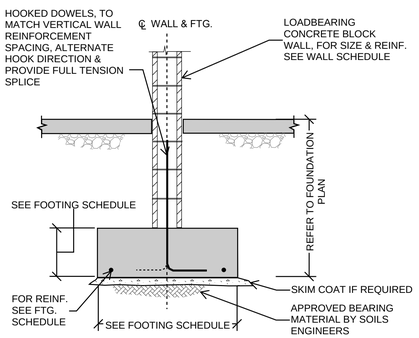
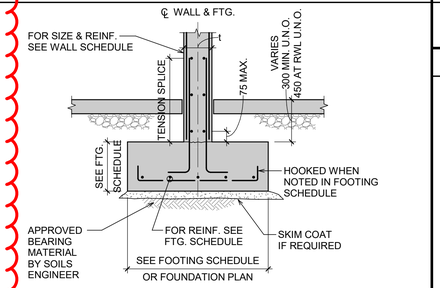
tel 416-977-5335
fax 416-977-1427
email toronto@rjc.ca
web rjc.ca

TYPICAL INTERIOR LOADBEARING MASONRY WALL FOOTINGS



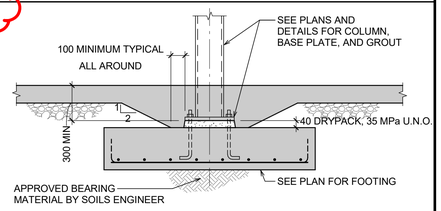
TYPICAL INTERIOR SHEAR WALL FOOTINGS



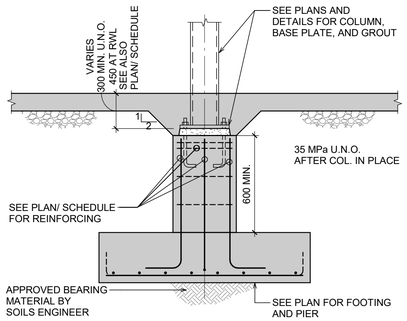
DOWELS TO MATCH VERTICAL WALL REINFORCING U.N.O.

SHEAR WALL FOOTING WITHOUT PEDESTAL

TYPICAL INTERIOR STEEL COLUMN ON FOOTING DETAILS - U.N.O.



STEEL COLUMN BEARING DIRECTLY ON FOOTING



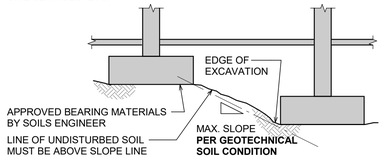
NOTES:

1. 15M VERTS WITH C15M DOWELS (LAP SPLICE 600) MAY BE USED. DO NOT WET SET DOWELS OR C15M VERTS.
2. DRYPACK - PREMIXED OR NON-PREMIXED COMPOSITION OF NON-METALLIC AGGREGATE, CEMENT AND SUFFICIENT WATER FOR THE MIXTURE TO RETAIN ITS SHAPE WHEN MADE INTO A BALL BY HAND AND CAPABLE OF DEVELOPING COMPRESSIVE STRENGTH OF 35 MPa AT 28 DAYS.
3. PROVIDE MINIMUM FROST COVER AT FROST SUSCEPTABLE LOCATIONS PER GEOTECHNICAL RECOMMENDATIONS.

STEEL COLUMN ON PEDESTAL ON FOOTING

TYPICAL FOOTING ADJACENT TO EXCAVATION

EDGE OF ADJACENT EXCAVATION FOR FOOTINGS, SUMPS, BASEMENT, SITE SERVICES, ETC.



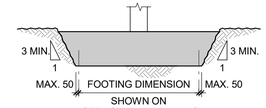
EXCAVATIONS

1. DESIGN AND FIELD REVIEW OF EXCAVATION, SHORING, AND BACKFILL IS NOT DONE BY READ JONES CHRISTOFFERSEN.

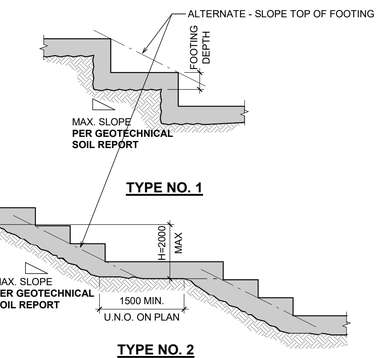
FOUNDATIONS

1. FOOTINGS HAVE BEEN DESIGNED FOR THE FOLLOWING BEARING RESISTANCES IN ACCORDANCE WITH THE SOILS REPORT.
   PREPARED BY: SNC-Lavalin Report No 671835.
   DATED: June 2020.

   ULS: 300 kPa, SLS: 100 kPa
2. BEARING SURFACES MUST BE APPROVED BY THE SOILS ENGINEER IMMEDIATELY BEFORE FOOTING CONCRETE IS PLACED. RJC IS NOT RESPONSIBLE FOR CONFIRMING BEARING CAPACITIES OF SOILS.
3. REFER TO SOILS REPORT FOR OTHER SPECIFIC DESIGN REQUIREMENTS FOR FOOTINGS, SOIL SLOPES, FROST PROTECTION, MINIMUM COVER, ETC.
4. UNLESS OTHERWISE SHOWN, CENTER FOOTINGS UNDER COLUMNS AND WALLS.
5. DOWELS SHALL BE PLACED BEFORE CONCRETE IS PLACED. TEMPLATES SHALL BE USED TO ENSURE CORRECT PLACEMENT OF DOWELS.
6. PROVIDE 50 mm GROUND SEAL/ SKIM COAT, MUD SLAB UNDER FOOTINGS AS REQUIRED BY SOIL CONDITIONS.
7. FOR GROUND ELEVATIONS AND DRAINAGE SLOPES, SEE ARCHITECT'S DRAWINGS.
8. VARY FOOTING ELEVATIONS WHERE REQUIRED IN ACCORDANCE WITH DETAIL FOR "TYPICAL STEPPED FOOTING"(S.D.F.), SHOWN ON STRUCTURAL DRAWINGS.
9. FOOTINGS MAY HAVE TO BE LOWERED TO ACCOMMODATE MECHANICAL OR ELECTRICAL SERVICES. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ELEVATIONS OF SAME. FOOTINGS ARE NOT TO BE UNDERMINED BY EXCAVATIONS FOR SERVICES, PITS, ETC.
10. FOOTING ELEVATIONS, IF SHOWN, ARE FOR PRICE ESTIMATING PURPOSES ONLY, ARE NOT FINAL, AND MAY VARY ACCORDING TO SITE CONDITIONS OR AS REQUIRED BY SERVICES. ALL FOOTINGS MUST BE TAKEN TO A BEARING LAYER APPROVED BY THE SOILS ENGINEER.
11. BEARING SURFACES MUST BE PROTECTED FROM FREEZING BEFORE AND AFTER FOOTINGS ARE POURED.
12. SUB-BASE DESIGN OF SOIL UNDER THE SLAB ON GRADE SHALL BE IN ACCORDANCE WITH THE SOIL REPORT.
13. CONCRETE PLACED UNDER WATER SHALL CONFORM TO CAN/CSA-A23.1.
14. FOOTINGS CAST DIRECTLY INTO EXCAVATIONS (WITHOUT SIDE FORMS) SHALL NOT BE LARGER THAN SHOWN BELOW:

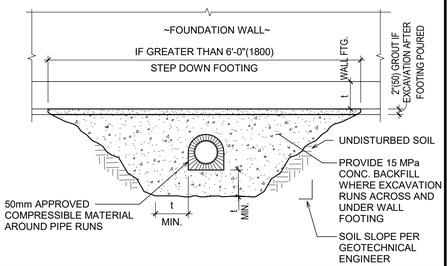


TYPICAL STEPPED FOOTINGS *ON SOIL* (WALLS)



NOTE: IF TOTAL STEPPING 'H' EXCEEDED PROVIDE INTERMEDIATE FLAT HORIZONTAL SECTION BETWEEN SLOPED FOOTINGS U.N.O. ON PLAN

TYPICAL PIPE UNDER WALL FOOTING DETAIL



1. All drawings, plans, models, designs, specifications and other documents prepared by Read Jones Christoffersen Ltd. ("RJC") and used in connection with this project are instruments of service for the work shown in them (the "Work") and as such are and remain the property of RJC whether the Work is executed or not, and RJC reserves the copyright in them and in the Work executed from them, and they shall not be used for any other work or project.
2. These drawings are "design drawings" only. They may not be suitable for use as shop drawings. Use of these drawings as base drawings for "shop drawings" is not permitted unless written permission containing certain conditions and limitations is obtained from RJC. The work "as constructed" may vary from what is shown on these drawings.
3. Use of these drawings is limited to that identified in the Revision column. Do not construct from these drawings unless marked "Issued for Construction" by RJC in the Revision column, and then only for the parts noted.The drawings shall not be used for "pricing", "costing", or "tender" unless so indicated in the Revision column. "Pricing" or "Costing" drawings are not complete and any prices based on such drawings must allow for this. Once drawings are "Issued for Tender", the drawings may be used for bidding.

7	ISSUED FOR ADDENDUM S1	27.10.2021
6	ISSUED FOR TENDER	30.08.2021
5	ISSUED FOR PERMIT	27.07.2021
4	ISSUED FOR 90% CD	03.05.2021
3	ISSUED FOR 50% CD	05.02.2021
2	ISSUED FOR PERMIT	05.02.2021

No.	Revision	Date

Orientation

Seal

LICENSED PROFESSIONAL ENGINEER H.W.M.MWANKI ONZE 100141559 2021-08-30 PROVINCE OF ONTARIO

Creative Thinking Practical Results

LICENSED PROFESSIONAL ENGINEER S.C.L.DION 100212603 2021-08-30 PROVINCE OF ONTARIO

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Engineers
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tel 416-977-5335
fax 416-977-1427

Project Information

BFES Station 201

27 Rutherford Rd. S., Brampton, ON. L6W 3J3

For

City of Brampton Fire & Emergency Services

Drawing Title

TYPICAL DETAILS

Date 30.08.2021	Drawing No S103
Drawn by BK	
Scale As indicated	
Project No TOR.127511.0001	